# **CM-005DN**

#### **DIGITAL MONITOR FOR HEATER BREAK ALARM**







#### **TECHNICAL SPECIFICATION**

Power Supply		220 VAC ±15% 50/60 Hz
		24 VDC/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-Condesing
Ambient Storage	Temperature	-20°C to 80°C
	Humidity	<85 % RH Non-Condesing
Protection Degree	Front Protection Rating	IP52
	Case Protection Rating	IP30
Material		ABS-V0
Installation		DIN RAIL Mounting
Size		48 x 96 x 80 mm.
Weight		200 g.

#### **DESCRIPTION**

- CM-005DN is device for display current value and Heater status by connect with CM-005N-4CH
- Can connect with CM-005N-4CH maximum 2 device via Monitor panel to show heater current maximum 8 devices.
- LED show status of each alarm can set Heater Break current cutting and has Auto/Manual system to see Heater status.
- Show heater current by red 7-Segment 3 digits size 0.56 inch and show Heater position by red 7- Segment 1 digit size 0.39 inch.
- Decimal point 1 position.

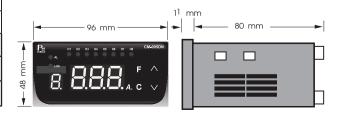
#### **GENERAL DESCRIPTION**

When user connects CM-005DN with Monitor panel of CM-005N-4CH and if there are Heater Break or Heater Short (Heater operate (current flow) all the time because solid state relay relay has short circuit or Contact surface of magnetic arc and stick together during Temperature do not operate) it made LED of other Heater of CM-005DN will ON or flash with alarm and display letters Hb (Heater Break) or H5 (Heater Short) at 7-Segment.

CM-005DN can show Heater current value each device by 7-Segment. First digit will show position of Heater (H1-H8) and next digit will show current value of Heater and display can choose and show result can choose both Manual (Press choose Heater (H1-H8) position for see heater current at the position) and Auto mode (show heater current circulating all the time)

CM-005DN can set heater current of each heater if measured value lower than Setpoint value. LED of heater will ON with Alarm and Display will show letter Hb (Heatbreak) at 7-Segment which made Alarm relay output of CM-005N-4CH operate by user can see current value during Alarm happened by pressing Reset(C) and can command LED and Alarm stop operate by pressing Reset (C) hold for 3 seconds.

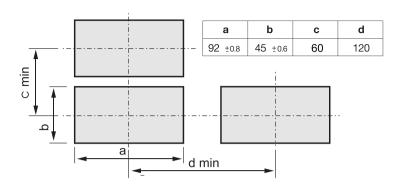
#### DIMENSION

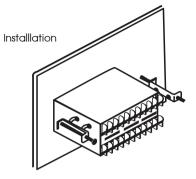




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## **CUTTING PANEL**





# Operation graph

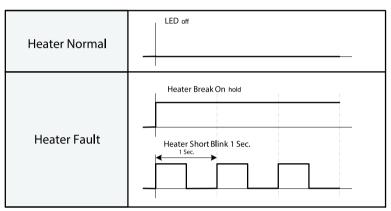
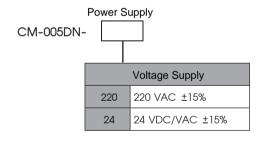


Fig1. LED Status operation

#### **WIRING DIAGRAM**

# CM-005N-4CH CM-005N-4CH Monitor Panel Monitor Panel / RS-485 / RS-485 D-D+ D- D+ Power Supply 220VAC ±15% 24VDC/VAC ±15% 8 6 5 3 2 1 D- D+ MonitorPanel CM-005DN 20 19 18 17 16 15 14 13

## ORDERING CODE





- 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.