





### 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, Platine 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

<b>Control</b>	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.)
<b>Alarm</b>	2
Contact Rating (SPST)	5A @ 230V AC / 30V DC, resistive
SSR Drive	12V DC (20mA)
<b>Retransmission</b>	
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°
<b>Heat Cool PID</b>	
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
<b>Alarms</b>	
Modes	Deviation high/low, Absolute high/low, Band, sensor Break
Hysteresis	0.1 to 99.9°
<b>Ramp Soak</b>	
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

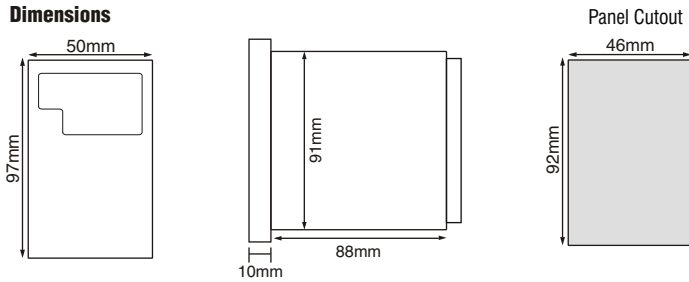
#### Environmental Specifications

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

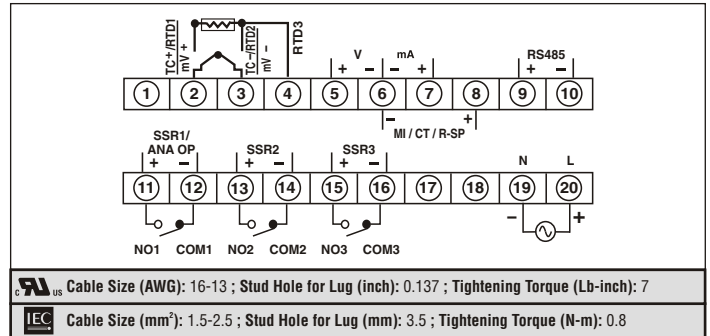
### Optional Specifications #2 :

#### 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...