

0.12A 0.08A 0.09A

Track Busway Product Selection Guide

T1-T5 US SYSTEMS S3-S5 US SYSTEMS



T1-T5 SYSTEMS

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SPECS & INTRODUCTION

SPECS

This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway or busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

Track Busway shall be designed and manufactured to the following standards:

1. Underwriters Laboratories Standard, UL 857 — The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.

*All standards and certifications available upon request

INTRODUCTION

Starline is the leader in electrical power distribution in the mission critical, commercial and light industrial industries with Starline Track Busway. This system was designed to meet the rugged specification of the UL857, Busway and Associated Fittings, with the flexible features of track lighting — and is available in systems with 40, 50 & 60 amps with isolated ground.

It is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

The Product Selection Guide was developed to help the design engineer understand and consider all of the options available with Starline Track Busway when designing a system.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at **1-800-245-6378** or email us at **info@starlinepower.com**. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reserves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at <u>downloads.starlinepower.com</u>.



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T1 SERIES

40-50-60T1 SYSTEMS

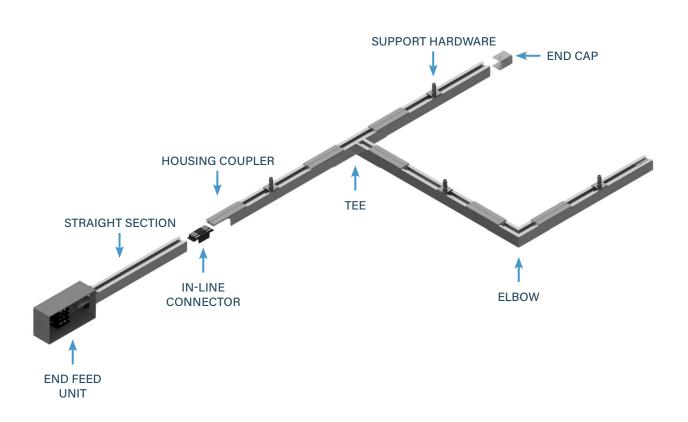
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SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

For further information on applicable T1 plug-in unit options, please consult the factory.

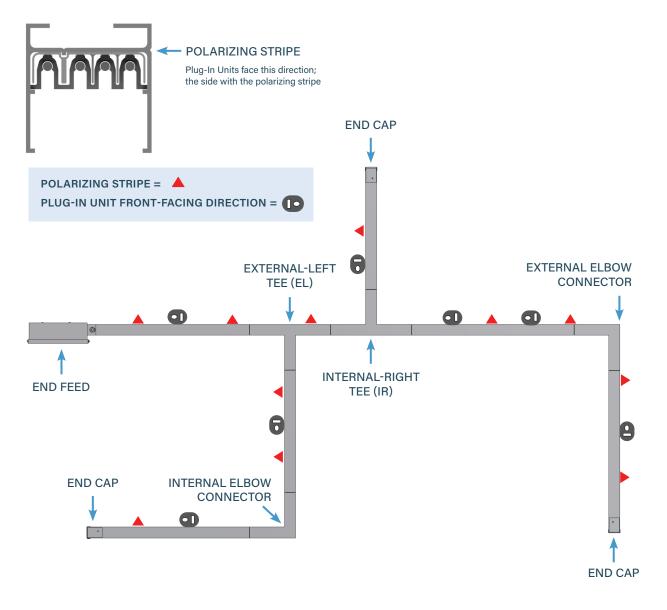


POLARITY TIPS

Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

It is particularly important to understand this design concept prior to ordering and/or installing some components.

For example, if the face direction of a Starline plug-in unit is important in your installation consider that they will always face the side with the polarizing stripe.





SYSTEM LAYOUT TIPS

POWER FEEDS

Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

SUPPORT HARDWARE

Support hardware is spaced no more than 10 feet apart. Refer to **page 1.24** for support hardware details. Contact your local Starline applications engineer for any questions.

INSTALLATION

Printed installation drawings are supplied with each system shipment and they are also available for download online at <u>downloads.starlinepower.com</u>. CAD files of these drawings are also available by contacting your local Starline applications engineer.

BUSWAY HOUSING SECTIONS

Standard busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual Starline Track Busway sections to any length under 20 feet, it is highly recommended to keep all layout runs in increments of 5 feet to simplify layout and installation. Custom lengths can be made but can increase lead time and make layout and installation a bit more complex.

BUSWAY TEES AND ELBOWS SECTIONS

Try to keep all runs as straight as possible as tees and elbows are added cost. With grid or any other bidirectional applications, there is a choice of two-plane with each direction on a separate plane or using cross sections if single-plane is required. Single-plane applications can provide power in both directions as well as parallel runs.

| LENGTH (| OF BUSWAY FOR A ONE V | OLT DROP IN LINE TO LIN | E VOLTAGE: |
|-----------------------|-----------------------|---------------------------------------|--------------------------------------|
| SYSTEM DESIGNATION | DISTRIBUTED LOAD | VOLTAGE DROP @ 0.8 PF SINGLE PHASE | VOLTAGE DROP @ 0.8 PF THREE PHASE |
| 40T1 | 40 amps | 36 ft | 63 ft |
| 50T1 | 50 amps | 29 ft | 50 ft |
| 60T1 | 60 amps | 29 ft | 51 ft |



COMPONENT RELATIONSHIP TIPS

When ordering material, it is important to understand the relationship between various components.

EXAMPLES

- Each straight section requires a connector and coupler.
- Three Housing Couplers (HC) are needed for each Tee Connector.

GENERAL SUPPORT HARDWARE RULE TO FOLLOW:

10 feet maximum spacing between supports and we recommend 10% more than the required quantity to cover potential layout changes.

- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering Elbow or Tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to **page 1.3 Polarity Tips** for more detail.



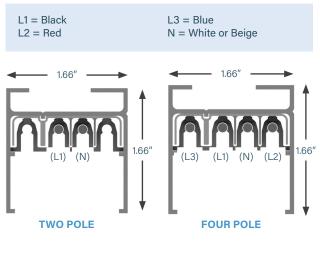
STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight sections consist of an extruded aluminum shell with insulated copper conductor strips mounted on the top interior wall. The aluminum housing acts as a 100% ground path and each straight section has an open access slot over its entire length for the insertion of snap-in plug-in units. Housing configurations include 2 and 4 pole varieties, 480/277 Volts max. Track Busway straights are connected together using a joint kit, which includes an in-line connector and housing coupler (found under Accessories).

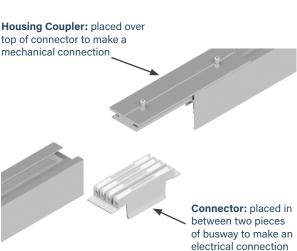
Sections are supported every 10 feet maximum and can support 100 pounds hanging weight between vertical supports. Four-pole busway is normally used in 3-phase/4-wire power systems. Four-pole busway may be used for 2 independent single-phase circuits at different voltages. Sections can be factory cut to any length.





WEIGHT

10 ft 40 Amp, 2 or 4 pole: 7/8 lbs 10 ft 50 Amp, 2 or 4 pole: 7/8 lbs 10 ft 60 Amp, 2 or 4 pole: 8/9 lbs





STRAIGHT SECTIONS: RECESSED

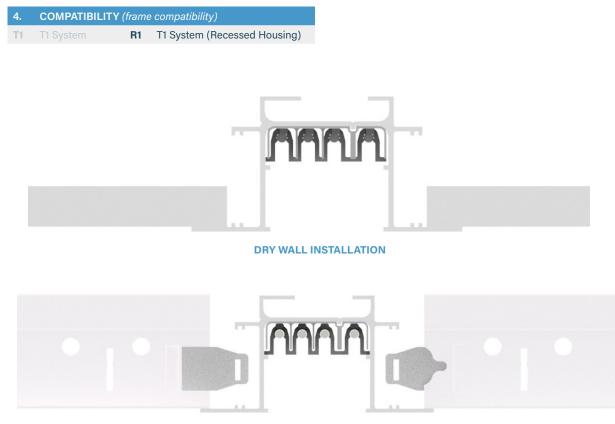
PRODUCT DESCRIPTION

T1 housing is also available in a slightly different design, specifically tailored for busway that is meant to be installed recessed into a suspended ceiling.

Busway straight sections are available in 20, 10, and 5 foot lengths for two standard drop or suspended ceiling configurations.

For recessed housing, please choose 'R1' as opposed to 'T1' in your product number.

*refer to page 1.8 option 4. Compatibility (frame compatibility)



STANDARD AND REGULAR TILE INSTALLATION

050 50 amps

6. Neutral/Ground Busbar (size of neutral busbar and/or ground)

7. Polarization (orientation of section for mating purposes)

2

R1 T1 System (Recessed Housing)

1 Phase plus Neutral



EXAMPLES

040 40 amps

060 60 amps

T1 T1 System

Copper

Standard

С

4

S

4. Compatibility (frame compatibility)

5. Material (busbar material)

3 Phase plus Neutral

8. Straight Length (length of section) XXYY XX=feet, YY=inches

US060T1C4S-0906C-STD0 = US System, Straight Section, 60 amps, T1 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 9 foot - 6 inch Straight Length, Continuous Busway Access, Factory Mill Finish

<u>US040R1C2S-0500C-PA50</u> = US System, Straight Section, 40 amps, T1 System-R1 Recessed Housing, Copper Conductor, 1 Phase plus Neutral, Standard Polarization- 5 foot Straight Length, Continuous Busway Access, Painted RAL 3005



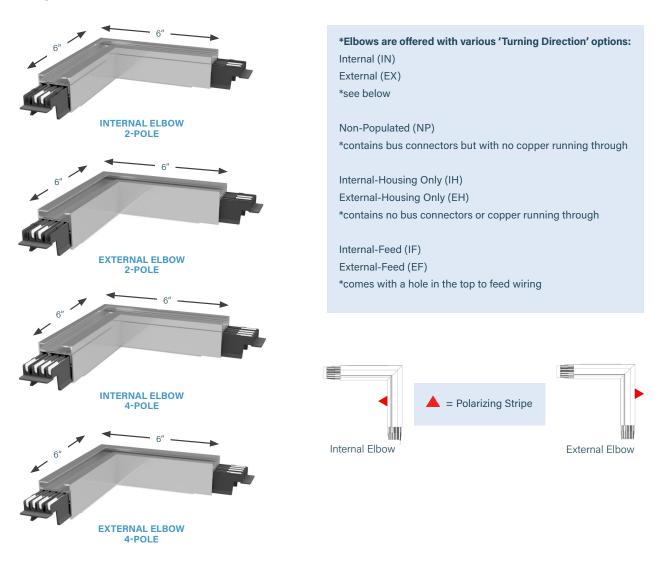
ELBOW SECTIONS

PRODUCT DESCRIPTION

Factory pre-assembled elbow sections are used for making a 90-degree turn. Elbows are connected to busway sections electrically by means of built-in bus connectors. Connectors are installed by "snapping" into position with housing section butted together. Connectors are polarized to prevent phase mismatch. Housings are then mechanically joined via couplers (found in Accessories section).

Dimensions below are 6 inches from center to center, not end to end.

Weight .5 lbs



| | | | CTION NUME | | | | | | | |
|----------------|----------------------------------|------------------------------|-----------------------|----------------------------|------------------------------------|----------------------|---|--------------------|----------------------------|--------------------------------------|
| | | U | Е | 040 | T1 | С | 4 | S | - IN | |
| | | l. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Turning Direction | |
| . Sj | ystem (| standard of | measure) | | | 9. Paint Colo | r | ection (direction | n of section po | larizing stripe) |
| U 2. P E | | Type (sect Section | ion compone | nt) | | IN NF EH EF | External- | Housing Only | | rnal nal-Housing Only nal-Feed |
| 040 | Product 40 am 60 am | ps | aximum ampe | erage) 050 50 am | ps | ST BL | DO Factory KO Paint Fa | actory Black | REDO Pair BLUO Pair | nt Factory Red nt Factory Blue |
| 4. C F1 | Compati T1 Sys | | ne compatibili | | em (Recessed ig) | | 110 Paint Fa | actory White | ** KAL (ple | ease see page 1.23) |
| 5. N C | /laterial Copp | <i>(busbar ma</i> er | terial) | | | | | | | |
| 6. N 4 | | Ground B se plus Ne | | | ar and/or ground e plus Neutral | d) | | | | |
| 7. Po S | <mark>olarizat</mark> Stand | | ation of sectio | n for mating p | urposes) | | | | | |

EXAMPLES

<u>UE060R1C4S-IN-BLK0</u> = US System, Elbow Section, 60 amps, T1 System-R1 Recessed Housing, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Black

UE050T1C2S-EH-STD0 = US System, Elbow Section, 50 amps, T1 System, Copper Conductor, 1 Phase plus Neutral, Standard Polarization, External Turning Direction Housing Only, Factory Mill Finish



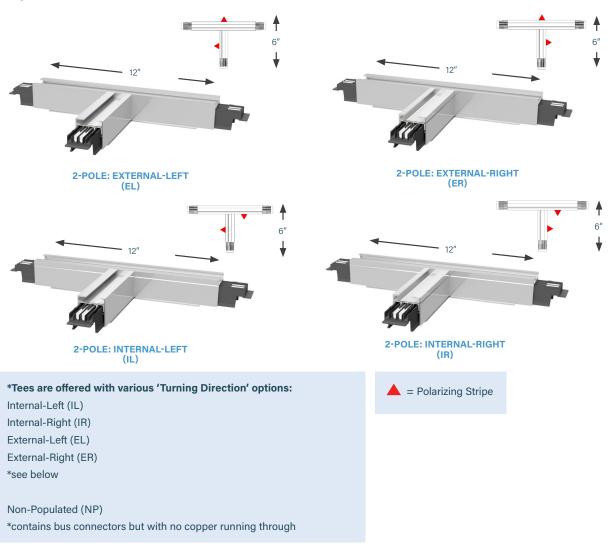
TEE SECTIONS

PRODUCT DESCRIPTION

Similar to elbow connectors, tee connectors are used for connecting branch housing sections at 90 degrees to the main run. Please be aware of polarization issues before making your final selection (refer to **page 1.3 Polarity Tips**).

Tees are electrically connected to sections of 40/50/60 amp busway by means of built-in bus connectors. Connectors are installed by "snapping" into position with housing section butted together. Connectors are polarized to prevent phase mismatch. Housings are then mechanically joined via couplers, ordered separately.

Weight 1 lb



TEE SECTIONS: PRODUCT NUMBERS

| | | _ | | | | | | . – | | | |
|--------------------------------------|----------------|-----------------------|------------------------|---------------------|----------------|------------------------------------|-----------------------------|----------------------------|-----------------------------------|--|--|
| | U | Т | 040 | T1 | С | 4 | S | – IR | | | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Turning Direction | | | |
| | | | | | - STD |) | | | | | |
| | | | | | 9. | | | | | | |
| | | | | | Paint Colo | r | | | | | |
| 1. System | (standard of | measure) | | | 8.1 | urning Dire | ection (directio | n of section po | arizing stripe) | | |
| U US | | | | | IL IB | | | | | | |
| 2. Produc | t Type (sect | ion componer | nt) | | NP | | | | nai-night | | |
| T Tee S | Section | | | | 9. F | aint Color | (allows painting | of the busway | housing) | | |
| | | aximum ampe | | | | | Mill Finish Actory Black | | nt Factory Red nt Factory Blue | | |
| 040 40 ar 060 60 ar | | | 050 50 am | OS | | | actory White | | ase see page 1.23 | | |
| 4. Compa ⁻ | tibility (fram | ne compatibilit | ty) | | | | | | | | |
| T1 T1 Sy | /stem | | R1 T1 Syste Housin | em (Recessed g) | | | | | | | |
| 5. Materia | al (busbar ma | terial) | | | | | | | | | |
| C Copp | per | | | | | | | | | | |
| 6. Neutral | l/Ground B | usbar (size o | of neutral busb | ar and/or ground | 1) | | | | | | |
| 4 3 Pha | ase plus Ne | utral | 2 1 Phas | e plus Neutral | | | | | | | |
| 7. Polariza | ation (orienta | ation of section | n for mating p | irposes) | | | | | | | |
| S Stand | dard | | | | | | | | | | |

EXAMPLES

UT060T1C4S-IR-RED0 = US System, Tee Section, 60 amps, T1 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red

UT040R1C2S-EL-STD0 = US System, Tee Section, 40 amps, T1 System-R1 Recessed Housing, Copper Conductor, 1 Phase plus Neutral, Standard Polarization, External-Left Turing Direction, Factory Mill Finish



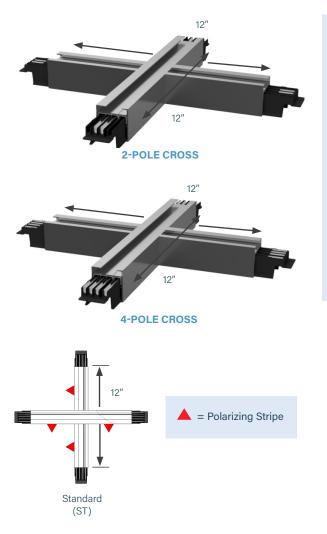
CROSS SECTIONS

PRODUCT DESCRIPTION

Similar to tee connectors, crosses are typically used for grid designs. Please be aware of polarization issues before making your final selection (refer to **page 1.3 Polarity Tips**).

Crosses are electrically connected to sections of 40/50/60 amp busway by means of built-in bus connectors. Connectors are installed by "snapping" into position with housing section butted together. Connectors are polarized to prevent phase mismatch. Housings are then mechanically joined via couplers, ordered separately.

Weight 1.5 lbs



*Crosses are offered with various 'Turning Direction' options: Standard (ST) *see below Internal (IN) External (EX) Internal-Left (IL)

Internal-Right (IR) External-Left (EL) External-Right (ER) *For structural configuration, empty legs of the cross may be ordered. Please consult your applications engineer.

Non-Populated (NP) *contains bus connectors but with no copper running through

| | SS SEC DUCT | | | | | | | | | |
|---------------------------------|----------------------------------|-----------------------|------------------------|---------------------|--------------|----------|------------------------------------|---|----------------------------|---|
| | U | Х | 040 | T1 | C | | 4 | S | - ST | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Materi | al | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Turning Direction | |
| 1. Syster U US | n (standard of | measure) | | | 9. Paint | Color | | ection (directio | | olarizing stripe) n-Populated |
| 2. Produ | ict Type (section | ion compone | nt) | | | IL EL | Internal-L External- | _eft | IR Inte | ernal-Right |
| | oss Section | vinum ampo | | | | | | (allows painting | - | |
| 040 40 a 060 60 a | amps | iximum ampe | 050 50 am | ps | | BLK | O Paint Fa | Mill Finish actory Black actory White | BLUO Pa | aint Factory Red aint Factory Blue allease see page 1.23) |
| 1.1 | atibility (fram System | e compatibili | | em (Recessed Ig) | | | | | | |
| 5. Mater | ial (busbar ma | terial) | | | | | | | | |
| C Co | pper | | | | | | | | | |
| 6. Neutra | al/Ground B | usbar (size o | of neutral bush | ar and/or ground | d) | | | | | |
| 4 3 P | hase plus Ne | utral | 2 1 Phas | e plus Neutral | | | | | | |
| | zation (orienta ndard | ation of sectio | on for mating p | urposes) | | | | | | |

EXAMPLES

<u>UX050T1C4S-NP-RED0</u> = US System, Cross Section, 50 amps, T1 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Non-Populated Turning Direction, Painted Factory Red

<u>UX060R1C2S-IL-STD0</u> = US System, Cross Section, 60 amps, T1 System-R1 Recessed Housing, Copper Conductor, 1 Phase plus Neutral, Standard Polarization, Internal-Left Turning Direction, Factory Mill Finish

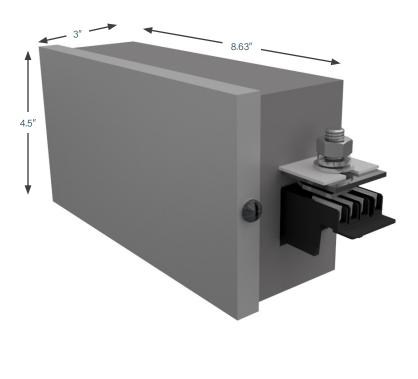


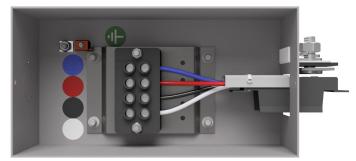
END FEED UNITS

PRODUCT DESCRIPTION

An end feed unit consists of a steel junction box with a removable side, a connector to insert into the busway run and terminal block for field connections. The unit is bolted to the first busway section.

Weight 3.3 lbs





INTERNAL VIEW

| U | F | 040 | T1 | С | 4 | S | - S | R | S | Ν |
|---|--|-------------------------------------|---------------------------------------|-----------------------------|------------------------------------|------------------------------|--------------------------------------|--------------------------|-----------------------------------|--------------------------------|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. n Lug/Box Options | 9. Lid Orientation | 10. Accessories Package | 11. Accessories Location |
| | | | | *12. System | - ST | | | | | |
| 1. System | m (standard o | f measure) | | | 9. R | Lid Orientat Right | tion (from the te | erminal, side wit | h removable lie | d) |
| 2. Produ | | ction compone | nt) | | | 0 | es Package (o, | ptional accesso | ries for feed un | its) |
| 3. Produ 040 40 060 60 | amps | naximum ampe | erage) 050 50 amps | | N | None (N | , | | | essory) |
| 4. Comp | oatibility (fra | me compatibili | ty) | | | 2. System (li. Line to Li | ine to line or line ine | | em Line to Neutr | al |
| T1 T1 | System | | R1 T1 System Housing) | n (Recessed | d * | & LN specific | cation required o 6 Neutral/Groui | nly when orderi | | |
| | r ial (busbar m | aterial) | | | 13 | . Paint Colo | r (allows paintin | a of the busway | housina) | |
| | pper | | | | S1 | DO Factory | / Mill Finish | RED0 Pair | nt Factory Re | |
| | r <mark>al/Ground</mark> Phase plus N | | of neutral busbar 2 1 Phase | and/or grour olus Neutra | 14/ | | actory Black actory White | | nt Factory Blu ase see page 1. | |
| | zation (orien | tation of sectio | n for mating purp | | | | | | | |
| 8. Lug/I | Box Options | (<i>standard/do</i> Standard bo | ıble/bolt lugs and | | | | | | | |

EXAMPLE

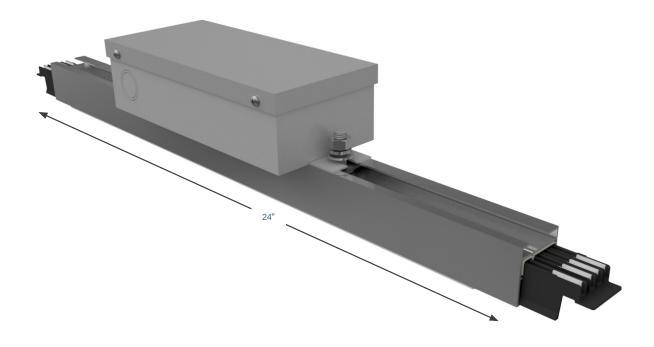
UF040T1C4R-SRSN-BLU0 = US System, End Feed, 40 amps, T1 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right lid Orientation, Standard Accessory Package, No Accessories Location, Painted Factory Blue



ABOVE FEED UNITS

PRODUCT DESCRIPTION

Weight 5 lbs





INTERNAL VIEW

| | | ED UN NUME | | | | | | | | | |
|-------------------|--|---------------------------------------|---|------------------------------|------------------------------------|---|-------------|--------------------------|--------------------------|--|-------------------------------|
| U | А | 040 | T1 | С | 4 | S | - | S | Ν | S | Ν |
| System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | on | 8. Lug/Box Options | 9. Lid Orientation | 10. Accessories Package | 11. Accessorie Location |
| | | - 02 | 200 C | 01 | 2 - | LL - | - S | TD0 | *Optional | | |
| | | 12. Straig Leng | , | 14. Feed Locati | | *15. System | 16. Pair | nt Color | | | |
| 1. Syster U US | n (standard o | f measure) | | | | I <mark>O. Accessor</mark> S Standar | | ackage (d | optional accesso | ries for feed ur | iits) |
| | ict Type (sed ove Feed | ction compone | nt) | | | 11. Accessori N None (N | | ocation (f | rom the terminal | , side with acco | essory) |
| 040 40 | amps | naximum ampe | <i>rage)</i> 050 50 amps | | | 12. Straight L 1200 2 feet | .engt | h (optiona | l accessories for | feed units) | |
| | atibility (frai | me compatibili | | | | 3. Busway A C Continu | | s (how plu | igs access the b | usway | |
| | System | | R1 T1 System Housing) | n (Recessed | 1 | 14. Feed Loc D12 12 inche | | (location o | of the center of t | he top feed) | |
| | r ial (<i>busbar m</i> pper | aterial) | | | k | 15. System (| line to | line or line | e to neutral syste | | |
| | al/Ground I hase plus N | | of neutral busbar 2 1 Phase p | and/or groun olus Neutral | d) , | LL Line to I LL & LN specia reference optic | ficatior | | only when orderi | Line to Neuti ing a 2-pole sys | |
| | <mark>zation</mark> (orient ndard | tation of sectio | n for mating purp R Reversed | | | | | | ng of the busway | | |
| • | 1 - C | (<i>standard/dou</i> Standard bo> | ible/bolt lugs and | l box size) | | STD0 Factor BLK0 Paint WHT0 Paint | Facto | ry Black | BLUO Pair | nt Factory Re nt Factory Blu ease see page 1 | le |
| | rientation (fi ne (N/A) | rom the termin | al, side with remo | vable lid) | | | | | | | |

EXAMPLE

<u>UA060T1C2S-SNSN-0200C012-LN-WHT0</u> = US System, Above Feed, 60 amps, T1 System, Copper Conductor, 1 Phase plus Neutral, Standard Polarization, Standard Lugs, Standard Box, No Lid Orientation, Standard Accessory Package, No Accessories Location- 2 foot Straight Length, Continuous Busway Access, 12 inch Feed Location, Line to Neutral System, Painted Factory White

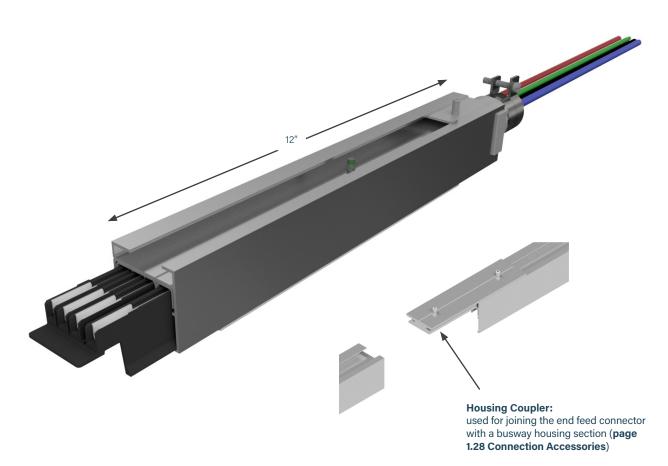


END FEED CONNECTOR UNITS

PRODUCT DESCRIPTION

An end feed connector provides an inconspicuous way to connect to power. It consists of a 1 foot section of busway with connector mounted inside and wire lead exiting through the end cap. A 1 inch conduit mounting adapter is included. A housing coupler (ordered separately) is used to connect to the busway section.

Weight 2 lbs



| | FEED CC DUCT NU | | | NITS: | | | | | |
|-----------------------|--|-----------------------|---------------------------|---------------------|------------------------------------|---|---|--|--------------------------|
| | U | С | 040 | T1 | С | 4 | S | - 024 | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Wire Length | |
| | | | - *9. Sys | 10. | int Color | *Optional | | | |
| | (standard of measu | ıre) | | | | | length of wire in | | |
| U US | | | | | 024 24 i 072 72 i | | 04: 09: | | |
| | t Type (section con Feed Connector | mponent) | | | *9. Syste | m (line to line | e or line to neutr | al system | |
| 040 40 an | | | 50 amps | | *LL & LN s | | LN equired only whe ral/Ground Bush | en ordering a 2- | o Neutral pole system |
| 060 60 an | nps | | | | 10 Daint | Color (-llau | s painting of the | · |) |
| 4. Compat T1 T1 Sy | s ibility (frame com stem | R1 | T1 System (Re Housing) | ecessed | STDO Fa Blko Pa | actory Mill F aint Factory aint Factory | inish RE Black BL | DO Paint Fac UO Paint Fac NAL (please se | tory Red tory Blue |
| 5. Materia C Copp | l (busbar material) per | | | | | | | (picace set | - page 1120) |
| 6. Neutral | /Ground Busba | r (size of neut | ral busbar and/ | or ground) | | | | | |
| 4 3 Pha | ase plus Neutral | 2 | 1 Phase plus | Neutral | | | | | |
| - | | | | | | | | | |
| | tion (orientation o | f section for n | nating purposes | s) | | | | | |

EXAMPLES

UC050T1C2R-048-LN-RED0 = US System, End Feed Connector, 50 amps, T1 System, Copper Conductor, 1 Phase plus Neutral, Reversed Polarization, 48 inch Wire Length, Line to Neutral System, Painted Factory Red

UC060R1C4S-072-STD0 = US System, End Feed Connector, 60 amps, T1 System-R1 Recessed Housing, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 72 inch Wire Length, Factory Mill Finish

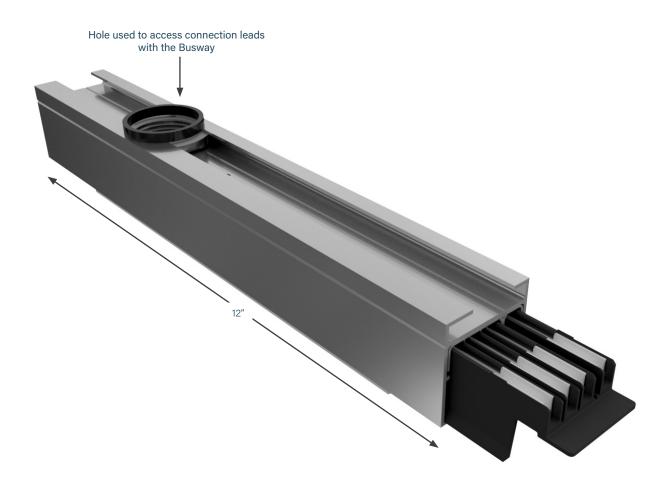


PENDANT FEED UNITS

PRODUCT DESCRIPTION

A Pendant Feed consists of a 1 foot busway section with a 1 inch conduit size access hole for access to connection leads inside the busway. A 1 inch conduit mounting adapter is included.

Weight 2 lbs



| | NDAN1 ODUC ⁻ | | | | | | | | | |
|--------------|--|-------------|-----------------------|---------------------------------------|---------------------|---------------------------|---|---|---|--------------------------|
| | | U | Ρ | 040 | T1 | С | 4 | S | – LL | |
| | 1. Sy | ystem | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | *8. System | |
| υι | tem (standard JS duct Type (s | | | | 9. Pain | LL Lin *LL & LN | e to Line specification re | or line to neutr LN quired only whe | Line t en ordering a 2- | o Neutral pole system |
| P F | Pendant Feed duct Frame | d | | | | | | ral/Ground Busk | | <i>q</i>) |
| 040 4 | 0 amps 0 amps | (maximum | | 50 amps | | STDO F Blko F | Factory Mill Fi Paint Factory Paint Factory | nish RE Black BL | DO Paint Fac UO Paint Fac IAL (please se | tory Red tory Blue |
| | n patibility (fi 「1 System | rame comp | R1 | Г1 System (R Housing) | ecessed | | | | | e page 1.23) |
| | t erial (<i>busbar</i> Copper | material) | | | | | | | | |
| | utral/Ground Phase plus | | | <i>al busbar and,</i> 1 Phase plus | Ŭ / | | | | | |
| | arization (orie | entation of | | ating purposes Reversed | s) | | | | | |

EXAMPLES

<u>UP040R1C2R-LL-PH50</u> = US System, Pendant Feed, 40 amps, T1 System-R1 Recessed Housing, Copper Conductor, 1 Phase plus Neutral, Reversed Polarization, Line to Line System, Painted RAL 5015

UP060T1C4S-STD0 = US System, Pendant Feed, 60 amps, T1 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Factory Mill Finish



RAL COLORS

| 1ST CHAR | ACTER |
|-----------------|-------|
| Р | Paint |

| 2ND CHA | RACTER |
|---------|--------|
| 0 | 100 |
| 1 | 101 |
| 2 | 102 |
| 3 | 103 |
| 4 | 200 |
| 5 | 201 |
| Α | 300 |
| В | 301 |
| С | 302 |
| D | 303 |
| E | 400 |
| F | 401 |
| G | 500 |
| н | 501 |
| J | 502 |
| к | 600 |
| L | 601 |
| М | 602 |
| Ν | 603 |
| Р | 700 |
| Q | 701 |
| R | 702 |
| S | 703 |
| т | 704 |
| U | 800 |
| V | 801 |
| W | 802 |
| х | 900 |
| Υ | 901 |
| z | 902 |
| | |

| 3RD CHA | RACTER |
|---------|--------|
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| | |

4TH CHARACTER0

EXAMPLE:

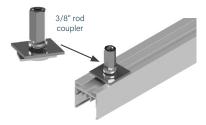
P B 2 0 = Paint RAL 3012



ACCESSORIES: SUPPORT HARDWARE

THREADED ROD

For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the top full-access slot of busway. Hanger support is required every 10 feet maximum. Part Number URHB-3 Available in plain zinc or black (-BLK) Weight .3 lb



3/8" or 1/4"

Stud

STANDARD

For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top full-access slot on the busway. Hanger support is required every 10 feet maximum.

WEIGHT HOOK ADAPTER

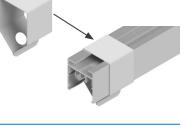
Can be used as a hanger to suspend the busway from chains or cables. Can also be used to hang loads of up to 50 pounds under the busway, such as light fixtures, tools and balancers.

T-BAR SUSPENDED CEILING

For mounting to an inverted T-bar. The clip locks onto T-bar and the busway is connected to the stud on the clip. T-bar is mounted with surface clip. Maximum spacing is 5 feet. Part Number UTHB-3 (3/8") UTHB-1/4 (1/4") Available in plain zinc or black (-BLK) Weight .2 lb

Part Number UWHRT1 Available in plain zinc or black (-BLK) Weight .2 lb

Part Number UTHB-5 Available in plain zinc Weight .1 lb





ACCESSORIES: SUPPORT HARDWARE

SURFACE MOUNT

For mounting to a surface. Comes with a 7/32 inch hole.

For rod mounting, this comes with a 7/16 inch hole.

CABLE

For mounting to a 1/16 inch or 3/32 inch aircraft cable with easy grip clamp assembly. Cable is not included. Hanger support is every 10 feet maximum.

CROSSOVER BRACKET

Two plane (over-under): the most economical method for providing single, two or three phase power in both directions. Use simple straight runs with power feeds from either end.

Part Number UGBT1-OU2 Available in plain zinc or black (-BLK) *4 required

Part Number UMCT1-S (surface)

Available in all standard

and RAL colors UMCT1-R (rod)

No available colors

Part Number

UACH-1 (1/16" cable)

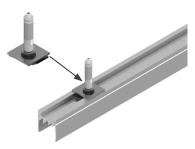
UACH-2 (3/32" cable)

Available in plain zinc

Weight

.2 lb



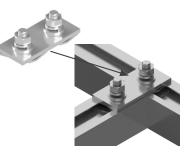




TWO-HOLE GRID BRACKET

Used to make the mechanical connection between two perpendicular pieces of T1 housing.

Part Number UGBT1-SP2 Available in plain zinc or black (-BLK)





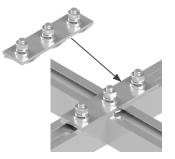


ACCESSORIES: SUPPORT HARDWARE

THREE-HOLE GRID BRACKET

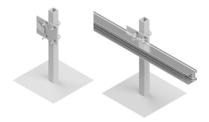
Used to make the mechanical connection between three, intersecting pieces of T1 housing.

Part Number UGBT1-SP3 Available in plain zinc or black (-BLK)



RAISED MOUNTING BRACKET

For mounting the busway horizontally (with access slot facing to the side) for under floor applications. Part Number URFBT1 Available in plain zinc or black (-BLK)





ACCESSORIES: CONNECTOR AND ADAPTERS

MONOPOINT ADAPTER

The monopoint track lighting adapter is compatible with a variety of Juno style track lighting fixtures, providing a direct connection to T1 Busway.

Weight

0.5 lbs

IP50 CONNECTOR

The IP50 connector can be hardwired into lighting fixtures other small loads to connect directly into T1 Busway.

*Additional fuse amperage available. Please consult factory.

Weight 0.5 lbs Part Number IP50-30-4

Part Number

UMPT1-1

(J-Style)





ACCESSORIES: CONNECTION HARDWARE

JOINT KIT

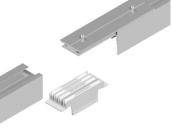
For the connection of adjacent busway sections. Each kit is comprised of an inline connector and housing coupler.

In-Line Connector: sections of busway are joined electrically by means of an in-line connector.

Housing Coupler: sections of busway are joined mechanically by means of a housing coupler. One is required per connection point.

IN-LINE CONNECTOR

The connector is installed by 'snapping' into position with housing sections butted together. All in-line bus connectors are polarized to prevent phase mismatch. Part Number UJKT1-2 (for 2-pole systems) UJKT1-4 (for 4-pole systems) Available in all standard and RAL colors



Part Number UBCT1-2 (for 2-pole systems) UBCT1-4 (for 4-pole systems)





4-pole connector

HOUSING COUPLER

Housing couplers make the mechanical connection between sections of busway.

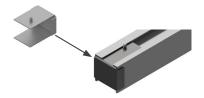
Part Number UHCT1 Available in all standard and RAL colors



END CAP

Used for insulating the female end of the busway.

Part Number UECT1 Available in standard & RAL colors UECR1 is required for recessed housing Weight: .2 lb



OPTIONAL CLOSURE STRIP

Made of rigid PVC, the closure strip is used to close the continuous access slot of the busway. It may be used for aesthetic purposes, for keeping dust and dirt from entering the busway or as an added safety measure. It is easily cut to length in the field to be installed around plug-in units.

Part Number UCST1 Available in standard colors



SERVICES

Regular servicing of busway systems is crucial for ensuring that your system performs at its best. By conducting regular maintenance, you can identify and address any potential issues before they turn into expensive problems, thus saving you time and money in the long run. Regular servicing can help extend the lifespan of your busway system, ensuring that it meets safety standards and complies with regulations. Choose from various offerings and customize a service plan that works best for you.

WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:

COMMISSIONING AND EQUIPMENT RENTALS

Designing a mission-critical facility involves a significant investment of time and money. Through comprehensive commissioning services, Starline can help guarantee your project delivers the outcomes you expect.

Whether you need rental equipment to test your busway system or certified technicians to perform the testing, Starline has you covered. Choose from our inventory of load bank tap-offs and associated gear, or work with a Starline Engineer to customize and perform a commissioning plan to fit your specific needs.

METER SERVICES

Starline's certified technicians make optimizing your meters' performance and functionality a breeze. Our comprehensive on-site meter programming service includes inspecting, programming, reporting, and optional retrofitting services for you existing systems.

STARTUP AND SYSTEM CERTIFICATION

At Starline, we are committed to ensuring the success of your project. Our team understands the risks associated with the energization of systems, which is why we've designed a rigorous certification process to inspect, test and report on your Starline Busway and Critical Power Monitor ("CPM") products. Our certification process proactively identifies and prevents any potential issues before they happen.

To ensure the long-term success of your project, it is crucial to have Starline-certified technicians inspect and validate the installation before full commissioning. Level 2 and 3 commissioning ensures the installation complies with safety requirements and meets factory standards for ongoing reliability.

- Double the length of the standard factory warranty
- Ensure all joint and feed connections are properly installed with continuity testing
- Ensure proper installation of all plug-in units
- Validate that system will perform to your specified requirements
- Full certification report delivered electronically at conclusion of service

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



SERVICES

TURNKEY INSTALLATION SERVICES

Our trained and factory certified Busbar installers are looking forward to completing your next job. You can order your best-in-class power distribution system and leave the rest to us. Our technicians will complete your installation quickly and safely and will reduce your overall TCO by extending your product warranty.

PREVENTATIVE MAINTENANCE PLANS AND IR SCANNING

Although Starline busway is expertly designed to require less maintenance, NETA ATS and MTS guidelines recommend conducting annual inspections and health assessments on all critical equipment. Yearly preventative maintenance helps to ensure your system's long-term reliability and safety.

Starline's FLIR-certified technicians will create a custom preventative maintenance plan for your specific needs. Our certified technicians will work to:

- Identify thermal anomalies
- Extend equipment lifecycle
- Ensure optimal system performance
- Improve facility safety and operational sustainability

Upon completing your preventative maintenance plan, you may be eligible to extend your product warranty.

ON-SITE INSTALLATION SUPPORT

Starline's on-site installation service makes installing your busway as quick and easy as possible.

Our installation support starts with scheduling a preliminary trip to the installation site. During the initial visit, our certified technicians will train your installing contractor and develop a thorough installation and commissioning plan.

After completing the training, your installing contractor will have a direct line of communication with our installation experts. Our experts can help answer questions and provide hands-on guidance when needed.

Opting for Starline's installation support helps mitigate the installation risk and reduces the learning curve typically associated with new installations.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



SERVICES

ON-SITE PRODUCT TRAINING

At Starline, we offer comprehensive on-site product training services facilitated by our team of certified technicians. With their extensive expertise and commitment to upholding our high factory standards, you can confidently rely on them to ensure your and your systems' reliability and operational safety.

Our training programs equip your team with the knowledge and skills necessary to operate and maintain your systems effectively. Through hands-on demonstrations and interactive sessions, our certified technicians will guide your staff in understanding the intricate workings of the products and address any questions or concerns your team may have during the training process.

By choosing our on-site product training services, you are investing in your system's and operations' long-term success

RECERTIFICATION AND EXTENDED WARRANTY PLANS

Starline's recertification and extended warranty options provide best-in-class coverage for all of your Starline products and systems. Our extended warranty plans safeguard your investment beyond the standard warranty timeframe, offering you peace-of-mind while our recertification programs help mitigate risk and downtime. Whether the busway has been installed for years or you are relocating to another building, Starline is here to help.

Choose from one of our flexible one to four-year plans or have your system recertified anytime. Contact your Starline rep for more information.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



T2 SERIES

SPECS & INTRODUCTION

SPECS

This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway or busway). The system shall be designed primarily for overhead distribution of electrical power. Supporting designated work areas and equipment. Once installed the busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

Track Busway shall be designed and manufactured to the following standards:

1. Underwriters Laboratories Standard, UL 857 — The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.

*All standards and certifications available upon request

INTRODUCTION

Starline is the leader in electrical power distribution in the mission critical, commercial and light industrial industries with Starline Track Busway. This system was designed to meet the rugged specification of the UL857, Busway and Associated Fittings, with the flexible features of track lighting — and is available in systems with 40, 50 & 60 amps with isolated ground.

It is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

The Product Selection Guide was developed to help the design engineer understand and consider all of the options available with Starline Track Busway when designing a system.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at **1-800-245-6378** or email us at **info@starlinepower.com**. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reserves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at <u>downloads.starlinepower.com</u>.



T2 SYSTEMS

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T2 SERIES

| SPECS & INTRODUCTION |
|-----------------------------|
| TABLE OF CONTENTS |
| SYSTEM LAYOUT DRAWING |
| POLARITY TIPS |
| SYSTEM LAYOUT TIPS |
| COMPONENT RELATIONSHIP TIPS |

60T2 SYSTEMS

| STRAIGHT SECTIONS | |
|---|------|
| STRAIGHT SECTIONS: PRODUCT NUMBERS | |
| ELBOW SECTIONS | |
| ELBOW SECTIONS: PRODUCT NUMBERS | |
| TEE SECTIONS | 2.10 |
| TEE SECTIONS: PRODUCT NUMBERS | |
| CROSS SECTIONS | 2.12 |
| CROSS SECTIONS: PRODUCT NUMBERS | |
| END FEED UNITS | |
| END FEED UNITS: PRODUCT NUMBERS | 2.16 |
| ABOVE FEED UNITS | 2.18 |
| ABOVE FEED UNITS: PRODUCT NUMBERS | 2.19 |
| END FEED CONNECTOR UNITS | |
| END FEED CONDUCTOR UNITS: PRODUCT NUMBERS | |
| BELOW FEED UNITS | |
| BELOW FEED UNITS: PRODUCT NUMBERS | |
| PENDANT FEED UNITS | |
| PENDANT FEED UNITS: PRODUCT NUMBERS | |
| | |

100T2 SYSTEMS

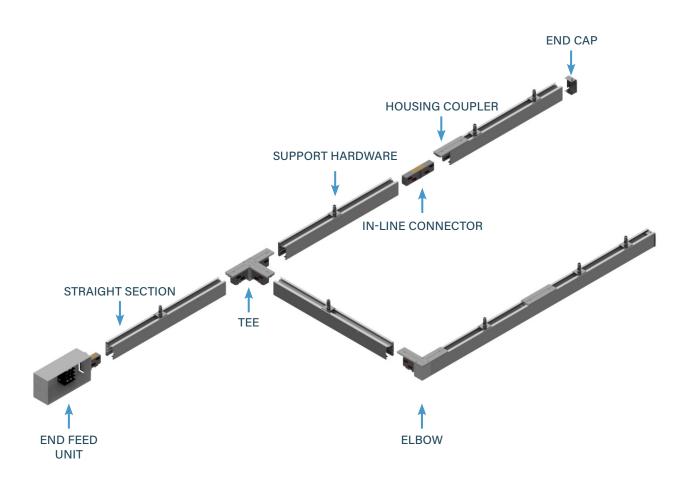
| STRAIGHT SECTIONS | |
|------------------------------------|--|
| STRAIGHT SECTIONS: PRODUCT NUMBERS | |
| ELBOW SECTIONS | |
| ELBOW SECTIONS: PRODUCT NUMBERS | |
| TEE SECTIONS | |
| TEE SECTIONS: PRODUCT NUMBERS | |
| CROSS SECTIONS | |
| CROSS SECTIONS: PRODUCT NUMBERS | |
| END FEED UNITS | |
| END FEED UNITS: PRODUCT NUMBERS | |
| ABOVE FEED UNITS | |
| ABOVE FEED UNITS: PRODUCT NUMBERS | |
| BELOW FEED UNITS | |
| BELOW FEED UNITS: PRODUCT NUMBERS | |
| | |

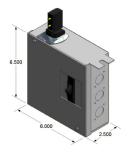
T2 ACCESSORIES

| RAL COLORS |
|----------------------------------|
| ACCESSORIES: SUPPORT HARDWARE |
| ACCESSORIES: CONNECTION HARDWARE |
| SERVICES |



SYSTEM LAYOUT DRAWING





PLUG-IN UNITS

For further information on applicable T2 plug-in unit options, please consult the factory.

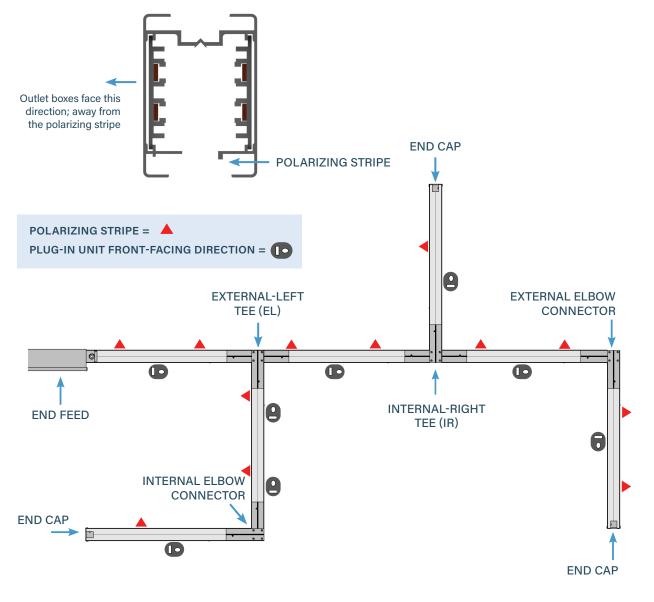


POLARITY TIPS

Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

It is particularly important to understand this design concept prior to ordering and/or installing some components.

For example, if the face direction of a Starline plug-in unit is important in your installation consider that they will always face the conductor side.





SYSTEM LAYOUT TIPS

POWER FEEDS

Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

SUPPORT HARDWARE

Support hardware is spaced no more than 10 feet apart. Refer to **page 2.43** for support hardware details. Contact your local Starline applications engineer for any questions.

INSTALLATION

Printed installation drawings are supplied with each system shipment and they are also available for download online at <u>downloads.starlinepower.com</u>. CAD files of these drawings are also available by contacting your local Starline applications engineer.

BUSWAY HOUSING SECTIONS

Standard busway lengths are available in 20, 10 and 5-foot increments. Although the factory can cut individual Starline Track Busway sections to any length under 20 feet, it is highly recommended to keep all layout runs in increments of 5 feet to simplify layout and installation. Custom lengths can be made but can increase lead time and make layout and installation a bit more complex.

BUSWAY TEES AND ELBOWS SECTIONS

Try to keep all runs as straight as possible as tees and elbows are added cost. Pay close attention to polarity on the elbows. The polarity will need to match the adjacent busway section(s) to be compatible.

| LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE: | | | | | | | | | | | |
|---|------------------|---------------------------------------|--------------------------------------|--|--|--|--|--|--|--|--|
| SYSTEM DESIGNATION | DISTRIBUTED LOAD | VOLTAGE DROP @ 0.8 PF SINGLE PHASE | VOLTAGE DROP @ 0.8 PF THREE PHASE | | | | | | | | |
| 60T2 (standard) | 60 amps | 29 ft | 51 ft | | | | | | | | |
| 100T2 (standard) | 100 amps | 42 ft | 72 ft | | | | | | | | |



COMPONENT RELATIONSHIP TIPS

When ordering material, it is important to understand the relationship between various components.

EXAMPLES

- No need to add extra Joint Kits for Elbows, Tees, or Crosses, as they are already part of your housing count.
- If using an Above Feed, order a Joint Kit for each Feed.

GENERAL SUPPORT HARDWARE RULE TO FOLLOW:

10 feet maximum spacing between supports and we recommend 10% more than the required quantity to cover potential layout changes.

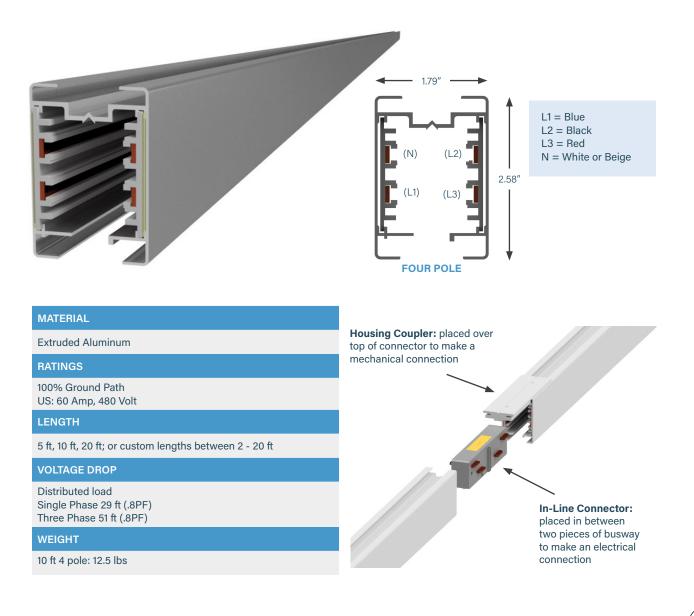
- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to **page 2.3 Polarity Tips** for more detail.



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight sections consist of an extruded aluminum shell with insulated copper conductor strips mounted on the two opposite interior side walls. The aluminum housing acts as a 100% ground path and each straight has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. The housing configuration is 4 pole in a 480V design. Track Busway housing is connected together using in-line connectors and housing couplers (found under Accessories).



| | | SECTI NUMB | | | | | | | | | |
|------------------|----------------|-----------------------|------------------------|---------------------|---|--|--------------------|-----------------|--------------|--|--|
| | U | S | 060 | T2 | С | 4 | S | - 0200 | С | | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material - STD 10. Paint Col | | 7. Polarization | 8. Straight | 9. Busway | | |
| 1. System | (standard of | measure) | | | 9 | . Busway Ac | cess (how plug | s access the bu | sway) | | |
| U US | | | | | C | Continuc | ous | | | | |
| 2. Product | t Type (sect | tion componer | nt) | | 1 | 0. Paint Colo | r (allows paintin | g of the busway | housing) | | |
| S Straig | ght Section | 1 | | | | STD0 Factory Mill Finish RED0 Paint Factory Red | | | | | |
| 3. Product | t Frame (ma | aximum ampe | rage) | | | BLKO Paint Factory Black BLUO Paint Factory Blue **RAL (please see page 2.4. | | | | | |
| 060 60 ar | nps | | | | | | , | | , , | | |
| 4. Compat | tibility (fram | ne compatibilit | ty) | | | | | | | | |
| T2 T2 Sy | ystem | | | | | | | | | | |
| 5. Materia | l (busbar ma | aterial) | | | | | | | | | |
| C Copp | ber | | | | | | | | | | |
| 6. Neutral | /Ground B | Susbar (size c | of neutral busba | ar and/or ground | d) | | | | | | |
| 4 3 Pha | ase plus Ne | eutral | | | | | | | | | |
| 7. Polariza | ition (orienta | ation of section | n for mating pu | rposes) | | | | | | | |
| S Stand | dard | | | | | | | | | | |
| 8. Straight | t Length (le | ength of sectio | n) | | | | | | | | |
| XXYY XX | =feet, YY=i | inches | | | | | | | | | |

EXAMPLES

US060T2C4S-1000C-STD0 = US System, Straight Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 10 foot Straight Length, Continuous Busway Access, Factory Mill Finish

<u>US060T2C4S-0500C-P010</u> = US System, Straight Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Continuous Busway Access, Painted RAL 1001



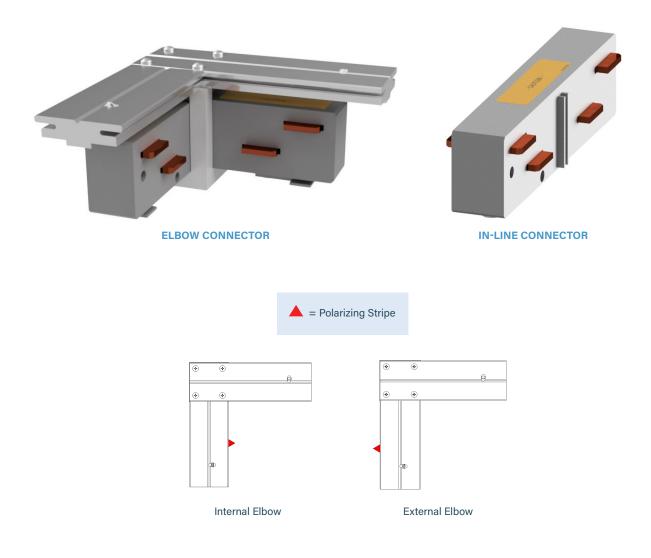
ELBOW SECTIONS

PRODUCT DESCRIPTION

Elbow connectors are used for making a 90 degree turn in a 60 amp busway run. Please be aware of polarization issues before making your final selection (refer to **page 2.3 Polarity Tips**).

Elbows are electrically connected to sections of 60 amp busway by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable connection. All in-line connectors are polarized to prevent phase mismatch.

Weight .5 lbs



ELBOW SECTIONS: PRODUCT NUMBERS U Ε 060 **T**2 С 4 S IN 3. 6. 2. 4. 5. 7. 8. 1. System Turning Product Product Compatibility Material Neutral/ Polarization Frame Ground Direction Туре Busbar - STD0 9. Paint Color 1 System (standard of 9 Turning Direction (dir Joriziu

| 1. System (standard of measure) | 8. Turning Direction (direction of section polarizing stripe) |
|---|---|
| U US | IN Internal EX External |
| 2. Product Type (section component) | 9. Paint Color (allows painting of the busway housing) |
| E Elbow Section | STD0 Factory Mill Finish RED0 Paint Factory Red |
| 3. Product Frame (maximum amperage) | BLKO Paint Factory Black BLUO Paint Factory Blue **RAL (please see page 2.42) |
| 060 60 amps | |
| 4. Compatibility (frame compatibility) | |
| T2 T2 System | |
| 5. Material (busbar material) | |
| C Copper | |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | |
| 4 3 Phase plus Neutral | |
| 7. Polarization (orientation of section for mating purposes) | |
| S Standard | |

EXAMPLES

UE060T2C4S-IN-BLK0 = US System, Elbow Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Black

UE060T2C4S-EX-STD0 = US System, Elbow Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External Turning Direction, Factory Mill Finish



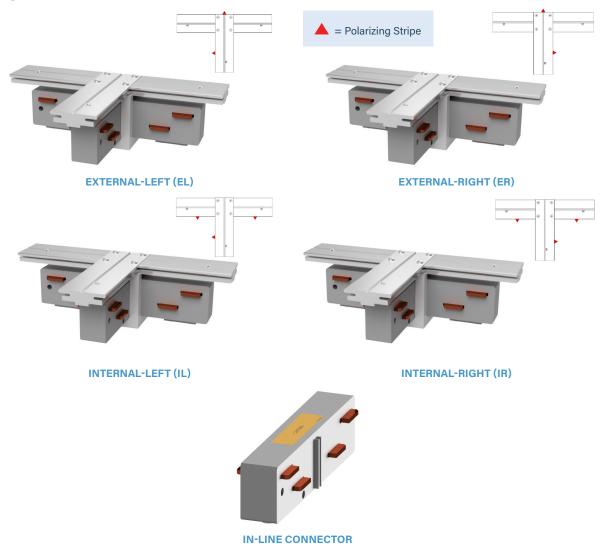
TEE SECTIONS

PRODUCT DESCRIPTION

Similar to elbow connectors, tee connectors are used for connecting branch housing sections at 90 degrees to the main run. Please be aware of polarization issues before making your final selection (refer to **page 2.3 Polarity Tips**).

Tees are electrically connected to sections of 60 amp busway by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable connection. All in-line connectors are polarized to prevent phase mismatch.

Weight 1 lb



TEE SECTIONS: PRODUCT NUMBERS

| | | _ | | | | | | | | |
|------------------------------|-------------------------|-------------------------|------------------------|---------------------|--|---|--------------------|-----------|---|--------|
| | U | Т | 060 | T2 | С | 4 | S | - | IR | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatior | | ing ction | |
| | | | | - S | TD0 | | | | | |
| | | | | 9. Pain | t Color | | | | | |
| 1. System (sta | andard of measure | ure) | | | | a Direction | (direction of s | ection po | larizina stri | |
| U US | | | | | IL Inte | ernal-Left | i (un conor or o | EL Ex | ternal-Left | t |
| 2. Product Ty | /pe (section co | mponent) | | | IR Inte | ernal-Right | | ER Ex | ternal-Rigl | nt |
| T Tee Sec | | | | | 9. Paint Color (allows painting of the busway housing) | | | | | |
| 3. Product Fr 060 60 amps | | m amperage) | | | BLK0 P | actory Mill F aint Factory aint Factory | Black B | LUO Pai | nt Factory nt Factory ease see pa | / Blue |
| 4. Compatibi | | npatibility) | | | | | | | | |
| T2 T2 Syste | | · | | | | | | | | |
| 5. Material (b | usbar material) |) | | | | | | | | |
| C Copper | | | | | | | | | | |
| 6. Neutral/G | round Busba | r (size of neutr | ral busbar and, | /or ground) | | | | | | |
| | plus Neutral | • | | <u> </u> | | | | | | |
| 7. Polarizatio | n (orientation c | of section for m | ating purposes | 5) | | | | | | |
| S Standar | | | Reversed | - - | | | | | | |

EXAMPLES

<u>UT060T2C4S-IR-RED0</u> = US System, Tee Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red

<u>UT060T2C4S-EL-STD0</u> = US System, Tee Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External-Left Turning Direction, Factory Mill Finish

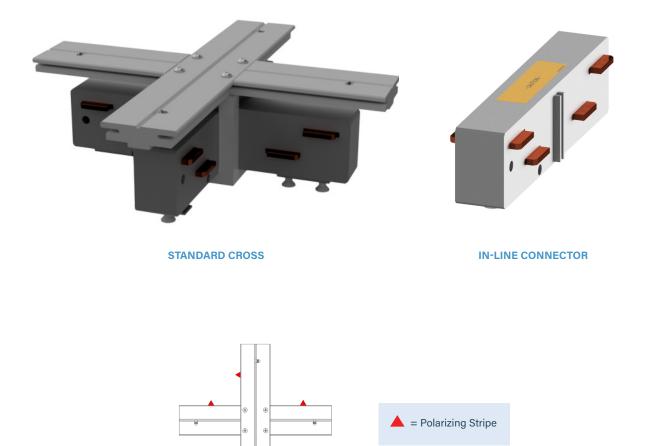


CROSS SECTIONS

PRODUCT DESCRIPTION

Similar to tee connectors, crosses are typically used for grid designs. Please be aware of polarization issues before making your final selection (**refer to page 2.3 Polarity Tips**).

Crosses are electrically connected to sections of 60 amp busway by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable connection. All in-line connectors are polarized to prevent phase mismatch.



CROSS SECTIONS: PRODUCT NUMBERS U Х 060 **T**2 С S ST 4 2. 3. 6. 8. 4. 5. 7. 1. Compatibility Material System Product Product Neutral/ Polarization Turning Ground Туре Frame Direction Busbar - STD0 9. Paint Color 1. System (standard of measure) 8. Turning Direction (direction of section polarizing stripe) U US ST Standard 2. Product Type (section component) 9. Paint Color (allows painting of the busway housing) Х **Cross Section STD0** Factory Mill Finish **REDO** Paint Factory Red BLKO Paint Factory Black BLUO Paint Factory Blue 3. Product Frame (maximum amperage) WHTO Paint Factory White ****RAL** (please see page 2.42) 060 60 amps 4. Compatibility (frame compatibility) T2 T2 System

5. Material (busbar material)

C Copper

6. Neutral/Ground Busbar (size of neutral busbar and/or ground)

4 3 Phase plus Neutral

- 7. Polarization (orientation of section for mating purposes)
- S Standard

EXAMPLES

<u>UX060T2C4S-ST-RED0</u> = US System, Cross Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Turning Direction, Painted Factory Red

<u>UX060T2C4S-ST-STD0</u> = US System, Cross Section, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Turning Direction, Factory Mill Finish



END FEED UNITS

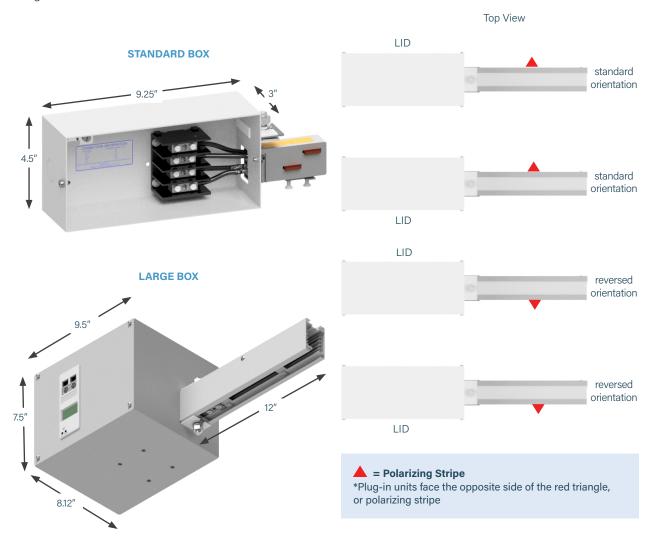
PRODUCT DESCRIPTION

With a built-in connector, the end feed units for 60T2 systems consist of a steel junction box with removable side, a terminal block for field connections and an in-line connector already terminated to one side of the terminal block.

The unit is inserted into the busway and held in position via a bolted connection to the busway.

Weight

Standard box: 3.5 lbs Large box: 12 lbs





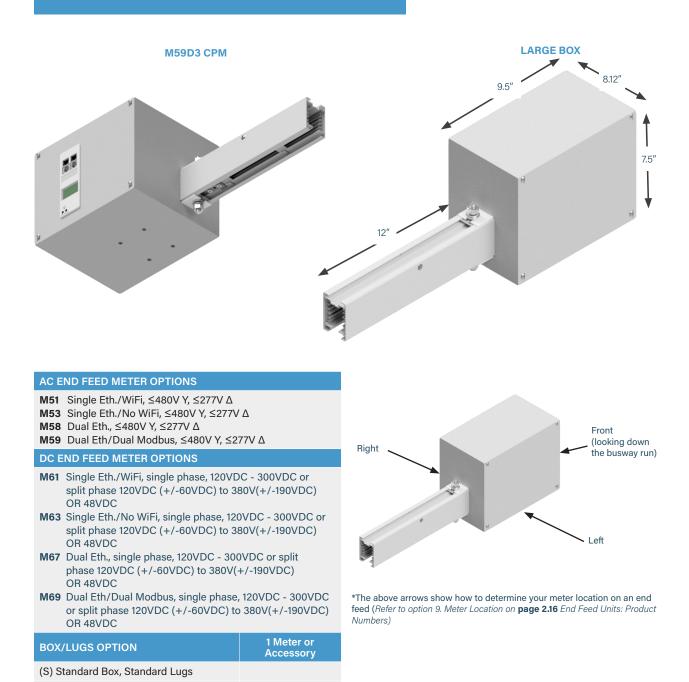
(L) Large Box, Standard Lugs

accessory location for Large box.

*Large box with one meter or accessory is 8.12" deep. A meter and accessory cannot be on the same lid. Consult factory to determine

Meters and accessories are not available on Standard box.

