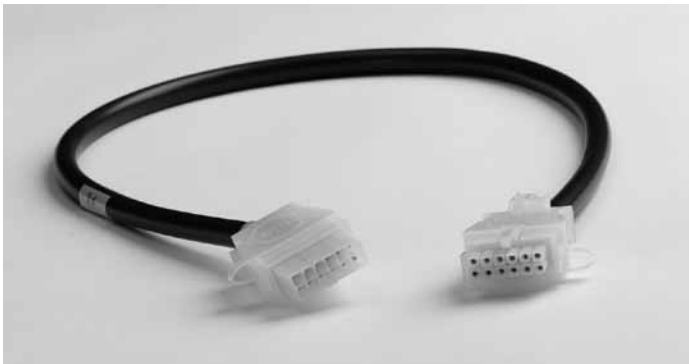


## GEH-6256 Installation Instructions

# Distribution Cable Extension

For Spectra® RMS Molded-Case Circuit Breakers  
with *microEntelliGuard*™, MicroVersaTrip® PM or MicroVersaTrip® Plus Trip Units

For Catalog Number SDCEA30  
**UL LISTED** Circuit Breaker Accessory



- Voltage Conditioner Assembly
- Distribution Cable Junction Box
- Distribution Cable Extension (Plug End)
- Distribution Cable Terminal Block
- Voltage Module

### Plug End of the Cable Extension

- Distribution Cable Harness
- Distribution Cable Extension (Receptacle End)
- Spectra® RMS Molded-Case Circuit Breaker with MicroVersaTrip® Plus Trip Unit and breaker cable
- Spectra® RMS Molded-Case Circuit Breaker with MicroVersaTrip® PM Trip Unit and breaker cable
- Spectra® RMS Molded-Case Circuit Breaker with *microEntelliGuard*™ Trip Unit with a 12-pin breaker cable

### Overview

The General Electric Distribution Cable Extension is used to provide modular expansion of the Distribution Cable System. The system is used to carry a variety of electronic signals between Spectra® RMS Molded-Case Circuit Breakers with *microEntelliGuard*™ or MicroVersaTrip® PM/Plus Trip Units and Distribution Cable Accessories. Accessories supported by the Distribution Cable Extension are as follows:

### Receptacle End of the Cable Extension

- Power Supply Plate
- Voltage Conditioner Plate
- Power Supply Assembly

The Distribution Cable Extension is 30 inches in length and can be group-connected to form a longer cable (the total system cabling length must not exceed 40 feet).

Because both ends of the Distribution Cable Extension are different (receptacle end / plug end), you cannot use it for connections between Spectra® RMS Molded-Case Circuit Breakers and Distribution Cable Accessories; use the Distribution Cable Harness (Cat. Nos. SDCHA11, SDCHA30 or SDCHA60) for this application.

Figure 1 shows how the Distribution Cable Extension is used in a typical MicroVersaTrip® PM system. Figure 2 shows how the Distribution Cable Extension is used in a typical MicroVersaTrip® Plus system. The *microEntelliGuard™* Trip Unit can be used with either configuration, i.e. Figure 1 or Figure 2. The connection diagram shown in Figure 2 applies to *microEntelliGuard™* Trip Units with Basic Metering.

