



Starline®  
A brand of legrand

# Track Busway Product Selection Guide

T3 160A METRIC SYSTEM

# T3 SERIES

## T3 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:

IEC 61439-1, 61439-6

CCC GB7251.1-2013

CCC GB7251.6-2015

CSA C22.2 No. 27

NMX-J-148-1998-ANCE

UL 857, Ed. 13

Low Voltage Directive - 2014/35/EC

RoHS Directive - 2011/65/EU

\*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 IEC 61439, General Rules & Busway Trunking Systems, with the flexible features of track lighting - and is available in systems with 160 & 225 amps with case, dedicated or isolated earth.

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](mailto: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 [downloads.starlinepower.com](https://downloads.starlinepower.com).

# T3 SERIES

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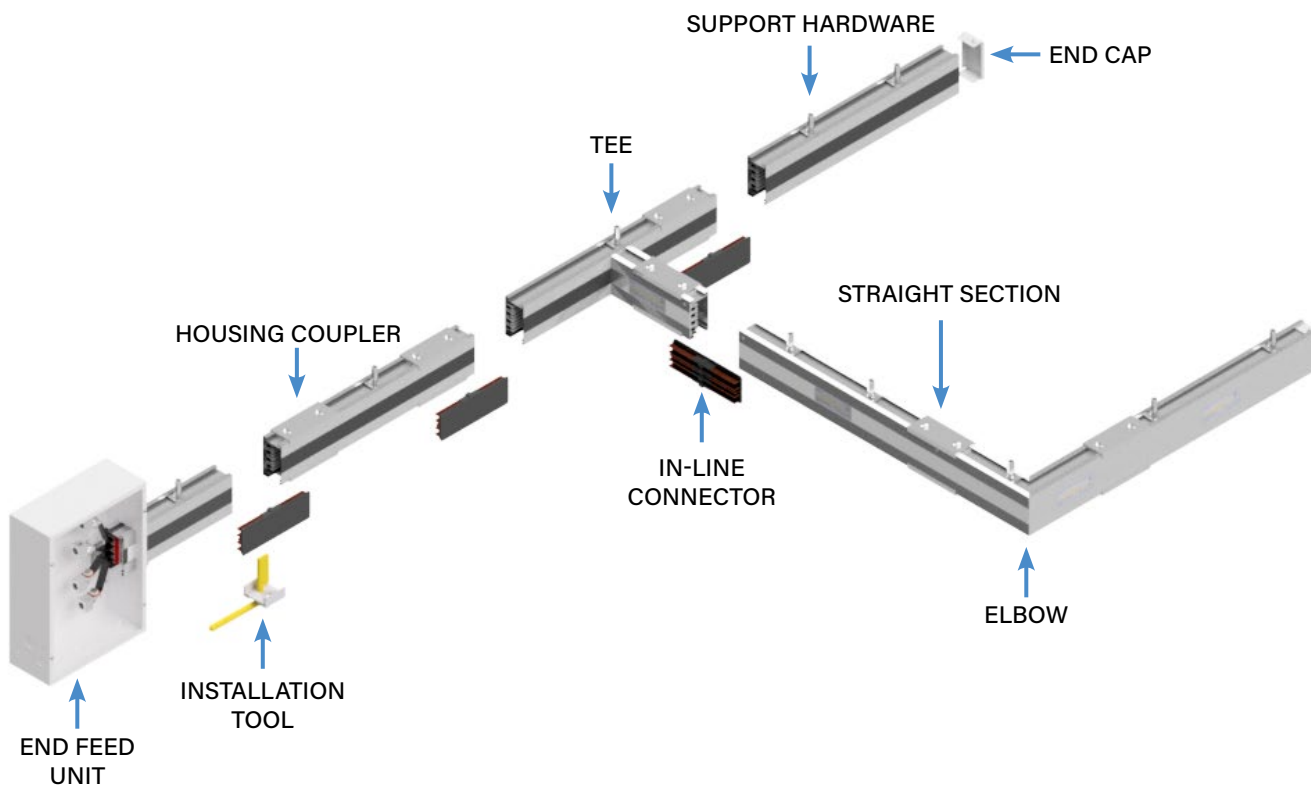
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# T3 SERIES

## SYSTEM LAYOUT DRAWING



### PLUG-IN UNITS

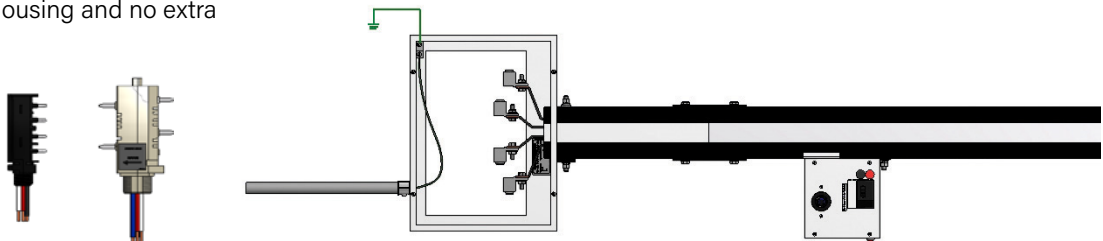
For further information on applicable T3 plug-in unit options, please consult the factory.

# T3 SERIES

## GROUND OPTIONS

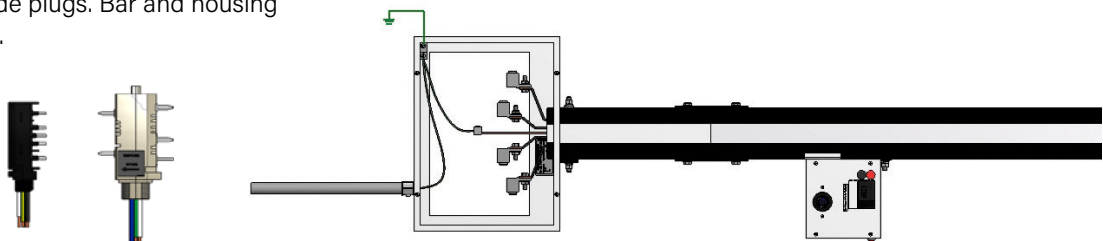
### ■ CASE GROUND/CHASSIS EARTH

Uses aluminum housing and no extra copper bar.



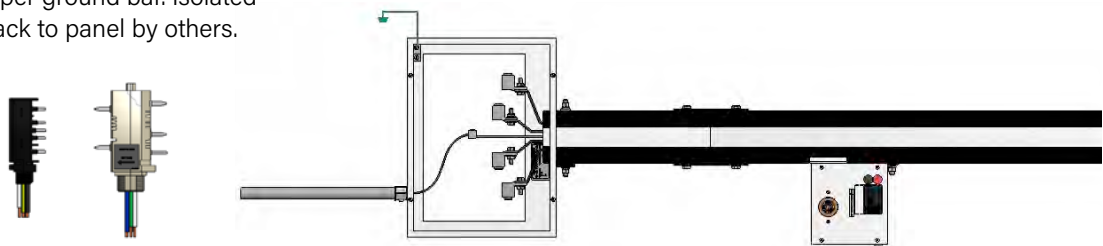
### ■ DEDICATED GROUND/EARTH

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 [downloads.starlinepower.com/](https://downloads.starlinepower.com/)