END FEED UNITS: METERING



Х



END FEED UNITS: PRODUCT NUMBERS

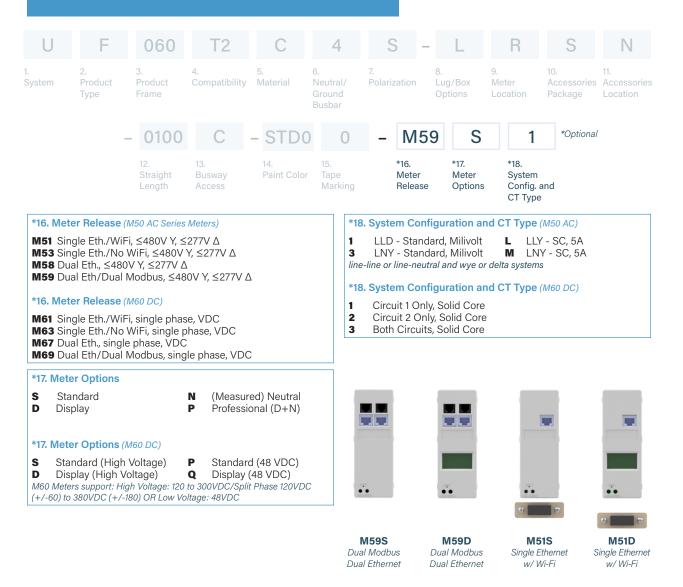
| U | F | 060 | T2 | С | 4 | S | - | L | R | S | Ν | | | |
|-----------------------|--|---------------------------------------|-------------------------------|-------------------|------------------------------------|--|----------|--------------------------|---|--|----------|--|--|--|
| 1. System | n Product Product Compatibility Material N Type Frame G | | | | 6. Neutral/ Ground Busbar | 7. Polarizatior | | .ug/Box 0ptions | 9. 10. 11. Meter Accessories Accessor Location Package Location | | | | | |
| | | - 0100 | С | - STD | 0 0 | - N | 159 | S | 1 | *Optiona | | | | |
| | | 12. Straight Length | 13. Busway Access | 14. Paint Colo | 15. r Tape Marking | *16. Mete Rele | | *17. Meter Options | *18. System Config. : CT Type | | | | | |
| U US | | of measure) ction componen | .*) | | S | Accessorie Standard ccessories not | l | | N No | ries for feed u ne (N/A) | nits) | | | |
| | d Feed | ction componer. | nt) | | 11. N | Accessorie None (N | | ation (fron | n the terminal, | side with acc | cessory) | | | |
| 3. Produ 60 60 | | maximum ampei | rage) | | *C | onsult factory | for La | • | | 8 | | | | |
| 4. Comp | | me compatibilit | y) | | | . Straight Le 00 1 ft. (For | | | | actory) | | | | |
| 5. Mate | rial (busbar m | naterial) | | | 13 C | Busway Ac | | (for large b | ox only) | | | | | |
| | r <mark>al/Ground</mark> Phase plus N | Busbar (size o leutral | f neutral busba | r and/or groun | a) S | . Paint Colo DO Factory KO Paint F | / Mill I | Finish | RED0 Pair | r housing) nt Factory R nt Factory B | | | | |
| | zation (orien Indard | tation of sectior | n for mating put R Reverse | | | HTO Paint F . Tape Mark | | | | ase see page of busway ho | | | | |
| 8. Lug/I | Box Options | s (standard/dou | ble/bolt lugs ar | nd box size) | 0 | No Tape | Marki | ng | | | | | | |
| S Sta | indard lugs, S | Standard box | L Standar | rd lugs, Large | e box | | | | | | | | | |
| | | from the termina rientation on lar | | novable lid; | | | | | | | | | | |
| R Rig N No | iht ne (N/A) | | L Left | | | | | | | | | | | |

EXAMPLE

UF60T2C4S-LNSN-0100C-STD0 = US System, End Feed, 60 Amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location - 1 ft. Straight Length, Continuous - Factory Mill Finish, No Tape Marking



END FEED UNITS: PRODUCT NUMBERS



EXAMPLE

<u>UF60T2C4S-LRSN-0100C-STD0-M59D3</u> = US System, End Feed, 60 Amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Large Box, Right Meter Location, Standard Accessory Package, No Accessory Location - 1 ft. Straight Length, Continuous - Factory Mill Finish, No Tape Marking - M59 Meter, with Display, LLD - Standard Milivolt



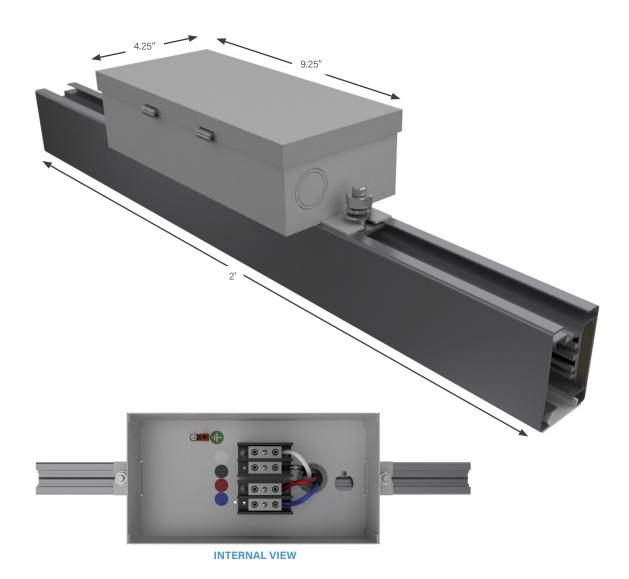
ABOVE FEED UNITS

PRODUCT DESCRIPTION

The above feed unit is used for supplying power anywhere along the top of a busway run. It consists of a twofoot section of busway, and a junction box with a 60A rated terminal block.

Two in-line connectors and housing couplers (supplied separately) are used to connect two adjacent busway sections.

Weight 2 - 5 lbs





ABOVE FEED UNITS: PRODUCT NUMBERS

| U | А | 060 | T2 | С | 4 | S | - | S | Ν | S | Ν |
|----------------------------------|----------------------------------|------------------------|----------------------|----------------|------------------------------------|--------------------------|-------------|--------------------------|--------------------------|-------------------------------|--------------------------------|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatior | ۱ | 8. Lug/Box Options | 9. Lid Orientation | 10. Accessories Package | 11. Accessories Location |
| | | | - 02 | 200 | C 0 | 12 - | ST | D0 | | | |
| | | | 12. Strai Leng | 0 | 14. Isway Feed Iscess Loca | l F | 5. Paint | Color | | | |
| 1. Syster U US | n (standard of | f measure) | | | 10. S | Accessorie Standard | | ackage (opt | ional accessor | ries for feed ur | nits) |
| 2. Produ | | tion componer | nt) | | | | s Lo | ocation (from | n the terminal, | side with acc | essory) |
| 3. Produ 060 60 | | aximum ampe | rage) | | | Straight Le 00 2 feet | engt | h (length of s | section) | | |
| 1 1 | atibility (fran System | ne compatibili | ty) | | 13. C | Busway Ac Continuo | | s (how plugs | access the bu | isway) | |
| 5. Mater | ial (busbar m | aterial) | | | 14. | Feed Loca | tion | (location of t | he center of th | ne top feed) | |

012 12 inches

STD0 Factory Mill Finish

BLKO Paint Factory Black

WHTO Paint Factory White

15. Paint Color (allows painting of the busway housing)

EXAMPLE

С

4

S

S

Ν

Copper

Standard

None (N/A)

3 Phase plus Neutral

Standard lugs, Standard box

6. Neutral/Ground Busbar (size of neutral busbar and/or ground)

R

Reversed

7. Polarization (orientation of section for mating purposes)

8. Lug/Box Options (standard/double/bolt lugs and box size)

9. Lid Orientation (from the terminal, side with removable lid)

UA060T2C4S-SNSN-0200C012-BLK0 = US System, Above Feed, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Standard Box, No Lid Orientation, Standard Accessory Package, No Accessory Location, 2 foot Straight Length, Continuous Access, 12 inch Feed Location, Painted Factory Black

REDO Paint Factory Red

BLUO Paint Factory Blue

**RAL (please see page 2.42)



END FEED CONNECTOR UNITS

PRODUCT DESCRIPTION

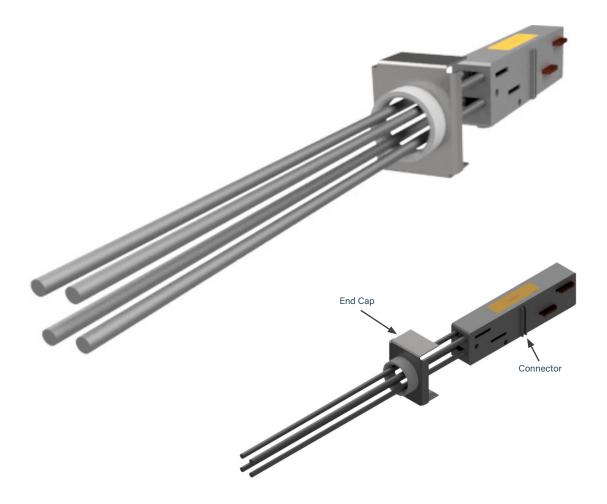
This design of power feed has a built-in connector and is used primarily in applications where aesthetic appearance is important — such as retail.

Wire leads are preassembled to the connector and eliminate the junction box on the busway.

24 in wire length is standard, but additional lengths are available upon request.

End Feed Connector units are shipped with an installation tool specifically designed to move the housing clip to desired location to allow for proper fit. See Installation Instructions for more details.

Weight 2 lbs



END FEED CONDUCTOR UNITS: PRODUCT NUMBERS

| | | U | С | 060 | T2 | С | 4 | S | - | 024 |
|------------|----------------|----------------|-----------------------|------------------------|---------------------|----------------|------------------------------------|--------------------|-------|----------------------|
| | | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | I | 8. Wire Length |
| 1. S | ystem (stand | ard of measur | re) | | | 8. Wire L | .ength (total le | ength of wire | in in | ches) |
| U | US | | | | | ZZZ ZZZ | Z = inches (02 | 24 is standar | d) | |
| 2. P | roduct Type | e (section com | nponent) | | | | | | | |
| С | Concealed | l Feed | | | | | | | | |
| 3. P | roduct Fran | ne (maximum | amperage) | | | | | | | |
| | 60 amps | | | | | | | | | |
| 4. C | ompatibility | (frame comp | oatibility) | | | | | | | |
| T 2 | T2 System | | | | | | | | | |
| 5. N | laterial (busk | bar material) | | | | | | | | |
| C | Copper | | | | | | | | | |
| 6. N | leutral/Grou | und Busbar | (size of neut | ral busbar and, | /or ground) | | | | | |
| 4 | 3 Phase plu | | | 1 Phase plus | | | | | | |
| 7. P | olarization (| orientation of | section for m | ating purposes | 5) | | | | | |
| S | Standard | | R | Reversed | | | | | | |

EXAMPLE

UC060T2C4S-024 = US System, Concealed Feed, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 24 inch Wire Length

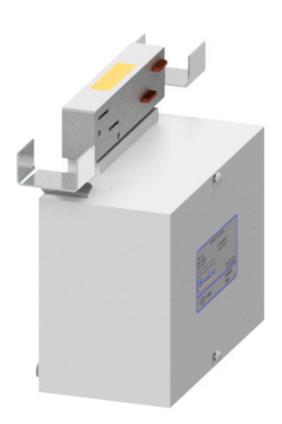


BELOW FEED UNITS

PRODUCT DESCRIPTION

A Below Power Feed is designed to be installed anywhere along the full-access opening of a busway run. Insert the Power Feed connector into the busway run where desired and secure with a hanger bolt (supplied). The Below Power Feed unit must be completely installed in the selected busway housing before the adjacent housing section can be installed. A terminal block is provided in the box for field terminations. Power supply cable is fed in from under the unit.

Weight 4.8 lbs





| | | ED UN NUMB | | | | | | | | | | | |
|----------------------------------|--|---------------------------------------|---------------------------------|----------------|---|--|---------|--------------------------|--------------------------|---|--------------------------------|--|--|
| U | В | 060 | T2 | С | 4 | S | - | S | R | S | Ν | | |
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | I | 8. Lug/Box Options | 9. Lid Orientation | | 11. Accessories Location | | |
| 1. Syster U US | m (standard o | f measure) | | | - STD 12. Paint Cold 9. 1 R | r | ion | (from the te | rminal, side wit | h removable li | id) | | |
| 2. Produ | Ict Type (see | ction componer | nt) | | 10. | - | s Pa | ackage (op | tional accesso | ries for feed u | nits) | | |
| | low Feed | | | | S | S Standard 11. Accessories Location (from the terminal, side with accessory) | | | | | | | |
| 3. Produ 060 60 | | naximum ampe | rage) | | 11. N | Accessorie: None (N/ | | cation (fro | m the terminal | side with acc | essory) | | |
| 4. Comp | atibility (fra | me compatibilit | ty) | | 12. | Paint Color | r (allo | ows painting | of the busway | housing) | | | |
| 5. Mater | System r ial (<i>busbar m</i> pper | aterial) | | | BL | DO Paint Fa KO Paint Fa ITO Paint Fa | acto | ry Black | BLUO Pair | nt Factory Re nt Factory Bl pase see page 2 | ue | | |
| | r <mark>al/Ground</mark> I hase plus N | | f neutral busbar | and/or grou | nd) | | | | | | | | |
| | <mark>zation</mark> (orien | tation of section | n for mating purp R Reversed | | | | | | | | | | |
| | | (<i>standard/dou</i> Standard box | ble/bolt lugs and | d box size) | | | | | | | | | |

EXAMPLE

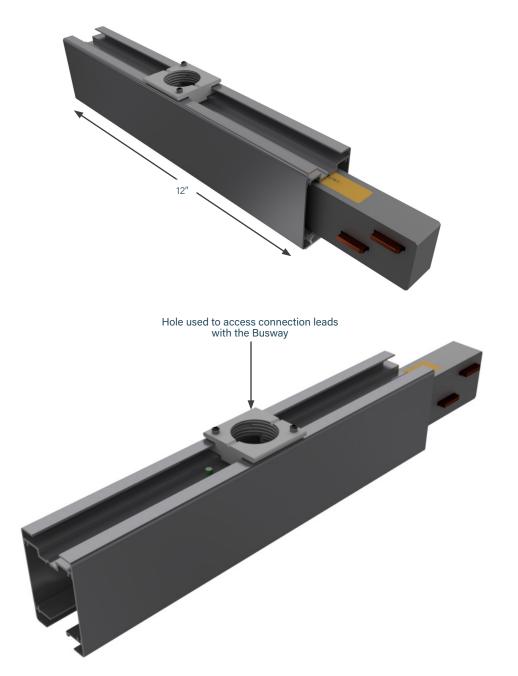
<u>UB060T2C4S-SRSN-STD0</u> = US System, Below Feed, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Standard Box, Right Lid Orientation, Standard Accessory Package, No Accessory Location, Galvanized



PENDANT FEED UNITS

PRODUCT DESCRIPTION

A Pendant Feed consists of a 1 foot busway section with a 1 inch conduit size access hole for access to connection leads inside the Busway. A 1 inch conduit mounting adapter is included.



| PENDAN PRODUC | | | | | | | | | | |
|--|----------------|-----------------|----------------------------|--|--|---|--------------------|---|------------|--|
| | U | Р | 060 | T2 | С | 4 | S | S | | |
| 1. System (stand U US | | | 3. Product Frame | 4. Compatibility – ST 9. Paint | Color *8. System | ne to Line | 7. Polarization | utral System) N Line to I | | |
| 2. Product Type P Pendant F | eed | | | | (reference option 6. Neutral/Ground Busbar) 9. Paint Color (allows painting of the busway housing) | | | | | |
| 3. Product Fran 060 60 amps 4. Compatibility | | | | | BLKO Pai | ctory Mill Fin nt Factory B int Factory V | lack BL | DO Paint Fac UO Paint Fac RAL (please so | ctory Blue | |
| T2 T2 System | | | | | | | | | | |
| 5. Material (busk C Copper | bar material) | | | | | | | | | |
| 6. Neutral/Grou4 3 Phase place | | (size of neutra | al busbar and/o | or ground) | | | | | | |
| 7. Polarization (S Standard | orientation of | | ating purposes Reversed |) | | | | | | |

EXAMPLES

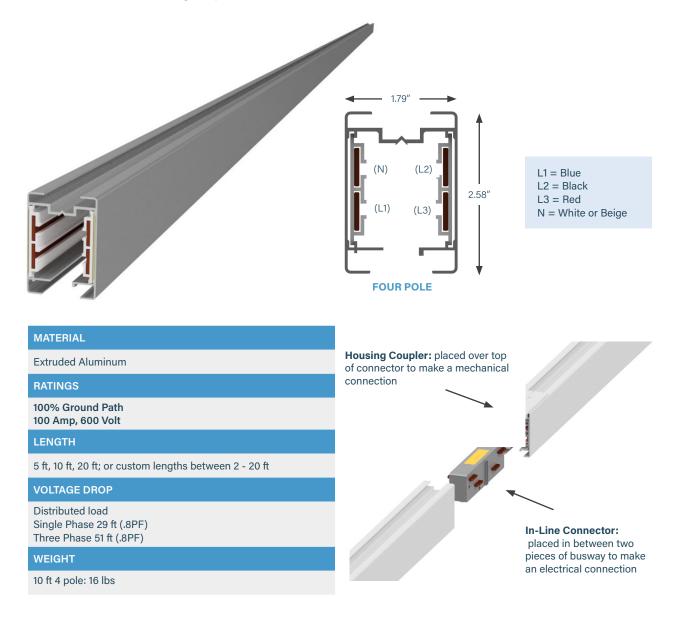
<u>UP060T2C4R-PD60</u> = US System, Pendant Feed, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Painted RAL 3036 <u>UP060T2C4S-STD0</u> = US System, Pendant Feed, 60 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Factory Mill Finish



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight sections consist of an extruded aluminum shell with insulated copper conductor strips mounted on the two opposite interior side walls. The aluminum extrusion acts as a 100% ground path and each straight has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. The housing configuration is 4 pole in a 600 Volt design. Track Busway straights are connected together using in-line connectors and housing couplers (found under Accessories).



| | | SECT | | | | | | | | |
|--------------------|-------------------------------------|----------------------------------|------------------------|---------------------|--|---------------------------|--|-------|---|---------------------------|
| | U | S | 100 | T2 | С | 4 | S | _ | 0200 | С |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material - STC 10. Paint Co | | 7. Polarization | | 8. Straight | 9. Busway |
| 1. System U US | ו (standard o | f measure) | | | 9 C | | cess (how plu us | gs ac | cess the busy | vay) |
| S Stra | hight Section | n n naximum amp | | | S | TDO Factor LKO Paint F | r (allows painta y Mill Finish factory Black factory White | | f the busway h REDO Paint BLUO Paint **RAL (plea | Factory Re Factory Blu |
| | atibility (frar System | me compatibi | lity) | | | | | | | |
| 5. Materi C Cop | al (<i>busbar m</i> | aterial) | | | | | | | | |
| | al/Ground E nase plus Ne | | of neutral bus | bar and/or grour | nd) | | | | | |
| | a <mark>tion</mark> (orient | tation of section | on for mating µ | ourposes) | | | | | | |
| | h t Length (/ X=feet, YY= | <i>length of secti</i> inches | ion) | | | | | | | |

EXAMPLES

<u>US100T2C4S-0206C-STD0</u> = US System, Straight Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Busway Access, Factory Mill Finish

US100T2C4S-0500C-P010 = US System, Straight Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Continuous Busway Access, Painted RAL 1001



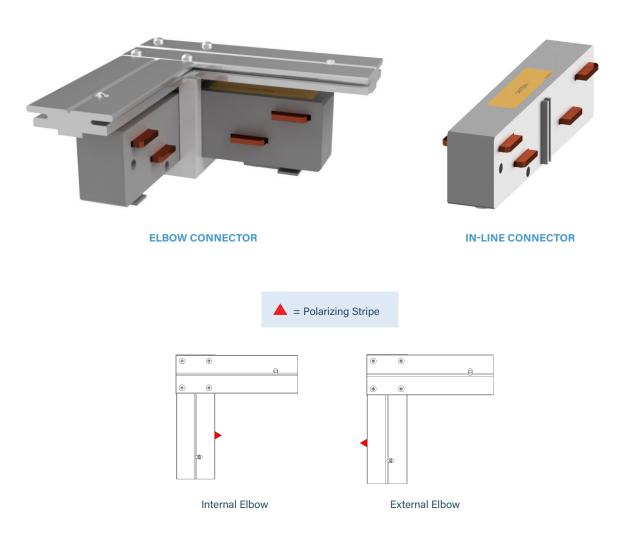
ELBOW SECTIONS

PRODUCT DESCRIPTION

Elbow connectors are used for making a 90 degree turn in a 100 amp compact busway run. Please be aware of polarization issues before making your final selection (refer to **page 2.3 Polarity Tips**).

Elbows are electrically connected to sections of 100 amp busway by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable connection. All in-line connectors are polarized to prevent phase mismatch.

Weight .5 lbs



ELBOW SECTIONS: PRODUCT NUMBERS U E 100 **T**2 С S IN 4 2. 3. 8. 1. 4. 5 6. 7. Product Compatibility Material System Product Neutral/ Polarization Turning Frame Туре Ground Direction Busbar - STD0 9. Paint Color 1. System (standard of measure) 8. Turning Direction (direction of section polarizing stripe) U US IN Internal **EX** External 9. Paint Color (allows painting of the busway housing) 2. Product Type (section component) E **Elbow Section STD0** Factory Mill Finish **REDO** Paint Factory Red BLKO Paint Factory Black **BLUO** Paint Factory Blue 3. Product Frame (maximum amperage) WHTO Paint Factory White **RAL (please see page 2.42) 100 100 amps 4. Compatibility (frame compatibility) T2 T2 System 5. Material (busbar material)

C Copper

6. Neutral/Ground Busbar (size of neutral busbar and/or ground)

- 4 3 Phase plus Neutral
- 7. Polarization (orientation of section for mating purposes)
- S Standard

EXAMPLES

<u>UE100T2C4S-IN-BLK0</u> = US System, Elbow Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Black

UE100T2C4S-EX-STD0 = US System, Elbow Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External Turning Direction, Factory Mill Finish



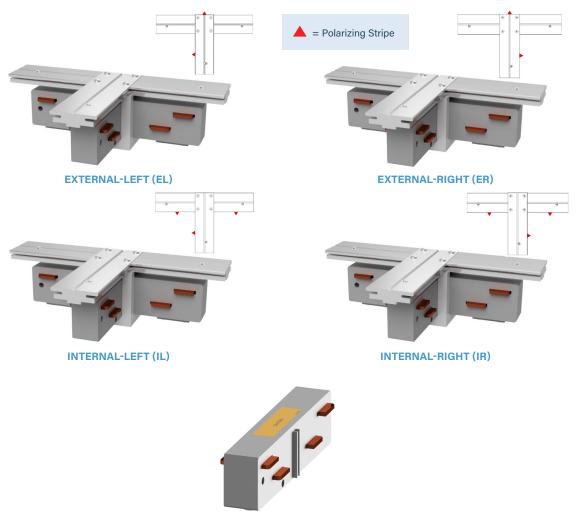
TEE SECTIONS

PRODUCT DESCRIPTION

Similar to elbow connectors, tee connectors are used for connecting branch housing sections at 90 degrees to the main run. Please be aware of polarization issues before making your final selection (refer to **page 2.3 Polarity Tips**).

Tees are electrically connected to sections of 100 amp busway by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable connection. All in-line connectors are polarized to prevent phase mismatch.

Weight 1 lb



IN-LINE CONNECTOR

TEE SECTIONS: PRODUCT NUMBERS

| | U | т | 100 | T2 | С | 4 | S | 1. | IR | |
|--|----------------|-----------------------|------------------------|---------------------|----------------|------------------------------------|-------------------|----------|----------------------------|----------|
| | • | 1 | | | • | | Ū. | | | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | ı | 8. Turning Direction | |
| | | | | - S | TD0 | | | | | |
| | | | | 9. Pa | int Color | | | | | |
| 1. System (sta | ndard of meas | sure) | | | 8. Turni | ng Directior | ו (direction of | section | n polarizing s | stripe) |
| U US | | | | | | ernal-Left ernal-Right | | EL ER | External-L External-F | |
| 2. Product Ty | | omponent) | | | | Color (allows | o pointing of t | | | 0 |
| T Tee Sect | tion | | | | | Factory Mill F | | | Paint Facto | |
| 3. Product Fra 100 100 amp | | ım amperage) | | | BLK0 | Paint Factory | / Black I | BLUO | Paint Facto | ory Blue |
| | | non otik ilitur) | | |] | | | | u | 1.0 |
| 4. CompatibilT2 T2 System | | працопцу) | | | | | | | | |
| 5. Material (b) | | 0 | | |] | | | | | |
| C Copper | usbar material | 9 | | | | | | | | |
| 6. Neutral/Gr | round Bush | ar (size of neu | tral hushar an | d/or ground) |] | | | | | |
| | plus Neutral | | aa busbar an | a, or ground) | | | | | | |
| 7. Polarizatio | | | nating purpos | es) | 1 | | | | | |
| S Standard | | R | Reversed | · | | | | | | |

EXAMPLES

UT100T2C4S-IR-RED0 = US System, Tee Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red

<u>UT100T2C4S-EL-STD0</u> = US System, Tee Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External-Left Turning Direction, Factory Mill Finish



CROSS SECTIONS

PRODUCT DESCRIPTION

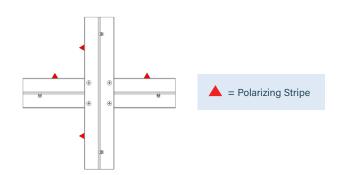
Similar to tee connectors, crosses are typically used for grid designs. Please be aware of polarization issues before making your final selection (**refer to page 2.3 Polarity Tips**).

Crosses are electrically connected to sections of 100 amp busway by means of an in-line connector. The connector is installed by inserting in each end of the housing sections to be joined. Hex head compression screws are tightened to make a reliable connection. All in-line connectors are polarized to prevent phase mismatch.



STANDARD CROSS





| CROSS PRODU | | | S | | | | | | | | |
|------------------------|-----------------------|-------------------------|------------------------|---------------------|--|------------------------------------|--------------------|---|-----------|--|--|
| | U | Х | 100 | T2 | С | 4 | S | - ST | | | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Turning Direction | | | |
| | | | | - S | TD0 | | | | | | |
| | | | | 9. Pa | int Color | | | | | | |
| 1. System (stan | dard of meas | ure) | | | | ng Direction | (direction of | section polarizing | ı stripe) | | |
| 2. Product Typ | De (section co | omponent) | | | 9. Paint Color (allows painting of the busway housing) | | | | | | |
| X Cross Se | ction | | | | STD0 Factory Mill Finish RED0 Paint Factory Red | | | | | | |
| 3. Product Fra | ame (maximu | m amperage) | | | | Paint Factory Paint Factory | | BLUO Paint Fac *RAL (please se | | | |
| 100 100 amps | 6 | | | | | | | | | | |
| 4. Compatibili | ty (frame con | npatibility) | | | | | | | | | |
| T2 T2 System | m | | | | | | | | | | |
| 5. Material (bu | sbar material, |) | | | | | | | | | |
| C Copper | | | | | | | | | | | |
| 6. Neutral/Gro | | Ir (size of neut | ral busbar and | d/or ground) | | | | | | | |
| 4 3 Phase p | olus Neutral | | | | | | | | | | |
| 7. Polarization | (orientation o | of section for n | nating purpose | es) | | | | | | | |

S Standard

EXAMPLES

UX100T2C4S-ST-RED0 = US System, Cross Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Turning Direction, Painted Factory Red

UX100T2C4S-ST-STD0 = US System, Cross Section, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Turning Direction, Factory Mill Finish

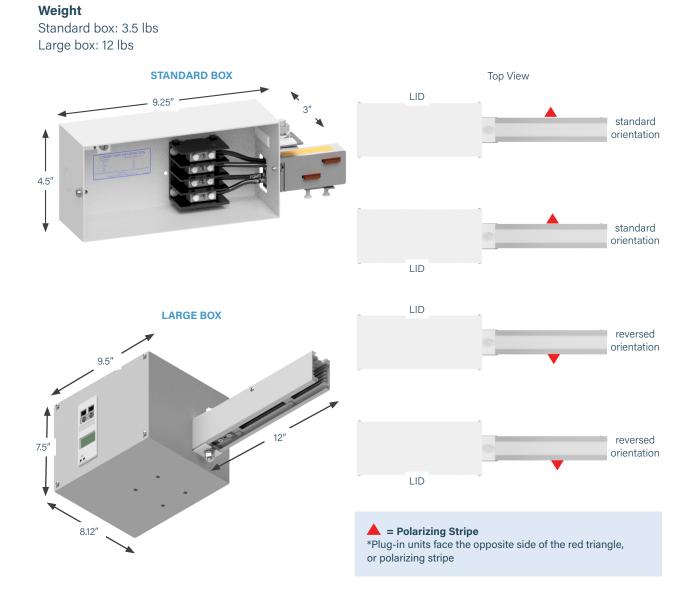


END FEED UNITS

PRODUCT DESCRIPTION

With a built-in connector, the end feed units for 60T2 systems consist of a steel junction box with removable side, a terminal block for field connections and an in-line connector already terminated to one side of the terminal block.

The unit is inserted into the busway and held in position via a bolted connection to the busway.





END FEED UNITS: METERING

M59D3 CPM

9.5" 9.5" 12"

AC END FEED METER OPTIONS

- **M51** Single Eth./WiFi, \leq 480V Y, \leq 277V Δ
- **M53** Single Eth./No WiFi, \leq 480V Y, \leq 277V Δ
- **M58** Dual Eth., ≤480V Y, ≤277V ∆
- M59 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ

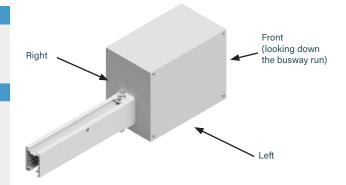
DC END FEED METER OPTIONS

- M61 Single Eth./WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M63 Single Eth./No WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M67 Dual Eth., single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M69 Dual Eth/Dual Modbus, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC

| BOX/LUGS OPTION | 1 Meter or Accessory |
|---------------------------------|-------------------------|
| (S) Standard Box, Standard Lugs | |
| (L) Large Box, Standard Lugs | Х |

*Large box with one meter or accessory is 8.12" deep. A meter and accessory cannot be on the same lid. Consult factory to determine accessory location for Large box.

Meters and accessories are not available on Standard box.



*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 2.36** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS

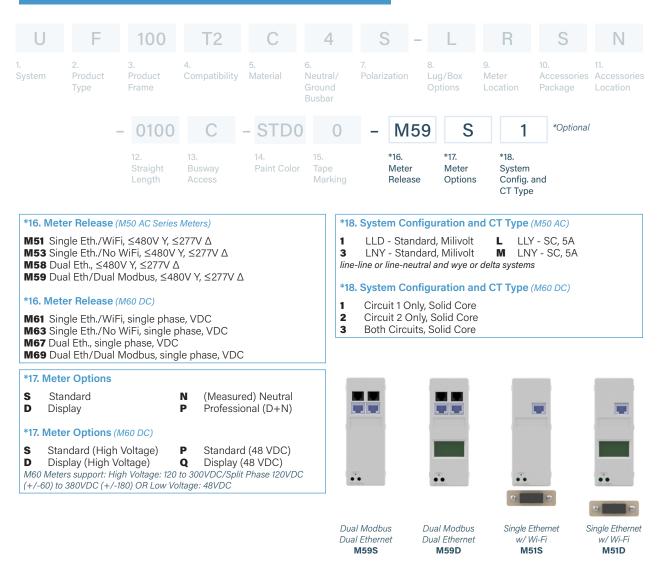
| U | F | 100 | T2 | С | 4 | S | - | L | R | S | Ν | |
|--|-----------------------|---|-------------------------|--------------------------------|--|--|---------------------|-------------------------------|--------------------------------------|-------------------------------|--------------------------------|---|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizati | on | 8. Lug/Box Options | 9. Meter Location | 10. Accessories Package | 11. Accessories Location | |
| | | - 0100 | С | - STD | 0 0 | - [| V 5 | 9 S | 1 | *Optiona | | |
| | | 12. Straight Length | 13. Busway Access | 14. Paint Colo | 15. r Tape Marking | | ð. eter lease | *17. Meter Options | *18. System Config. CT Type | | | |
| U US | | f measure) | .+) | | 5 | Standa | rd | ackage (opt ilable on stan | N No | ries for feed u ne (N/A) | nits) | |
| F En | d Feed | naximum ampei | | | | ptions) | | ocation (con | sult factory fo | r Large box ac | cessory | |
| 100 100 amps 4. Compatibility (frame compatibility) | | | | | 12. Straight Length (for large box only) 0100 1 ft. (For other lengths, consult the factory) 13. Busway Access (for large box only) C Continuous | | | | | | | |
| T2 T2 System 5. Material (busbar material) C Copper | | | | | | | | | | | | C |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 4 3 Phase plus Neutral | | | | | d) E | 14. Paint Color (allows painting of the busway housing) STD0 Factory Mill Finish RED0 Paint Factory Red BLK0 Paint Factory Black BLU0 Paint Factory Blue wHT0 Paint Factory White **RAL (please see page 2.42) | | | | | | |
| 7. Polarization (orientation of section for mating purposes) S S Standard R Reversed | | | | 1 | 15. Tape Marking (colored tape on both sides of busway housing) 0 No Tape Marking | | | | | | | |
| | 1.1 | s (<i>standard/dou</i> Standard box | | nd box size) rd lugs, Large | | | | | | | | |
| | | rom the termina rientation on lar | | novable lid; | | | | | | | | |
| R Rig N No | iht ne (N/A) | | L Left | | | | | | | | | |

EXAMPLE

UF100T2C4S-LNSN-0100C-STD0 = US System, End Feed, 100 Amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location - 1 ft. Straight Length, Continuous - Factory Mill Finish, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



EXAMPLE

UF100T2C4S-LRSN-0100C-STD0-M59D3 = US System, End Feed, 100 Amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Large Box, Right Meter Location, Standard Accessory Package, No Accessory Location - 1 ft. Straight Length, Continuous - Factory Mill Finish, No Tape Marking - M59 Meter, with Display, LLD - Standard Milivolt



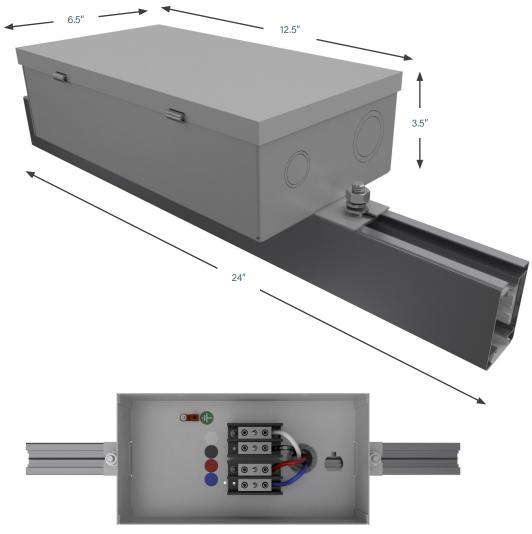
ABOVE FEED UNITS

PRODUCT DESCRIPTION

The above feed unit is used for supplying power anywhere along the top of a busway run. It consists of a two-foot section of busway, and a junction box with a 100 amp rated terminal block.

Two in-line connectors and housing couplers (supplied separately) are used to connect two adjacent busway sections.

Weight 5 lb



INTERNAL VIEW

ABOVE FEED UNITS: PRODUCT NUMBERS

| U | А | 100 | T2 | С | 4 | S | - | S | Ν | S | Ν |
|--|-----------------------|------------------------|---------------------|----------------|------------------------------------|--|----------------|--------------------------|--------------------------|---------------------------------|--------------------------------|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | | 3. _ug/Box Options | 9. Lid Orientation | 10. Accessories Package | 11. Accessories Location |
| | | | - 02 | 200 | C (|)12 – | STI | D0 | | | |
| | | | 12. Stra Len | 0 | 14. sway Fee cess Loc | d ation | 15. Paint C | Color | | | |
| 1. Syste | m (standard o | f measure) | | | 10 | . Accessori | es Pa | ckage (op | tional accesso | ries for feed u | nits) |
| U US | 6 | | | | S | Standar | d | | | | |
| 2. Prod | uct Type (see | ction compone | nt) | | 11. | 11. Accessories Location (from the terminal, side with accessory) | | | | | |
| A Ak | ove Feed | | | | N | N None (N/A) | | | | | |
| 3. Product Frame (maximum amperage) | | | | | | 12. Straight Length (length of section) | | | | | |
| 100 100 amps | | | | | | 0200 2 feet | | | | | |
| 4. Compatibility (frame compatibility) | | | | | | 13. Busway Access (how plugs access the busway) | | | | | |
| T2 T2 | System | | | | C | Continue | ous | | | | |
| 5. Mate | rial (busbar m | aterial) | | | 14 | 14. Feed Location (location of the center of the top feed) | | | | | |
| C Co | opper | | | | 01 | 2 12 inche | S | | | | |
| 6. Neut | ral/Ground | Busbar (size o | of neutral busba | r and/or grou | nd) 15 | . Paint Colo | or (allow | ws painting | of the busway | housing) | |
| 4 3 1 | Phase plus N | eutral | | | | FDO Factor | | | | nt Factory Re | |
| 7. Polar | ization (orien | tation of sectio | on for mating pur | poses) | | L KO Paint I HTO Paint I | | | | nt Factory Bl ase see page 2 | |
| S Sta | andard | | R Reverse | d | | | | | | | |
| 8. Lug/ | Box Options | (standard/dou | uble/bolt lugs an | d box size) | | | | | | | |
| S Sta | andard lugs, S | Standard box | | | | | | | | | |
| 9. Lid C | rientation (fi | rom the termin | al, side with rem | ovable lid) | | | | | | | |
| N No | one (N/A) | | | | | | | | | | |

EXAMPLE

UA100T2C4S-SNSN-0200C012-BLK0 = US System, Above Feed, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Standard Box, No Lid Orientation, Standard Accessory Package, No Accessory Location, 2 foot Straight Length, Continuous Access, 12 inch Feed Location, Painted Factory Black



BELOW FEED UNITS

PRODUCT DESCRIPTION

A Below Power Feed is designed to be installed anywhere along the full-access opening of a busway run. Insert the Power Feed connector into the busway run where desired and secure with a hanger bolt (supplied). The Below Power Feed unit must be completely installed in the selected busway housing before the adjacent housing section can be installed. A terminal block is provided in the box for field terminations. Power supply cable is fed in from under the unit.

Weight 4.8 lbs





| | | ED UN NUME | | | | | | | | | |
|--|-------------------------------|------------------------|---------------------|----------------|------------------------------------|--|------|--------------------------|--------------------------|--|--------------------------------|
| U | В | 100 | T2 | С | 4 | S | _ | S | R | S | Ν |
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | | 8. Lug/Box Options | 9. Lid Orientation | | 11. Accessories Location |
| 1. Syster U US | <mark>n</mark> (standard o | f measure) | | | 12. Paint Cold | | ion | (from the ter | rminal, side wit | h removable li | d) |
| 2. Product Type (section component) | | | | | | 10. Accessories Package (optional accessories for feed units) | | | | | |
| Below Feed 3. Product Frame (maximum amperage) | | | | | S | | | | | | |
| 3. Produ | | naximum ampe | erage) | | N | 11. Accessories Location (from the terminal, side with accessory) N None (N/A) | | | | | |
| 4. Comp | atibility (fra | me compatibili | ity) | | 12. | 12. Paint Color (allows painting of the busway housing) | | | | | |
| 5. Mater | 5. Material (busbar material) | | | | | D0 Factory K0 Paint Fa HT0 Paint Fa | acto | ry Black | BLUO Pair | nt Factory Re nt Factory Blu base see page 2 | Je |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 4 3 Phase plus Neutral | | | | | nd) | | | | | | |
| 7. Polarization (orientation of section for mating purposes) S S Standard R Reversed R | | | | | | | | | | | |
| 8. Lug/Box Options (standard/double/bolt lugs and box size) S Standard lugs, Standard box | | | | | | | | | | | |

EXAMPLE

UB100T2C4R-SRSN-WHT0 = US System, Below Feed, 100 amps, T2 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Lid Orientation, Standard Accessory Package, No Accessory Location, Painted Factory White



RAL COLORS

| 1ST CHARACTER | | | | |
|---------------|-------|--|--|--|
| Р | Paint | | | |

| 2ND CHA | RACTER |
|---------|--------|
| 0 | 100 |
| 1 | 101 |
| 2 | 102 |
| 3 | 103 |
| 4 | 200 |
| 5 | 201 |
| Α | 300 |
| В | 301 |
| С | 302 |
| D | 303 |
| E | 400 |
| F | 401 |
| G | 500 |
| н | 501 |
| J | 502 |
| к | 600 |
| L | 601 |
| М | 602 |
| Ν | 603 |
| Р | 700 |
| Q | 701 |
| R | 702 |
| S | 703 |
| т | 704 |
| U | 800 |
| V | 801 |
| W | 802 |
| х | 900 |
| Y | 901 |
| Z | 902 |
| | |

| 3RD CHA | RACTER |
|---------|--------|
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| | |

4TH CHARACTER0

EXAMPLE:

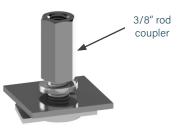
P B 2 0 = Paint RAL 3012



ACCESSORIES: SUPPORT HARDWARE

THREADED ROD

For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the top full-access slot of busway. Hanger support is required every 10 feet maximum. Part Number URHB-3 Available in plain zinc or black (-BLK) Weight .3 lb



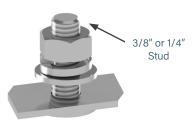
STANDARD

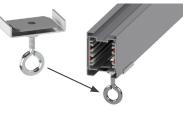
For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top full-access slot on the busway. Hanger support is required every 10 feet maximum.

WEIGHT HOOK

Can be used as a hanger to suspend the busway from chains or cables. Can also be used to hang loads of up to 50 pounds under the busway, such as light fixtures, tools and balancers. Part Number UTHB-3 (3/8") UTHB-1/4 (1/4") Available in plain zinc or black (-BLK) Weight .2 lb

Part Number UWHRT2 Available in plain zinc Weight .2 lb







ACCESSORIES: SUPPORT HARDWARE

SURFACE MOUNT

For mounting to a surface. Comes with a 3/8 inch hole.

Part Number UMCT2-S (surface) Available in all standard and RAL colors

> Part Number UTHB-4

Available in plain zinc

Weight

.1 lb



T-BAR SUSPENDED CEILING

For mounting to an inverted T-bar. The clip locks onto T-bar and the busway is connected to the stud on the clip. T-bar is mounted with surface clip.

RECESSED MOUNT

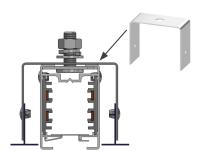
Recessed mount brackets are used when installing busway that is recessed into a suspended ceiling.

*Hanger bolt must be ordered separately

**Busway must sit slightly below the surface of the ceiling in order to install plug in units.

CABLE

For mounting to a 1/16 in or 3/32 in aircraft cable with easy grip clamp assembly. Cable is not included. Hanger support is every 10 feet maximum. Part Number URMT2 Available in plain zinc Weight .1 lb



Part Number UACH-1 (1/16" cable) UACH-2 (3/32" cable) Available in plain zinc Weight .2 lb





ACCESSORIES: CONNECTION HARDWARE

JOINT KIT

For the connection of adjacent busway sections. Each kit is comprised of an inline connector and housing coupler.

In-Line Connector: sections of busway are joined electrically by means of an in-line connector. All in-line bus connectors are polarized to prevent phase mismatch.

Housing Coupler: sections of busway are joined mechanically by means of a housing coupler. One is required per connection point.

IN-LINE CONNECTOR

For mounting to an inverted T-bar. The clip locks onto T-bar and the busway is connected to the stud on the clip. T-bar is mounted with surface clip.

Part Number UBCT2-4

Part Number

UJKT2-4

Available in all standard and

RAL colors



HOUSING COUPLER

Recessed mount brackets are used when installing busway that is recessed into a suspended ceiling.

*Hanger bolt must be ordered separately

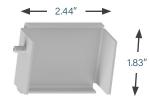
END CAP

For covering the end of 60T2 or 100T2 busway.

Part Number UHCT2 Available in all standard and RAL colors



Part Number UECT2 Available in all standard and RAL colors Weight: .2 lb



OPTIONAL CLOSURE STRIP

Made of white, rigid PVC, the closure strip is used to close the continuous access slot of the busway. It may be used for aesthetic purposes, for keeping dust and dirt from entering the busway or as an added safety measure. It is easily cut to length in the field to be installed around plug-in units.

Part Number UCST2 Available in black & white Maximum Cut Length: 20 ft



SERVICES

Regular servicing of busway systems is crucial for ensuring that your system performs at its best. By conducting regular maintenance, you can identify and address any potential issues before they turn into expensive problems, thus saving you time and money in the long run. Regular servicing can help extend the lifespan of your busway system, ensuring that it meets safety standards and complies with regulations. Choose from various offerings and customize a service plan that works best for you.

WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:

COMMISSIONING AND EQUIPMENT RENTALS

Designing a mission-critical facility involves a significant investment of time and money. Through comprehensive commissioning services, Starline can help guarantee your project delivers the outcomes you expect.

Whether you need rental equipment to test your busway system or certified technicians to perform the testing, Starline has you covered. Choose from our inventory of load bank tap-offs and associated gear, or work with a Starline Engineer to customize and perform a commissioning plan to fit your specific needs.

METER SERVICES

Starline's certified technicians make optimizing your meters' performance and functionality a breeze. Our comprehensive on-site meter programming service includes inspecting, programming, reporting, and optional retrofitting services for you existing systems.

STARTUP AND SYSTEM CERTIFICATION

At Starline, we are committed to ensuring the success of your project. Our team understands the risks associated with the energization of systems, which is why we've designed a rigorous certification process to inspect, test and report on your Starline Busway and Critical Power Monitor ("CPM") products. Our certification process proactively identifies and prevents any potential issues before they happen.

To ensure the long-term success of your project, it is crucial to have Starline-certified technicians inspect and validate the installation before full commissioning. Level 2 and 3 commissioning ensures the installation complies with safety requirements and meets factory standards for ongoing reliability.

- Double the length of the standard factory warranty
- Ensure all joint and feed connections are properly installed with continuity testing
- Ensure proper installation of all plug-in units
- · Validate that system will perform to your specified requirements
- Full certification report delivered electronically at conclusion of service

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **<u>downloads.starlinepower.com/services</u>**.



SERVICES

TURNKEY INSTALLATION SERVICES

Our trained and factory certified Busbar installers are looking forward to completing your next job. You can order your best-in-class power distribution system and leave the rest to us. Our technicians will complete your installation quickly and safely and will reduce your overall TCO by extending your product warranty.

PREVENTATIVE MAINTENANCE PLANS AND IR SCANNING

Although Starline busway is expertly designed to require less maintenance, NETA ATS and MTS guidelines recommend conducting annual inspections and health assessments on all critical equipment. Yearly preventative maintenance helps to ensure your system's long-term reliability and safety.

Starline's FLIR-certified technicians will create a custom preventative maintenance plan for your specific needs. Our certified technicians will work to:

- Identify thermal anomalies
- Extend equipment lifecycle
- Ensure optimal system performance
- Improve facility safety and operational sustainability

Upon completing your preventative maintenance plan, you may be eligible to extend your product warranty.

ON-SITE INSTALLATION SUPPORT

Starline's on-site installation service makes installing your busway as quick and easy as possible.

Our installation support starts with scheduling a preliminary trip to the installation site. During the initial visit, our certified technicians will train your installing contractor and develop a thorough installation and commissioning plan.

After completing the training, your installing contractor will have a direct line of communication with our installation experts. Our experts can help answer questions and provide hands-on guidance when needed.

Opting for Starline's installation support helps mitigate the installation risk and reduces the learning curve typically associated with new installations.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



SERVICES

ON-SITE PRODUCT TRAINING

At Starline, we offer comprehensive on-site product training services facilitated by our team of certified technicians. With their extensive expertise and commitment to upholding our high factory standards, you can confidently rely on them to ensure your and your systems' reliability and operational safety.

Our training programs equip your team with the knowledge and skills necessary to operate and maintain your systems effectively. Through hands-on demonstrations and interactive sessions, our certified technicians will guide your staff in understanding the intricate workings of the products and address any questions or concerns your team may have during the training process.

By choosing our on-site product training services, you are investing in your system's and operations' long-term success

RECERTIFICATION AND EXTENDED WARRANTY PLANS

Starline's recertification and extended warranty options provide best-in-class coverage for all of your Starline products and systems. Our extended warranty plans safeguard your investment beyond the standard warranty timeframe, offering you peace-of-mind while our recertification programs help mitigate risk and downtime. Whether the busway has been installed for years or you are relocating to another building, Starline is here to help.

Choose from one of our flexible one to four-year plans or have your system recertified anytime. Contact your Starline rep for more information.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



SPECS & INTRODUCTION

INTRODUCTION

Starline is the leader in electrical power distribution in the mission critical, commercial and light industrial industries with Starline Track Busway. This system was designed to meet the rugged specification of the UL857, Busway and Associated Fittings, with the flexible features of track lighting — and is available in systems with 100 or 225 amps with isolated ground.

Track Busway is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

The Product Selection Guide was developed to help the design engineer understand and consider all of the options available with Starline Track Busway when designing a system.

The Product Selection Guide also covers the Series-S Busway System, which offers the same performance, functionality, and flexibility of Starline Track Busway at higher ingress protection levels. Please note that most information is applicable across both systems. Any variations between systems will be differentiated throughout the document. In these cases, please note that the "S3" nomenclature refers to the Series-S system and "T3" refers to the standard Track Busway System.

SERIES-S SYSTEM

The Series-S System is certified to both IP54 and NEMA 3R ratings, which offers a higher level of protection against ingress of dust, water or other foreign objects. The unique sealed-system design provides the same level of protection across the entire power distribution system, from the power feeds to the busway and plug-in units.

Series-S plug-in units are specifically designed with durable, impact and chemical resistant materials commonly used in UL and outdoor applications. These plug-in units are paired with a wide variety of watertight rated IEC and NEMA devices.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at 1-800-245-6378. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reserves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at <u>downloads.starlinepower.com/starline/busway/</u>.



SPECS & INTRODUCTION

SPECS

This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway or busway). The system shall be designed primarily for overhead distribution of electrical power; supporting designated work areas and equipment. Once installed the busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

The Track Busway shall be designed and manufactured to the following standards:

1. Underwriters Laboratories Standard, UL 857 — The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.

2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 61439-1 & IEC 61439-6.

SERIES-S SPECS

The S3 Busway Series is designed with additional levels of ingress protection, IEC IP54 and NEMA 3R ratings, against liquid and solid contaminants.

This system meets or exceeds the additional standards for ingress protection:

3. International Electrotechnical Commission (IEC) - 60529, Degrees of Protection Provided by Enclosures (IP Code)

4. National Electrical Manufacturers Association (NEMA) — 250, Enclosures for Electrical Equipment (1000 Volts Maximum)

5. Housing shall be protected against corrosion utilizing protective coating (per MIL-DTL-5541), while maintaining case grounding capability, with option for powder-coating.

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T3 AND S3 ACCESSORIES

| RAL COLORS |
|----------------------------------|
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S3 PLUG-IN UNITS

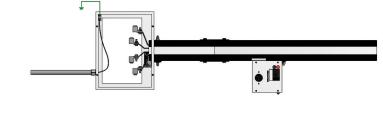
| S3 PLUG-IN UNITS | |
|---|--|
| S3 ENCLOSURE STYLE OPTIONS | |
| SYSTEM & BUILD GUIDE | |
| CIRCUIT BREAKER w/ DEVICES: PRODUCT NUMBERS | |
| US DEVICE CODE TABLE | |

GROUND OPTIONS

100 & 225 OPTIONS CASE GROUND/CHASSIS EARTH

Uses aluminum housing and no extra copper bar.

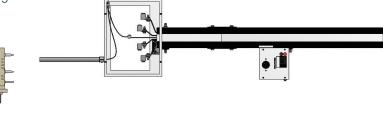




100 OPTION ONLY DEDICATED GROUND/EARTH

Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.

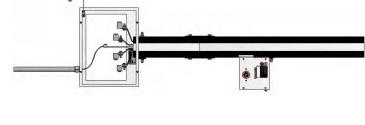




100 OPTION ONLY ISOLATED GROUND/EARTH

Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.





*For further details about Dedicated Ground vs. Isolated Ground, please reference our "Isolated Ground vs. Dedicated Ground" tech brief on **downloads.starlinepower.com/starline/busway**.

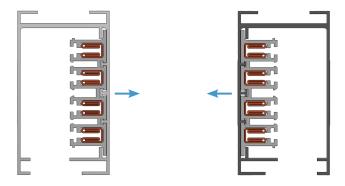


POLARITY TIPS

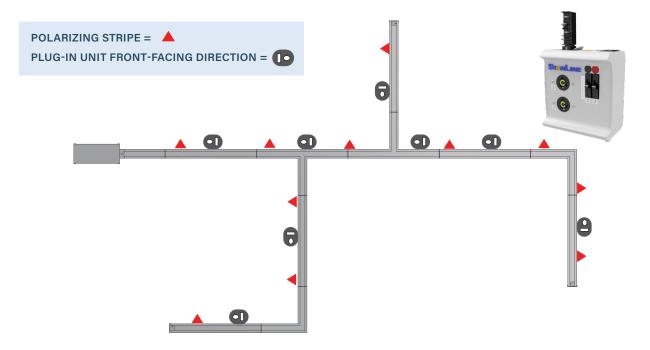
Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

It is particularly important to understand this design concept prior to ordering and/or installing some components.

For example, if the face direction of a Starline plug-in unit is important in your installation consider that they will always face the conductor side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.



All standard outlet boxes face the conductor side unless reversed plugs are specified





SYSTEM LAYOUT TIPS

POWER FEEDS

Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

SUPPORT HARDWARE

Support hardware is spaced no more than 10 feet apart. Refer to **page 3.39** for support hardware details. Contact your local Starline applications engineer for any questions.

INSTALLATION

Printed installation drawings are supplied with each system shipment and they are also available for download online at <u>downloads.starlinepower.com</u>. CAD files of these drawings are also available by contacting your local Starline applications engineer.

BUSWAY HOUSING SECTIONS

Standard busway lengths are available in 5, 10 and 20 foot increments. Although the factory can cut individual Starline Track Busway sections to any length under 20 feet, it is highly recommended to keep all layout runs in increments of 5 feet to simplify layout and installation. Custom lengths can be made but can increase lead time and make layout and installation a bit more complex.

BUSWAY TEES AND ELBOWS SECTIONS

Try to keep all runs as straight as possible as tees and elbows are added cost. Pay close attention to polarity on the elbows. The polarity will need to match the adjacent busway section(s) to be compatible.

| LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE: | | | | | |
|---|------------------|---------------------------------------|--------------------------------------|--|--|
| SYSTEM DESIGNATION | DISTRIBUTED LOAD | VOLTAGE DROP @ 0.8 PF SINGLE PHASE | VOLTAGE DROP @ 0.8 PF THREE PHASE | | |
| 100T3 (standard) | 100 amps | 42 ft | 72 ft | | |
| 225T3 (standard) | 225 amps | 28 ft | 48 ft | | |



SYSTEM LAYOUT TIPS

S3 INFORMATION:

Each piece of S3 housing components (straights and elbows) requires an S3 joint kit (containing two housing couplers, one bus connector, a joint seal, and two joint covers). Determine the total number of housing sections (regardless of length) as this becomes the number of joint kits that will be needed. Add one extra joint kit for each tee section. If this is your first installation for S3 systems, you will need to order an Installation Tool (ST3IT). Closure strip must also be ordered separately, and should match the total length of busway housing ordered.

PLEASE NOTE: All S3 Busway components are designed to work together to function as one complete IP54-rated system. When selecting system components, it is important that only S3 Busway components from this catalog are used together. Do not use any T3 components within this catalog. For technical questions related to these systems and/or specific applications, please contact our technical support team.

| LENGTH OF BUSWAY FOR A ONE VOLT DROP IN LINE TO LINE VOLTAGE: | | | | | | | | | |
|---|------------------|---------------------------------------|--------------------------------------|--|--|--|--|--|--|
| SYSTEM DESIGNATION | DISTRIBUTED LOAD | VOLTAGE DROP @ 0.8 PF SINGLE PHASE | VOLTAGE DROP @ 0.8 PF THREE PHASE | | | | | | |
| 100S3 (standard) | 100 amps | 42 ft | 72 ft | | | | | | |
| 225S3 (standard) | 225 amps | 28 ft | 48 ft | | | | | | |



COMPONENT RELATIONSHIP TIPS

When ordering material, it is important to understand the relationship between various components.

EXAMPLES

- Each piece of housing (straights and elbows) requires a joint kit (containing two housing couplers and one bus connector). Determine the total number of housing sections (regardless of length) as this becomes the number of joint kits that will be needed. Add one extra joint kit for each tee section.
- If this is your first installation for 100T3 or 225T3 systems, you will need to order an Installation Tool (ST3IT).

GENERAL SUPPORT HARDWARE RULE TO FOLLOW:

10 feet maximum spacing between supports and we recommend 10% more than the required quantity to cover potential layout changes.

- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering Elbow or Tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to **page 3.5** Polarity Tips for more detail.

S3 SYSTEM INFORMATION

All S3 components must be purchased and installed together to build a complete S3 System.

For the S3 system, please note the specific catalog numbering systems dedicated for these components. S3 system components will include the "S3" nomenclature in the "compatibility" field of the catalog number. 225S3 (standard)

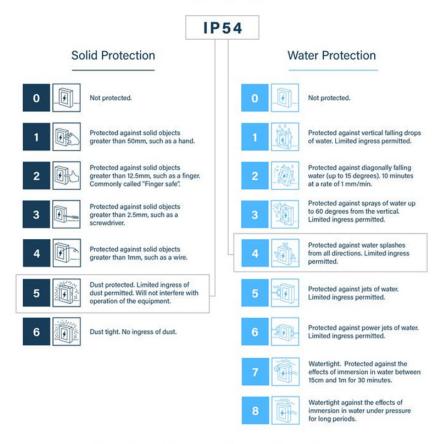
The standard installation tool (ST3IT) can be used for both the T3 and S3 system.

INGRESS PROTECTION

This table provides descriptions for the various Ingress Protection (IP) ratings as listed in IEC 60529. General T5 Busway is listed as IP2X. IP3X rated busway is available with additional accessories. Series - S Busway is available with an IP54 rating.

As the table indicates, for the IP54 rating the first number (5) pertains to the solid particle protection and the second (4) pertains to the level of protection from water. For purposes of real-world application of the Series-S busway system, please consider these general guidelines.

1. Splashproof and sprinkler proof; 2. Highly dust-resistant; 2. Not waterproof or watertight; 3. Not for outdoor use; 4. Not subject to direct exposure to natural elements, such as wind, rain, sun, ice, etc.



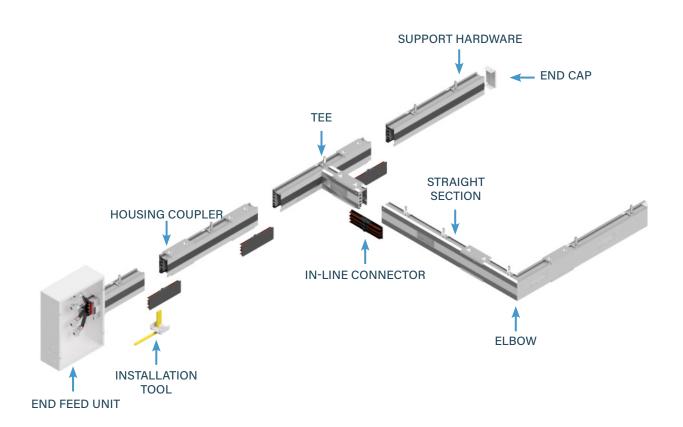
IP Rating Table

Ratings in accordance with the International Electrotechnical Commission (IEC) - 60529, Degrees of Protection Provided by Enclosures (IP Code)



T3 SERIES

SYSTEM LAYOUT DRAWING





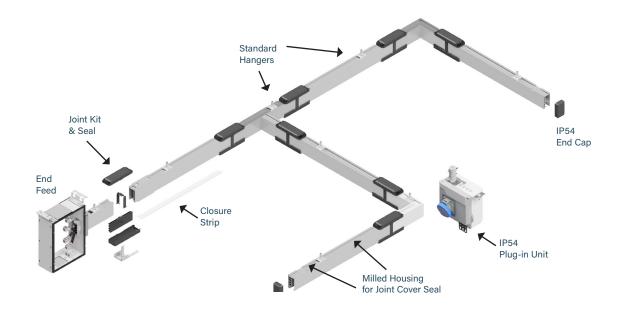
T3 PLUG-IN UNITS

See page **3.55** for further information on applicable T3 plug-in unit options.



S3 SERIES

SYSTEM LAYOUT DRAWING





S3 PLUG-IN UNITS

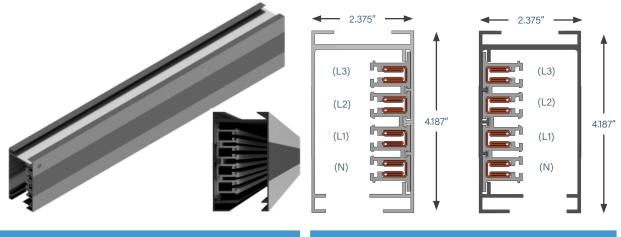
See enclosure style options page **3.76** for more information on applicable plug-in units.



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with channel type solid copper busbars contained in a full length insulator mounted on one side of the interior wall. Each straight has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configuration is 4 pole, 600 Volt. Busway joint connections are made using a joint kit, which includes a housing coupler and bus connector. An installation tool is used to insert the bus connector in between the busbar channels of the two sections for a solid spring-tempered electrical connection. A housing coupler is then used to make a solid mechanical connection.



MATERIAL

Extruded Aluminum Note: S3 housing includes corrosion resistant base coating

RATINGS

100% Ground Path US: 100 Amp, 600 Volt Metric: 160 Amp, 415 Volt

LENGTH

T3: 5 ft, 10 ft, 20 ft; or custom lengths between 2 - 20 ft S3: 5 ft, 10 ft max. Consult factory for additional lengths

VOLTAGE DROP

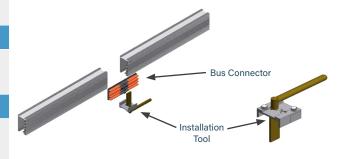
Distributed load Single Phase 1V per 54 ft (.8PF) Three Phase 1V per 62 ft (.8PF)

WEIGHT

- 10 ft 4 pole: 26 lbs
- 10 ft 4 pole w/ ground: 30 lbs
- 10 ft 4 pole w/ 200% N: 33 lbs

10 ft 4 pole w/ ground & 200% N: 34 lbs

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |



STRAIGHT SECTIONS: PRODUCT NUMBERS

| | U | S | 100 | Т3 | С | | 4 | S | - (| 0200 | С | |
|------------------|-----------------|-----------------------|------------------------|--|----------------|------------------------|------------------------|------------------------------|---------|-------------|-------------------------------|-----------|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | Gro | utral/ ound sbar | 7. Polarization | 8 S | traight | 9. Busway | |
| | | | | - 5 | STD | 0 | | | | | | |
| | | | | 10. Pair | nt Color | 11. Tape Marking |] | | | | | |
| 1. System | (standard of ı | measure) | | | 9 | 9. Busw | ay Acc | ess (how plug | gs acc | ess the bus | sway) | |
| U US | | | | | | C Cc | ntinuou | IS | | | | |
| 2. Product | t Type (section | on componer | nt) | | 1 | IO. Pain | t Color | (allows paintii | ng of i | he busway | housing) | |
| S Straig | ght Section | | | | - | | | Mill Finish | | | Paint Factor | |
| 3. Product | t Frame (ma | ximum ampel | rage) | | | | | actory Black actory White | | | Paint Factor please see pa | / |
| 100 100 a | mps | | | | | | | es-S Housing | | | | resistant |
| 4. Compat | tibility (fram | e compatibilit | y) | | k | base co | ating, re | egardless of | paint | color sele | ection. | |
| T3 T3 Sy | ystem | | S3 S3 Syst | tem | [1 | I1. Tape | Markin | ng (colored ta | be on | both sides | of buswav hou | ısina) |
| 5. Materia | l (busbar mat | terial) | | | | | o Tape N | | 7 | | Factory Blue | |
| C Copp | ber | | | | | | | ory Black ory White | 8 | | Factory Gre Factory Yell | |
| 6. Neutral | /Ground Bi | usbar (size o | f neutral busb | ar and/or ground | | | | ory Red | 3 | Таре | raciory rein | Jvv |
| 4 3 Pha | ase plus Net | utral | | e plus Neutral p I Ground Cond | | | | | | | | |
| N 3 Pha | ase plus 200 | 0% Neutral | | e plus 200% Ne ernal Ground ctor | eutral | | | | | | | |
| 7. Polariza | tion (orienta | tion of section | n for mating pu | irposes) | | | | | | | | |

EXAMPLES

S

Standard

8. Straight Length (length of section) XXYY XX=feet, YY=inches

US100T3C4S-0206C-STD0 = US System, Straight Section, 100 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Access, Factory Mill Finish, No Tape Marking

<u>US100T3CNS-0500C-P013</u> = US System, Straight Section, 100 amps, T3 System, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, 5 foot Straight Length, Continuous Access, Painted RAL 1001, Factory Black Tape

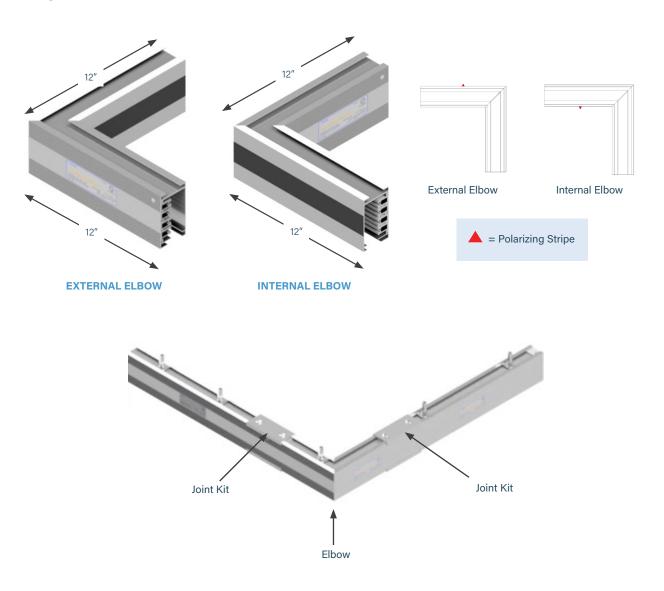


ELBOW SECTIONS

PRODUCT DESCRIPTION

Elbows are used for making a 90 degree in a busway run. Horizontal elbows are available. Specify external or internal elbow according to the orientation of the busbars in the busway sections to be connected. Elbow sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and elbow section of busway.