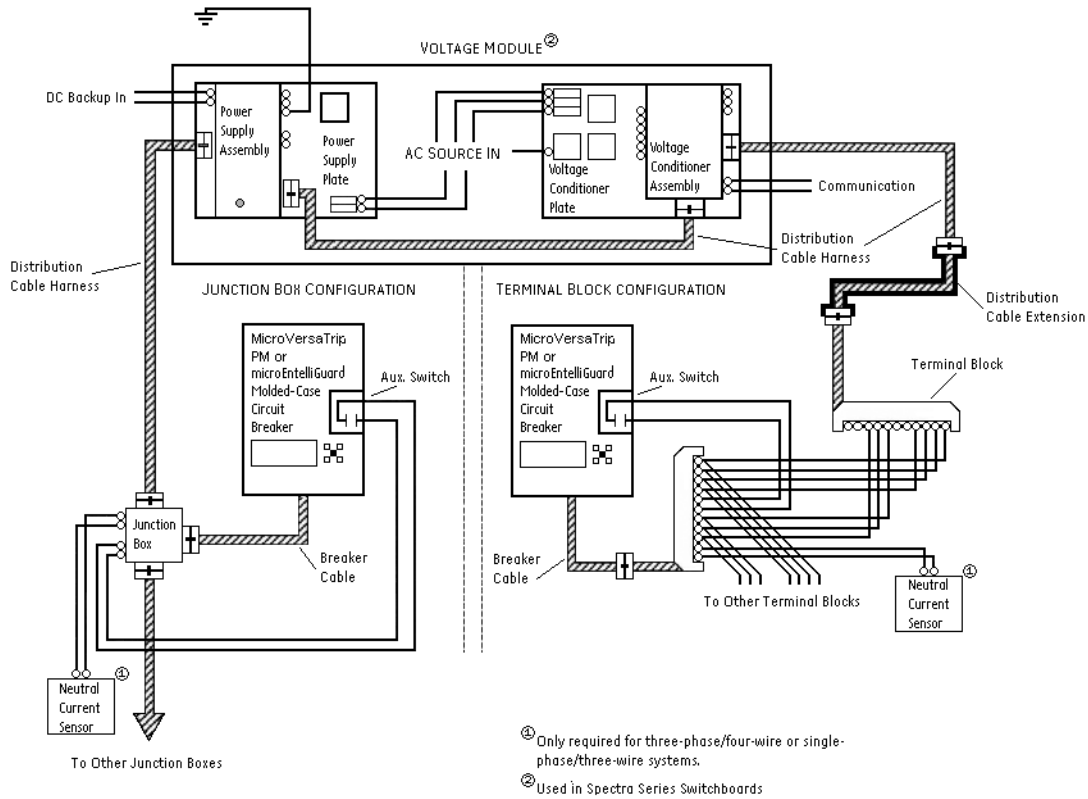


Figure 1. Typical MicroVersaTrip® PM Trip Unit System detailing the Distribution Cable Extension.

