

INSTALLATION PARAMETERS : PAGE-10	
Parameters	Settings (Default Value)
Temperature Range for PID1 RG.1	-199 to 600°C (Default : 300)
Zero Offset for PID1 OF.1	-99 to +99°C (Default : 0)
Control Action for PID1 CR.1	Pid PID On.F On-Off (Default : PID)
Hysteresis for PID1 HY.1	1 to 999°C (Default : 2)
Temperature Range for PID2 RG.2	-199 to 600°C (Default : 300)
Zero Offset for PID2 OP.2	-99 to +99°C (Default : 0)
Control Action for PID2 CR.2	Pid PID On.F On-Off (Default : PID)
Hysteresis for PID2 HY.2	1 to 999°C (Default : 2)

OPERATOR PARAMETERS : PAGE-0	
Parameters	Settings (Default Value)
Tune command for PID1 tn.1	YES Yes no No (Default : No)
Tune command for PID2 tn.2	YES Yes no No (Default : No)

PID CONTROL PARAMETERS : PAGE-12	
Parameters	Settings (Default Value)
View Output Power for PID1 Pr.1	Not Applicable (for View Only) (Default : Not Applicable)

Parameters	Settings (Default Value)
Cycle Time For PID1 ct.1	0.5 to 99.5 Seconds (in steps of 0.5 Sec.) (Default : 1.0)
Proportional Band for PID1 Pb.1	1 to 999°C (Default : 10)
Integral Time (reset) for PID1 It.1	0 to 999 Seconds (Default : 100)
Derivative Time (rate) for PID1 dt.1	0 to 250 Seconds (Default : 25)
View Output Power for PID2 Pr.2	Not Applicable (for View Only) (Default : Not Applicable)

CONFIGURATION PARAMETERS : PAGE-11	
Parameters	Settings (Default Value)
Self-Tune on Setpoint Change St	Enb Enable dSb Disable (Default : Enable)
Sensor Break Strategy Sb	AUT Auto nAn Manual (Default : Auto)
Setpoint Locking Lp	non None SP Control Setpoint ASP Auxiliary Setpoint ALL Both Control & Auxiliary Setpoint (Default : None)
Controller ID Number Id	1 to 127 (Default : 1)
Baud Rate br	1.2 1200bps 2.4 2400bps 4.8 4800bps 9.6 9600bps (Default : 9.6 bps)

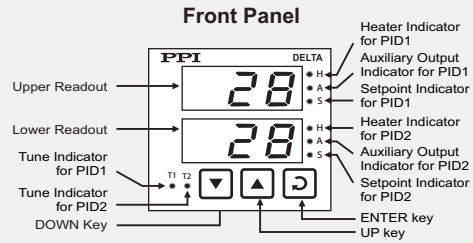
Parameters	Settings (Default Value)
Communication Write Enable CE	YES Yes no No (Default : Yes)
Cycle Time for PID2 ct.2	0.5 to 99.5 Seconds (in steps of 0.5 Sec.) (Default : 20.0 Sec.for Relay 1.0 Sec.for SSR)
Proportional Band for PID2 Pb.2	1 to 999°C (Default : 10)
Integral Time (reset) for PID2 It.2	0 to 999 Seconds (Default : 100)
Derivative Time (rate) for PID2 dt.2	0 to 250 Seconds (Default : 25)

Note: The Auxiliary function parameters for PID 1 & PID 2 are grouped on PAGE 13 & 14 and are mentioned together in the below table

AUXILIARY FUNCTION PARAMETERS : PAGE-13/14	
Parameters	Settings (Default Value)
Auxiliary Function for PID1 AF.1	non None ALn Alarm Con Control blr Blower (Default : None)
Alarm Type tYP	PLo Process Low PH.1 Process High dEv Deviation Band bnd Window Band (Default : Process Low)
Alarm Setpoint SP	-199 to 600 (Default : 0)

Parameters	Settings (Default Value)
Alarm Deviation Band bnd	-99 to 999 (Default : 0)
Alarm Window Band bnd	3 to 999 (Default : 3)
Alarm Logic LOG	nor Normal rEv Reverse (Default : Normal)
Alarm Inhibit ihb	YES Yes no No (Default : Yes)
Auxiliary Setpoint SP	(Min. Range - SP) to (Max. Range - SP) for selected Input (Default : 0)
Control Hysteresis HYS	1 to 999 (Default : 2)
Control Logic LOG	nor Normal rEv Reverse (Default : Normal)
Blower Setpoint SP	0 to 250 (Default : 0)
Blower Hysteresis HYS	1 to 250 (Default : 2)