Weight 5.6 lbs



ELBOW SECTIONS: PRODUCT NUMBERS

| | U | Е | 100 | Т3 | С | 4 | S | – IN | |
|--------------------------------|-------------------|-----------------------|--|-------------------------------|------------------------|--|--------------------|----------------------------|--|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Turning Direction | |
| | | | | - STD | 0 | | | | |
| | | | | 9. Paint Color | 10. Tape Marking | | | | |
| 1. System (star | ndard of measu | re) | | | 8. Turnin | g Direction | (direction of s | ection polarizing | g stripe) |
| U US | | | | | IN Inte | | | EX External | |
| 2. Product Ty | pe (section cor | mponent) | | | HN Seis | smic Internal | | GX Seismic | External |
| E Elbow Se | ection | | | | 9. Paint | Color (allows | painting of the | e busway housin | g) |
| 3. Product Fra 100 100 amps | | n amperage) | | | BLK F | Factory Mill F Paint Factory Paint Factory | Black Bl | LU Paint | Factory Red Factory Blue e see page 3.38 |
| 4. Compatibili | ity (frame.com | natibility) | | | NOTE: A | ll Series-S h | ousings inclu | de a clear coi | rosion resista |
| T3 T3 Syste | | | S3 System | | base coa | ting, regard | ess of paint of | color selectior | 1. |
| | | | 55 System | | 10. Tape | Marking (co | lored tape on l | ooth sides of bu | sway housing) |
| 5. Material (bu | ısbar material) | | | | | Tape Markir | | Tape Facto | |
| C Copper | | | | | | be Factory Bl be Factory W | | Tape Facto Tape Facto | |
| 6. Neutral/Gr | ound Busbar | (size of neut | ral busbar and | /or ground) | | e Factory Re | | | |
| 4 3 Phase | plus Neutral | G | 3 Phase plus Internal Grou | Neutral plus Ind Conductor | | | | | |
| N 3 Phase p | plus 200% Ne | eutral F | 3 Phase plus plus Internal Conductor | 200% Neutral Ground | | | | | |
| 7. Polarization | n (orientation of | f section for m | nating purpose | s) | | | | | |
| Standard | 4 | | | | | | | | |

S Standard

EXAMPLES

<u>UE100T3C4S-IN-BLK4</u> = US System, Elbow Section, 100 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Black, Factory White Tape

<u>UE100T3CNS-EX-STD0</u> = US System, Elbow Section, 100 amps, T3 System, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, External Turning Direction, Factory Mill Finish, No Tape Marking



TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Weight 8 lbs



TEE SECTIONS: PRODUCT NUMBERS

| | U | т | 100 | Т3 | С | 4 | S | _ | IR | |
|--|-------------------------------------|-----------------------|----------------------------|----------------------------|-------------------------------|---|-------------------------------|-------------------------------|--|---|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | on | 8. Turning Direction | |
| | | | | - STD 9. Paint Color | 10. Tape Marking | | | | | |
| 1. System (stat U US 2. Product Ty T Tee Sect | pe (section co | | | | IL Inte IR Inte HL Seis | g Direction rnal-Left rnal-Right smic Internal- | -Left | EL ER GL | External- External- Seismic I | Left |
| 3. Product Fra 100 100 amp 4. Compatibil | s lity (frame con | npatibility) | | | STD F BLK F | Color (allows Factory Mill F Paint Factory Paint Factory | -inish I Black I | he bus RED BLU **RAI | Paint Paint | g) Factory Red Factory Blue • see page 3.38) |
| T3 T3 System 5. Material (but compared) C Copper | | | S3 System | | base coa | ting, regard Marking (co | less of pain lored tape of | t colo n both | r selection sides of bus | way housing) |
| 6. Neutral/Gr 4 3 Phase | r ound Busba plus Neutral | | 3 Phase plus | | 3 Tap 4 Tap | Tape Markin e Factory B e Factory W e Factory R | lack k hite s | B ⁻ | Tape Facto Tape Facto Tape Facto | ry Green |
| N 3 Phase | plus 200% N | | plus Internal Conductor | | | | | | | |
| S Standard | b | | | | | | | | | |

EXAMPLES

<u>UT100T3C4S-IR-RED0</u> = US System, Tee Section, 100 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking

UT100T3CGS-EL-STD0 = US System, Tee Section, 100 amps, T3 System, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking



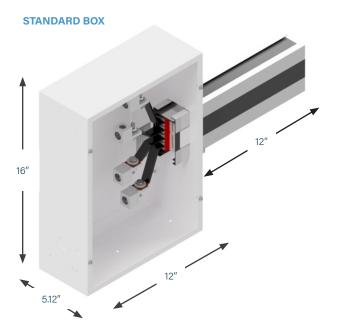
END FEED UNITS

PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 12 inch section of busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 300 MCM.

End power feed units are connected to adjacent busway sections using an installation tool and housing coupler set (ordered separately).

Special need power feed units for confined spaces as found in mission critical data centers can also be designed and fabricated requiring minimum quantities.



| Top View | standard orientation |
|--|----------------------|
| | 6 |
| | reversed orientation |
| INFRARED (IR) W Refer to option 10. Acces page 3.21 End Feed Uni | 0 |
| | |





100S3 End Feed

Box size and Lug options: Refer to option 8. Lug/Box Options on page 3.21 End Feed Units: Product Numbers

LUGS

Standard

Double

Bolt

Standard

s

D

BOXES

Large

L

Α

Fused

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>

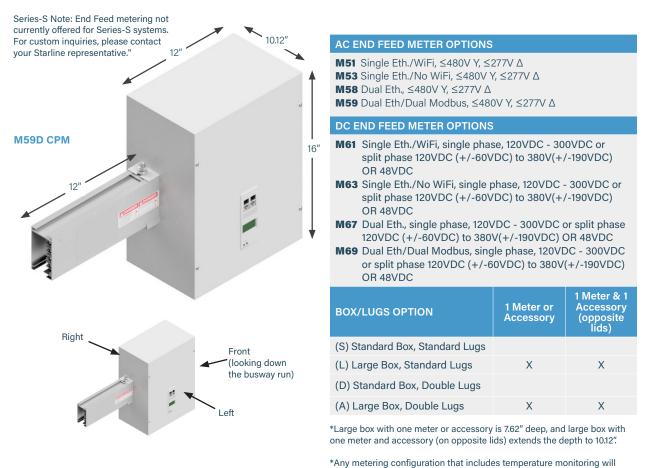


END FEED UNITS: METERING

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. A factory assembled unit consists of a steel junction box, with removable sides, connected to a 12 inch section of busway. The assembly includes connection lugs, a ground lug, and shrink tubing for wires up to 300 MCM.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. An automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 3.21** End Feed Units: Product Numbers)

A meter and accessory can not be on the same lid.

require a box depth of 10.12".



END FEED UNITS: ACCESSORIES

IR WINDOWS

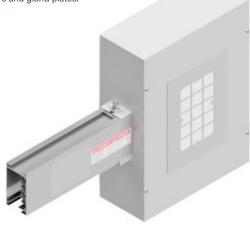
Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections. **FEATURES & BENEFITS**

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

Notes: All Series-S End Feeds are offered with pre-installed hangers and gland plates.



Note: Rectangular IR window option not available for Series-S systems. See S3 end feed accessories package for more information.

| GENERAL SPECIFICATIONS | |
|---------------------------|---|
| Viewing Material | IR transmissive polymer, UL 94B HB Rated |
| Structural Mesh Material | Stainless Steel 304 |
| Body Material | Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| Ingress Protection | IP3x (T3); IP54 (S3) |
| Max Operating Temperature | 125°C |
| WINDOW DIMENSIONS | |
| End Feeds: 400A and Below | 5" (127mm) x 7" (178mm) |
| End Feeds: 500A and Above | 8" (203mm) x 12" (305mm) |

(Refer to option 17. M50 Options on **page 3.22** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 3.21** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS



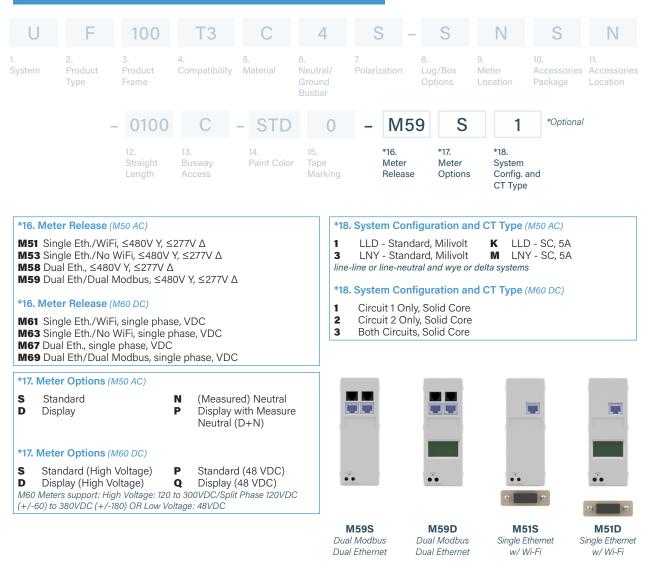
| 1. S | system (standard of measure) | | 10. Acce | ssories Package (op | tional acc | cessories for feed units) | | | |
|-------------|---|--|--|---|------------|---|--|--|--|
| U | US | | T3 Optio S Sta | ns: ndard | | | | | |
| 2. F | Product Type (section component) | | | rline Rect. IR Windov | v, 5″x7″ | | | | |
| F | End Feed | | | Window - Circular | | | | | |
| 3. F | Product Frame (maximum amperage | e) | D Sei | smic Mounting Holes smic with IR Window | , Circula | | | | |
| 100 | 100 amps | | Q Sei | smic with IR Window | Rectan | igular | | | |
| 4. 0 | Compatibility (frame compatibility) | | S3 Optio | | | | | | |
| Т3 | T3 System S3 | S3 System | | Standard (includes h Standard + IR Windo | | | | | |
| 5. N | Material (busbar material) | | 11. Acces | ssories Location (from | m the ter | minal, side with accessory) | | | |
| С | Copper | | N Nor L Lef | ne (N/A) | R F | Right Front (consult the factory) | | | |
| 6. 1 | Neutral/Ground Busbar (size of ne | eutral busbar and/or ground) | L Lei | l | | From (consult the lactory) | | | |
| 4 | 3 Phase plus Neutral G | 3 Phase plus Neutral plus | 12. Straig | ght Length (length of | section) | | | | |
| N | 3 Phase plus 200% Neutral F | Internal Ground Conductor 3 Phase plus 200% Neutral | 0100 1 # (For other lengths, consult the factory) | | | | | | |
| 14 | | plus Internal Ground | ernal Ground 13. Busway Access | | | | | | |
| | | Conductor | C Cor | ntinuous | | | | | |
| 7. P | Polarization (orientation of section fo | r mating purposes) | 14. Paint | Color (allows painting | of the bu | uswav housing) | | | |
| S | Standard R | Reversed | | actory Mill Finish | | Paint Factory Red | | | |
| 8. L | ug/Box Options (standard/double, | /bolt lugs and box size) | BLK P | aint Factory Black | BLU | Paint Factory Blue | | | |
| s | Standard lugs, Standard box D | Double lugs, Standard box | WHT P | aint Factory White | **RA | L (please see page 3.38) | | | |
| L | Standard lugs, Large box A | Double lugs, Large box | 15. Tape | Marking (colored tape | on both | sides of busway housing) | | | |
| 9. N | Meter Location (from the terminal, s | ide with removable lid; | | Tape Marking | 7 | Tape Factory Blue | | | |
| met | er must follow lid orientation on large | box) | | e Factory Black e Factory White | 8 9 | Tape Factory Green Tape Factory Yellow | | | |
| R N | Right L None (N/A) | Left | | e Factory Red | | | | | |

EXAMPLE

<u>UF100T3C4R-LNSN-0100C-STD0</u> = US System, End Feed, 100 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location- 1 foot Straight Length, Continuous Busway Access- Factory Mill Finish, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

UF100T3C4R-LNSN-0100C-STD0-M59D1 = US System, End Feed, 100 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location, 1 foot Straight Length, Continuous Busway Access, Factory Mill Finish, No Tape Marking, M59 Meter with Display, LLD - Standard, Milivolt



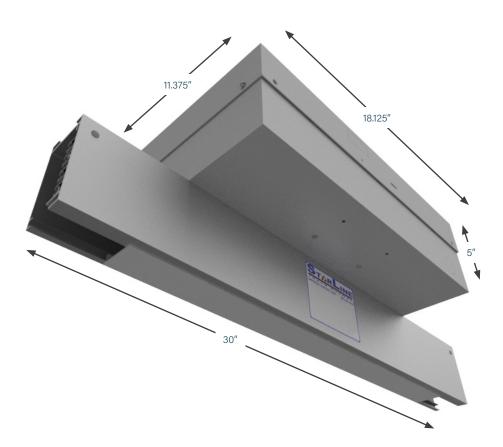
ABOVE FEED UNITS

PRODUCT DESCRIPTION

The above feed power unit comes as a completely pre-wired steel box to the top of a 30 inch section of busway. A connection lug is located inside the box for field termination of supply power cable up to 1/0. This unit is then connected to the end of an adjoining busway section using an installation tool and set of housing couplers (ordered separately).

Weight 16.5 lbs

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>





ABOVE FEED UNITS: PRODUCT NUMBERS

| U | А | 100 | Т3 | С | 4 | S | 6 - | • | S | | N | S | Ν |
|--------------|---------------------------|-------------------------|-------------------------|--------------------|------------------------------------|---------------|--------------------------|---|--------------------------|--------------------|---|-------------------------------|--------------------------------|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polariz | zation | | g/Box otions | 9. Mete Loca | er ation | 10. Accessories Package | 11. Accessories Location |
| - | 0206 | С | 015 | - STD | 0 | - | M5 | 9 | S | | 1 | *Optional | |
| | 12. Straight Length | 13. Busway Access | 14. Feed Location | 15. Paint Color | 16. Tape Marking | | *17. Meter Release | • | *18. Meter Options | : | *19. System (and CT ⁻ | 0 | |

| 1. System (standard of measure) | 12. Straight Length (length of section) |
|---|---|
| U US | 0206 2 feet, 6 inches |
| 2. Product Type (section component) | 13. Busway Access (how plugs access the busway) |
| A Above Feed | C Continuous |
| 3. Product Frame (maximum amperage) | 14. Feed Location (location of the center of the top feed) |
| 100 100 amps | 015 15 inches (For other lengths, consult the factory) |
| 4. Compatibility (frame compatibility) | 15. Paint Color (allows painting of the busway housing) |
| T3 System S3 S3 System | STD Factory Mill Finish RED Paint Factory Red |
| 5. Material (busbar material) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 3.38) |
| C Copper | 16. Tape Marking (colored tape on both sides of busway housing) |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | No Tape Marking 7 Tape Factory Blue |
| 4 3 Phase plus Neutral G 3 Phase plus Neutral plus | 3 Tape Factory Black 4 Tape Factory White 9 Tape Factory Yellow |
| N 3 Phase plus 200% Neutral F 3 Phase plus 200% Neutral | 6 Tape Factory Red |
| plus Internal Ground Conductor | *17. Meter Release (M50 Series Meters) |
| | M51 Single Eth./WiFi, \leq 480V Y, \leq 277V Δ |
| 7. Polarization (orientation of section for mating purposes) | M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ M58 Dual Eth., ≤480V Y, ≤277V Δ |
| S Standard R Reversed | M59 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ |
| 8. Lug/Box Options (standard/double/bolt lugs and box size) | *18. Meter Options (choose from a 4.1" display, measured neutral, |
| S Standard lugs, Standard box L Standard lugs, Large box | audible alarm and/or a temperature monitor) |
| 9. Meter Location (from the terminal, side with removable lid; meter must follow lid orientation on large box) | SStandard (M60s also)N(Measured) NeutralDDisplay (M60s also)PProfessional (D+N)) |
| R Right L Left N None (N/A) | *19. System Configuration and CT Type (line-line or line-neutral |
| 10. Accessories Package (optional accessories for feed units) | and wye or delta systems) |
| S Standard | 1LLD - Standard, MilivoltKLLD - SC, 5A3LNY - Standard, MilivoltMLNY - SC, 5A |
| 11. Accessories Location (from the terminal, side with removable lid) | |
| N None (N/A) | |

EXAMPLE

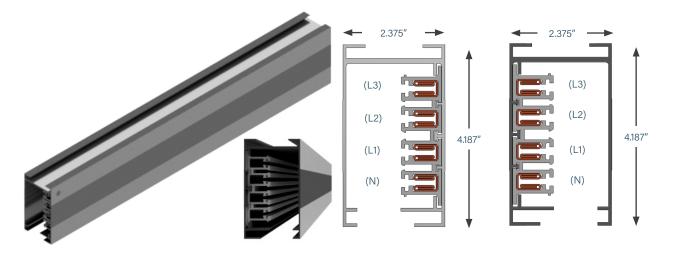
<u>UA100T3CFS-LNSN-0206C015-STD0</u> = US System, Above Feed, 100 amps, T3 System, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Large Box, No Lid Orientation, Standard Accessory Package, No Accessory Location- 2 foot 6 inch Straight Length, Continuous Busway Access, 15 inch Feed Location, Factory Mill Finish, No Tape Marking



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with channel type solid copper busbars contained in a full length insulator mounted on one side of the interior wall. Each straight has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configuration is 4 pole, 600 Volt. Busway joint connections are made using a joint kit, which includes a housing coupler and bus connector. An installation tool is used to insert the bus connector in between the busbar channels of the two sections for a solid spring-tempered electrical connection. A housing coupler is then used to make a solid mechanical connection.



MATERIAL

Extruded Aluminum *Note:* S3 housing includes corrosion resistant finish

RATINGS

100% Ground Path 225 Amp, 600 Volt

LENGTH

5 ft, 10 ft, 20 ft; or custom lengths between 2 - 20 ft S3: 5ft, 10 ft max. Consult factory for additional lengths

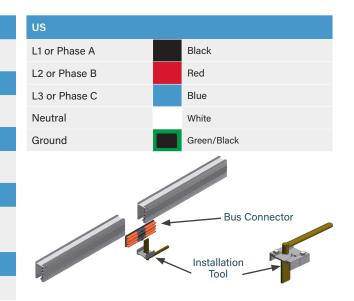
VOLTAGE DROP

Distributed load

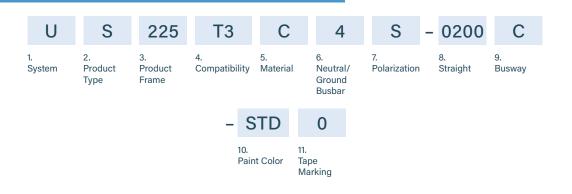
Single Phase 1V per 28 ft (.8PF) Three Phase 1V per 48 ft (.8PF)

WEIGHT

10 ft 4 pole: 33 lbs



STRAIGHT SECTIONS: PRODUCT NUMBERS



| 1. System (standard of measure) | 9. Busway Access (how plugs access the busway) | | | | | |
|---|---|--|--|--|--|--|
| U US | C Continuous | | | | | |
| 2. Product Type (section component) | 10. Paint Color (allows painting of the busway housing) | | | | | |
| S Straight Section | STD Factory Mill Finish RED Paint Factory Red | | | | | |
| 3. Product Frame (maximum amperage) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 3.38) | | | | | |
| 225 225 amps | NOTE: All Series-S housings include a clear corrosion resistant | | | | | |
| 4. Compatibility (frame compatibility) | base coating, regardless of paint color selection. | | | | | |
| T3 System | 11. Tape Marking (colored tape on both sides of busway housing) | | | | | |
| 5. Material (busbar material) | O No Tape Marking 7 Tape Factory Blue Tape Factory Black 8 Tape Factory Green | | | | | |
| C Copper | 4 Tape Factory White 9 Tape Factory Yellow 6 Tape Factory Red | | | | | |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | | | | | | |
| 4 3 Phase plus Neutral | | | | | | |
| 7. Polarization (orientation of section for mating purposes) | | | | | | |
| S Standard | | | | | | |
| 8. Straight Length (length of section) | | | | | | |
| XXYY XX=feet, YY=inches | | | | | | |

EXAMPLES

US225T3C4S-0206C-STD6 = US System, Straight Section, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Busway Access, Factory Mill Finish, Factory Red Tape

<u>US225T3C4S-1000C-P013</u> = US System, Straight Section, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 10 foot Straight Length, Continuous Busway Access, Painted RAL 1001, Factory Black Tape

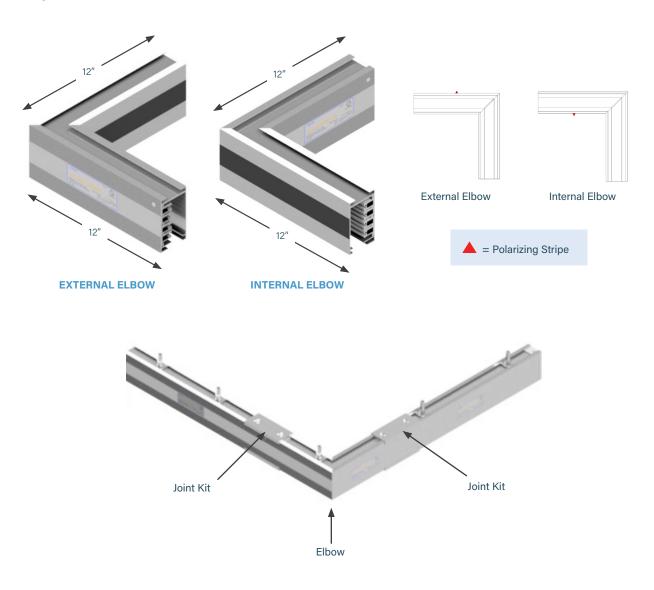


ELBOW SECTIONS

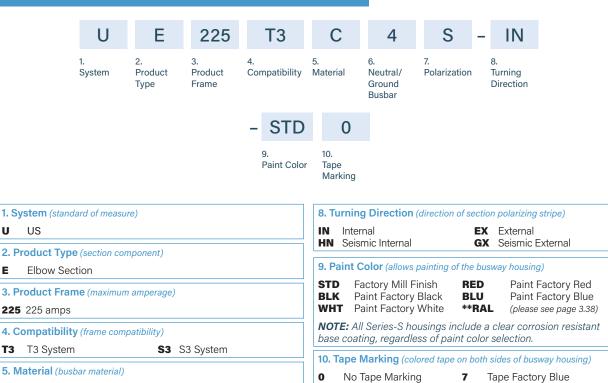
PRODUCT DESCRIPTION

Elbows are used for making a 90 degree in a busway run. Horizontal elbows are available. Specify external or internal elbow according to the orientation of the busbars in the busway sections to be connected. Elbow sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and elbow section of busway.

Weight 5.5 lbs



ELBOW SECTIONS: PRODUCT NUMBERS



3

4

6

Tape Factory Black

Tape Factory White

Tape Factory Red

8

9

Tape Factory Green Tape Factory Yellow

C Copper

6. Neutral/Ground Busbar (size of neutral busbar and/or ground)

4 3 Phase plus Neutral

7. Polarization (orientation of section for mating purposes)

S Standard

EXAMPLES

<u>UE225T3C4S-EX-WHT0</u> = US System, Elbow Section, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External Turning Direction, Painted Factory White, No Tape Marking

UE225T3C4S-IN-PH40 = US System, Elbow Section, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted RAL 5014, No Tape Marking

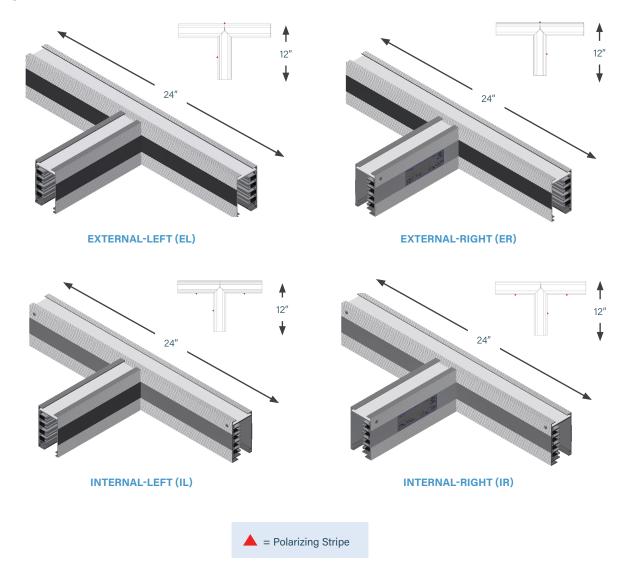


TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a housing section and tee section of busway.

Weight 9.2 lbs



TEE SECTIONS: PRODUCT NUMBERS

| | U | Т | 225 | Т3 | С | 4 | S | - | IR | |
|---------------|--|-------------------------|------------------------|---------------------|--------------------------|---|-------------------|-------------|----------------------------|---------------------------------|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | n | 8. Turning Direction | |
| | | | | - STD | 0 | | | | | |
| | | | | 9. Paint Colo | 10. r Tape Marking | | | | | |
| 1. Syste | em (standard of measu | ıre) | | | 8. Turnin | g Direction | (direction of | sectio | n polarizing | stripe) |
| U U | S | | | | | rnal-Left rnal-Right | | EL ER | External- External- | |
| | uct Type (section con ee Section | mponent) | | | HL Seis | mic Internal- mic Internal- | | GL | Seismic I | External-Left External-Right |
| 3. Prod | uct Frame (maximun | n amperage) | | | 9. Paint (| Color (allows | painting of th | ne bus | way housin | g) |
| 225 22 | 5 amps | | | | | actory Mill F | | ED | | Factory Red |
| 4. Com | patibility (frame com | patibility) | | | | Paint Factory Paint Factory | | SLU *RAI | | Factory Blue see page 3.38 |
| T5 T5 | 5 System | S5 (| S5 System | | | ll Series-S ho ting, regardl | | | | rosion resista |
| 5. Mate | erial (busbar material) | | | | | | | | | way housing) |
| C Co | opper | | | | | Tape Markin | | | Tape Facto | , o, |
| | ral/Ground Busbar Phase plus Neutral | r (size of neuti | al busbar and, | /or ground) | 3 Tap 4 Tap | e Factory Bl e Factory W e Factory Re | ack 8 hite 9 | ۲ (| Tape Facto Tape Facto | ry Green |
| | ization (orientation of andard | f section for m | ating purposes | s) | u iap | | -u | | | |

EXAMPLES

<u>UT225T3C4S-IR-BLU0</u> = US System, Tee Section, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Blue, No Tape Marking

<u>UT225T3C4S-EL-STD0</u> = US System, Tee Section, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking



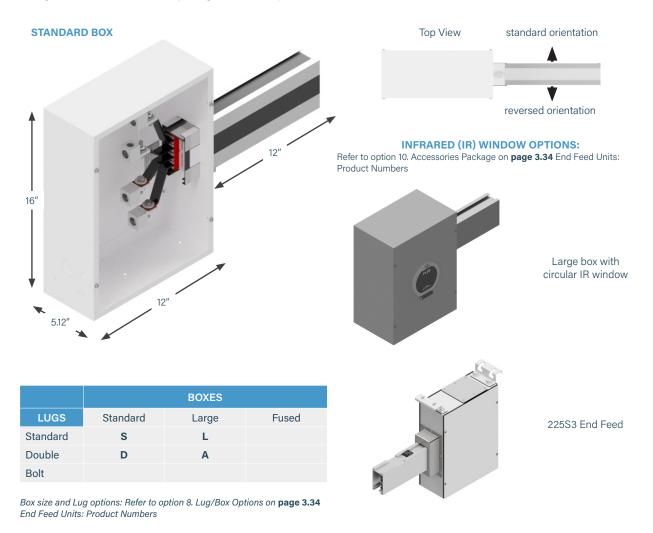
END FEED UNITS

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a steel junction box, with removable side, connected to a 12 inch section of busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 300 MCM.

End power feed units are connected to adjacent busway sections using an installation tool and joint kit (ordered separately).

Special need power feed units for confined spaces as found in mission critical data centers can also be designed and fabricated requiring minimum quantities.



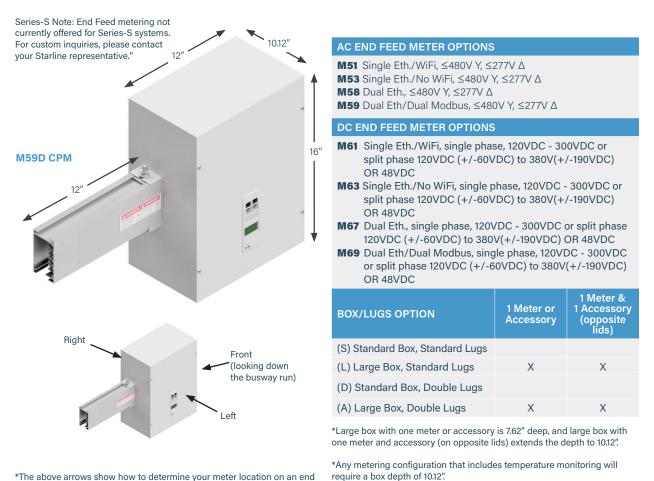


END FEED UNITS: METERING

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. A factory assembled unit consists of a steel junction box, with removable sides, connected to a 12 inch section of busway. The assembly includes connection lugs, a ground lug, and shrink tubing for wires up to 300 MCM.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. An automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 3.34** End Feed Units: Product Numbers)

A meter and accessory can not be on the same lid.



END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

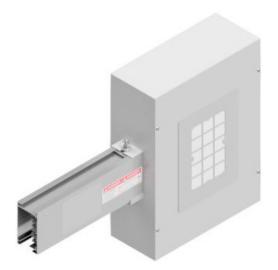
When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Notes: All Series-S End Feeds are offered with pre-installed hangers and gland plates.

FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance



Note: Rectangular IR window option not available for Series-S systems. See S3 end feed accessories package for more information.

| IR transmissive polymer, UL 94B HB Rated |
|---|
| Stainless Steel 304 |
| Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| IP3x (T3); IP54 (S3) |
| 125°C |
| |
| 5" (127mm) x 7" (178mm) |
| 8" (203mm) x 12" (305mm) |
| |

(Refer to option 17. M50 Options on **page 3.35** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 3.34** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS



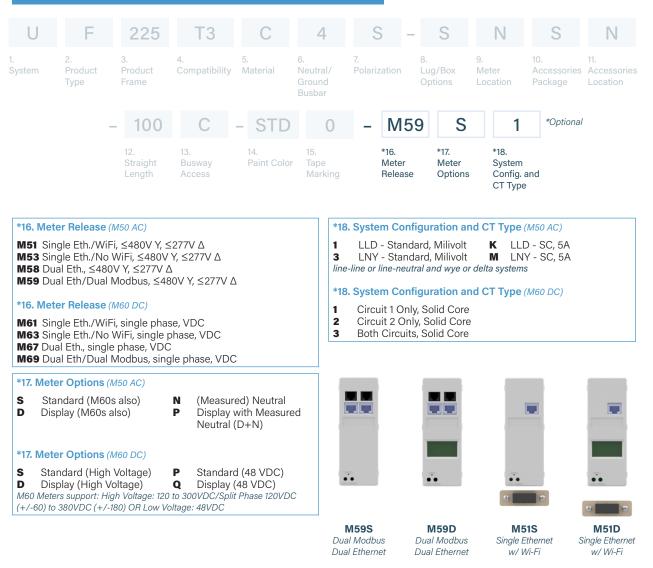
| 1. System (standard of measure) | 10. Accessories Package (optional accessories for feed units) | | | | | |
|---|--|--|--|--|--|--|
| U US 2. Product Type (section component) | T3 Options: S Standard G Starline Rect. IR Window, 5"x7" | | | | | |
| F End Feed | C IR Window - Circular Seismic Mounting Holes | | | | | |
| 3. Product Frame (maximum amperage) | D Seismic with IR Window Circular Q Seismic with IR Window Rectangular | | | | | |
| 225 225 amps | | | | | | |
| 4. Compatibility (frame compatibility) | S3 Options: F S3 Standard (includes hangars and gland plates) | | | | | |
| T3 T3 System S3 S3 System | B S3 Standard + IR Window - Circular | | | | | |
| 5. Material (busbar material) | 11. Accessories Location (from the terminal, side with accessory) | | | | | |
| C Copper | N None (N/A) R Right | | | | | |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | L Left F Front (consult the factory) | | | | | |
| 4 3 Phase plus Neutral | 12. Straight Length (length of section) | | | | | |
| 7. Polarization (orientation of section for mating purposes) | 0100 1 ft. (For other lengths, consult the factory) | | | | | |
| S Standard R Reversed | 13. Busway Access | | | | | |
| 8. Lug/Box Options (standard/double/bolt lugs and box size) | C Continuous | | | | | |
| S Standard lugs, Standard box D Double lugs, Standard box D Double lugs, Standard box D Double lugs, Large box | 14. Paint Color (allows painting of the busway housing) | | | | | |
| | STD Factory Mill Finish RED Paint Factory Red BLK Paint Factory Black BLU Paint Factory Blue | | | | | |
| 9. Meter Location (from the terminal, side with removable lid; meter must follow lid orientation on large box) | WHT Paint Factory White **RAL (please see page 3.38) | | | | | |
| R Right L Left | 15. Tape Marking (colored tape on both sides of busway housing) | | | | | |
| N None (N/A) | 0No Tape Marking7Tape Factory Blue3Tape Factory Black8Tape Factory Green4Tape Factory White9Tape Factory Yellow6Tape Factory Red9 | | | | | |

EXAMPLE

UF225T3C4R-DRSN-0100C-BLK0 = US System, End Feed, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Double Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, 1 foot Straight Length, Continuous Access, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

<u>UF225T3C4R-DRSN-0100C-BLK0-M59D1</u> = US System, End Feed, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Double Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, 1 foot Straight Length, Continuous Access, Painted Factory Black, No Tape Marking, M59 Meter with Display, LLD - Standard, Milivolt

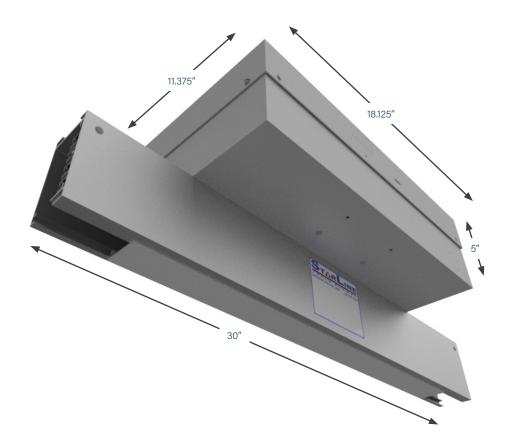


ABOVE FEED UNITS

PRODUCT DESCRIPTION

The above feed power unit comes as a completely pre-wired steel box to the top of a 30 inch section of busway. A connection lug is located inside the box for field termination of supply power cable up to 1/0. This unit is then connected to the end of an adjoining busway section using an installation tool and a joint kit (ordered separately).

Weight 16.5 - 23 lbs





ABOVE FEED UNITS: PRODUCT NUMBERS

| U | А | 225 | Т3 | С | 4 | S | 5 | - | S | 1 | N | S | Ν |
|---------------------|--|-------------------------|-------------------------|--------------------|------------------------------------|---------------------------------|-------------------------|--------|-------------------------------------|------------------------|---------------------------|---|--------------------------------|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polariz | zation | | ug/Box ptions | 9. Meter Locat | | 10. Accessories Package | 11. Accessories Location |
| - | 0206 | С | 015 | - STD | 0 | - | M | 59 | S | | 1 | *Optional | 1 |
| | 12. Straight Length | 13. Busway Access | 14. Feed Location | 15. Paint Color | 16. Tape Marking | | *17. Meter Releas | e | *18. Meter Options | S | 19. ystem (nd CT T | | |
| 1. Systen U US | n (standard of | measure) | | | | Straig 06 2 fe | | · · · | (length of s | ection) |) | | |
| | ct Type (sect | ion componer | nt) | | | Buswa | | ess (| (how plugs | access | s the bu | sway) | |
| 3. Produ 225 225 | ct Frame (ma amps | aximum ampe | rage) | | | | | | ocation of t ther length | | | e top feed) actory) | |
| T3 T3 | atibility (fram System al (busbar ma | | y) S3 S3 Syste | m | 15. STI | D Fa | ctory N | Лill F | s <i>painting</i> inish Black | of the L RED BLU | Pain | <i>housing)</i> t Factory Re t Factory Bl | |

| - compatibility (name compatibility) | 15. Paint Color (allows painting of the busway housing) | | | | | |
|--|--|--|--|--|--|--|
| T3 T3 System S3 S3 System | STD Factory Mill Finish RED Paint Factory Red | | | | | |
| 5. Material (busbar material) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 3.38) | | | | | |
| C Copper | NOTE: All Above Feed enclosures are painted. "STD Factory Mill | | | | | |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | Finish" represents painted standard silver. | | | | | |
| 4 3 Phase plus Neutral | 16. Tape Marking (colored tape on both sides of busway housing) | | | | | |
| 7. Polarization (orientation of section for mating purposes) S Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) | 0No Tape Marking7Tape Factory Blue3Tape Factory Black8Tape Factory Green4Tape Factory White9Tape Factory Yellow6Tape Factory Red9Tape Factory Yellow | | | | | |
| S Standard lugs, Standard box L Standard lugs, Large box | *17. Meter Release (M50 Series Meters) | | | | | |
| 9. Meter Location (from the terminal, side with removable lid; meter must follow lid orientation on large box) | M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ | | | | | |
| R Right L Left N None (N/A) | M58 Dual Eth., ≤480V Y, ≤277V Δ M59 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ | | | | | |
| 10. Accessories Package (optional accessories for feed units) | *18. Meter Options (choose from a 4.1" display, measured neutral, audible alarm and/or a temperature monitor) | | | | | |
| S Standard 11. Accessories Location (from the terminal, side with removable lid) | SStandard (M60s also)N(Measured) Neutral)DDisplay (M60s also)PProfessional (D+N) | | | | | |
| NNone (N/A)RRightARearLLeftTTopFFront | *19. System Configuration and CT Type (line-line or line-neutral and wye or delta systems) | | | | | |
| | LLD - Standard, Milivolt LNY - Standard, Milivolt LNY - Standard, Milivolt LNY - SC, 5A | | | | | |

EXAMPLE

<u>UA225T3C4R-SNSN-0206C015-STD0</u> = US System, Above Feed, 225 amps, T3 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, No Meter Location, Standard Accessory Package, No Accessory Location, 2 foot 6 inch Straight Length, Continuous Access, 15 inch Feed Location, Factory Mill Finish, No Tape Marking



T3 SERIES

RAL COLORS

| 1ST CHARACTER | | | | | |
|---------------|-------|--|--|--|--|
| Р | Paint | | | | |

| 2ND CHA | RACTER |
|---------|--------|
| 0 | 100 |
| 1 | 101 |
| 2 | 102 |
| 3 | 103 |
| 4 | 200 |
| 5 | 201 |
| Α | 300 |
| В | 301 |
| С | 302 |
| D | 303 |
| Е | 400 |
| F | 401 |
| G | 500 |
| н | 501 |
| J | 502 |
| К | 600 |
| L | 601 |
| М | 602 |
| Ν | 603 |
| Р | 700 |
| Q | 701 |
| R | 702 |
| S | 703 |
| т | 704 |
| U | 800 |
| V | 801 |
| W | 802 |
| х | 900 |
| Υ | 901 |
| Z | 902 |
| | |

| 3RD CHA | RACTER |
|---------|--------|
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| | |

4TH CHARACTER0

EXAMPLE:

P B 2 0 = Paint RAL 3012



T3 SERIES

ACCESSORIES: SUPPORT HARDWARE

| THREADED ROD For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the top full-access slot of busway. Hanger support is required every 10 feet maximum. | Part Number UBRH-1 Available in plain zinc or black (-BLK) Weight .3 lb | 3/8" rod coupler |
|---|--|---------------------|
| SEISMIC THREADED ROD For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the top full-access slot of busway, and includes a seismic brace. Hangers are required every 5 feet maximum for seismic support. | Part Number UBRH-3 Available in plain zinc or black (-BLK) Weight .3 lb | 3/8" rod coupler |
| STANDARD For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top full-access slot on the busway. Hanger support is required every 10 feet maximum. | Part Number UBH-1 Available in plain zinc or black (-BLK) Weight .2 lb | 3/8" Stud |
| • WEIGHT HOOK Can be used as a hanger to suspend the busway from chains or cables. Can also be used to hang loads up to 100 pounds under the busway, such as light fixtures, tools and balancers. | Part Number SWHRT3 Available in plain zinc Weight .2 lb | C C |
| RECESSED SUSPENDED CEILINGS For hanging busway into a recessed ceiling. *Hanger bolt must be ordered separately **Busway must sit slightly below the surface of the ceiling in order to install plug in units. | Part Number SRMT3-1 Available in plain zinc | |



T3 SERIES

ACCESSORIES: SUPPORT HARDWARE

RAISED ACCESS FLOOR

For mounting the busway vertically (with access slot facing down) for under floor applications. Pedestal not included.

Part Number URFBT3-1 *UBH-1 comes included Available in plain zinc or black (-BLK)

Part Number

WMBT5-9

Part Number

URFBT3-2



WALL MOUNT BRACKET

For mounting to walls, using standard hangers. Hanger support is required everything 3 meters maximum.

Note: All S3 Systems must be mounted in the standard vertical orientation.

RAISED MOUNTING BRACKET

For mounting the busway horizontally (with access slot facing to the side) for under floor applications. Pedestal not included.

Note: Not available for S3 systems

SIDE MOUNT BRACKETS

Mounted to vertical supports. Vertical supports not included, only bracket.

Note: Not available for S3 systems

Mounted to overhead supports

Note: Not available for S3 systems

Available in plain zinc or black (-BLK) Weight .2 lb

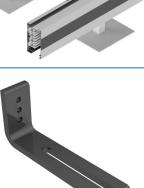
Part Number UBSS-1 Available in plain zinc or black (-BLK) Weight



Part Number **UBH-T3-SIDE** Available in plain zinc or black (-BLK) Weight 1.31 lb

.2 lb









ACCESSORIES: SUPPORT HARDWARE

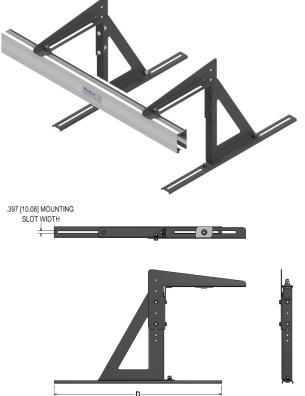
PRODUCT DESCRIPTION

UNIVERSAL SERVER CABINET MOUNTING BRACKETS

The Universal Server Cabinet Mounting Brackets are designed with generous 3/8 inch wide through slots to mount directly onto virtually any server cabinet.

These accessories quickly and easily provide a flexible busway mounting solution on top of server cabinets, eliminating the need for threaded rod and strut support from the ceiling.

The brackets are adjustable in height, can be ordered in virtually any color, and can be positioned at any depth on the server cabinet. Moreover, they can accommodate up to (2) runs of busway. Hanger Bolt Included – UBH-1



| | MATERIAL | | | | | | |
|---|--|--|--|--|--|--|--|
| | Galvanneal Steel | | | | | | |
| | HEIGHT | | | | | | |
| > | 17.68 in Min 23.75 in Max Maximum Spacing: Every 10 ft per run | | | | | | |
| | | | | | | | |
| | C: Color (1, 3, 4, 6, 7) Anodized Silver Black White *consult factory for custom colors | | | | | | |
| | Part Number U.S: UUSCMB-(X)-(D)-(C) | | | | | | |
| | X = System (T3) D = Depth (30", 36", 42", 48" or custom length) C = Color (1, 3, 4, 6, 7) | | | | | | |
| | EXAMPLES | | | | | | |
| | <u>UUSCMB-T3-36-4</u> = US, Universal Server Cabinet Mounting Bracket, T3 System, 36 inch Depth, White | | | | | | |
| Ļ | UUSCMB-T3-42-3 = US, Universal Server Cabinet Mounting Bracket, T3 System, 42 inch Depth, Black | | | | | | |

ACCESSORIES: CONNECTION HARDWARE

T3 & S3 JOINT KITS

| SYSTEM AMPERAGE | NEUTRAL/GROUNDBAR OPTION | T3 SERIES CATALOG # | S3 SERIES CATALOG # |
|--------------------|--|------------------------|------------------------|
| 100 | 3 Phase plus Neutral | SJK100T3 | SJK100S3 |
| 100 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK100T3G | SJK100S3G |
| 100 | 3 Phase plus 200% Neutral | SJK100T3N | SJK100S3N |
| 100 | 3 Phase plus 200% Neutral plus Internal Ground Conductor | SJK100T3F | SJK100S3F |
| 225 | 3 Phase plus Neutral | SJK225T3 | SJK225S3 |

T3 JOINT KIT

For the connection of adjacent busway sections. One kit is required at each joint. Each kit is comprised of a housing coupler pair and bus connector set.

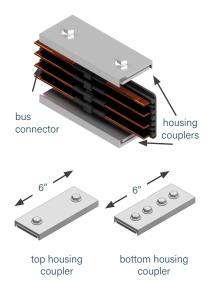
Bus Connector: copper blades secured to an insulating mounting plate. This makes the electrical connection between sections.

Housing Couplers: consists of two 12-screw couplers - one for the top and one for the bottom of busway. These make the mechanical connection between busway sections.

*Installation tool is required (see below)

**Available in all standard and RAL colors

T3 Joint Kit components



S3 JOINT KIT

For the connection of adjacent busway sections. One kit is required at each joint. Each kit is comprised of a housing coupler pair and bus connector set, joint seal and two joint covers.

Bus Connector: copper blades secured to an insulating mounting plate. This makes the electrical connection between sections.

Housing Couplers: consists of two 12-screw couplers - one for the top and one for the bottom of busway. These make the mechanical connection between busway sections.

Joint Seal: Plastic sealing component installed between two housings at joint prior to bus connector and coupler installation.

Joint Covers: Plastic sealing cover fitted over top of housing coupler after coupler installation.

**Installation tool is required (see below)*

S3 Joint Kit components



Includes: Couple Covers, Top and Bottom Housing Couplers, Joint Seal and Bus Connector

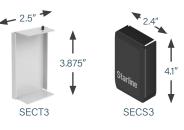


ACCESSORIES: CONNECTION HARDWARE

END CAP

For covering the end of 100T3, 100S3, 225T3, or 225S3 busway.

| SYSTEM | DESCRIPTION | T3 SERIES CATALOG # | S3 SERIES CATALOG # |
|--------|-----------------|---------------------|---------------------|
| 100 | 100 Amp End Cap | SECT3 | SECS3 |
| 250 | 100 Amp End Cap | SECT3 | SECS3 |



SCST3-1

CLOSURE STRIP

Snaps into bottom access slot of busway housing. The optional closure strip is normally shipped in 10 feet lengths and can be field cut to fit exact desired length. The Closure Strip is offered in both non-conductive plastic material and aluminum.

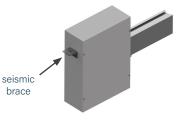
IMPORTANT NOTE: Closure strip is optional for T3 systems, but is required for S3 systems in order to ensure the system meets IP54 ingress protection requirements. Closure strip must be ordered separately.

| SYSTEM | AMPERAGE | PART NUMBER | MATERIAL TYPE | REQUIRED |
|--------|----------|-------------|---------------|----------|
| Т3 | 100-225 | SCST3-1 | Plastic | Optional |
| Т3 | 100-225 | SCST3-1-AL | Aluminum | Optional |
| S3 | 100-225 | SCSS3-1 | Aluminum | Yes |

END FEED SEISMIC BRACE

For seismic applications, the End Feed Seismic Brace bolts on to the end feed, to be used with threaded rod for gravity hanger.

Part Number SEFB-SIL



SCST3-1-AL

TAP-OFF SEAL ASSEMBLY

For use with Series-S Busway only. The seal assembly (2 pieces) wraps around the enclosure, protecting it from dust and liquid ingress.

*Tap-off Seal Assemblies are already included with each Series-S Plug-in Unit, but may be ordered separately.

| PLUG-IN (TAP-OFF) ENCLOSURE | SEAL ASSEMBLY CATALOG # |
|-----------------------------|-------------------------|
| S1 Enclosure | S3TOU-SEAL-S1-STD |
| S2 Enclosure | S3TOU-SEAL-S2-STD |
| S3 Enclosure | S3TOU-SEAL-S3-STD |





ACCESSORIES: INSTALLATION TOOL

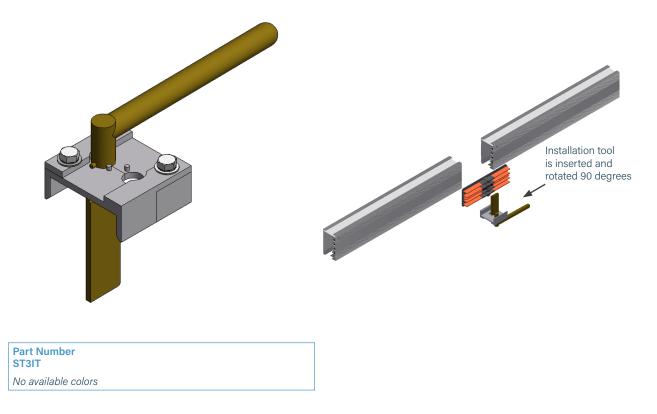
PRODUCT DESCRIPTION

INSTALLATION TOOL

An installation tool is used to install the bus connector between two adjacent sections of busway. A joint kit, which is comprised of two housing couplers and a bus connector set, is required at every joint.

Busway sections are butted together and the top housing coupler is installed. The bus connector is inserted, centered and seated in the slot of the busway. The installation tool is inserted into the jointed intersection and rotated 90 degrees to form a spring-loaded, secure electrical connection. The housing coupler is then positioned over the bottom joint and tightened. Series-S and Track Busway use the same installation tool.

Weight 2.5 lb





SERVICES

Regular servicing of busway systems is crucial for ensuring that your system performs at its best. By conducting regular maintenance, you can identify and address any potential issues before they turn into expensive problems, thus saving you time and money in the long run. Regular servicing can help extend the lifespan of your busway system, ensuring that it meets safety standards and complies with regulations. Choose from various offerings and customize a service plan that works best for you.

WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:

COMMISSIONING AND EQUIPMENT RENTALS

Designing a mission-critical facility involves a significant investment of time and money. Through comprehensive commissioning services, Starline can help guarantee your project delivers the outcomes you expect.

Whether you need rental equipment to test your busway system or certified technicians to perform the testing, Starline has you covered. Choose from our inventory of load bank tap-offs and associated gear, or work with a Starline Engineer to customize and perform a commissioning plan to fit your specific needs.

METER SERVICES

Starline's certified technicians make optimizing your meters' performance and functionality a breeze. Our comprehensive on-site meter programming service includes inspecting, programming, reporting, and optional retrofitting services for you existing systems.

STARTUP AND SYSTEM CERTIFICATION

At Starline, we are committed to ensuring the success of your project. Our team understands the risks associated with the energization of systems, which is why we've designed a rigorous certification process to inspect, test and report on your Starline Busway and Critical Power Monitor ("CPM") products. Our certification process proactively identifies and prevents any potential issues before they happen.

To ensure the long-term success of your project, it is crucial to have Starline-certified technicians inspect and validate the installation before full commissioning. Level 2 and 3 commissioning ensures the installation complies with safety requirements and meets factory standards for ongoing reliability.

- Double the length of the standard factory warranty
- Ensure all joint and feed connections are properly installed with continuity testing
- Ensure proper installation of all plug-in units
- · Validate that system will perform to your specified requirements
- Full certification report delivered electronically at conclusion of service

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **<u>downloads.starlinepower.com/services</u>**.



SERVICES

TURNKEY INSTALLATION SERVICES

Our trained and factory certified Busbar installers are looking forward to completing your next job. You can order your best-in-class power distribution system and leave the rest to us. Our technicians will complete your installation quickly and safely and will reduce your overall TCO by extending your product warranty.

PREVENTATIVE MAINTENANCE PLANS AND IR SCANNING

Although Starline busway is expertly designed to require less maintenance, NETA ATS and MTS guidelines recommend conducting annual inspections and health assessments on all critical equipment. Yearly preventative maintenance helps to ensure your system's long-term reliability and safety.

Starline's FLIR-certified technicians will create a custom preventative maintenance plan for your specific needs. Our certified technicians will work to:

- Identify thermal anomalies
- Extend equipment lifecycle
- Ensure optimal system performance
- Improve facility safety and operational sustainability

Upon completing your preventative maintenance plan, you may be eligible to extend your product warranty.

ON-SITE INSTALLATION SUPPORT

Starline's on-site installation service makes installing your busway as quick and easy as possible.

Our installation support starts with scheduling a preliminary trip to the installation site. During the initial visit, our certified technicians will train your installing contractor and develop a thorough installation and commissioning plan.

After completing the training, your installing contractor will have a direct line of communication with our installation experts. Our experts can help answer questions and provide hands-on guidance when needed.

Opting for Starline's installation support helps mitigate the installation risk and reduces the learning curve typically associated with new installations.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



SERVICES

ON-SITE PRODUCT TRAINING

At Starline, we offer comprehensive on-site product training services facilitated by our team of certified technicians. With their extensive expertise and commitment to upholding our high factory standards, you can confidently rely on them to ensure your and your systems' reliability and operational safety.

Our training programs equip your team with the knowledge and skills necessary to operate and maintain your systems effectively. Through hands-on demonstrations and interactive sessions, our certified technicians will guide your staff in understanding the intricate workings of the products and address any questions or concerns your team may have during the training process.

By choosing our on-site product training services, you are investing in your system's and operations' long-term success

RECERTIFICATION AND EXTENDED WARRANTY PLANS

Starline's recertification and extended warranty options provide best-in-class coverage for all of your Starline products and systems. Our extended warranty plans safeguard your investment beyond the standard warranty timeframe, offering you peace-of-mind while our recertification programs help mitigate risk and downtime. Whether the busway has been installed for years or you are relocating to another building, Starline is here to help.

Choose from one of our flexible one to four-year plans or have your system recertified anytime. Contact your Starline rep for more information.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



T3 PLUG-IN UNITS

METER PLUG/METER BOX UNITS

Any T3 compatible Starline Plug-In Unit that contains only a meter, or any lone box (without paddle head) that includes a meter.



RECEPTACLE BOX/DROP CORD UNITS WITH CLASS CC FUSE

Any T3 compatible Starline Plug-In Unit that contains a receptacle box or drop cord that contains a class CC fuse.

TERMINAL BLOCK UNITS

Any T3 compatible Starline Plug-In Unit that's fully rated to the listed electrical ratings that can accept incoming connections from the end user.



CIRCUIT BREAKER/FUSED DISCONNECT UNITS

Any T3 compatible Starline Plug-In Unit that contains a receptacle and/or drop cord along with circuit breaker(s) or fused disconnect.







SYSTEM & BUILD GUIDE

The below is a suggested list of questions to determine answers to in order to properly build or assemble both Track Busway systems and plugs.

WHEN BUILDING SYSTEMS

- 1. What is the amperage needed for the system? (100, 225, etc..)
- 2. Does the system need an internal ground?
- 3. Are there any limitations on the length of a run? (5ft max, 10ft max, 20ft max, etc...)

WHEN DETERMINING DESIRED PLUG CONFIGURATIONS

1. What type of system is this being used on? (T3)

2. Does the system have an internal ground? If so, does the plug need to be wired Isolated or Dedicated ground/earth?

- 3. What is the fault current needed for the breaker? (10Kaic, 22Kaic, etc...)
- 4. Does the plug need to have drop cords or receptacles?
- 5. What is the device configuration of the connector bodies or receptacles?
- 6. What is your desired MCB configuration? (phase, amperage, poles?)
- 7. Do you require metering?
- 8. How many outlets are needed?
- 9. What is the trip curve needed?
- 10. What MCB brand is preferred?
- 11. What is the voltage required?

METER PLUGS: PRODUCT NUMBERS

| U | М | Т3 | | С | 52 | S | - | 065 | |
|--|---|-------------------|------------------------|---------------------------------|---|--|---|---|-------|
| 1. System | 2. Product Type | 3. Compatibi | 4. lity Gro | und | 5. Box | 6. Orientatior | n (| 7. Current Transformer | |
| | - | M59 | S | | 1 – | STD | *Opi | tional | |
| | | Meter I | 9. Meter Options | *10. Mete Conf | er iguration | 11. Paint Color | | | |
| I. System (standard of measure) | | | | 9. N | /leter Opt | ions (M50 AC |) | | |
| U US | | | | SD | Standar Display | d | | N (Measured) NeutralP Professional (D+N) | |
| 2. Product Type (section compon | ent) | | | _ | | | | P Professional (D+N) | |
| M Meter Plug | | | | 9. N | | ions (M60 DC | | P Standard (48 VDC) | |
| 3. Compatibility (frame compatible | lity) | | | D | D Display (High Voltage) Q Display (48 VDC) | | | | |
| T3 T3 System | | | | | | | | 120 to 300 VDC/Split Phase 120 w Voltage: 48 VDC |) VDC |
| Ground (ground type installed) Case (Housing) Ground | | | | *10 | . Meter Co | onfiguration | (M50 | AC) | |
| 5. Box (what size enclosure) | | | | 1 | | er, Delta Solic | | | |
| 01, 02, 99 (refer to enclosure) 12 and 28 boxes are currently not av 6. Orientation (what direction the S Standard | ailable | - <i>i</i> | | 3 4 6 7 9 K M | LL powe LN pow LL powe LN pow LL powe | er, Wye Solid er, Delta Split er, Wye Split er, Delta Split | l Core Core Core Core, Core | e, 5A-secondary CT e, 5A-secondary CT e, mV CT | |
| 7. Current Transformer (current i | ating) | | | *10 | | onfiguration | , | | |
| 065 65 amps 250 250 amps 800 800 amps 1K2 1200 amps | 225 225 a 400 400 a 1K0 1000 | amps | | 1 2 3 | Circuit 1 Circuit 2 | Only, Solid C Only, Solid C cuits, Solid C | Core Core | | |
| **M60 (DC) meters are only available | vith 800 amp o | current transdu | cers | 11. | Paint Colo | or | | | |
| 8. Meter Release (<i>M50 AC</i>) M51 Single Eth./WiFi, ≤480V Y, M53 Single Eth./No WiFi, ≤480 M58 Dual Eth., ≤480V Y, ≤277V M59 Dual Eth/Dual Modbus, ≤4 | √ Y, ≤277V Δ Δ | | | ST BL WH | K Paint | Factory Silve Factory Blacl Factory Whit | < | RED Paint Factory Red BLU Paint Factory Blue **RAL (please see page 3.38) |] |
| 8. Meter Release (M60 DC) | | | | | | | | | |
| M61 Single Eth./WiFi, single ph M63 Single Eth./No WiFi, single M67 Dual Eth., single phase, VD M69 Dual Eth/Dual Modbus, sin | phase, VDC C | | | | | | | | |

EXAMPLE

<u>UMT3C52S-065-M59S1-STD</u> = US System, Meter Plug, T3 System, Case Ground, 52 Box, Standard Orientation, 65 Current Rating, M59 Meter, Standard, LL Power, Delta Solid Core, mV CT, Painted Factory Silver

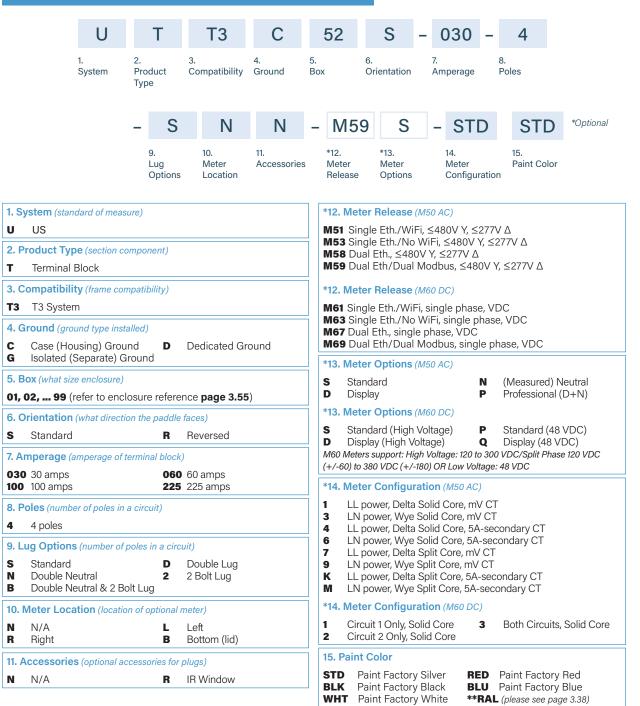
METER BOXES: PRODUCT NUMBERS

| | U | D | NL/ | ` | \sim | 50 | C | | 005 | |
|---|--|---|-------------------------|------------------------|--|---|--|---|--|--|
| | U | В | NA | 4 | C | 52 | S | | 065 | |
| | 1. System | 2. Product Type | 3. Compatil | 4. bility Grou | und | 5. Box | 6. Orientation | | 7. Current Transform | er |
| | | - | M59 | S | | 1 – | STD | *Opi | tional | |
| | | | 3. Vleter Release | 9. Meter Options | *10. Mete Con | | 11. Paint Color | | | |
| 1. System (standard of | measure) | | | | 9.1 | Meter Optic | ons (M50 AC) | | | |
| U US | | | | | S | Standard | 1 | | | Measured) Neutral |
| 2. Product Type (sect | tion compone | nt) | | | D | Display | | | P P | rofessional (D+N) |
| B Meter Box | | | | | | | ons (M60 DC) | | | |
| 3. Compatibility (fram | ne compatibil | ity) | | | S Standard (High Voltage) P Standard (48 VDC) D Display (High Voltage) Q Display (48 VDC) M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC (+/-60) to 380 VDC (+/-180) OR Low Voltage: 48 VDC | | | | | |
| NA Not Applicable | | | | | | | | | | |
| Ground (ground typ) C Case (Housing) | | | | | | | nfiguration | | | |
| 5. Box (what size enclowed) 6. Orientation (what of Standard) | sure) enclosure rently not ava | ilable | | | 1 3 4 6 7 9 K M | LN powe LL power LN powe LL power LN powe LL power | r, Delta Solid r, Wye Solid r, Delta Solid r, Wye Solid r, Delta Split r, Wye Split r, Delta Split r, Wye Split | Core Core Core Core Core, Core | e, mV CT e, 5A-sec e, 5A-sec , mV CT , mV CT , 5A-sec | ondary CT ondary CT |
| 7. Current Transform | er (current ra | | | | *10 | . Meter Co | nfiguration | (M60 | DC) | |
| 065 65 amps 250 250 amps 800 800 amps 1K2 1200 amps | - 1- | 225 225 a 400 400 a 1K0 1000 | amps ampss | 4 | 1 2 3 | Circuit 2 | Only, Solid C Only, Solid C cuits, Solid C | Core | | |
| **M60 (DC) meters are or | - | nth 800 amp c | current transc | lucers | | Paint Color | | | | |
| 8. Meter Release (M5 M51 Single Eth./WiF M53 Single Eth./No N M58 Dual Eth., ≤480 M59 Dual Eth/Dual N 8. Meter Release (M6 | i, ≤480V Y, WiFi, ≤480V V Y, ≤277V Modbus, ≤4 | ′ Y, ≤277V Δ Δ | | | ST BL WI | K Paint F | actory Silver actory Black actory White | (| BLU Pa | aint Factory Red aint Factory Blue olease see page 3.38) |
| M61 Single Eth./WiFi M63 Single Eth./No M67 Dual Eth., single M69 Dual Eth/Dual N | WiFi, single phase, VD | phase, VDC C | | | | | | | | |

EXAMPLE

UBNAC52S-065-M59S1-STD = US System, Meter Box, Not Applicable, Case Ground, 52 Box, Standard Orientation, 65 Current Rating, M59 Meter, Standard, LL Power, Delta Solid Core, mV CT, Painted Factory Silver

TERMINAL BLOCK UNITS: PRODUCT NUMBERS



EXAMPLE

UTT3C27S-225-4-SBN-M59S3-BLK = US System, Terminal Block, T3 System, Case (Housing) Ground , 27 Box, Standard Orientation, 225 amps, 4 poles, Standard Lugs, Bottom-Located Meter, No Accessories, M59 Meter, Audible Alarm, Painted Factory Black

CIRCUIT BREAKER/FUSED DISCONNECT: PRODUCT NUMBERS

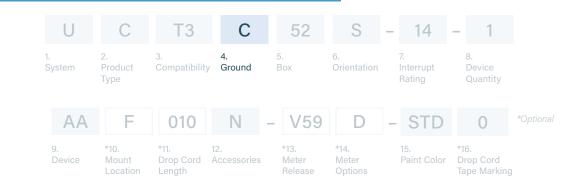
| | U | С | Т3 | С | 52 | S | - 14 | - 1 | | |
|---|--|---|--|--------------------|--|---|--|--|---|--|
| | 1. System | 2. Product Type | 3. Compatibility | 4. Ground | 5. Box | 6. Orientation | 7. Interrupt Rating | 8. Device Quantity | | |
| | AA | F | 010 | Ν | - V59 | D | - STD | 0 | *Optional | |
| | 9. Device | *10. Mount Location | *11. Drop Cord Length | 12. Accessories | *13. Meter Release | *14. Meter Options | 15. Paint Color | *16. Drop Cord Tape Markin | g | |
| 1. System (s | tandard of meas | sure) | | | 12. Acc | cessories (opi | tional accessorie | es for plugs) | | |
| U US | | | | | | /A ircuit Breaker | Interleak | F Finger S P Padlock | hroud Adapter for Circu | |
| 2. Product 7 | Гуре (section co | omponent) | | | | | | Breaker | | |
| C Circuit | Breaker Unit | F | Fused Disco | nnect Unit | S S | eismic Hange | r | R IR Wind | 0W | |
| 3. Compatik | oility (frame cor | npatibility) | | | *13. Me | eter Release | (M50 AC) | | | |
| T3 T3 Sys | tem | | | | | | Fi, ≤480V Y, ≤ WiFi, ≤480V \ | | | |
| 4. Ground (g | ground type inst | alled) | | | V58 D | ual Eth., ≤480 |)V Y, ≤277V Δ | | | |
| | Housing) Grou | | Dedicated G | iround | | V59 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ V56 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ , Breaker Monitoring | | | | |
| G Isolated | d (Separate) G | iround | | | | | er Monitoring | | | |
| 5. Box (what | size enclosure) | | | | *13 M | eter Release | | | | |
| 01, 02, 99 | 9 (refer to encl | losure refere | nce page 3.6 | 6) | | | Fi, single phas | e VDC | | |
| 6. Orientatio | on (what directi | on the paddle | faces) | | M63 S | M63 Single Eth./No WiFi, single phase, VDC | | | | |
| S Standa | Standard R Reversed M67 Dual Eth., single phase, VDC M69 Dual Eth/Dual Modbus, single phase, VDC | | | | | | | | | |
| 7. Interrupt | Rating (interrup | ot rating of the | e breakers in K) | | | eter Options | | | | |
| 10, 14, 22, 2 | 25, 30, 35, 50 | , 65, CC (C | C = 200,000 |) (for U.S.) | | tandard | | N (Macour | ad) Noutral | |
| 8. Device Q | uantity (quanti | ity of device 1) | | | | isplay | | | ed) Neutral onal (D+N) | |
| 1, 2, 3, 4, 5, page 3.71) | 6, 7, 8, 9 (for | more than 1 | device type, ı | reference | | eter Options | (M60 DC) | | | |
| | uantity of device | e 1) | | | S Standard (High Voltage) P Standard (48 VDC) D Display (High Voltage) Q Display (48 VDC) | | | | | |
| 9. Device (qu | 7 (vafar ta dau | vice codes pa | ige 3.57) | | M60 Me | ters support: Hi | gh Voltage: 120 to 180) OR Low Vol | o 300 VDC/Split | | |
| | | | sway polarizing | stripe) | | nt Color | , | | | |
| AA, AB,Z | Location (with | respect to bu | <i>.</i> , . | | 15. Fall | | | | | |
| AA, AB,Z *10. Mount I F Front | | Α | Back | | STD | Paint Factor | / Silver D | D Paint Fac | tory Red | |
| AA, AB,Z *10. Mount I | | · _ | | | STD BLK WHT | Paint Factory Paint Factory | / Black BL | | tory Blue | |
| AA, AB,Z *10. Mount I F Front T Top L Left | | A B R | Back Bottom Right | | BLK WHT | Paint Factory Paint Factory | / Black BL / White ** | | tory Blue | |
| AA, AB,Z *10. Mount I F Front T Top L Left *11. Drop Co | Location (with | A B R cation of optic | Back Bottom Right nal meter) | | BLK WHT 16. Dro | Paint Factory Paint Factory P Cord Tape | / Black BI / White ** Marking | .U Paint Fac RAL (please se | ctory Blue <i>pe page 3.38)</i> | |
| AA, AB,Z *10. Mount I F Front T Top L Left *11. Drop Co XXY: XX = fe (only can be cf | Location (with | A B R cation of optic (010 = 1 foot ments) | Back Bottom Right <i>nal meter)</i> c, 0 inches) | | BLK WHT 16. Dro 3 Tap | Paint Factory Paint Factory | / Black BI / White ** Marking uck 7 | .U Paint Fac | etory Blue <i>e page 3.38)</i> y Blue | |

EXAMPLE

UCT3D28S-50-2BCB010N-V59D-STD = US System, Circuit Breaker Unit, T3 System, Dedicated Ground, 28 Box, Standard Orientation, 50 kA Interrupt Rating-2 Devices, 6-20C, Bottom Located, 12 inch Long Drop Cord, No Accessories- V59 Meter, with Display, Painted Factory Silver



CIRCUIT BREAKER/FUSED DISCONNECT: GROUND



ISOLATED GROUND/EARTH

Orange receptacles in plugs. Case

ground isolated from copper ground

bar. Isolated ground carried back to

| 4. 0 | Ground (ground type installed) | | |
|------|--------------------------------|---|------------------|
| С | Case (Housing) Ground | D | Dedicated Ground |
| G | Isolated (Separate) Ground | | |

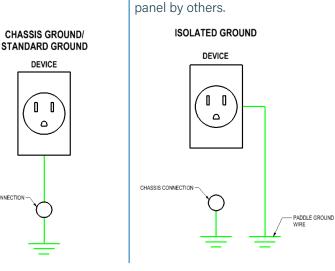
IN OPTION 4. you are asked to specify what type of ground you would like: case, dedicated or isolated. Parts affected by grounding are the plug paddle (ground paddles have a fifth stab).

