LM-200 heater Monitor is monitoring accurately of heater resistance value inelectrical furnace. It can find heater shortor broken by alarm output setting. Through this products, user can keep optimal condition on the heater or electrical furnace by checking heater life-span or short.Preventive action will be done early through this products

Features

- Accurate heater resistance measuringby calculating input
- current and voltage through True RMS converter and highly accurate 14BitADC with Micro-process.
- Use as a ampere-meter or volt-meterbyRMS display.
- Auto measuring of first heaterresistance value or manualchanging.
- Zero, Span Calibration of actual heatercurrent or voltage.
- 60x80x110mm size, 3mm volt fixing or35mm DIN rail mounting.

Specifications

• INPUT

Description	Voltage Input	Current Input	Others
Input Range	Single-Phase 440 VAC	5 VAC	
Display Range	0.0-440 VAC	0.1- 999.9 VAC	
Accuracy	+ / - 0.1 Volt	+ / - 0.1 Amp	
Frequency	40- 200Hz		
Input Wave	Sine Wave or Phase-Control Wave		
Measuring Value	True RMS		

• Output

Alarm-Output Capacity : 125VAC 0.5A, 30VDC 2A

• Power

Operating Power:Single-Phase 220V/60Hz

Power Consumption : About 3VA

• Display

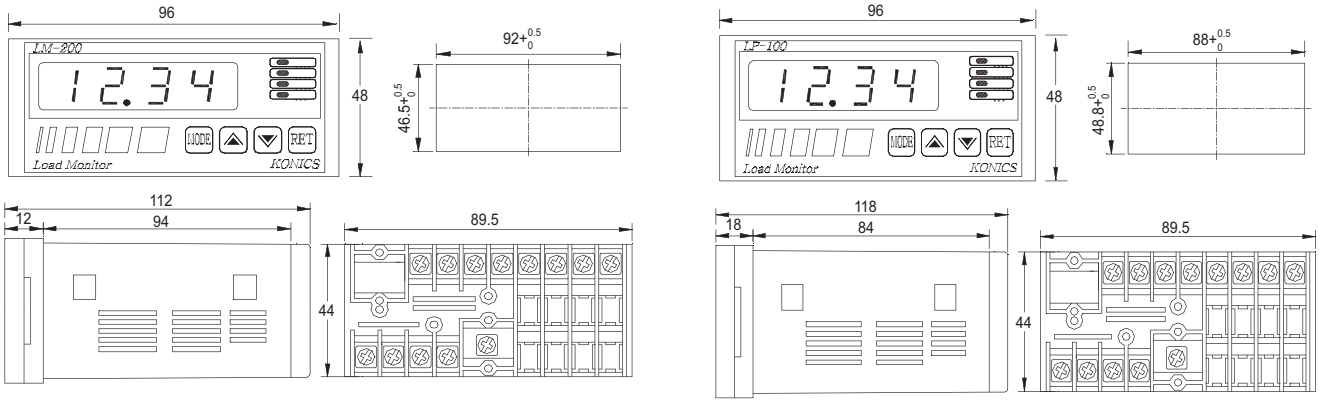
Display	Name	Unit	Description	Reference
ALn	Alarm-Set Value	Ohm	0.00- 650.0	Alarm-Set Resistance Value[Ohm]
Curr	Load Current Value	Amp	0.00- 999.9	Heater-Current Present Value(True RMS)
volt	Load Voltage Value	Volt	0.0- 440.0	Heater Voltage Present Value(True RMS)
oHn	Heater Resistance Value	Ohm	0.00-650.0	Auto Heater Resistance Measuring Value[Ohm]

• Setting Parameters

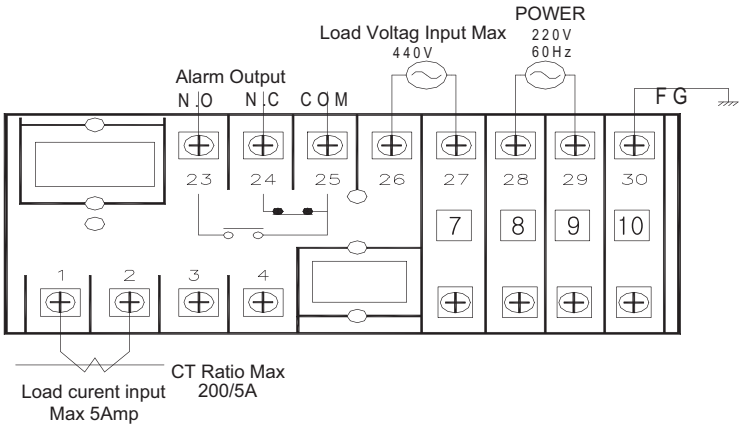
NO.	Display	Description 1	Description 2	Others
P00	AL	Alarm . Level	Alarm Set(%) Value	Heater Resistance Value =100%
P01	CE	Current Zero	Load Current Value	True RMS Ampere
P02	CS	Current Span	Load Current Value	True RMS Ampere
P03	Ct	CT Ratio	Load Current Value	True RMS Ampere
P04	uE	Voltage Zero	Load Voltage Value	True RMS Volt
P05	uS	Voltage Span	Load Voltage Value	True RMS Volt
P06	An	Alarm Mode	Alarm Mode No.	1 : Load Resistance Auto Measuring 4 : Must-not Set Alarm Output 5 : Alarm Output Test Mode 6 : Alarm Output Use
P07	Hr	Heater Resistor	Load Resistance Value	Auto Load Measured Value
P08	Pn	Parameter mode	First Parameters Value	0 :No Modifying of Set Value 1 :Yes Modifying of Set Value

Dimensions, Panel Cutout

(Unit : mm)



Connections



※ OPTION : RS485/422 WIRING

TERMINAL	7	8	9	10
RS485	R X (+)	R X (-)	–	–
RS422	R X (+)	R X (-)	T X (-)	T X (+)

Ordering Codes

TYPE		Mount	Option	Content
L	P10			KW
	M20			below 5A
		0		PANEL mounting type
		1		SCR mounting type
			0	NONE
			1	Communication RS-485
			2	Communication RS-422
			3	Only Zero-Switching