



Specification

Power Supply		220VAC ±15% 50/60Hz
		24VDC/VAC ±15%
Power Consumption		1 VA
Display	7-Segment	Size 0.39 inch 1 Digit ,for Heater Index
		Size 0.56 inch 3 Digit ,1 Decimal Point
	Heater Status	8 LED
	Alarm Relay	1 LED
	Communication	1 LED (Blink when communication success)
Communi- cation	Protocol	MODBUS RTU
	Baud Rate	4800, 9600, 19200, 38400 bps
	Parity	None, Odd, Even
	Stop Bits	1, 2
	Data Bits	8 Bits
	Maximum Support Node	2 Module of CM-005N-4CH
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	Front Protection Rating	IP52
	Case Protection Rating	IP30
Material		ABS-V0
Installation		DIN RAIL Mounting
Size (mm.)		48 x 96 x 80
Weight (kg.)		200

Description

- Digital Monitor for Heater Break Alarm CM-005DN is a device for displaying current values and heater status. It is used together with the CM-005N-4CH to check for heater break conditions.
- Can be connected with up to 2 units of CM-005N-4CH via the monitor panel, allowing display of current values for up to 8 heaters.
- Equipped with LED indicators showing the alarm status of each channel. Heater break current cutoff can be set, and Auto/Manual modes are available to view the status of each heater.
- Displays heater current using a red 3-digit 7-segment display (0.56 inch) and displays the heater position using a red 1-digit 7-segment display (0.39 inch).
- Includes 1 decimal point.

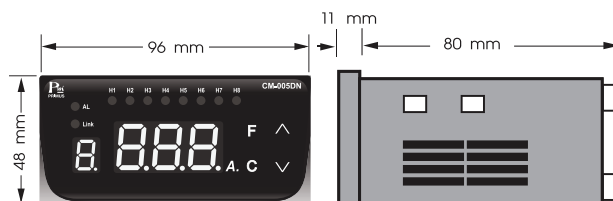
Operation

After connecting the CM-005DN to the monitor panel of the CM-005N-4CH, if a Heater Break (heater open, no current flow) or Heater Short (heater continuously conducting current) occurs due to a short circuit in the solid state relay or welded contacts of the magnetic contactor while the output of the temperature controller is not operating, the LED of the corresponding heater position on the CM-005DN will turn on or flash together with the alarm. The display will show “hb” (Heater Break) or “hs” (Heater Short) on the 7-segment display.

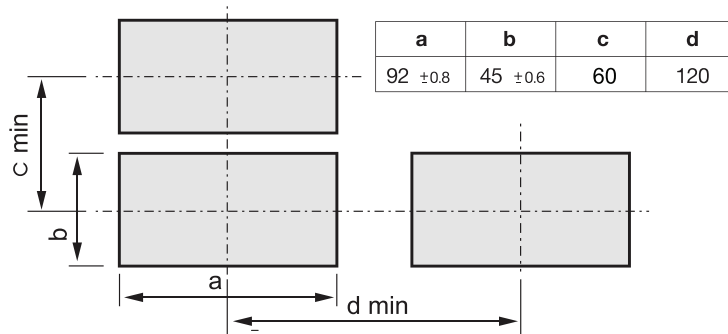
The CM-005DN can display the current value of each heater. The first 7-segment digit indicates the heater position (H1-H8), and the following digits display the current value of that heater. Display operation can be selected in Manual mode (manually selecting the heater position H1-H8 to view its current value) or Auto mode (automatically cycling through and displaying the current values of each heater continuously).

The CM-005DN also allows setting the current threshold for each heater. If the measured current is lower than the setpoint, the LED of that heater will turn on together with the alarm, and the display will show “hb” (Heater Break) on the 7-segment display. This will activate the alarm relay output of the CM-005N-4CH. The current value at the time of the alarm can be viewed by pressing the C button, and the LED and alarm can be stopped by pressing and holding the C button for approximately 3 seconds to reset.

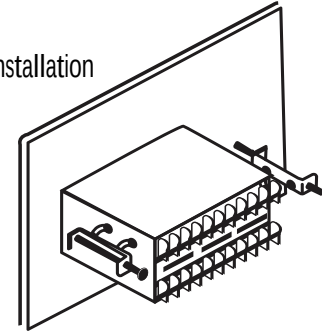
Dimension



Cutting Size



Installation



Operation Graph

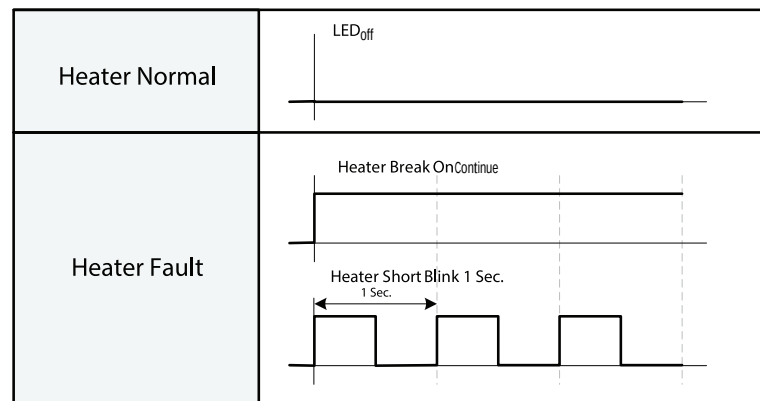
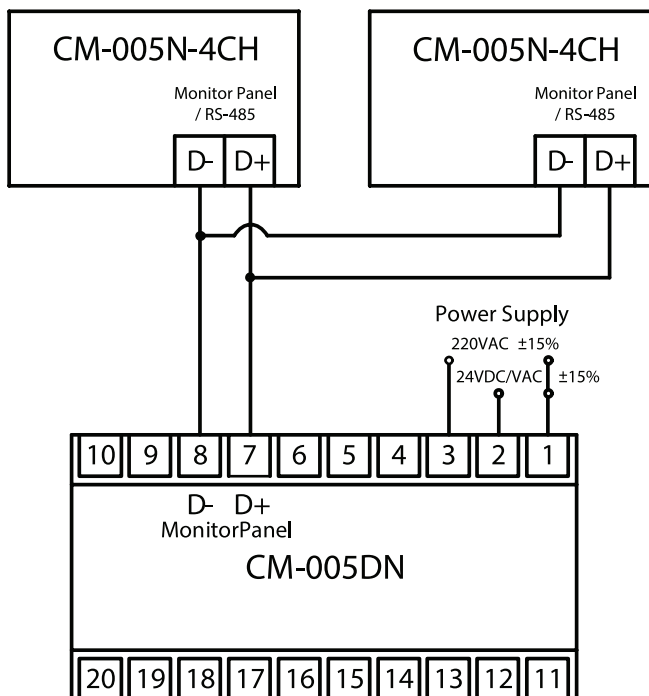


Fig1. Shows the operation of LED Status

Wiring Diagram

Ordering Code



Supply	
CM-005DN-	
Supply	
220	220VAC ±15%
24	24VDC/VAC ±15%



- 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.