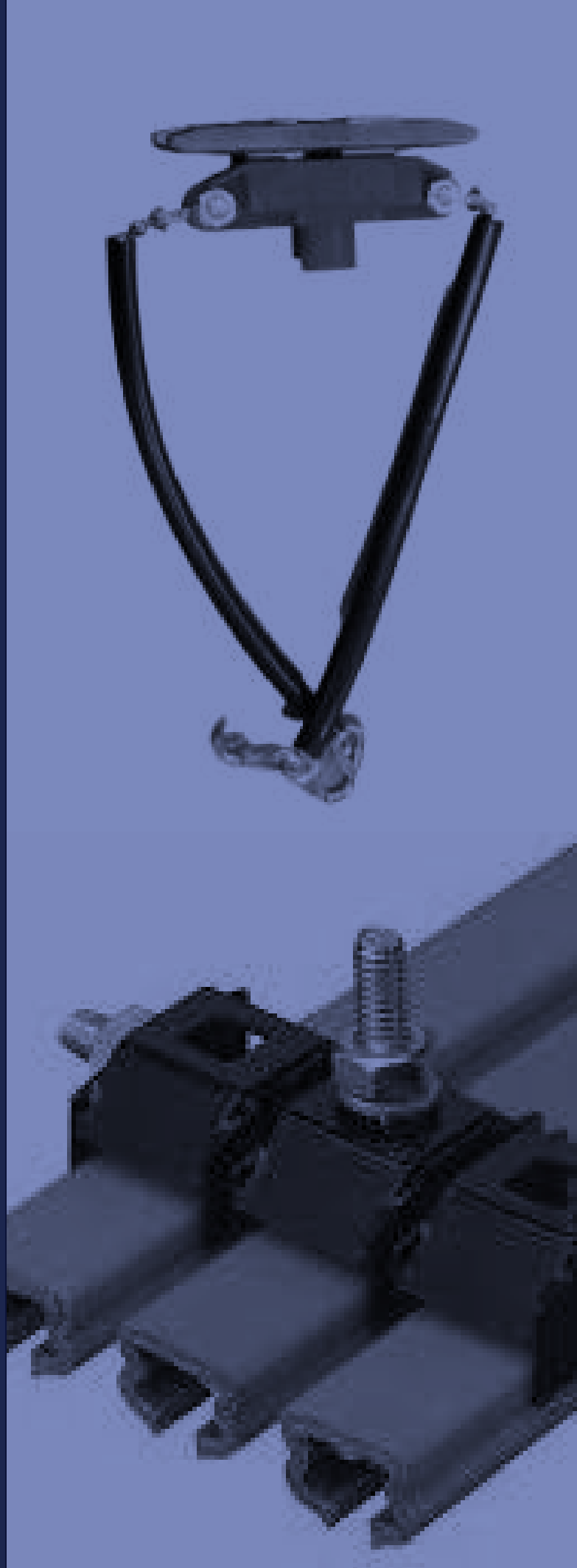


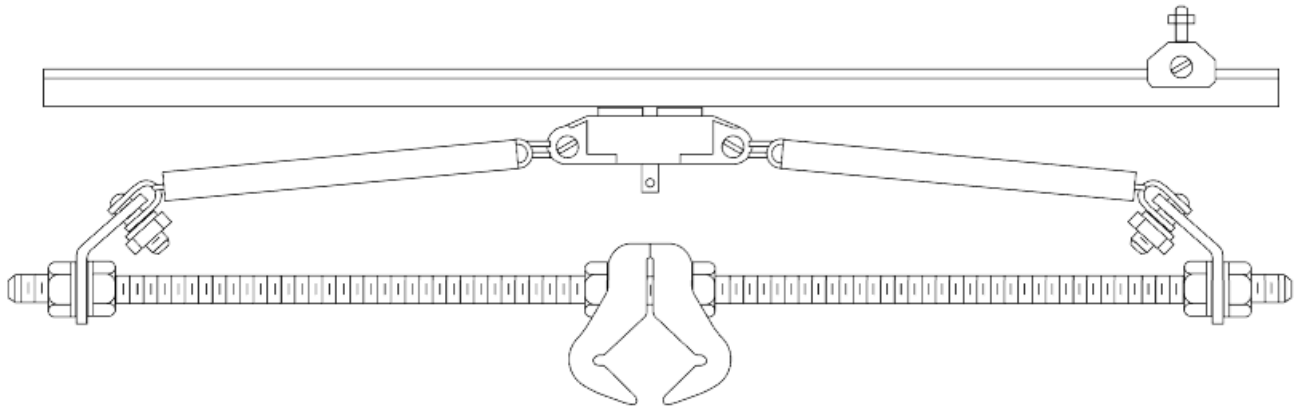
# **SERIES T** **SAF-T BAR**

Brochure & Installation Guide



# Series T SAF-T BAR

## General Information



## Description & Usage

The advanced Series T Saf-T-Bar system offers the basic engineering concept of an integral insulated conductor which can be applied on a broad range of electrification systems. Series T can be installed rapidly with slide-on or snap-on joint clips. Ganged hanger clamps allow for quick, easy installation. Skin-tight, rigid PVC insulation runs cooler and will not deform under clamp pressure. Two internal contact grooves track the collector providing excellent ventilation with high current capacity for its weight