FRONT PANEL LAYOUT



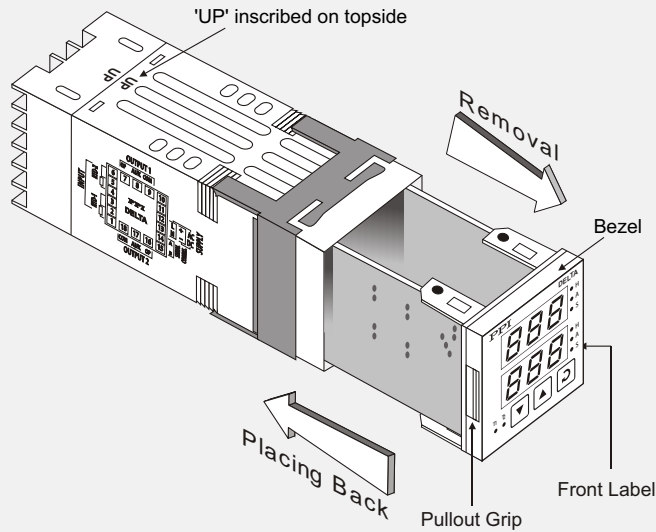
Keys Operation

Symbol	Name	Function When Setting Parameter
▼	DOWN Key	Press to decrease the parameter value
▲	UP Key	Press to increase the parameter value
↻	ENTER Key	Press to store the set parameter value and / or scroll to the next parameter

PV Error Indications

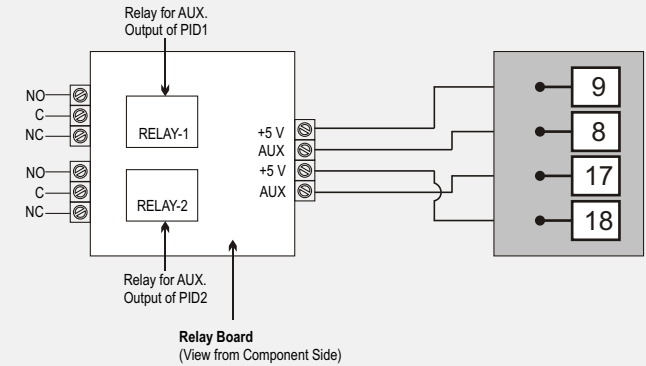
Message	Error Type
Or	Over-range (Temp. above Max. Range)
Ur	Under-range (Temp. below Min. Range)
S.br	Sensor Break (Thermocouple is open or broken)