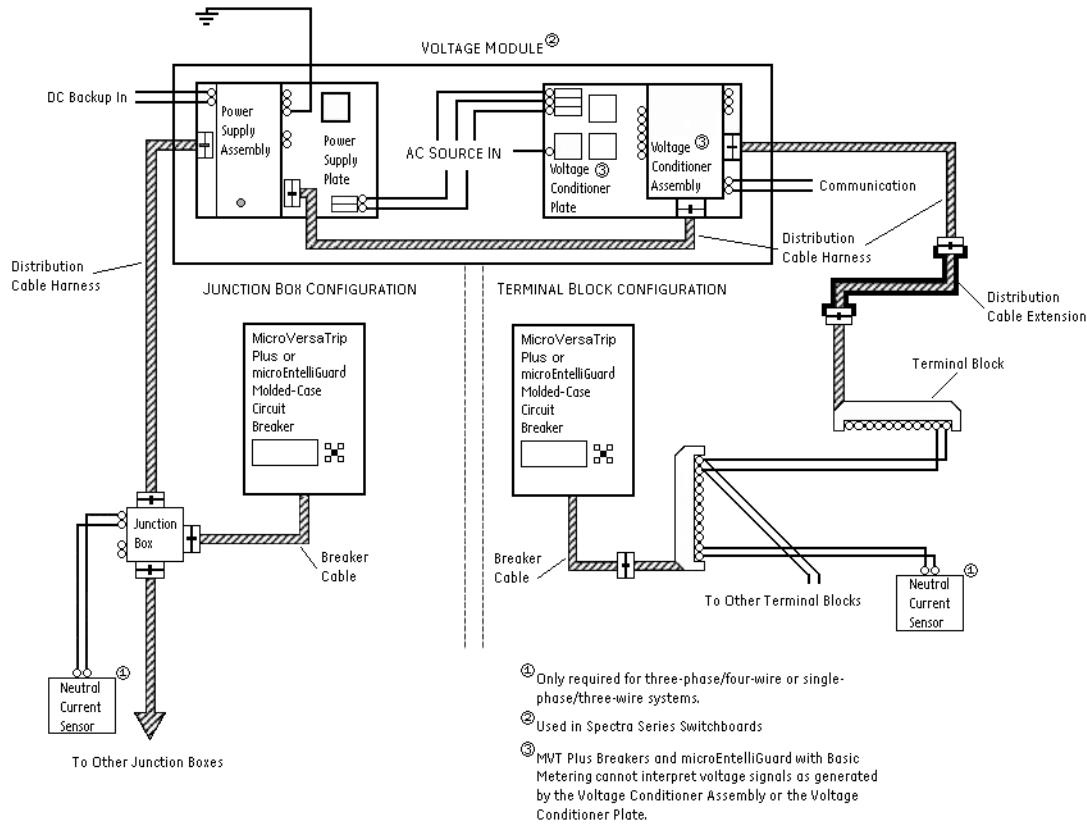


Figure 2. Typical MicroVersaTrip® Plus Trip Unit System detailing the Distribution Cable Extension.

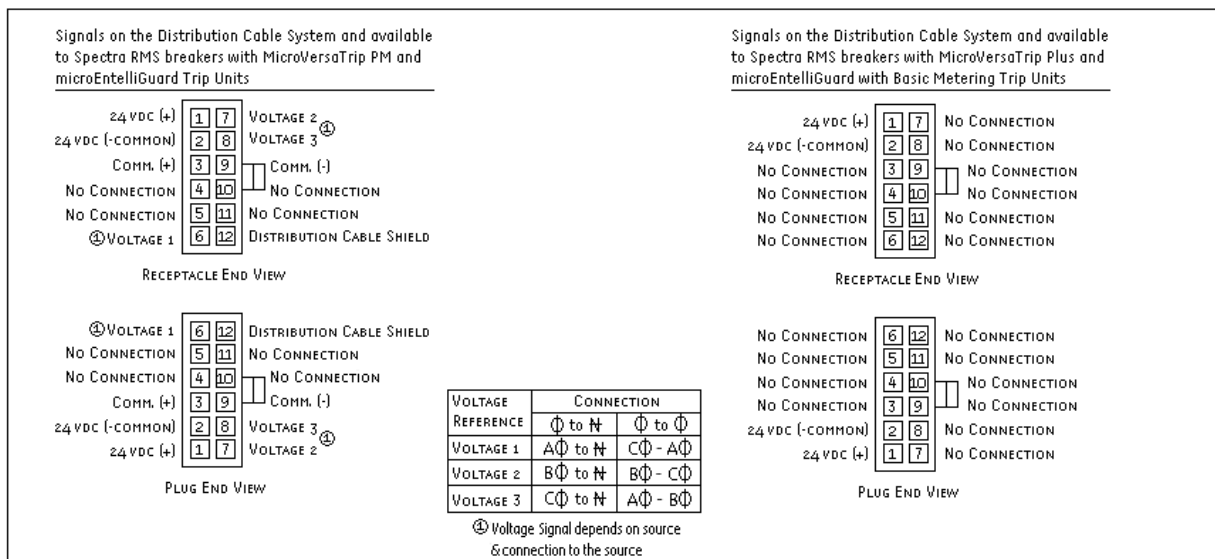


Figure 3. End view of Distribution Cable Extension detailing available pinout connections.

The electronic signals supported by the Distribution Cable Extension vary depending on the type of trip unit used; a list of supported functions is as follows.