Series T is ideal for the following applications: light rail systems, automated storage and retrieval systems, conveyors, indoor locations (dry), small cranes, monorails, hoists, moving cameras and instruments

### Other features

- Collector is captured within the twin-contact conductor profile of the bar
- Compact dimensions with rails mounted on 1" centers.
- Modular design of this system facilitates use with multiple conductor and collector configurations

# Series T SAF-T BAR

## Conductor Bar Components



Series T conductor bar is constructed of roll-formed galvanized steel and is supplied with rail insulation along with the joint splice pre-mounted to one end of the conductor bar. The galvanized steel version provides a current capacity of 65 Amps at 30°C ambient temperature and continuous duty.

**TA65×10** TA65×10: 65 Amp Indoor Conductor With Joint Kit x 10 feet



PART #	APPLICATION	COLOR	COVER MATERIAL
TA65×10	Phase	Orange	PVC
TA65Gx10	Ground	Green	PVC
TA65HHx10	High Heat	Red	Lexan

DESCRIPTION	TA65
Material	Galvanized Steel
Nominal current	65 Amps
DC resistance	0.0007 Ohms/ft
AC Impedance	0.0018 Ohms/ft at 60 Hz
Weight	4 lbs
Max Voltage	600 V
Support Spacing	5.0 ft
Standard Rail Length	10 ft
Maximum Rail Temperature	160°F (standard cover) / 260°F (high heat lexan cover)
Conductor Mounting	Can be installed in standard or lateral orientation
Curves	Factory Curves to a 36" minimum radius

### Characteristics

1. Nominal current is based on 30°C and is for 100% duty.
2. Complete with normal phase rail cover, orange rigid PVC, 160°F heat distortion point, 260psi, self extinguishing.
3. Complete with ground rail cover, green rigid PVC, 160°F heat distortion point, 260psi, self extinguishing.
4. Complete with red lexan high heat cover, 260°F heat distortion point, 260psi, self extinguishing.
5. Series T conductor kits are provided with the rail joint pre-mounted to the rail.

# Series T SAF-T BAR

## Conductor Bar Components



Connects and aligns standard 10' conductor lengths. Consists of a 4" joint cover that slides over the exposed joint area to complete the insulation. The joint cover locks in place by means of indents and is formed of the same material as the insulating conductor cover. Splice joints are pre-installed on one end of each conductor rail.

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**TJ65** Splice Joint Kit

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The TF100 is a terminal lug with insulating cover that clamps onto a 3/4" (19.1 mm) length of bare conductor to feed power to the bar. It will accept wires up to # 6 flex. Rated at 100 amperes. The conductor may also be fed by securing a standard terminal lug to the 1/4" hole in the end of the conductor and taping over it for insulation.

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**TF100** Powerfeed

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End Cap TN100C is a sleeve required to complete the insulation of the conductor. It extends 1/2" (13 mm) over the end of the bar. As an alternative, the conductor may be cut back so that the regular insulating cover extends 1/2" beyond the end of the conductor. End Cap may also be used as a transfer end cap having a  $\pm 1/8"$  ( $\pm 3.2$  mm) tolerance with a 1" (25 mm) gap setting on interlocks.

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**TN100C** End Cap

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A rigid plastic sleeve, providing 1/2" (13 mm) over-surface gap electrically, for electrical segmentation of conductor bar. A self-supporting sleeve.

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**TA65IS** Isolation Sleeve

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# Series T SAF-T BAR

## Conductor Bar Components



The Tow Bar is an optional mounting bracket for Series T collectors. It is designed to mount to a 1"(25.4 mm) square bar and connect to the standard towlines supplied with the Series T collector assemblies.

The threaded rod is 18 inches long and is equipped with a clip at each end which provides a connection point for the S-hook at the end of the T-bar towlines. The TB-18 will provide the proper angle of pull to ensure smooth travel of the collectors as they are pulled through the rail.

Connect up to 3 collectors to a single TB-18 tow bar.

**TB-18** Tow Bar

Collectors with self-lubricating contacts for quiet operation and long life. Multiple collectors are supplied as single units times the number of poles.