CASE GROUND/CHASSIS EARTH

Uses aluminum housing and no extra copper bar.

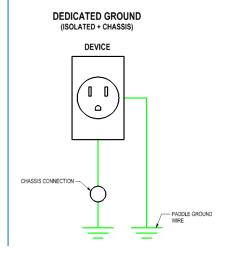
۵

CHASSIS CONNECTION



DEDICATED GROUND/EARTH

Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



*For further details about Dedicated Ground vs. Isolated Ground, please reference our "Isolated Ground vs. Dedicated Ground" tech brief on downloads.starlinepower.com/starline/busway



CIRCUIT BREAKER/FUSED DISCONNECT: BOX



5. Box (what size enclosure)01, 02, ... 99 (refer to enclosure reference page 3.66)

IN OPTION 5. you are asked to specify what size and style enclosure that you would like. A few common enclosure sizes for T3 busway systems are shown below:



*For all box sizes and styles, please refer to page 3.66



CIRCUIT BREAKER/FUSED DISCONNECT: INTERRUPT RATING



7. Interrupt Rating (interrupt rating of the breakers in K)
10, 14, 22, 25, 30, 35, 50, 65, CC (CC = 200,000) (for U.S.)

IN OPTION 7. you are asked to specify what the interrupt rating of your protection will be. The breaker used is dependent on voltage, amperage and short-circuit ratings. Different or particular brands may be available upon request. Images of example breakers can be found below.





CIRCUIT BREAKER/FUSED DISCONNECT: DEVICE



9. Device (quantity of device 1) AA, AB, ...ZZ (refer to device codes page 3.71)

StanLin



•••

IN OPTION 9. you are asked to specify what device(s) you would like in your plug. All devices will need to be coded. The catalog number can accommodate up to 3 different types of devicesanything more than that will be handled in the G0 code. If you require more than one type of device, see the example catalog number below:

UCT3C57S-22-2AD-3AB-1ACFN-V59D-STD

If you require a drop cord(s), only one device type can be accommodated in the main catalog number. In addition, drop cord length is only specified if it's the same for all devices. Any additional device types or varying lengths will be handled in the G0 code.





CIRCUIT BREAKER/FUSED DISCONNECT: DEVICE: INDUSTRIAL SPECIFIC

PRODUCT DESCRIPTION

For your convenience, the below display includes a variety of plug-in units that are popularly used in industrialspecific applications. However, these plug configurations are not limited to use in industrial environments.



UCT3C12S-14-1FGB060N-STD 5-20 Receptacle Quad Box 6' Drop Cord UCT3C53S-14-3ABFN-STD (3) 5-20 Duplex Receptacles UCT3C92S-14-1MAB060N-STD-G001 MA = Custom Device Gxxx = Specific Meltric Brand Industrial Connector

*For the full list of all device codes, please refer to page 3.71



CIRCUIT BREAKER/FUSED DISCONNECT: MOUNT LOCATION

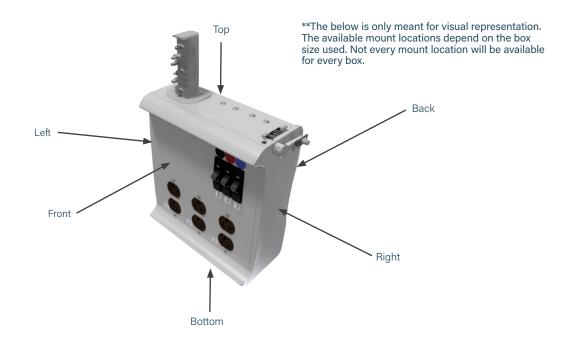


| *10. Mount Location (with respect to busway polarizing stripe) | | | | | | | | |
|--|----------------------|-------------|-------------------------|--|--|--|--|--|
| F T L | Front Top Left | A B R | Back Bottom Right | | | | | |
| | | | - | | | | | |

IN OPTION 10. if you are required to specify the devices desired location on the plug.

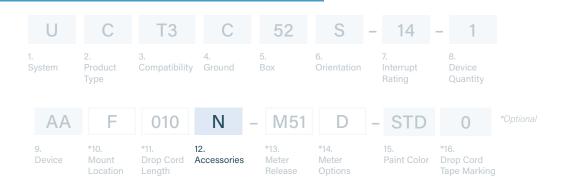
Please see the image below to guide you in selecting your specified mounting location.

*Mount location is only specified if it's the same for all chosen devices. If it is not the same, then it is omitted.





CIRCUIT BREAKER/FUSED DISCONNECT: ACCESSORIES



12. Accessories (optional accessories for plugs)

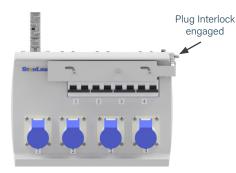
- N N/AC Circuit Breaker Interlock
- S Seismic Hanger
- T NETA Injection Tested Breakers
- Finger Shroud Padlock Adapter for Circuit Breaker
- R IR Window
- L Pilot Light

F

P

IN OPTION 12. you have the option to choose an accessory: The Circuit Breaker prevents disengaging the plug from the busway while the breaker is in the "on" position. The Finger Shroud prevents accidentail on or off contact with the breaker toggle. The Padlock Adapter provides optional protection for locking out breakers. NETA injection testing certifies the breakers will operate as specified in their trip logic. The Pilot Light signals breakers on with a green light. Green light is off in the off/tripped position.

CIRCUIT BREAKER INTERLOCK



PILOT LIGHT



FINGER SHROUD



PADLOCK ADAPTER FOR CIRCUIT BREAKER LOCK-OUT

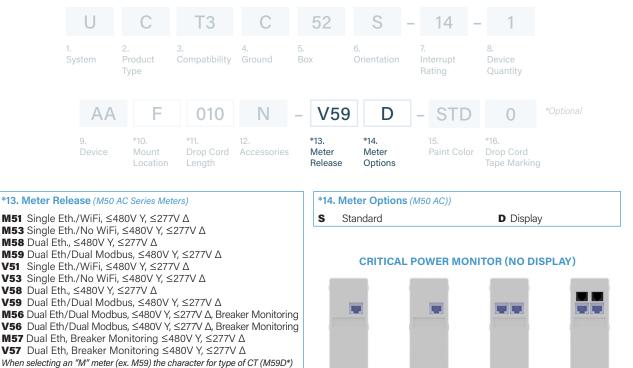


SEISMIC HANGER

IR WINDOW



CIRCUIT BREAKER/FUSED DISCONNECT: (AC ONLY) METER RELEASE



configuration is required in the catalog number.

IN OPTION 13. you are able to select metering for your plug-in unit. M50 and V50 series meters are the best options for plug-in units.

The communication options include:

- Single Ethernet + WiFi
- Single Ethernet
- Dual Ethernet
- Dual Modbus + Dual Ethernet

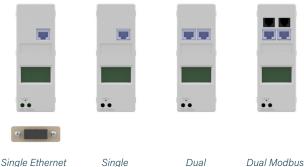
The difference between 'M' and 'V' is that M50 series meters are capable of monitoring the current of the entire unit, and V50 series meters are capable of monitoring up to 6 individual devices limited to 6 solid core Current Transformers (CTs).

Each unit is calibrated for accuracy and is within 0.5% to meet ANSI Revenue Grade Standards.

M/V56 and M/V57 meters also have the capability to sense circuit breaker position (on/off) for up to two outlets.



CRITICAL POWER MONITOR WITH OPTIONAL DISPLAY



w/Wi-Fi M/V51

Ethernet M/V53

Ethernet Dual Ethernet M/V58 M/V59

CIRCUIT BREAKER/FUSED DISCONNECT: (DC ONLY) METER RELEASE



*13. Meter Release (M60 DC Series Meters)

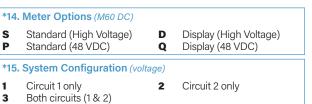
M61/V61 Single Eth./WiFi, single phase, VDC
M63/V63 Single Eth./No WiFi, single phase, VDC
M67/V67 Dual Eth., single phase, VDC
M69/V69 Dual Eth/Dual Modbus, single phase, VDC

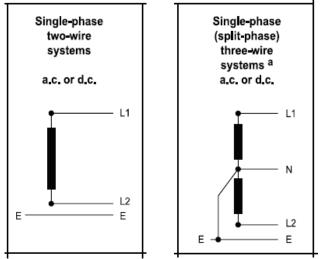
If you've chosen to use direct current (DC) for your Track Busway system, then the DC M60 series meters are a perfect fit. For M60 meters there is a special addition to the catalog number (reference 15. System Configuration). It is important to select your circuit(s) when ordering.

The M60 device utilizes the M50 bezel (shown on previous page) and is capable of measuring up to 4 outlets (circuit 1 or circuit 2). The difference between 'M' and 'V' is that M60 series meters are capable of monitoring the current of the entire unit, and V60 series meters are capable of monitoring up to 4 individual devices.

M60 devices support the following voltages: **High Voltage:** 120-300VDC or split phase 120VDC (+/- 60VDC) to 380VDC (+/- 190VDC) **Low Voltage:** 48 VDC

Each unit is calibrated for accuracy within 1% of energy.





M60 meters are capable of supporting single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380VDC(+/-190VDC).

*12VDC & 24VDC applications are not supported at this time.

^{**}Meter is capable of reporting A to B voltages (as shown above). A to N + B to N voltages will not be reported.

CIRCUIT BREAKER UNITS, NO DEVICES: PRODUCT NUMBERS

| | | L | J | ר כ | ГЗ | С | 5 | 2 | S – | 14 | - | | | |
|---|----------------|--------------|-----------------------|-----------------------------|----------------------------|-----------------|-----------|--------------|-------------------------|---------------------------|-------|--------------------|-----------------------------------|---------|
| | | 1. Systen | 2. n Produ Type | 3. ct Comp | 4. atibility Gr | | 5. Box | 6. Orie | entation | 7. Interrupt Rating | | | | |
| 2 | 030 | 3 | 480 | 050 | 5 | Ν | - | M59 | D | 3 | - | STD | 0 | *Optior |
| 8. Circuit Protection Quantity | 9. Amperage | 10. Poles | 11. Voltage | *12. Drop Cord Length | *13. Number of Wires | 14. Accessor | ies | 15. Meter | 16. Meter Options | 17. Meter Configura | ation | 18. Paint Color | *19. Drop Cord Tape Marking |] |

| 1. System (standard of measure) | 14. Accessories (optional accessories for plugs) |
|---|---|
| U US | N N/A F Finger Shroud |
| 2. Product Type (section component) | C Circuit Breaker Interlock P Padlock Adapter for Circui Breaker |
| C Circuit Breaker Unit F Fused Disconnect Unit | S Seismic Hanger R IR Window |
| 3. Compatibility (frame compatibility) | 15. Meter |
| T3T3 SystemK5T3 System (Limiting Strip)R5T3 System (Rotating Paddle)Z5K5 + R5 | M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ M58 Dual Eth. ≤480V Y, ≤277V Δ |
| 4. Ground (ground type installed) | M59 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ |
| C Case (Housing) Ground D Dedicated Ground G Isolated (Separate) Ground | M56 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ, Breaker Monitoring 16. Meter Options (M50 AC) |
| 5. Box (what size enclosure) | S Standard N (Measured) Neutral |
| 01, 02, 99 (refer to enclosure reference page 3.55) | D Display P Professional (D+N) |
| 6. Orientation (what direction the paddle faces) | *16. Meter Options (M60 DC) |
| S Standard R Reversed | SStandard (High Voltage)PStandard (48 VDC)DDisplay (High Voltage)QDisplay (48 VDC) |
| 7. Interrupt Rating (interrupt rating of the breakers in K) | M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC (+/ |
| 10, 14, 22, 25, 30, 35, 50, 65, CC (CC = 200,000) (for US) | 60) to 380 VDC (+/-180) OR Low Voltage: 48 VDC |
| 8. Circuit Protection Quantity | *17. Meter Configuration |
| 1, 2, 3, 4, 5, 6 | 1 LL power, Delta Solid Core, mV CT 3 LN power, Wye Solid Core, mV CT |
| 9. Amperage | 4 LL power, Delta Solid Core, 5A-secondary CT 6 LN power, Wye Solid Core, 5A-secondary CT |
| 015, 020, 030, 600 | 7 LL power, Delta Split Core, mV CT |
| 10. Poles (number of poles in a circuit) | 9 LN power, Wye Split Core, mV CT K LL power, Delta Split Core, 5A-secondary CT |
| 1, 2, 3, 4, 5 | M LN power, Wye Split Core, 5A-secondary CT |
| 11. Voltage | *14. Meter Configuration (M60 DC) |
| 120, 240, 277, 300, 415, 480, 600 | 1 Circuit 1 Only, Solid Core 3 Both Circuits, Solid Core 2 Circuit 2 Only, Solid Core 3 Both Circuits, Solid Core |
| *12. Drop Cord Length (length of drop cord) | |
| 010 1 foot XXY XX=feet, Y=inches (only can be chosen in 6" increments) For any device configuration chosen over 70 amps, the max. drop cord length is 10 feet (100) | 17. Paint Color STD Paint Factory Silver BLK Paint Factory Black WHT Paint Factory White RED Paint Factory Red BLU Paint Factory Blue **RAL (please see page 3.38) |
| *13. Number of Wires (M50 AC) | 18. Drop Cord Tape Marking |
| 2, 3, 4, 5 | 3 Black 6 Red 8 Green |
| EXAMPLE | 4 White 7 Blue |

UCT5D57S-25-203034800505N-M59D3-*STD0 = US System, Circuit Breaker Only Unit, T5 system, Dedicated Ground, 57 box, Standard orientation, 25kA interrupt rating, 2 circuits, 30 amps, 3 poles, 480v, 5 ft drop cord, 5 wires, no accessories, M59 meter, painted factory silver, no drop cord tape marking

| CORI | DED ME | TERS | | | | | | | | | | | |
|---|--|-----------------------|---------|---|---|------------------------------------|---|-----------|-------------------------|-------------------|-------------------------------|-------------------|-------|
| | U | ССРМ | N | /I | 51 | | S | | 1 | - 1 | L515 | С | |
| | 1. System | 2. Product Type | | 4. nitoring Meter pabilities Features | | | 5. Meter Variations | | 6. System Voltage | D | liring evice or ord Set | 8. Device Styl | e |
| | | | - 2 | XXX | × – | С | ь г | - | BLK | | | | |
| | | | | ength (end end) | | 10. Meter Locatio the Cor | | | I1. Paint Color | | | | |
| 1. System U US | (standard of mea | sure) | | | | 6. 1 | | | Voltage _ine | | 3 | Line-Neu | ıtral |
| | t Type (section of orded CPM | component) | | | | | 7. Wiring Device or Cord Set Options listed on page 3.65 | | | | | | |
| | ring Compatibi Ile/Feed Monito | | | | | С | | onne | ector Body | | R | Receptac | |
| 4. Meter Features51Single Ethernet WiFi58Dual Ethernet59Dual Ethernet, Modbus | | | | 9. | D Duplex Q Quad Receptacle 9. Length (end to end) XXXX Length will be selected when ordering. There will always | | | | | | | | |
| 5. Meter Variations | | | | | be four X's for these characters. (lengths range from 4 to 25 feet in increments of 1 foot) | | | | | n 4 to 25 feet in | | | |
| S Standard Unit D Display Monitoring: The Corded CPM has a plug on one end | | | 10 C | | <mark>er L</mark> ente | .ocation oı r | n the C | Cord T | Тор | | | | |

В

Bottom

11. Paint Color

Monitoring: The Corded CPM has a plug on one end and a connector body or receptacle on the other end; making it ideal for field power monitoring on-the-fly. It is capable of monitoring the energy of any device. The Corded CPM is also available without connectors. All M50 meter features, communication options and accessories are available except for measured neutral.

Box Size: There are two different Corded CPM box sizes. The smaller is designed for single phase (2 pole/3 wire, 1 pole+N/3W) wiring devices rated from 0-32A & 0-480V. The color is black unless specified. The larger enclosure is designed for all other configurations. These include single phase (2 pole/3 wire) rated at 32A-63A & 0-480V, three phase delta (3 pole/4 wire) rated at 0-63A & 0-480V and three phase wye (4 pole/5 wire) rated at 0-63A & 0-480V.

Meter Location: The meter can be placed in the center or offset from the top or bottom of the cord. Top or Bottom meters will always be 1'8" from the end of the connector.



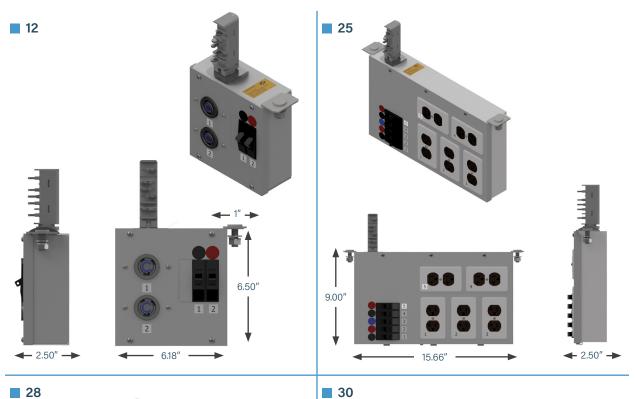


WIRING DEVICE/CORD SET OPTIONS

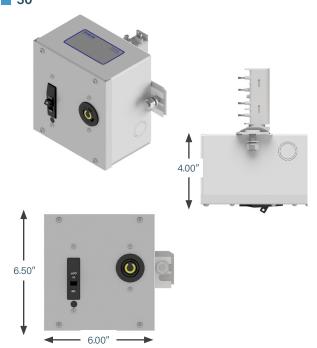
| AC NEMA/IEC NAME | VOLTAGE | CURRENT | AC NEMA/IEC NAME | VOLTAGE | CURRENT |
|------------------|--------------|---------|------------------|------------------|----------|
| CS6360C | 125V | 50 | 420C12W | 125/250V | 20 |
| CS6364C | 125/250V | 50 | 430C12W | 125/250V | 30 |
| CS8264C | 250V | 50 | 460C12W | 125/250V | 60 |
| CS8364C | 250V | 50 | 320C6W | 250V | 20 |
| CS8164C | 480V | 50 | 330C6W | 250V | 30 |
| CS8464C | 480V | 50 | 360C6W | 250V | 60 |
| 515D | 125V | 15 | 320C5W | 277V | 20 |
| 515 | 125V | 15 | 330C5W | 277V | 30 |
| 520D | 125V | 20 | 360C5W | 277V | 60 |
| 520 | 125V | 20 | 416C4S | 110V | 16 |
| 530 | 125V | 30 | 432C4S | 110V | 32 |
| 615D | 250V | 15 | 463C4S | 110V | 63 |
| 615 | 250V | 15 | 416C9S | 230V | 16 |
| 620D | 250V | 20 | 432C9S | 230V | 32 |
| 620 | 250V | 20 | 463C9S | 230V | 63 |
| 630 | 250V | 30 | 420C9S | 250V | 20 |
| L1420 | 125/250V | 20 | 430C9S | 250V | 30 |
| L1420 | 125/250V | 30 | 460C9S | 250V | 60 |
| L1520 | 250V | 20 | 416C6S | 415V | 16 |
| L1530 | 250V | 30 | 432C6S | 415V | 32 |
| L1620 | 480V | 20 | 463C6S | 415V | 63 |
| L1620 | 480V 480V | 30 | 403C03 420C7S | 415V 480V | 20 |
| L2120 | 120/208V | 20 | 430C7S | 480V 480V | 30 |
| L2120 | 120/208V | 30 | 450C7S | 480V 480V | 60 |
| L2220 | 277/480V | 20 | 516C6S | 480V 230/400V | 16 |
| | | 30 | | | |
| L2230 | 277/480V | 20 | 532C6S | 230/400V | 32 63 |
| L2320 | 347/600V | | 563C6S | 230/400V | |
| L2330 | 347/600V | 30 | 316C9S | 415V | 16 |
| L515 | 125V | 15 | 332C9S | 415V | 32 |
| L520 | 125V | 20 | 363C9S | 415V | 63 |
| L530 | 125V | 30 | 520C7S | 277/480V | 20 |
| L615 | 250V | 15 | 530C7S | 277/480V | 30 |
| L620 | 250V | 20 | 560C7S | 277/480V | 60 |
| L630 | 250V | 30 | 320C7W | 480V | 20 |
| L715 | 277V | 15 | 330C7W | 480V | 30 |
| L720 | 277V | 20 | 360C7W | 480V | 60 |
| L730 | 277V | 30 | 15A-300V | 300V | 15 |
| L820 | 480V | 20 | 16A-300V | 300V | 16 |
| L830 | 480V | 30 | 20A-300V | 300V | 20 |
| 316C4S | 110V | 16 | 30A-300V | 300V | 30 |
| 332C4S | 110V | 32 | 32A-300V | 300V | 32 |
| 363C4S | 110V | 63 | 50A-300V | 300V | 50 |
| 320C4S | 125V | 20 | 60A-300V | 300V | 60 |
| 330C4S | 125V | 30 | 63A-300V | 300V | 63 |
| 360C4S | 125V | 60 | 15A-480V | 480V | 15 |
| 520C9W | 120/208V | 20 | 16A-480V | 480V | 16 |
| 530C9W | 120/208V | 30 | 20A-480V | 480V | 20 |
| 560C9W | 120/208V | 60 | 30A-480V | 480V | 30 |
| 316C6S | 230V | 16 | 32A-480V | 480V | 32 |
| 332C6S | 230V | 32 | 50A-480V | 480V | 50 |
| 363C6S | 230V | 63 | 60A-480V | 480V | 60 |



BOX SIZES & STYLES

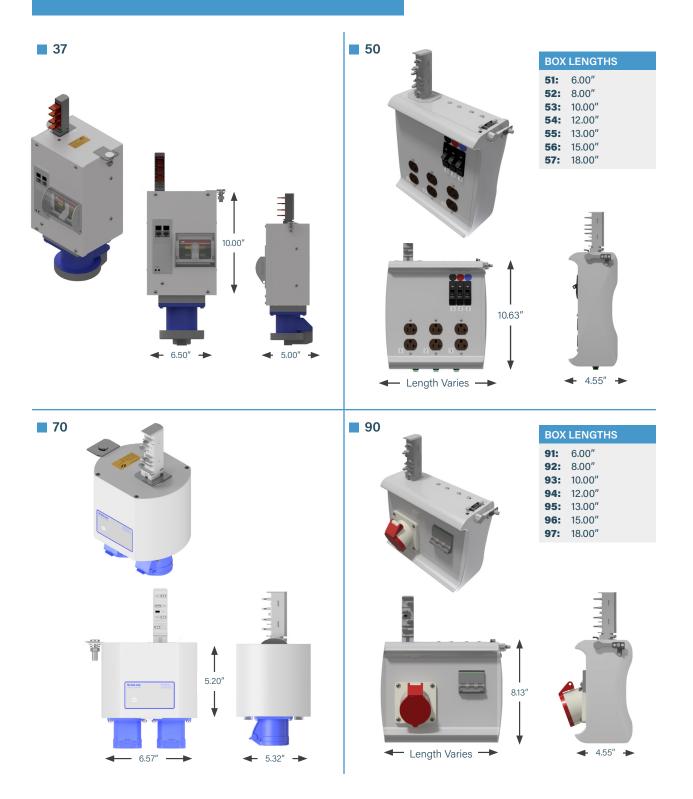








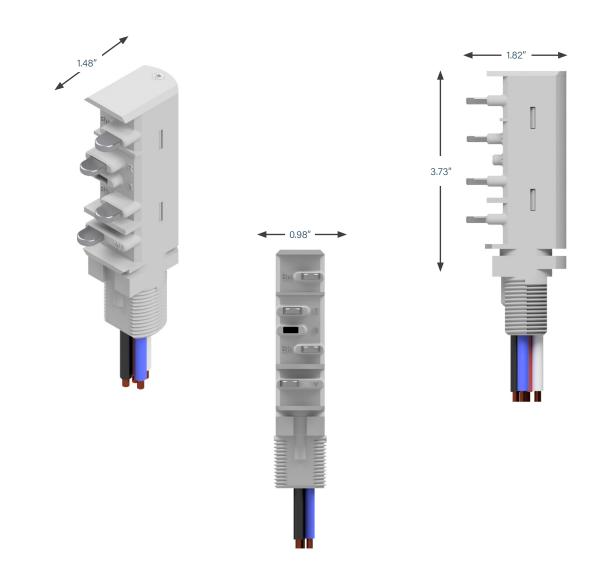
BOX SIZES & STYLES





BOX SIZES & STYLES

T3 PADDLE





50 SERIES ENCLOSURE CUT SHEET

PRODUCT DESCRIPTION

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The 50 Series enclosure is designed to tap off power from the busway. The option is available to have a reverse paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Consult factory for possible combinations*



| BOX | BOX LENGTHS | | | | |
|-----|-------------|--|--|--|--|
| 51: | 6.00" | | | | |
| 52: | 8.00" | | | | |
| 53: | 10.00" | | | | |
| 54: | 12.00" | | | | |
| 55: | 13.00″ | | | | |
| 56: | 15.00" | | | | |
| 57: | 18.00″ | | | | |
| | | | | | |

EXAMPLES

UCT3C54S-22-2ACFN-STD = US System, Circuit Breaker Plug, T3 System, Case (Housing) Ground, 54 Box, Standard Orientation, 22 Interrupt Rating, 2 Devices, L21-30, Front Located, No Accessories, PPG Anodized Silver

UCT3G53S-10-2EMFN-STD = US System, Circuit Breaker Plug, T3 System, Isolated (Separate) Ground, 53 Box, Standard Orientation, 10 Interrupt Rating, 2 Devices, IGL15-30, Front Located, No Accessories, PPG Anodized Silver

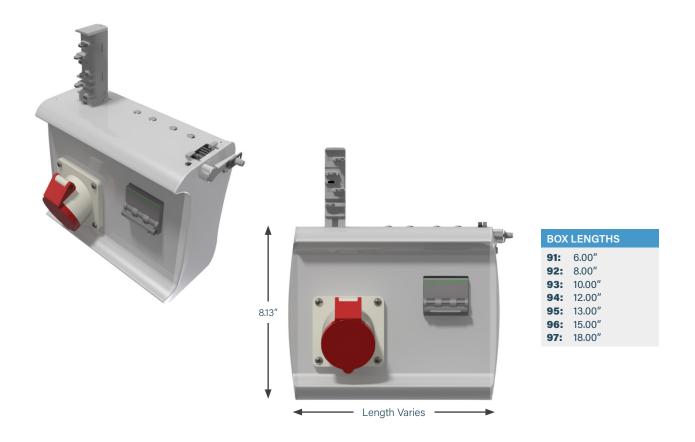


90 SERIES ENCLOSURE CUT SHEET

PRODUCT DESCRIPTION

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The 90 Series enclosure is designed to tap off power from the busway. The option is available to have a reverse paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Consult factory for possible combinations*



EXAMPLES

<u>UCT3C93S-50-1AKFN-STD</u> = US System, Circuit Breaker Plug, T3 System, Case (Housing) Ground, 93 Box, Standard Orientation, 50 Interrupt Rating, 1 Device, CS8369, Front Located, No Accessories, PPG Anodized Silver

<u>UCT3C94S-10-2BGB050F-STD</u> = US System, Circuit Breaker Plug, T3 System, Case (Housing) Ground, 94 Box, Standard Orientation, 10 Interrupt Rating, 2 Devices, I6-30, Bottom Located, 5 foot Drop Cord, Finger Shroud, PPG Anodized SilverIGL15-30, Front Located, No Accessories, PPG Anodized Silver



US DEVICE CODE TABLE

| | NEM | IA Connectors | | |
|-------------|--------------------|---------------|---------|----------------------|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration |
| BS | 5-15C | Connector | 120 | 1PNG |
| FF | 5-15Q-X | Connector | 120 | 1PNG |
| BD | 5-20C | Connector | 120 | 1PNG |
| FG | 5-20-Q-X | Connector | 120 | 1PNG |
| BB | 6-15C | Connector | 240 | 2PG |
| FH | 6-15Q-X | Connector | 240 | 2PG |
| BC | 6-20C | Connector | 240 | 2PG |
| FI | 6-20Q-X | Connector | 240 | 2PG |
| со | L14-20C | Connector | 120/208 | 2PNG |
| CN | L14-30C | Connector | 120/208 | 2PNG |
| СМ | L15-20C | Connector | 240 | 3PG |
| CL | L15-30C | Connector | 240 | 3PG |
| CE | L16-20C | Connector | 480 | 3PG |
| CD | L16-30C | Connector | 480 | 3PG |
| CS | L21-20C | Connector | 120/208 | 3PNG |
| СТ | L21-30C | Connector | 120/208 | 3PNG |
| FA | L22-20C | Connector | 277/480 | 3PNG |
| EZ | L22-30C | Connector | 277/480 | 3PNG |
| BR | L5-15C | Connector | 120 | 1PNG |
| BE | L5-20C | Connector | 120 | 1PNG |
| BF | L5-30C | Connector | 120 | 1PNG |
| BA | L6-15C | Connector | 240 | 2PG |
| BH | L6-20C | Connector | 240 | 2PG |
| BG | L6-30C | Connector | 240 | 2PG |
| СК | L7-15C | Connector | 277 | 1PNG |
| CJ | L7-20C | Connector | 277 | 1PNG |
| CF | L7-30C | Connector | 277 | 1PNG |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

| | Pin & Sleeve Connectors | | | | | | | | | | |
|-------------|-------------------------|-----------|---------|----------------------|--|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | | |
| BJ | 360C6W | Connector | 240 | 2PG | | | | | | | |
| BQ | 420C6W | Connector | 240 | 2PNG | | | | | | | |
| BW | 430C7W | Connector | 480 | 3PG | | | | | | | |
| BP | 430C9W | Connector | 240 | 3PG | | | | | | | |
| BX | 460C7W | Connector | 480 | 3PG | | | | | | | |
| EJ | 460C9S | Connector | 240 | 3PG | | | | | | | |
| EI | 460C9W | Connector | 240 | 3PG | | | | | | | |
| BZ | 520C6S | Connector | 240/415 | 3PNG | | | | | | | |
| CC | 530C6S | Connector | 240/415 | 3PNG | | | | | | | |
| EX | 530C6W | Connector | 240/415 | 3PNG | | | | | | | |



US DEVICE CODE TABLE

| | Pin & Sleeve Connectors (Continued) | | | | | | | | | | |
|-------------|-------------------------------------|-----------|---------|----------------------|--|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | | |
| СН | 530C7S | Connector | 480 | 3PNG | | | | | | | |
| BI | 530C9W | Connector | 240/415 | 3PNG | | | | | | | |
| СВ | 560C6S | Connector | 240/415 | 3PNG | | | | | | | |
| CI | 560C7S | Connector | 480 | 3PNG | | | | | | | |
| EH | 560C9W | Connector | 120/208 | 3PNG | | | | | | | |
| BV | 320C6S | Connector | 240 | 2PG | | | | | | | |
| BU | 330C6S | Connector | 240 | 2PG | | | | | | | |
| BT | 360C6S | Connector | 240 | 2PG | | | | | | | |
| BO | 560C9S | Connector | 120/208 | 3PNG | | | | | | | |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

| NEMA Receptacles | | | | | | | | | | |
|------------------|--------------------|------------|---------|----------------------|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | |
| DD | 14-20R | Receptacle | 120/208 | 2PNG | | | | | | |
| DC | 14-30R | Receptacle | 120/208 | 2PNG | | | | | | |
| CW | 14-50R | Receptacle | 120/208 | 2PNG | | | | | | |
| CV | 14-60R | Receptacle | 120/208 | 2PNG | | | | | | |
| CU | 15-20R | Receptacle | 240 | 3PG | | | | | | |
| СҮ | 15-30R | Receptacle | 240 | 3PG | | | | | | |
| DI | 15-50R | Receptacle | 240 | 3PG | | | | | | |
| DH | 15-60R | Receptacle | 240 | 3PG | | | | | | |
| AW | 5-15D | Receptacle | 120 | 1PNG | | | | | | |
| FB | 5-15Q | Receptacle | 120 | 1PNG | | | | | | |
| DN | 5-15R | Receptacle | 120 | 1PNG | | | | | | |
| AB | 5-20D | Receptacle | 120 | 1PNG | | | | | | |
| DL | 5-20D-GFI | Receptacle | 120 | 1PNG | | | | | | |
| FC | 5-20Q | Receptacle | 120 | 1PNG | | | | | | |
| DM | 5-20R | Receptacle | 120 | 1PNG | | | | | | |
| DV | 5-30R | Receptacle | 120 | 1PNG | | | | | | |
| GB | 6-15D | Receptacle | 240 | 2PG | | | | | | |
| FD | 6-15Q | Receptacle | 240 | 2PG | | | | | | |
| DU | 6-15R | Receptacle | 240 | 2PG | | | | | | |
| GC | 6-20D | Receptacle | 240 | 2PG | | | | | | |
| FE | 6-20Q | Receptacle | 240 | 2PG | | | | | | |
| DO | 6-20R | Receptacle | 240 | 2PG | | | | | | |
| DR | 6-30R | Receptacle | 240 | 2PG | | | | | | |
| DA | 6-50R | Receptacle | 240 | 2PG | | | | | | |
| CZ | L14-20R | Receptacle | 120/208 | 2PNG | | | | | | |
| DB | L14-30R | Receptacle | 120/208 | 2PNG | | | | | | |
| СХ | L15-20R | Receptacle | 240 | 3PG | | | | | | |
| AH | L15-30R | Receptacle | 240 | 3PG | | | | | | |
| EO | L16-20R | Receptacle | 480 | 3PG | | | | | | |



US DEVICE CODE TABLE

| | NEMA Receptacles (Continued) | | | | | | | | | | |
|-------------|------------------------------|------------|---------|----------------------|--|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | | |
| EQ | L16-30R | Receptacle | 480 | 3PG | | | | | | | |
| AT | L21-20R | Receptacle | 120/208 | 3PNG | | | | | | | |
| AC | L21-30R | Receptacle | 120/208 | 3PNG | | | | | | | |
| AA | L22-20R | Receptacle | 277/480 | 3PNG | | | | | | | |
| AF | L22-30R | Receptacle | 277/480 | 3PNG | | | | | | | |
| AS | L5-15D | Receptacle | 120 | 1PNG | | | | | | | |
| AP | L5-15R | Receptacle | 120 | 1PNG | | | | | | | |
| AG | L5-20R | Receptacle | 120 | 1PNG | | | | | | | |
| AO | L5-30R | Receptacle | 120 | 1PNG | | | | | | | |
| DP | L6-15D | Receptacle | 240 | 2PG | | | | | | | |
| DQ | L6-15R | Receptacle | 240 | 2PG | | | | | | | |
| AI | L6-20R | Receptacle | 240 | 2PG | | | | | | | |
| AD | L6-30R | Receptacle | 240 | 2PG | | | | | | | |
| ES | L7-15D | Receptacle | 277 | 1PNG | | | | | | | |
| ER | L7-15R | Receptacle | 277 | 1PNG | | | | | | | |
| AQ | L7-20R | Receptacle | 277 | 1PNG | | | | | | | |
| EP | L7-30R | Receptacle | 277 | 1PNG | | | | | | | |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

| Pin & Sleeve Receptacles | | | | | | | | | | |
|--------------------------|--------------------|------------|---------|----------------------|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | |
| FJ | 316A6S | Receptacle | 240/415 | 2PG | | | | | | |
| FK | 316A6W | Receptacle | 240/415 | 2PG | | | | | | |
| FL | 316R6S | Receptacle | 240/415 | 2PG | | | | | | |
| FM | 320A6S | Receptacle | 240/415 | 2PG | | | | | | |
| FN | 320A6W | Receptacle | 240/415 | 2PG | | | | | | |
| FO | 332A6S | Receptacle | 240/415 | 2PG | | | | | | |
| FP | 332A6W | Receptacle | 240/415 | 2PG | | | | | | |
| FQ | 332A9S | Receptacle | 240/415 | 2PG | | | | | | |
| FR | 332R6S | Receptacle | 240/415 | 2PG | | | | | | |
| DG | 360R6W | Receptacle | 240 | 2PG | | | | | | |
| FS | 363R6S | Receptacle | 240/415 | 2PG | | | | | | |
| DF | 430R9W | Receptacle | 240 | 3PG | | | | | | |
| AU | 460R9S | Receptacle | 240 | 3PG | | | | | | |
| AN | 460R9W | Receptacle | 240 | 3PG | | | | | | |
| FT | 5125R6S | Receptacle | 240/415 | 3PNG | | | | | | |
| FU | 516A6S | Receptacle | 240/415 | 3PNG | | | | | | |
| FV | 516A6W | Receptacle | 240/415 | 3PNG | | | | | | |
| FW | 516R6S | Receptacle | 240/415 | 3PNG | | | | | | |
| FX | 520A6W | Receptacle | 240/415 | 3PNG | | | | | | |
| FY | 520R6S | Receptacle | 240/415 | 3PNG | | | | | | |
| AR | 530R6S | Receptacle | 240/415 | 3PNG | | | | | | |
| FZ | 532A6S | Receptacle | 240/415 | 3PNG | | | | | | |
| GA | 532A6W | Receptacle | 240/415 | 3PNG | | | | | | |



US DEVICE CODE TABLE

| Pin & Sleeve Receptacles (Continued) | | | | | | | | | |
|--------------------------------------|--------------------|------------|---------|----------------------|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | |
| BY | 560R6S | Receptacle | 240/415 | 3PNG | | | | | |
| DS | 360C4W | Receptacle | 120 | 1PNG | | | | | |

| | Isolated (| Ground Recepta | icles | |
|-------------|--------------------|----------------|---------|----------------------|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration |
| EN | IG14-30R | Receptacle | 120/208 | 2PNG |
| AX | IG5-20D | Receptacle | 120 | 1PNG |
| EA | IG5-20R | Receptacle | 120 | 1PNG |
| DY | IG6-20D | Receptacle | 240 | 2PG |
| DZ | IG6-20R | Receptacle | 240 | 2PG |
| EK | IGL14-20R | Receptacle | 120/208 | 2PNG |
| ET | IGL15-20R | Receptacle | 240 | 3PG |
| EM | IGL15-30R | Receptacle | 240 | 3PG |
| EL | IGL21-20R | Receptacle | 120/208 | 3PNG |
| EG | IGL21-30R | Receptacle | 120/208 | 3PNG |
| EU | IGL22-20R | Receptacle | 277/480 | 3PNG |
| EV | IGL22-30R | Receptacle | 277/480 | 3PNG |
| EB | IGL5-15R | Receptacle | 120 | 1PNG |
| AY | IGL5-20R | Receptacle | 120 | 1PNG |
| ED | IGL5-30R | Receptacle | 120 | 1PNG |
| DW | IGL6-15D | Receptacle | 240/415 | 2PG |
| DX | IGL6-15R | Receptacle | 240/415 | 2PG |
| AM | IGL6-20R | Receptacle | 240/415 | 2PG |
| AZ | IGL6-30R | Receptacle | 240/415 | 2PG |

| | California Connectors | | | | | | | | | | | |
|-------------|--|-----------|-----|------|--|--|--|--|--|--|--|--|
| Device Code | Device Designation Type Voltage Wiring Configu | | | | | | | | | | | |
| CP | CS6360C | Connector | 120 | 1PNG | | | | | | | | |
| CG | CS8164C | Connector | 480 | 3PG | | | | | | | | |
| CR | CS8264C | Connector | 240 | 2PG | | | | | | | | |
| CQ | CS8364C | Connector | 240 | 3PG | | | | | | | | |

| | California Receptacles | | | | | | | | | | | |
|-------------|------------------------|------------|---------|----------------------|--|--|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | | | |
| DK | CS6369 | Receptacle | 120/208 | 2PNG | | | | | | | | |
| DE | CS8269 | Receptacle | 240 | 2PG | | | | | | | | |
| AK | CS8369 | Receptacle | 240 | 3PG | | | | | | | | |

| | Other | | | | | | | | | |
|-------------|---------------------------|-------------------|---------|----------------------|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | |
| XX | Custom Device (ex: colore | ed receptacle, et | c.) | | | | | | | |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground



S3 PLUG-IN UNITS

PRODUCT DESCRIPTION

S3 Plug-in Units are designed to provide the same "plug and play" flexbility as T3 Plug-in Units, but with added ingress protection. These Plug-In units have been tested and certified to meet the additional IP54 ingress protection levels of the overall system.

OPTIONS:

- 1. Receptacle Box/Drop Cord Units
- 2. Circuit Breaker Uniits Only
- 3. Meter Plugs

GENERAL SPECS:

- Three (3) Standard size enclosures
 - ES1 Up to 3 poles available
 - ES2 Up to 6 poles available
 - ES3 Up to 9 poles available
- Clear cover protects breakers and meter while maintaining status visibility
- UV, Corrosion, and impact-resistant materials
- NEMA & IEC water tight devices available
- Bottom or Front-Mounted receptacles available
- Breaker actuators for floor operability
- Lock-out lids and breaker
- Up to 125A and 600V per box
- Compatible with Starline Critical
 Power Monitors
- Wide range of configuration options

Note: All Series-S Plug-in Units come standard with Tap-off seal assembly. To order separately, please see page 3.43







S3 ENCLOSURE STYLE OPTIONS

ES1 ENCLOSURE

Dimensions(in):

H: 10.5" W: 8" D: 6.36"

Configuration Options:

- Up to 3 Poles
- Up to 3 drop cords
- Meter available
- 1 Bottom-Mounted receptacle

ES2 ENCLOSURE

Dimensions(in):

H: 10.5" W: 11" D: 6.36"

Configuration Options:

- Up to 6 Poles
- Up to 6 drop cords
- Meter available
- 1 Front-Mounted or Bottom-Mounted receptacle

ES3 ENCLOSURE

Dimensions(in):

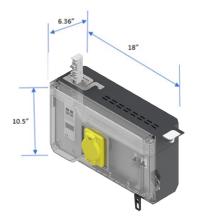
H: 10.5" W: 18" D: 6.36"

Configuration Options:

- Up to 9 Poles
- Up to 8 drop cords
- Meter available
- Up to 2 Front-Mounted receptacles



10.5"





SYSTEM & BUILD GUIDE

The below is a suggested list of questions to determine answers to in order to properly build or assemble both Track Busway systems and plugs.

WHEN BUILDING SYSTEMS

- 1. What is the amperage needed for the system? (100, 225, etc..)
- 2. Does the system need an internal ground?
- 3. Are there any limitations on the length of a run? (5ft max, 10ft max)

WHEN DETERMINING DESIRED PLUG CONFIGURATIONS

1. What type of system is this being used on? (S3)

2. Does the system have an internal ground? If so, does the plug need to be wired Isolated or Dedicated ground/earth?

3. What is the fault current needed for the breaker? (10kAIC, 22kAIC, etc...)

- 4. Does the plug need to have drop cords or receptacles?
- 5. What is the device configuration of the connector bodies or receptacles?
- 6. What is your desired MCB configuration? (phase, amperage, poles?)
- 7. Do you require metering?
- 8. How many outlets are needed?
- 9. What is the trip curve needed?
- 10. What MCB brand is preferred?
- 11. What is the voltage required?

CIRCUIT BREAKER/FUSED DISCONNECT UNITS W/ DEVICES: PRODUCT NUMBERS

| | U | С | S3 | С | S 3 | S | - | 14 | - | 1 | |
|---|------------------------------|---------------------------|-----------------------------|--------------------|--------------------------|--|--------|---------------------------|---------|-------------------------------------|---------------------------|
| | 1. System | 2. Product Type | 3. Compatibility | 4. Ground | 5. Box | 6. Orientation | I | 7. Interrupt Rating | | 8. Device Quantity | |
| | RU | F | 010 | Ν | – M51 | D |]- | STD | | 0 | *Optional |
| | 9. Device | *10. Mount Location | *11. Drop Cord Length | 12. Accessories | *13. Meter Release | *14. Meter Options | | 15. Paint Color | | op Cord oe Markin | g |
| | ndard of meas | sure) | | | 12. Acce | essories (op | tiona | l accessorie | s for p | olugs) | |
| J US | | | | | N N/ | A | | | | | |
| . Product Ty | /pe (section co | omponent) | | | *13. Met | er Release | (M50 |) AC) | | | |
| Circuit E | Breaker Unit | F | Fused Disco | nnect Unit | | ngle Eth./W | | | | | |
| 3. Compatibi | lity (frame cor | mpatibility) | | | | gle Eth./No al Eth., ≤48 | | | , 527 | 7ν Δ | |
| S3 S3 Syste | em | | | | | al Eth/Dual | | | | | |
| I. Ground (gr | ound type inst | alled) | | | | al Eth, Breal | | | | | Breaker Monitorin 7V Δ |
| | ousing) Grou (Separate) G | | Dedicated G | iround | *13. Met | ter Release | (M60 |) DC) | | | |
| 5. Box (what s | , , | | | | | ngle Eth./W | | | | | |
| | í l | Enclosure St | yle Options, p | ade 376) | | ngle Eth./No al Eth., sing | | | nase, | VDC | |
| | | | | | M69 Du | ial Eth/Dua | l Moo | dbus, singl | e pha | ase, VDC |) |
| 6. Orientatio S Standar | | | Reversed | | *14. Me | ter Options | (M50 |) AC) | | | |
| | - | R | | | | indard | | | | | ed) Neutral |
| 1 A A A A A A A A A A A A A A A A A A A | | | e breakers in K) | | D Dis | play | | | Ρ | Professio | onal (D+N) |
| 10, 14, 22, 25 | 5, 30, 35, 50 | , 65, CC (C | C = 200,000 |) (for U.S.) | *14. Met | ter Options | (M60 | DC) | | | |
| 8. Device Qu | antity (quanti | ity of device 1) | | | | indard (High | | | | | (48 VDC) |
| 1, 2, 3, 4, 5, 6 Device Code | | | vice type, refe | er to S3 | M60 Mete | splay (High \ ers support: H 380 VDC (+/ | igh Vo | oltage: 120 to | 300 1 | /DC/Split | 48 VDC) Phase 120 VDC |
| 9. Device (qu | antity of device | e 1) | | | | • | 100) | CTI LOW VOIL | aye. 4 | | |
| AA, AB,Z | Z (refer to S3 | Device Cod | e Table, page | 3.79) | 15. Pain | | | | | | |
| *10. Mount L | ocation (with | respect to bu | sway polarizing | stripe) | | tandard Da | | - | tin- | | |
| F Front | | В | Bottom | | | Consult Fact | | | แบกร | | |
| *11. Drop Cor | d Length (loo | cation of optio | nal meter) | | | • Cord Tape • Factory Bl | | rking 7 | Tan | e Factory | (Blue |
| XXY: XX = fee (only can be cho ***For any devic | osen in 6″ increi | ments) | , , | | 4 Tape | e Factory Bi e Factory W e Factory Re | hite | 8 9 | Tape | e Factory e Factory e Factory | / Green |

EXAMPLE

UCS3CS3S-22-2QSFN-STD0 = US System, Circuit Breaker Only Unit, S3 System, Case Ground, ES3 Box, Standard Orientation, 22 kA Interrupt Rating, 2 Devices, NEMA L5-15R-IP receptacles, front mount location, no accessories, no meter, standard dark gray color.



US DEVICE CODE TABLE

| | | | NEMA | Connectors | ; | | |
|------|------|-------------|-------------|------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| RU | NEMA | 5-15C-IP | CONNECTOR | 120 | 15 | 1PNG | IP67 |
| PV | NEMA | L5-15C-IP | CONNECTOR | 120 | 15 | 1PNG | IP67 |
| RV | NEMA | 6-15C-IP | CONNECTOR | 240 | 15 | 2PG | IP67 |
| PW | NEMA | L6-15C-IP | CONNECTOR | 240 | 15 | 2PG | IP67 |
| РХ | NEMA | L7-15C-IP | CONNECTOR | 277 | 15 | 1PNG | IP67 |
| RW | NEMA | 5-20C-IP | CONNECTOR | 120 | 20 | 1PNG | IP67 |
| PY | NEMA | L5-20C-IP | CONNECTOR | 120 | 20 | 1PNG | IP67 |
| RX | NEMA | 6-20C-IP | CONNECTOR | 240 | 20 | 2PG | IP67 |
| ΡZ | NEMA | L6-20C-IP | CONNECTOR | 240 | 20 | 2PG | IP67 |
| QC | NEMA | L15-20C-IP | CONNECTOR | 240 | 20 | 3PG | IP67 |
| QA | NEMA | L7-20C-IP | CONNECTOR | 277 | 20 | 1PNG | IP67 |
| QD | NEMA | L16-20C-IP | CONNECTOR | 480 | 20 | 3PG | IP67 |
| QG | NEMA | L23-20C-IP | CONNECTOR | 600 | 20 | 3PNG | IP67 |
| QB | NEMA | L14-20C-IP | CONNECTOR | 120/208 | 20 | 2PNG | IP67 |
| QE | NEMA | L21-20C-IP | CONNECTOR | 120/208 | 20 | 3PNG | IP67 |
| QF | NEMA | L22-20C-IP | CONNECTOR | 277/480 | 20 | 3PNG | IP67 |
| QH | NEMA | L5-30C-IP | CONNECTOR | 120 | 30 | 1PNG | IP67 |
| QI | NEMA | L6-30C-IP | CONNECTOR | 240 | 30 | 2PG | IP67 |
| QL | NEMA | L15-30C-IP | CONNECTOR | 240 | 30 | 3PG | IP67 |
| QJ | NEMA | L7-30C-IP | CONNECTOR | 277 | 30 | 1PNG | IP67 |
| QM | NEMA | L16-30C-IP | CONNECTOR | 480 | 30 | 3PG | IP67 |
| QN | NEMA | L17-30C-IP | CONNECTOR | 600 | 30 | 3PG | IP67 |
| QR | NEMA | L23-30C-IP | CONNECTOR | 600 | 30 | 3PNG | IP67 |
| QK | NEMA | L14-30C-IP | CONNECTOR | 120/208 | 30 | 2PNG | IP67 |
| QO | NEMA | L18-30C-IP | CONNECTOR | 120/208 | 30 | 3PG | IP67 |
| QP | NEMA | L21-30C-IP | CONNECTOR | 120/208 | 30 | 3PNG | IP67 |
| QQ | NEMA | L22-30C-IP | CONNECTOR | 277/480 | 30 | 3PNG | IP67 |

WIRING CONFIGURATION REFERENCE TABLE

- P = Poles
- N = Neutral
- G = Ground

^{1 =} Number of poles



US DEVICE CODE TABLE

| | | | Pin & Slee | ve Connec | tors | | |
|------|------|-------------|-------------|-----------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| SU | IEC | 320C7W | CONNECTOR | 480 | 20 | 2PG | IP67 |
| SY | IEC | 420C7W | CONNECTOR | 480 | 20 | 3PG | IP67 |
| ТА | IEC | 320C9W | CONNECTOR | 120/208 | 20 | 2PG | IP67 |
| SZ | IEC | 520C7W | CONNECTOR | 277/480 | 20 | 3PNG | IP67 |
| sv | IEC | 330C7W | CONNECTOR | 480 | 30 | 2PG | IP67 |
| тв | IEC | 330C9W | CONNECTOR | 120/208 | 30 | 2PG | IP67 |
| SW | IEC | 360C7W | CONNECTOR | 240 | 60 | 2PG | IP67 |
| тс | IEC | 360C9W | CONNECTOR | 120/208 | 60 | 2PG | IP67 |
| SX | IEC | 3100C7W | CONNECTOR | 480 | 100 | 2PG | IP67 |
| TD | IEC | 3100C9W | CONNECTOR | 120/208 | 100 | 2PG | IP67 |
| BI | IEC | 530C9W | CONNECTOR | 120/208 | 30 | 3PNG | IP67 |
| BP | IEC | 430C9W | CONNECTOR | 250 | 30 | 3PG | IP67 |
| BW | IEC | 430C7W | CONNECTOR | 480 | 30 | 3PG | IP67 |
| BX | IEC | 460C7W | CONNECTOR | 480 | 60 | 3PG | IP67 |
| EH | IEC | 560C9W | CONNECTOR | 120/208 | 60 | 3PNG | IP67 |
| EI | IEC | 460C9W | CONNECTOR | 250 | 60 | 3PG | IP67 |
| GI | IEC | 4100C9W | CONNECTOR | 250 | 100 | 3PG | IP67 |
| GJ | IEC | 560C7W | CONNECTOR | 277/480 | 60 | 3PNG | IP67 |
| GK | IEC | 530C7W | CONNECTOR | 277/480 | 30 | 3PNG | IP67 |
| GR | IEC | 5100C7W | CONNECTOR | 277/480 | 100 | 3PNG | IP67 |
| GS | IEC | 5100C9W | CONNECTOR | 120/208 | 100 | 3PNG | IP67 |
| МК | IEC | 4100C7W | CONNECTOR | 480 | 100 | 3PG | IP67 |
| NL | IEC | 420C9W | CONNECTOR | 250 | 20 | 3PG | IP67 |

WIRING CONFIGURATION **REFERENCE TABLE** 1 = Number of poles

- P = Poles
- N = Neutral
- G = Ground



US DEVICE CODE TABLE

| | | | NEMA F | Receptacles | 6 | | |
|------|------|-------------|-------------|-------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| RQ | Nema | 5-15R-IP | RECEPTACLE | 120 | 15 | 1PNG | IP67 |
| QS | NEMA | L5-15R-IP | RECEPTACLE | 120 | 15 | 1PNG | IP67 |
| RR | NEMA | 6-15R-IP | RECEPTACLE | 240 | 15 | 2PG | IP67 |
| QT | NEMA | L6-15R-IP | RECEPTACLE | 240 | 15 | 2PG | IP67 |
| QU | NEMA | L7-15R-IP | RECEPTACLE | 277 | 15 | 1PNG | IP67 |
| RS | NEMA | 5-20R-IP | RECEPTACLE | 120 | 20 | 1PNG | IP67 |
| QV | NEMA | L5-20R-IP | RECEPTACLE | 120 | 20 | 1PNG | IP67 |
| RT | NEMA | 6-20R-IP | RECEPTACLE | 240 | 20 | 2PG | IP67 |
| QW | NEMA | L6-20R-IP | RECEPTACLE | 240 | 20 | 2PG | IP67 |
| QZ | NEMA | L15-20R-IP | RECEPTACLE | 240 | 20 | 3PG | IP67 |
| QX | NEMA | L7-20R-IP | RECEPTACLE | 277 | 20 | 1PNG | IP67 |
| RA | NEMA | L16-20R-IP | RECEPTACLE | 480 | 20 | 3PG | IP67 |
| RD | NEMA | L23-20R-IP | RECEPTACLE | 600 | 20 | 3PNG | IP67 |
| QY | NEMA | L14-20R-IP | RECEPTACLE | 120/208 | 20 | 2PNG | IP67 |
| RB | NEMA | L21-20R-IP | RECEPTACLE | 120/208 | 20 | 3PNG | IP67 |
| RC | NEMA | L22-20R-IP | RECEPTACLE | 277/480 | 20 | 3PNG | IP67 |
| RE | NEMA | L5-30R-IP | RECEPTACLE | 120 | 30 | 1PNG | IP67 |
| RF | NEMA | L6-30R-IP | RECEPTACLE | 240 | 30 | 2PG | IP67 |
| RI | NEMA | L15-30R-IP | RECEPTACLE | 240 | 30 | 3PG | IP67 |
| RG | NEMA | L7-30R-IP | RECEPTACLE | 277 | 30 | 1PNG | IP67 |
| RJ | NEMA | L16-30R-IP | RECEPTACLE | 480 | 30 | 3PG | IP67 |
| RK | NEMA | L17-30R-IP | RECEPTACLE | 600 | 30 | 3PG | IP67 |
| RN | NEMA | L23-30R-IP | RECEPTACLE | 600 | 30 | 3PNG | IP67 |
| RH | NEMA | L14-30R-IP | RECEPTACLE | 120/208 | 30 | 2PNG | IP67 |
| RL | NEMA | L21-30R-IP | RECEPTACLE | 120/208 | 30 | 3PNG | IP67 |
| RM | NEMA | L22-30R-IP | RECEPTACLE | 277/480 | 30 | 3PNG | IP67 |

WIRING CONFIGURATION REFERENCE TABLE

P = Poles

N = Neutral

G = Ground

^{1 =} Number of poles



US DEVICE CODE TABLE

| | | | Pin & Slee | ve Recepta | les | | |
|------|------|-------------|-------------|------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| SN | IEC | 420R9W | RECEPTACLE | 240 | 20 | 3PG | IP67 |
| RY | IEC | 320R7W | RECEPTACLE | 480 | 20 | 2PG | IP67 |
| SC | IEC | 420R7W | RECEPTACLE | 480 | 20 | 3PG | IP67 |
| SQ | IEC | 520R9W | RECEPTACLE | 120/208 | 20 | 3PNG | IP67 |
| SG | IEC | 520R7W | RECEPTACLE | 277/480 | 20 | 3PNG | IP67 |
| RZ | IEC | 330R7W | RECEPTACLE | 480 | 30 | 2PG | IP67 |
| SD | IEC | 430R7W | RECEPTACLE | 480 | 30 | 3PG | IP67 |
| SR | IEC | 530R9W | RECEPTACLE | 120/208 | 30 | 3PNG | IP67 |
| SA | IEC | 360R7W | RECEPTACLE | 480 | 60 | 2PG | IP67 |
| SH | IEC | 560R7W | RECEPTACLE | 277/480 | 60 | 3PNG | IP67 |
| SE | IEC | 460R7W | RECEPTACLE | 480 | 60 | 3PG | IP67 |
| SO | IEC | 460R9W | RECEPTACLE | 120/208 | 60 | 3PG | IP67 |
| SS | IEC | 560R9W | RECEPTACLE | 120/208 | 60 | 3PNG | IP67 |
| SB | IEC | 3100R7W | RECEPTACLE | 480 | 100 | 2PG | IP67 |
| SF | IEC | 4100R7W | RECEPTACLE | 480 | 100 | 3PG | IP67 |
| SP | IEC | 4100R9W | RECEPTACLE | 120/208 | 100 | 3PG | IP67 |
| ST | IEC | 5100R9W | RECEPTACLE | 120/208 | 100 | 3PNG | IP67 |
| SI | IEC | 5100R7W | RECEPTACLE | 277/480 | 100 | 3PNG | IP67 |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

CIRCUIT BREAKER/FUSED DISCONNECT UNITS, NO DEVICES: PRODUCT NUMBERS

| | | U | С | S | 3 | C | S2 | S | S – | 14 | 4 | | |
|---|----------------|--------------|----------------------|-----------------------------|----------------------------|--------------------|-------------|--------------|-------------------------|-------------------------|--------------------|----------------------------------|---------|
| | | 1. System | 2. Produc Type | 3. t Compa | 4. tibility Gro | 5. und Box | | 6. Orient | tation | 7. Interru Rating | | | |
| 2 | 030 | 3 | 240 | 050 | 3 | Ν | - 1 | /159 | D | - | STD | 0 | *Option |
| 8. Circuit Protection Quantity | 9. Amperage | 10. Poles | 11. Voltage | *12. Drop Cord Length | *13. Number of Wires | 14. Accessories | 15. 8 Me | ter | 16. Meter Options | | 17. Paint Color | 18. Drop Cord Tape Marking | g |

| 1. System (standard of measure) | *13. Number of Wires (M50 AC) | | | | | | |
|---|---|--|--|--|--|--|--|
| U US | 2, 3, 4, 5 | | | | | | |
| 2. Product Type (section component) | 14. Accessories (optional accessories for plugs) | | | | | | |
| C Circuit Breaker Unit F Fused Disconnect Unit | N N/A | | | | | | |
| 3. Compatibility (frame compatibility) | 15. Meter | | | | | | |
| S3 System | M51 Single Eth./WiFi, \leq 480V Y, \leq 277V Δ | | | | | | |
| 4. Ground (ground type installed) | M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ M58 Dual Eth, ≤480V Y, ≤277V Δ | | | | | | |
| C Case (Housing) GroundD Dedicated GroundG Isolated (Separate) Ground | M59 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ M56 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ , Breaker Monitoring | | | | | | |
| 5. Box (what size enclosure) | 16. Meter Options (M50 AC) | | | | | | |
| S1, S2, S3 (refer to S3 Enclosure Style Options, page 3.76) | S Standard N (Measured) Neutral | | | | | | |
| 6. Orientation (what direction the paddle faces) | D Display P Professional (D+N) *16. Meter Options (M60 DC) | | | | | | |
| S Standard R Reversed | S Standard (High Voltage) P Standard (48 VDC) | | | | | | |
| 7. Interrupt Rating (interrupt rating of the breakers in K) | D Display (High Voltage) Q Display (48 VDC) M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC (+/ | | | | | | |
| 10, 14, 22, 25, 30, 35, 50, 65, CC (CC = 200,000) (for US) | 60) to 380 VDC (+/-180) OR Low Voltage: 48 VDC | | | | | | |
| 8. Circuit Protection Quantity | 17. Paint Color | | | | | | |
| 1, 2, 3, 4, 5, 6 | STD Standard Dark Gray | | | | | | |
| 9. Amperage | Note: Consult Factory for other options | | | | | | |
| 015, 020, 030, 60, 100 | 18. Drop Cord Tape Marking | | | | | | |
| 10. Poles (number of poles in a circuit) | 3 Black 6 Red 8 Green | | | | | | |
| 1, 2, 3, 4, 5 | 4 White 7 Blue | | | | | | |
| 11. Voltage | 7 | | | | | | |
| 120, 240, 277, 300, 415, 480, 600 | | | | | | | |
| *12. Drop Cord Length (length of drop cord) | 7 | | | | | | |
| | | | | | | | |

010 1 foot **XXX**=feet, Y=inches (only can be chosen in 6" increments) For any device configuration chosen

over 70 amps, the max. drop cord length is 10 feet (100)

EXAMPLE

UCS3D57S-25-203032400503N-STD0 = US System, Circuit Breaker Only Unit, S3 system, Case Ground, ES2 Box, Standard Orientation, 14kA interrupt rating, 2 circuits, 30 amps, 3 poles, 240v, 5 ft drop cord, 3 wires, no accessories, no meter, standard dark gray color

METER PLUGS: PRODUCT NUMBERS

| | U | М | S3 | } | С | Sź | 2 | S | _ | 06 | 5 |
|---|---|-----------------------------------|-------------------------|------------------------|-------------------|-----------|-------|---|--------|---------------------------|--|
| | 1. System | 2. Product Type | 3. Compatik | 4. pility Gro | ound | 5. Box | | 6. Orientatio | n | 7. Current Transfor | mer |
| | | - | M59 | S | | 1 | - | STD | *Ор | tional | |
| | | I | 3. Vleter Release | 9. Meter Options | *10. Me Cor | | F | 1. Paint Color | | | |
| . System (standard of | measure) | | | | 9. | Meter C | ptio | ons (M50 AC | ;) | | |
| U US | | | | | S | Stan | | | | | (Measured) Neutral Professional (D+N) |
| 2. Product Type (sect | ion compone | nt) | | | | Displ | - | | | Ρ | Professional (D+N) |
| M Meter Plug | | | | | 9. S | | ÷ | o <mark>ns (M60 DC</mark> (High Volt | · | Р | Standard (48 VDC) |
| 3. Compatibility (fram | ne compatibil | ity) | | | D | Displ | ay (F | High Voltag | je) | Q | Display (48 VDC) |
| S3 System | | | | | | | | DC (+/-180) | | | 00 VDC/Split Phase 120 VDC e: 48 VDC |
| Ground (ground typ) Case (Housing) | | | | | *1 | 0. Meter | Cor | nfiguration | (M50 | AC) | |
| Box (what size enclosed) | | | | | 1 | | | , Delta Soli r, Wye Solic | | | |
| S1, S2, S3 (refer to S | , i i i i i i i i i i i i i i i i i i i | Style Optic | ons, page 3 | .76) | 4 | LL po | ower, | , Delta Soli | d Core | e, 5A-se | econdary CT |
| 6. Orientation (what a | lirection the p | addle faces) | | | 7 | LL pc | ower, | , Delta Spli | t Core | , mV Cl | |
| S Standard | | R Reve | rsed | | 9 K | LL pc | ower, | | t Core | , 5A-se | condary CT |
| 7. Current Transform | er (current ra | ating) | | | м | LN po | ower | r, Wye Split | Core | , 5A-sec | condary CT |
| 065 65 amps 250 250 amps | | 225 225 a 400 400 a | | | *1 | 0. Meter | Cor | nfiguration | (M60 | DC) | |
| BOO 800 amps | | 1KO 1000 | | | 1 | | | Only, Solid (Only, Solid | | | |
| IK2 1200 amps **M60 (DC) meters are or | nly available w | ith 800 amp c | urrent transo | lucers | 3 | | | uits, Solid (| | | |
| 3. Meter Release (M5 | 50 AC) | | | | 11. | Paint C | olor | | | | |
| W51 Single Eth./WiF | | | | | | | | rd Dark Gra | , | | |
| 153 Single Eth./No \ 158 Dual Eth., ≤480` 159 Dual Eth/Dual N | V Y, ≤277V | Δ | | | N | ote: Con | sult | Factory for | other | option | S |
| 8. Meter Release (M6 | 60 DC) | | | | | | | | | | |
| M61 Single Eth./WiF M63 Single Eth./No N M67 Dual Eth., single M69 Dual Eth/Dual N | WiFi, single phase, VD0 | phase, VDC C | | | | | | | | | |

EXAMPLE

<u>UMS3CS2S-065-M59S1-STD</u> = US System, Meter Plug, S3 System, Case Ground, ES2 Box, Standard Orientation, 65 Current Rating, M59 Meter, Standard, LL Power, Delta Solid Core, mV CT, Standard Dark Gray



SPECS & INTRODUCTION

INTRODUCTION

Starline is the leader in electrical power distribution in the mission critical, commercial and light industrial applications with Starline Track Busway. This system was designed to meet the rugged specification of the UL857, Busway and Associated Fittings, with the flexible features of track lighting - and is available in systems with 250, 400, 500, 600, 800, 1000 & 1200 amps with case, dedicated or isolated ground.

