



CMA-005-1



CMA-005-3

Specification

		CMA-005-1	CMA-005-3
Power Supply		90-250VAC/VDC	
		24VAC/VDC ±15%	
Power Consumption		2.5VA	
Display	7-Segment	Size 0.28 inch, 4 Digit, 1Row	
	LED Input	-	Green LED for Channel
	LED Output	Red LED Status	
Input	Input Type	PT100, PTC(1K)	
	Channel Input	1 Channel Input	Isolate 3 Channel Inputs
	Accuracy	±0.25% of Full Scale +1dgt @ Room Temperature (25 °C)	
	Sampling Time	500 mSec	
Commu- nication	Protocol	Modbus RTU	
	Baud Rate	4800, 9600, 19200, 38400, 57600 bps	
	Parity	None, Odd, Even	
	Stop Bits	1, 2	
	Data Bits	8 Bits	
	Support Device Node	1-127	
Output	Channel	1 Channel Output	3 Channel Outputs
	Relay Contact	5A/250VAC or 5A/30VDC (SPDT)	
Ambient Operation	Temperature	-10°C to 60°C	
	Humidity	85 % RH Non-Condensing	
Ambient Storage	Temperature	-20°C to 80°C	
	Humidity	85 % RH Non-Condensing	
Protection Degree		IP30	
Installation		DIN RAIL Maunting	
Material		ABS-V0	
Size (mm.)		55 x 90 x 62	74.6 x 90 x 62
Weight (kg.)		144	198

Description

- Digital Thermistor Motor Protection Relay CMA-005: A digital measurement and thermal protection device.
- Input: RTD (PT100) (-200 to 850 °C) and Thermistor PTC 1K (-20 to 150 °C)
- Models:
 - CMA-005-1, CMA-005-1-P1K: Input 1 channel.
 - CMA-005-3: Input 3 channels.
- Relay Contact Output: 5A/250 VAC or 5A/30 VDC.
- Each channel input can be assigned to Output 1, 2, or 3.
- Display of each channel's temperature can be selected by pressing the keypad or by using the auto scan function with adjustable display time (CMA-005-3).
- Test keypad available to check Output Relay operation.
- Communication: RS-485 Modbus RTU Protocol.
- LEDs indicate the temperature status of each channel (CMA-005-3).
- Time delay for output relay operation can be set (delay ON, delay OFF).
- Hold Alarm Relay Function: Number of trips (1-10 times) can be set to hold until reset.
- Manual reset function for Hold Alarm Relay.
- DIN rail installation with display on screen.
- 7-segment LED, 0.28 inch, 4 digits, 1 row.

Operation

CMA-005 is a digital temperature measurement and protection device designed to prevent motor coil damage caused by temperatures

The CMA-005 operates by detecting the motor heating temperature through internal temperature sensors(PT100 or PTC) installed inside the motor.

CMA-005-1 measures the temperature at 1 spot. It allows setting of high setpoint, low setpoint, and hysteresis, with a Delay ON/OFF function to postpone relay operation. The delay time is adjustable from 0 to 60 seconds.

CMA-005-3 measures temperature at 3 points.

The operation is the same as CMA-005-1, and each channel input can be assigned to output 1, 2, or 3, for example:

