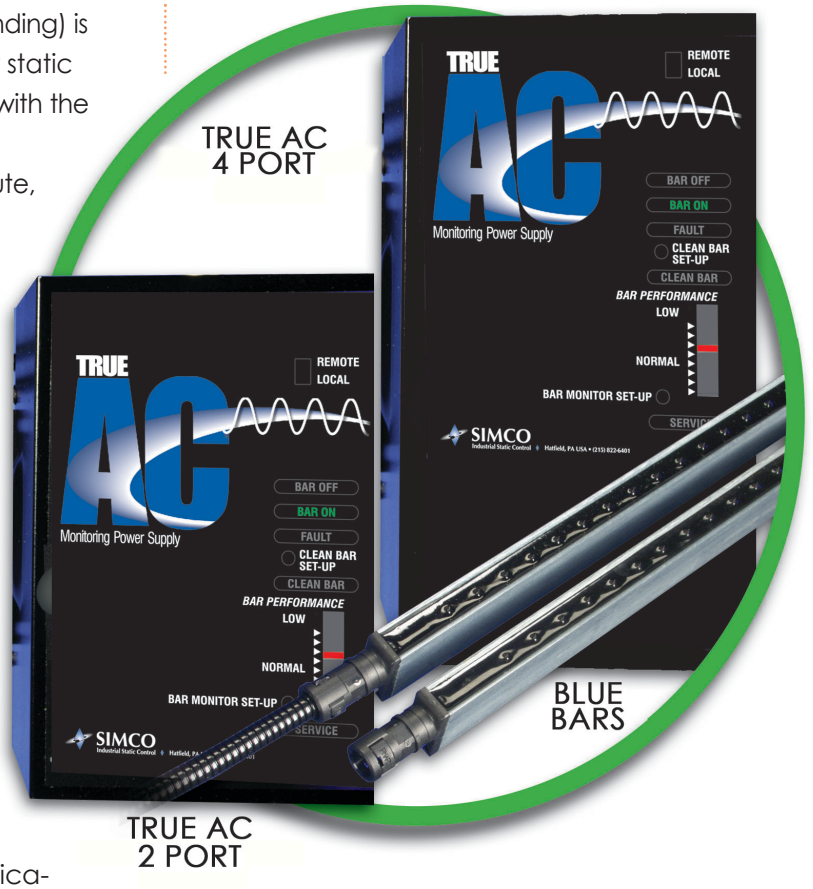
SIMCO®
Industrial Static Control
An Illinois Tool Works Company

TrueAC™ Monitoring Power Supply System

SIMCO Industrial Static Control's **TrueAC** (patent pending) is the only self-monitoring AC power supply available for static control equipment. The unit is designed to operate with the Blue Bar to provide consistent static neutralization of materials traveling at speeds up to 2,500 feet per minute, while also monitoring and controlling the equipment. When the system is activated the BAR ON indicator is illuminated to let you know that the system is ready to go. During operation the **TrueAC** power supply monitors the static bar while also displaying the BAR PERFORMANCE RANGE, and indicates when the static bar needs to be cleaned with the CLEAN BAR indicator light.



The **TrueAC** system is also designed with LOCAL or REMOTE on/off control so the unit can be wired directly to your production line for better convenience and control. The power supply is equipped with an ARC-DETECTION circuit to protect the unit in the event of a short and should an arc occur, the BAR OFF and FAULT lights would illuminate as an additional visual indication that there is a problem with the system. There is even a SERVICE display that illuminates when the ionization has been terminated, or when there are electrical restrictions that affect the high voltage to the static bar.

The **TrueAC** circuitry is monitoring the ion current from the static eliminator, and the system is calibrated at your facility to match the actual operating environment. The calibration effectively removes all area interferences allowing the system to focus on the web charge and the performance of the static bar. Because it is a true AC circuit, it has an innate ability to recognize impedance to the ionization, conductive or insulative, that can affect the performance of a static eliminator over time. Once the CLEAN BAR indicator illuminates, a thorough cleaning of the static bar will return the system to the normal operating range.