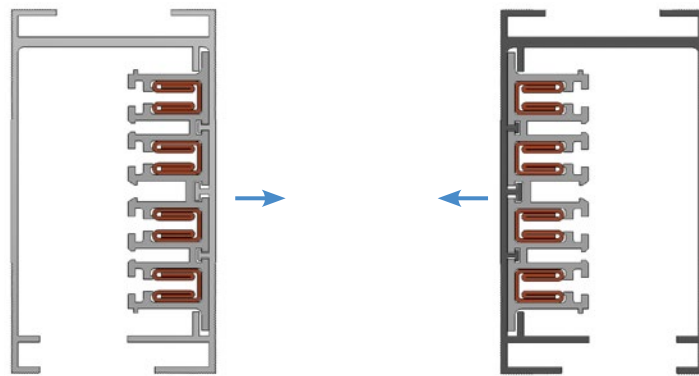
# T3 SERIES

## POLARITY TIPS

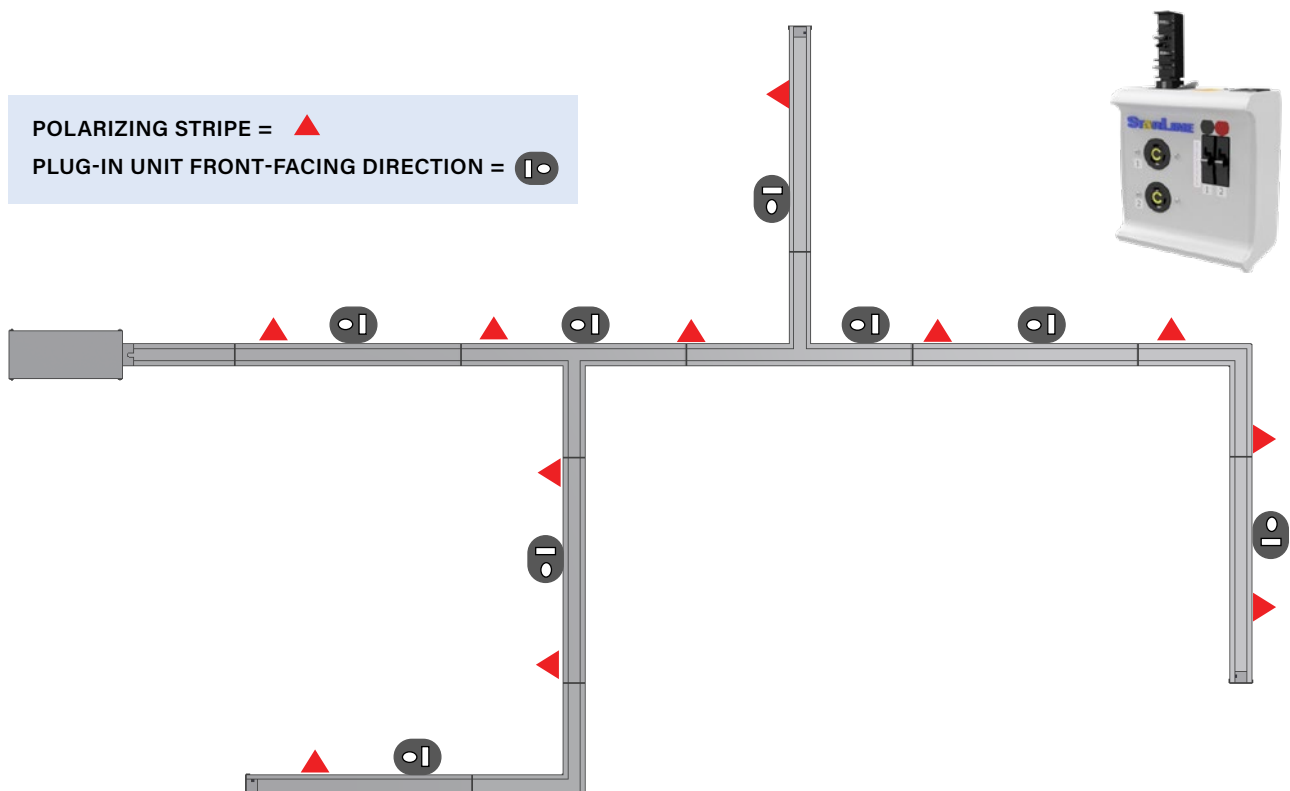
Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

**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





# T3 SERIES

## 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 3 meters apart. Refer to **page 3.36** 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 **[downloads.starlinepower.com/busway/](https://downloads.starlinepower.com/busway/)**. CAD files of these drawings are also available by contacting your local Starline applications engineer.

### BUSWAY HOUSING SECTIONS

Standard Busway lengths are available in 1.5 meter, 3 meter and 6 meter increments. Although the factory can cut individual Starline Track Busway sections to any length under 6 meters, it is highly recommended to keep all layout runs in increments of 1.5 meters 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.

## T3 SERIES

### 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 160T3 or 225T3 systems, you will need to order an installation tool (ST3IT).

#### GENERAL SUPPORT HARDWARE RULE TO FOLLOW:

- 3 meter 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 3.6** Polarity Tips for more detail.

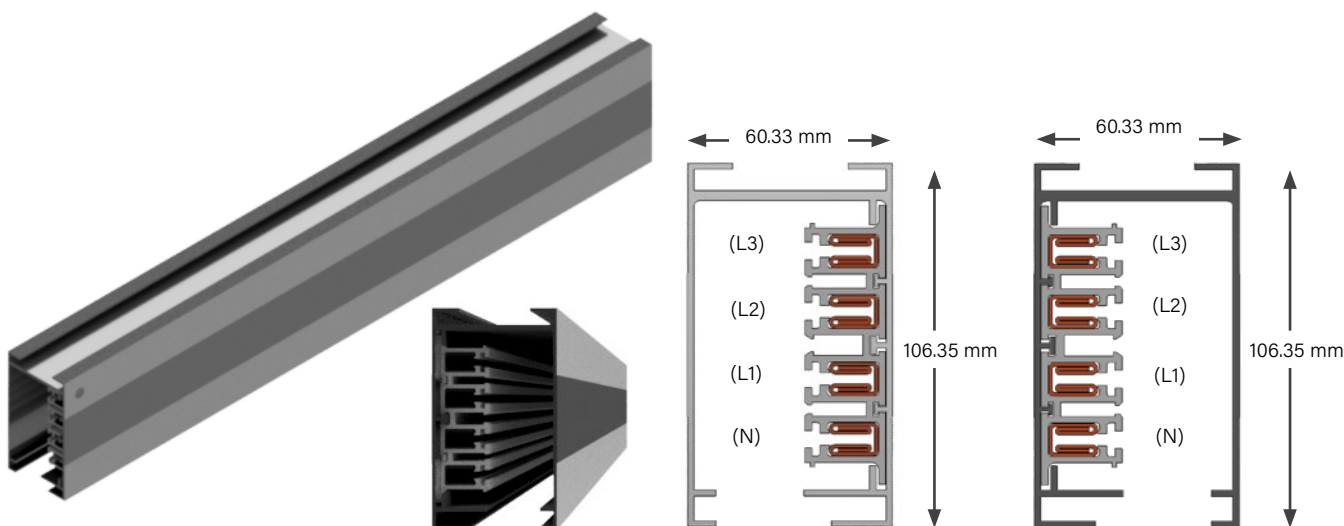


# 160T3 SYSTEMS






## STRAIGHT SECTIONS

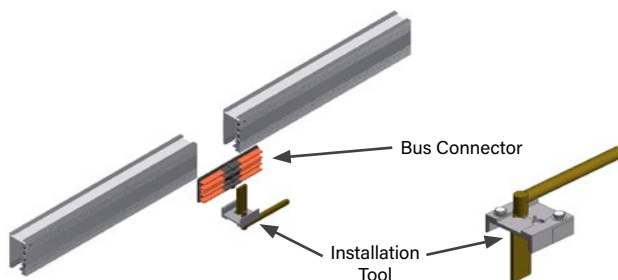
### PRODUCT DESCRIPTION

Track Busway straight sections consist 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, 415 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
RATINGS
100% Protective Earth 160 Amp, 415 Volt
LENGTH
1.5 m, 3 m, 6 m; or custom lengths between 1.5 - 6 m
WEIGHT
3m 4 pole: 11.8 kg 3m 4 pole w/ ground: 13.6 kg 3m 4 pole w/ 200% N: 15 kg 3m 4 pole w/ ground & 200% N: 15.4 kg

METRIC		
L1 or Phase A		brown
L2 or Phase B		black
L3 or Phase C		gray
L3 or Phase C		blue
Neutral Ground		green/yellow



## STRAIGHT SECTIONS: PRODUCT NUMBERS

M	S	160	T3	C	4	S	-	M030	C
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Straight	9. Busway	
				-	STD	0			
				10. Paint Color	11. Tape Marking				

