





Features:

- Dual Display, 4 digit, 7 segment LED
- LED Status Indicator: Relay ON, Tune, Alarm, Manual
- TC / RTD Input, Analog input
- ON-OFF, PID, PID Autotune
- °C / °F Selectable
- Heat Cool PID
- Ramp Soak
- Soft Start
- RS485 Communication (Optional)

Size: 1/8 DIN, 96mm x 48mm

Certifications:  

Technical Specifications

Display

Digits	4 digit 7 Segment LED, Dual display Height of Upper Display : 0.3785" Height of Lower Display : 0.2720"
LED Indications	Relay ON, Alarm, Manual mode, Tune

Input Specifications

Inputs	Thermocouple (J,K,T,R,S,C,E,B,N,L,U,W, Platinel II), RTD (Pt100) DC Analog Inputs (-5 to 56mV, 0 to 10V, 0 to 20mA)
Sampling time	200 ms
Input Filter (FTC)	0.2 to 10.0 sec
Resolution	1 / 0.1° for TC/RTD only (Fixed 1° resolution for R & S type TC) Decimal point position selectable: 1/0.1/0.01/0.001 for analog input
Temperature Unit	°C / °F Selectable
Indication Accuracy	For TC inputs: 0.25% of F.S. ±1° For R & S type TC inputs: 0.5% of F.S. ±2° (20 min of warm up time for TC input) For RTD inputs: 0.1% of F.S. ±1° For Analog Input: ±0.5%, ±1 digit (F.S. = Full Scale)

Output Specifications

Control	1
Contact Rating (SPST)	5A @ 230V AC / 30V DC, resistive
SSR Drive (Voltage Pulse)	18V DC, 20mA
Current	0/4 to 20mA DC (loop impedance : 500Ω max)
Voltage	0 to 5/10V DC (load resistance : 10KΩ min)
Alarm	2
Contact Rating (SPST)	5A @ 230V AC / 30V DC, resistive
SSR Drive	12V DC (20mA)
Retransmission	
Current	0/4 to 20mA DC (loop impedance:500Ω max)
Voltage	0 to 5/10V DC (load resistance :10KΩ min.)
Update Rate	100 msec

Functional Specifications:

Control Action	1) PID 2) ON-OFF
Proportional Band (P)	0.0 to 400.0°
Integral Time (I)	0 to 3600 sec
Derivative Time (D)	0 to 200 sec
Cycle Time	0.1 to 100.0 sec
Hysteresis Width	0.1 to 99.9°
Manual Reset Value	-99.9 to 99.9°
Heat Cool PID	
Control Action	PID
Cycle Time	0.1 to 100 sec
Proportional Gain	0.0 to 400.0°
Deadband	Programmable from setpoint low limit to setpoint high limit
Alarms	
Modes	Deviation high/low, Absolute high/low, Band, sensor Break
Hysteresis	0.1 to 99.9°
Ramp Soak	
Ramp Rate	1 to 9999°/hr
Soak Time	0 to 1440 min
Soft Start Time	0 to 999 min

Supply Voltage

Supply Voltage	85 to 270V AC/DC (50 / 60Hz) OPTIONAL - 24V AC/DC, ±10%
Power Consumption	6VA max @230V AC

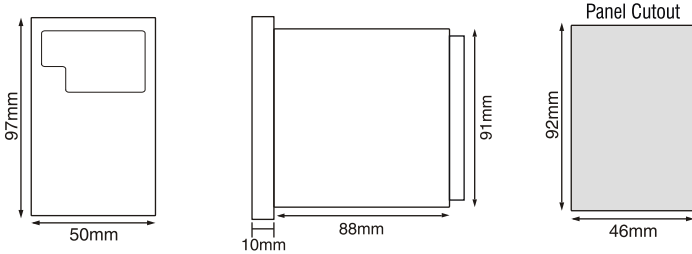
Environmental Specifications

Temperature	Operating: 0 to 50°C (32 to 122°F) Storage: -20 to 75°C (-4 to 167°F)
Humidity (non-condensing)	95% RH
Weight	230 gms
Protection Level	IP65 for faceplate

Compliance

IEC/EN 61326 (EMI/EMC)
IEC/EN 61010 Revision3 2010 Edition (Safety)
UL 61010 Revision3 2010 Edition (Safety)

Dimensions



Mounting Accessories (Supplied with units)

