

Aptus Automation

Temperature Indicator

User Manual

Notice before start-up

Please confirm the specification of instrument is to totally with your requirement before using it, also read this manual in detail.



Danger

Danger! Electric Shock!

DON'T touch AC power wiring terminals when instrument has been powered! Keep the power off until all of the wirings are completed!

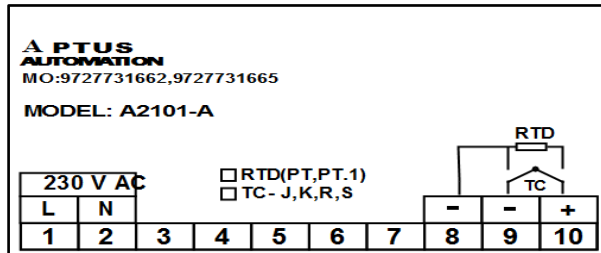


Warning

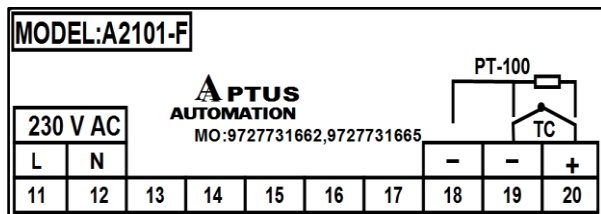
- 1) Please confirm the AC power wiring to instrument is correct, otherwise it would be caused aggravated damage on instrument.
- 2) Be sure to use the rated power supply, otherwise it would be caused aggravated damage on instrument.
- 3) Please confirm wires are connected with correct terminal (Power, Input and Output).
- 4) Avoid installing instrument in following spaces:
I. A place where the ambient temperature may reach beyond the range from 0 to 50°C
II. A place where the ambient humidity may reach beyond the range from 20 to 90% RH.
III. A place where the instrument likely to come into contact with water, oil, chemicals, steam and vapor.
IV. A place where the instrument is subject to interface with static electricity, magnetism and noise.
- 5) For thermocouple (TC) input, use shield compensating lead wire.
- 6) For RTD input, use shield wires which have low resistance and no resistance difference between the 3 wires.

TERMINAL DETAIL

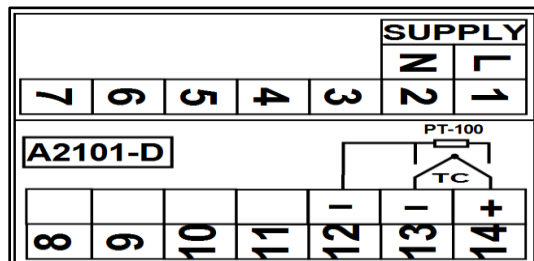
SIZE: 96 x 96:



SIZE: 48 x 96:



SIZE: 72 x 72:



TECHNICAL SPECIFICATIONS

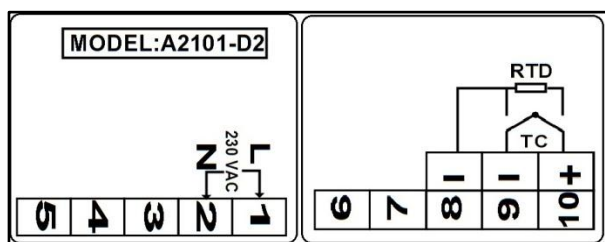
Product Name	: Temperature Indicator		
Model No.	: A2101		
Input	: RTD-PT 100 Thermocouples K Type, J Type, R Type, S Type,		
Range	: RTD-PT 100 (0.1 °C)--99.9 to 400.0°C RTD-PT 100 (1°C) - -99 to 400°C Thermocouple K Type -0000 to 1200°C Thermocouple J Type - 0000 to 750°C Thermocouple R Type-0000 to 1750°C Thermocouple S Type- 0000 to 1750°C		
Resolution	: RTD-PT 100	-	1°C or 0.1°C
	K Type	-	1°C
	J Type	-	1°C
	R Type	-	1°C
	S Type	-	1°C
Accuracy	: Better than ±0.5% of Full Scale		
Features through Keyboard	: Three Keys on the front panel, Input Sensor Selection, High and Low Range Settings, Decimal Point Selection, Offset		
Power Supply	: 230VAC± 10%, 50Hz		
Display	: 4 Digits RED Seven Segment Display		

INPUT TYPE	SIZE-A (96 X 96)
230 V AC Power supply	Terminal 1 & 2
Thermocouple	Terminal 10 (+Ve) & 9 (-Ve)
RTD-PT 100	Terminal 10 (A), 9 (B) & 8 (B)

INPUT TYPE	SIZE-F (48 X 96)
230 V AC Power supply	Terminal 11 & 12
Thermocouple	Terminal 20 (+Ve) & 19 (-Ve)
RTD-PT 100	Terminal 20 (A), 19 (B) & 18 (B)

INPUT TYPE	SIZE-D (72 X 72)
230 V AC Power supply	Terminal 1 & 2
Thermocouple	Terminal 14 (+Ve) & 13 (-Ve)
RTD-PT 100	Terminal 14 (A), 13 (B) & 12 (B)

SIZE: 48 x 48:



INPUT TYPE	SIZE-D (72 X 72)
230 V AC Power supply	Terminal 1 & 2
Thermocouple	Terminal 10 (+Ve) & 9 (-Ve)
RTD-PT 100	Terminal 10 (A), 9 (B) & 8 (B')

PARAMETER SETTING MENU

To enter to Parameter setting menu, press Increment (▲) and Decrement (▼) keys together for more than 3 seconds.
All settings to be done using Increment (▲) and Decrement (▼) keys.

KEY	DISPLAY	ALTERNATE /SECOND DISPLAY	FUNCTION
POWER ON	K		Initialization of the controller. Shows input sensor type.
	Process Value		The display shows process value corresponds to input or ' OPEn ' if sensor open or ' IPLO ' if process value is below lower range or ' IPHI ' if process value is above higher range.
(▲) and (▼) keys together > 3 seconds.	K	InPt	Input sensor selection. Options are as follows: - S ----- Thermocouple type S sensor R ----- Thermocouple type R sensor K ----- Thermocouple type K sensor J ----- Thermocouple type J sensor 1° ----- 1° RTD Pt-100 [three-wire] sensor 0.1° ----- 0.1° RTD Pt-100 [three-wire] sensor
SET	0	OFSt	Offset counts which directly add to or subtract from display reading. Setting range = -999 to 999 counts.
SET	CELS	tEmP	Set the temperature mode in Celsius / Fahrenheit.

DISPLAY MESSAGES

DISPLAY	DESCRIPTION
IPLO	Input signal below lower range setting
IPHI	Input Signal higher than higher range setting
OPEn	No Signal or I/P Wire Break or Sensor Burn Out