<b>1. System</b> <i>(standard of measure)</i> <b>M</b> Metric	<b>9. Busway Access</b> <i>(how plugs access the busway)</i> <b>C</b> Continuous
<b>2. Product Type</b> <i>(section component)</i> <b>S</b> Straight Section	<b>10. Paint Color</b> <i>(allows painting of the busway housing)</i> <b>STD</b> Factory Mill Finish <b>RED</b> Paint Factory Red <b>BLK</b> Paint Factory Black <b>BLU</b> Paint Factory Blue <b>WHT</b> Paint Factory White <b>**RAL</b> <i>(please see page 3.35)</i>
<b>3. Product Frame</b> <i>(maximum amperage)</i> <b>160</b> 160 amps	<b>11. Tape Marking</b> <i>(colored tape on both sides of busway housing)</i> <b>0</b> None <b>6</b> Tape Factory Red <b>3</b> Tape Factory Black <b>7</b> Tape Factory Blue <b>4</b> Tape Factory White <b>8</b> Tape Factory Green
<b>4. Compatibility</b> <i>(frame compatibility)</i> <b>T3</b> T3 Series	
<b>5. Material</b> <i>(busbar material)</i> <b>C</b> Copper	
<b>6. Neutral/Ground Busbar</b> <i>(size of neutral busbar and/or ground)</i> <b>4</b> 3 Phase plus Neutral <b>G</b> 3 Phase plus Neutral plus Internal Ground Conductor <b>N</b> 3 Phase plus 200% Neutral <b>F</b> 3 Phase plus 200% Neutral plus Internal Ground Conductor	
<b>7. Polarization</b> <i>(orientation of section for mating purposes)</i> <b>S</b> Standard	
<b>8. Straight Length</b> <i>(length of section)</i> <b>MXYY</b> X = meters, YY = centimeters	

**MS160T3CNS-M600C-P013** = Metric System, Straight Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, 6 meter Straight Length, Continuous Busway Access, Painted RAL 1001, Black Tape Marking

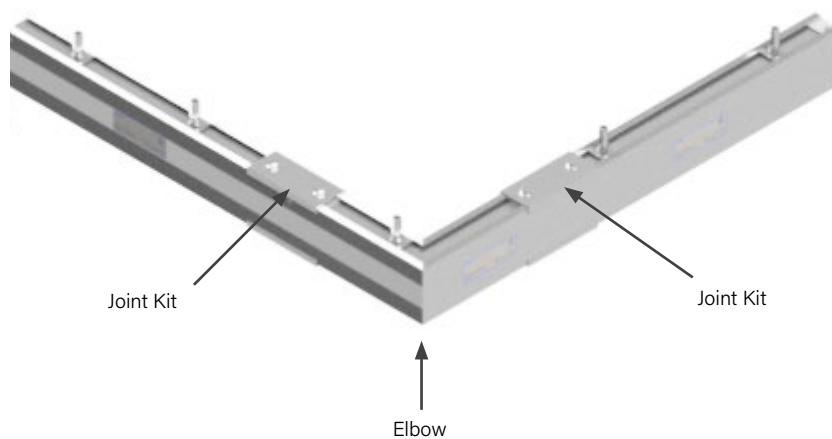
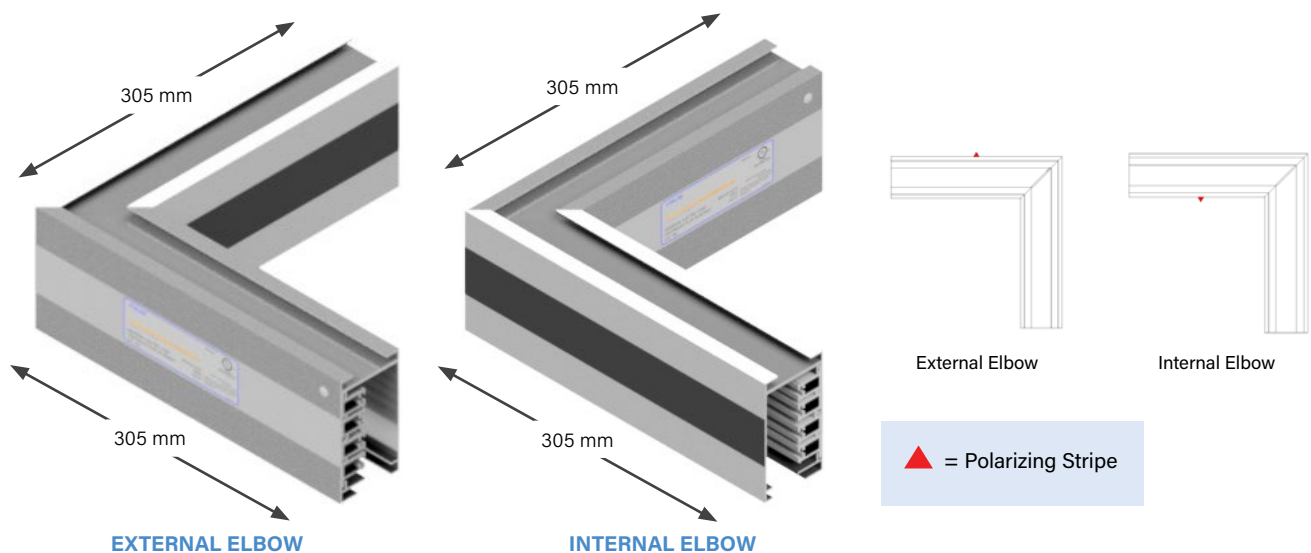
# 160T3 SYSTEMS

## 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** 2.5 kg



## ELBOW SECTIONS: PRODUCT NUMBERS

M	E	160	T3	C	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				

<b>1. System</b> <i>(standard of measure)</i>		<b>8. Turning Direction</b> <i>(direction of section polarizing stripe)</i>			
<b>M</b>	Metric	<b>IN</b>	Internal	<b>EX</b>	External
<b>HN</b>	Seismic Internal	<b>GX</b>	Seismic External		
<b>2. Product Type</b> <i>(section component)</i>		<b>9. Paint Color</b> <i>(allows painting of the busway housing)</i>			
<b>E</b>	Elbow Section	<b>STD</b>	Factory Mill Finish	<b>RED</b>	Paint Factory Red
<b>3. Product Frame</b> <i>(maximum amperage)</i>		<b>BLK</b>	Paint Factory Black	<b>BLU</b>	Paint Factory Blue
<b>160</b>	160 amps	<b>WHT</b>	Paint Factory White	<b>**RAL</b>	<i>(please see page 3.35)</i>
<b>4. Compatibility</b> <i>(frame compatibility)</i>		<b>10. Tape Marking</b> <i>(colored tape on both sides of busway housing)</i>			
<b>T3</b>	T3 Series	<b>0</b>	None	<b>6</b>	Tape Factory Red
<b>5. Material</b> <i>(busbar material)</i>		<b>3</b>	Tape Factory Black	<b>7</b>	Tape Factory Blue
<b>C</b>	Copper	<b>4</b>	Tape Factory White	<b>8</b>	Tape Factory Green
<b>6. Neutral/Ground Busbar</b> <i>(size of neutral busbar and/or ground)</i>					
<b>A</b>	3 Phase plus Neutral	<b>G</b>	3 Phase plus Neutral plus Internal Ground Conductor		
<b>N</b>	3 Phase plus 200% Neutral	<b>F</b>	3 Phase plus 200% Neutral plus Internal Ground Conductor		
<b>7. Polarization</b> <i>(orientation of section for mating purposes)</i>					
<b>S</b>	Standard				

**ME160T3CNS-EX-STD0** = Metric System, Elbow Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization- External Turning Direction- Standard Mill Finish, No Tape Marking