TE501CR



TE503CR

PART #	POLES	SHOE SIZE	TOWLINES	SHOE MATL	RECOMMENDED FOR	AMPS
TE301	Single	Short	Yes	Beryllium-Copper	Systems with bend radii tighter than 48"	30A
TE302	Dual	Short	Yes	Beryllium-Copper	Systems with bend radii tighter than 48"	30A
TE303	Triple	Short	Yes	Beryllium-Copper	Systems with bend radii tighter than 48"	30A
TE501CR	Single	Standard	Yes	Copper Graphite	Systems without tight radii	50A
TE502CR	Dual	Standard	Yes	Copper Graphite	Systems without tight radii	50A
TE503CR	Triple	Standard	Yes	Copper Graphite	Systems without tight radii	50A

# Series T SAF-T BAR

## Hanger Mounting Clamps

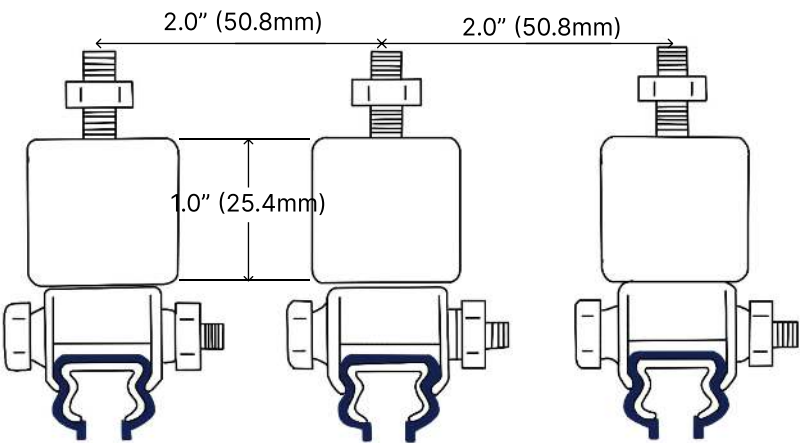
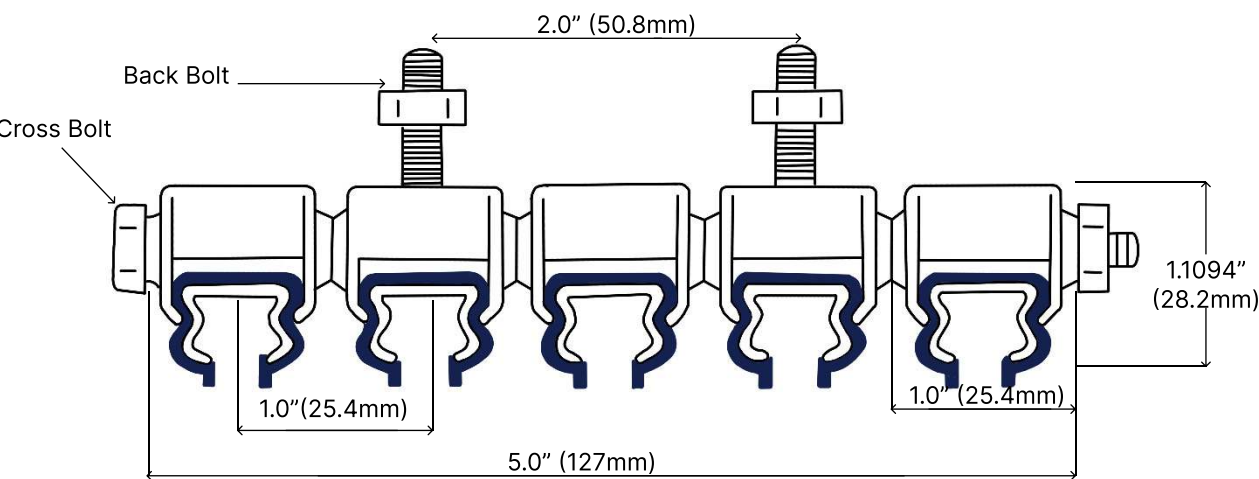


Nylon coated stamped steel hanger clamps can be furnished in multiples on 1" (25 mm) centers. Can be mounted using cross bolt or back bolt. Bolts are 1/4" and require a 5/16" mounting hole. Hangers are required for every 5' (1.52 m) of conductor. Joints should be located not more than 3" (76.2 mm) from hangers to avoid flexing

**Note:** A spool mount insulator hanger option is available as an alternative - Contact Factory

POLE	PART #
1	TH101
2	TH201
3	TH301
4	TH402
5	TH502

## Dimensions



# Series T SAF-T BAR

## Joining Conductor Sections



### Joining Sections



1. Slide hanger clamps on bar. Secure clamps in mounting holes on brackets. Be sure bar slides smoothly inside each clamp (until joining operation is completed). Maintain 3" spacing at ends of bars.
2. Insert Joint Tool into holes at ends of Bars. Draw Bars together until they butt. Slide cover over joint. Tighten clamps on bar.