ENCLOSURE ASSEMBLY

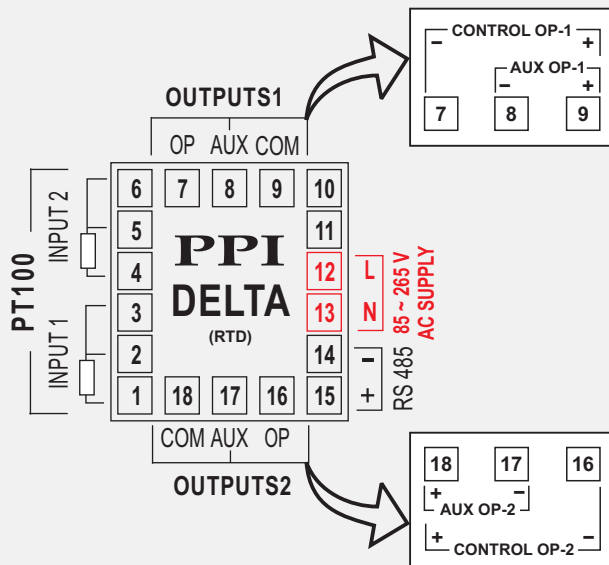


WIRING CONNECTION

AUXILIARY OUTPUT

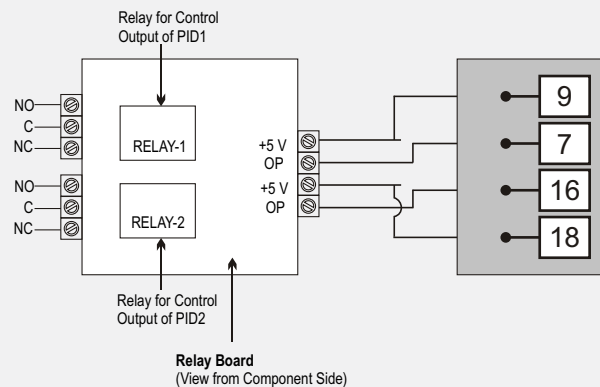


ELECTRICAL CONNECTIONS



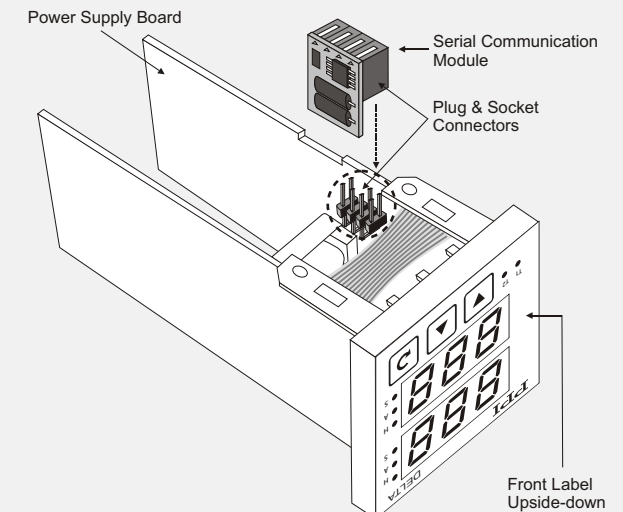
WIRING CONNECTION

CONTROL OUTPUT



MOUNTING DETAILS

SERIAL COMM. MODULE





INSTALLATION PARAMETERS : PAGE-10

Parameters	Settings (Default Value)
Input Type for PID1 tc.1	Refer Table 1 (Default : Type J)
Output Type for PID1 OP.1	RLY Relay SSR SSR (Default : SSR)
Temperature Range for PID1 rc.1	0 to Max. Range Specified for the selected Input type (Default : 300)
Offset for PID1 OF.1	-99 to 99 (Default : 0)
Control Action for PID1 CA.1	PID PID On-Off On-Off (Default : PID)
Input Type for PID2 tc.2	Refer Table 1 (Default : Type J)
Output Type for PID2 OP.2	RLY Relay SSR SSR (Default : SSR)
Temperature Range for PID2 rc.2	0 to Max. Range Specified for the selected Input type (Default : 300)
Offset for PID2 OP.2	-99 to 99 (Default : 0)
Control Action for PID2 CA.2	PID PID On-Off On-Off (Default : PID)

OPERATOR PARAMETERS : PAGE-0

Parameters	Settings (Default Value)
Tune command for PID1 tn.1	YES Yes no No (Default : No)
Tune command for PID2 tn.2	YES Yes no No (Default : No)

PID CONTROL PARAMETERS : PAGE-12

Parameters	Settings (Default Value)
View Output Power for PID1 Pr.1	Not Applicable (for View Only) (Default : Not Applicable)
Cycle Time For PID1 Ct.1	0.5 to 99.5 Seconds (in steps of 0.5 Sec.) (Default : 20.0 Sec. for Relay 1.0 Sec. for SSR)
Proportional Band for PID1 Pb.1	1 to 999°C (Default : 10)
Integral Time (reset) for PID1 It.1	0 to 999 Seconds (Default : 100)
Derivative Time (rate) for PID1 dt.1	0 to 250 Seconds (Default : 25)
View Output Power for PID2 Pr.2	Not Applicable (for View Only) (Default : Not Applicable)
Cycle Time for PID2 Ct.2	0.5 to 99.5 Seconds (in steps of 0.5 Sec.) (Default : 20.0 Sec. for Relay 1.0 Sec. for SSR)
Proportional Band for PID2 Pb.2	1 to 999°C (Default : 10)
Integral Time (reset) for PID2 It.2	0 to 999 Seconds (Default : 100)
Derivative Time (rate) for PID2 dt.2	0 to 250 Seconds (Default : 25)

CONFIGURATION PARAMETERS : PAGE-11

Parameters	Settings (Default Value)
Self-Tune on Setpoint Change St	Enb Enable dSb Disable (Default : Enable)

Parameters	Settings (Default Value)
Sensor Break Strategy Sb	Aut Auto Man Manual (Default : Auto)
Setpoint Locking LK	non None SP Control Setpoint ASP Auxiliary Setpoint ALL Both Control & Auxiliary Setpoint (Default : None)
Controller ID Number Id	1 to 127 (Default : 1)
Baud Rate br	12 1200bps 24 2400bps 48 4800bps 96 9600bps (Default : 9.6 bps)
Communication Write Enable CE	YES Yes no No (Default : Yes)

AUXILIARY FUNCTION PARAMETERS : PAGE-13/14

Parameters	Settings (Default Value)
Auxiliary Function for PID1 AF.1	non None ALn Alarm Con Control blr Blower (Default : None)
Alarm Type tyP	PLo Process Low PHi Process High dEw Deviation Band bnd Window Band (Default : Process Low)