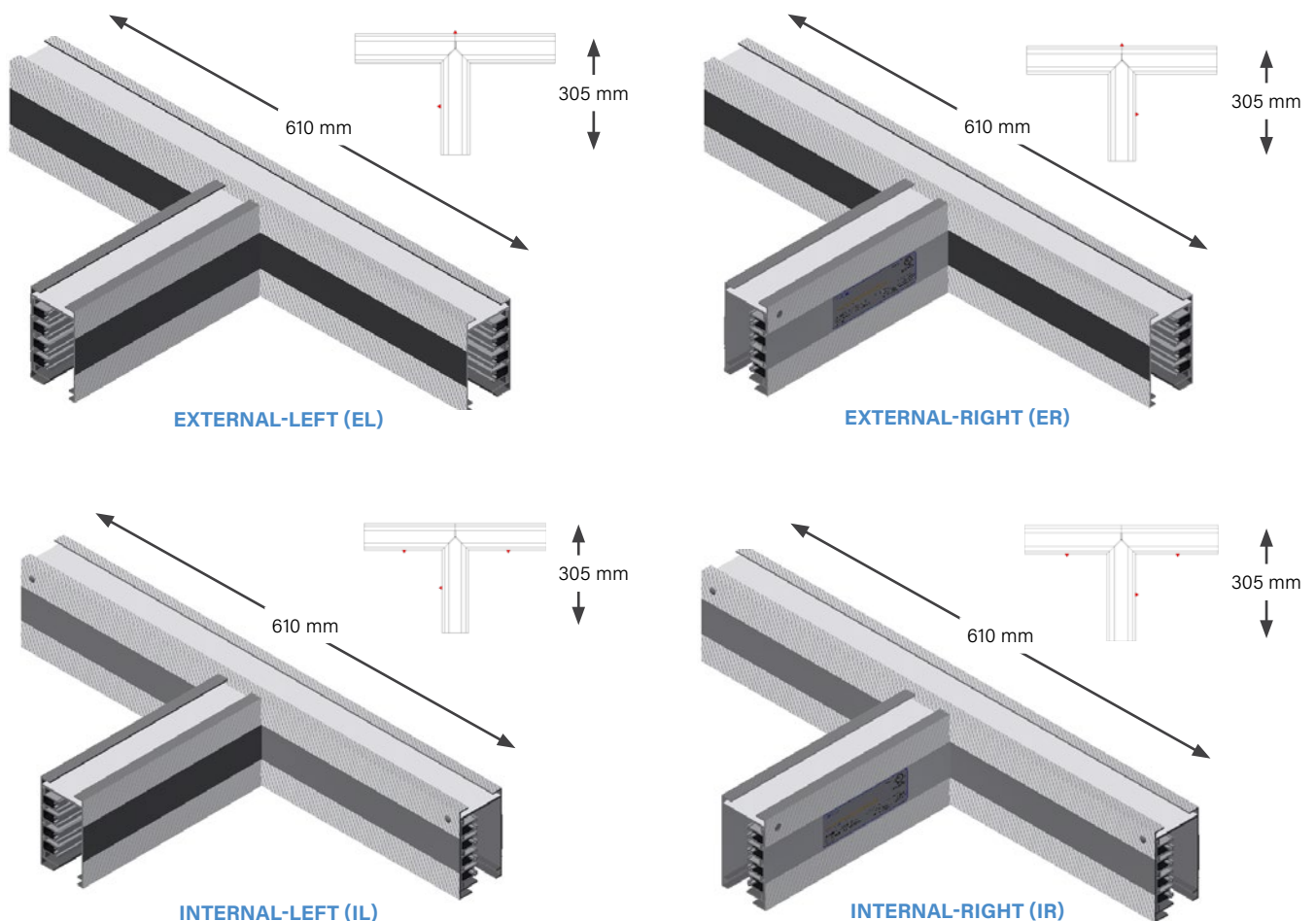
# 160T3 SYSTEMS

## 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** 3.6 kg



▲ = Polarizing Stripe

# 160T3 SYSTEMS

## TEE SECTIONS: PRODUCT NUMBERS

<b>M</b>	<b>T</b>	<b>160</b>	<b>T3</b>	<b>C</b>	<b>4</b>	<b>S</b>	<b>-</b>	<b>IR</b>
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/Ground Busbar	7. Polarization		8. Turning Direction
							<b>-</b>	
							<b>STD</b>	<b>0</b>
							9. Paint Color	10. Tape Marking

<b>1. System</b> ( <i>standard of measure</i> ) <b>M</b> Metric	<b>8. Turning Direction</b> ( <i>direction of section polarizing stripe</i> ) <b>IL</b> Internal-Left <b>EL</b> External-Left <b>IR</b> Internal-Right <b>ER</b> External-Right <b>HL</b> Seismic Internal-Left <b>GL</b> Seismic External-Left <b>HR</b> Seismic Internal-Right <b>GR</b> Seismic External-Right
<b>2. Product Type</b> ( <i>section component</i> ) <b>T</b> Tee Section	<b>9. Paint Color</b> ( <i>allows painting of the busway housing</i> ) <b>STD</b> Factory Mill Finish <b>RED</b> Paint Factory Red <b>BLK</b> Paint Factory Black <b>BLU</b> Paint Factory Blue <b>WHT</b> Paint Factory White <b>**RAL</b> (please see page 3.35)
<b>3. Product Frame</b> ( <i>maximum amperage</i> ) <b>160</b> 160 amps	<b>10. Tape Marking</b> ( <i>colored tape on both sides of busway housing</i> ) <b>0</b> No Tape Marking <b>6</b> Tape Factory Red <b>3</b> Tape Factory Black <b>7</b> Tape Factory Blue <b>4</b> Tape Factory White <b>8</b> Tape Factory Green
<b>4. Compatibility</b> ( <i>frame compatibility</i> ) <b>T3</b> T3 Series	
<b>5. Material</b> ( <i>busbar material</i> ) <b>C</b> Copper	
<b>6. Neutral/Ground Busbar</b> ( <i>size of neutral busbar and/or ground</i> ) <b>4</b> 3 Phase plus Neutral <b>G</b> 3 Phase plus Neutral plus Internal Ground Conductor <b>N</b> 3 Phase plus 200% Neutral <b>F</b> 3 Phase plus 200% Neutral plus Internal Ground Conductor	
<b>7. Polarization</b> ( <i>orientation of section for mating purposes</i> ) <b>S</b> Standard	

### EXAMPLES

**MT160T3C4S-IR-RED0** = Metric System, Tee Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking

**MT160T3CGS-EL-STD0** = Metric System, Tee Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Standard Mill Finish, No Tape Marking

# 160T3 SYSTEMS

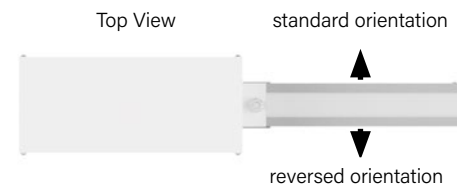
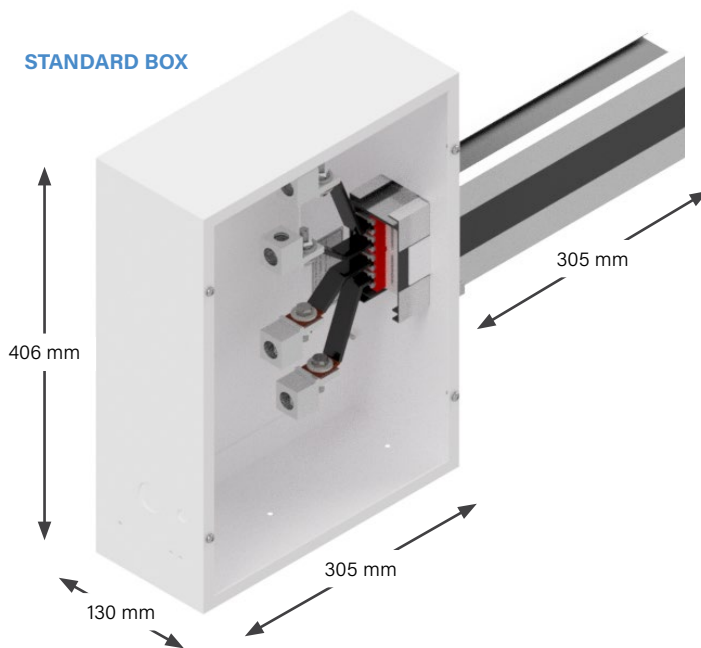
## END FEED UNITS

### 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 305 millimeter section of busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 150 mm<sup>2</sup>.

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.

