

Features

- ◇ When a loop is long beyond regulations, a relay should be added to extend communication distance.
- ◇ When a single loop has excessive nodes to affect stability, a CAN relay could be connected to extend nodes.
- ◇ The control panel needs a relay for building a star topology and two relays for a ring topology.

Structure

Appearance of the relay is shown in Fig. 1.

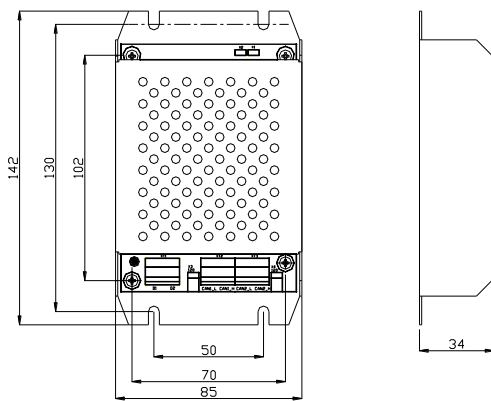


Fig. 1

Connection and Cabling

Warning: Please switch off power before installation.

- 1) Please check the enclosure and markings and make sure they are complete.
- 2) Dimension of the relay is shown in Fig. 1. Install the relay into the module or inner supporting board of the control panel, fixed and secured by M4 crews.
- 3) External terminals are shown in Fig. 2.

D1 D2 CAN1-L CAN1-H CAN2-L CAN2-H

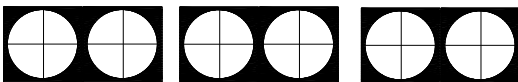


Fig. 2

D1, D2: 24VDC input terminal, polarity-insensitive. Input voltage is 19.2VDC to 28.8VDC.

CAN1-L, CAN1-H, CAN2-L, CAN2-H: Terminals connecting with the CAN loop of control panel. Each CAN loop should be less than 3000m and the number nodes is not over 112. At the end of CAN loop, the jumper should be connected to short the related pins.

Wiring: 1.0 mm² or above RVS twisted pair for polarity-insensitive signal loop 1.5mm² or above BV cable for 24VDC power line.

Specification

Operating Voltage	24VDC(19.2VDC~28.8VDC)
Standby Current	≤50mA
Max. Operating Current	≤100mA
two CAN interfaces of photoelectrical isolation	Transmission distance is less than 3000m. 120Ω end of line resistor is integrated on the board and set by jumper.
CAN1 Comm LED	It flashes red when CAN loop interface 1 communicates normally.
CAN2 Comm LED	It flashes red when CAN loop interface 2 communicates normally.
Using Pin X1 for Setting Mode	Pin X1 should be shorted by a jumper when a relay is for ring topology. Pin X1 should not be shorted by a jumper when a relay is used to extend distance, nodes and build star topology.
Pin X3 for Setting CAN1 End of Line Resistor	Connect with 120Ω resistor after Pin X3 is shorted.
Pin X4 for Setting CAN2 End of Line Resistor	Connect with 120Ω resistor after Pin X4 is shorted.
Environmental Temperature	0℃~+40℃
Relative Humidity	≤95%, non-condensing
Dimension	85mm X 142mm X 34mm
IP Rating	IP30

Troubleshooting

Problem	Reason	Solution
All LEDs not lit when the relay is powered	24VDC power fault	Fix the power supply
	Internal power circuit damaged	Return for repair
All LEDs not lit when the relay is powered	24VDC power fault	Fix the power supply
	Internal power circuit damaged	Return for repair
The relay can not transmit signal or	Short circuit	Search and remove the short

can only communicate in one direction		circuit.
	Internal circuit damaged	Return for repair
No communication	End of line resistor not connected	Add end of line resistor to the end of each loop
	Loop length or nodes quantity exceed limits	Add the CAN relay to the appropriate position

way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

Limited Warranty

GST warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any

Application

The relay is used to build network topology, applicable for the places where requires high reliability. System connection is shown in Fig. 3.

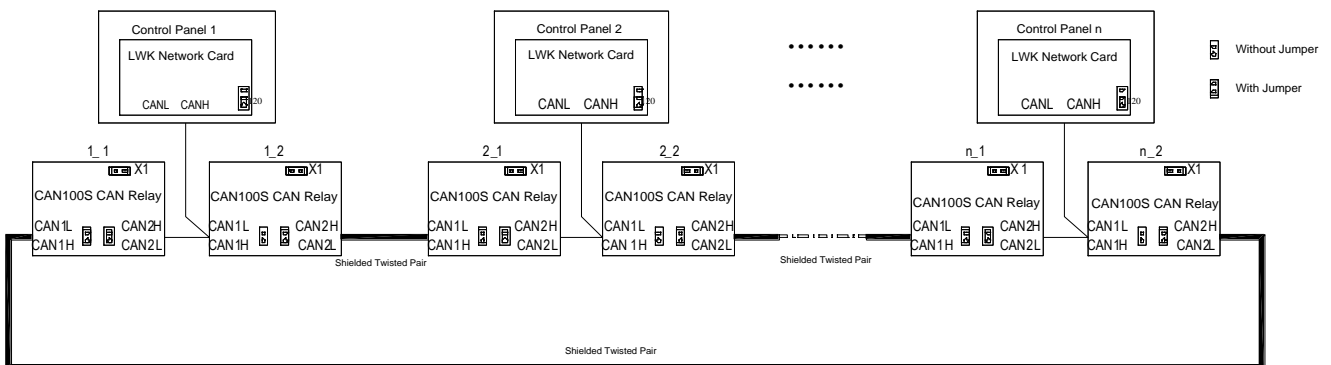


Fig. 3

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