Clamp side with screw assembled

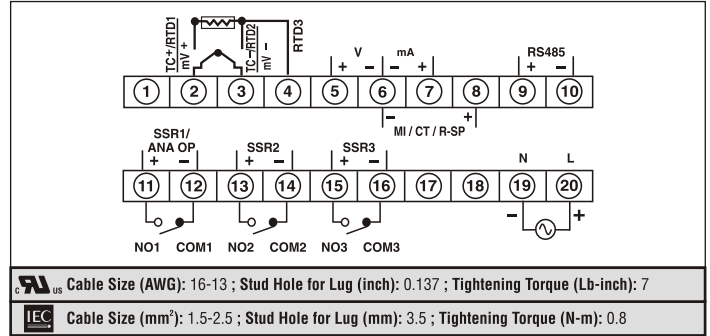
Optional Specifications #2 :

SERIAL COMMUNICATION

Interface standard	RS485
Communication address	1 to 99, maximum of 32 units per line
Transmission mode	Half duplex
Transmission protocol	MODBUS RTU
Transmission distance	500 m maximum
Transmission speed	9600, 4800, 2400, 1200, 600, 300 bits/sec

#2 Optional specifications depend on the type of unit ordered.

Terminal Connections



Ordering Information

This product is CE certified. Also available with UL marking against order. Please order as per the requirement.

Part No.	OUTPUT 1	OUTPUT 2	OUTPUT 3		SUPPLY VOLTAGE
			RELAY / SSR	COMMUNICATION (RS485)	
PID110-0-0-00	RELAY	RELAY	NA		85-270V AC/DC
PID110-0-0-00-24V	RELAY	RELAY	NA		24V AC/DC
PID110-0-0-01	RELAY	RELAY	RELAY		85-270V AC/DC
PID110-0-0-04	RELAY	RELAY	RELAY	YES	85-270V AC/DC
PID110-0-0-04-24V	RELAY	RELAY	RELAY	YES	24V AC/DC
PID110-0-1-05	RELAY	12VDC SSR	12VDC SSR	YES	85-270V AC/DC
PID110-1-0-00	18VDC SSR	RELAY	NA		85-270V AC/DC
PID110-1-0-00-24V	18VDC SSR	RELAY	NA		24V AC/DC
PID110-1-0-01	18VDC SSR	RELAY	RELAY		85-270V AC/DC
PID110-1-1-01	18VDC SSR	12VDC SSR	RELAY		85-270V AC/DC
PID110-1-0-04	18VDC SSR	RELAY	RELAY	YES	85-270V AC/DC
PID110-1-0-04-24V	18VDC SSR	RELAY	RELAY	YES	24V AC/DC
PID110-1-1-05	18VDC SSR	12VDC SSR	12VDC SSR	YES	85-270V AC/DC
PID110-2-0-00	4-20mA (Current)	RELAY	NA		85-270V AC/DC
PID110-2-0-00-24V	4-20mA (Current)	RELAY	NA		24V AC/DC
PID110-2-0-01	4-20mA (Current)	RELAY	RELAY		85-270V AC/DC
PID110-2-0-04	4-20mA (Current)	RELAY	RELAY	YES	85-270V AC/DC
PID110-2-0-04-24V	4-20mA (Current)	RELAY	RELAY	YES	24V AC/DC
PID110-2-1-05	4-20mA (Current)	12VDC SSR	12VDC SSR	YES	85-270V AC/DC
PID110-3-0-00	0 - 10V (Voltage)	RELAY	NA		85-270V AC/DC
PID110-3-0-00-24V	0 - 10V (Voltage)	RELAY	NA		24V AC/DC
PID110-3-0-01	0 - 10V (Voltage)	RELAY	RELAY		85-270V AC/DC
PID110-3-0-04	0 - 10V (Voltage)	RELAY	RELAY	YES	85-270V AC/DC
PID110-3-0-04-24V	0 - 10V (Voltage)	RELAY	RELAY	YES	24V AC/DC
PID110-3-1-05	0 - 10V (Voltage)	12VDC SSR	12VDC SSR	YES	85-270V AC/DC
PID110-5-0-04	0 - 20mA (Current)	RELAY	RELAY	YES	85-270V AC/DC
PID110-5-1-05	0 - 20mA (Current)	12VDC SSR	12VDC SSR	YES	85-270V AC/DC
PID110-4-0-04	0 - 5V (Voltage)	RELAY	RELAY	YES	85-270V AC/DC
PID110-4-1-05	0 - 5V (Voltage)	12VDC SSR	12VDC SSR	YES	85-270V AC/DC

UL approved part numbers (with CE mark)

Please add suffix-CU to the above part nos.:

- i.e. 1) **PID110-0-0-00-CU**
2) **PID110-0-0-00-24V-CU**
and so on...