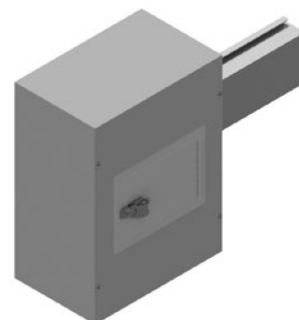


### INFRARED (IR) WINDOW OPTIONS:

Refer to option 10. Accessories Package on **page 3.18** End Feed Units: Product Numbers



Large box with circular IR window



Large box with rectangular IR window

	BOXES		
LUGS	Standard	Large	Fused
Standard	<b>S</b>	<b>L</b>	
Double	<b>D</b>	<b>A</b>	
Bolt			

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 3.18** End Feed Units: Product Numbers

\*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/](https://downloads.starlinepower.com/)



# 160T3 SYSTEMS

## END FEED UNITS: METERING

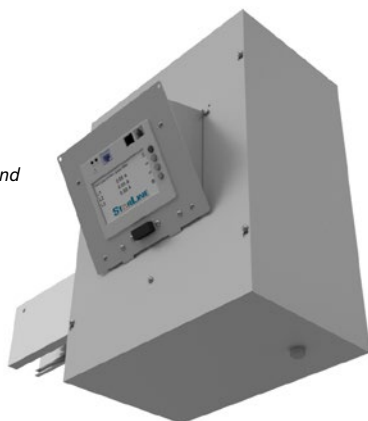
### PRODUCT DESCRIPTION

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 305 millimeter section of busway. The assembly includes connection lugs, a ground lug, and shrink tubing for wires up to 150 mm<sup>2</sup>.

Integral CPM installed in the end feed provides power monitoring and alarm capabilities. The M40 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.

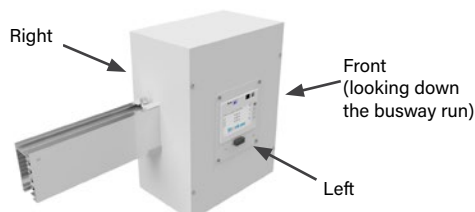
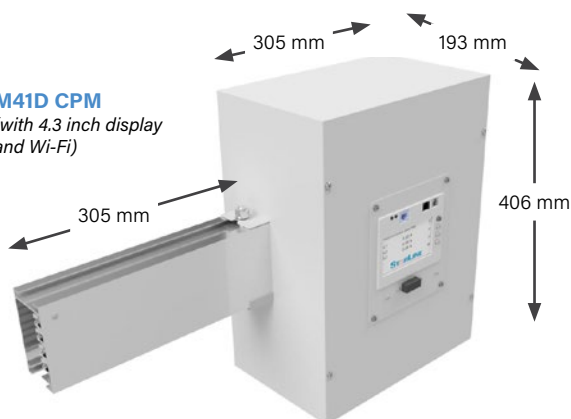
#### M41D CPM

(with 4.3 inch display and Wi-Fi on a 30° angled display)



#### M41D CPM

(with 4.3 inch display and Wi-Fi)



\*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 3.18** End Feed Units: Product Numbers)

#### AC END FEED METER OPTIONS

- M41** WiFi, ≤415V Y, ≤240V Δ
- M43** No WiFi, ≤415V Y, ≤240V Δ
- M45** WiFi, 600V Y, 347V Δ
- M47** No WiFi, 600V Y, 347V Δ Y = wye, Δ = delta

#### DC END FEED METER OPTIONS

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

BOX/LUGS OPTION	1 Meter or Accessory	1 Meter & 1 Accessory (opposite lids)
(S) Standard Box, Standard Lugs		
(L) Large Box, Standard Lugs	X	X
(D) Standard Box, Double Lugs		
(A) Large Box, Double Lugs	X	X

\*Large box with one meter or accessory is 7.62" deep, and large box with one meter and accessory (on opposite lids) extends the depth to 10.12"

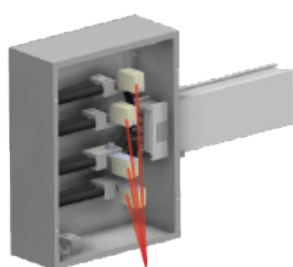
A meter and accessory can not be on the same lid.

# 160T3 SYSTEMS

## END FEED UNITS: ACCESSORIES

### ■ TEMPERATURE MONITOR

Temperature sensor technology is now available with the Starline Critical Monitor (CPM) for End Feeds. This innovative technology is a first of its kind; making the monitoring and viewing of temperature data instantaneous.



Wired or wireless nodes are installed in the busway end feed, which measure the temperature of each mechanical or compression lug.



Each node communicates the temperature back to the Starline CPM. Both power and temperature information will now display on the meter's LCD screen.



Wireless Temperature Monitor

(Refer to option 17, M40 Options on **page 3.19** End Feed Units: Product Numbers)

Temperature data also automatically transfer to the CPM's integral webpage—placing timely data at the end users fingertips.

### ■ ANGLED METER LID

The angled meter End Feed lid is an accessory that delivers the flexibility to change the viewing angle for Display Meters in an End Feed.

This enclosure allows for the meter to be mounted flush to the End Feed lid or presented in an extended position at 30° from vertical. This presents a more comfortable and easier viewing angle when looking up at an End Feed unit to read the LCD screen.

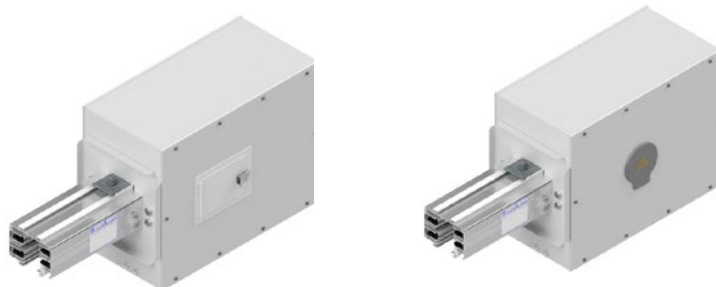


(Refer to option 10, Accessories Package on **page 3.18** End Feed Units: Product Numbers)

### ■ IR WINDOWS

IR windows added to End Feeds offer:

- Enhanced electrical safety
- Increased compliance to NFPA 70E / CSA Z462
- Reduced PPE
- Closed-door infrared inspections
- Stable and consistent transmission over product life
- Largest field of view of any IR window
- Supports visual and infrared imaging for any IR camera



(Refer to option 10, Accessories Package on **page 3.18** End Feed Units: Product Numbers)



# 160T3 SYSTEMS

## END FEED METERING: PRODUCT NUMBERS

M	F	160	T3	C	4	S	-	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location	
- M030 C - STD 0 - M41 S 1 <i>*Optional</i>											
		12. Straight Length	13. Busway Access	14. Paint Color	15. Tape Marking	*16. Meter Release	*17. M40 Options	*18. System Config. and CT Type			

### \*16. Meter Release (M40/M60 Series Meters)

**M41** Wi-Fi, ≤415V Y, ≤240V Δ  
**M43** No Wi-Fi, ≤415V Y, ≤240V Δ  
**M45** Wi-Fi, 600V Y, 347V Δ  
**M47** No Wi-Fi, 600V Y, 347V Δ  
**M61** Single Eth./Wi-Fi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)  
**M63** Single Eth./No Wi-Fi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)  
**M67** Dual Eth., single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)  
**M69** Dual Eth./Dual Modbus, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)

### \*18. System Configuration and CT Type (line-line or line-neutral and wye or delta systems)

<b>1</b> LLD - Standard, Milivolt	<b>K</b> LLD - SC, 5A
<b>2</b> LLY - Standard, Milivolt	<b>L</b> LLY - SC, 5A
<b>3</b> LNY - Standard, Milivolt	<b>M</b> LNY - SC, 5A
<b>1</b> Circuit 1 Only, Solid Core (M60s only)	
<b>2</b> Circuit 2 Only, Solid Core (M60s only)	
<b>3</b> Both Circuits, Solid Core (M60s only)	

### \*17. Meter Options (M40 AC)

<b>S</b> Standard (M60s also)	<b>F</b> Featured (D+A)
<b>D</b> Display (M60s also)	<b>E</b> Enhanced (N+A)
<b>N</b> (Measured) Neutral	<b>P</b> Professional (D+N)
<b>A</b> Audible Alarm	<b>U</b> Ultimate (D+N+A)
<b>T</b> Wireless Temperature Monitor	<b>G</b> (T+D)
<b>H</b> (T+N)	<b>J</b> (T+A)
<b>Q</b> (T+D+N)	<b>K</b> (T+D+A)
<b>L</b> (T+N+A)	<b>R</b> (T+D+N+A)
<b>B</b> Wired Temperature Monitor	<b>W</b> (B+D+N)
<b>V</b> (B+N)	<b>1</b> (B+D+A)
<b>C</b> (B+D)	<b>2</b> (B+N+A)
<b>M</b> (B+A)	<b>3</b> (B+D+N+A)