**Spectra® RMS Breaker with *microEntelliGuard™* or MicroVersaTrip® PM Trip Unit**

- Control power (+24vdc)
- Control power (-common)
- System communications (Comm. +)
- System communications (Comm. -)
- Voltage A  $\phi$  (must be from Voltage Module or Voltage Conditioner Plate or Voltage Conditioner Assembly)
- Voltage B  $\phi$  (must be from Voltage Module or Voltage Conditioner Plate or Voltage Conditioner Assembly)
- Voltage C  $\phi$  (must be from Voltage Module or Voltage Conditioner Plate or Voltage Conditioner Assembly)

**Spectra® RMS Breaker with MicroVersaTrip® Plus or *microEntelliGuard™* (with Basic Metering) Trip Unit**

- Control power (+24vdc)
- Control power (-common)

Figure 3 shows the connector pinout for the Distribution Cable Harness for each type of trip unit.

**Connections**

The Distribution Cable Harness contains a 12-pin receptacle connector on each end. The connectors are keyed so they cannot be inserted incorrectly into a mating 12-pin plug connector.

To connect the end of the Distribution Cable Extension to another Distribution Cable Accessory, align the receptacle interlock with the plug hook and insert the receptacle into the plug until the interlock and hook overlap and catch (see Figure 4).

To disconnect the Distribution Cable Extension, press down at the rear of the receptacle interlock until the interlock clears the hook and remove the receptacle (see Figure 5).

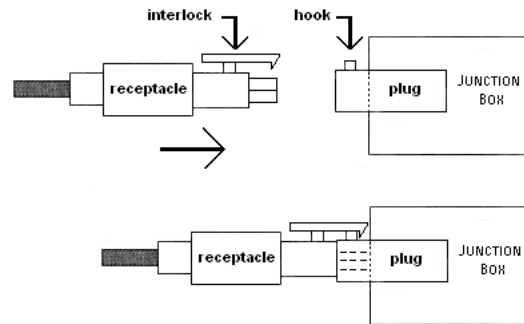


Figure 4. Side view of receptacle-plug connection insertion.

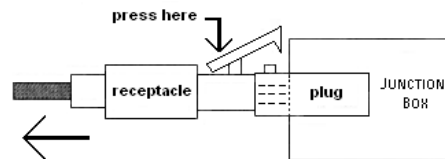


Figure 5. Side view of receptacle-plug connection removal.

### Additional Information

Refer to these other user's manuals for more details:

GEH-5934	MicroVersaTrip® Plus and MicroVersaTrip® PM Trip Units in Spectra® RMS Molded-Case Circuit Breakers
GEH-700	Spectra® G Breaker w/ <i>microEntelliGuard</i> ™ Trip Unit
GEH-701	Spectra® K Breaker w/ <i>microEntelliGuard</i> ™ Trip Unit
GEH-702	<i>microEntelliGuard</i> ™ Trip Unit Users Manual
DEH-41318	Universal Rating Plug
GEH-6250	Voltage Module
GEH-6251	Power Supply Plate
GEH-6252	Voltage Conditioner Plate
GEH-6253	Power Supply Assembly
GEH-6254	Voltage Conditioner Assembly
GEH-703	MET Battery Pack Adapter
GEH-704	MET Advanced Distribution Cable Junction Box
DEH-006	Distribution Cable Junction Box
GEH-705	MET Distribution Cable Extension (20-pin)
GEH-6255	Distribution Cable Harness (12-pin)
GEH-706	MET Distribution Cable Terminal Blocks (11 point & 22 point)
GEH-6257	Distribution Cable Terminal Block (11 point)
GEH-6491	POWER LEADER™ Modbus Concentrator
GEH-6502	POWER LEADER™ PMCS 5.0 Network Architecture Guide
GEH-707	MET Sealable Cover kits
DEH-4568	GTU digital test kit (GTUTK20)
GEH-5551	Shunt Trip and UVR instructions
GEH-5593	Aux switch and bell alarm
GEK-64467	TIM-1 Zone Selective Interlock Module

**Notes**

**Notes**

Spectra and MicroVersaTrip are registered trademarks and EntelliGuard and *microEntelliGuard* are trademarks of the General Electric Company.

These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the GE Company.

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