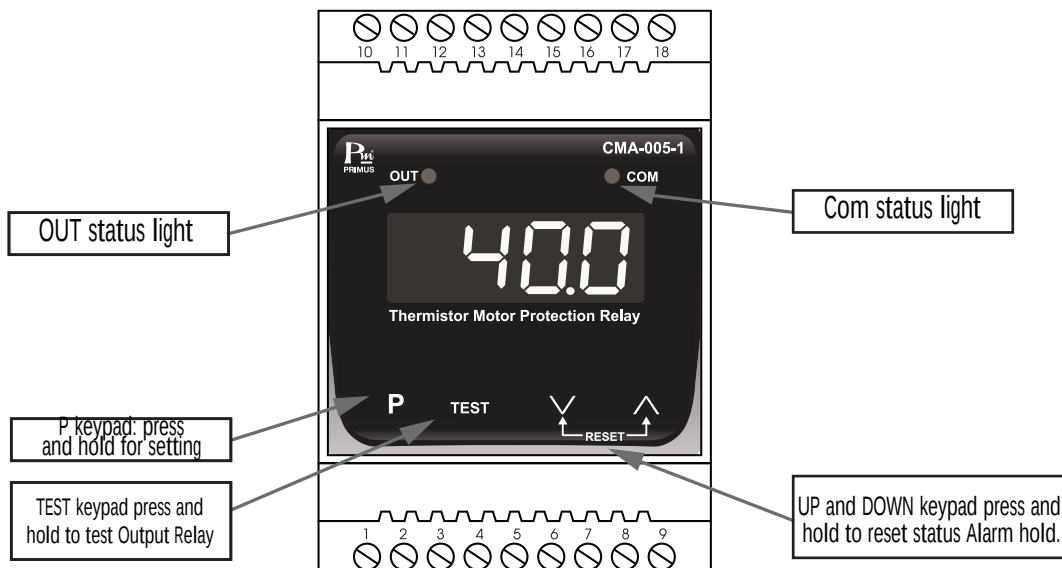
Input 1 relates to Output 1

Input 1 relates to Output 2

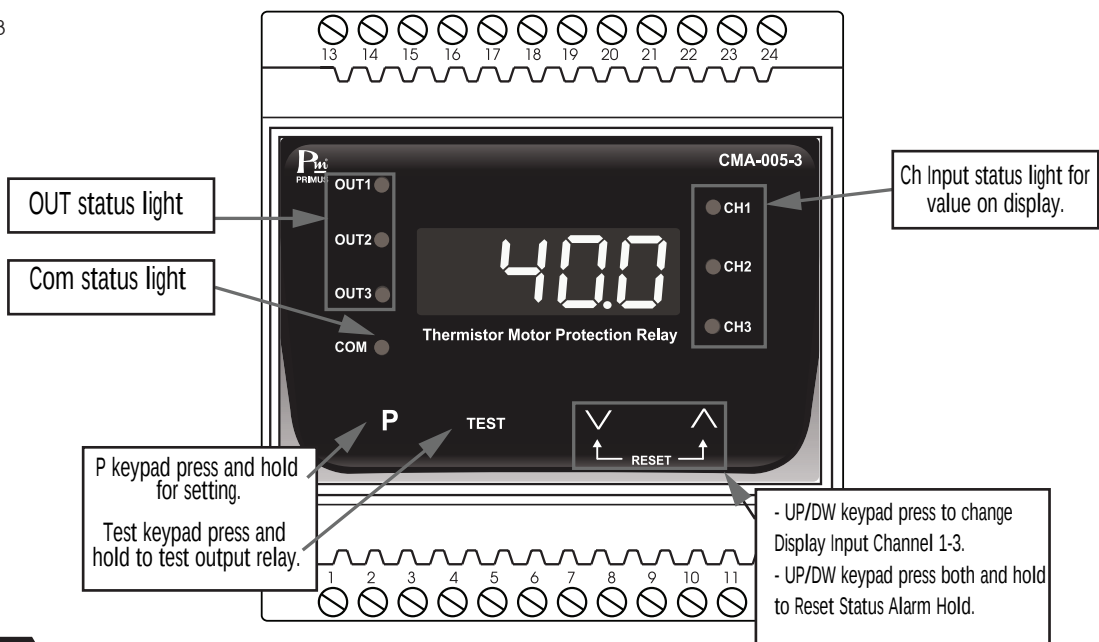
Input 1 relates to Output 3

Display Appearance

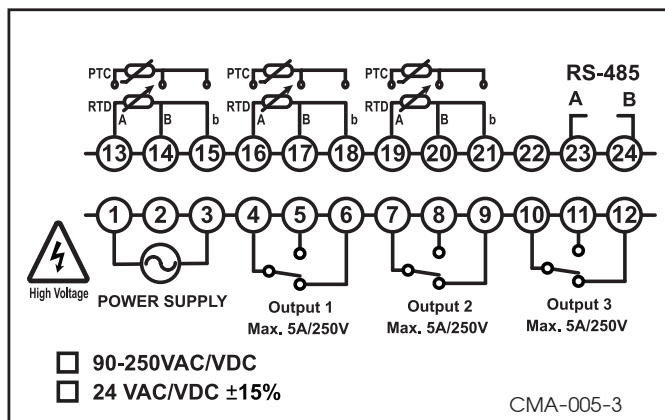
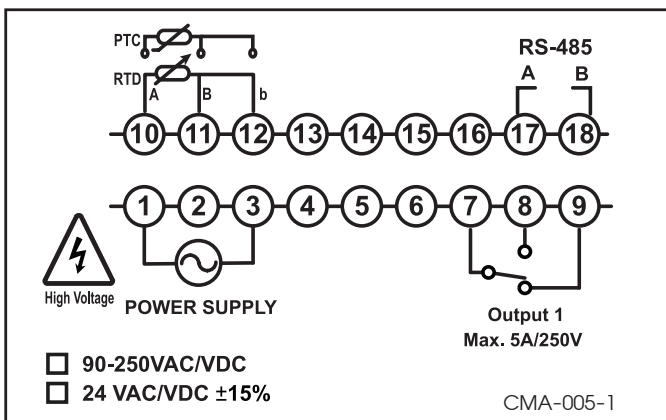
CMA-005-1



CMA-005-3



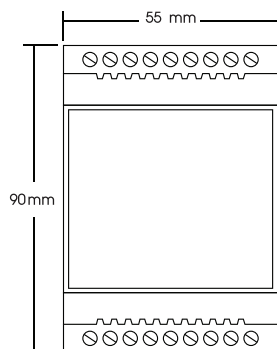
Wiring Diagram



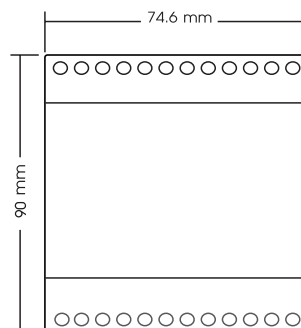
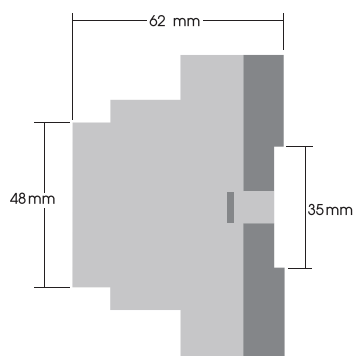
WARNING

- Make sure the correct wiring connection before turning on electricity. Mis-wiring may cause malfunction of the unit and fire.
- Never modify the unit to prevent damage or incident such as malfunction and fire etc.

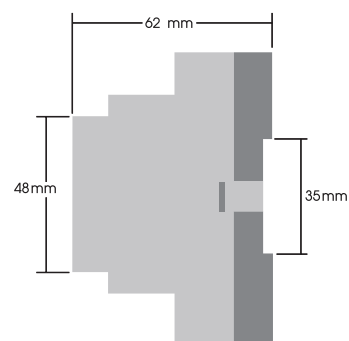
Dimension



CMA-005-1



CMA-005-3



Ordering Code

CMA-005-1-	Communication	-	Power Supply	-	External Sensor
	Communication		Power Supply		External Sensor
	NONE	NONE	220	90-250VAC/VDC	NONE
	M	RS-485	24	24VAC/VDC±15%	P1K
					PTC 1KΩ Wire 1m.

CMA-005-3-	Communication	-	Power Supply
	Communication		Power Supply
	NONE	NONE	220
	M	RS-485	24
			90-250VAC/VDC
			24VAC/VDC±15%