TrueAC Performance Features

- Bar ON indicator
- Bar OFF indicator
- Remote display capabilities for CLEAN BAR, FAULT* and SERVICE*
- CLEAN BAR indicator…factory set at 40% of maximum bar efficiency or can be set by user
- FAULT indicator
- BAR PERFORMANCE RANGE indicator
- Arc Detection circuit

** Dry contacts available via remote connector included with the unit.*

SIMCO® Industrial Static Control
An Illinois Tool Works Company
2257 North Penn Road • Hatfield, PA 19440 • Tele:(215) 822-6401 • Fax:(215) 822-3795
www.simco-static.com • e-mail: sales@simco.biz
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Specifications Two Connector (Two Bars)

Part Number	Power Requirements	Output Voltage	Output Current	Dimensions
4010442	120 VAC, 20 VA, 50/60 Hz	7 kVAC	3.0 mA maximum 5.0 mA short circuit	6.4 X 3.8 X 4.5 (L x W x H)
4010443	230 VAC, 20 VA, 50/60 Hz	7 kVAC	3.0 mA maximum 5.0 mA short circuit	6.4 X 3.8 X 4.5 (L x W x H)
4010440	120 VAC, 20 VA, 50/60 Hz	5 kVAC	3.0 mA maximum 5.0 mA short circuit	6.4 X 3.8 X 4.5 (L x W x H)
4010441	230 VAC, 20 VA, 50/60 Hz	5 kVAC	3.0 mA maximum 5.0 mA short circuit	6.4 X 3.8 X 4.5 (L x W x H)

Specifications Four Connector (Four Bars)

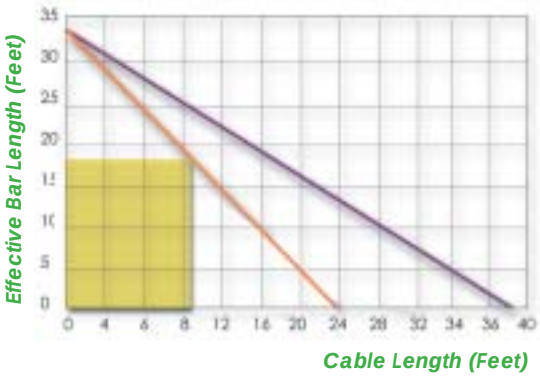
4010883	120 VAC, 20 VA, 50/60 Hz	5 kVAC	3.0 mA maximum 5.0 mA short circuit	8.6 X 4.9 X 4.5 (L x W x H)
4010884	230 VAC, 20 VA, 50/60 Hz	5 kVAC	3.0 mA maximum	8.6 X 4.9 X 4.5
4010604	120 VAC, 20 VA, 50/60 Hz	7 kVAC	3.0 mA maximum 5.0 mA short circuit	8.6 X 4.9 X 4.5 (L x W x H)
4010605	230 VAC, 20 VA, 50/60 Hz	7 kVAC	3.0 mA maximum 5.0 mA short circuit	8.6 X 4.9 X 4.5 (L x W x H)

Remote Display Option

The TrueAC Remote Display Option (Part Number 4010641) is available for difficult installations where the TrueAC power supply is not visible after mounting. The remote unit allows for ON/OFF power control, as well as alarm displays - Clean Bar, Fault and Service - from a location that can be observed by the operator or a supervisor. The remote includes a key switch for locking the ON/OFF control.

Loading Capacity

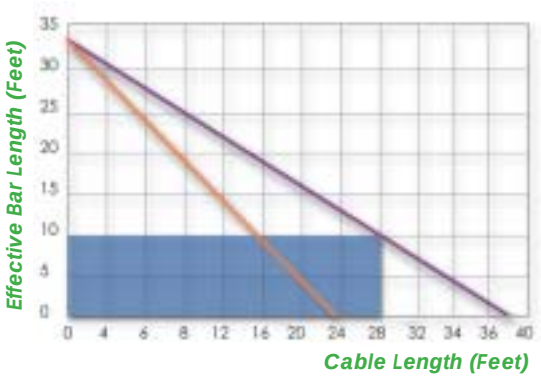
The total effective static bar length and the total cable length must be calculated so that the TrueAC power supply's loading capacity is not exceeded. See the examples below.



Bar requirements:

- Model: R50
- Quantity: 2
- Length of each bar: 108"
- Total effective bar length: 216" (108 x 2).
- Cable Length: 4.25' per bar (custom cable length)

The maximum allowable cable length on the monitoring circuit for both bars is 9.5' (4.25' per bar). The cable length for this installation is OK.



R50 — 7.5kV with Fixed Cable
R51 — 5.8kV with Removable Cable

Bar requirements:

- Model: R51
- Quantity: 4
- Length of each bar: 30"
- Total effective bar length: 120" (30 x 4).
- Cable Length: 7' per bar (custom cable length)

The maximum allowable cable length on the monitoring circuit for four bars is 28' (7' per bar). Because the cable length required is equal to the maximum allowed, this installation is within specification and is OK.