### EXAMPLE

**MF160T3C4R-LNSN-M030C-STD0-M43D1** = Metric System, End Feed, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape Marking, M43 Meter, with Display, LLD-Standard Milivolt

# 160T3 SYSTEMS

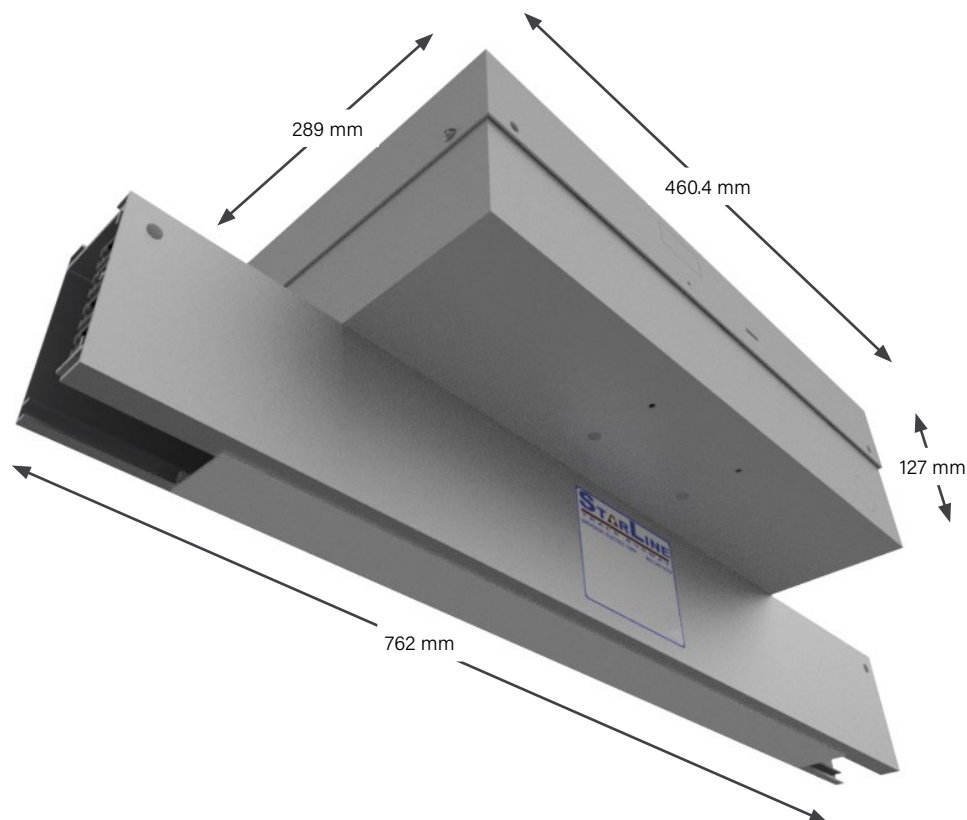
## ABOVE FEED UNITS

### ■ PRODUCT DESCRIPTION

The above feed power unit comes as a completely pre-wired steel box to the top of a 762 millimeter 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** 7.5 kg

\*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/](https://downloads.starlinepower.com/)



# 160T3 SYSTEMS

## ABOVE FEED UNITS: PRODUCT NUMBERS

M	A	160	T3	C	4	S	-	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location	
- M067 C 038 - STD 0 - M41 S 1 <i>*Optional</i>											
	12. Straight Length	13. Busway Access	14. Feed Location	15. Paint Color	16. Tape Marking	*17. Meter Release	*18. M40 Options	*19. System Config. and CT Type			

<b>1. System</b> <i>(standard of measure)</i> <b>M</b> Metric	<b>13. Busway Access</b> <i>(how plugs access the busway)</i> <b>C</b> Continuous
<b>2. Product Type</b> <i>(section component)</i> <b>A</b> Above Feed	<b>14. Feed Location</b> <i>(location of the center of the top feed)</i> <b>038</b> 38 centimeters <i>(For other lengths, consult the factory)</i>
<b>3. Product Frame</b> <i>(maximum amperage)</i> <b>160</b> 160 amps	<b>15. Paint Color</b> <i>(allows painting of the busway housing)</i> <b>STD</b> Factory Mill Finish <b>RED</b> Paint Factory Red <b>BLK</b> Paint Factory Black <b>BLU</b> Paint Factory Blue <b>WHT</b> Paint Factory White <b>**RAL</b> <i>(please see page 3.35)</i>
<b>4. Compatibility</b> <i>(frame compatibility)</i> <b>T3</b> T3 Series	<b>16. Tape Marking</b> <i>(colored tape on both sides of busway housing)</i> <b>0</b> None <b>6</b> Tape Factory Red <b>3</b> Tape Factory Black <b>7</b> Tape Factory Blue <b>4</b> Tape Factory White <b>8</b> Tape Factory Green
<b>5. Material</b> <i>(busbar material)</i> <b>C</b> Copper	<b>*17. Meter Release</b> <i>(M40 Series Meters)</i> <b>M41</b> WiFi, ≤415V Y, ≤240V Δ <b>M43</b> No WiFi, ≤415V Y, ≤240V Δ <b>M45</b> WiFi, 600V Y, 347V Δ <b>M47</b> No WiFi, 600V Y, 347V Δ
<b>6. Neutral/Ground Busbar</b> <i>(size of neutral busbar and/or ground)</i> <b>4</b> 3 Phase plus Neutral <b>G</b> 3 Phase plus Neutral plus Internal Ground Conductor <b>N</b> 3 Phase plus 200% Neutral <b>F</b> 3 Phase plus 200% Neutral plus Internal Ground Conductor	<b>*18. M40 Options</b> <i>(choose from a 4.1" display, measured neutral, audible alarm and/or a temperature monitor)</i> <b>S</b> Standard (M60s also) <b>F</b> Featured (D+A) <b>D</b> Display (M60s also) <b>E</b> Enhanced (N+A) <b>N</b> (Measured) Neutral <b>P</b> Professional (D+N) <b>A</b> Audible Alarm <b>U</b> Ultimate (D+N+A)
<b>7. Polarization</b> <i>(orientation of section for mating purposes)</i> <b>S</b> Standard <b>R</b> Reversed	<b>*19. System Configuration and CT Type</b> <i>(line-line or line-neutral and wye or delta systems)</i> <b>1</b> LLD - Standard, Milivolt <b>K</b> LLD - SC, 5A <b>2</b> LLY - Standard, Milivolt <b>L</b> LLY - SC, 5A <b>3</b> LNY - Standard, Milivolt <b>M</b> LNY - SC, 5A
<b>8. Lug/Box Options</b> <i>(standard/double/bolt lugs and box size)</i> <b>S</b> Standard lugs, Standard box <b>L</b> Standard lugs, Large box	
<b>9. Meter Location</b> <i>(from the terminal, side with removable lid; meter must follow lid orientation on large box)</i> <b>R</b> Right <b>L</b> Left <b>N</b> None (N/A)	
<b>10. Accessories Package</b> <i>(optional accessories for feed units)</i> <b>S</b> Standard	
<b>11. Accessories Location</b> <i>(from the terminal, side with removable lid)</i> <b>N</b> None (na) <b>R</b> Right <b>A</b> Rear <b>L</b> Left <b>T</b> Top <b>F</b> Front	
<b>12. Straight Length</b> <i>(length of section)</i> <b>M076</b> .76 meters	

### EXAMPLE

**MA160T3CFS-LNSN-M076C038-STD0** = Metric System, Above Feed, 160 amps, T3 Series, 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, .76 meter Straight Length, Continuous Busway Access, 38 centimeter Feed Location, Painted Factory Silver, No Tape Marking

# T3 SERIES

## RAL COLORS

1ST CHARACTER	
<b>P</b>	Paint

2ND CHARACTER	
<b>0</b>	100
<b>1</b>	101
<b>2</b>	102
<b>3</b>	103
<b>4</b>	200
<b>5</b>	201
<b>A</b>	300
<b>B</b>	301
<b>C</b>	302
<b>D</b>	303
<b>E</b>	400
<b>F</b>	401
<b>G</b>	500
<b>H</b>	501
<b>J</b>	502
<b>K</b>	600
<b>L</b>	601
<b>M</b>	602
<b>N</b>	603
<b>P</b>	700
<b>Q</b>	701
<b>R</b>	702
<b>S</b>	703
<b>T</b>	704
<b>U</b>	800
<b>V</b>	801
<b>W</b>	802
<b>X</b>	900
<b>Y</b>	901
<b>Z</b>	902