Track Busway is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

The Product Selection Guide was developed to help the design engineer understand and consider all of the options available with Starline Track Busway when designing a system.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at **1-800-245-6378** or email us at **info@starlinepower.com**. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reserves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at <u>downloads.starlinepower.com/starline/busway/</u>.

SERIES-S SYSTEM

The Series-S System is certified to both IP54 and NEMA 3R ratings, which offers a higher level of protection against ingress of dust, water or other foreign objects. The unique sealed-system design provides the same level of protection across the entire power distribution system, from the power feeds to the busway and plug-in units.

Series-S plug-in units are specifically designed with durable, impact and chemical resistant materials commonly used in UL and outdoor applications. These plug-in units are paired with a wide variety of watertight rated IEC and NEMA devices.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at 1-800-245-6378. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reserves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at downloads.starlinepower.com/starline/busway/.



SPECS & INTRODUCTION

SPECS

This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway or busway). The system shall be designed primarily for overhead distribution of electrical power; supporting designated work areas and equipment. Once installed the busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

The Track Busway shall be designed and manufactured to the following standards:

1. Underwriters Laboratories Standard, UL 857 — The common UL, CSA, and ANCE Standard for Busways that is derived from the fifth edition of CSA Standard C22.2 No. 27, the twelfth edition of UL 857, and the second edition of NMX-J-148-1998-ANCE.

2. Low Voltage Switchgear and Controlgear Assemblies, Part 1: Type Tested and partially type tested Assemblies, IEC 61439-1 & IEC 61439-6.

SERIES-S SPECS

The S5 Busway Series is designed with additional levels of ingress protection, IEC IP54 and NEMA 3R ratings, against liquid and solid contaminants.

This system meets or exceeds the additional standards for ingress protection:

3. International Electrotechnical Commission (IEC) - 60529, Degrees of Protection Provided by Enclosures (IP Code)

4. National Electrical Manufacturers Association (NEMA) - 250, Enclosures for Electrical Equipment (1000 Volts Maximum)

5. Housing shall be protected against corrosion utilizing protective coating (per MIL-DTL-5541), while maintaining case grounding capability, with option for powder-coating.

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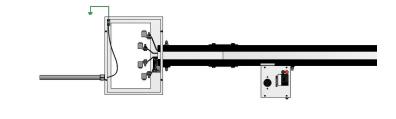
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GROUND OPTIONS

CASE GROUND/CHASSIS EARTH

Uses aluminum housing and no extra copper bar.

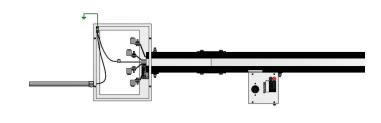




DEDICATED GROUND/EARTH

Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.

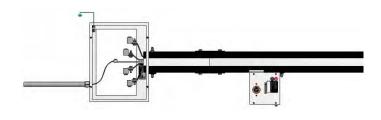




ISOLATED GROUND/EARTH

Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.





*For further details about Dedicated Ground vs. Isolated Ground, please reference our "Isolated Ground vs. Dedicated Ground" tech brief on **<u>downloads.starlinepower.com/starline/busway</u>**.

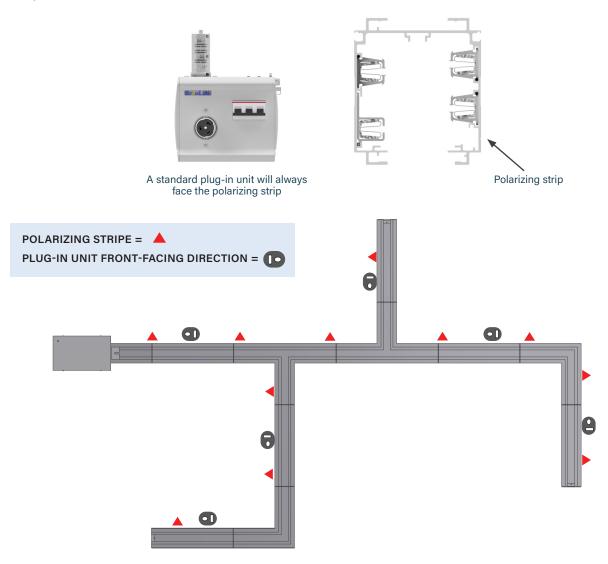


POLARITY TIPS

Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

It is particularly important to understand this design concept prior to ordering and/or installing some components.

For example, if the face direction of a Starline plug-in unit is important in your installation consider that they will always face the polarizing strip side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.





SYSTEM LAYOUT TIPS

POWER FEEDS

Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

SUPPORT HARDWARE

Support hardware is spaced no more than 10 feet apart. Refer to **page 4.104** for support hardware details. Contact your local Starline applications engineer for any questions.

INSTALLATION

Printed installation drawings are supplied with each system shipment and they are also available for download online at <u>downloads.starlinepower.com/starline/busway/</u>. CAD and BIM files of these drawings are also available by contacting your local Starline applications engineer.

BUSWAY HOUSING SECTIONS

Standard Busway lengths are available in 5 foot, 10 foot and 20 foot increments (except for 800 amp and above where the max length is 10 feet. Although the factory can cut individual Starline Track Busway sections to any length under 20 feet, it is highly recommended to keep all layout runs in increments of 5 feet to simplify layout and installation.

BUSWAY TEES AND ELBOWS SECTIONS

Try to keep all runs as straight as possible as tees and elbows are added cost. Pay close attention to polarity on the elbows. The polarity will need to match the adjacent busway section(s) to be compatible.

S5 INFORMATION:

Each piece of S5 housing components (straights and elbows) requires an S5 joint kit (containing two housing couplers, one bus connector, a joint seal, and two joint covers). Determine the total number of housing sections (regardless of length) as this becomes the number of joint kits that will be needed. Add one extra joint kit for each tee section. If this is your first installation for S5 systems, you will need to order an Installation Tool (ST5IT). Closure strip must also be ordered to match the total length of busway housing ordered.

PLEASE NOTE: All S5 Busway components are designed to work together to function as one complete IP54-rated system. When selecting system components, it is important that only S5 Busway components from this catalog are used together. Do not use any T5 components within this catalog. For technical questions related to these systems and/or specific applications, please contact our technical support team.



COMPONENT RELATIONSHIP TIPS

When ordering material, it is important to understand the relationship between various components.

EXAMPLES

- The T5 series of plug-in units are compatible with all T5 Busway systems.
- Each piece of housing (straights and elbows) requires a joint kit (containing two housing couplers and one bus connector). Determine the total number of housing sections (regardless of length) as this becomes the number of joint kits that will be needed.
 - Add one extra joint kit for each tee section.
- If this is your first installation for T5 systems, you will need to order an Installation Tool (ST5IT).
- General support hardware rule to follow:

10 foot maximum spacing between supports and we recommend 10% more than the required quantity to cover potential layout changes. Seismic mounts and supports will differ from the standard. Please consult the factory for details.

- Total Power Feeds and End Caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to **page 4.6** Polarity Tips for more detail.

S5 SYSTEM INFORMATION

All S5 components must be purchased and installed together to build a complete S5 System.

For the S5 system, please note the specific catalog numbering systems dedicated for these components. S5 system components will include the "S5" nomenclature in the "compatibility" field of the catalog number. Closure strip is required and must be ordered separately.

The S5 Joint Kit (SJK250S5) includes an additional joint seal and joint cover component required for the IP54 rating.

The standard installation tool (ST5IT) can be used for both the T5 and S5 system.



INGRESS PROTECTION

This table provides descriptions for the various Ingress Protection (IP) ratings as listed in IEC 60529. General T5 Busway is listed as IP2X. IP3X rated busway is available with additional accessories. Series - S Busway is available with an IP54 rating.

As the table indicates, for the IP54 rating the first number (5) pertains to the solid particle protection and the second (4) pertains to the level of protection from water. For purposes of real-world application of the Series-S busway system, please consider these general guidelines.

1. Splashproof and sprinkler proof; 2. Highly dust-resistant; 2. Not waterproof or watertight; 3. Not for outdoor use; 4. Not subject to direct exposure to natural elements, such as wind, rain, sun, ice, etc.



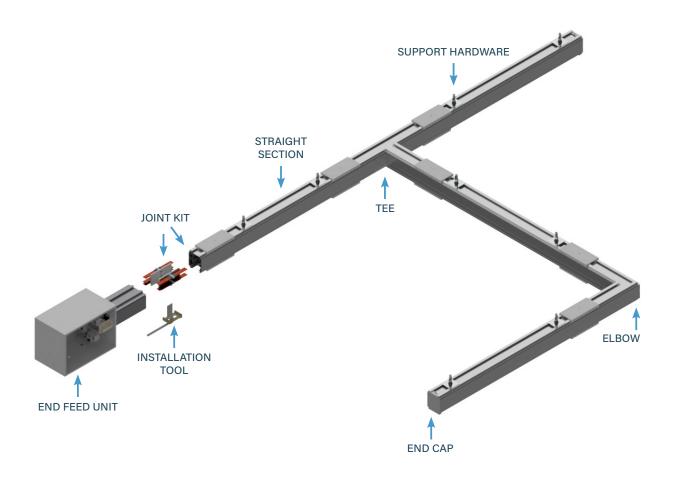
IP Rating Table

Ratings in accordance with the International Electrotechnical Commission (IEC) - 60529, Degrees of Protection Provided by Enclosures (IP Code)



250 AMP SYSTEMS

T5 SYSTEM LAYOUT DRAWING



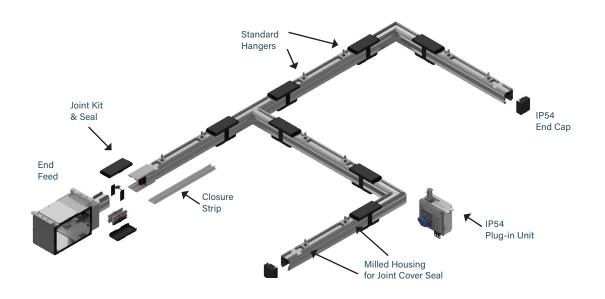
PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



250 AMP SYSTEMS

S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

For further information on applicable S5 plug-in unit options, please visit the **Plug-In Units** section.

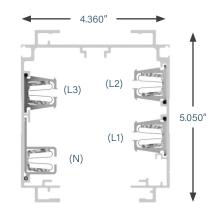


STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 4-pole varieties, optional isolated or dedicated ground, optional oversize (200%) neutral. The housing sections join together using Bus Connectors which fit into the channels of the adjoining section. An Installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.





MATERIAL

Extruded Aluminum Note: S5 housing includes corrosion resistant base coating.

RATINGS

100% Ground Path 250 Amps 250T5C4/250T5CG: 600 Volt 250T5CN/250T5CF: 600 Volt

LENGTH

T5: 10 ft, 20 ft; or custom lengths between 2 - 20 ft S5: 5 ft, 10 ft max. Consult factory for additional lengths

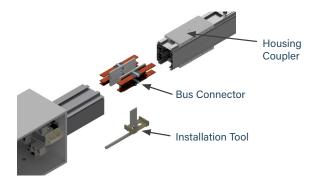
VOLTAGE DROP

Distributed load Single Phase 1V per 28ft (.8PF) Three Phase 1V per 48ft (.8PF)

WEIGHT

10 ft 4 pole: 41 lbs 10 ft 4 pole w/ ground: 46 lbs 10 ft 4 pole w/ 200% N: 47 lbs 10 ft 4 pole w/ ground & 200% N: 51 lbs

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |



STRAIGHT SECTIONS: **PRODUCT NUMBERS** U S 250 **T**5 4 S 0200 С С 2. 3. 4. 5. 6. 8. 9. 1. 7. Product Product Compatibility Material Polarization System Neutral/ Straight Busway Frame Ground Туре Busbar 0 STD 10. 11. Paint Color Tape Marking

| 1. System (standard of measure) | | 9. Busway Access (how plugs access the busway) | | | | | | |
|---|---|---|--------------------------------|---------------|---|--|--|--|
| U US | | C Continuous | | | | | | |
| 2. Product Type (section compone | ent) | 10. Paint Color (allows painting of the busway housing) | | | | | | |
| S Straight Section | | | | | | | | |
| 3. Product Frame (maximum amp | erage) | | Factory Black Factory White | BLU **RAL | Paint Factory Blue (please see page 4.103) | | | |
| 250 250 amps | | NOTE: All Series-S housings include a clear corrosion resist | | | | | | |
| 4. Compatibility (frame compatibil | lity) | base coating, | regardless of pa | aint color se | election. | | | |
| T5 T5 System | K5 T5 System (Limiting Strip) | 11. Tape Mark | ing (colored tape | e on both sid | es of busway housing) | | | |
| S5 S5 System | L5 S5 System (Limiting Strip) | 0 No Tape Marking 7 Tape Factory Blue | | | | | | |
| 5. Material (busbar material) | 3 Tape Factory Black 4 Tape Factory White 9 Tape Factory Yellow | | | | | | | |
| C Copper | | 6 Tape Factory Red | | | | | | |
| 6. Neutral/Ground Busbar (size | of neutral busbar and/or ground) | | | | | | | |
| 4 3 Phase plus Neutral | G 3 Phase plus Neutral plus Internal Ground Conductor | | | | | | | |
| N 3 Phase plus 200% Neutral | F 3 Phase plus 200% Neutral plus Internal Ground Conductor | | | | | | | |
| 7. Polarization (orientation of section | on for mating purposes) | | | | | | | |
| S Standard | | | | | | | | |
| 8. Straight Length (length of section | ion) | | | | | | | |
| | | | | | | | | |

XXYY XX=feet, YY=inches

EXAMPLES

<u>US250T5C4S-0500C-STD0</u> = US System, Straight Section, 250 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Continuous Busway Access, Factory Mill Finish, No Tape Marking

US250T5CNS-0206C-BLU0 = US System, Straight Section, 250 amps, T5 System, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Busway Access, Painted Factory Blue, No Tape Marking



ELBOW SECTIONS

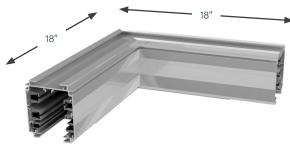
PRODUCT DESCRIPTION

An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify right or left elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

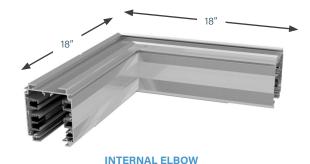
Connection Accessories (Ordered Separately)

A Joint Kit (**page 4.108**) is used to make mechanical and electrical connections to adjacent busway sections.

Weight 14.5 lbs



EXTERNAL ELBOW



External Elbow Internal Elbow

ELBOW SECTIONS: PRODUCT NUMBERS

| | U | Е | 250 | T5 | С | 4 | S | – IN | | |
|---|-------------------------|-----------------------|--|----------------------------------|--|---|-----------------------------------|---|------|--|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Turning Direction | | |
| | | | | - STD | 0 | | | | | |
| | | | | 9. Paint Color | 10. Tape Marking | | | | | |
| 1. System (sta U US | ndard of measu | ure) | | | IN Inter | nal | | EX External | | |
| 2. Product Ty | | omponent) | | | HN Seismic Internal GX Seismic External 9. Paint Color (allows painting of the busway housing) Image: Color (allows painting of the busway housing) Image: Color (allows painting of the busway housing) | | | | | |
| E Elbow S 3. Product Fr 250 250 amp | ame (maximur | m amperage) | | | STD Fa BLK Pa | ctory Mill Fi int Factory int Factory | nish RE Black BL | D Paint Factory D Paint Factory RAL (please see pag | Blue | |
| 4. Compatibil T5 T5 Syste S5 S5 Syste | em | K5 | | imiting Strip) imiting Strip) | base coat | ing, regardle | ess of paint c | de a clear corrosion olor selection. both sides of busway l | | |
| 5. Material (b) C Copper | | | | | 3 Tape4 Tape | Tape Markir e Factory Bl e Factory W | ack 8 hite 9 | Tape Factory Bl Tape Factory Gi Tape Factory Ye | reen | |
| 6. Neutral/G | round Busba | r (size of neutr | al busbar and, | /or ground) | 6 Tape | e Factory Re | ea | | | |
| 4 3 Phase | plus Neutral | | 3 Phase plus Internal Grou | Neutral plus nd Conductor | | | | | | |
| N 3 Phase | plus 200% N | | 3 Phase plus plus Internal Conductor | 200% Neutral Ground | | | | | | |
| 7. Polarizatio | n (orientation o | of section for m | ating purposes | s) | | | | | | |
| S Standard | d | | | | | | | | | |

EXAMPLES

UE250T5C4S-IN-BLU4 = US System, Elbow Section, 250 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Black, Factory White Tape

<u>UE250T5CGS-EX-STD0</u> = US System, Elbow Section, 250 amps, T5 System, Copper Conductor, 3 Phase plus Neutral plus Isolated/Dedicated Ground, Standard Polarization, External Turning Direction, Factory Mill Finish, No Tape Marking

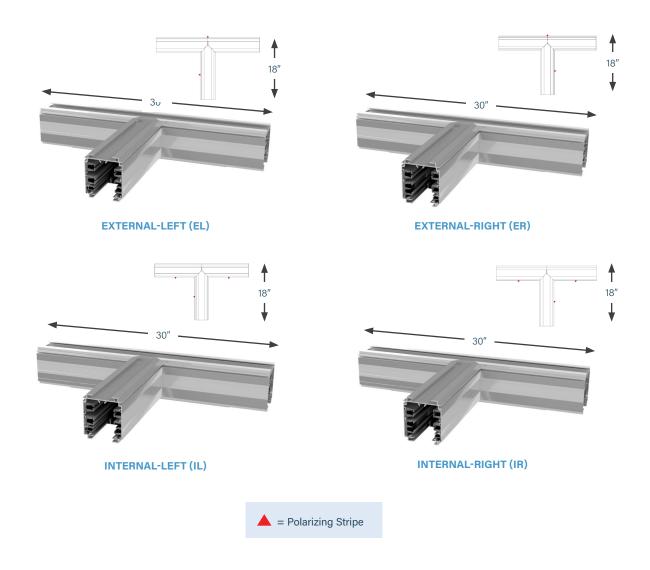


TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a housing section and tee section of busway.

Weight 19.5 lbs



TEE SECTIONS: PRODUCT NUMBERS

| | | | | | 0 | | 0 | | | |
|----------------|------------------------------|-----------------------|--|----------------------------------|------------------|------------------------------------|-----------------|--------------|----------------------------|--------------------------------|
| | U | I | 250 | T5 | С | 4 | S | - | IR | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizat | on | 8. Turning Direction | |
| | | | | - STD 9. | 10. |) | | | | |
| | | | | Paint Color | r Tape Markin | ıg | | | | |
| 1. Syster | n (standard of measur | re) | | | 8. Turn | ning Direction | (direction c | f sectio | n polarizing | stripe) |
| U US | | | | | | iternal-Left | | | External- | |
| 2. Produ | Ict Type (section com | nponent) | | | | iternal-Right eismic Internal | -Left | ER GL | | Right External-Left |
| T Tee | Section | | | | HR S | eismic Internal | -Right | GR | Seismic I | External-Right |
| 3. Produ | ict Frame (maximum | amperage) | | | 9. Pain | t Color (allows | painting of | the bus | way housing | g) |
| 250 250 |) amps | | | | STD | Factory Mill I | | RED | | Factory Red |
| 4. Comp | atibility (frame comp | oatibility) | | | BLK WHT | Paint Factory Paint Factory | | BLU **RAL | | Factory Blue see page 4.103 |
| | System System | | | imiting Strip) Imiting Strip) | | All Series-S h pating, regardl | | | | osion resistan |
| 5. Mater | ial (busbar material) | | | | 10. Tap | e Marking (co | olored tape o | n both : | sides of bus | way housing) |
| C Co | pper | | | | | lo Tape Markir | | | ape Facto | |
| 6. Neutr | al/Ground Busbar | (size of neut | ral busbar and | /or ground) | | ape Factory B ape Factory W | | 8 T 9 T | ape Facto ape Facto | ry Green rv Yellow |
| 4 3 P | hase plus Neutral | G | 3 Phase plus Internal Grou | Neutral plus nd Conductor | | ape Factory R | | - • | | |
| N 3 P | hase plus 200% Ne | utral F | 3 Phase plus plus Internal Conductor | 200% Neutral Ground | | | | | | |
| 7. Polari | zation (orientation of | section for n | nating purpose | s) | | | | | | |
| S Sta | ndard | | | | | | | | | |

EXAMPLES

<u>UT250T5C4S-IR-RED0</u> = US System, Tee Section, 250 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking

<u>UT250T5CFS-EL-STD7</u> = US System, Tee Section, 250 amps, T5 System, Copper Conductor, 3 Phase plus 200% Neutral plus Isolated/Dedicated Ground, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, Factory Blue Tape Marking



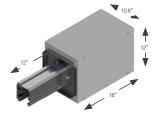
END FEED UNITS

PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 12 inch section of busway. Certain assemblies include connection lugs and a ground lug for wires up to 300MCM for standard size boxes and large size boxes.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately). Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight (for standard size end feed) 33 lbs *Standard busway stub size is 1 ft



STANDARD BOX

LARGE BOX





250S5 END FEED

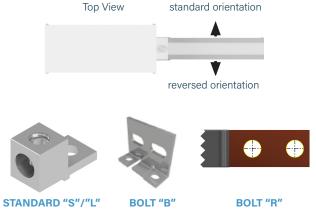
FUSED BOX

| | | BOXES | |
|----------|----------|-------|-------|
| LUGS | Standard | Large | Fused |
| Standard | S | L | F |
| Double | | | |
| Bolt | В | R | |

Box size and Lug options: Refer to option 8. Lug/Box Options on page 4.21 End Feed Units: Product Numbers

*Bolt options include bolt, washer, nut. Lug not included.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on downloads.starlinepower.com/starline/busway





END FEED UNITS: METERING

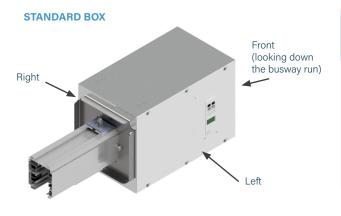
PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 12 inch section of busway. Certain assemblies include connection lugs, a ground lug, and shrink tubing for wires up to 300MCM for standard size boxes and large size boxes.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.

LARGE BOX





*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.21** End Feed Units: Product Numbers)

AC END FEED METER OPTIONS

| M51 | Single Eth./WiFi, ≤480V Y, ≤277V ∆ |
|-----|---|
| M53 | Single Eth./No WiFi, ≤480V Y, ≤277V ∆ |
| M58 | Dual Eth., ≤480V Y, ≤277V ∆ |
| M59 | Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ |

DC END FEED METER OPTIONS

- M61 Single Eth./WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M63 Single Eth./No WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- **M67** Dual Eth., single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M69 Dual Eth/Dual Modbus, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC

| BOX/LUGS OPTION | 1 Meter or Accessory | 1 Meter & 1 Accessory (opposite lids) | 1 Meter & 1 Accessory (same lid) |
|------------------------------------|-------------------------|--|---|
| (S) Standard Box, Standard Lugs | Х | Х | Х |
| (L) Large Box, Standard Lugs | Х | Х | Х |
| (R) Large Box, Bolt Lugs | Х | Х | Х |
| (B) Standard Box, Box Lugs | Х | Х | Х |

Series-S Note: End Feed metering not currently offered for Series-S systems. For custom inquiries, please contact your Starline representative."



END FEED UNITS: ACCESSORIES

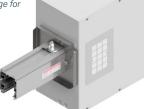
IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

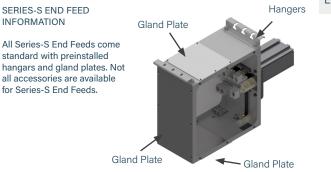
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

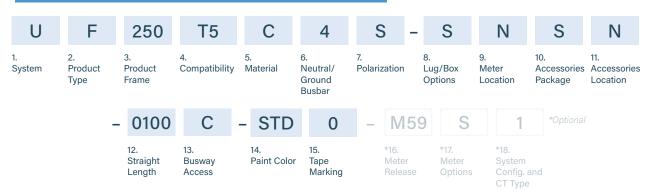
| GENERAL SPECIFICATIONS | |
|---------------------------|---|
| Viewing Material | IR transmissive polymer, UL 94B HB Rated |
| Structural Mesh Material | Stainless Steel 304 |
| Body Material | Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| Ingress Protection | IP3x (T5); IP54 (S5) |
| Max Operating Temperature | 125°C |
| WINDOW DIMENSIONS | |
| End Feeds: 400A and Below | 5" (127mm) x 7" (178mm) |
| End Feeds: 500A and Above | 8" (203mm) x 12" (305mm) |

(Refer to option 17. M50 Options on **page 4.22** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 4.21** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS



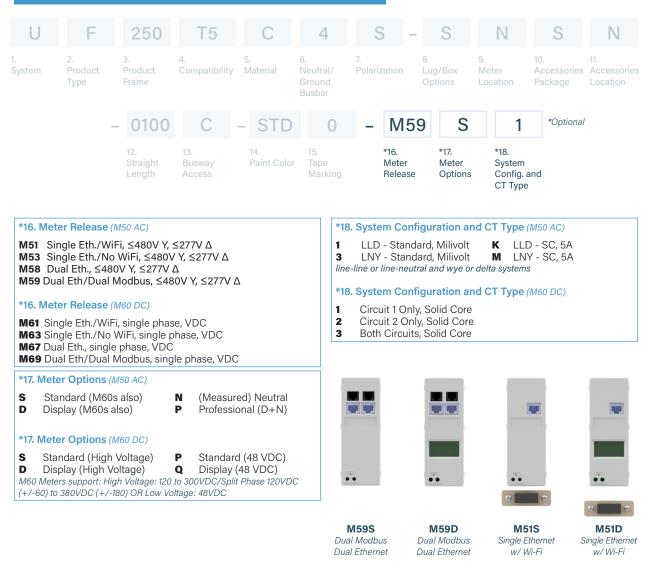
| 1. System (standard of measure) | 10. Accessories Package (optional accessories for feed units) | | | | | |
|---|--|--|--|--|--|--|
| U US | T5 Options: S Standard B (C+F) | | | | | |
| 2. Product Type (section component) | C IR Window - Circular I (G+F) | | | | | |
| F End Feed | F End Feed Hanger & Gland Plates G Starline Rect. IR window, 5"x7" | | | | | |
| 3. Product Frame (maximum amperage) | S5 Options: | | | | | |
| 250 250 amps | F S5 Standard (includes hangars, and gland plates) B S5 Standard + IR Window - Circular | | | | | |
| 4. Compatibility (frame compatibility) | | | | | | |
| T5 T5 System K5 T5 System (Limiting Strip) | 11. Accessories Location (from the terminal, side with accessory) | | | | | |
| S5 S5 System L5 S5 System (Limiting Strip) | N None (N/A) R Right | | | | | |
| 5. Material (busbar material) | L Left F Front (consult the factory) | | | | | |
| C Copper | 12. Straight Length (length of section) | | | | | |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | 0100 1 ft. (For other lengths, consult the factory) | | | | | |
| 4 3 Phase plus Neutral G 3 Phase plus Neutral plus | 13. Busway Access | | | | | |
| N 3 Phase plus 200% Neutral F 3 Phase plus 200% Neutral | C Continuous | | | | | |
| plus Internal Ground Conductor | 14. Paint Color (allows painting of the busway housing) | | | | | |
| Conductor | STD Factory Mill Finish RED Paint Factory Red | | | | | |
| 7. Polarization (orientation of section for mating purposes) | BLK Paint Factory Black BLU Paint Factory Blue | | | | | |
| S Standard R Reversed | WHT Paint Factory White **RAL (please see page 4.103) | | | | | |
| 8. Lug/Box Options (standard/double/bolt lugs and box size) | NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. | | | | | |
| S Standard lugs, Standard box R Bolt lugs, Large box Standard lugs, Large box F Standard lugs, Fused box | 15. Tape Marking (colored tape on both sides of busway housing) | | | | | |
| L Standard lugs, Large box F Standard lugs, Fused box B Bolt Lugs, Standard Box | No Tape Marking Tape Factory Blue | | | | | |
| 9. Meter Location (from the terminal, side with removable lid) | 3 Tape Factory Black 8 Tape Factory Green 4 Tape Factory White 9 Tape Factory Yellow | | | | | |
| R Right L Left | 6 Tape Factory Red | | | | | |
| N None (N/A) | | | | | | |

EXAMPLE

UF250T5C4R-LRLL-0100C-BLK0 = US System, End Feed, 250 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

UF250T5C4R-LRLL-0100C-BLK0-M59S1 = US System, End Feed, 250 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M59 Meter, Standard Meter Options, LLD - Standard, Milivolt



ABOVE FEED UNITS

PRODUCT DESCRIPTION

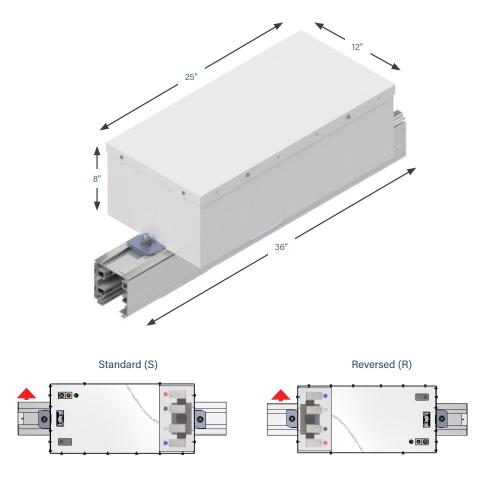
The above feed power unit supplies power from the topside of the Busway. Factory assembled unit consists of a $25 \times 12 \times 8$ inch steel junction box that is mounted on top of a 36 inch section of busway.

*36 inches is the minimum and standard length of busway that an above feed is provided with.

Above feed units can be placed at the end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

Weight 45.5 lbs

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>





ABOVE FEED UNITS: PRODUCT NUMBERS

| U | А | 250 | T5 | С | 4 | S | - | D | Ν | S | Ν |
|--------------|---------------------------|-------------------------|-------------------------|--------------------|------------------------------------|---------------------|-----|--------------------------|-------------------------|-------------------------------|--------------------------------|
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | | ug/Box ptions | 9. Meter Location | 10. Accessorie: Package | 11. Accessories Location |
| - | 0300 | С | 018 | - STD | 0 | – N | 159 | S | 1 | *Optiona | n/ |
| | 12. Straight Length | 13. Busway Access | 14. Feed Location | 15. Paint Color | 16. Tape Marking | *17. Met Rele | | *18. Meter Options | | n Config. T Type | |

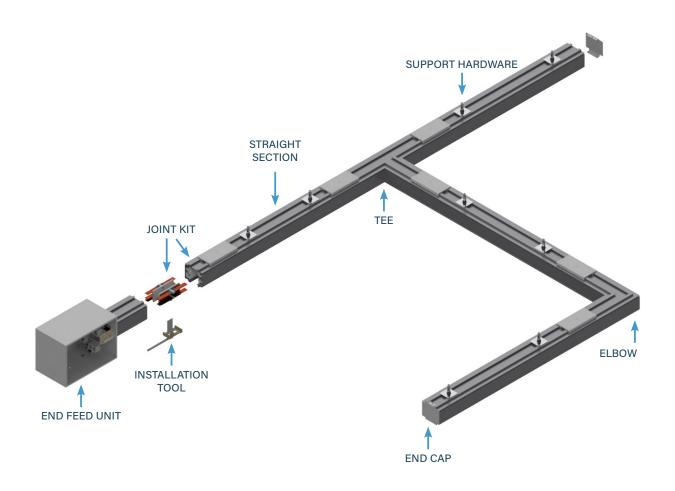
| 1. System (standard of measure) | 12. Straight Length (length of section) |
|--|--|
| U US | 0300 3 feet |
| 2. Product Type (section component) A Above Feed | 13. Busway Access (how plugs access the busway) C Continuous |
| 3. Product Frame (maximum amperage)250 250 amps | 14. Feed Location (location of the center of the top feed)018 18 inches (For other lengths, consult the factory) |
| 4. Compatibility (frame compatibility) | 15. Paint Color (allows painting of the busway housing) |
| T5T5 SystemK5T5 System (Limiting StripS5S5 SystemL5S5 System (Limiting Strip | |
| 5. Material (busbar material) C Copper | NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 4 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conducts N 3 Phase plus 200% Neutral F 3 Phase plus 200% Neutral plus Internal Ground Conductor | Or A Tape Factory Black B Tape Factory Green |
| 7. Polarization (orientation of section for mating purposes) S Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) | *17. Meter Release (M50 Series Meters) M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ M58 Dual Eth., ≤480V Y, ≤277V Δ M59 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ |
| Double lugs, Standard box B Bolt lugs, Standard box 9. Meter Location (from the terminal, side with removable lid) | *18. Meter Options (choose from a 4.1" display, measured neutral, audible alarm and/or a temperature monitor) |
| R Right L Left N None (N/A) | SStandardN(Measured) NeutralDDisplayPProfessional (D+N) |
| S Standard | *19. System Configuration and CT Type (line-line or line-neutral and wye or delta systems) |
| None (N/A) R Right A Rear L Left T Top F Front | 1LLD - Standard, MilivoltKLLD - SC, 5A3LNY - Standard, MilivoltMLNY - SC, 5A |

EXAMPLE

<u>UA250T5CFS-DLSN-0300C018-STD0-M59D3</u> = US System, Above Feed, 250 amps, 75 System, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Double Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location-3 foot Straight Length, Continuous Busway Access, 18 inch Feed Location, Factory Mill Finish, No Tape Marking, M59 Meter, Display, LNY - Standard, Milivolt



T5 SYSTEM LAYOUT DRAWING

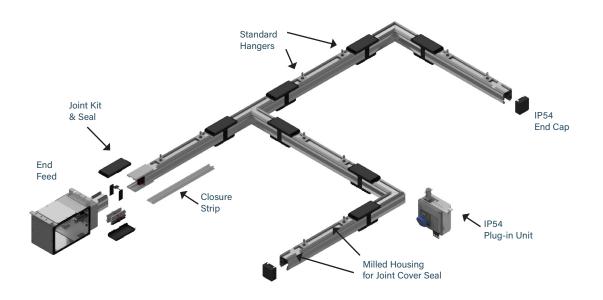


PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

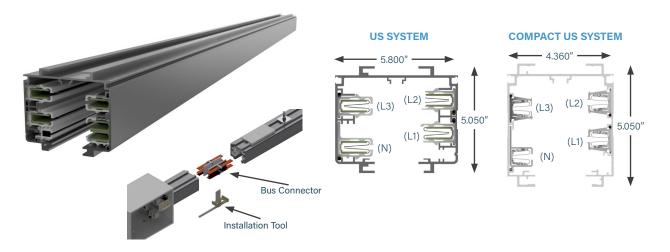
For further information on applicable S5 plug-in unit options, please visit the **Plug-In Units** section.



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 4-pole varieties, optional isolated ground, optional oversize (200%) neutral. The straight sections join together using Bus Connectors which fit into the channels of the adjoining section. An Installation Tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.



MATERIAL

Extruded Aluminum Note: S5 housing includes corrosion resistant base coating

RATINGS

100% Ground Path 400 Amps 400T5C4/400T5CG: 600 Volt 400T5CN/400T5CF: 600 Volt

LENGTH

T5: 10 ft, 20 ft; or custom lengths between 2 - 20 ft S5: 5 ft, 10 ft max. Consult factory for additional lengths

VOLTAGE DROP

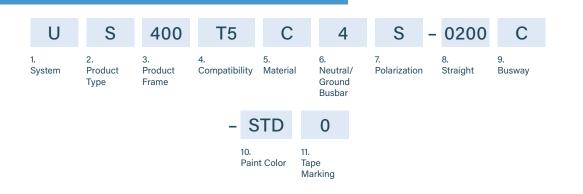
Distributed load US System Single Phase 1V per 37ft (.8PF) Three Phase 1V per 65ft (.8PF) Compact US System Single Phase 1V per 28ft (.8PF) Three Phase 1V per 48ft (.8PF)

WEIGHT

| US System |
|--|
| 10 ft 4 pole: 95 lbs |
| 10 ft 4 pole w/ ground: 96 lbs |
| 10 ft 4 pole w/ 200% N: 97 lbs |
| 10 ft 4 pole w/ ground & 200% N: 107 lbs |
| Compact US System |
| 10 ft 4 pole: 52 lbs |
| 10 ft 4 pole w/ ground: 57 lbs |
| 10 ft 4 pole w/ 200% N: 60 lbs |
| 10 ft 4 pole w/ ground & 200% N: 64 lbs |
| |
| |

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |

STRAIGHT SECTIONS: PRODUCT NUMBERS



| 1. System (standard of mea | asure) | 9. Busway Access (how plugs access the busway) |
|---|---|---|
| U US | C Compact | C Continuous |
| 2. Product Type (section | component) | 10. Paint Color (allows painting of the busway housing) |
| S Straight Section | | STD Factory Mill Finish RED Paint Factory Red |
| 3. Product Frame (maxim | num amperage) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 4.103) |
| 400 400 amps | | *Paint Factory Silver for Compact US systems |
| 4. Compatibility (frame co | ompatibility) | NOTE: All Series-S housings include a clear corrosion resistant base coating, regardless of paint color selection. |
| T5 SystemS5 System | K5 T5 System (Limiting Strip)L5 S5 System (Limiting Strip) | 11. Tape Marking (colored tape on both sides of busway housing) |
| 5. Material (busbar materia | al) | 0No Tape Marking7Tape Factory Blue3Tape Factory Black8Tape Factory Green |
| C Copper | | 4 Tape Factory White 9 Tape Factory Yellow 6 Tape Factory Red |
| 6. Neutral/Ground Bush | bar (size of neutral busbar and/or ground) | |
| 4 3 Phase plus Neutra | al G 3 Phase plus Neutral plus Internal Ground Conductor | |
| N 3 Phase plus 200% | Neutral F 3 Phase plus 200% Neutral plus Internal Ground Conductor | |
| 7. Polarization (orientation | n of section for mating purposes) | |
| S Standard | | |
| 8. Straight Length (length | h of section) | |
| XXYY XX=feet, YY=inch | ies | |

EXAMPLES

US400T5C4S-0500C-STD0 = US System, Straight Section, 400 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Continuous Busway Access, Factory Mill Finish, No Tape Marking

CS400K5CNS-0206C-P013 = Compact US System, Straight Section, 400 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Busway Access, Painted RAL 1001, Factory Black Tape Marking



ELBOW SECTIONS

PRODUCT DESCRIPTION

An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories

(Ordered Separately) Joint Kits (**page 4.108**) are used to make mechanical and electrical connections to adjacent busway sections.

Weight

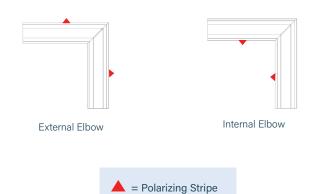
28 lbs US System 18 lbs Compact US System



EXTERNAL ELBOW



INTERNAL ELBOW



ELBOW SECTIONS: PRODUCT NUMBERS

| | U | Е | 400 | Τ5 | С | 4 | S | - | IN | |
|--|-------------------------|-----------------------|--|----------------------------------|-----------------------|--|--------------------|------------------|----------------------------|--|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | | 8. Turning Direction | |
| | | | | - STD | C |) | | | | |
| | | | | 9. Paint Color | 10. Tape Markir | g | | | | |
| 1. System (sta U US | ndard of measu | · · | Compact US | | | iing Direction | (direction of s | | n polarizing External | stripe) |
| 2. Product Ty | una (apotion op | | | | | eismic Internal | | | Seismic E | External |
| E Elbow S | | mponent) | | | 9. Pair | t Color (allows | painting of th | e bus | sway housing | <i>q)</i> |
| 3. Product Fr 400 400 amp | ame (maximur | m amperage) | | | STD BLK WHT | Factory Mill F Paint Factory Paint Factory | Black B | ED LU *RAI | Paint I | Factory Rec Factory Blue see page 4.10 |
| 4. Compatibi | lity (frame com | npatibility) | | | | All Series-S housi | | clear | corrosion res | istant base co |
| T5 T5 Syste S5 S5 Syste | | | | imiting Strip) imiting Strip) | | ess of paint color of Marking (co | | both | sides of bus | way housing, |
| 5. Material (b) | usbar material) | | | | | lo Tape Markin ape Factory Bl | | | Tape Facto Tape Facto | |
| C Copper | | | | | 4 T | ape Factory W | hite 9 | | Tape Facto | |
| 6. Neutral/G | round Busba | r (size of neuti | al busbar and, | /or ground) | 6 T | ape Factory Re | ed | | | |
| 4 3 Phase | plus Neutral | | 3 Phase plus Internal Grou | Neutral plus nd Conductor | | | | | | |
| N 3 Phase | plus 200% N | | 3 Phase plus plus Internal Conductor | 200% Neutral Ground | | | | | | |
| 7. Polarizatio | n (orientation o | f section for m | ating purposes | s) | | | | | | |
| S Standard | b | | | | | | | | | |

EXAMPLES

<u>UE400K5C4S-IN-PJ70</u> = US System, Elbow Section, 400 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted RAL 5027, No Tape Marking

<u>CE400T5CGS-EX-STD3</u> = Compact US System, Elbow Section, 400 amps, T5 System, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Factory Mill Finish, Factory Black Tape Marking



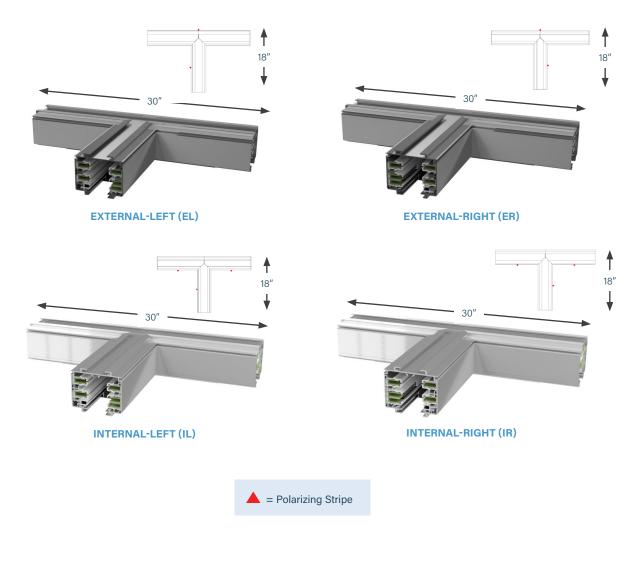
TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a Busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent Busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Weight

42 lbs US System 24 lbs Compact US System



TEE SECTIONS: PRODUCT NUMBERS

| | U | Т | 400 | T5 | С | 4 | S | - | IR | |
|--|---------------------------------------|------------------------|--|----------------------------------|--------------------------|--|------------------|---------------------------|----------------------------|--|
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizati | on [.] | 8. Turning Direction | |
| | | | | - STD | 0 | | | | | |
| | | | | 9. Paint Color | 10. r Tape Marking | g | | | | |
| 1. System (s | tandard of meas | ure) | | | 8. Turn | ing Directio | ו (direction c | of sectio | n polarizing | stripe) |
| U US 2. Product 1 T Tee Se | Type (section co | | Compact US | | IR In HL Se | ternal-Left ternal-Right eismic Interna eismic Interna | | EL ER GL GR | | |
| 3. Product F 400 400 am | Frame (maximul nps | m amperage) | | | STD | t Color (allow Factory Mill | Finish | RED | Paint | Factory Red |
| 4. Compatik T5 T5 Sys S5 S5 Sys | | K5 | | imiting Strip) imiting Strip) | | Paint Factor Paint Factor All Series-S hous ss of paint color | y White | BLU **RAI a clear o | (please | Factory Blue see page 4.10 istant base coa |
| y | (busbar material) | | | | | e Marking (c | | n hoth | sides of hus | way housing) |
| C Coppe | · · · · · · · · · · · · · · · · · · · | | | | | o Tape Marki | | 7 7 | Tape Facto | ry Blue |
| 6. Neutral/0 | Ground Busba | r (size of neut | ral busbar and, | /or ground) | | ape Factory E ape Factory V | | | Tape Facto Tape Facto | |
| 4 3 Phas | e plus Neutral | G | 3 Phase plus Internal Grou | Neutral plus nd Conductor | | ape Factory F | | - ' | | ., |
| N 3 Phas | e plus 200% N | eutral F | 3 Phase plus plus Internal Conductor | 200% Neutral Ground | | | | | | |
| 7. Polarizati | on (orientation o | of section for n | nating purpose | s) | | | | | | |
| S Standa | ard | | | | | | | | | |

EXAMPLES

<u>UT400T5C4S-IR-RED0</u> = US System, Tee Section, 400 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning direction, Painted Factory Red, No Tape Marking

<u>CT400K5CFS-EL-STD0</u> = Compact US System, Tee Section, 400 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking



END FEED UNITS

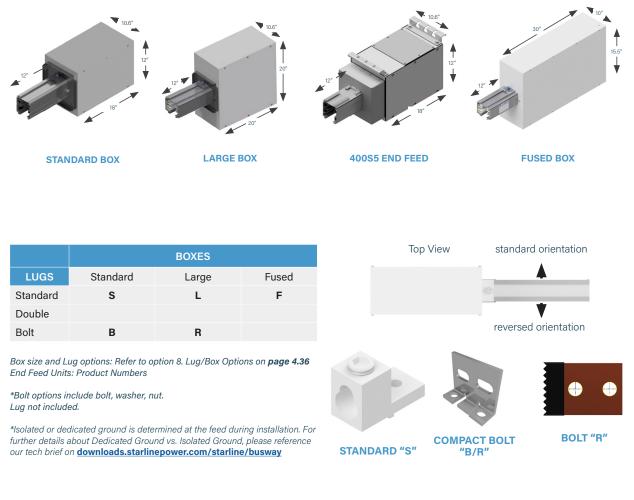
PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 1 foot section of busway. Certain assemblies include connection lugs and a ground lug for wires (2) 250MCM or up to 600MCM for standard size boxes and large size boxes.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately).

Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight (for standard size end feed) 36 lbs





END FEED UNITS: METERING

PRODUCT DESCRIPTION

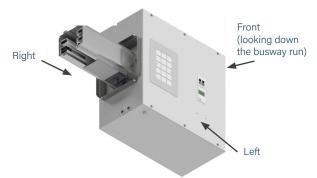
End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable side, connected to a 1 foot section of busway. Certain assemblies include connection lugs and a ground lug for wires (2) 250MCM or up to 600MCM for standard size boxes and large size boxes.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.

LARGE BOX



STANDARD BOX



*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.36** End Feed Units: Product Numbers)

Series-S Note: End Feed metering not currently offered for Series-S systems. For custom inquiries, please contact your Starline representative.

AC END FEED METER OPTIONS

M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ
M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ
M58 Dual Eth., ≤480V Y, ≤277V Δ
M59 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ

DC END FEED METER OPTIONS

- M61 Single Eth./WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M63 Single Eth./No WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M67 Dual Eth., single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M69 Dual Eth/Dual Modbus, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC

| BOX/LUGS OPTION | 1 Meter or Accessory | 1 Meter & 1 Accessory (opposite lids) | 1 Meter & 1 Accessory (same lid) |
|------------------------------------|-------------------------|--|---|
| (S) Standard Box, Standard Lugs | Х | Х | Х |
| (L) Large Box, Standard Lugs | Х | Х | Х |
| (R) Large Box, Bolt Lugs | х | х | Х |
| (B) Standard Box, Bolt Lugs | х | х | Х |



END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

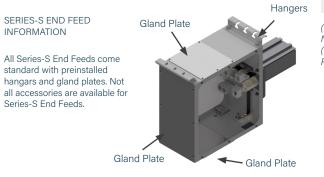
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- Plug-in units have both Line & Load side IR windows for OCPD connections
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

| GENERAL SPECIFICATIONS | |
|---------------------------|---|
| Viewing Material | IR transmissive polymer, UL 94B HB Rated |
| Structural Mesh Material | Stainless Steel 304 |
| Body Material | Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| Ingress Protection | IP3x (T5); IP54 (S5) |
| Max Operating Temperature | 125°C |
| WINDOW DIMENSIONS | |
| End Feeds: 400A and Below | 5" (127mm) x 7" (178mm) |
| End Feeds: 500A and Above | 8" (203mm) x 12" (305mm) |

(Refer to option 17. M50 Options on **page 4.37** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 4.36** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS

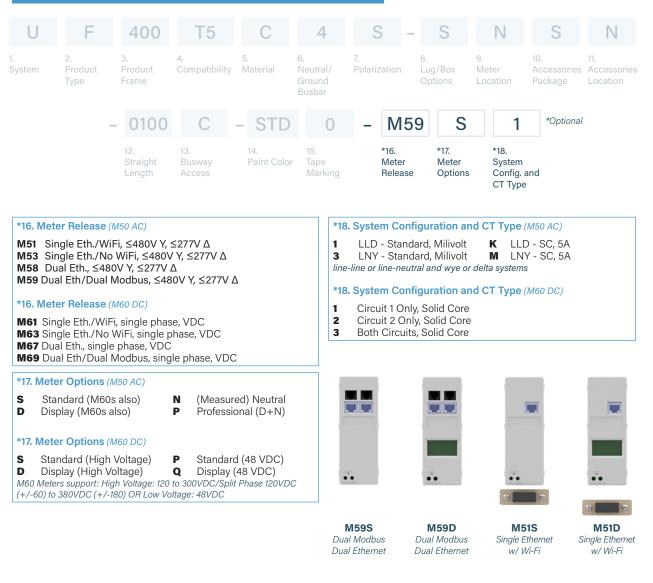
| U | J F | 400 | T5 | С | 4 | S | - | S | Ν | S | Ν |
|----------|--------------------------------------|---------------------------|--|-------------------------------|------------------------------------|---------------------|------------------------|---------------------------------|-------------------------------------|-----------------------------------|--------------------------------|
| System | 2. n Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polariza | tion | 8. Lug/Box Options | 9. Meter Location | 10. Accessories Package | 11. Accessories Location |
| | | - 0100 | С | - STD | 0 | - | M59 | 9 S | 1 | *Optiona | |
| | | 12. Straight Length | 13. Busway Access | 14. Paint Colo | 15. or Tape Marking | Ν | 16. 1eter elease | *17. Meter Options | *18. System Config. CT Typ | and | |
| 1. Sy | /stem (standard o | f measure) | | | 1 | 0. Access | ories Pa | ackage (op | tional access | ories for feed u | nits) |
| U | US | | C Compac | et US | T | 5 Options: Stand | | | B (C | +F) | |
| 2. Pi | roduct Type (sec | tion componer | nt) | | C | IR Wir | ndow - | Circular | I (G | +F) | |
| F | End Feed | | | | F | | | nger & Gla . IR window | | | |
| 3. Pi | roduct Frame (m | naximum ampe | rage) | | S | 5 Options | | (includes b | , angars and | gland plates) | |
| 400 | 400 amps | | | | | | | | w - Circula | | |
| 4. C | ompatibility (frai | me compatibilit | ty) | | | | | | | | |
| T5 S5 | T5 System S5 System | | K5 T5 Syste L5 S5 Syste | | Strin) | | | ocation (from | | l, side with acc | essory) |
| | laterial (busbar m | otorial) | LO 00 0930 | | N L | | (N/A) | | | ght ont (consult tl | ne factory) |
| C. | Copper | alenai) | | | | | | | | | |
| | eutral/Ground I | Rushar (size c | of neutral busha | r and/or group | | | | h (length of a | | | |
| 4 | 3 Phase plus N | | | e plus Neutral | | | | | nsult the facto | ory) | |
| | | | Internal | Ground Cond | ductor | 3. Busway Contir | | S | | | |
| Ν | 3 Phase plus 20 | J0% Neutrai | plus Int | e plus 200% N ernal Ground | | | | | 6.1 I | | |
| | | | Conduc | ctor | | | | ows painting Il Finish | of the buswa | <i>y nousing)</i> Paint Factor | Red |
| 7. Pc | olarization (orient | tation of section | n for mating pu | rposes) | E | ILK Pair | nt Facto | ory Black | BLU | Paint Factor | y Blue |
| S | Standard | | R Reverse | ed | | | | ory White | **RAL | (please see pa | • • |
| 8. Lu | ug/Box Options | (standard/dou | ıble/bolt lugs aı | nd box size) | | | | enclosures an andard silver. | e painted. "ST | D Factory Mill F | -ınish" |
| S L | Standard lugs, S Standard lugs, L | | | d lugs, Fused s, Large box | box | | | | on both side | s of busway ho | using) |
| B | Bolt Lugs, Stand | | Doit lug | s, Larye DUX | 0 | | pe Mar | | | pe Factory Bl | - |
| 9. M | eter Location (fi | rom the termin: | al. side with ren | novable lid) | 3 | | actory actory | | | pe Factory G pe Factory Ye | |
| R | Right None (N/A) | | L Left | | 6 | | actory | | ⊎ Id | | -IIUW |

EXAMPLE

UF400T5C4R-LRLL-0100C-BLK0 = US System, End Feed, 400 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

UF400T5C4R-LRLL-0100C-BLK0-M59S1 = US System, End Feed, 400 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M59 Meter, Standard Meter Options, LLD - Standard, Milivolt



ABOVE FEED UNITS

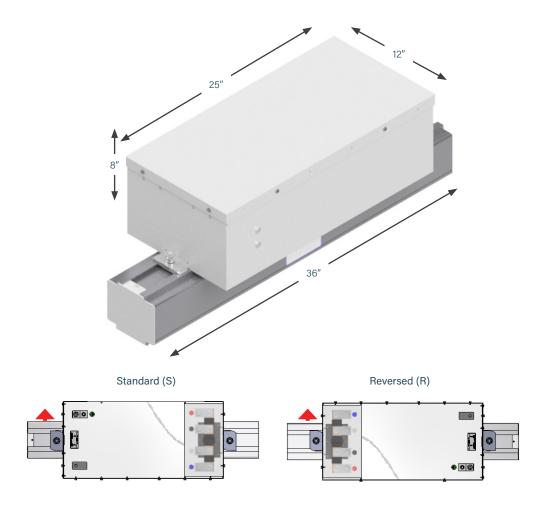
PRODUCT DESCRIPTION

The above feed power unit supplies power from the topside of the busway. Factory assembled unit consists of a $25 \times 12 \times 8$ inch steel junction box mounted on top of a 36 inch section of busway.

*36 inches is the minimum and standard length of busway that an above feed is provided with.

Above feed units can be placed at the end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>





ABOVE FEED UNITS: PRODUCT NUMBERS

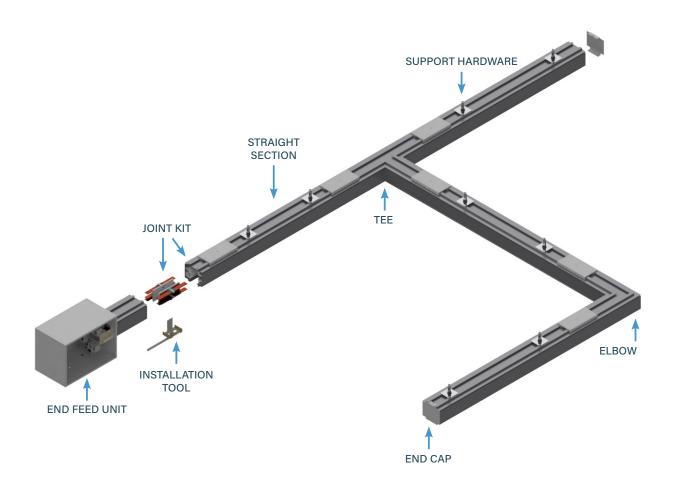
| | | | | | _ | | | | | | |
|--------------------------------|---------------------------|-------------------------------------|---|---|------------------------------------|---|----------------------|--------------------------|-------------------------|---------------------------------------|-------------------------------|
| U | А | 400 | T5 | С | 4 | S | - | S | Ν | S | Ν |
| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizatio | | ıg/Box ptions | 9. Meter Location | 10. Accessories Package | 11. Accessorie Location |
| | - 0300 | С | 018 | - STD | 0 | - N | /159 | S | 1 | *Optiona | I |
| | 12. Straight Length | 13. Busway Access | 14. Feed Location | 15. Paint Colo | 16. or Tape Marking | *17. Me Rel | | *18. Meter Options | | n Config. Type | |
| 1. Syste U US | m (standard of | measure) | C Compact | US | | 2. Straight L 300 3 feet | .ength (| length of | section) | | |
| | uct Type (sect | tion compone | • | | | B. Busway A | ccess (| how plug | access the l | busway) | |
| | ove Feed | | | | C | | | non plage | | ,aonay) | |
| 3. Produ | uct Frame (m | aximum ampe | erage) | | 14 | 4. Feed Loc | ation (/a | cation of | the center of | the top feed) | |
| 400 40 | 0 amps | | | | 0 | 18 18 inche | s (For ot | her length | s, consult the | e factory) | |
| 4. Comp | patibility (fran | ne compatibili | ity) | | 1 | 5. Paint Col | or (allow | s painting | of the buswa | y housing) | |
| | System System | | K5 T5 SystemL5 S5 System | | | | ry Mill F Factory | | RED BLU | Paint Factor Paint Factor | |
| | rial (busbar ma | aterial) | | | | | Factory | | **RAL | (please see pa | , |
| C Co | pper | | | | | OTE: All Abov | | | | STD Factory M | ill Finish" |
| 6. Neuti | ral/Ground B | Busbar (size d | of neutral busbar | and/or groun | ld) 1 | 6. Tape Mar | king (co | lored tape | on both side | es of busway ho | using) |
| 4 3 F | hase plus Ne | eutral | | plus Neutral | plus 0 | No Tape | Markir | ng | 7 Ta | pe Factory B | ue |
| N 3 F | Phase plus 20 | 0% Neutral | F 3 Phase | Ground Conc plus 200% N ernal Grounc tor | leutral 4 | Tape Fa | ctory W | 'hite | | pe Factory G pe Factory Ye | |
| 7. Polari | zation (orienta | ation of sectio | n for mating purp | | * | 17. Meter Re | lease (/ | M50 Serie | s Meters) | | |
| | andard | | R Reverse | | | 151 Single 153 Single | | | | | |
| 8. Lug/I | Box Options | (standard/doเ | uble/bolt lugs and | d box size) | N | 158 Dual Et | h., ≤48 | 0V Y, ≤27 | 77V Δ | | |
| S Sta | indard lugs, St | tandard box | | | | 159 Dual Eth | | , | | | |
| 9. Mete | r Location (fr | om the termin | al, side with rem | ovable lid) | | 18. Meter O <i>udible alarm a</i> | | | | lay, measured r | eutral, |
| R Rig | jht | L Left | N | None (N/A) | S | | d | | | Measured) Ne | |
| | essories Pacl andard | kage (optiona | al accessories for | r feed units) | | 19. System (| | | | rofessional (E e (line-line or lin | , |
| | ne (N/A) | ntion (from the R Right T Top | | <i>vith removabl</i> Rear Front | | nd wye or delt LLD - St LNY - St | andard | Milivolt | | LD - SC, 5A NY - SC, 5A | |

EXAMPLE

UA400K5CFS-SRSN-0300C018-STD0-M59D3 = US System, Above Feed, 400 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, 3 foot Straight Length, Continuous Busway Access, 18 inch Feed Location, Factory Mill Finish, No Tape Marking, M59 Meter, Display, LNY - Standard, Milivolt



T5 SYSTEM LAYOUT DRAWING

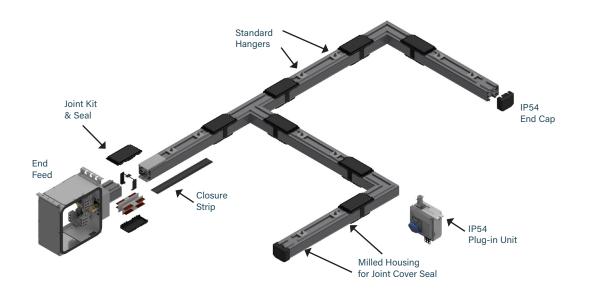


PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.

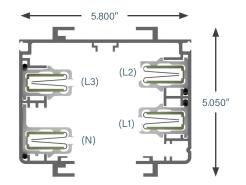


STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 4-pole varieties and optional isolated ground. The straight sections join together using bus connectors which fit into the channels of the adjoining section. An Installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.





MATERIAL

Extruded Aluminum Note: S5 housing includes corrosion resistant base coating

RATINGS

100% Ground Path 500 Amps 500T5C4/500T5CG: 600 Volt

LENGTH

T5: 10 ft, 20 ft; or custom lengths between 2 - 20 ft S5: 5 ft, 10 ft max. Consult factory for additional lengths

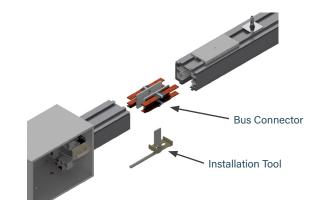
VOLTAGE DROP

Distributed load Single Phase 1V per 37 ft (.8PF) Three Phase 1V per 65 ft (.8PF)

WEIGHT

10 ft 4 pole: 104 lbs 10 ft 4 pole w/ ground: 109 lbs

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |



С

9.

Busway

500 AMP SYSTEMS

STRAIGHT SECTIONS: **PRODUCT NUMBERS** 500 U S **T5** С 4 S 0200 2. 3. 4. 5. 6. 8. 1. 7. Product Product Compatibility Material Polarization System Neutral/ Straight Frame Ground Туре Busbar 0 STD 11.

10. 11. Paint Color Tape Marking

| 1. System (standard of measure) | 9. Busway Access (how plugs access the busway) |
|--|---|
| U US | C Continuous |
| 2. Product Type (section component) | 10. Paint Color (allows painting of the busway housing) |
| S Straight Section | STD Factory Mill Finish RED Paint Factory Red |
| 3. Product Frame (maximum amperage) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 4.103) |
| 500 500 amps | NOTE: All Series-S housings include a clear corrosion resistant base coat- |
| 4. Compatibility (frame compatibility) | ing, regardless of paint color selection. |
| T5T5 SystemK5T5 System (Limiting Strip)S5S5 SystemL5S5 System (Limiting Strip) | 11. Tape Marking (colored tape on both sides of busway housing) 0 No Tape Marking 7 Tape Factory Blue |
| 5. Material (busbar material) | 3Tape Factory Black8Tape Factory Green4Tape Factory White9Tape Factory Yellow |
| C Copper | 6 Tape Factory Red |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | |
| 43 Phase plus NeutralG3 Phase plus Neutral plus Internal Ground Conductor | |
| 7. Polarization (orientation of section for mating purposes) | |
| S Standard | |
| 8. Straight Length (length of section) | |
| XXYY XX=feet, YY=inches | |

EXAMPLES

US500T5C4S-0500C-STD0 = US System, Straight Section, 500 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Continuous Busway Access, Factory Mill Finish, No Tape Marking

<u>US500K5CGS-0206C-P013</u> = US System, Straight Section, 500 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Busway Access, Painted RAL 1001, Factory Black Tape Marking



ELBOW SECTIONS

PRODUCT DESCRIPTION

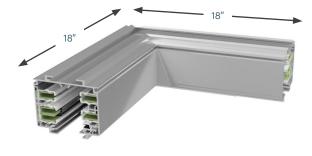
An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories

(Ordered Separately) A Joint Kit (**page 4.108**) is used to make mechanical and electrical connections to adjacent busway sections.

