# **GRT1-CRT INSTRUCTION SHEET**

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Precautions for Compliance with UL Standards and CSA Standards

#### Notice to Users of the GRT1-CRT in the USA and Canada

Please use the following installation information instead of the general information in the instruction manuals in order to use the product under certified conditions of UL and CSA when the product is installed in the USA or Canada. These conditions are required by NFPA 70, National Electrical Code in the USA and the Canadian Electrical Code, Part I in Canada and may vary from information given in the product manuals or safety precautions.

## Wiring for Communications Connector

 Using Flat Cable or VCTF 4-conductor Cable

Using VCTF 2-conductor Cable

Network		BS+	
		BDH	
		BDL	
		BS-	

1	1	BS+
Network		BDH
Network		BDL
	1	BS-

. The applicable wires when using a DCN4-TB4 Terminal Block Adaptor for the network lines BDH and BDL are as follows:

Cable type	Model	Application	Specifications
Round Cable I (VCTF 2-conductor cable)		BDH and BDL	Wire Size AWG19 to AWG18
Round Cable II (VCTF 4-conductor cable)		BS+, BDH, BDL, and BS–	Stranded

- · Do not use crimp terminals for field wiring.
- . Use the same wire size when two wires are connected to one terminal
- Tightening torque: 4.4 lb-in (0.5 N·m)
- The applicable wires when using a DCN4-BR4, DCN4-TR4, DCN5-BR4, or DCN5-TR4 Flat Cable Branch Line Pressure-welded Connector for the communications connector are as follows:

Cable type	Model	Application	Specifications
Flat Cable I (Standard Flat Cable)	DCA4-4 F10	Red: BS+ White: BDH	Wire Sizes Red and Black:
Flat Cable II (Sheathed Flat Cable)	DCA5-4 F10	Blue: BDL Black: BS–	AWG19 Stranded White and Blue: AWG21 Stranded

#### Wiring for Unit Power Supply and I/O Power Supply

- · Do not use ferrule terminals. Insert the standard or solid wire directly into the holes on the terminal block.
- · Do not insert more than one wire in one terminal.
- . The wire size is AWG20 to AWG16. The stripping length is 10 mm.
- · Select the wire size according to the following table.

Wire size	20AWG	18AWG	16AWG
Maximum current rating of protection	5 A	7 A	8 A

#### Direction of Installation

The GRT1-CRT can be installed in any of the three directions shown in the following figure.



DC Power Supplies

Use the following DC power supplies.

- Unit Supply: Isolated power supply with external 8 A overcurrent protection · I/O Supply: Isolated power supply

### Environment

Surround air temperature: 55°C

Compliance with Class I Division 2 Hazardous Location:

Input and output wiring must be in accordance with Class I, Div. 2 wiring methods and in accordance with the authority having jurisdiction.

- 1. This equipment is suitable for use in Class I, Div. 2, Group A, B, C, D or Non-Hazardous Locations Only.
- 2. WARNING: Explosion Hazard Substitution of Components May Impair Suitability For Class I. Div. 2.
- 3. WARNING: Explosion Hazard Do Not Disconnect Equipment Unless Power Has Been Switched Off Or The Area Is Known To Be Non-Hazardous.