3RD CHARACTER	
<b>0</b>	0
<b>1</b>	1
<b>2</b>	2
<b>3</b>	3
<b>4</b>	4
<b>5</b>	5
<b>6</b>	6
<b>7</b>	7
<b>8</b>	8
<b>9</b>	9

4TH CHARACTER	
<b>0</b>	0

### EXAMPLE:

P B 2 0 = Paint RAL 3012



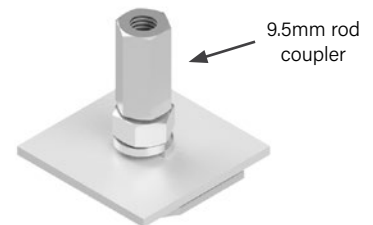
## T3 SERIES

### 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 3 meters maximum.

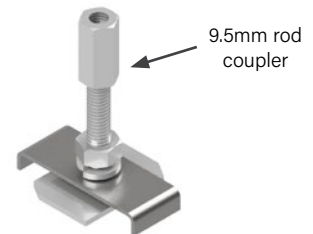
Part Number  
MBRH-M10  
Available in plain zinc  
or black (-BLK)  
Weight  
.14 kg



#### ■ 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. Hanger support is required every 3 meters maximum.

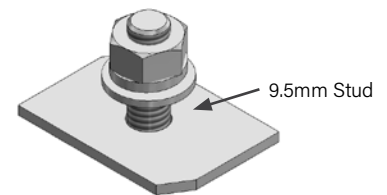
Part Number  
MBRS-M10  
Available in plain zinc  
or black (-BLK)  
Weight  
.14 kg



#### ■ 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 3 meters maximum.

Part Number  
MBH-M10  
Available in plain zinc  
or black (-BLK)  
Weight  
.09 kg



#### ■ 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 45.4 kg under the busway, such as light fixtures, tools and balancers.

Part Number  
SWHRT3  
Available in plain zinc  
Weight  
.09 kg

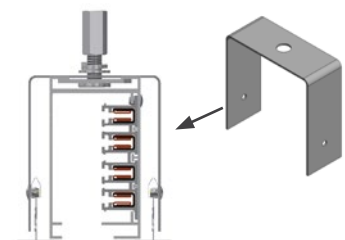


#### ■ RECESSED SUSPENDED CEILINGS

For hanging busway into a recessed ceiling.

*\*Hanger bolt must be ordered separately*

Part Number  
SRMT3-1  
Available in plain zinc



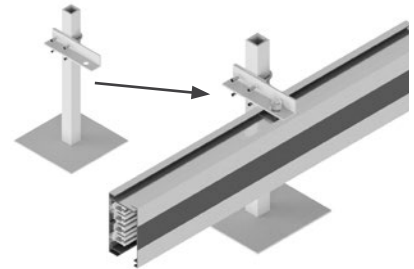
# T3 SERIES

## ACCESSORIES: SUPPORT HARDWARE

### ■ RAISED ACCESS FLOOR

For mounting the busway vertically (with access slot facing down) for under floor applications.

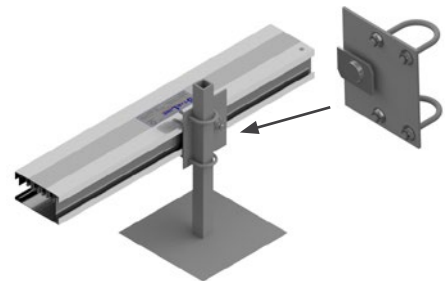
Part Number  
MRFBT3-1  
\*MBH-M10 comes included  
Available in plain zinc  
or black (-BLK)



### ■ RAISED MOUNTING BRACKET

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

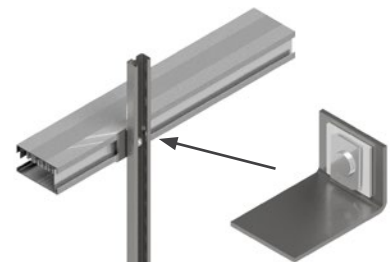
Part Number  
MRFBT3-2  
Available in plain zinc  
or black (-BLK)  
Weight  
.09 kg



### ■ SIDE MOUNT BRACKETS

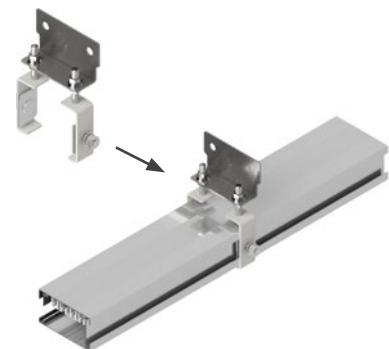
Mounted to vertical supports. Vertical supports not included, only bracket.

Part Number  
MBSS-1  
Available in plain zinc  
or black (-BLK)  
Weight  
.09 kg



Mounted to overhead supports

Part Number  
MBH-T3-SIDE  
Available in plain zinc  
or black (-BLK)  
Weight  
.59 kg



# T3 SERIES

## ACCESSORIES: SUPPORT HARDWARE

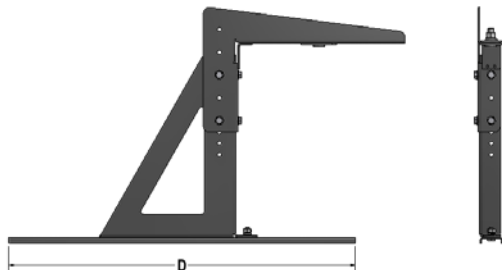
### ■ PRODUCT DESCRIPTION

#### UNIVERSAL SERVER CABINET MOUNTING BRACKETS

The Universal Server Cabinet Mounting Brackets are designed with generous 3/8 inch (9.5 millimeter) 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 – MBH-M10



#### MATERIAL

Galvanneal Steel

#### HEIGHT

449 mm Min  
603 mm Max  
Maximum Spacing: Every 3 m per run

#### C: Color (1, 3, 4, 6, 7)

<b>1</b> Anodized Silver	<b>6</b> Red
<b>3</b> Black	<b>7</b> Blue
<b>4</b> White	

*\*consult factory for custom colors*

#### Part Number

##### MUSCMB-(X)-(D)-(C)

**X** = System (T3)  
**D** = Depth (762 mm, 914 mm, 1067 mm, 1219 mm or custom length)  
**C** = Color (1, 3, 4, 6, 7)

#### ■ EXAMPLES

**MUSCMB-T3-762-4** = Metric System, Universal Server Cabinet Mounting Bracket, T3 Series, 762 millimeter Depth, White

**MUSCMB-T3-1219-3** = Metric System, Universal Server Cabinet Mounting Bracket, T3 Series, 1219 millimeter Depth, Black

## T3 SERIES

### ACCESSORIES: CONNECTION HARDWARE

#### ■ JOINT KIT

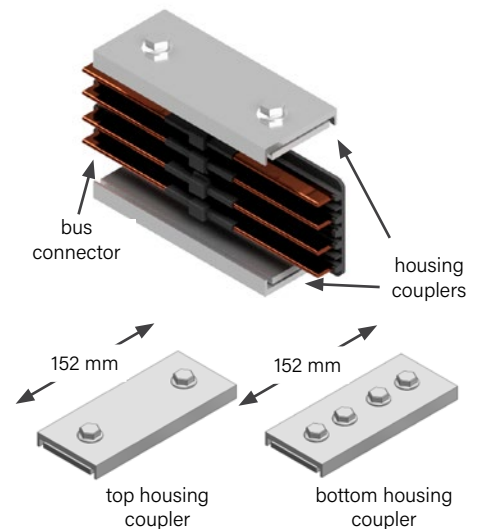
For the connection of adjacent busway sections. One kit is required at each joint. Each kit is comprised of a housing coupler pair and bus connector set.

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

**Housing Couplers:** one pair that consists of a 2-bolt coupler for the top of busway, and a 4-bolt coupler for the bottom of busway.