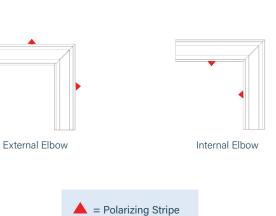
Weight 17.5 lbs





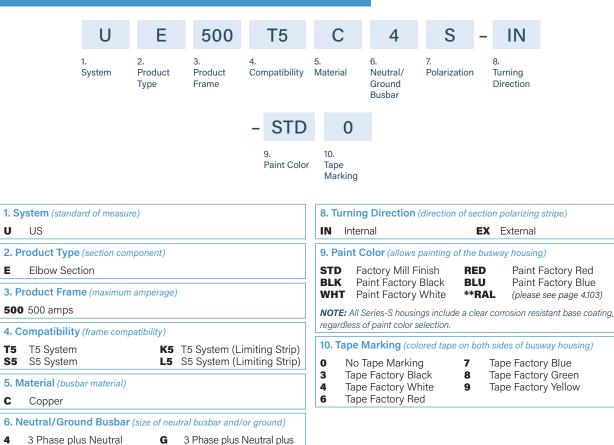
INTERNAL ELBOW

EXTERNAL ELBOW



7. Polarization (orientation of section for mating purposes)

ELBOW SECTIONS: PRODUCT NUMBERS



Internal Ground Conductor

EXAMPLES

Standard

S

UE500K5C4S-IN-STD7 = US System, Elbow Section, 500 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Factory Mill Finish, Factory Blue Tape Marking

<u>UE500T5CGS-EX-BLK0</u> = US System, Elbow Section, 500 amps, T5 System, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Black, No Tape Marking

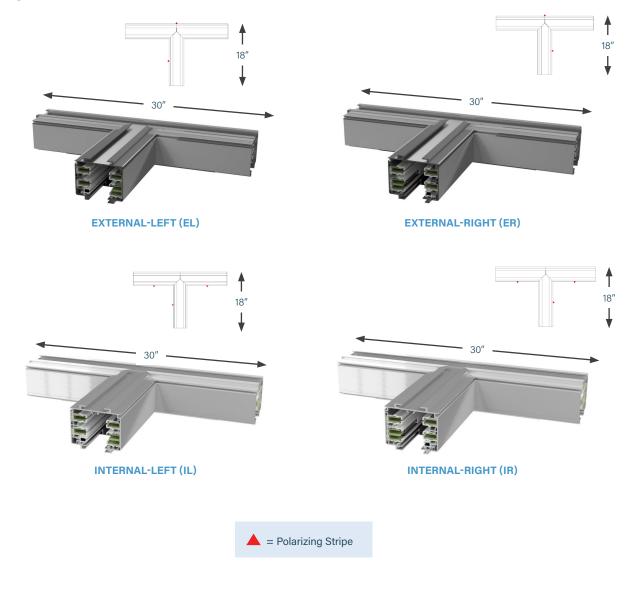


TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Weight 45.5 lbs



TEE SECTIONS: PRODUCT NUMBERS

| | U | т | 500 | T5 | С | 4 | S | | IR | |
|-----------------------|---------------------------------------|-----------------------|-------------------------------|----------------------------------|------------------------|------------------------------------|--------------------|------------|--------------------------|-------------------|
| | 0 | | 500 | 15 | C | - | 5 | | | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarization | | rning rection | |
| | | | | - STD | 0 | | | | | |
| | | | | 9. Paint Color | 10. Tape Marking | | | | | |
| 1. System (s | standard of measu | ıre) | | | 8. Turnii | ng Directior | (direction of s | section p | olarizing s | tripe) |
| U US | | | | | | ernal-Left ernal-Right | | | External-L External-F | |
| | Type (section co | mponent) | | | | | s painting of th | | | 0 |
| T Tee Se | ection | | | | | actory Mill | | | | , actory Red |
| 3. Product | Frame (maximun | n amperage) | | | - | Paint Factory | | LU | | actory Blue |
| 500 500 ar | nps | | | | WHT | Paint Factor | y White 🔹 | *RAL | (please s | see page 4.103) |
| 4. Compati | bility (frame com | patibility) | | | | Series-S hous of paint color | | clear corr | rosion resis | stant base coatir |
| T5 T5 Sy: S5 S5 Sy | | | | imiting Strip) imiting Strip) | 0 | , | olored tape on | both sid | es of busw | vay housing) |
| 5. Material | (busbar material) | | | | | Tape Marki | | | e Factor | |
| C Coppe | · · · · · · · · · · · · · · · · · · · | | | | | be Factory B be Factory V | | | e Factor | |
| | Ground Busba | r (oizo of rout | ral buchar and | (or ground) | | pe Factory R | | -1- | | , - |
| | | | | Ŭ / | | | | | | |
| 4 3 Phas | se plus Neutral | G | 3 Phase plus Internal Grou | ind Conductor | | | | | | |
| 7. Polarizat | ion (orientation of | f section for n | nating purposes | s) | | | | | | |
| | ard | | | | | | | | | |

EXAMPLES

<u>UT500T5C4S-IR-RED0</u> = US System, Tee Section, 500 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking

<u>UT500K5CGS-EL-STD0</u> = US System, Tee Section, 500 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking



END FEED UNITS

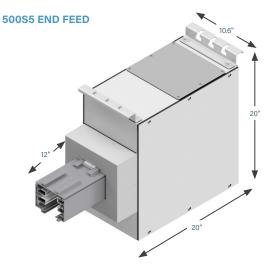
PRODUCT DESCRIPTION

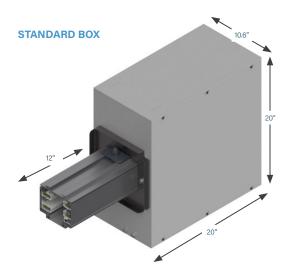
End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 1 foot section of busway. The assembly includes connection lugs and a ground lug for wires (2) 250MCM or up to 600MCM for standard size boxes and large size boxes.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately).

Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight (for standard size end feed) 35 lbs





| | | BOXES | |
|----------|----------|-------|-------|
| LUGS | Standard | Large | Fused |
| Standard | S | | |
| Double | | | |
| Bolt* | В | | |

*Bolt options include bolt, washer, nut. Lug not included.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>





STANDARD "S"

BOLT "B"

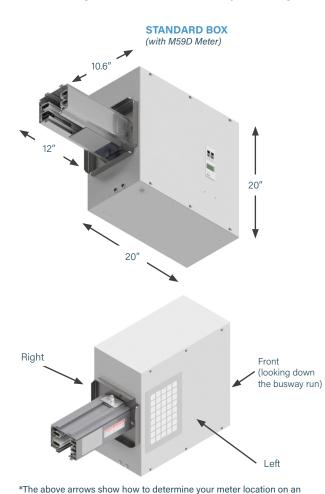


END FEED UNITS: METERING

PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable side, connected to a 1 foot section of busway. The assembly includes connection lugs and a ground lug for wires (2) 250MCM or up to 600MCM for standard size boxes and large size boxes.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



end feed (Refer to option 9. Meter Location on page 4.51 End Feed Units:

Product Numbers)

| AC END | EEED | METED | OPTIONS |
|--------|------|---------|---------|
| | FEED | IVIEIEN | UP HUNS |
| | | | |

M51 Single Eth./WiFi, \leq 480V Y, \leq 277V Δ **M53** Single Eth./No WiFi, \leq 480V Y, \leq 277V Δ **M58** Dual Eth., \leq 480V Y, \leq 277V Δ **M59** Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ DC END FEED METER OPTIONS M61 Single Eth./WiFi, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M63 Single Eth./No WiFi, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M67 Dual Eth., single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M69 Dual Eth/Dual Modbus, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC

Series-S Note: End Feed metering not currently offered for Series-S systems. For custom inquiries, please contact your Starline representative."



END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

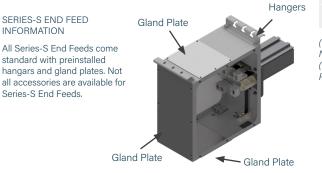
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

| GENERAL SPECIFICATIONS | |
|---------------------------|---|
| Viewing Material | IR transmissive polymer, UL 94B HB Rated |
| Structural Mesh Material | Stainless Steel 304 |
| Body Material | Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| Ingress Protection | IP3x (T5); IP54 (S5) |
| Max Operating Temperature | 125°C |
| WINDOW DIMENSIONS | |
| End Feeds: 400A and Below | 5" (127mm) x 7" (178mm) |
| End Feeds: 500A and Above | 8" (203mm) x 12" (305mm) |
| | |

(Refer to option 17. M50 Options on **page 4.52** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 4.51** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS



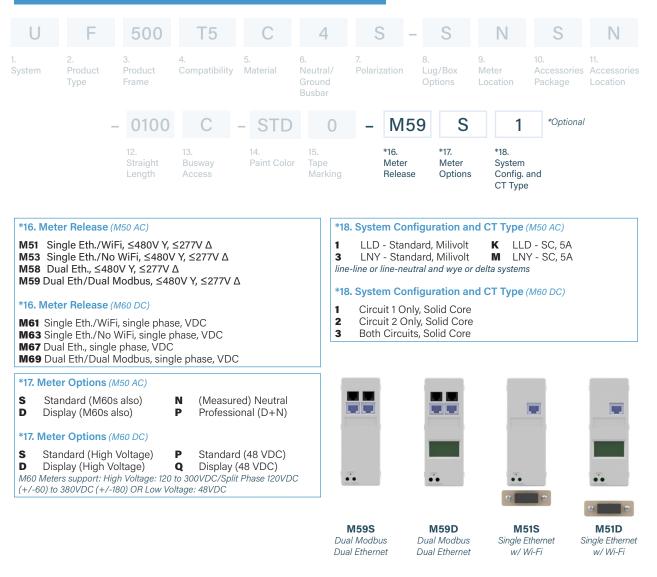
| 1. System (standard of measure) | 10. Accessories Package (optional accessories for feed units) |
|---|---|
| U US | T5 Options: S Standard B (C+F) |
| 2. Product Type (section component) | C IR Window - Circular P $(U+F)$ |
| F End Feed | F End Feed Hanger & Gland Plates U Starline Bect, IB window, 8"x12" |
| 3. Product Frame (maximum amperage) | U Starline Rect. IR window, 8"x12" S5 Options: |
| 500 500 amps | F S5 Standard (includes hangars and gland plates) B S5 Standard + IR Window - Circular |
| 4. Compatibility (frame compatibility) | 11. Accessories Location (from the terminal, side with accessory) |
| T5T5 SystemK5T5 System (Limiting Strip)S5S5 SystemL5S5 System (Limiting Strip) | NNone (N/A)RRightLLeftFFront (consult the factory) |
| 5. Material (busbar material) | 12. Straight Length (length of section) |
| C Copper | 0100 1 ft. (For other lengths, consult the factory) |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | 13. Busway Access |
| 4 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor | C Continuous |
| 7. Polarization (orientation of section for mating purposes) | 14. Paint Color (allows painting of the busway housing) |
| S Standard R Reversed | STDFactory Mill FinishREDPaint Factory RedBLKPaint Factory BlackBLUPaint Factory Blue |
| 8. Lug/Box Options (standard/double/bolt lugs and box size) | WHT Paint Factory White **RAL (please see page 4.103) |
| S Standard Lugs, Standard Box B Bolt Lugs, Standard Box | NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. |
| 9. Meter Location (from the terminal, side with removable lid) | 15. Tape Marking (colored tape on both sides of busway housing) |
| R Right L Left N None (N/A) | No Tape Marking Tape Factory Black Tape Factory Black Tape Factory White Tape Factory White Tape Factory Red |

EXAMPLE

UF500T5C4R-SLSN-0102C-BLK0 = US System, End Feed, 500 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessories Location, 1 foot 2 inch Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

<u>UF500T5C4R-SLSN-0102P-BLK0-M59S1</u> = US System, End Feed, 500 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard box, Left Meter Location, Standard Accessory Package, No Accessories Location, 1 foot 2 inch Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M59 Meter, Standard Meter Options, LLD - Standard, Milivolt



ABOVE FEED UNITS

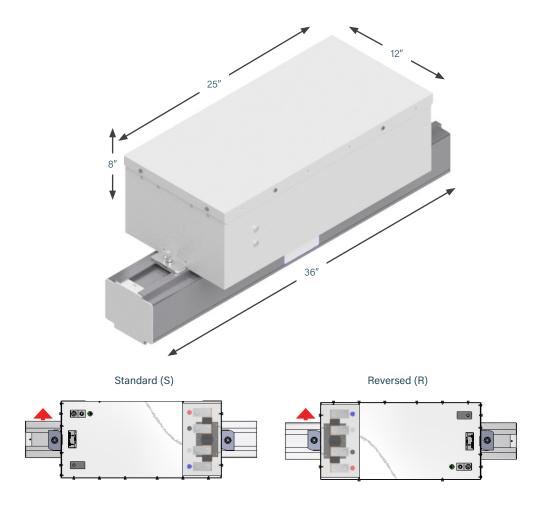
PRODUCT DESCRIPTION

The above feed power unit supplies power from the topside of the busway. Factory assembled unit consists of a 25 x 12 x 8 inch steel junction box mounted on top of a 36 inch section of busway.

*36 inches is the minimum and standard length of busway that an above feed is provided with.

Above feed units can be placed at the end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>





ABOVE FEED UNITS: PRODUCT NUMBERS

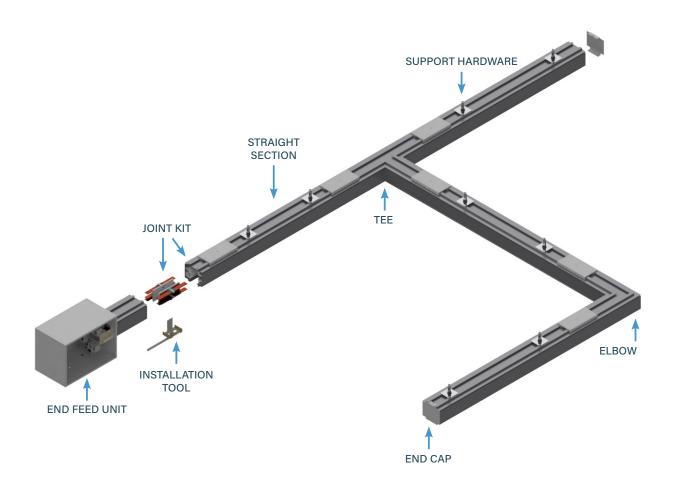
| U | А | 500 | T5 | С | 4 | S | - | S | Ν | S | Ν |
|----------------|---------------------------|-------------------------|---|-----------------------------|------------------------------------|----------------------------|------------------------------------|----------------------------|-------------------------|---|----------------------------------|
| System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polariza | | ug/Box options | 9. Meter Location | 10. Accessorie Package | 11. s Accessorie: Location |
| | - 0300 | С | 018 | - STD | 0 | - | M59 | S | • | *Optiona | al |
| | 12. Straight Length | 13. Busway Access | 14. Feed Location | 15. Paint Colo | 16. r Tape Marking | Ν | 17. Aeter Selease | *18. Meter Options | | m Config. T Type | |
| - | m (standard of | measure) | | | | 2. Straight | • | (length of s | section) | | |
| U US | | | | | | 300 3 fee | | | | | |
| | Ict Type (sect | tion compone | nt) | | | - | | (how plugs | s access the | busway) | |
| | ove Feed | | | | C | | | | | | |
| | ict Frame (ma | aximum ampe | erage) | | | | | | | f the top feed) | |
| 500 500 | | | | | 0 | 18 18 inch | nes (For o | ther length | is, consult th | e factory) | |
| | oatibility (fran | ne compatibili | | | | 5. Paint Co | olor (allow | s painting | of the busw | ay housing) | |
| | System System | | K5 T5 SystemL5 S5 System | | Strip) B | LK Pair | tory Mill | y Black | RED BLU | Paint Facto Paint Facto | ry Blue |
| 5. Mater | r ial (busbar ma | aterial) | | | | | nt Factor | | **RAL | (please see p | · · |
| C Co | pper | | | | | OTE: All Ab presents pa | | | | "STD Factory N | lill Finish" |
| 6. Neutr | al/Ground B | Busbar (size d | of neutral busbar | and/or groun | d) [10 | 6. Tape Ma | arking (co | olored tape | e on both sia | es of busway h | ousing) |
| 4 3 P | hase plus Ne | eutral | | plus Neutral Ground Conc | plus o | No Ta Tape I | pe Marki Factory B Factory V | ng lack | 7 Ta 8 Ta | ape Factory B ape Factory G ape Factory Y | lue ireen |
| 7. Polari | zation (orienta | ation of sectio | n for mating pur | ooses) | 6 | | actory R | | | | |
| S Sta | indard | | R Reverse | d | * | 7. Meter F | Release (| M50 Series | s Meters) | | |
| 8. Lug/E | Box Options | (standard/doเ | ıble/bolt lugs an | d box size) | | | | | V Y, ≤277V | | |
| S Sta | ndard lugs, St | tandard box | | | | 153 Singl 158 Dual | | | 180V Y, ≤2 77V Δ | //νΔ | |
| 9. Meter | Location (fro | om the termin | al, side with rem | ovable lid) | N | 159 Dual E | th/Dual | Modbus, | ≤480V Y, : | ≤277V ∆ | |
| R Rig | ht I | L Left | N | None (N/A) | | | | | | olay, measured | neutral, |
| 10. Acce | ssories Pacl | kage (optiona | al accessories for | feed units) | | udible alarm | | temperatu | | | o utral |
| S Sta | ndard | | | | S D | | | | · · · · | Measured) Ne Professional (I | |
| 11. Acce | ssories Loca | tion (from th | e terminal, side v | vith removable | e lid) 🛛 🔭 | 9. System | n Config | uration a | nd CT Typ | e (line-line or li | ne-neutral |
| | | R Right | | Rear | | nd wye or d | elta syster | ns) | | | |
| L Lef | L | Т Тор | F | Front | 1 | | | l, Milivolt l, Milivolt | | LD - SC, 5A NY - SC, 5A | |

EXAMPLE

UA500T5C4S-SRSN-0300C018-STD0-M59D3 = US System, Above Feed, 500 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Standard Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, 3 foot Straight Length, Continuous Busway Access, 18 inch Feed Location, Factory Mill Finish, No Tape Marking, M59 Meter, Display, LNY - Standard, Milivolt



T5 SYSTEM LAYOUT DRAWING

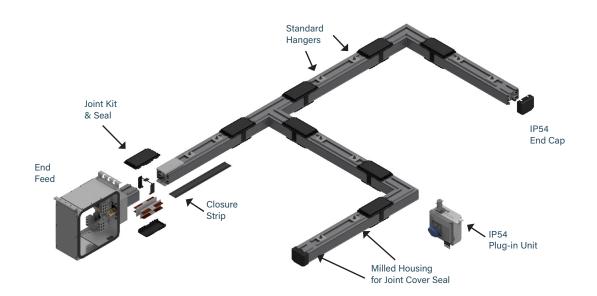


PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.

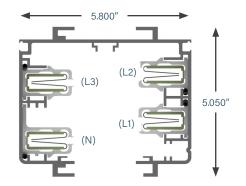


STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plugin units. Housing configurations include 4-pole varieties and optional isolated ground. The straight sections join together using bus connectors which fit into the channels of the adjoining section. An Installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.





MATERIAL

Extruded Aluminum Note: S5 housing includes corrosion resistant base coating

RATINGS

100% Ground Path 600 Amps 600T5C4/600T5CG: 600 Volt

LENGTH

T5: 10 ft, 20 ft; or custom lengths between 2 - 20 ft S5: 5 ft, 10 ft max. Consult factory for additional lengths

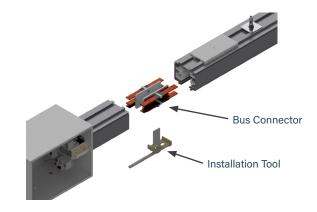
VOLTAGE DROP

Distributed load Single Phase 1V per 37 ft (.8PF) Three Phase 1V per 65 ft (.8PF)

WEIGHT

10 ft 4 pole: 115 lbs 10 ft 4 pole w/ ground: 120 lbs

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |



| | FRAIGHT RODUCT | | | | | | | | | | | |
|------------|---------------------------------|-----------------------|------------------------|--------------------------------------|---------------|--|-----------------------------|---------------------------------|------|----------------|------------------------------|-------|
| | U | S | 600 | T5 | С | | 4 | S | - | 0200 | С | |
| | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Materia | G | leutral/ iround usbar | 7. Polarizatior | n | 8. Straight | 9. Busway | |
| | | | | - S | STD | (| C | | | | | |
| | | | | 10. Pair | nt Color | 11. Tape Marki | ng | | | | | |
| | /stem (standard o | of measure) | | | | | - | ccess (how plu | gs a | ccess the bu | sway) | |
| U | US | | | | | C Continuous | | | | | | |
| 2. P | roduct Type (se | 1 - C | ent) | | | 10. Paint Color (allows painting of the busway housing) | | | | | | |
| S | Straight Section | on | | | | STD BLK | | ry Mill Finish Factory Black | | | Paint Factor Paint Factor | |
| 3. P | roduct Frame (r | maximum amp | erage) | | | WHT | | Factory White | | | (please see pa | |
| 600 | 600 amps | | | | | | | s-S housings inc | | a clear corros | sion resistant b | ase o |
| 4. C | ompatibility (fra | ame compatibil | | | | regardless of paint color selection. | | | | | | |
| T5 S5 | T5 System S5 System | | K5 T5 Syst | em (Limiting S tem (Limiting S | Strip) | | | | | | | |
| | | | LJ 00 0y3 | | (inp) | ONo Tape Marking7Tape Factory Blue3Tape Factory Black8Tape Factory Green | | | | | | |
| | laterial (busbar n | naterial) | | | | | | ctory White ctory Red | | 9 Tape | Factory Yelle | ЭW |
| C | Copper | Duch en () | <i>c</i> | | | 5 | ape i d | | | | | |
| 6. N | eutral/Ground 3 Phase plus N | | | ar and/or ground e plus Neutral p | · | | | | | | | |
| -+ | 5 Flidse plus N | eulidi | | l Ground Condi | | | | | | | | |
| 7. Po S | olarization (orier Standard | ntation of section | on for mating p | urposes) | | | | | | | | |
| - | | (law anthe for all | () | | | | | | | | | |
| ð. 5 | traight Length | liength of secti | ion) | | | | | | | | | |

EXAMPLES

XXYY XX=feet, YY=inches

<u>US600T5C4S-0500C-STD0</u> = US System, Straight Section, 600 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Continuous Busway Access, Factory Mill Finish, No Tape Marking

<u>US600K5CGS-0206C-P013</u> = US System, Straight Section, 600 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2 foot 6 inch Straight Length, Continuous Busway Access, Painted RAL 1001, Factory Black Tape Marking



ELBOW SECTIONS

PRODUCT DESCRIPTION

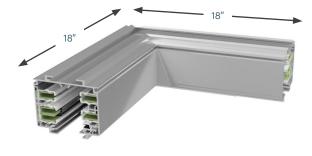
An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories

(Ordered Separately) A Joint Kit (**page 4.108**) is used to make mechanical and electrical connections to adjacent busway sections.

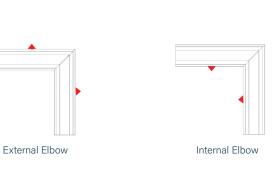
Weight 32 lbs





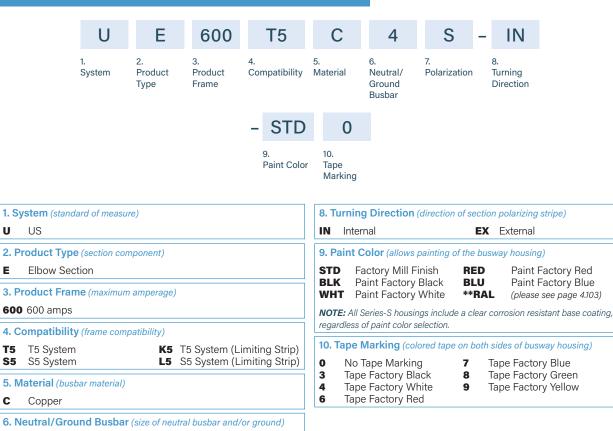
INTERNAL ELBOW

EXTERNAL ELBOW





ELBOW SECTIONS: PRODUCT NUMBERS



3 Phase plus Neutral plus

Internal Ground Conductor

G

7. Polarization (orientation of section for mating purposes)

EXAMPLES

3 Phase plus Neutral

Standard

4

S

UE600K5C4S-IN-STD7 = US System, Elbow Section, 600 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Factory Mill Finish, Factory Blue Tape Marking

<u>UE600T5CGS-EX-BLK0</u> = US System, Elbow Section, 600 amps, T5 System, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Black, No Tape Marking

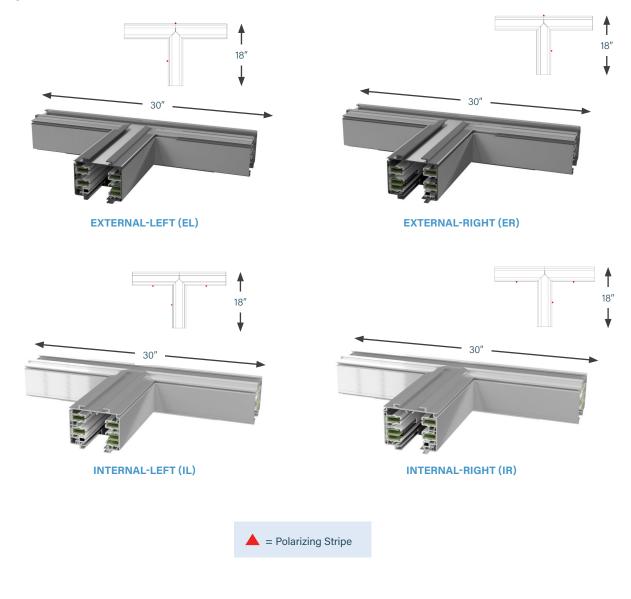


TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Weight 47.5 lbs



TEE SECTIONS: PRODUCT NUMBERS

| | | U | Т | 600 | T5 | С | 4 | S | - | IR | |
|---------|------------------------|--------------|-----------------------|------------------------|----------------------------------|------------------------|---------------------------------------|------------------|-----------|----------------------------|--------------------|
| | 1 S | System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polarizati | on | 8. Turning Direction | |
| | | | | | - STD | 0 | | | | | |
| | | | | | 9. Paint Color | 10. Tape Marking |] | | | | |
| 1. Sys | tem (standar | d of measu | re) | | | 8. Turni | ng Direction | (direction o | f sectio | n polarizing | stripe) |
| U | US | | | | | | ernal-Left ernal-Right | | EL ER | External- External- | |
| | oduct Type (| section con | nponent) | | | | Color (allows | painting of | | | • |
| Т | Tee Section | | | | | | Factory Mill I | | RED | | Factory Red |
| 3. Pro | duct Frame | e (maximum | amperage) | | | BLK | Paint Factory | / Black | BLU | Paint | Factory Blue |
| 600 (| 600 amps | | | | | | Paint Factory | | **RAL | () | see page 4.103) |
| 4. Co | mpatibility (| frame com | patibility) | | | | ll Series-S hous is of paint color | | a clear d | corrosion res | istant base coatii |
| | T5 System S5 System | | | | imiting Strip) imiting Strip) | 0 | e Marking (co | | n both : | sides of bus | way housing) |
| 5. Ma | terial (busba | r material) | | | | | o Tape Markin | | | ape Facto | |
| С | Copper | | | | | | pe Factory B pe Factory W | | | ape Facto ape Facto | |
| 6. Ne | utral/Groun | d Busbar | (size of neut | ral busbar and, | /or ground) | 6 Ta | pe Factory R | ed | | | |
| | 3 Phase plus | | G | 3 Phase plus | Ŭ / | | | | | | |
| 7. Pola | arization (or | ientation of | section for m | ating purposes | 5) | | | | | | |
| S S | Standard | | | | | | | | | | |

EXAMPLES

<u>UT600T5C4S-IR-RED0</u> = US System, Tee Section, 600 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking

<u>UT600K5CGS-EL-STD0</u> = US System, Tee Section, 600 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking



END FEED UNITS

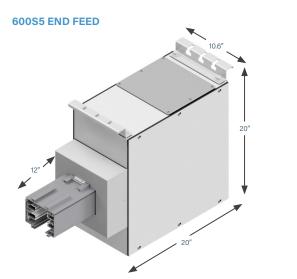
PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 1 foot section of busway. The assembly includes connection lugs and a ground lug for wires (2) 250MCM or up to 600MCM for standard size boxes and large size boxes.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately).

Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight (for standard size end feed) 52 lbs



| STANDARD BOX |
|--------------|
| |

| | | BOXES | |
|----------|----------|-------|-------|
| LUGS | Standard | Large | Fused |
| Standard | S | | |
| Double | | | |
| Bolt* | В | | |

*Bolt options include bolt, washer, nut. Lug not included.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>





STANDARD "S"

BOLT "B"

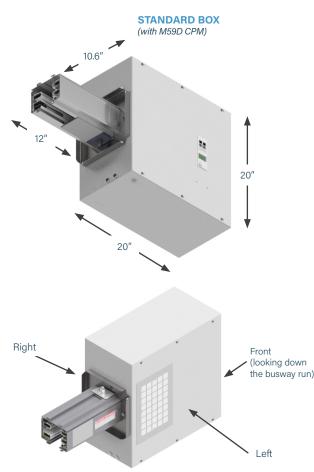


END FEED UNITS: METERING

PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable side, connected to a 1 foot section of busway. The assembly includes connection lugs and a ground lug for wires (2) 250MCM or up to 600MCM for standard size boxes and large size boxes.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



| AC | END | FEED | METER | OPTIONS |
|----|-----|------|-------|----------------|
| | | | | |

| M58 | Single Eth./WiFi, \leq 480V Y, \leq 277V Δ Single Eth./No WiFi, \leq 480V Y, \leq 277V Δ Dual Eth., \leq 480V Y, \leq 277V Δ Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ |
|--------|--|
| DC E | ND FEED METER OPTIONS |
| M61 | Single Eth./WiFi, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC |
| M63 | Single Eth./No WiFi, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC |
| M67 | Dual Eth., single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC |
| M69 | Dual Eth/Dual Modbus, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC |
| Sorioo | S Note: End Feed metering not currently offered for Series-S |

systems. For custom inquiries, please contact your Starline representative.

*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.66** End Feed Units: Product Numbers)



END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

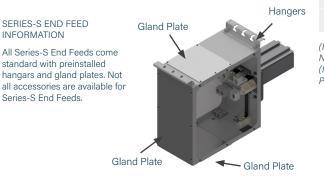
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

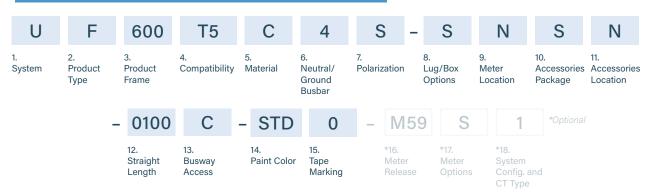
| IR transmissive polymer, UL 94B HB Rated |
|---|
| Stainless Steel 304 |
| Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| IP3x (T5); IP54 (S5) |
| 125°C |
| |
| 5"(127mm) x 7" (178mm) |
| 8" (203mm) x 12" (305mm) |
| |

(Refer to option 17. M50 Options on **page 4.67** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 4.66** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS



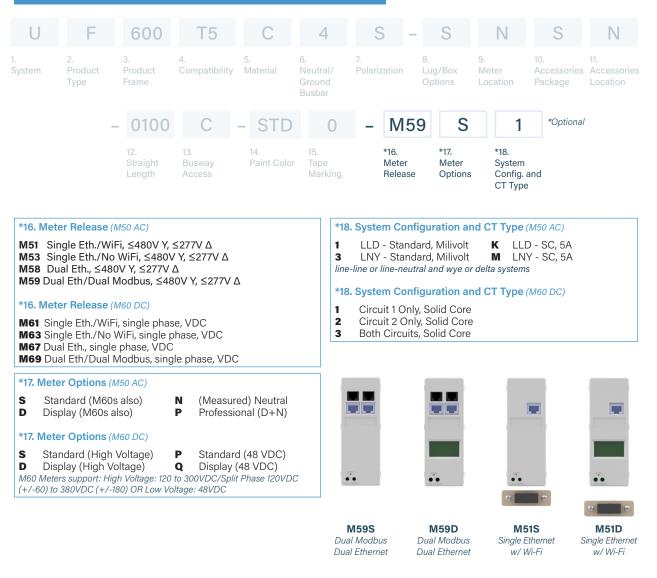
| 1. System (standard of measure) | 10. Accessories Package (optional accessories for feed units) |
|---|--|
| U US | T5 Options: |
| 2. Product Type (section component) F End Feed | SStandardB(C+F)CIR Window - CircularP(U+F)FEnd Feed Hanger & Gland Plates |
| 3. Product Frame (maximum amperage) | U Starline Rect. IR window, 8"x12" S5 Options: |
| 600 600 amps | F S5 Standard (includes hangars and gland plates) |
| 4. Compatibility (frame compatibility) | B S5 Standard + IR Window - Circular |
| T5 T5 System K5 T5 System (Limiting | Strip) 11. Accessories Location (from the terminal, side with accessory) |
| S5 S5 System L5 S5 System (Limiting | Strip) N None (N/A) R Right |
| 5. Material (busbar material) | |
| C Copper | 12. Straight Length (length of section) |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or grou | 0100 1 ft. (For other lengths, consult the factory) |
| 4 3 Phase plus Neutral G 3 Phase plus Neutral Internal Ground Con | l plus |
| 7. Polarization (orientation of section for mating purposes) | 14. Paint Color (allows painting of the busway housing) |
| S Standard R Reversed | STD Factory Mill Finish RED Paint Factory Red BLK Paint Factory Black BLU Paint Factory Blue |
| 8. Lug/Box Options (standard/double/bolt lugs and box size) | WHT Paint Factory White **RAL (please see page 4.103) |
| S Standard Lugs, Standard Box B Bolt Lugs, Standard | |
| 9. Meter Location (from the terminal, side with removable lid) | represents painted standard silver. |
| R Right L Left | 15. Tape Marking (colored tape on both sides of busway housing) |
| N None (N/A) | 0No Tape Marking7Tape Factory Blue3Tape Factory Black8Tape Factory Green4Tape Factory White9Tape Factory Yellow6Tape Factory Red9Tape Factory Yellow |

EXAMPLE

UF600T5C4R-SLSN-0102C-BLK0 = US System, End Feed, 600 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessories Location, 1 foot 2 inch Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



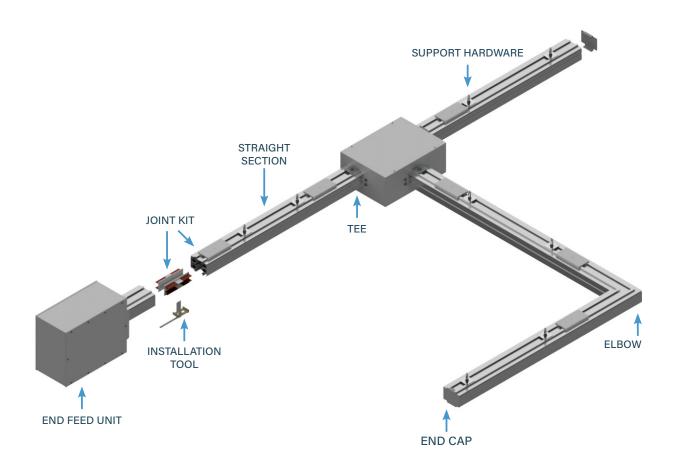
Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

<u>UF600T5C4R-SLSN-0102P-BLK0-M59S1</u> = US System, End Feed, 600 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard box, Left Meter Location, Standard Accessory Package, No Accessories Location, 1 foot 2 inch Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M59 Meter, Standard Meter Options, LLD - Standard, Milivolt



T5 SYSTEM LAYOUT DRAWING

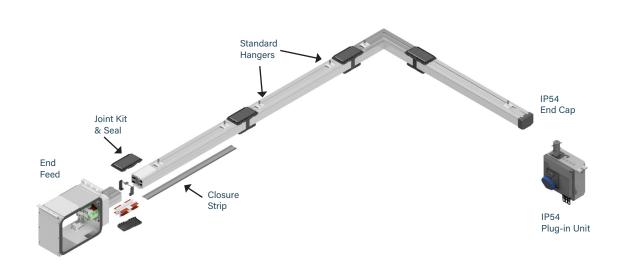


PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.

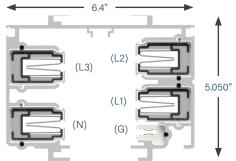


STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with you choice of copper or copperaluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of plug-in units. Housing configurations include 4-pole varieties, with optional isolated ground. The housing sections join together using Bus Connectors which fit into the channels of the adjoining section. An Installation Tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.





MATERIAL

Extruded Aluminum

Note: S5 housing includes corrosion resistant base coating

RATINGS

100% Ground Path 800 Amps, 600 Volt

LENGTH

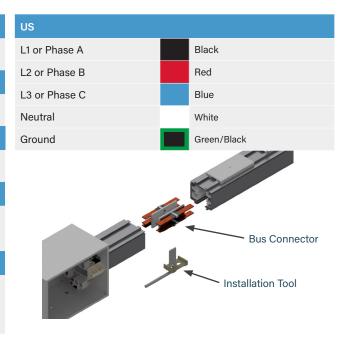
T5: 5 ft, Max 10 ft or custom lengths between 2 - 10 ft S5: 5 ft or 10 ft max. Consult factory for additional lengths

VOLTAGE DROP

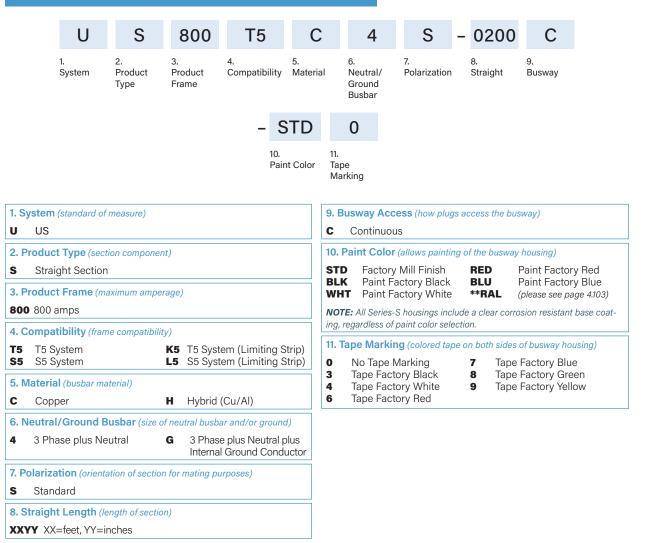
Distributed load Single Phase 1V per 15 ft (.8PF) Three Phase 1V per 25 ft (.8PF)

WEIGHT

10 ft 4 pole w/ standard ground: 204 lbs - Copper 10 ft 4 pole w/ standard ground: 142 lbs - Hybrid 10 ft 4 pole w/ copper ground: 215 lbs - Copper 10 ft 4 pole w/ copper ground: 152 lbs - Hybrid



STRAIGHT SECTIONS: PRODUCT NUMBERS



EXAMPLES

US800T5C4S-0500C-STD0 = US System, Straight Section, 800 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Factory Mill Finish, No Tape Marking

US800K5CGS-0206C-P013 = US System, Straight Section, 800 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Netural plus Internal Ground Connector, Standard Polarization, 2 foot 6 inch Straight Length, Painted RAL 1001, Factory Black Tape Marking



ELBOW SECTIONS

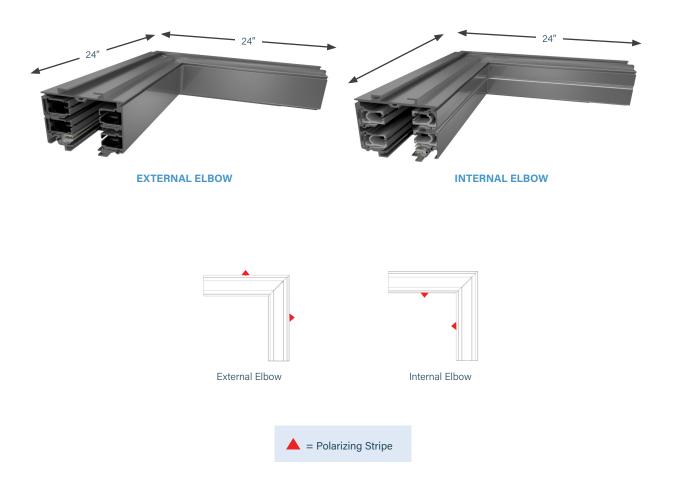
PRODUCT DESCRIPTION

An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

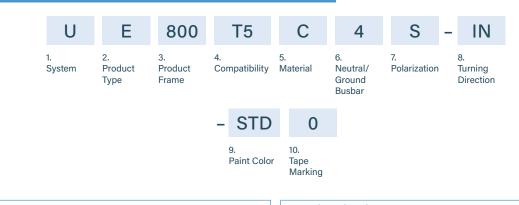
Connection Accessories

(Ordered Separately) A Joint Kit (**page 4.108**) is used to make mechanical and electrical connections to adjacent busway sections.

Weight 51 lbs - Hybrid



ELBOW SECTIONS: PRODUCT NUMBERS



| 1. System (standard of measure) | | 8. Turning Direction (direct | ion of section polarizing stripe) |
|--|--|---|--|
| U US | | IN Internal | EX External |
| 2. Product Type (section compone | ent) | 9. Paint Color (allows paintin | g of the busway housing) |
| E Elbow Section | | STD Factory Mill Finish | RED Paint Factory Red |
| 3. Product Frame (maximum amp | erage) | BLK Paint Factory Black WHT Paint Factory White | |
| 800 800 amps | | NOTE: All Series-S housings inc | clude a clear corrosion resistant base coat- |
| 4. Compatibility (frame compatibi | ity) | ing, regardless of paint color sel | ection. |
| T5 T5 System | K5 T5 System (Limiting Strip) | 10. Tape Marking (colored ta | ape on both sides of busway housing) |
| S5 S5 System | L5 S5 System (Limiting Strip) | No Tape Marking Tage Factors Disclo | 7 Tape Factory Blue |
| 5. Material (busbar material) | | 3 Tape Factory Black4 Tape Factory White | 8 Tape Factory Green9 Tape Factory Yellow |
| C Copper | H Hybrid (Cu/Al) | 6 Tape Factory Red | |
| 6. Neutral/Ground Busbar (size | of neutral busbar and/or ground) | | |
| 4 3 Phase plus Neutral | G 3 Phase plus Neutral plus Internal Ground Conductor | | |
| 7. Polarization (orientation of secti | on for mating purposes) | | |
| Chanadanal | | | |

S Standard

EXAMPLES

UE800K5C4S-IN-STD7 = US System, Elbow Section, 800 amps, T5 System-K5 Limiting Strip, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Factory Mill Finish, Factory Blue Tape Marking

UE800T5CGS-EX-BLK0 = US System, Elbow Section, 800 amps, T5 System, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Black, No Tape Marking

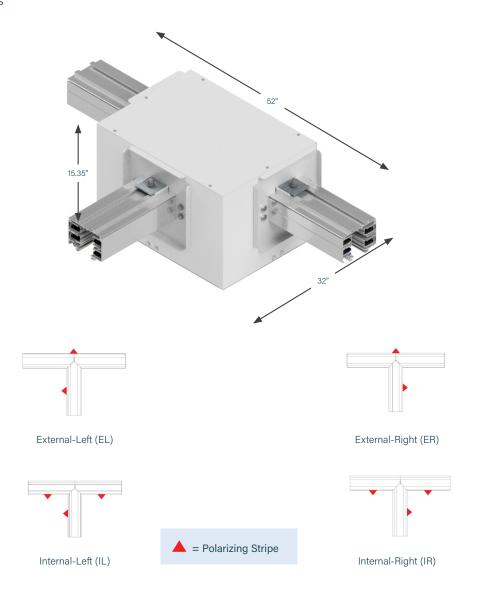


TEE SECTIONS

PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector (ordered separately). This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Weight 180 lbs



TEE SECTIONS: PRODUCT NUMBERS

| | | U | Т | 800 | T5 | С | 4 | S | - | IR | |
|----------|------------------------|---------------|-----------------------|-------------------------------|----------------------------------|------------------------|---------------------------------------|----------------|------------|----------------------------|-----------------------------|
| | | 1. System | 2. Product Type | 3. Product Frame | 4. Compatibility | 5. Material | 6. Neutral/ Ground Busbar | 7. Polariza | tion | 8. Turning Direction | |
| | | | | | - STD | 0 | | | | | |
| | | | | | 9. Paint Color | 10. Tape Marking | 9 | | | | |
| 1. Sy | stem (standa | rd of measur | re) | | | 8. Turni | ng Directior | (direction | of sectio | n polarizing | stripe) |
| U | US | | | | | | ernal-Left ernal-Right | | | External- External- | |
| 2. Pr | oduct Type | (section com | nponent) | | | | 0 | | | | 0 |
| Т | Tee Section | 1 | | | | | Color (allows | | | | |
| 3. Pr | oduct Fram | e (maximum | amperage) | | | | Factory Mill Paint Factory | | RED BLU | | Factory Red Factory Blue |
| 800 | 800 amps | | | | | WHT | Paint Factor | / White | **RAI | (please | see page 4.103) |
| 4. Co | mpatibility | (frame comp | oatibility) | | | | ll Series-S hous rdless of paint (| | | corrosion re | sistant base coa |
| T5 S5 | T5 System S5 System | | | | imiting Strip) imiting Strip) | | e Marking (co | | | sides of bus | way housing) |
| 5. Ma | aterial (busba | ar material) | | | | | o Tape Marki | | | ape Facto | |
| с | Copper | | н | Hybrid (Cu/A | d) | 4 Ta | pe Factory B pe Factory V | /hite | | ape Facto ape Facto | |
| 6. Ne | eutral/Grou | nd Busbar | (size of neut | ral busbar and, | /or ground) | 6 Ta | pe Factory R | ed | | | |
| 4 | 3 Phase plu | s Neutral | G | 3 Phase plus Internal Grou | Neutral plus nd Conductor | | | | | | |
| 7. Po | larization (o | rientation of | section for n | nating purposes | s) | | | | | | |
| s | Standard | | | | | | | | | | |

EXAMPLES

<u>UT800T5H4S-IR-RED0</u> = US System, Tee Section, 800 amps, T5 System, Hybrid Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking

<u>UT800K5HGS-EL-STD0</u> = US System, Tee Section, 800 amps, T5 System-K5 Limiting Strip, Hybrid Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking

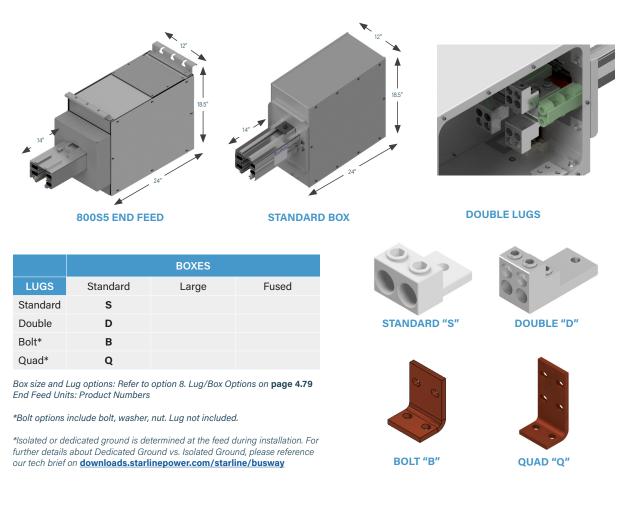


END FEED UNITS

PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a 18.5 x 24 x 12 inch steel junction box, with removable side, connected to an 14 inch section of busway. Certain assemblies include ground lugs for wires up to 350MCM and connection lugs that can handle up to (2) 600MCM wires (CU) or (2) 600MCM wires (AL). Reverse end feed units are for connection to the opposite end of the busway section (polarizing strip faces to right as viewed from end of unit). Junction box is sized such that one or two 4 inch conduits can be installed in the end of the box.End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately). Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight 84.5 lbs

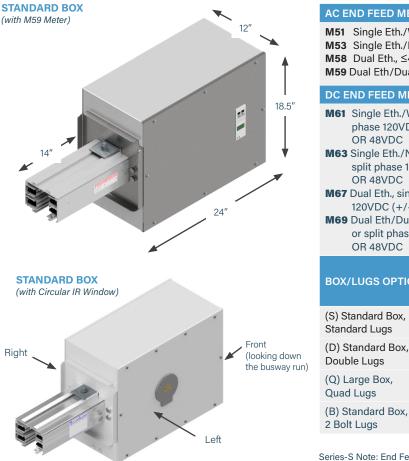




END FEED UNITS: METERING

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a 18.5 x 24 x 12 inch steel junction box, with removable sides, connected to a 14 inch section of busway. Certain assemblies include ground lugs for wires up to 350MCM and connection lugs that can handle up to (2) 600MCM wires (CU) or (2) 600MCM wires (AL). Reverse end feed units are for connection to the opposite end of the busway section (polarizing strip faces to right as viewed from end of unit). Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



AC END FEED METER OPTIONS

| M53 Single Eth./No W M58 Dual Eth., ≤480V M59 Dual Eth/Dual Mo | I Single Eth./WiFi, ≤480V Y, ≤277V Δ 3 Single Eth./No WiFi, ≤480V Y, ≤277V Δ 8 Dual Eth., ≤480V Y, ≤277V Δ 9 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ | | | | | |
|--|--|---|---|--|--|--|
| DC END FEED METER | ROPTIONS | | | | | |
| M61 Single Eth./WiFi, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M63 Single Eth./No WiFi, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M67 Dual Eth., single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M69 Dual Eth/Dual Modbus, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC M69 Dual Eth/Dual Modbus, single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC | | | | | | |
| BOX/LUGS OPTION Accessory Accessory (opposite lids) lid) | | | | | | |
| (S) Standard Box, Standard Lugs | Y X X X | | | | | |
| (D) Standard Box, Double Lugs | х | х | х | | | |
| (Q) Large Box, Quad Lugs | х | х | х | | | |
| | | | | | | |

Series-S Note: End Feed metering not currently offered for Series-S systems. For custom inquiries, please contact your Starline representative.

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*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on page 4.79 End Feed Units: Product Numbers)

Х

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END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

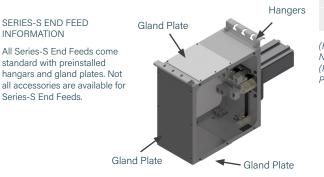
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

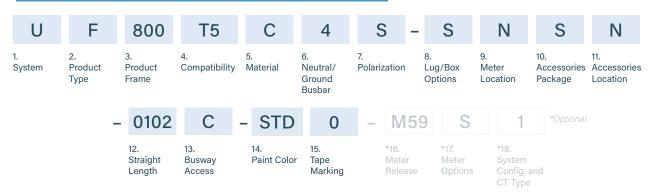
| GENERAL SPECIFICATIONS | |
|---------------------------|---|
| Viewing Material | IR transmissive polymer, UL 94B HB Rated |
| Structural Mesh Material | Stainless Steel 304 |
| Body Material | Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| Ingress Protection | IP3x (T5); IP54 (S5) |
| Max Operating Temperature | 125°C |
| WINDOW DIMENSIONS | |
| End Feeds: 400A and Below | 5" (127mm) x 7" (178mm) |
| End Feeds: 500A and Above | 8" (203mm) x 12" (305mm) |
| | |

(Refer to option 17. M50 Options on **page 4.80** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 4.79** End Feed Units: Product Numbers)



END FEED UNITS: PRODUCT NUMBERS



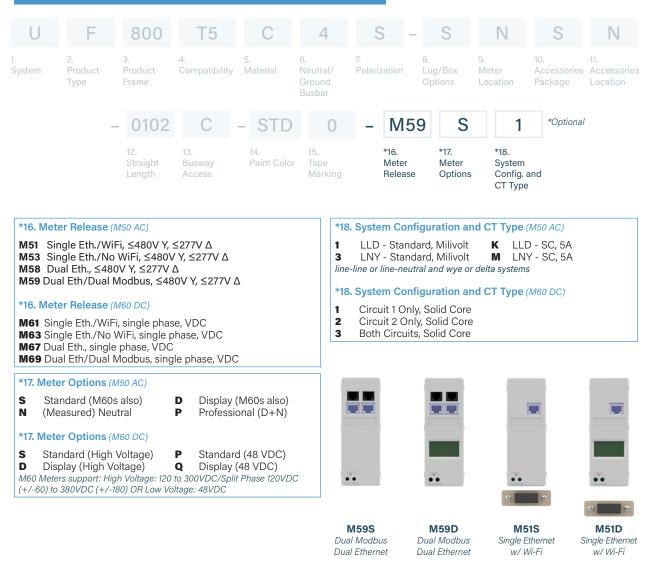
| U US 2. Product Type (section component) F F End Feed 3. Product Frame (maximum amperage) B00 800 amps 800 800 amps S Standard B (C+F) C IR Window - Circular P (U+F) F End Feed S Standard B (C+F) Solo 800 amps S Standard (includes hangars and gland plates) S Standard + IR Window - Circular 4. Compatibility (frame compatibility) T5 System K5 T5 System (Limiting Strip) 5. Material (busbar material) C C Copper H Hybrid (Cu/AI)Strip) 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 12. Straight Length (length of section) Oto2 14 inches (For other lengths, consult the factory) 13. Busway Access C Continuous C Continuous 7. Polarization (orientation of section for mating purposes) S Standard M R Reversed BLU NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. 8. Lug/Box Options (standard/double/bot lugs, and box size) MOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" 8. Boit Lugs, Standard Box Q Quad lugs, Large box 15. Tape Marking T | | |
|---|---|--|
| S Standard B (C+F) C IR Window - Circular P (U+F) F End Feed IR Window - Circular P (U+F) S End Feed Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" S Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" S Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" S Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" S Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" S Standard the S Starline Rect. IR window, 8"x12" Starline Rect. IR window, 8"x12" S Standard the S Starline Rect. IR window - Circular In Accessories Location (from the terminal, side with accessory) N None (N/A) R Right L Left F Front (consult the factory) I I. Accessories Location (from the terminal, side with removable lid) R Repersed Standard lugs, Standard box D Double lugs, Standard box <t< td=""><td>1. System (standard of measure)</td><td>10. Accessories Package (optional accessories for feed units)</td></t<> | 1. System (standard of measure) | 10. Accessories Package (optional accessories for feed units) |
| 2. Product Type (section component) F End Feed 3. Product Frame (maximum amperage) 800 800 amps 4. Compatibility (frame compatibility) 75 T5 System K5 T5 System (Limiting Strip) 55 S5 System L5 S5 System (Limiting Strip) 5. Material (busbar material) C Opper C Copper H Hybrid (Cu/Al)Strip) 5. Neutral/Ground Busbar (size of neutral busbar and/or ground) 12. Straight Length (length of section) 9. Neutral/Ground Busbar (size of neutral busbar and/or ground) 13. Busway Access 6. Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) Standard lugs, Standard box D Q Quad lugs, Large box 8. Meter Location (from the terminal, side with removable lid) R Right L Left 8. Right N None (N/A) L Left 8. Right N None (N/A) L Left 9. None (N/A) R Tape Factory Black B Tape Factory Slack B Tape Factory Slack B Tape Factory Velicw 9. None (N/A) R Right L Left 9. None (N/A) R Paint Factory Velicw | U US | |
| U Starline Rect. IŘ window, 8"x12" 3. Product Frame (maximum amperage) S5 Options: 800 800 amps F 4. Compatibility (frame compatibility) F 75 T5 System K5 T5 System (Limiting Strip) 55 S5 System L5 S5 System (Limiting Strip) 5. Material (busbar material) T C Copper H Hybrid (Cu/Al)Strip) 5. Neutral/Ground Busbar (size of neutral busbar and/or ground) 4 3 Phase plus Neutral G 3 Phase plus Neutral forund Conductor 7. Polarization (orientation of section for mating purposes) S Standard lugs, Standard box B. Lug/Box Options (standard/double/bolt lugs and box size) S. Standard lugs, Standard Box Q Quad lugs, Large box B. Boit Lugs, Standard Box Q Quad lugs, Large box B. Meter Location (from the terminal, side with removable lid) R Right L Left None (N/A) S Tape Factory Bluck S Might L Left None (N/A) S Tape Factory Bluck <td>2. Product Type (section component)</td> <td> ()</td> | 2. Product Type (section component) | () |
| 3. Product Frame (maximum amperage) S5 Options: 800 800 amps S5 Options: 4. Compatibility (frame compatibility) F S5 Standard (includes hangars and gland plates) B S5 Standard Linet (includes hangars and gland plates) B S5 Standard + IR Window - Circular 1. Accessories Location (from the terminal, side with accessory) N None (N/A) R Right L Left F Front (consult the factory) 12. Straight Length (length of section) O102 14 inches (For other lengths, consult the factory) 13. Busway Access C Continuous 7. Polarization (orientation of section for mating purposes) S Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) Double lugs, Standard box Q Quad lugs, Large box 9. Meter Location (from the terminal, side with removable lid) NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. 9. Meter Location (from the terminal, side with removable lid) NOT ape Marking (colored tape on both sides of busway housing) 9. Tape Factory Bluck 8 Tape Factory Bluck 9. Tape Factory Vellow 9 Tape Factory Yellow | F End Feed | |
| B00 800 amps 4. Compatibility (frame compatibility) 7. Polarization (orientation of section for mating purposes) S Standard S Standard lugs, Standard box D Double lugs, Standard box B Double lugs, Standard box B Double lugs, Standard box B Double lugs, Standard box C Q uad lugs, Large box | 3. Product Frame (maximum amperage) | |
| If 5 T5 System K5 T5 System (Limiting Strip) S5 S5 System L5 S5 System (Limiting Strip) S. Material (busbar material) C Copper H Hybrid (Cu/Al)Strip) S. Neutral/Ground Busbar (size of neutral busbar and/or ground) R 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor 7. Polarization (orientation of section for mating purposes) S Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) D Double lugs, Standard box Q Quad lugs, Large box 9. Meter Location (from the terminal, side with removable lid) R Right L Left R Right L Left Tape Factory Black Tape Factory Blue 9. None (N/A) Tape Factory White 9 Tape Factory Slack 8 Tape Factory Slack | 800 800 amps | |
| S5 S6 S7 D Double lugs, S1 S7 D S7 Factory S1 BLK Paint Factory Black BLU Paint Factory Blue S7 Paint Factory S1 S7 Paint Factory S1 S6 S7 S7 S7 S7 D S7 D S7 | 4. Compatibility (frame compatibility) | 11. Accessories Location (from the terminal, side with accessory) |
| C Copper H Hybrid (Cu/Al)Strip) 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 12. Straight Length (length of section) 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 13. Busway Access 6. Neutral of a 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor 7. Polarization (orientation of section for mating purposes) C C continuous 8. Lug/Box Options (standard/double/bolt lugs and box size) Standard lugs, Standard box Paint Factory Black 8. Lug/Sox Options (standard double/bolt lugs, standard box D Double lugs, Standard box Paint Factory Black 9. Meter Location (from the terminal, side with removable lid) L Left 15. Tape Marking (colored tape on both sides of busway housing) 9. Meter Location (N/A) L Left 15. Tape Factory Black 8 Tape Factory Blue | | |
| C Copper H Hybrid (Cu/Al)Strip) 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 6 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor 7. Polarization (orientation of section for mating purposes) S Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) S Standard lugs, Standard box D Double lugs, Standard box D 9. Meter Location (from the terminal, side with removable lid) L Left 15. Tape Marking (colored tape on both sides of busway housing) 9. Meter Location (IN/A) L Left 15. Tape Factory Black 8 Tape Factory Black 8 Tape Factory Black 8 Tape Factory Stendard | 5. Material (busbar material) | 12 Straight Length (length of section) |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) 4 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor 7. Polarization (orientation of section for mating purposes) S Standard R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) S Standard lugs, Standard box B Bolt Lugs, Standard Box Q Quad lugs, Large box 9. Meter Location (from the terminal, side with removable lid) R Right L Left None (N/A) 13. Busway Access C Continuous 14. Paint Color (allows painting of the busway housing) STD Factory Mill Finish BLU Paint Factory Black Meter Location (from the terminal, side with removable lid) None (N/A) | C Copper H Hybrid (Cu/Al)Strip) | |
| 4 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor 7. Polarization (orientation of section for mating purposes) R Reversed 8. Lug/Box Options (standard/double/bolt lugs and box size) Standard lugs, Standard box Paint Factory Black 8. Lug/Sox Options (standard/double/bolt lugs and box size) D Double lugs, Standard box Paint Factory White 8. Meter Location (from the terminal, side with removable lid) L Left 15. Tape Marking (colored tape on both sides of busway housing) 9. Meter Location (N/A) Tape Factory Black Tape Factory Black Tape Factory Black | 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | |
| Standard R Reversed S. Lug/Box Options (standard/double/bolt lugs and box size) Standard lugs, Standard box D Double lugs, Standard box D Double lugs, Standard box Paint Factory Black BLU **RAL Paint Factory Blue (please see page 4.103) S. Standard lugs, Standard box D Double lugs, Standard box Q Quad lugs, Large box NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. Paint Factory Blue (please see page 4.103) B. Meter Location (from the terminal, side with removable lid) L Left 15. Tape Marking (colored tape on both sides of busway housing) O No Tape Marking 7 Tape Factory Blue 3 3 Tape Factory Black 8 Tape Factory Blue 4 Tape Factory White 9 Tape Factory Stellew | | |
| BLK Paint Factory Black BLU Paint Factory Blue 8. Lug/Box Options (standard/double/bolt lugs and box size) BLK Paint Factory Black BLU Paint Factory Blue 8. Lug/Box Options (standard/double/bolt lugs and box size) Double lugs, Standard box D Double lugs, Standard box NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" 8. Bolt Lugs, Standard Box Q Quad lugs, Large box NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" 9. Meter Location (from the terminal, side with removable lid) L Left 15. Tape Marking (colored tape on both sides of busway housing) 0 No Tape Marking 7 Tape Factory Blue 3 Tape Factory Black 8 Tape Factory Green 4 Tape Factory White 9 Tape Factory Yellow | 7. Polarization (orientation of section for mating purposes) | 14. Paint Color (allows painting of the busway housing) |
| S Standard lugs, Standard box D Double lugs, Standard box Q Duble lugs, Standard box Q B Bolt Lugs, Standard Box Q Quad lugs, Large box D Meter Location (from the terminal, side with removable lid) R Right Luft None (N/A) L L Left 3 Tape Factory Black 4 Tape Factory White 9 Tape Factory Yellow | S Standard R Reversed | |
| B Bolt Lugs, Standard Box Q Quad lugs, Large box represents painted standard silver. 9. Meter Location (from the terminal, side with removable lid) Image: Colored tape on both sides of busway housing) 0 None (N/A) Image: Colored tape on both sides of busway housing) 0 No Tape Marking 7 15. Tape Marking 7 Tape Factory Blue 3 Tape Factory Black 8 4 Tape Factory White 9 7 Tape Factory Yellow | 8. Lug/Box Options (standard/double/bolt lugs and box size) | WHT Paint Factory White **RAL (please see page 4.103) |
| R Right L Left N None (N/A) 0 No Tape Marking 3 Tape Factory Black 4 Tape Factory White 9 Tape Factory Yellow | | |
| None (N/A) 3 Tape Factory Black 8 Tape Factory Green 4 Tape Factory White 9 Tape Factory Yellow | 9. Meter Location (from the terminal, side with removable lid) | 15. Tape Marking (colored tape on both sides of busway housing) |
| | J | 3 Tape Factory Black 8 Tape Factory Green |
| | | |

EXAMPLE

UF800T5C4R-SLSN-0102C-BLK0 = US System, End Feed, 800 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization- Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessories Location, 1 foot 2 inch Straight Length, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

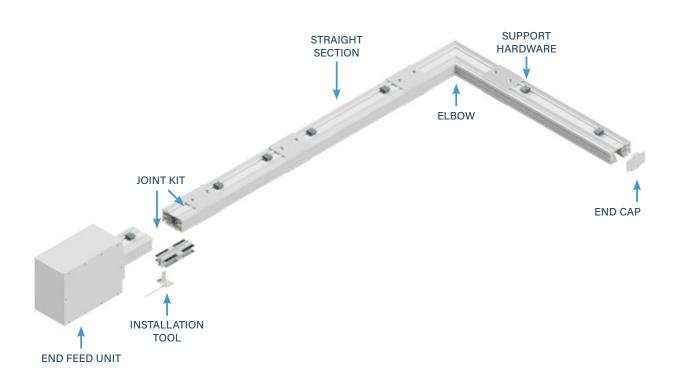
EXAMPLE

UF800T5C4R-SLSN-0102C-BLK0-M47S1 = US System, End Feed, 800 amps, T5 System, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization-Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessories Location, 1 foot 2 inch Straight Length, Painted Factory Black, No Tape Marking, 47 Meter, Standard Meter Options, LLD - Standard, Milivolt



1000T5/S5 SYSTEMS

T5 SYSTEM LAYOUT DRAWING

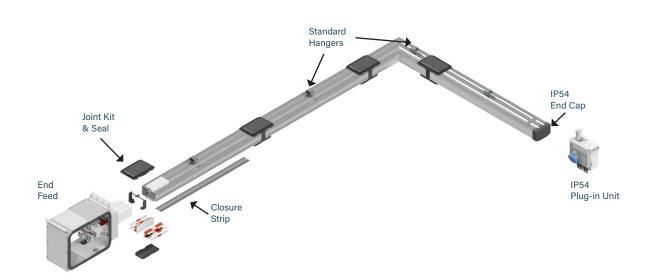


PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

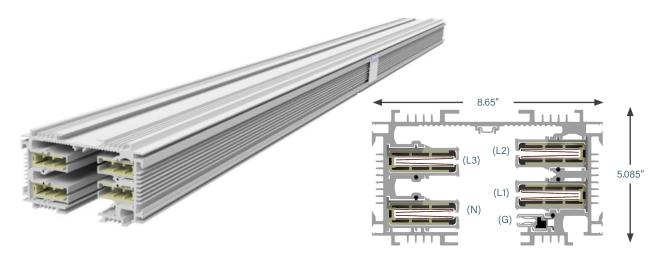
For further information on applicable S5 plug-in unit options, please visit the **Plug-In Units** section.



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with you copper-aluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of plugin units. Housing configurations include 4-pole varieties, with optional isolated ground. The housing sections join together using Bus Connectors which fit into the channels of the adjoining section. An Installation Tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.



