GE Energy
Industrial Solutions

GEH-6255 Installation Instructions

Distribution Cable Harness

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

For Catalog Number SDCHA11, SDCHA30, SDCHA60
UL LISTED Circuit Breaker Accessory

Overview
The General Electric Distribution Cable Harness is a modular connector used to carry a variety of electronic signals between Spectra® RMS Molded-Case Circuit Breakers with *micro*EntelliGuard™ or MicroVersaTrip® PM/Plus Trip Units and Distribution Cable Accessories. The Distribution Cable accessories supported by the Distribution Cable Harness are as follows:

- Power Supply Plate
- Voltage Conditioner Plate
- Power Supply Assembly
- Voltage Conditioner Assembly
- Distribution Cable Junction Box
- Distribution Cable Extension
- Distribution Cable Terminal Block
- Voltage Module

The Distribution Cable Harness is also used in GE Spectra® Series Switchboards to either connect Distribution Cable Junction Boxes (Cat. Nos. SDCJBB and SDCJBBC) to other Distribution Cable Junction Boxes or to connect Distribution Cable Boxes to the Voltage Module.

Because both ends are receptacles, you cannot use the Distribution Cable Harness as an extension cable; use the Distribution Cable Extension (Cat. Nos. SDCEA30 and SDCEA30C) for this application (*micro*EntelliGuard™ Trip Units with 20-pin connectors use the SDCEA30C extension cable).

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

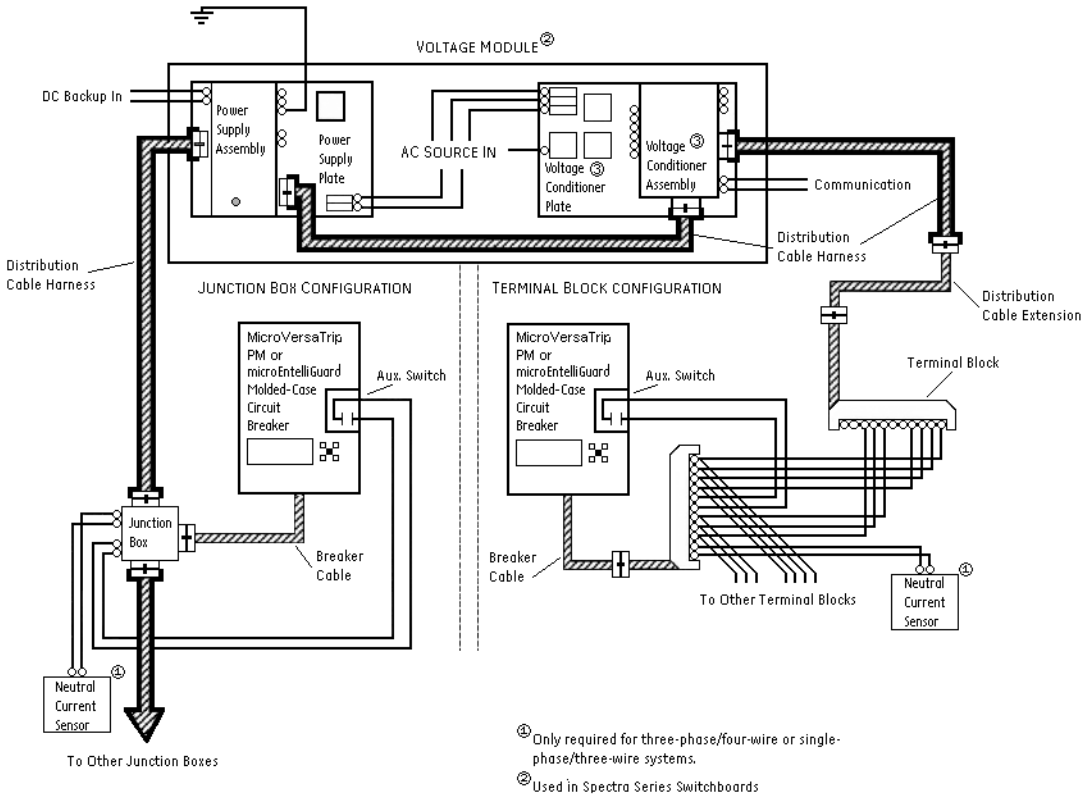


Figure 1. Typical MicroVersaTrip® PM Trip Unit System detailing the Distribution Cable Harness.