*\*Installation tool is required (page 3.40)*

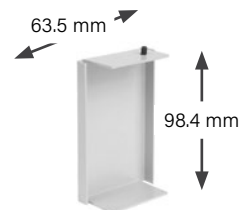
*Part Number*  
*SJK160T3 (for 100 amp systems)*  
*SJK160T3G (for 100 amp systems with ground)*  
*SJK160T3N (for 100 amp systems with 200% neutral)*  
*SJK160T3F (for 100 amp systems with ground and 200% neutral)*  
*SJK225T3 (for 225 amp systems)*  
*Available in all standard and RAL colors*



#### ■ END CAP

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

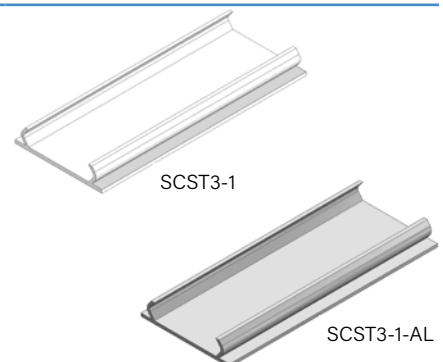
*Part Number*  
*SECT3*  
*Available in all standard and RAL colors*  
*Weight: .09 kg*



#### ■ OPTIONAL CLOSURE STRIP

Snap into bottom access slot of busway housing. The optional closure strip is normally shipped in 6 meter lengths and can be field cut to fit exact desired length. The closure strip is offered in both nonconductive plastic material and aluminum.

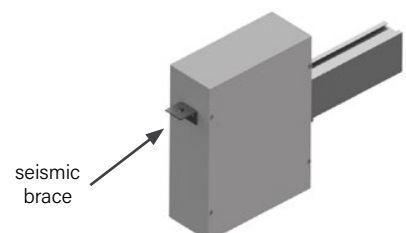
*Part Number*  
*SCST3-1*  
*Aluminum closure strip: SCST3-1-AL*  
*-Plastic Closure Strip available in black & white*  
*-Aluminum Closure Strip available in all standard colors*  
*Maximum Cut Length: 6m*



#### ■ 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*



# T3 SERIES

## ACCESSORIES: INSTALLATION TOOL

### ■ PRODUCT DESCRIPTION

#### INSTALLATION TOOL

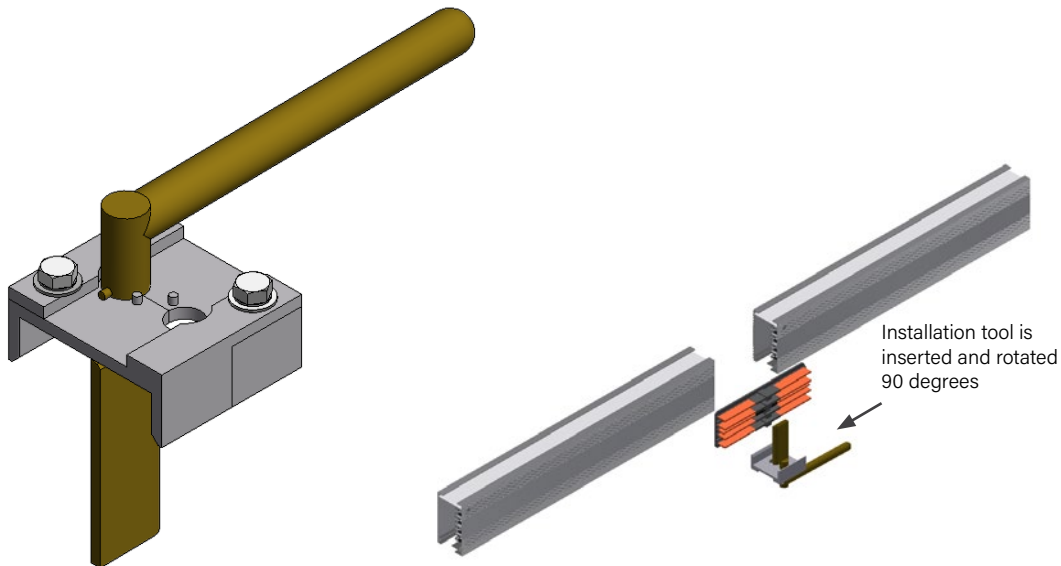
An installation tool is used to install the bus connector between two adjacent sections of busway. A joint kit, which is comprised of two housing couplers and a bus connector set, is required at every joint.

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.

**Weight** 1.1 kg

Part Number (for all T3 systems)  
**ST3IT**

*No available colors*



# T3 SERIES

## SERVICES

Starline Services offers a comprehensive suite of services from startup and system certification through on-going support contracts and extended warranty programs. To ensure that your Busway system is installed properly you can trust Starline's team of factory certified technicians to perform services throughout the long life of your Starline Track Busway system. With over 30 years of experience in the busway market, Starline has the knowledge and expertise to ensure that your Track Busway system is functioning at a best-in-class level.

### **WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:**

#### **LOAD BANK TESTING AND EQUIPMENT RENTALS**

Whether you are in need of rental equipment to test your power system or a team of technicians to test the system for you, Starline Services has you covered. Select testing equipment from our inventory of load banks and associated gear, or work with a Starline engineer to customize your own test plan to suit your individual needs.

#### **METER SERVICES**

Factory trained and certified technicians will provide comprehensive on-site meter commissioning that includes meter inspection, programming and detailed documentation. Our technicians will program CPM meters and offer optional integration services to your BMS or DCIM for any and all meters located within your facility.

#### **STARTUP AND SYSTEM CERTIFICATION**

Certified technicians inspect and validate that the installation meets factory standards, ensuring ongoing reliability and compliance with facility safety requirements. Upon successful completion of system startup, Starline's standard one (1) year manufacturer's warranty will be automatically extended in duration.

- 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

#### **ENGINEERING STUDIES (US ONLY)**

Understanding the dangers and implementing a safety program is imperative to maintaining a safe work environment. Our professional engineers will conduct comprehensive facility electrical studies and recommend corrective actions, confirming your systems reliability and compliance with government and safety requirements.

#### **TURNKEY INSTALLATION SERVICES (UK ONLY)**

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.

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](https://downloads.starlinepower.com/services).

# T3 SERIES

## SERVICES

### ON-SITE INSTALLATION SUPPORT

On-site installation support begins by scheduling a site trip during your system installation. All work is performed by certified technicians- including review of installation best practices prior to the job, visual inspection of safe system installation, contractor installation oversight, and inspection and verification of functionality after rework.

### ON-SITE PRODUCT TRAINING

Certified technicians will provide a comprehensive training course curriculum that meets our high factory system standards, ensuring ongoing reliability of the system while also emphasizing operational safety. This course curriculum takes place in both a classroom and on-site with equipment.

### EXTENDED WARRANTY AND ENHANCED SERVICE PLANS

Ensure that your equipment investment is always covered. Select from an extended factory warranty or one of our many Enhanced Service Plans to meet your organizational requirements.

CHOICE OF EXTENDED WARRANTY OR ENHANCED: SILVER, GOLD OR PLATINUM SERVICE PLANS	EXTENDED 1, 2, 3, 4 YEARS	SILVER 1, 2, 3, 4 YEARS	GOLD 1, 2, 3, 4 YEARS	PLATINUM 2, 3, 4 YEARS
Repair or replacement of defective parts throughout life of service agreement	X	X	X	X
24/7 technical support hotline	X	X	X	X
Visual inspection of meters		X	X	X
Visual inspection of all joints for visible gaps		X	X	X
Update firmware and verify all Starline CPMs		X	X	X
Includes travel and expenses		X	X	X
One (1) service site visit per year		X		
Two (2) service site visits per year			X	X
Thermal imaging of all plug-in units			X	X
Thermal imaging of all Busway joints			X	X
Thermal imaging of all end feed units			X	X
Detailed and fully executed thermography report			X	X
Online portal for test reports & documentation			X	X
Spare parts inventory management program				X

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](https://downloads.starlinepower.com/services).



Starline, a brand of Legrand, has been a leader in power distribution since 1924. The company's founders led the way for many new technologies in the power distribution equipment industry. Today, Starline continues to pave the way for safer, more innovative and more reliable electrical power distribution systems. Visit [StarlinePower.com](http://StarlinePower.com) to learn more about our flexible power solutions.

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A brand of **legrand**

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