MATERIAL

Extruded Aluminum Note: S5 housing includes corrosion resistant base coating

RATINGS

100% Ground Path 1000 Amps 600 Volt

LENGTH

T5: 5 ft, 10 ft max. Custom lengths between 2 - 10 ft S5: 5 ft, 10 ft max. Consult factory for additional lengths

VOLTAGE DROP

Distributed load Single Phase 1V per 15 ft (.8PF) Three Phase 1V per 25 ft (.8PF)

WEIGHT

10 ft 4 pole w/ standard ground: 195.5 lbs - Hybrid 10 ft 4 pole w/ copper ground: 210 lbs - Hybrid

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |

STRAIGHT SECTIONS: **PRODUCT NUMBERS** U S 1K0 **T**5 н 4 S 0200 С 2. 3. 4. 5. 6. 8. 9. 1. 7. Product Product Compatibility Material Polarization System Neutral/ Straight Busway Frame Ground Туре Busbar 0 STD 10, 11. Paint Color Tape Marking

| 1. System (standard of measure) | 9. Busway Access (how plugs access the busway) | | | |
|---|--|--|--|--|
| U US | C Continuous | | | |
| 2. Product Type (section component) | 10. Paint Color (allows painting of the busway housing) | | | |
| S Straight Section | STD Factory Mill Finish RED Paint Factory Red | | | |
| 3. Product Frame (maximum amperage) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 4.103) | | | |
| 1K0 1000 amps | NOTE: All Series-S housings include a clear corrosion resistant base coat- | | | |
| 4. Compatibility (frame compatibility) | ing, regardless of paint color selection. | | | |
| T5T5 SystemK5T5 System (Limiting Strip)S5S5 SystemL5S5 System (Limiting Strip) | 11. Tape Marking (colored tape on both sides of busway housing)0 None | | | |
| 5. Material (busbar material) | | | | |
| H Hybrid (Cu/Al) | | | | |
| 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | | | | |
| 4 3 Phase plus Neutral G 3 Phase plus Neutral plus Internal Ground Conductor | | | | |
| 7. Polarization (orientation of section for mating purposes) | | | | |
| S Standard | | | | |
| 8. Straight Length (length of section) | | | | |
| XXYY XX=feet, YY=inches | | | | |

EXAMPLES

US1K0K5HGS-1000C-C010 = US System, Straight Section, 1000 amps, T5 System, Hybrid, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Factory Mill Finish, No Tape Marking

<u>US1K0K5HGS-1000R-C010</u> = US System, Straight Section, 1000 amps, T5 System-K5 Limiting Strip, Hybrid, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 10 foot Straight Length, Painted RAL 1001, No Tape Marking



ELBOW SECTIONS

PRODUCT DESCRIPTION

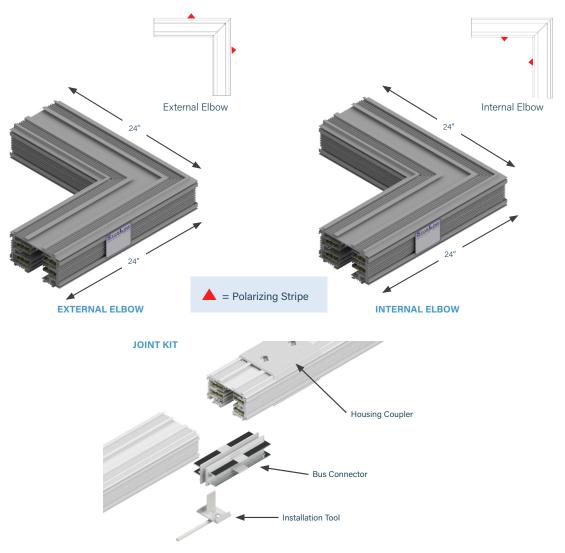
An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories

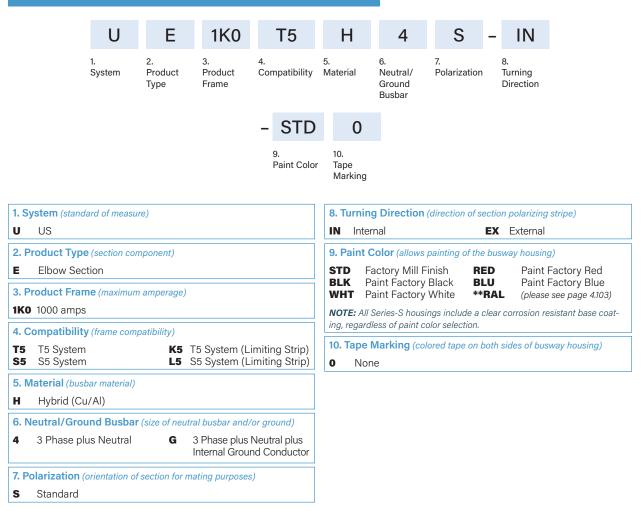
(Ordered Separately)

A Joint Kit (**page 4.108**) is used to make mechanical and electrical connections to adjacent busway sections.

Weight 77 lbs



ELBOW SECTIONS: PRODUCT NUMBERS



EXAMPLES

UE1K0K5H4S-IN-BLU0 = US System, Elbow Section, 1000 amps, T5 System-K5 Limiting Strip, Hybrid, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Blue, No Tape Marking

<u>UE1K0T5HGS-EX-STD0</u> = US System, Elbow Section, 1000 amps, T5 System, Hybrid, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Factory Mill Finish, No Tape Marking

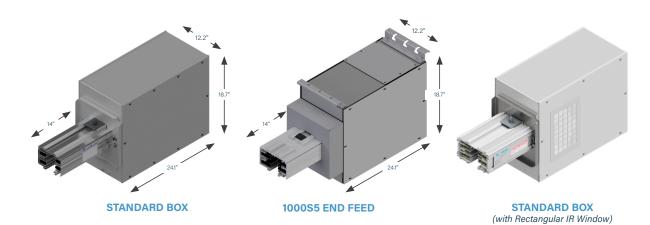


END FEED UNITS

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a 18.7 x 24.125 x 12.15 inch steel junction box that is removable for easier installation, also with removable side, connected to an 14 inch section of busway. Certain assemblies include ground lugs for wires up to 350MCM and mechanical lugs that can accommodate up to (4) 600MCM cables per phase. Compression lug capable feeds are available upon request. Reverse end feed units are for connection to the opposite end of the busway section (polarizing strip faces to right as viewed from end of unit). Junction box is sized such that three 4 inch conduits can be installed in the end of the box. End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately). Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight 100.5 lbs (76 lbs without busway stub)



| | | BOXES | |
|----------|----------|-------|-------|
| LUGS | Standard | Large | Fused |
| Standard | S | | |
| Double | | | |
| Bolt* | В | | |

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 4.90** End Feed Units: Product Numbers

*Bolt options include bolt, washer, nut. Lug not included.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>







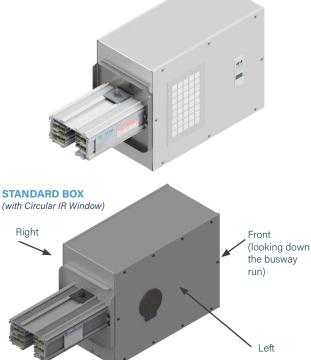
END FEED UNITS: METERING

PRODUCT DESCRIPTION

Factory assembled unit consists of a 18.7 x 24.125 x 12.15 inch steel junction box that is removable for easier installation, also with removable side, connected to an 14 inch section of busway. Certain assemblies include ground lugs for wires up to 350MCM and mechanical lugs that can accommodate up to (4) 600MCM cables per phase. Compression lug capable feeds are available upon request. Reverse end feed units are for connection to the opposite end of the busway section (polarizing strip faces to right as viewed from end of unit).

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.





AC END FEED METER OPTIONS

DC END FEED METER OPTIONS

- M61 Single Eth./WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M63 Single Eth./No WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M67 Dual Eth., single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M69 Dual Eth/Dual Modbus, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC

| BOX/LUGS OPTION | 1 Meter or Accessory | 1 Meter & 1 Accessory (opposite lids) | 1 Meter & 1 Accessory (same lid) |
|------------------------------------|-------------------------|--|---|
| (S) Standard Box, Standard Lugs | х | Х | x |
| (B) Standard Box, Bolt Lugs | Х | Х | х |

Series-S Note: End Feed metering not currently offered for Series-S systems. For custom inquiries, please contact your Starline representative.

*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.90** End Feed Units: Product Numbers)



END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

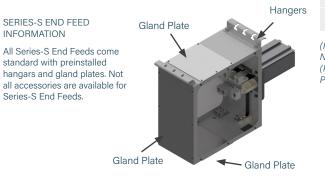
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

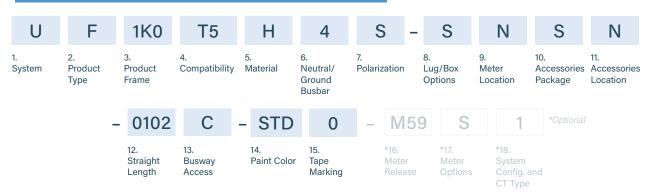
| transmissive polymer, UL IB HB Rated |
|---|
| ainless Steel 304 |
| owder Coated Steel or Alu- inum (matched to busway or ug-in unit color) |
| 3x (T5); IP54 (S5) |
| 5°C |
| |
| (127mm) x 7" (178mm) |
| (203mm) x 12" (305mm) |
| |

(Refer to option 17. Meter Options on **page 4.91** End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on **page 4.90** End Feed Units: Product Numbers)

Track Busway Product Selection Guide | T1-T5 US Systems

END FEED UNITS: PRODUCT NUMBERS



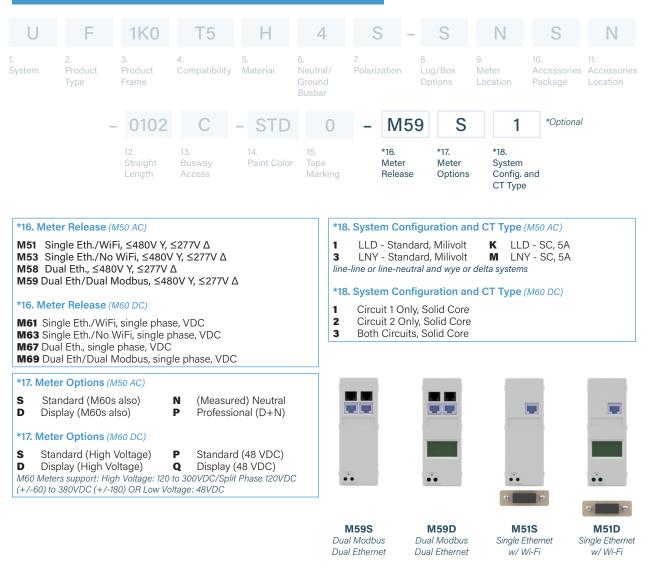
| 1. Sy | stem (standard of measure) | | 10. Accessories Package (optional accessories for feed units) | | | |
|--|---|--|--|--|--|--|
| U | US | | T5 Options: | | | |
| 2. Pr F | roduct Type (section component) End Feed | | SStandardB(C+F)CIR Window - CircularP(U+F)FEnd Feed Hanger & Gland Plates | | | |
| 3. Pr | roduct Frame (maximum amperage |) | U Starline Rect. IR window, 8"x12" | | | |
| 1K0 | 1000 amps | | S5 Options: F S5 Standard (includes hangars and gland plates) | | | |
| 4. Co | ompatibility (frame compatibility) | | B S5 Standard + IR Window - Circular | | | |
| T5 S5 | | T5 System (Limiting Strip) S5 System (Limiting Strip) | 11. Accessories Location (from the terminal, side with accessory) | | | |
| 5. M | aterial (busbar material) | | N None (N/A) R Right L Left F Front (consult the factory) | | | |
| н | Hybrid (Cu/Al)Strip) | | 12. Straight Length (length of section) | | | |
| 6. N | 6. Neutral/Ground Busbar (size of neutral busbar and/or ground) | | 0102 14 inches (For other lengths, consult the factory) | | | |
| 4 | 3 Phase plus Neutral G | 3 Phase plus Neutral plus Internal Ground Conductor | 13. Busway Access | | | |
| 7. Po | plarization (orientation of section for | mating purposes) | C Continuous | | | |
| S | Standard R | Reversed | 14. Paint Color (allows painting of the busway housing) | | | |
| | ug/Box Options (standard/double/ | Ŭ / | STD Factory Mill Finish RED Paint Factory Red BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 4.103) | | | |
| S | Standard lugs, Standard box B | Bolt lugs, Standard box | | | | |
| 9. Meter Location (from the terminal, side with removable lid) | | de with removable lid) | NOTE: All End Feed enclosures are painted. "STD Factory Mill Finish" represents painted standard silver. | | | |
| R N | Right L None (N/A) | Left | 15. Tape Marking (colored tape on both sides of busway housing) | | | |

EXAMPLE

<u>UFIK0T5H4R-SRLL-0102C-BLK0</u> = US System, End Feed, 1000 amps, T5 System, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot 2 inch Straight Length, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



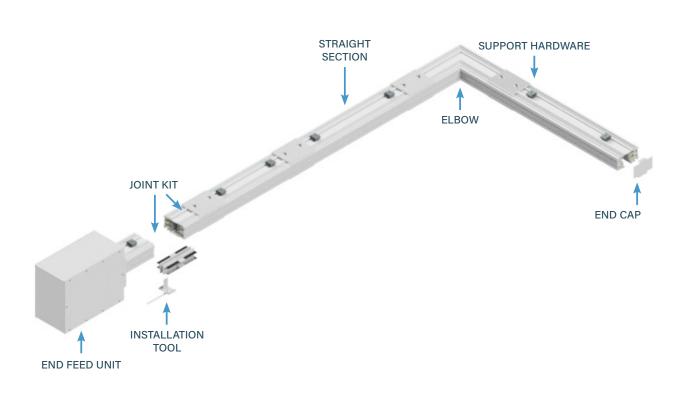
Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

UF1K0T5H4R-SRLL-0102C-BLK0-M59S1= US System, End Feed, 1000 amps, T5 System, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot 2 inch Straight Length, Painted Factory Black, No Tape Marking, M59 Meter, Standard Meter Options, LLD - Standard, 5 amp



T5 SYSTEM LAYOUT DRAWING

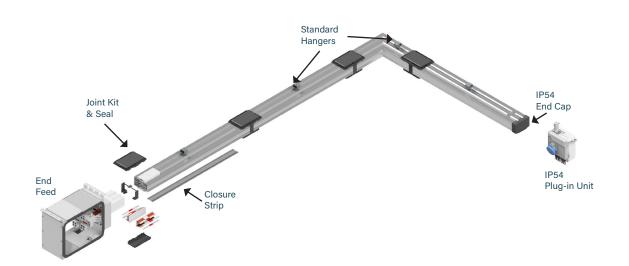


PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



S5 SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

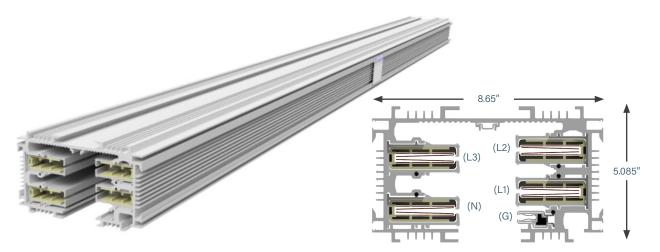
For further information on applicable T5 plug-in unit options, please visit the **Plug-In Units** section.



STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight section consists of an extruded aluminum shell with you copper-aluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% ground path. Each housing has a continuous access slot over its entire length for the insertion of plugin units. Housing configurations include 4-pole varieties, with optional isolated ground. The housing sections join together using Bus Connectors which fit into the channels of the adjoining section. An Installation Tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.



MATERIAL

Powder Coated Extruded Aluminum Note: S5 housing includes corrosion resistant base coating

RATINGS

100% Ground Path 1200 Amps 600 Volt

LENGTH

T5: 5 ft, 10 ft max. Custom lengths between 2 - 10 ft S5: 5 ft, 10 ft max. Consult factory for additional lengths

VOLTAGE DROP

Distributed load Single Phase 1V per 15ft (.8PF) Three Phase 1V per 25ft (.8PF)

WEIGHT

10 ft 4 pole w/ standard ground: 195.5 lbs - Hybrid 10 ft 4 pole w/ copper ground: 210 lbs - Hybrid

| US | |
|---------------|-------------|
| L1 or Phase A | Black |
| L2 or Phase B | Red |
| L3 or Phase C | Blue |
| Neutral | White |
| Ground | Green/Black |

С

1200 AMP SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS U S 1K2 T5 H 4 1. 2. 3. 4. 5. 6.

| 1. System | 2. Product Type | 3. Product Frame | 4. Compatibil | 5. ity Materia | I | 6. Neutral/ Ground Busbar | 7. Polarization | 8. Straight | 9. Busway |
|--------------|-----------------------|------------------------|------------------|--------------------|--------------------|------------------------------------|--------------------|----------------|--------------|
| | | | - | STD | | 0 | | | |
| | | | | 10. Paint Color | 11. Tape Mar | e king | | | |

S – 0200

| 1. System (standard of meas | sure) | 9. Busway Access (how plugs access the busway) |
|---|---|--|
| U US | | C Continuous |
| 2. Product Type (section co | omponent) | 10. Paint Color (allows painting of the busway housing) |
| S Straight Section | | STD Factory Mill Finish RED Paint Factory Red |
| 3. Product Frame (maximu | ım amperage) | BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL (please see page 4.103) |
| 1K2 1200 amps | | NOTE: All Series-S housings include a clear corrosion resistant base coat- |
| 4. Compatibility (frame con | npatibility) | ing, regardless of paint color selection. |
| T5 T5 System S5 S5 System | K5 T5 System (Limiting Strip)L5 S5 System (Limiting Strip) | |
| 5. Material (busbar material) |) | |
| H Hybrid (Cu/Al) | | |
| 6. Neutral/Ground Busba | ar (size of neutral busbar and/or ground) | 7 |
| 4 3 Phase plus Neutral | G 3 Phase plus Neutral plus Internal Ground Conductor | |
| 7. Polarization (orientation of | of section for mating purposes) |] |
| S Standard | | |
| 8. Straight Length (length | of section) | 7 |
| XXYY XX=feet, YY=inches | S | |

EXAMPLES

US1K2T5H4S-0500C-STD0 = US System, Straight Section, 1200 amps, T5 System, Hybrid, 3 Phase plus Neutral, Standard Polarization, 5 foot Straight Length, Painted Factory Silver, No Tape Marking

<u>US1K2K5HGS-0206C-P010</u> = US System, Straight Section, 1200 amps, T5 System-K5 Limiting Strip, Hybrid, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2 foot 6 inch Straight Length, Painted RAL 1001, No Tape Marking



ELBOW SECTIONS

PRODUCT DESCRIPTION

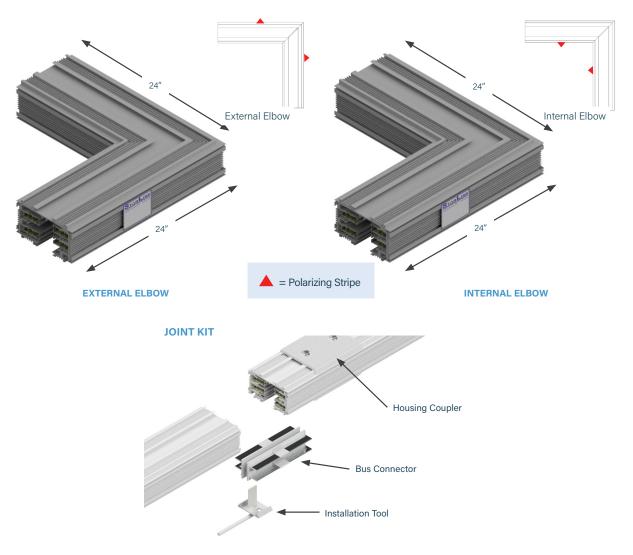
An Elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories

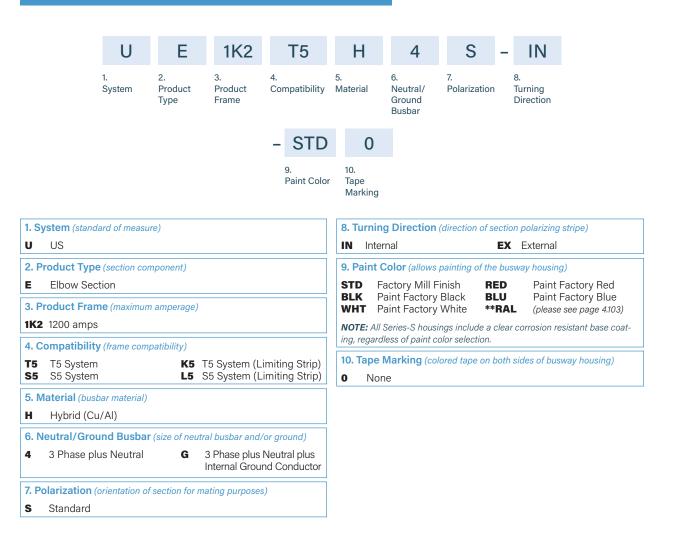
(Ordered Separately)

A Joint Kit (**page 4.108**) is used to make mechanical and electrical connections to adjacent busway sections.

Weight 77 lbs



ELBOW SECTIONS: PRODUCT NUMBERS



EXAMPLES

UE1K2K5H4S-IN-BLU0 = US System, Elbow Section, 1200 amps, T5 System-K5 Limiting Strip, Hybrid, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Blue, No Tape Marking

<u>UE1K2T5HGS-EX-STD0</u> = US System, Elbow Section, 1200 amps, T5 System, Hybrid, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Silver, No Tape Marking

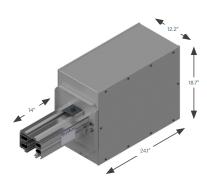


END FEED UNITS

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a 18.7 x 24.125 x 12.15 inch steel junction box that is removable for easier installation, also with removable side, connected to an 14 inch section of busway. Certain assemblies include ground lugs for wires up to 350MCM and mechanical lugs that can accommodate up to (4) 600MCM cables per phase. Compression lug capable feeds are available upon request. Reverse end feed units are for connection to the opposite end of the busway section (polarizing strip faces to right as viewed from end of unit). Junction box is sized such that three 4 inch conduits can be installed in the end of the box. End power feed units are connected to adjacent busway sections using a housing coupler and bus connector (ordered separately). Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

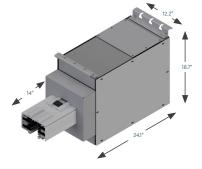
Weight 100.5 lbs (76 lbs without busway stub)



STANDARD BOX



STANDARD BOX (with Rectangular IR Window)



1200S5 END FEED

| | | BOXES | |
|----------|----------|-------|-------|
| LUGS | Standard | Large | Fused |
| Standard | S | | |
| Double | | | |
| Bolt | В | | |

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 4.101** End Feed Units: Product Numbers

*Bolt options include bolt, washer, nut. Lug not included.

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on <u>downloads.starlinepower.com/starline/busway</u>



STANDARD "S"



STANDARD "B"

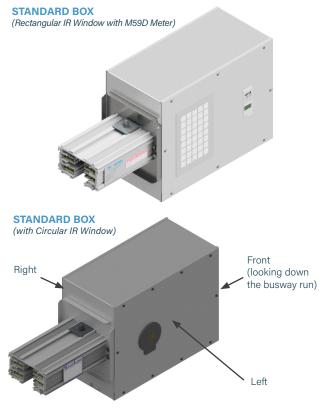


END FEED UNITS: METERING

PRODUCT DESCRIPTION

Factory assembled unit consists of a 18.7 x 24.125 x 12.15 inch steel junction box that is removable for easier installation, also with removable side, connected to an 14 inch section of busway. Certain assemblies include ground lugs for wires up to 350MCM and mechanical lugs that can accommodate up to (4) 600MCM cables per phase. Compression lug capable feeds are available upon request. Reverse end feed units are for connection to the opposite end of the busway section (polarizing strip faces to right as viewed from end of unit).

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M50 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.101** End Feed Units: Product Numbers)

AC END FEED METER OPTIONS

M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ
M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ
M58 Dual Eth., ≤480V Y, ≤277V Δ
M59 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ

DC END FEED METER OPTIONS

- M61 Single Eth./WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M63 Single Eth./No WiFi, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M67 Dual Eth., single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC
- M69 Dual Eth/Dual Modbus, single phase, 120VDC 300VDC or split phase 120VDC (+/-60VDC) to 380V(+/-190VDC) OR 48VDC

| BOX/LUGS OPTION | 1 Meter or Accessory | 1 Meter & 1 Accessory (opposite lids) | 1 Meter & 1 Accessory (same lid) |
|------------------------------------|-------------------------|--|---|
| (S) Standard Box, Standard Lugs | Х | Х | Х |
| (B) Standard Box, Bolt Lugs | Х | Х | х |

Series-S Note: End Feed metering not currently offered for Series-S systems. For custom inquiries, please contact your Starline representative."



END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

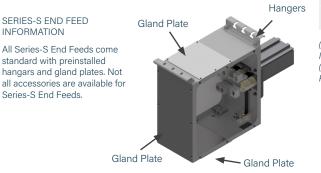
Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

Note: Rectangular IR window option not available for Series-S systems. See S5 end feed accessories package for more information.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

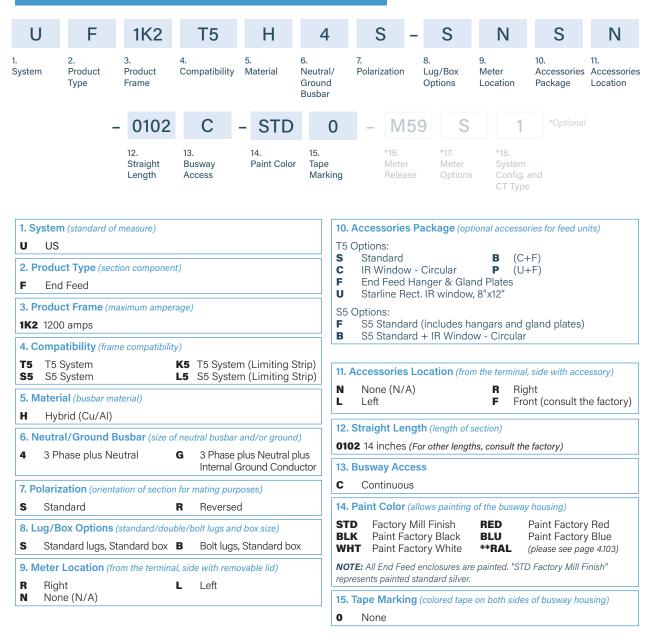
- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

| GENERAL SPECIFICATIONS | |
|---------------------------|---|
| Viewing Material | IR transmissive polymer, UL 94B HB Rated |
| Structural Mesh Material | Stainless Steel 304 |
| Body Material | Powder Coated Steel or Alu- minum (matched to busway or plug-in unit color) |
| Ingress Protection | IP3x (T5); IP54 (S5) |
| Max Operating Temperature | 125°C |
| WINDOW DIMENSIONS | |
| End Feeds: 400A and Below | 5" (127mm) x 7" (178mm) |
| End Feeds: 500A and Above | 8" (203mm) x 12" (305mm) |

(Refer to option 17. M50 Options on page 4.102 End Feed Units: Product Numbers)

(Refer to option 10. Accessories Package on page 4.101 End Feed Units: Product Numbers)

END FEED UNITS: PRODUCT NUMBERS

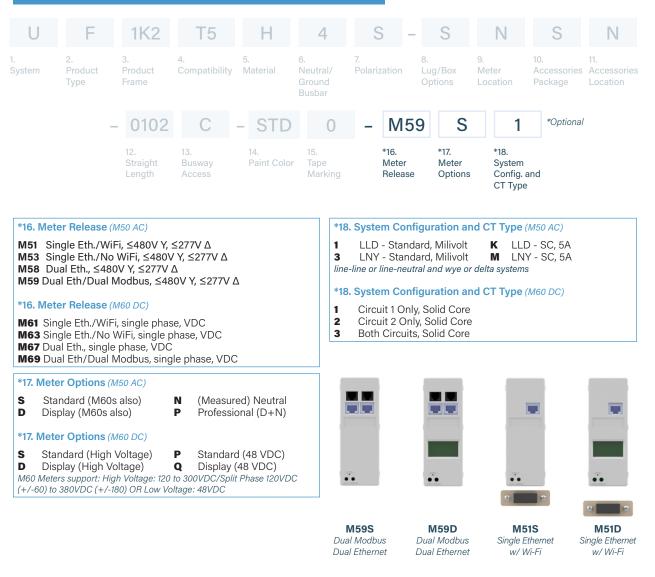


EXAMPLE

UF1K2T5H4R-SRLL-0102C-BLK0 = US System, End Feed, 1200 amps, T5 System, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot 2 inch Straight Length, Painted Factory Black, No Tape Marking



END FEED METERING: PRODUCT NUMBERS



Note: Series - S end feeds not currently equipped with power monitoring. Consult factory for details.

EXAMPLE

UF1K2T5H4R-SRLL-0102C-BLK0-M59S1 = US System, End Feed, 1200 amps, T5 System, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, 1 foot 2 inch Straight Length, Painted Factory Black, No Tape Marking, M59 Meter, Standard Meter Options, LLD - Standard, 5 amp



T5 SERIES

RAL COLORS

| 1ST CHAR | ACTER |
|-----------------|-------|
| Р | Paint |

| 2ND CHA | RACTER |
|---------|--------|
| 0 | 100 |
| 1 | 101 |
| 2 | 102 |
| 3 | 103 |
| 4 | 200 |
| 5 | 201 |
| Α | 300 |
| В | 301 |
| С | 302 |
| D | 303 |
| Е | 400 |
| F | 401 |
| G | 500 |
| н | 501 |
| J | 502 |
| К | 600 |
| L | 601 |
| М | 602 |
| Ν | 603 |
| Р | 700 |
| Q | 701 |
| R | 702 |
| S | 703 |
| т | 704 |
| U | 800 |
| V | 801 |
| W | 802 |
| х | 900 |
| Υ | 901 |
| Z | 902 |
| | |

| 3RD CHARACTER | | | | | | |
|---------------|---|--|--|--|--|--|
| 0 | 0 | | | | | |
| 1 | 1 | | | | | |
| 2 | 2 | | | | | |
| 3 | 3 | | | | | |
| 4 | 4 | | | | | |
| 5 | 5 | | | | | |
| 6 | 6 | | | | | |
| 7 | 7 | | | | | |
| 8 | 8 | | | | | |
| 9 | 9 | | | | | |
| | | | | | | |

4TH CHARACTER0

EXAMPLE:

P B 2 0 = Paint RAL 3012



ACCESSORIES: SUPPORT HARDWARE

THREADED ROD

For mounting to 1/2 - 13 UNC threaded rod (UBRHT5-1) or to 3/8 - 16 UNC (UBRHT5-2). Twist-in design. Can be inserted anywhere along the top fullaccess slot of busway. Maximum hanger support spacing is every 10 feet.

SEISMIC THREADED ROD

For mounting to 1/2 - 13 UNC threaded rod. Can be inserted anywhere along the top full-access slot of busway. Hangers are required every 10 feet maximum for seismic support.

STANDARD

For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top fullaccess slot on the busway. Hanger support is required every 10 feet maximum.

STANDARD ONE-PIECE, SLOTTED

For mounting to 1/2 - 13 UNC threaded rod. Can be inserted anywhere along the top full-access slot of busway. Hangers are required every 10 feet maximum.

WALL MOUNT BRACKET

For mounting to walls, using standard hangers. Hanger support is required everything 3 meters maximum. *Note:* All S3 Systems must be mounted in the standard vertical orientation Part Number (250, 400, 600, & 800 amp systems only): UBRHT5-1 UBRHT5-2 Available in plain zinc or black (-BLK) Weight .3 lb

Part Number (250, 400 & 600 amp systems only): US: UBRHT5-3 Available in plain zinc or black (-BLK) Weight .3 lb

Part Number (250, 400, 600 & 800 amp systems only): UBHT5-1 Available in plain zinc or black (-BLK) Weight .2 lb

Part Number (Required for 1000 and 1200A, available for all T5 systems.) UBSHT5-4 Available in plain zinc or black (-BLK) Weight .09 kg



Part Number WMBT5-9





ACCESSORIES: SUPPORT HARDWARE

RAISED MOUNTING BRACKET

For mounting the busway horizontally (with access slot facing to the side) for under floor applications. Pedestal not included.

Note: Not available for S5 Systems

SIDE MOUNT BRACKETS

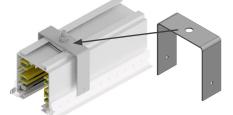
Mounted to vertical supports.

Note: Not available for S5 Systems

RECESSED SUSPENDED CEILINGS

For hanging busway into a recessed ceiling.

*Hanger bolt must be ordered separately



SRM250T5-1



SRM400T5-1



Part Number (250, 400, 600 & 800 amp systems only): URFBT5-2 Available in plain zinc or black (-BLK) Weight .2 lb

Part Number (250, 400, 600 & 800 amp systems only): UBSST5-1 Available in plain zinc or black (-BLK) Weight .2 lb

Part Numbers (for 250 and compact 400A systems): SRM250T5-1

(for 400 amp systems): SRM400T5-1

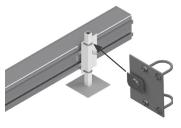
(for 600 amp systems): SRM600T5-1

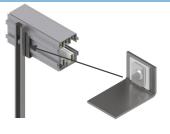
(for 800 amp systems): SRM800T5-1

(for 1000 amp systems): SRM1K0T5-1

(for 1200 amp systems): SRM1K2T5-1

Available in plain zinc or black (-BLK)









SRM1K0T5-1





ACCESSORIES: SUPPORT HARDWARE

PRODUCT DESCRIPTION

UNIVERSAL SERVER CABINET MOUNTING BRACKETS

The Universal Server Cabinet Mounting Brackets are designed with generous 3/8 inch wide through slots to mount directly onto virtually any server cabinet. Special versions for Legrand Nexpand cabinets are also available.

These accessories quickly and easily provide a flexible busway mounting solution on top of server cabinets, eliminating the need for threaded rod and strut support from the ceiling.

The brackets are adjustable in height, can be ordered in virtually any color, and can be positioned at any depth on the server cabinet. Moreover, they can accommodate up to 2 runs of 250 or 400 amp busway, and 1 run of 600, 800, 1000 or 1200 amp busway.

Hanger Bolt Included - UBHT5-1 (or MBHT5-1)



| MATERIAL | | | | | | |
|---|--|--|--|--|--|--|
| Galvanneal Steel | | | | | | |
| HEIGHT | | | | | | |
| 17.68" Min 23.75" Max Maximum Spacing: Every 10' per run | | | | | | |
| C: Color (1, 3, 4, 6, 7) | | | | | | |
| 1 Anodized Silver 6 Red 3 Black 7 Blue 4 White *consult factory for custom colors | | | | | | |
| Universal Part Number U.S: UUSCMB-(X)-(D)-(C) | | | | | | |
| Legrand Nexpand Part Number ULNCMB-(X)-45-(C) | | | | | | |
| X = System (T5) D = Depth (30", 36", 42", 48" or custom length) C = Color (1, 3, 4, 6, 7) | | | | | | |
| EXAMPLES | | | | | | |
| <u>UUSCMB-T5-36-4</u> = System, Universal Server Cabinet Mounting Bracket, T5 System, 36 inch Depth, White | | | | | | |
| <u>UUSCMB-T5-42-7</u> = US System, Universal Server Cabinet Mounting Bracket, T5 System, 42 inch Depth, Blue | | | | | | |



ACCESSORIES: CONNECTION HARDWARE

T5 & S5 JOINT KITS

| SYSTEM AMPERAGE | NEUTRAL/GROUNDBAR OPTION | T5 SERIES CATALOG # | S5 SERIES CATALOG # |
|--------------------|--|------------------------|------------------------|
| | 3 Phase plus Neutral | SJK250T5-1 | SJK250S5-1 |
| 250 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK250T5G-1 | SJK250S5G-1 |
| 250 | 3 Phase plus 200% Neutral | SJK250T5N-1 | SJK250S5N-1 |
| | 3 Phase plus 200% Neutral plus Internal Ground Conductor | SJK250T5F-1 | SJK250S5F-1 |
| | 3 Phase plus Neutral | SJK400S5-1 | SJK400S5-1 |
| 400 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK400S5G-1 | SJK400S5G-1 |
| 400 | 3 Phase plus 200% Neutral | SJK400S5N-1 | SJK400S5N-1 |
| | 3 Phase plus 200% Neutral plus Internal Ground Conductor | SJK400S5F-1 | SJK400S5F-1 |
| | 3 Phase plus Neutral | CJK400T5-1 | CJK400S5-1 |
| 0400 | 3 Phase plus Neutral plus Internal Ground Conductor | CJK400T5G-1 | CJK400S5G-1 |
| C400 | 3 Phase plus 200% Neutral | CJK400T5N-1 | CJK400S5N-1 |
| | 3 Phase plus 200% Neutral plus Internal Ground Conductor | CJK400T5F-1 | CJK400S5F-1 |
| 500 | 3 Phase plus Neutral | SJK500T5-2 | SJK500S5-2 |
| 500 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK500T5G-2 | SJK500S5G-2 |
| 600 | 3 Phase plus Neutral | SJK600T5-2 | SJK600S5-2 |
| 600 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK600T5G-2 | SJK600S5G-2 |
| 800 | 3 Phase plus Neutral | SJK800T5-2 | SJK800S5-2 |
| 800 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK800T5G-2 | SJK800S5G-2 |
| 1000 | 3 Phase plus Neutral | SJK1K0T5-2 | SJK1K0S5-2 |
| 1000 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK1K0T5G-2 | SJK1K0S5G-2 |
| 1200 | 3 Phase plus Neutral | SJK1K2T5-2 | SJK1K2S5-2 |
| 1200 | 3 Phase plus Neutral plus Internal Ground Conductor | SJK1K2T5G-2 | SJK1K2S5G-2 |



ACCESSORIES: CONNECTION HARDWARE

T5 JOINT KIT

For the connection of adjacent busway sections. One kit is required at each joint. Each kit is comprised of a housing coupler pair and bus connector set.

Bus Connector: copper blades secured to an insulating mounting plate. This makes the electrical connection between sections.

Housing Couplers: consists of two 12-screw couplers-one for the top and one for the bottom. These make the mechanical connection between busway sections.

*Installation tool is required (see below) **Available in all standard and RAL colors

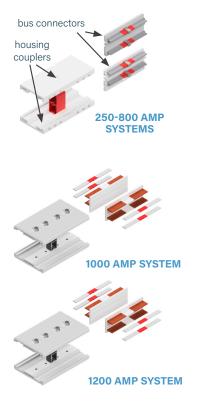
S5 JOINT KIT

Bus Connector: copper blades secured to an insulating mounting plate. This makes the electrical connection between sections.

Housing Couplers: consists of two 12-screw couplers-one for the top and one for the bottom. These make the mechanical connection between busway sections.

Joint Seal: Plastic sealing component installed between two housings at joint prior to bus connector and coupler installation

Joint Cover: Plastic sealing cover snapped over top of housing coupler after coupler installation.





Includes: Couple Covers, Top and Bottom Housing Couplers, Joint Seal and Bus Connectors

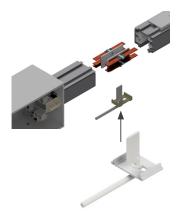


ACCESSORIES: CONNECTION HARDWARE

INSTALLATION TOOL

An installation tool is used to install the bus connector between two adjacent sections of busway. A joint kit, which is comprised of two housing couplers and a bus connector set, is required at every joint.

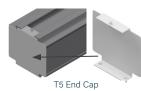
Busway sections are butted together and the top housing coupler is installed. The bus connector is inserted, centered and seated in the slot of the busway. The installation tool is inserted into the jointed intersection and rotated 90 degrees to form a secure electrical connection. The housing coupler is then positioned over the bottom joint and tightened. Part Number ST5IT No available colors Weight 3.1 lb



END CAP

For covering the end of T5 busway systems.

| SYSTEM | DESCRIPTION | T5 SERIES CATALOG # | S5 SERIES CATALOG # |
|--------|---------------------------------|---------------------|---------------------|
| 250 | 250 Amp End Cap | SEC250T5 | SEC250S5 |
| 250 | 250 Amp End Cap, 200% N | SEC250T5-2N | SEC250S5-2N |
| C400 | Compact 400 Amp End Cap | CEC400T5 | CEC400S5 |
| C400 | Compact 400 Amp End Cap, 200% N | CEC400T5-2N | CEC400S5-2N |
| 400 | 400 Amp End Cap | SEC400T5 | SEC400S5 |
| 400 | 400 Amp End Cap, 200% N | SEC400T5-2N | SEC400S5-2N |
| 500 | 500 Amp End Cap | SEC500T5 | SEC500S5 |
| 600 | 600 Amp End Cap | SEC600T5 | SEC600S5 |
| 800 | 800 Amp End Cap | SEC800T5 | SEC800S5 |
| 1000 | 1000 Amp End Cap | SEC1K0T5 | SEC1K0S5 |
| 1200 | 1200 Amp End Cap | SEC1K2T5 | SEC1K2S5 |





S5 End Cap and Cover



ACCESSORIES: CONNECTION HARDWARE

CLOSURE STRIP

Snaps into bottom access slot of busway housing. The optional closure strip is normally shipped in 10 feet lenghts and can be field cut to fit exact desired length.

Closure Strip is offered in both non-conductive plastic material and aluminum.

Important note: Closure strip is optional for T5 systems, but is required for S5 systems in order to ensure the system meets IP54 ingress protection requirements. Closure strip must be ordered separately.

| SYSTEM | AMPERAGE | PART NUMBER | MATERIAL TYPE | REQUIRED |
|--------|-----------|-------------|---------------|----------|
| T5 | 250-800A | SCST5-1 | Plastic | Optional |
| T5 | 250-800A | SCST5-1-AL | Aluminum | Optional |
| T5 | 1000-1200 | SCST5-2 | Plastic | Optional |
| S5 | 250-800A | SCSS5-1-AL | Aluminum | Yes |
| S5 | 1000-1200 | SCST5-2 | Plastic | Yes |



TAP-OFF SEAL ASSEMBLY

For use with Series-S Busway only. The seal assembly (2 pieces) wraps around the enclosure, protecting it and the busway from dust and liquid ingress.

Note: Tap-off Seal Assemblies are already included with each Series-S Plug-in unit, but may be ordered separately.

| PLUG-IN (TAP-OFF) ENCLOSURE | SEAL ASSEMBLY CATALOG # |
|-----------------------------|-------------------------|
| S1 Enclosure | S5TOU-SEAL-S1-STD |
| S2 Enclosure | S5TOU-SEAL-S2-STD |
| S3 Enclosure | S5TOU-SEAL-S3-STD |





ADD-ON ACCESSORIES: DATA CHANNEL

DATA CHANNEL COVER

The Data Channel Cover is used to hold cables into position and hide them from view. It can also be used for a variety of busway identification applications, and it is available in many different colors.

The Data Channel Cover is available in lengths of 10 feet.

Please contact sales to order the quantity needed.

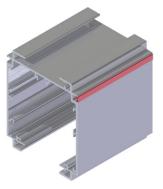
HINGED WIRE WAY

The Hinged Wire Way provides a seamless, integrated cable management solution that allows users to easily route cabling while leaving it easily accessible and identifiable.Discreet slots located every 6 inches provide built-in accessibility for cable drops.

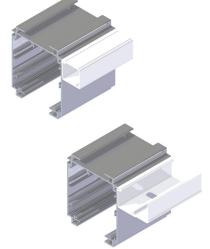
The Hinged Wire Way is available in lengths up to 10 feet.

Please contact sales to order the quantity and length needed.

Part Number UDCCT5-10-SIL (silver) UDCCT5-10-BLK (black) UDCCT5-10-GRN (green) UDCCT5-10-YEL (yellow) UDCCT5-10-W (white) UDCCT5-10-RED (red) UDCCT5-10-BLU (blue)



Part Number UHWWT5-10 Available in gray only





ADD-ON ACCESSORIES: DATA CHANNEL

DATA CABLE STRAP

The Data Cable Strap provides a seamless, integrated cable management solution that allows users to easily route cabling while leaving it easily accessible and identifiable. The 12 inch adjustable velcro strap can accommodate a wide variety and quantity of cables, and can be easily positioned along the busway to accommodate various cable management needs.

MULTI USE MOUNTING BRACKET

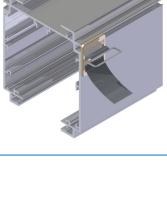
The Multi Use Mounting Bracket is an allpurpose bracket that easily attaches to any position on the busway. The bracket comes with 1/4 inch slotted holes throughout to allow for the attachment of a wide variety of accessories. Each bracket is capable of supporting a load of 25 pounds.

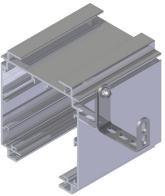
The Multi Use Mounting Bracket is commonly used for suspending compressed air lines, tap box cable management and suspending accessory lighting. Part Number SVCST5-12

Available in gray, with a black colored strap only



Available in plain zinc or black (-BLK)







SERVICES

Regular servicing of busway systems is crucial for ensuring that your system performs at its best. By conducting regular maintenance, you can identify and address any potential issues before they turn into expensive problems, thus saving you time and money in the long run. Regular servicing can help extend the lifespan of your busway system, ensuring that it meets safety standards and complies with regulations. Choose from various offerings and customize a service plan that works best for you.

WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:

COMMISSIONING AND EQUIPMENT RENTALS

Designing a mission-critical facility involves a significant investment of time and money. Through comprehensive commissioning services, Starline can help guarantee your project delivers the outcomes you expect.

Whether you need rental equipment to test your busway system or certified technicians to perform the testing, Starline has you covered. Choose from our inventory of load bank tap-offs and associated gear, or work with a Starline Engineer to customize and perform a commissioning plan to fit your specific needs.

METER SERVICES

Starline's certified technicians make optimizing your meters' performance and functionality a breeze. Our comprehensive on-site meter programming service includes inspecting, programming, reporting, and optional retrofitting services for you existing systems.

STARTUP AND SYSTEM CERTIFICATION

At Starline, we are committed to ensuring the success of your project. Our team understands the risks associated with the energization of systems, which is why we've designed a rigorous certification process to inspect, test and report on your Starline Busway and Critical Power Monitor ("CPM") products. Our certification process proactively identifies and prevents any potential issues before they happen.

To ensure the long-term success of your project, it is crucial to have Starline-certified technicians inspect and validate the installation before full commissioning. Level 2 and 3 commissioning ensures the installation complies with safety requirements and meets factory standards for ongoing reliability.

- Double the length of the standard factory warranty
- Ensure all joint and feed connections are properly installed with continuity testing
- Ensure proper installation of all plug-in units
- Validate that system will perform to your specified requirements
- Full certification report delivered electronically at conclusion of service

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at <u>downloads.starlinepower.com/services</u>.



SERVICES

TURNKEY INSTALLATION SERVICES

Our trained and factory certified Busbar installers are looking forward to completing your next job. You can order your best-in-class power distribution system and leave the rest to us. Our technicians will complete your installation quickly and safely and will reduce your overall TCO by extending your product warranty.

PREVENTATIVE MAINTENANCE PLANS AND IR SCANNING

Although Starline busway is expertly designed to require less maintenance, NETA ATS and MTS guidelines recommend conducting annual inspections and health assessments on all critical equipment. Yearly preventative maintenance helps to ensure your system's long-term reliability and safety.

Starline's FLIR-certified technicians will create a custom preventative maintenance plan for your specific needs. Our certified technicians will work to:

- Identify thermal anomalies
- Extend equipment lifecycle
- Ensure optimal system performance
- Improve facility safety and operational sustainability

Upon completing your preventative maintenance plan, you may be eligible to extend your product warranty.

ON-SITE INSTALLATION SUPPORT

Starline's on-site installation service makes installing your busway as quick and easy as possible.

Our installation support starts with scheduling a preliminary trip to the installation site. During the initial visit, our certified technicians will train your installing contractor and develop a thorough installation and commissioning plan.

After completing the training, your installing contractor will have a direct line of communication with our installation experts. Our experts can help answer questions and provide hands-on guidance when needed.

Opting for Starline's installation support helps mitigate the installation risk and reduces the learning curve typically associated with new installations.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



SERVICES

ON-SITE PRODUCT TRAINING

At Starline, we offer comprehensive on-site product training services facilitated by our team of certified technicians. With their extensive expertise and commitment to upholding our high factory standards, you can confidently rely on them to ensure your and your systems' reliability and operational safety.

Our training programs equip your team with the knowledge and skills necessary to operate and maintain your systems effectively. Through hands-on demonstrations and interactive sessions, our certified technicians will guide your staff in understanding the intricate workings of the products and address any questions or concerns your team may have during the training process.

By choosing our on-site product training services, you are investing in your system's and operations' long-term success.

RECERTIFICATION AND EXTENDED WARRANTY PLANS

Starline's recertification and extended warranty options provide best-in-class coverage for all of your Starline products and systems. Our extended warranty plans safeguard your investment beyond the standard warranty timeframe, offering you peace-of-mind while our recertification programs help mitigate risk and downtime. Whether the busway has been installed for years or you are relocating to another building, Starline is here to help.

Choose from one of our flexible one to four-year plans or have your system recertified anytime. Contact your Starline rep for more information.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.



T5 PLUG-IN UNITS

METER PLUG UNITS

Any T5 compatible Starline Plug-In Unit that contains only a meter.



METER BOX UNITS

Any lone box (without paddle head) that includes a meter.

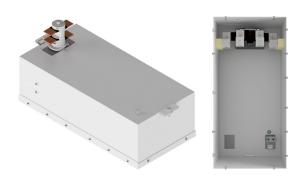


TERMINAL BLOCK UNITS

Any T5 compatible Starline Plug-In Unit that's fully rated to the listed electrical ratings that can accept incoming connections from the end user.

CIRCUIT BREAKER/FUSED DISCONNECT UNITS

Any T5 compatible Starline Plug-In Unit that contains a receptacle and/or drop cord along with circuit breaker(s) or fused disconnect.







SYSTEM & BUILD GUIDE

The below is a suggested list of questions to determine answers to in order to properly build or assemble both Track Busway systems and plugs.

WHEN BUILDING SYSTEMS

- 1. What is the amperage needed for the system? (200, 400, 500, 600, etc.)
- 2. Does the system need an internal ground?
- 3. Are there any limitations on the length of a run? (5ft max, 10ft max, 20ft max, etc.)

WHEN DETERMINING DESIRED PLUG CONFIGURATIONS

1. What type of system is this being used on? (T5)

2. Does the system have an internal ground? If so, does the plug need to be wired Isolated or Dedicated ground/earth?

- 3. What is the fault current needed for the breaker? (10Kaic, 22Kaic, etc.)
- 4. Does the plug need to have drop cords or receptacles?
- 5. What is the device configuration of the connector bodies or receptacles?
- 6. What is your desired circuit breaker configuration? (phase, amperage, poles?)
- 7. Do you require metering?
- 8. How many outlets are needed?
- 9. What is the trip curve needed?
- 10. What is the voltage required?

METER PLUGS: PRODUCT NUMBERS

| | U | Μ | T5 | С | 52 | S | - C | 065 |
|--|---|---|-----------------|------------------------|---|--|---|---|
| | 1. System | 2. Product Type | 3. Compatib | 4. ility Ground | 5. I Box | 6. Orientatior | | rent nsformer |
| | | I | Vleter | 9. Meter Options | | STD 11. Paint Color | *Option | al |
| . System (standard of J US 2. Product Type (sect M Meter Plug 3. Compatibility (fram | ion compone | | | | | 1 | I I Ige) I | N (Measured) Neutral P Professional (D+N) P Standard (48 VDC) Q Display (48 VDC) |
| T5 System T5 System (Rota Ground (ground typ Case (Housing) Box (what size enclose) 01, 02, 99 (refer to an 28 boxes are cur | e installed) Ground sure) enclosure |) Z5 K5 + | | ng Strip) | (+/-60) to 380 V *10. Meter Co 1 LL power 3 LN power 4 LL power 6 LN power 7 LL power 9 LN power | DC (+/-180) C nfiguration r, Delta Solic r, Wye Solid r, Delta Solic | <i>DR Low Vc</i> (<i>M50 AC</i>) I Core, m Core, 5, Core, 5, Core, m | to 300 VDC/Split Phase 120 VDC oltage: 48 VDC NV CT V CT A-secondary CT A-secondary CT V CT |
| 6. Orientation (what c S Standard 7. Current Transform 065 65 amps 250 250 amps 300 800 amps | | R Reve | imps | | M LN powe *10. Meter Co 1 Circuit 1 2 Circuit 2 | r, Wye Split | Core, 5A (<i>M60 DC</i>) Core Core | A-secondary CT -secondary CT |
| 1K2 1200 amps **M60 (DC) meters are or 8. Meter Release (MS M51 Single Eth./WiF M53 Single Eth./No N M58 Dual Eth./A0 N 8. Meter Release (MC M61 Single Eth./WiF M63 Single Eth./No N M67 Dual Eth., single | 50 AC) i, ≤480V Y, WiFi, ≤480V V Y, ≤277V Modbus, ≤4 50 DC) i, single pha WiFi, single | vith 800 amp c ≤277V Δ / Y, ≤277V Δ Δ 80V Y, ≤277 ase, VDC phase, VDC | vurrent transdu | icers | BLK Paint F | r Factory Silve Factory Black Factory Whit | C BL | D Paint Factory Red U Paint Factory Blue RAL (please see page 4.103) |

EXAMPLE

<u>UMT5C52S-065-M59S1-STD</u> = US System, Meter Plug, T5 System, Case Ground, 52 Box, Standard Orientation, 65 Current Rating, M59 Meter, Standard Meter Options, LL Power, Delta Solid Core, mV CT, Painted Factory Silver

METER BOXES: PRODUCT NUMBERS

| | | | _ | | _ | | | | | |
|--|---|---|------------------------|------------------------|---|--------------------|---|--------------|----------------------------|--|
| | U | В | NA | A (| C 5 | 2 | S | - | 065 | |
| | 1. System | 2. Product Type | 3. Compatil | 4. pility Grour | 5. nd Box | | 6. Orientatior | 1 | 7. Current Transform | er |
| | | - | M59 | S | 1 | - | STD | *Opi | tional | |
| | | | 8. Meter Release | 9. Meter Options | *10. Meter Configurati | F | 1. Paint Color | | | |
| 1. System (standard of | f measure) | | | | 9. Meter | Optio | ons (M50 AC) |) | | |
| U US | | | | | | ndard | | | | Measured) Neutral rofessional (D+N) |
| 2. Product Type (sec | tion compone | nt) | | | | olay | <i></i> | | F F | Tolessional (D+N) |
| B Meter Box | | | | | | | ons (M60 DC) (High Volta | | P S | tandard (48 VDC) |
| 3. Compatibility (fran | ne compatibili | ity) | | | D Dis | blay (F | High Voltag | e) | Q D | isplay (48 VDC) |
| NA Not Applicable | | | | | | | DC (+/-180) C | | | VDC/Split Phase 120 VDC 48 VDC |
| Ground (ground typ) C Case (Housing) | | | | | *10. Mete | r Cor | nfiguration | (M50 | AC) | |
| 5. Box (what size enclosure) 01, 02, 99 (refer to enclosure reference page 4.124) *12 and 28 boxes are currently not available 6. Orientation (what direction the paddle faces) S Standard | | | | | LL power, Delta Solid Core, mV CT LN power, Wye Solid Core, mV CT LL power, Delta Solid Core, 5A-secondary CT LN power, Wye Solid Core, 5A-secondary CT LN power, Delta Split Core, mV CT LN power, Delta Split Core, 5A-secondary CT K LL power, Delta Split Core, 5A-secondary CT M power, Wye Split Core, 5A-secondary CT | | | | | |
| 7. Current Transform | ner (current ra | nting) | | | *10. Mete | r Cor | nfiguration | (M60 | DC) | |
| 065 65 amps 250 250 amps 800 800 amps 1K2 1200 amps | | 225 225 a 400 400 a 1K0 1000 | amps amps | , | 1 Circ 2 Circ | uit 1 C uit 2 (| Only, Solid C Only, Solid C uits, Solid C | Core Core | | |
| **M60 (DC) meters are of | , | ith 800 amp (| current transc | lucers | 11. Paint | | | | | |
| 8. Meter Release (M8 M51 Single Eth./WiF M53 Single Eth./No \ M58 Dual Eth., ≤480 M59 Dual Eth/Dual I | ;i, ≤480V Y, ± WiFi, ≤480V V Y, ≤277V / | ′Y, ≤277V <i>L</i> ∆ | | | BLK P | aint Fa | actory Silve actory Black actory Whit | < | BLU Pa | aint Factory Red aint Factory Blue Jease see page 4.103) |
| 8. Meter Release (Me | 60 DC) | | | | | | | | | |
| M61 Single Eth./WiF M63 Single Eth./No M67 Dual Eth., single M69 Dual Eth/Dual I | WiFi, single e phase, VD0 | phase, VD0 C | | | | | | | | |

EXAMPLE

UBNAC52S-065-M59S1-STD = US System, Meter Box, Not Applicable, Case Ground, 52 Box, Standard Orientation, 65 Current Rating, M59 Meter, Standard, LL Power, Delta Solid Core, mV CT, Painted Factory Silver

TERMINAL BLOCK UNITS: PRODUCT NUMBERS

| | _ | _ | _ | | | | | | | |
|--------------------------------------|---|----------------------------|---|--------------------|---|---|--|---|----------------|--|
| | U | Т | T5 | С | 52 | S - | - 030 - | 4 | | |
| | 1. System | 2. Product Type | 3. Compatibility | 4. Ground | 5. Box | 6. Orientation | 7. Amperage | 8. Poles | | |
| | | - S | Ν | Ν | - M5 | 9 S | - STD | STD | *Optional | |
| | | 9. Lug Options | 10. Meter Location | 11. Accessories | *12. Meter Release | *13. Meter Options | 14. Meter Configuratio | 15. Paint Color n | | |
| l . System (s U US | standard of meas | sure) | | | | er Release (N gle Eth./WiFi | 150 AC) , ≤480V Y, ≤277 | VΔ | | |
| | Type (section contained by the section of the sec | omponent) | | | M53 Sin M58 Du | gle Eth./No V al Eth., ≤480\ | ViFi, ≤480V Y, ≤ | 277V 🛆 | | |
| T5 T5 Sys | B. Compatibility (frame compatibility) *12. Meter Release (M60 DC) IT5 T5 System K5 T5 System (Limiting Strip) | | | | | | | | | |
| C Case (| ground type inst Housing) Grou d (Separate) G | und D | Dedicated Gr | round | M67 Dual Eth., single phase, VDC M69 Dual Eth/Dual Modbus, single phase, VDC *13. Meter Options (<i>M50 AC</i>) | | | | | |
| | size enclosure) 9 (refer to enc | | nce page 4.12 | 4) | S Standard N (Measured) Neutral D Display P Professional (D+N) | | | | | |
| 6. Orientati S Standa | on (what direct | ion the paddle R | <i>faces)</i> Reversed | | *13. Meter Options (M60 DC) S Standard (High Voltage) P Standard (48 VDC) D Display (High Voltage) Q Display (48 VDC) | | | | | |
| 030 30 amp 100 100 am | ips | 060 225 | 60 amps 225 amps | | M60 Mete (+/-60) to | ers support: Hig | h Voltage: 120 to 3 80) OR Low Voltag | 800 VDC/Split | | |
| 600 600 am | 50 250 amps 400 400 amps 00 600 amps . . Poles (number of poles in a circuit) . | | | | LL power, Delta Solid Core, mV CT LN power, Wye Solid Core, mV CT LL power, Delta Solid Core, 5A-secondary CT LN power, Wye Solid Core, 5A-secondary CT | | | | | |
| 9. Lug Optio S Standa N Double | ons (number of | D 2 | <i>uit)</i> Double Lug 2 Bolt Lug | | 7 LL power, Delta Split Core, mV CT 9 LN power, Wye Split Core, mV CT K LL power, Delta Split Core, 5A-secondary CT M LN power, Wye Split Core, 5A-secondary CT *14. Meter Configuration (M60 DC) | | | | | |
| 10. Meter Lo N N/A R Right | ocation (locatio | on of optional I L B | <i>meter)</i> Left Bottom (lid) | | | cuit 1 Only, Sol cuit 2 Only, Sol Color | | Both Circui | ts, Solid Core | |
| N N/A | ries (optional a | ccessories for R B | plugs) IR Window IR Window & F | Finger Shroud | STD F BLK F | Paint Factory S Paint Factory B Paint Factory N | Black BLU | Paint Facto Paint Facto _ (<i>please see p</i> | y Blue | |

EXAMPLE

UTT5C27S-225-4-SBN-M59S3-BLK = US System, Terminal Block, T5 System, Case (Housing) Ground , 27 Box, Standard Orientation, 225 amps, 4 Pole - Standard Lugs, Bottom Located Meter, No Accessories, M59 Meter, Audible Alarm, Painted Factory Black

CIRCUIT BREAKER/FUSED DISCONNECT: PRODUCT NUMBERS

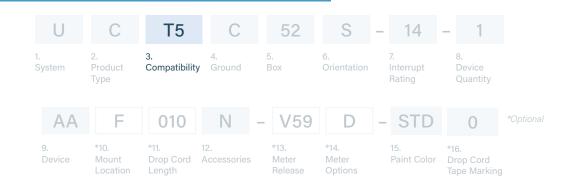
| | U | С | T5 | С | 52 | S | - 14 | - 1 | | | | |
|------------------------|--|---------------------------|-----------------------------|--------------------|--|--|--------------------------------|----------------------------------|--------------------------|--|--|--|
| | 1. System | 2. Product Type | 3. Compatibility | 4. Ground | 5. Box | 6. Orientation | 7. Interrupt Rating | 8. Device Quantity | | | | |
| | AA | F | 010 | Ν | - V59 | D | - STD | 0 | *Optional | | | |
| | 9. Device | *10. Mount Location | *11. Drop Cord Length | 12. Accessories | *13. Meter Release | *14. Meter Options | 15. Paint Color | *16. Drop Cord Tape Markir | ıg | | | |
| I. System (s | tandard of meas | sure) | | | 12. Acc | essories (op | tional accessorie | es for plugs) | | | | |
| U US | | | | | | /A rcuit Breaker | | F Finger S P Padlock | Shroud Adapter for Ci | | | |
| 2. Product | Type (section c | omponent) | | | | | | Breaker | | | | |
| C Circuit | Breaker Unit | F | Fused Disco | nnect Unit | S Se | eismic Hange | r | R IR Wind | OW | | | |
| 3. Compatil | oility (frame co | mpatibility) | | | *13. Me | ter Release | (M50 AC) | | | | | |
| T5 T5 Sys R5 T5 Sys | tem tem (Rotating I | | T5 System (L | imiting Strip | V31 31 | | Fi, ≤480V Y, ≤ | | | | | |
| , | . 0 | , | | | | | WiFi, ≤480V Y)V Y, ≤277V Δ | ∕, ≤277V Δ | | | | |
| | <i>ground type inst</i> Housing) Grou | · · · · | Dedicated G | round | V59 Du | V59 Dual Eth/Dual Modbus, ≤480V Y, ≤277V ∆ | | | | | | |
| | d (Separate) G | | Deulcaleu C | irouriu | | V56 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ , Breaker Monitoring V57 Dual Eth, Breaker Monitoring \leq 480V Y, \leq 277V Δ | | | | | | |
| 5. Box (what | size enclosure) | | | | | ter Release | (M60 DC) | | | | | |
| 01, 02, 9 | 9 (refer to enc | losure refere | nce page 4.1 | 24) | M61 Si | ngle Eth./Wi | Fi, single phas | | | | | |
| 6. Orientati | on (what directi | on the paddle | faces) | | M63 Single Eth./No WiFi, single phase, VDC M67 Dual Eth., single phase, VDC | | | | | | | |
| S Standa | ard | R | Reversed | | | | Modbus, sing | le phase, VD | C | | | |
| 7. Interrupt | Rating (interru | ot rating of the | e breakers in K) | | *14. Me | ter Options | (M50 AC) | | | | | |
| 10, 14, 22, 2 | 25, 30, 35, 50 | , 65, CC (C | C = 200,000 |) (for U.S.) | | andard | | | red) Neutral | | | |
| 8. Device Q | uantity (quanti | ity of device 1) | | | D Di | splay | | P Proiessi | onal (D+N) | | | |
| 1, 2, 3, 4, 5, | 6, 7, 8, 9 | | | | | ter Options | · · · · · | | | | | |
| 9. Device (q | uantity of device | e 1) | | | S Standard (High Voltage) P Standard (48 VDC) D Display (High Voltage) Q Display (48 VDC) | | | | | | | |
| AA, AB,2 | ZZ (refer to dev | vice codes pa | ige 4.139) | | M60 Me | M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC | | | | | | |
| *10. Mount | Location (with | respect to bu | sway polarizin <u>g</u> | stripe) | | | /-180) OR Low Ve | oltage: 48 VDC | | | | |
| F Front | | Α | Back | | | nt Color | 0.1 | | | | | |
| T Top L Left | | B | Bottom Right | | | Paint Factor Paint Factor | | D Paint Fac D Paint Fac | | | | |
| | unt location will l | | 0 | | | Paint Factor | | RAL (please se | | | | |
| *11 Drop C | ord Length (lo | action of anti- | nal motor) | | 16. Dro | p Cord Tape | Marking | | | | | |
| XXY: XX=fe | | cation of optic | nai meter) | | | e Factory Bla | | Tape Factor | | | | |
| | chosen in 6" incr | ements) For a | ny device confi | guration | | e Factory Wl e Factory Re | | Tape Factor Tape Factor | | | | |
| chosen over 7 | 0 amps, the ma | x. drop cord le | ngth is 10 feet (| 100) | | | | 1 | | | | |

EXAMPLE

<u>UCT5D57S-25-2CDB0100N-V59D-STD</u> = US System, Circuit Breaker Unit, T5 System, Dedicated Ground, 57 Box, Standard Orientation, 25 Interrupt Rating, 2 Devices, L16-30C, Bottom Located, 1 foot Drop Cord, No Accessories, V59 Meter, with Display, Painted Factory Silver



CIRCUIT BREAKER/FUSED DISCONNECT: COMPATIBILITY



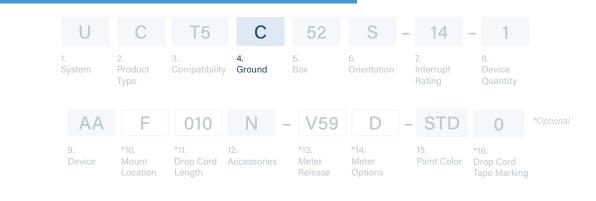
| 3. Co | 3. Compatibility (frame compatibility) | | | | | | |
|-------|--|----|----------------------------|--|--|--|--|
| | T5 System | K5 | T5 System (Limiting Strip) | | | | |
| | T5 System (Rotating Paddle) | Z5 | K5 + R5 | | | | |

IN OPTION 3. you are asked to specify what type of compatibility (paddle type) you would like to work with your busway system. There are three different types: the traditional T5 system, the K5 that works with systems with a limiting strip, and the R5 that is a rotating design capable of being operated from the floor.





CIRCUIT BREAKER/FUSED DISCONNECT: GROUND



ISOLATED GROUND/EARTH

Case ground isolated from copper

Orange receptacles in plugs.

ground bar. Isolated ground

| 4. G | round (ground type installed) | | |
|--------|---|---|------------------|
| C G | Case (Housing) Ground Isolated (Separate) Ground | D | Dedicated Ground |

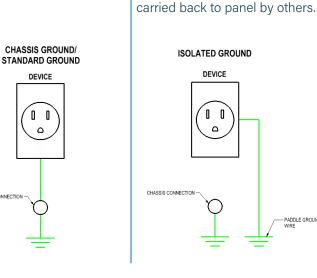
IN OPTION 4. you are asked to specify what type of ground you would like: case, dedicated or isolated.