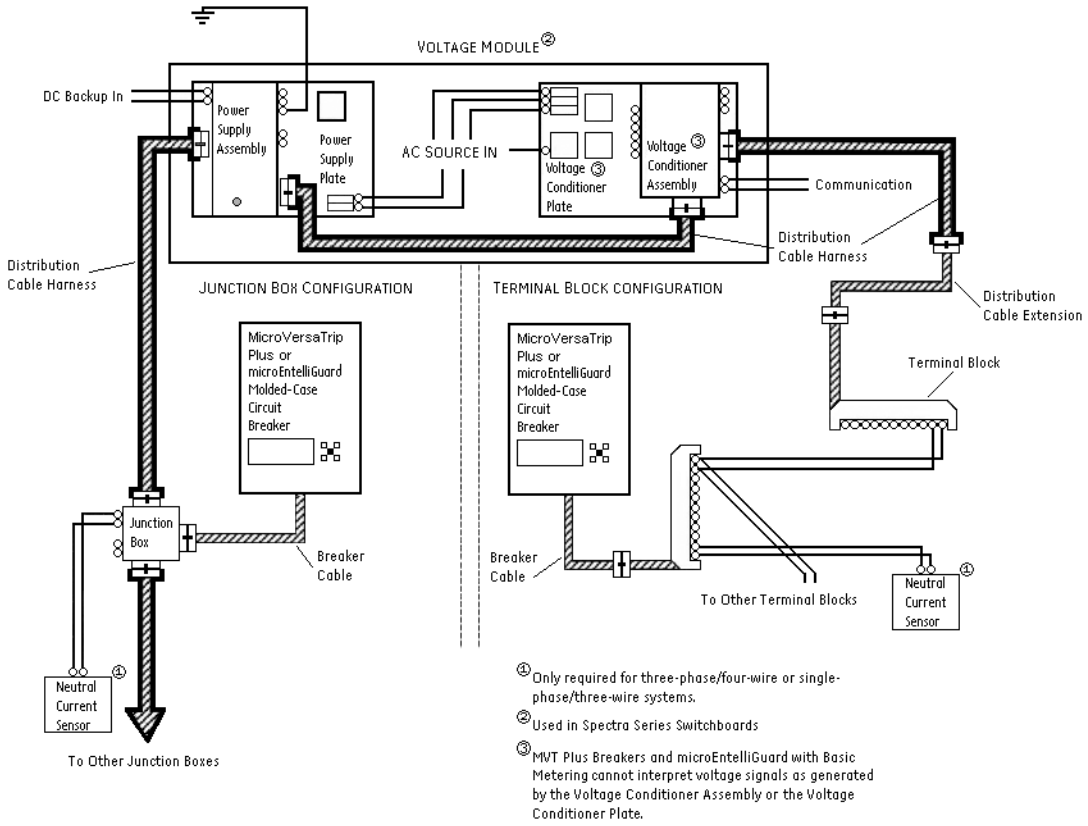


Figure 2. Typical MicroVersaTrip® Plus Trip Unit System detailing the Distribution Cable Harness.

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

Spectra® RMS Breaker with *micro*EntelliGuard™ or MicroVersaTrip® PM Trip Unit
- Control power (+24vdc)
- Control power (-common)
- System communications (Comm. +)
- System communications (Comm. -)
- Voltage A ϕ (must be from Voltage Module or Voltage Conditioner Plate or Voltage Conditioner Assembly)
- Voltage B ϕ (must be from Voltage Module or Voltage Conditioner Plate or Voltage Conditioner Assembly)
- Voltage C ϕ (must be from Voltage Module or Voltage Conditioner Plate or Voltage Conditioner Assembly)

Spectra® RMS Breaker with MicroVersaTrip® Plus or *micro*EntelliGuard™ (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 Harness to another Distribution Cable Accessory, align the harness receptacle interlock with the plug hook of the mating Distribution Cable accessory and insert the receptacle into the plug until the interlock and hook overlap and catch (see Figure 4).

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

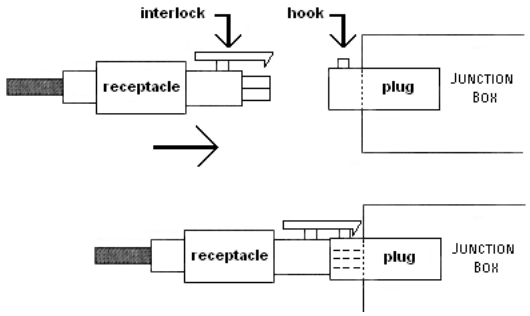
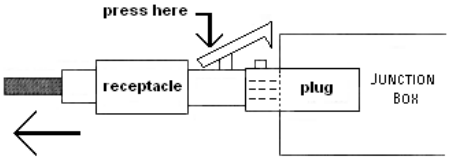


Figure 4. Side view of receptacle-plug connection insertion.



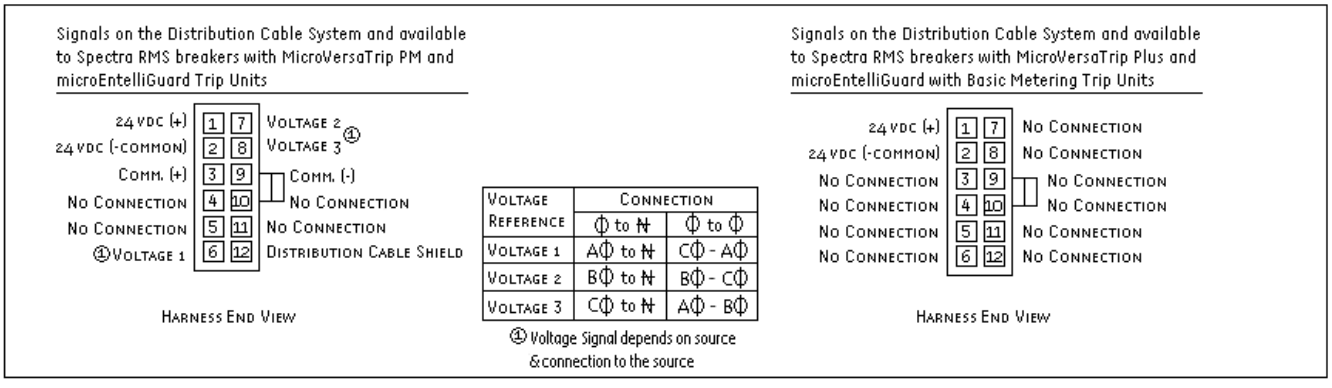


Figure 3. End view of Distribution Cable Harness detailing available pinout connections.

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/ *micro*EntelliGuard™ Trip Unit
GEH-701	Spectra® G Breaker w/ *micro*EntelliGuard™ Trip Unit
GEH-702	*micro*EntelliGuard™ 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-6256	Distribution Cable Extension (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

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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