Parts affected by grounding are the plug paddle (ground paddles have a fifth stab).

CASE GROUND/CHASSIS EARTH

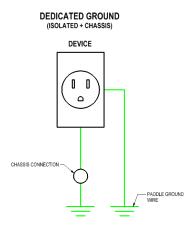
Uses aluminum housing and no extra copper bar.

CHASSIS CONNECTION



DEDICATED GROUND/EARTH

Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.



*For further details about Dedicated Ground vs. Isolated Ground, please reference our "Isolated Ground vs. Dedicated Ground" tech brief on downloads.starlinepower.com/starline/busway

PADDLE GROUND



CIRCUIT BREAKER/FUSED DISCONNECT: BOX



5. Box (what size enclosure)
01, 02, ... 99 (refer to enclosure reference page 4.134)

50 SERIES

IN OPTION 5. you are asked to specify what style enclosure you would like. Size is typically a result of the options and features that you choose. A few common enclosure sizes for T5 busway systems are shown below:

A.55" ← Length varies ►

90 SERIES



| BOX LENGTHS | BOX LENGTHS |
|--|--|
| 51: 6.00" 52: 8.00" 53: 10.00" 54: 12.00" 55: 13.00" 56: 15.00" 57: 18.00" | 91: 6.00" 92: 8.00" 93: 10.00" 94: 12.00" 95: 13.00" 96: 15.00" 97: 18.00" |

*For all box sizes and styles, please refer to page 4.134



CIRCUIT BREAKER/FUSED DISCONNECT: INTERRUPT RATING



7. Interrupt Rating (interrupt rating of the breakers in K)
10, 14, 22, 25, 30, 35, 50, 65, CC (CC = 200,000)

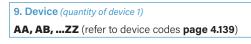
IN OPTION 7. you are asked to specify what the interrupt rating of your protection will be. Starline standardizes on Schneider Electric (Square D) and ABB for breakers, and the breaker used is dependent on voltage, amperage and short-circuit ratings. Different or particular brands may be available upon request. Images of example breakers can be found below. Injection (NETA) testing may also be available upon request.





CIRCUIT BREAKER/FUSED DISCONNECT: DEVICE







UCT5C53S-22-3AIFN-STD

IN OPTION 9. you are asked to specify what device(s) you would like in your plug. All devices will need to be coded. The catalog number can accommodate up to 3 different types of devices- anything more than that will be handled in the G0 code. If you require more than one type of device, see the example catalog number below:

UCT5C57S-22-2AD-3AB-1ACFN-V59D-G001

If you require a drop cord(s), only one device type can be accommodated in the main catalog number. In addition, drop cord length is only specified if it's the same for all devices. Any additional device types or varying lengths will be handled in the G0 code.



MCT5C53S-14-1FOFN-M59S-STD

*For the full list of all device codes, please refer to **page 4.139**



UCT5D92S-22-2BGB(XXX)N-STD



UFT5C93R-CC-1EYB(XXX)N-V59S-STD



CIRCUIT BREAKER/FUSED DISCONNECT: MOUNT LOCATION



| *10. | *10. Mount Location (with respect to busway polarizing stripe) | | | | | | | |
|--------|--|---|--------|--|--|--|--|--|
| F T | Front | Α | Back | | | | | |
| Т | Тор | В | Bottom | | | | | |
| L | Left | R | Right | | | | | |

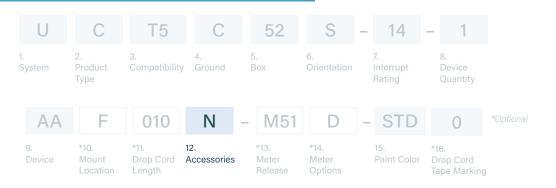
IN OPTION 10. you are required to specify the devices desired location on the plug. Please see the image below to guide you in selecting your specified mounting location.

*Mount location is 'situational' because it is only specified if it's the same for all chosen devices. If it is not the same, then it is omitted from the catalog number and moved to the configuration code.



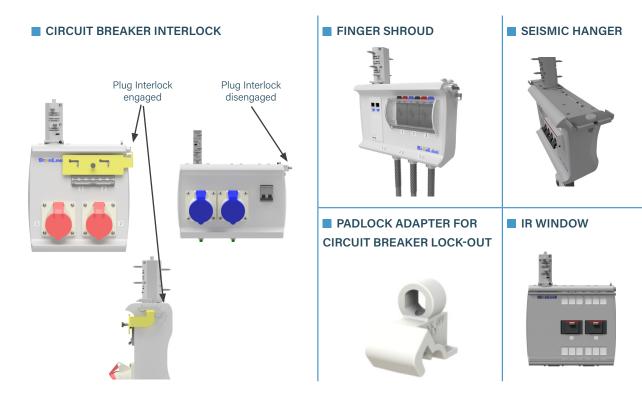


CIRCUIT BREAKER/FUSED DISCONNECT: ACCESSORIES

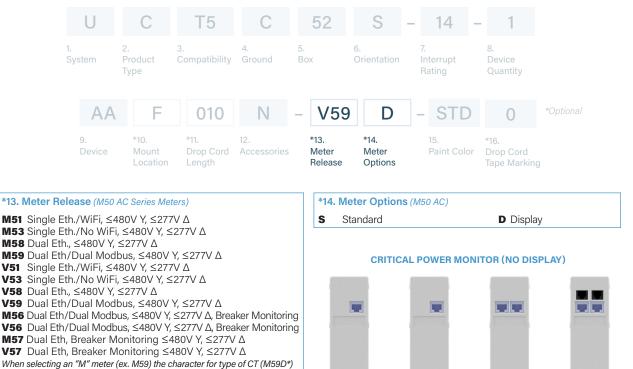


| 12. | Accessories (optional accessories for plugs) | |
|--------|--|---|
| Ν | N/A | B |
| C S | Circuit Breaker Interlock Seismic Hanger | b |
| L T | Pilot Light NETA Injection Tested Breakers | 0 |
| F | Finger Shroud Padlock Adapter for Circuit Breaker | 0 |
| R | IR Window | С |
| | | L |
| | | |

IN OPTION 12. you have the option to choose an accessory: The Circuit Breaker prevents disengaging the plug from the busway while the breaker is in the "on" position. The Finger Shroud prevents accidentail on or off contact with the breaker toggle. The Padlock Adapter provides optional protection for locking out breakers. NETA injection testing certifies the breakers will operate as specified in their trip logic. Pilot Light: When breaker is on, pilot light will be illuminated green. When the breaker off or tripped, the pilot light is off.



CIRCUIT BREAKER/FUSED DISCONNECT: (AC ONLY) METER RELEASE



configuration is required in the catalog number.

IN OPTION 13. you are able to select metering for your plug-in unit. M50 and V50 series meters are the best options for plug-in units.

The communication options include:

- Single Ethernet + WiFi
- Single Ethernet
- Dual Ethernet
- Dual Modbus + Dual Ethernet

The difference between 'M' and 'V' is that M50 series meters are capable of monitoring the current of the entire unit, and V50 series meters are capable of monitoring up to 6 individual devices limited to 6 solid core Current Transformers (CTs).

Each unit is calibrated for accuracy and is within 0.5% to meet ANSI Revenue Grade Standards.

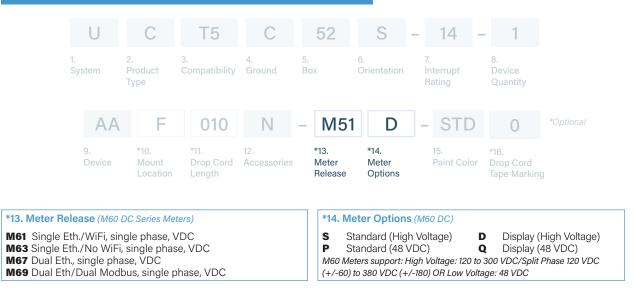
M/V56 and M/V57 meters also have the capability to sense circuit breaker position (on/off) for up to two outlets.



CRITICAL POWER MONITOR WITH OPTIONAL DISPLAY



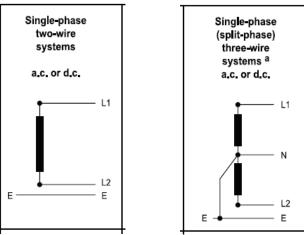
CIRCUIT BREAKER/FUSED DISCONNECT: (DC ONLY) METER RELEASE



If you've chosen to use direct current (DC) for your Track Busway system, then the DC M60 series meters are a perfect fit. For M60 meters there is a special addition to the catalog number (reference 15. System Configuration). It is important to select your circuit(s) when ordering.

The M60 device utilizes the M50 bezel (shown on previous page) and is capable of measuring up to 4 outlets (circuit 1 or circuit 2). The difference between 'M' and 'V' is that M60 series meters are capable of monitoring the current of the entire unit, and V60 series meters are capable of monitoring up to 4 individual devices.

Each unit is calibrated for accuracy within 1% of energy.



M60 meters are capable of supporting single phase, 120VDC - 300VDC or split phase 120VDC (+/-60VDC) to 380VDC(+/-190VDC).

*12VDC & 24VDC applications are not supported at this time.

**Meter is capable of reporting A to B voltages (as shown above). A to N + B to N voltages will not be reported.

CIRCUIT BREAKER UNITS, NO DEVICES: PRODUCT NUMBERS

| | | ι | J (| C | T5 | С | 5 | 2 | S - | - 14 | - | | |
|---|----------------|--------------|-----------------------|-----------------------------|----------------------------|-------------------|-----------|--------------|-------------------------|------------------------------|--------------------------|---------------------------------|-----------|
| | | 1. Syster | 2. n Produ Type | 3. Ict Com | 4 Ipatibility C | Ground | 5. Box | 6. Oi | rientation | 7. Interrupt Rating | | | |
| 2 | 030 | 3 | 480 | 050 | 5 | Ν | - | M59 | D | 3 | - STD | 0 | *Optional |
| 8. Circuit Protection Quantity | 9. Amperage | 10. Poles | 11. Voltage | *12. Drop Cord Length | *13. Number of Wires | 14. Accessorie | | 15. Meter | 16. Meter Options | 17. Meter Configuratio | 18. Paint Color on | 19. Drop Cord Tape Markin | ng |

| 1. System (standard of measure) | 14. Accessories (optional accessories for plugs) | | | | | |
|---|--|--|--|--|--|--|
| U US | N N/A F Finger Shroud | | | | | |
| 2. Product Type (section component) | C Circuit Breaker Interlock P Padlock Adapter for Circuit Breaker | | | | | |
| C Circuit Breaker Unit F Fused Disconnect Unit | S Seismic Hanger R IR Window | | | | | |
| 3. Compatibility (frame compatibility) | 15. Meter | | | | | |
| T5T5 SystemK5T5 System (Limiting Strip)R5T5 System (Rotating Paddle)Z5K5 + R5 | M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ M58 Dual Eth, ≤480V Y, ≤277V Δ | | | | | |
| 4. Ground (ground type installed) | M59 Dual Eth/Dual Modbus, \leq 480V Y, \leq 277V Δ | | | | | |
| C Case (Housing) Ground D Dedicated Ground G Isolated (Separate) Ground | M56 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ, Breaker Monitoring | | | | | |
| | 16. Meter Options (M50 AC) | | | | | |
| 5. Box (what size enclosure) | S Standard N (Measured) Neutral D Display P Professional (D+N) | | | | | |
| 01, 02, 99 (refer to enclosure reference page 4.124) | *16. Meter Options (<i>M60 DC</i>) | | | | | |
| 6. Orientation (what direction the paddle faces) | S Standard (High Voltage) P Standard (48 VDC) | | | | | |
| S Standard R Reversed | D Display (High Voltage) Q Display (48 VDC) | | | | | |
| 7. Interrupt Rating (interrupt rating of the breakers in K) | M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC (+/-60) to 380 VDC (+/-180) OR Low Voltage: 48 VDC | | | | | |
| 10, 14, 22, 25, 30, 35, 50, 65, CC (CC = 200,000) (for US) | *17. Meter Configuration | | | | | |
| 8. Circuit Protection Quantity | 1 LL power, Delta Solid Core, mV CT | | | | | |
| 1, 2, 3, 4, 5, 6 | 3 LN power, Wye Solid Core, mV CT 4 LL power, Delta Solid Core, 5A-secondary CT | | | | | |
| 9. Amperage | 6 LN power, Wye Solid Core, 5A-secondary CT | | | | | |
| 015, 020, 030, 600 | 7 LL power, Delta Split Core, mV CT 9 LN power, Wye Split Core, mV CT | | | | | |
| 10. Poles (number of poles in a circuit) | K LL power, Delta Split Core, 5A-secondary CT | | | | | |
| 1, 2, 3, 4, 5 | M LN power, Wye Split Core, 5A-secondary CT | | | | | |
| 11. Voltage | *14. Meter Configuration (M60 DC) | | | | | |
| 120, 240, 277, 300, 415, 480, 600 | 1 Circuit 1 Only, Solid Core 3 Both Circuits, Solid Core 2 Circuit 2 Only, Solid Core | | | | | |
| *12. Drop Cord Length (length of drop cord) | 18. Paint Color | | | | | |
| 010 1 foot XXX =feet, Y=inches (only can be chosen in 6" increments) For any device configuration chosen over 70 amps, the max. drop cord length is 10 feet (100) | STD Paint Factory Silver BLK Paint Factory Black WHT Paint Factory White RED Paint Factory Red BLU Paint Factory Blue **RAL (please see page 4.103) | | | | | |
| *13. Number of Wires (M50 AC) | , , , , , , , , , , , , , , , , , , , | | | | | |
| 2, 3, 4, 5 | 19. Drop Cord Tape Marking | | | | | |
| EXAMPLE | 3 Black 6 Red 8 Green 4 White 7 Blue | | | | | |

UCT5D57S-25-203034800505N-M59D3-*STD0 = US System, Circuit Breaker Only Unit, T5 system, Dedicated Ground, 57 box, Standard orientation, 25kA interrupt rating, 2 circuits, 30 amps, 3 poles, 480v, 5 ft drop cord, 5 wires, no accessories, M59 meter, painted factory silver, no drop cord tape marking

| С | ORDE | D ME | TERS | | | | | | | |
|----------|---|----------------------|-----------------------|----------------------------------|---|--|----------------------------------|---------------------------------------|-------------------------------|--|
| | | U | ССРМ | М | 51 | S | 1 | - L515 | С | |
| | | 1. System | 2. Product Type | 3. Monitoring Capabilities | 4. Meter Features | 5. Meter Variations | 6. System Voltage | 7. Wiring Device or Cord Set | 8. Device Style | |
| | | | | - XXX | <x td="" –<=""><td>C -</td><td>BLK</td><td></td><td></td></x> | C - | BLK | | | |
| | | | | 9. Length (to end) | L |). leter ocation on le Cord | 11. Paint Color | | | |
| 1. Sy | ystem (star | ndard of mea | sure) | | | 7. Wiring Device or Cord Set | | | | |
| U | US | | | | | Options listed on page 4.133 | | | | |
| 2. P | roduct Ty | pe (section c | component) | | | 8. Device Style | | | | |
| CCI | PM Corde | d CPM | | | | | nector Body | R | Receptacle Quad Receptacle | |
| 3. N | Ionitoring | Compatibi | lities | | | | | | | |
| М | Paddle/F | eed Monito | oring | | | 9. Length (end to end) | | | | |
| 4. № | leter Feat | ures | | | | XXXX Length will be selected when ordering. There will always be four X's for these characters. (lengths range from 4 to 25 feet in | | | | |
| 51 58 | Single Et Dual Ethe | hernet WiFi | | ngle Ethernet | | incremen | s of 1 foot) | | | |
| | 58 Dual Ethernet 59 Dual Ethernet, Modbus 5. Meter Variations | | | | | 10. Meter | Location o | n the Cord | | |
| 5. IV | Standard | | D | isplay | | C Cen B Bott | | т | Тор | |
| - | ystem Vol | | | ispidy | | 11. Paint | | | | |
| 0. 5 | Line-Line | • | 3 Li | ne-Neutral | | | aint Factory S | Silver BED | Paint Factory Red | |
| • | | , | J LI | ne neutral | | BLK Pa | aint Factory I aint Factory I | Black BLU | 3 | |

Monitoring: The Corded CPM has a plug on one end and a connector body or receptacle on the other end; making it ideal for field power monitoring onthe-fly. It is capable of monitoring the energy of any device. The Corded CPM is also available without connectors. All M50 meter features, communication options and accessories are available except for measured neutral.

Box Size: There are two different Corded CPM box sizes. The smaller is designed for single phase (2 pole/3 wire, 1 pole+N/3W) wiring devices rated from 0-32A & 0-480V. The color is black unless specified. The larger enclosure is designed for all other configurations. These include single phase (2 pole/3 wire) rated at 32A-63A & 0-480V, three phase delta (3 pole/4 wire) rated at 0-63A & 0-480V and three phase wye (4 pole/5 wire) rated at 0-63A & 0-480V.

Meter Location: The meter can be placed in the center or offset from the top or bottom of the cord. Top or Bottom meters will always be 1'8" from the end of the connector.



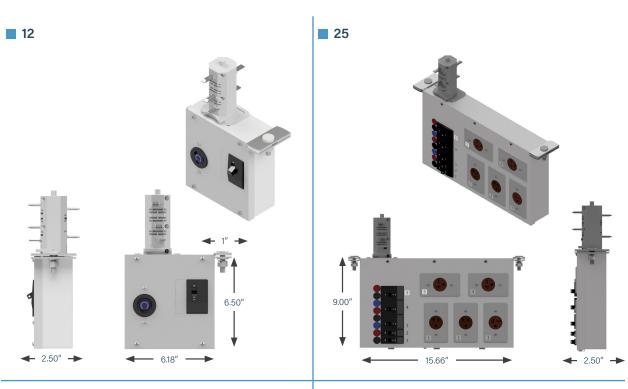


WIRING DEVICE/CORD SET OPTIONS

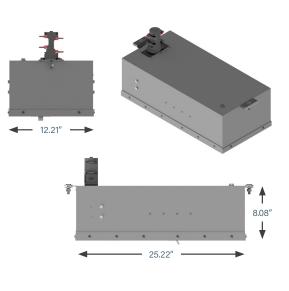
| AC NEMA/IEC NAME | VOLTAGE | CURRENT | AC NEMA/IEC NAME | VOLTAGE | CURRENT |
|------------------|--------------|---------|----------------------|--------------|---------|
| CS6360C | 125V | 50 | 420C12W | 125/250V | 20 |
| CS6364C | 125/250V | 50 | 430C12W | 125/250V | 30 |
| CS8264C | 250V | 50 | 460C12W | 125/250V | 60 |
| CS8364C | 250V | 50 | 320C6W | 250V | 20 |
| CS8164C | 480V | 50 | 330C6W | 250V | 30 |
| CS8464C | 480V | 50 | 360C6W | 250V | 60 |
| 515D | 125V | 15 | 320C5W | 277V | 20 |
| 515 | 125V | 15 | 330C5W | 277V | 30 |
| 520D | 125V | 20 | 360C5W | 277V | 60 |
| 520 | 125V | 20 | 416C4S | 110V | 16 |
| 530 | 125V | 30 | 432C4S | 110V | 32 |
| 615D | 250V | 15 | 463C4S | 110V | 63 |
| 615 | 250V | 15 | 416C9S | 230V | 16 |
| 620D | 250V | 20 | 432C9S | 230V | 32 |
| 620 | 250V | 20 | 463C9S | 230V | 63 |
| 630 | 250V | 30 | 420C9S | 250V | 20 |
| L1420 | 125/250V | 20 | 430C9S | 250V | 30 |
| L1420 | 125/250V | | | | 60 |
| | | 30 | 460C9S | 250V | |
| L1520 | 250V | 20 | 416C6S | 415V | 16 |
| L1530 | 250V | 30 | 432C6S | 415V | 32 |
| L1620 | 480V | 20 | 463C6S | 415V | 63 |
| L1630 | 480V | 30 | 420C7S | 480V | 20 |
| L2120 | 120/208V | 20 | 430C7S | 480V | 30 |
| L2130 | 120/208V | 30 | 460C7S | 480V | 60 |
| L2220 | 277/480V | 20 | 516C6S | 230/400V | 16 |
| L2230 | 277/480V | 30 | 532C6S | 230/400V | 32 |
| L2320 | 347/600V | 20 | 563C6S | 230/400V | 63 |
| L2330 | 347/600V | 30 | 316C9S | 415V | 16 |
| L515 | 125V | 15 | 332C9S | 415V | 32 |
| L520 | 125V | 20 | 363C9S | 415V | 63 |
| L530 | 125V | 30 | 520C7S | 277/480V | 20 |
| L615 | 250V | 15 | 530C7S | 277/480V | 30 |
| L620 | 250V | 20 | 560C7S | 277/480V | 60 |
| L630 | 250V | 30 | 320C7W | 480V | 20 |
| L715 | 277V | 15 | 330C7W | 480V | 30 |
| L720 | 277V | 20 | 360C7W | 480V | 60 |
| L730 | 277V | 30 | 15A-300V | 300V | 15 |
| L820 | 480V | 20 | 16A-300V | 300V | 16 |
| L830 | 480V | 30 | 20A-300V | 300V | 20 |
| 316C4S | 110V | 16 | 30A-300V | 300V | 30 |
| 332C4S | 110V | 32 | 32A-300V | 300V | 32 |
| 363C4S | 110V | 63 | 50A-300V | 300V | 50 |
| 320C4S | 125V | 20 | 60A-300V | 300V | 60 |
| 330C4S | 125V | 30 | 63A-300V | 300V | 63 |
| 360C4S | 125V | 60 | 15A-480V | 480V | 15 |
| 520C9W | 120/208V | 20 | 16A-480V | 480V | 16 |
| 530C9W | 120/208V | 30 | 20A-480V | 480V | 20 |
| 560C9W | 120/208V | 60 | 30A-480V | 480V | 30 |
| 316C6S | 230V | 16 | 32A-480V | 480V | 32 |
| | 230V 230V | 32 | 50A-480V | | 50 |
| 332C6S | | | | 480V | |
| 363C6S | 230V | 63 | 60A-480V 63A-480V | 480V 480V | 60 |



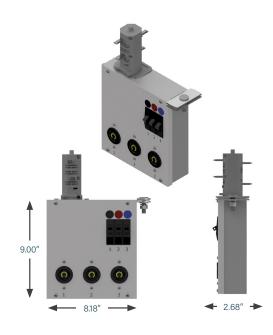
BOX SIZES & STYLES





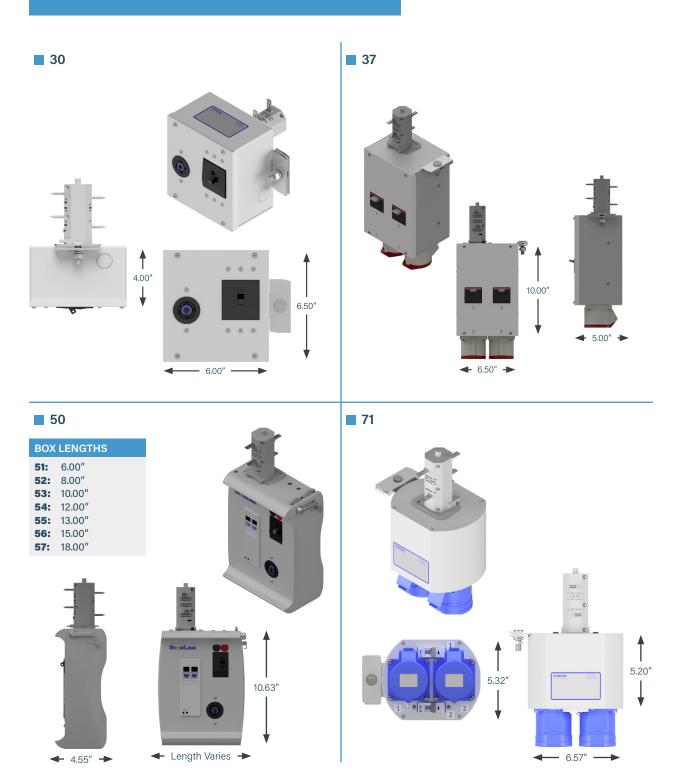


28



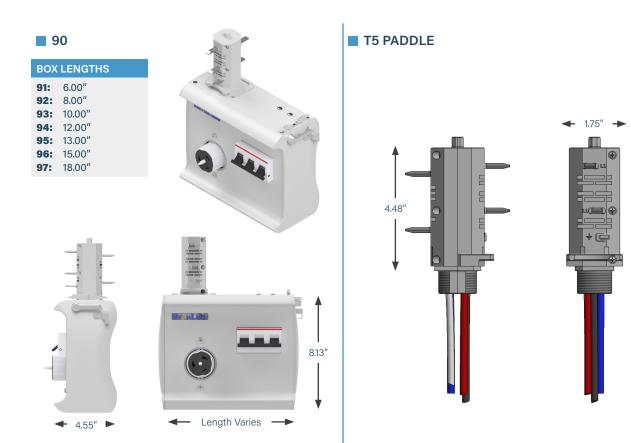


BOX SIZES & STYLES





BOX SIZES & STYLES



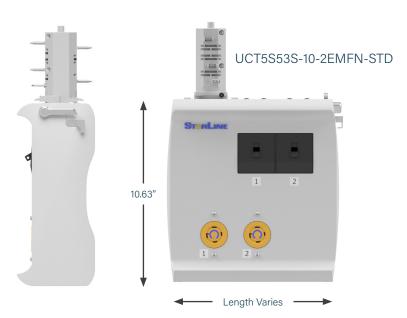


50 SERIES ENCLOSURE CUT SHEET

PRODUCT DESCRIPTION

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The 50 Series enclosure is designed to tap off power from the busway. The option is available to have a reverse paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Consult factory for possible combinations*





| BOX LENGTHS | | | | | | |
|-------------|--------|--|--|--|--|--|
| 51: | 6.00" | | | | | |
| 52: | 8.00" | | | | | |
| 53: | 10.00" | | | | | |
| 54: | 12.00" | | | | | |
| 55: | 13.00″ | | | | | |
| 56: | 15.00" | | | | | |
| 57: | 18.00" | | | | | |

EXAMPLES

UCT5C54S-22-2ACFN-STD = US, Circuit Breaker Plug, T5 Systems, Case (Housing) Ground, 54 Box, Standard Orientation, 22 Interrupt Rating, 2 Devices, L21-30, Front Located, No Accessories, Painted Factory Silver

UCT5G53S-10-2EMFN-STD = US, Circuit Breaker Plug, T5 Systems, Isolated (Separate) Ground, 53 Box, Standard Orientation, 10 Interrupt Rating, 2 Devices, IGL15-30, Front Located, No Accessories, Painted Factory Silver



90 SERIES ENCLOSURE CUT SHEET

PRODUCT DESCRIPTION

Next-generation, custom engineered enclosure that features a stylish exterior combined with a spacious interior and customizable body length to accommodate a wide variety of applications. The 90 Series enclosure is designed to tap off power from the busway. The option is available to have a reverse paddle such that the enclosure faces in the opposite direction when in the busway.

- Configurable unit length for multiple circuit breaker pole positions.
- Consult factory for possible combinations*

Length Varies

EXAMPLES

<u>UCT5C93S-50-1AKFN-STD</u> = US, Circuit Breaker Plug, T5 Systems, Case (Housing) Ground, 93 Box, Standard Orientation, 50 Interrupt Rating, 1 Device, CS8369, Front Located, No Accessories, Painted Factory Silver

<u>UCT5C94S-10-2BGB050F-STD</u> = US, Circuit Breaker Plug, T5 Systems, Case (Housing) Ground, 94 Box, Standard Orientation, 10 Interrupt Rating, 2 Devices, I6-30, Bottom Located, 5 foot Drop Cord, Finger Shroud, Painted Factory Silver



DEVICE CODE TABLE

| | NEMA Connectors | | | | | | | | |
|-------------|--------------------|---------------------|---------|----------------------|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | |
| BS | 5-15C | Connector | 120 | 1PNG | | | | | |
| FF | 5-15Q-X | Connector 120 | | 1PNG | | | | | |
| BD | 5-20C | Connector | 120 | 1PNG | | | | | |
| FG | 5-20-Q-X | Connector | 120 | 1PNG | | | | | |
| BB | 6-15C | Connector | 240 | 2PG | | | | | |
| FH | 6-15Q-X | Connector | 240 | 2PG | | | | | |
| BC | 6-20C | Connector | 240 | 2PG | | | | | |
| FI | 6-20Q-X | Connector | 240 | 2PG | | | | | |
| со | L14-20C | Connector | 120/208 | 2PNG | | | | | |
| CN | L14-30C | Connector | 120/208 | 2PNG | | | | | |
| СМ | L15-20C | 5-20C Connector 240 | | 3PG | | | | | |
| CL | L15-30C | Connector | 240 | 3PG | | | | | |
| CE | L16-20C | Connector | 480 | 3PG | | | | | |
| CD | L16-30C | Connector | 480 | 3PG | | | | | |
| CS | L21-20C | Connector | 120/208 | 3PNG | | | | | |
| СТ | L21-30C | Connector | 120/208 | 3PNG | | | | | |
| FA | L22-20C | Connector | 277/480 | 3PNG | | | | | |
| EZ | L22-30C | Connector | 277/480 | 3PNG | | | | | |
| BR | L5-15C | Connector | 120 | 1PNG | | | | | |
| BE | L5-20C | Connector | 120 | 1PNG | | | | | |
| BF | L5-30C | Connector | 120 | 1PNG | | | | | |
| BA | L6-15C | Connector | 240 | 2PG | | | | | |
| BH | L6-20C | Connector | 240 | 2PG | | | | | |
| BG | L6-30C | Connector | 240 | 2PG | | | | | |
| СК | L7-15C | Connector | 277 | 1PNG | | | | | |
| CJ | L7-20C | Connector | 277 | 1PNG | | | | | |
| CF | L7-30C | Connector | 277 | 1PNG | | | | | |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

| Pin & Sleeve Connectors | | | | | | | | |
|-------------------------|--------------------|-----------|---------|----------------------|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | |
| BJ | 360C6W | Connector | 240 | 2PG | | | | |
| BQ | 420C6W | Connector | 240 | 2PNG | | | | |
| BW | 430C7W | Connector | 480 | 3PG | | | | |
| BP | 430C9W | Connector | 240 | 3PG | | | | |
| BX | 460C7W | Connector | 480 | 3PG | | | | |
| EJ | 460C9S | Connector | 240 | 3PG | | | | |
| EI | 460C9W | Connector | 240 | 3PG | | | | |
| BZ | 520C6S | Connector | 240/415 | 3PNG | | | | |
| сс | 530C6S | Connector | 240/415 | 3PNG | | | | |
| EX | 530C6W | Connector | 240/415 | 3PNG | | | | |



DEVICE CODE TABLE

| Pin & Sleeve Connectors (Continued) | | | | | | | | |
|-------------------------------------|--------------------|-----------|---------|----------------------|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | |
| СН | 530C7S | Connector | 480 | 3PNG | | | | |
| BI | 530C9W | Connector | 240/415 | 3PNG | | | | |
| СВ | 560C6S | Connector | 240/415 | 3PNG | | | | |
| CI | 560C7S | Connector | 480 | 3PNG | | | | |
| EH | 560C9W | Connector | 120/208 | 3PNG | | | | |
| BV | 320C6S | Connector | 240 | 2PG | | | | |
| BU | 330C6S | Connector | 240 | 2PG | | | | |
| BT | 360C6S | Connector | 240 | 2PG | | | | |
| BO | 560C9S | Connector | 120/208 | 3PNG | | | | |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

| | NEMA Receptacles | | | | | | | |
|-------------|--------------------|------------|---------|----------------------|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | |
| DD | 14-20R | Receptacle | 120/208 | 2PNG | | | | |
| DC | 14-30R | Receptacle | 120/208 | 2PNG | | | | |
| CW | 14-50R | Receptacle | 120/208 | 2PNG | | | | |
| CV | 14-60R | Receptacle | 120/208 | 2PNG | | | | |
| CU | 15-20R | Receptacle | 240 | 3PG | | | | |
| CY | 15-30R | Receptacle | 240 | 3PG | | | | |
| DI | 15-50R | Receptacle | 240 | 3PG | | | | |
| DH | 15-60R | Receptacle | 240 | 3PG | | | | |
| AW | 5-15D | Receptacle | 120 | 1PNG | | | | |
| FB | 5-15Q | Receptacle | 120 | 1PNG | | | | |
| DN | 5-15R | Receptacle | 120 | 1PNG | | | | |
| AB | 5-20D | Receptacle | 120 | 1PNG | | | | |
| DL | 5-20D-GFI | Receptacle | 120 | 1PNG | | | | |
| FC | 5-20Q | Receptacle | 120 | 1PNG | | | | |
| DM | 5-20R | Receptacle | 120 | 1PNG | | | | |
| DV | 5-30R | Receptacle | 120 | 1PNG | | | | |
| GB | 6-15D | Receptacle | 240 | 2PG | | | | |
| FD | 6-15Q | Receptacle | 240 | 2PG | | | | |
| DU | 6-15R | Receptacle | 240 | 2PG | | | | |
| GC | 6-20D | Receptacle | 240 | 2PG | | | | |
| FE | 6-20Q | Receptacle | 240 | 2PG | | | | |
| DO | 6-20R | Receptacle | 240 | 2PG | | | | |
| DR | 6-30R | Receptacle | 240 | 2PG | | | | |
| DA | 6-50R | Receptacle | 240 | 2PG | | | | |
| CZ | L14-20R | Receptacle | 120/208 | 2PNG | | | | |
| DB | L14-30R | Receptacle | 120/208 | 2PNG | | | | |
| СХ | L15-20R | Receptacle | 240 | 3PG | | | | |
| AH | L15-30R | Receptacle | 240 | 3PG | | | | |
| EO | L16-20R | Receptacle | 480 | 3PG | | | | |



DEVICE CODE TABLE

| NEMA Receptacles (Continued) | | | | | | | | | |
|------------------------------|--------------------|------------|----------------------|------|--|--|--|--|--|
| Device Code | Device Designation | Voltage | Wiring Configuration | | | | | | |
| EQ | L16-30R | Receptacle | 480 | 3PG | | | | | |
| AT | L21-20R | Receptacle | 120/208 | 3PNG | | | | | |
| AC | L21-30R | Receptacle | 120/208 | 3PNG | | | | | |
| AA | L22-20R | Receptacle | 277/480 | 3PNG | | | | | |
| AF | L22-30R | Receptacle | 277/480 | 3PNG | | | | | |
| AS | L5-15D | Receptacle | 120 | 1PNG | | | | | |
| AP | L5-15R | Receptacle | 120 | 1PNG | | | | | |
| AG | L5-20R | Receptacle | 120 | 1PNG | | | | | |
| AO | L5-30R | Receptacle | 120 | 1PNG | | | | | |
| DP | L6-15D | Receptacle | 240 | 2PG | | | | | |
| DQ | L6-15R | Receptacle | 240 | 2PG | | | | | |
| AI | L6-20R | Receptacle | 240 | 2PG | | | | | |
| AD | L6-30R | Receptacle | 240 | 2PG | | | | | |
| ES | L7-15D | Receptacle | 277 | 1PNG | | | | | |
| ER | L7-15R | Receptacle | 277 | 1PNG | | | | | |
| AQ | L7-20R | Receptacle | 277 | 1PNG | | | | | |
| EP | L7-30R | Receptacle | 277 | 1PNG | | | | | |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

| Pin & Sleeve Receptacles | | | | | | | | | |
|--------------------------|--------------------|------------|----------------------|------|--|--|--|--|--|
| Device Code | Device Designation | Voltage | Wiring Configuration | | | | | | |
| FJ | 316A6S | Receptacle | 240/415 | 2PG | | | | | |
| FK | 316A6W | Receptacle | 240/415 | 2PG | | | | | |
| FL | 316R6S | Receptacle | 240/415 | 2PG | | | | | |
| FM | 320A6S | Receptacle | 240/415 | 2PG | | | | | |
| FN | 320A6W | Receptacle | 240/415 | 2PG | | | | | |
| FO | 332A6S | Receptacle | 240/415 | 2PG | | | | | |
| FP | 332A6W | Receptacle | 240/415 | 2PG | | | | | |
| FQ | 332A9S | Receptacle | 240/415 | 2PG | | | | | |
| FR | 332R6S | Receptacle | 240/415 | 2PG | | | | | |
| DG | 360R6W | Receptacle | 240 | 2PG | | | | | |
| FS | 363R6S | Receptacle | 240/415 | 2PG | | | | | |
| DF | 430R9W | Receptacle | 240 | 3PG | | | | | |
| AU | 460R9S | Receptacle | 240 | 3PG | | | | | |
| AN | 460R9W | Receptacle | 240 | 3PG | | | | | |
| FT | 5125R6S | Receptacle | 240/415 | 3PNG | | | | | |
| FU | 516A6S | Receptacle | 240/415 | 3PNG | | | | | |
| FV | 516A6W | Receptacle | 240/415 | 3PNG | | | | | |
| FW | 516R6S | Receptacle | 240/415 | 3PNG | | | | | |
| FX | 520A6W | Receptacle | 240/415 | 3PNG | | | | | |
| FY | 520R6S | Receptacle | 240/415 | 3PNG | | | | | |
| AR | 530R6S | Receptacle | 240/415 | 3PNG | | | | | |
| FZ | 532A6S | Receptacle | 240/415 | 3PNG | | | | | |
| GA | 532A6W | Receptacle | 240/415 | 3PNG | | | | | |



DEVICE CODE TABLE

| Pin & Sleeve Receptacles (Continued) | | | | | | | | |
|--------------------------------------|---------------------------|------------|---------|----------------------|--|--|--|--|
| Device Code | e Code Device Designation | | Voltage | Wiring Configuration | | | | |
| BY | 560R6S | Receptacle | 240/415 | 3PNG | | | | |
| DS | 360C4W | Receptacle | 120 | 1PNG | | | | |

| Isolated Ground Receptacles | | | | | | | | |
|-----------------------------|-------------------------|------------|---------|----------------------|--|--|--|--|
| Device Code | Device Designation Type | | Voltage | Wiring Configuration | | | | |
| EN | IG14-30R | Receptacle | 120/208 | 2PNG | | | | |
| AX | IG5-20D | Receptacle | 120 | 1PNG | | | | |
| EA | IG5-20R | Receptacle | 120 | 1PNG | | | | |
| DY | IG6-20D | Receptacle | 240 | 2PG | | | | |
| DZ | IG6-20R | Receptacle | 240 | 2PG | | | | |
| EK | IGL14-20R | Receptacle | 120/208 | 2PNG | | | | |
| ET | IGL15-20R | Receptacle | 240 | 3PG | | | | |
| EM | IGL15-30R | Receptacle | 240 | 3PG | | | | |
| EL | IGL21-20R | Receptacle | 120/208 | 3PNG | | | | |
| EG | IGL21-30R | Receptacle | 120/208 | 3PNG | | | | |
| EU | IGL22-20R | Receptacle | 277/480 | 3PNG | | | | |
| EV | IGL22-30R | Receptacle | 277/480 | 3PNG | | | | |
| EB | IGL5-15R | Receptacle | 120 | 1PNG | | | | |
| AY | IGL5-20R | Receptacle | 120 | 1PNG | | | | |
| ED | IGL5-30R | Receptacle | 120 | 1PNG | | | | |
| DW | IGL6-15D | Receptacle | 240/415 | 2PG | | | | |
| DX | IGL6-15R | Receptacle | 240/415 | 2PG | | | | |
| AM | IGL6-20R | Receptacle | 240/415 | 2PG | | | | |
| AZ | IGL6-30R | Receptacle | 240/415 | 2PG | | | | |

WIRING CONFIGURATION REFERENCE TABLE

- 1 = Number of poles
- P = Poles

G = Ground

| California Connectors | | | | | | | | |
|-----------------------|--------------------|---------------|---------|----------------------|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | |
| CP | CS6360C | Connector | 120 | 1PNG | | | | |
| CG | CS8164C | Connector | 480 | 3PG | | | | |
| CR | CS8264C | Connector | 240 | 2PG | | | | |
| CQ | CS8364C | Connector 240 | | 3PG | | | | |

| | California Receptacles | | | | | | | | | |
|-------------|------------------------|------------|---------|----------------------|--|--|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | | | |
| DK | CS6369 | Receptacle | 120/208 | 2PNG | | | | | | |
| DE | CS8269 | Receptacle | 240 | 2PG | | | | | | |
| AK | CS8369 | Receptacle | 240 | 3PG | | | | | | |

| Other | | | | | | | | |
|-------------|---------------------------|--|---------|----------------------|--|--|--|--|
| Device Code | Device Designation | Туре | Voltage | Wiring Configuration | | | | |
| XX | Custom Device (ex: colore | Custom Device (ex: colored receptacle, etc.) | | | | | | |

N = Neutral



S5 PLUG-IN UNITS

PRODUCT DESCRIPTION

S5 Plug-in Units are designed to provide the same "plug and play" flexibility for our S5 systems. These Plug-In units have been tested and certified to meet the additional ingress protection levels of the overall system.

OPTIONS:

- 1. Receptacle Box/Drop Cord Units
- 2. Circuit Breaker Units only
- 3. Meter Plugs

GENERAL SPECS:

- Three (3) Standard size enclosures
 - ES1 Up to 3 poles available
 - ES2 Up to 6 poles available
 - ES3 Up to 9 poles available
- · Clear cover protects breakers and meter while maintaining status visibility
- UV, Corrosion, and impact-resistant materials
- NEMA & IEC watertight devices available
- Breaker actuators for floor operability
- Lock-out lids and breaker
- Up to 125A per box
- 65kA Short Circuit rating @480V
- Compatible with Starline meters
- Wide range of configuration options

Note: Series-S Plug-in Units come standard with tap-off seal assembly. Reference T5 Accessories **page 4.110** to order separately.







SERIES-S ENCLOSURE STYLE OPTIONS

ES1 ENCLOSURE

Dimensions(in):

H: 10.5" W: 8" D: 6.36"

Configuration Options:

- Up to 3 Poles
- Up to 3 drop cords
- Meter available
- 1 Bottom-Mounted receptacle

ES2 ENCLOSURE

Dimensions(in):

H: 10.5" W: 11" D: 6.36"

Configuration Options:

- Up to 6 Poles
- Up to 6 drop cords
- Meter available
- Up to 1 Front-Mounted or 2 Bottom-Mounted receptacles

ES3 ENCLOSURE

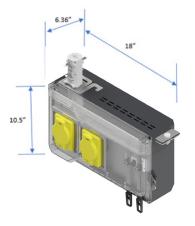
Dimensions(in):

H: 10.5" W: 18" D: 6.36"

Configuration Options:

- Up to 9 Poles
- Up to 9 drop cords
- Meter available
- Up to 2 Front-Mounted or 3 Bottom-Mounted receptacles









SYSTEM & BUILD GUIDE

The below is a suggested list of questions to determine answers to in order to properly build or assemble both Track Busway systems and plugs.

WHEN BUILDING SYSTEMS

- 1. What is the amperage needed for the system? (250, 400, 500, etc..)
- 2. Does the system need an internal ground?
- 3. Are there any limitations on the length of a run? (5ft max, 10ft max)

WHEN DETERMINING DESIRED PLUG CONFIGURATIONS

1. What type of system is this being used on? (S5)

2. Does the system have an internal ground? If so, does the plug need to be wired Isolated or Dedicated ground/earth?

3. What is the fault current needed for the breaker? (10kAIC, 22kAIC, etc..)

- 4. Does the plug need to have drop cords or receptacles?
- 5. What is the device configuration of the connector bodies or receptacles?
- 6. What is your desired MCB configuration? (phase, amperage, poles?)
- 7. Do you require metering?
- 8. How many outlets are needed?
- 9. What is the trip curve needed?
- 10. What MCB brand is preferred?
- 11. What is the voltage required?

CIRCUIT BREAKER/FUSED DISCONNECT UNITS W/ DEVICES: PRODUCT NUMBERS

| | U | С | S5 | С | S 3 | S | - | 14 | - | 1 | |
|---------------------|---|---------------------------|-----------------------------|--------------------|--------------------------|----------------------------------|--------|---------------------------|-----------------|----------------------------|--------------------------|
| | 1. System | 2. Product Type | 3. Compatibility | 4. Ground | 5. Box | 6. Orientation | | 7. Interrupt Rating | I | 3. Device Quantity | |
| | RU | F | 010 | Ν | - M51 | D |] - | STD | | 0 | *Optional |
| | 9. Device | *10. Mount Location | *11. Drop Cord Length | 12. Accessories | *13. Meter Release | *14. Meter Options | | 15. Paint Color | | 6. op Cord oe Markin | g |
| . System (st | andard of meas | sure) | | | 12. Acc | essories (op | otiona | al accessorie | s for | plugs) | |
| J US | | | | | N N. | /A | | | | | |
| . Product T | ype (section c | omponent) | | | *13. Me | ter Release | (M5 | 0 AC) | | | |
| Circuit I | Breaker Unit | F | Fused Disco | nnect Unit | | ngle Eth./W ngle Eth./No | | | | | |
| 3. Compatib | ility (frame co | mpatibility) | | | V58 Du | ual Eth., ≤48 | 0V Y | , ≤277V Δ | | | |
| 5 S5 Syst | em | | | | | ual Eth/Dual ual Eth/Dual | | | | | Breaker Monitorin |
| 1. Ground (g | round type inst | talled) | | | | ial Eth, Brea | | | | | |
| | lousing) Grou | | Dedicated G | round | *13. Me | ter Release | (M6 | 0 DC) | | | |
| | (Separate) G | | | | | ngle Eth./W | | | | | |
| | size enclosure) | | | | | ngle Eth./No ual Eth., sing | | | hase | , VDC | |
| | | | tyle Options, p | age 4.144) | | ual Eth/Dua | | | e ph | ase, VDC |) |
| | n (what direct | 1 - C | · · | | *14. Me | ter Options | (M5 | 0 AC) | | | |
| S Standar | - | R | Reversed | | | andard | | | Ν | | ed) Neutral |
| | | | e breakers in K) | | D Di | splay | | I | Ρ | Professio | onal (D+N) |
| 0, 14, 22, 2 | 5, 30, 35, 50 | , 65, CC (C | C = 200,000 |) (for U.S.) | *14. Me | ter Options | (M6 | 0 DC) | | | |
| | iantity (quant | · · · · · | | | | andard (High | | | P | | (48 VDC) |
| | 6, 7, 8 (for m [,] Table, page 4 | | evice type, refe | er to S5 | | splay (High \ ters support: H | | | Q 300 | Display (VDC/Split | 48 VDC) Phase 120 VDC |
| | antity of device | | | | (+/-60) t | o 380 VDC (+/ | '-180) | OR Low Volt | age: | 48 VDC | |
| | | · | e Table, page | 4147) | 15. Pair | nt Color | | | | | |
| | | | sway polarizing | , | STD S | Standard Da | rk G | ray | | | |
| F Front | | B | Bottom | suipe) | | Consult Fact | - | , | otions | 5 | |
| *11. Drop Co | rd Length (lo | cation of optio | nal meter) | | | p Cord Tape | | • | - | | Dlus |
| | et, Y = Inches | | | | | e Factory Bl e Factory W | | 7 8 | | e Factory e Factory | |
| | | | , | | | | | | | | |
| (only can be ch | | | '0 amps, the max | | 6 Tap | e Factory Re | ed | 9 | Тар | e Factory | / Yellow |

EXAMPLE

UCS5CS3S-22-20SFN-STD0 = US System, circuit Breaker Only Unit, S5 System, Case Ground, S3 Box, Standard Orientation, 22kA interrupt rating, 2 devices, NEMA L5-15R-IP receptacles, front mount location, no accessories, no meter, standard dark gray color



US DEVICE CODE TABLE

| | | | NEMA | Connectors | ; | | |
|------|------|-------------|-------------|------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| RU | NEMA | 5-15C-IP | CONNECTOR | 120 | 15 | 1PNG | IP67 |
| PV | NEMA | L5-15C-IP | CONNECTOR | 120 | 15 | 1PNG | IP67 |
| RV | NEMA | 6-15C-IP | CONNECTOR | 240 | 15 | 2PG | IP67 |
| PW | NEMA | L6-15C-IP | CONNECTOR | 240 | 15 | 2PG | IP67 |
| РХ | NEMA | L7-15C-IP | CONNECTOR | 277 | 15 | 1PNG | IP67 |
| RW | NEMA | 5-20C-IP | CONNECTOR | 120 | 20 | 1PNG | IP67 |
| ΡΥ | NEMA | L5-20C-IP | CONNECTOR | 120 | 20 | 1PNG | IP67 |
| RX | NEMA | 6-20C-IP | CONNECTOR | 240 | 20 | 2PG | IP67 |
| ΡZ | NEMA | L6-20C-IP | CONNECTOR | 240 | 20 | 2PG | IP67 |
| QC | NEMA | L15-20C-IP | CONNECTOR | 240 | 20 | 3PG | IP67 |
| QA | NEMA | L7-20C-IP | CONNECTOR | 277 | 20 | 1PNG | IP67 |
| QD | NEMA | L16-20C-IP | CONNECTOR | 480 | 20 | 3PG | IP67 |
| QG | NEMA | L23-20C-IP | CONNECTOR | 600 | 20 | 3PNG | IP67 |
| QB | NEMA | L14-20C-IP | CONNECTOR | 120/208 | 20 | 2PNG | IP67 |
| QE | NEMA | L21-20C-IP | CONNECTOR | 120/208 | 20 | 3PNG | IP67 |
| QF | NEMA | L22-20C-IP | CONNECTOR | 277/480 | 20 | 3PNG | IP67 |
| QH | NEMA | L5-30C-IP | CONNECTOR | 120 | 30 | 1PNG | IP67 |
| QI | NEMA | L6-30C-IP | CONNECTOR | 240 | 30 | 2PG | IP67 |
| QL | NEMA | L15-30C-IP | CONNECTOR | 240 | 30 | 3PG | IP67 |
| QJ | NEMA | L7-30C-IP | CONNECTOR | 277 | 30 | 1PNG | IP67 |
| QM | NEMA | L16-30C-IP | CONNECTOR | 480 | 30 | 3PG | IP67 |
| QN | NEMA | L17-30C-IP | CONNECTOR | 600 | 30 | 3PG | IP67 |
| QR | NEMA | L23-30C-IP | CONNECTOR | 600 | 30 | 3PNG | IP67 |
| QK | NEMA | L14-30C-IP | CONNECTOR | 120/208 | 30 | 2PNG | IP67 |
| QO | NEMA | L18-30C-IP | CONNECTOR | 120/208 | 30 | 3PG | IP67 |
| QP | NEMA | L21-30C-IP | CONNECTOR | 120/208 | 30 | 3PNG | IP67 |
| QQ | NEMA | L22-30C-IP | CONNECTOR | 277/480 | 30 | 3PNG | IP67 |

WIRING CONFIGURATION REFERENCE TABLE

- N = Neutral
- G = Ground

^{1 =} Number of poles

P = Poles



US DEVICE CODE TABLE

| | | | Pin & Slee | eve Connec | tors | | |
|------|------|-------------|-------------|------------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| SU | IEC | 320C7W | CONNECTOR | 480 | 20 | 2PG | IP67 |
| SY | IEC | 420C7W | CONNECTOR | 480 | 20 | 3PG | IP67 |
| ТА | IEC | 320C9W | CONNECTOR | 120/208 | 20 | 2PG | IP67 |
| SZ | IEC | 520C7W | CONNECTOR | 277/480 | 20 | 3PNG | IP67 |
| sv | IEC | 330C7W | CONNECTOR | 480 | 30 | 2PG | IP67 |
| тв | IEC | 330C9W | CONNECTOR | 120/208 | 30 | 2PG | IP67 |
| SW | IEC | 360C7W | CONNECTOR | 240 | 60 | 2PG | IP67 |
| тс | IEC | 360C9W | CONNECTOR | 120/208 | 60 | 2PG | IP67 |
| SX | IEC | 3100C7W | CONNECTOR | 480 | 100 | 2PG | IP67 |
| TD | IEC | 3100C9W | CONNECTOR | 120/208 | 100 | 2PG | IP67 |
| BI | IEC | 530C9W | CONNECTOR | ECTOR 120/208 30 | | 3PNG | IP67 |
| BP | IEC | 430C9W | CONNECTOR | 250 | 30 | 3PG | IP67 |
| BW | IEC | 430C7W | CONNECTOR | 480 | 30 | 3PG | IP67 |
| BX | IEC | 460C7W | CONNECTOR | 480 | 60 | 3PG | IP67 |
| EH | IEC | 560C9W | CONNECTOR | 120/208 | 60 | 3PNG | IP67 |
| EI | IEC | 460C9W | CONNECTOR | 250 | 60 | 3PG | IP67 |
| GI | IEC | 4100C9W | CONNECTOR | 250 | 100 | 3PG | IP67 |
| GJ | IEC | 560C7W | CONNECTOR | 277/480 | 60 | 3PNG | IP67 |
| GK | IEC | 530C7W | CONNECTOR | 277/480 | 30 | 3PNG | IP67 |
| GR | IEC | 5100C7W | CONNECTOR | 277/480 | 100 | 3PNG | IP67 |
| GS | IEC | 5100C9W | CONNECTOR | 120/208 | 100 | 3PNG | IP67 |
| МК | IEC | 4100C7W | CONNECTOR | 480 | 100 | 3PG | IP67 |
| NL | IEC | 420C9W | CONNECTOR | 250 | 20 | 3PG | IP67 |



- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground



US DEVICE CODE TABLE

| | | | NEMA F | Receptacles | 5 | | |
|------|------|-------------|-------------|-------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| RQ | Nema | 5-15R-IP | RECEPTACLE | 120 | 15 | 1PNG | IP67 |
| QS | NEMA | L5-15R-IP | RECEPTACLE | 120 | 15 | 1PNG | IP67 |
| RR | NEMA | 6-15R-IP | RECEPTACLE | 240 | 15 | 2PG | IP67 |
| QT | NEMA | L6-15R-IP | RECEPTACLE | 240 | 15 | 2PG | IP67 |
| QU | NEMA | L7-15R-IP | RECEPTACLE | 277 | 15 | 1PNG | IP67 |
| RS | NEMA | 5-20R-IP | RECEPTACLE | 120 | 20 | 1PNG | IP67 |
| QV | NEMA | L5-20R-IP | RECEPTACLE | 120 | 20 | 1PNG | IP67 |
| RT | NEMA | 6-20R-IP | RECEPTACLE | 240 | 20 | 2PG | IP67 |
| QW | NEMA | L6-20R-IP | RECEPTACLE | 240 | 20 | 2PG | IP67 |
| QZ | NEMA | L15-20R-IP | RECEPTACLE | 240 | 20 | 3PG | IP67 |
| QX | NEMA | L7-20R-IP | RECEPTACLE | 277 | 20 | 1PNG | IP67 |
| RA | NEMA | L16-20R-IP | RECEPTACLE | 480 | 20 | 3PG | IP67 |
| RD | NEMA | L23-20R-IP | RECEPTACLE | 600 | 20 | 3PNG | IP67 |
| QY | NEMA | L14-20R-IP | RECEPTACLE | 120/208 | 20 | 2PNG | IP67 |
| RB | NEMA | L21-20R-IP | RECEPTACLE | 120/208 | 20 | 3PNG | IP67 |
| RC | NEMA | L22-20R-IP | RECEPTACLE | 277/480 | 20 | 3PNG | IP67 |
| RE | NEMA | L5-30R-IP | RECEPTACLE | 120 | 30 | 1PNG | IP67 |
| RF | NEMA | L6-30R-IP | RECEPTACLE | 240 | 30 | 2PG | IP67 |
| RI | NEMA | L15-30R-IP | RECEPTACLE | 240 | 30 | 3PG | IP67 |
| RG | NEMA | L7-30R-IP | RECEPTACLE | 277 | 30 | 1PNG | IP67 |
| RJ | NEMA | L16-30R-IP | RECEPTACLE | 480 | 30 | 3PG | IP67 |
| RK | NEMA | L17-30R-IP | RECEPTACLE | 600 | 30 | 3PG | IP67 |
| RN | NEMA | L23-30R-IP | RECEPTACLE | 600 | 30 | 3PNG | IP67 |
| RH | NEMA | L14-30R-IP | RECEPTACLE | 120/208 | 30 | 2PNG | IP67 |
| RL | NEMA | L21-30R-IP | RECEPTACLE | 120/208 | 30 | 3PNG | IP67 |
| RM | NEMA | L22-30R-IP | RECEPTACLE | 277/480 | 30 | 3PNG | IP67 |

WIRING CONFIGURATION REFERENCE TABLE

- P = Poles
- N = Neutral
- G = Ground

^{1 =} Number of poles



US DEVICE CODE TABLE

| | | | Pin & Slee | ve Receptad | les | | |
|------|------|-------------|-------------|-------------|----------|-------------------------|-----------|
| Code | Туре | Designation | Device Type | Voltage | Amperage | Wiring Configuration | IP Rating |
| SN | IEC | 420R9W | RECEPTACLE | 240 | 20 | 3PG | IP67 |
| RY | IEC | 320R7W | RECEPTACLE | 480 | 20 | 2PG | IP67 |
| SC | IEC | 420R7W | RECEPTACLE | 480 | 20 | 3PG | IP67 |
| SQ | IEC | 520R9W | RECEPTACLE | 120/208 | 20 | 3PNG | IP67 |
| SG | IEC | 520R7W | RECEPTACLE | 277/480 | 20 | 3PNG | IP67 |
| RZ | IEC | 330R7W | RECEPTACLE | 480 | 30 | 2PG | IP67 |
| SD | IEC | 430R7W | RECEPTACLE | 480 | 30 | 3PG | IP67 |
| SR | IEC | 530R9W | RECEPTACLE | 120/208 | 30 | 3PNG | IP67 |
| SA | IEC | 360R7W | RECEPTACLE | CLE 480 | | 2PG | IP67 |
| SH | IEC | 560R7W | RECEPTACLE | 277/480 | 60 | 3PNG | IP67 |
| SE | IEC | 460R7W | RECEPTACLE | 480 | 60 | 3PG | IP67 |
| SO | IEC | 460R9W | RECEPTACLE | 120/208 | 60 | 3PG | IP67 |
| SS | IEC | 560R9W | RECEPTACLE | 120/208 | 60 | 3PNG | IP67 |
| SB | IEC | 3100R7W | RECEPTACLE | 480 | 100 | 2PG | IP67 |
| SF | IEC | 4100R7W | RECEPTACLE | 480 | 100 | 3PG | IP67 |
| SP | IEC | 4100R9W | RECEPTACLE | 120/208 | 100 | 3PG | IP67 |
| ST | IEC | 5100R9W | RECEPTACLE | 120/208 | 100 | 3PNG | IP67 |
| SI | IEC | 5100R7W | RECEPTACLE | 277/480 | 100 | 3PNG | IP67 |

- 1 = Number of poles
- P = Poles
- N = Neutral
- G = Ground

CIRCUIT BREAKER/FUSED DISCONNECT UNITS, NO DEVICES: PRODUCT NUMBERS

| | | U | C | ; 5 | 65 | С | S2 | ; | S – | 14 | _ | | | |
|---|----------------|--------------|---------------------|-----------------------------|----------------------------|--------------------|-----------|-------------|-------------------------|----------------------------|---|--------------------|-----------------------------------|----------|
| | | 1. System | 2. Produ Type | 3. ct Comp | 4. atibility Gro | 5. ound Bo | | 6. Orier | ntation | 7. Interrupt Rating | | | | |
| 2 | 030 | 3 | 480 | 050 | 5 | Ν | - 1 | M59 | D | 3 | - | STD | 0 | *Optiona |
| 8. Circuit Protection Quantity | 9. Amperage | 10. Poles | 11. Voltage | *12. Drop Cord Length | *13. Number of Wires | 14. Accessorie: | 15 s M | i. leter | 16. Meter Options | 17. Meter Configurat | | 18. Paint Color | *19. Drop Cord Tape Marking | I |

| 1. System (standard of measure) | 14. Accessories (optional accessories for plugs) | | | | | |
|---|--|--|--|--|--|--|
| U US | N N/A | | | | | |
| 2. Product Type (section component) | 15. Meter | | | | | |
| C Circuit Breaker Unit F Fused Disconnect Unit | M51 Single Eth./WiFi, ≤480V Y, ≤277V Δ | | | | | |
| 3. Compatibility (frame compatibility) | M53 Single Eth./No WiFi, ≤480V Y, ≤277V Δ M58 Dual Eth, ≤480V Y, ≤277V Δ | | | | | |
| S5 System | M59 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ M56 Dual Eth/Dual Modbus, ≤480V Y, ≤277V Δ, Breaker Monitoring | | | | | |
| 4. Ground (ground type installed) | | | | | | |
| C Case (Housing) Ground D Dedicated Ground | 16. Meter Options (M50 AC) | | | | | |
| G Isolated (Separate) Ground | SStandardN(Measured) NeutralDDisplayPProfessional (D+N) | | | | | |
| 5. Box (what size enclosure) | *16. Meter Options (M60 DC) | | | | | |
| S1, S2, S3 (refer to S5 Enclosure Style Options, page 4.144) | S Standard (High Voltage) P Standard (48 VDC) D Display (High Voltage) Q Display (48 VDC) | | | | | |
| 6. Orientation (what direction the paddle faces) | M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC (+/ | | | | | |
| S Standard R Reversed | 60) to 380 VDC (+/-180) OR Low Voltage: 48 VDC | | | | | |
| 7. Interrupt Rating (interrupt rating of the breakers in K) | *17. Meter Configuration | | | | | |
| 10, 14, 22, 25, 30, 35, 50, 65, CC (CC = 200,000) (for US) | 1 LL power, Delta Solid Core, mV CT 3 LN power, Wye Solid Core, mV CT | | | | | |
| 8. Circuit Protection Quantity | 4 LL power, Delta Solid Core, 5A-secondary CT | | | | | |
| 1, 2, 3, 4, 5, 6 | 6 LN power, Wye Solid Core, 5A-secondary CT 7 LL power, Delta Split Core, mV CT | | | | | |
| 9. Amperage | 9 LN power, Wye Split Core, mV CT | | | | | |
| 015, 020, 030, 60, 100 | K LL power, Delta Split Core, 5A-secondary CT M LN power, Wye Split Core, 5A-secondary CT | | | | | |
| 10. Poles (number of poles in a circuit) | *14. Meter Configuration (M60 DC) | | | | | |
| 1, 2, 3, 4, 5 | 1 Circuit 1 Only, Solid Core 3 Both Circuits, Solid Core | | | | | |
| 11. Voltage | 2 Circuit 2 Only, Solid Core | | | | | |
| 120, 240, 277, 300, 415, 480, 600 | 17. Paint Color | | | | | |
| *12. Drop Cord Length (length of drop cord) | STD Standard Dark Gray | | | | | |
| 010 1 foot XXY XX=feet, Y=inches | Note: Consult Factory for other options | | | | | |
| (only can be chosen in 6" increments) For any device configuration chosen over 70 amps, the max. drop cord length is 10 feet (100) | 18. Drop Cord Tape Marking | | | | | |
| *13. Number of Wires (M50 AC) | 3 Black 6 Red 8 Green 4 White 7 Blue | | | | | |
| 2, 3, 4, 5 | | | | | | |

EXAMPLE

UCS5CS2S-14-203032400503N-STD0 = US System, circuit Breaker Only Unit, S5 System, Case Ground, S2 Box, Standard Orientation, 14kA interrupt rating, 2 circuits, 30 amps, 3 poles, 240v, 5 ft drop cord, 3 wires, no accessories, no meter, standard dark gray color

METER PLUGS: PRODUCT NUMBERS

| | U | Μ | S | 5 | С | S | 3 | S | - | 065 | 5 | |
|--|---|---|------------------------|------------------------|--------------|---|--------|---|------|----------------------------|--|--|
| | 1. System | 2. Product Type | 3. Compat | 4. ibility Gro | ound | 5. Box | | 6. Orientation | n | 7. Current Transforr | mer | |
| | | - | M59 | S | | 1 | - | STD | *Op | tional | | |
| | | | 8. Meter Release | 9. Meter Options | |). eter nfiguratio | P | 1. Paint Color | | | | |
| . System (standard of J US | | | | | 9. S D | Stan | dard | ons (<i>M</i> 50 AC |) | | (Measured) Neutral Professional (D+N) | |
| 2. Product Type (sect | | | | | | 9. Meter Options (M60 DC) | | | | | | |
| 3. Compatibility (fram 55 S5 System | | ity) | | | М | D Display (High Voltage) Q Display (48 VDC) M60 Meters support: High Voltage: 120 to 300 VDC/Split Phase 120 VDC (+/-60) to 380 VDC (+/-180) OR Low Voltage: 48 VDC | | | | | | |
| Ground (ground typ Case (Housing) Box (what size enclose) | Ground | | | | *1 1 3 | | | | | | | |
| 5. Box (what size enclosure) S1, S2, S3 (refer to S5 Enclosure Style Options, page 4.144) 6. Orientation (what direction the paddle faces) S Standard R Reversed | | | | | | 4 LL power, Delta Solid Core, 5A-secondary CT 6 LN power, Wye Solid Core, 5A-secondary CT 7 LL power, Delta Split Core, mV CT 9 LN power, Wye Split Core, mV CT K LL power, Delta Split Core, 5A-secondary CT | | | | | | |
| Current Transform | er (current ra | 225 225 | | | M *1 | | | r, Wye Split nfiguration | | | condary CT | |
| 250 250 amps 800 800 amps IK2 1200 amps #M60 (DC) meters are or | nly available w | 400 400 1K0 1000 with 800 amp | amps | ducers | 1 2 3 | Circu | it 2 (| Only, Solid (Only, Solid (uits, Solid (| Core | | | |
| 8. Meter Release (M5 M51 Single Eth./WiF M53 Single Eth./No \ M58 Dual Eth., ≤480 M59 Dual Eth/Dual \ | 11. Paint ColorSTD Standard Dark Gray Note: Consult Factory for other options | | | | | | | | | | | |
| 8. Meter Release (M6 M61 Single Eth./WiF M63 Single Eth./No \ M67 Dual Eth., single M69 Dual Eth/Dual M | i, single pha ViFi, single phase, VD(| phase, VD C | | | | | | | | | | |

EXAMPLE

<u>UMS5CS2S-065-M59S1-STD</u> = US System, Meter Plug, S5 System, Case Ground, S2 Box, Standard Orientation, 65 Current Rating, M59 Meter, Standard, LL Power, Delta Solid Core, mV CT, Painted Factory Silver



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