Parameters	Settings (Default Value)
Alarm Setpoint SP	Min. to Max. Range specified for the selected Input Type (Default : 0)
Alarm Deviation Band bnd	-99 to 999 (Default : 0)
Alarm Window Band bnd	3 to 999 (Default : 3)
Alarm Logic LOG	nor Normal rEv Reverse (Default : Normal)
Alarm Inhibit ihb	YES Yes no No (Default : Yes)
Auxiliary Setpoint SP	(Min. Range - SP) to (Max. Range - SP) for selected Input (Default : 0)
Control Hysteresis HYS	1 to 999 (Default : 2)
Control Logic LOG	nor Normal rEv Reverse (Default : Normal)
Blower Setpoint SP	0 to 250 (Default : 0)
Blower Hysteresis HYS	1 to 250 (Default : 2)

Input Type for PID 1 TABLE - 1

Option	Range (Min. to Max.)	Resolution
J J Type T/C	0 to 760°C	Fixed 1°C
K K Type T/C	0 to 999°C	

Output Type for PID1 TABLE - 2

Option	What it means
RLY	Electromechanical Relay contacts
SSR	DC voltage pulses for driving external Solid State Relay (SSR)

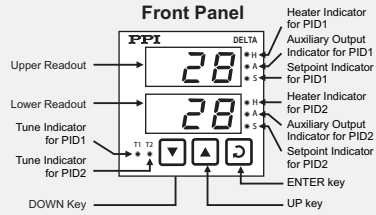
PID1 STATUS TABLE

PID1 Indicator	Functions
H	• Indicates the On/Off status of Heater Output for PID1
A	• Flashes while the Upper Readout shows the Auxiliary Setpoint value for PID1 in Operator Mode • Indicates the On / Off status of Auxiliary Output for PID1
S	• Flashes while the Upper Readout shows the Control Setpoint value for PID1 in Operator Mode
T1	• Flashes while the PID1 Tuning is in progress

PID2 STATUS TABLE

PID2 Indicator	Functions
H	• Indicates the On/Off status of Heater Output for PID2
A	• Flashes while the Lower Readout shows the Auxiliary Setpoint value for PID2 in Operator Mode • Indicates the On/Off status of Auxiliary Output for PID2
S	• Flashes while the Lower Readout shows the Control Setpoint value for PID2 in Operator Mode
T2	• Flashes while the PID2 Tuning is in progress

FRONT PANEL LAYOUT



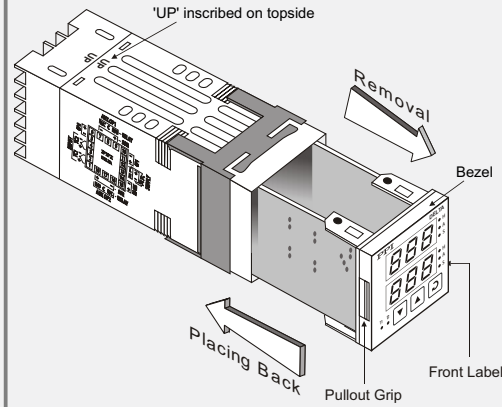
Keys Operation

Symbol	Name	Function When Setting Parameter
▼	DOWN Key	Press to decrease the parameter value
▲	UP Key	Press to increase the parameter value
↻	ENTER Key	Press to store the set parameter value and / or scroll to the next parameter

PV Error Indications

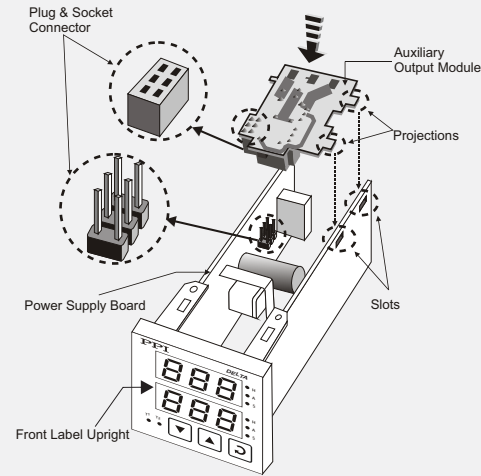
Message	Error Type
Or	Over-range (Temp. above Max. Range)
Ur	Under-range (Temp. below Min. Range)
S.br	Sensor Break (Thermocouple is open or broken)

ENCLOSURE ASSEMBLY



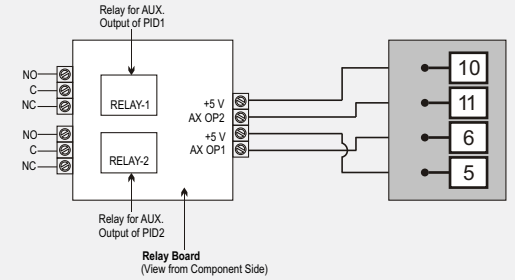
MOUNTING DETAILS

OUTPUT MODULE PID 1

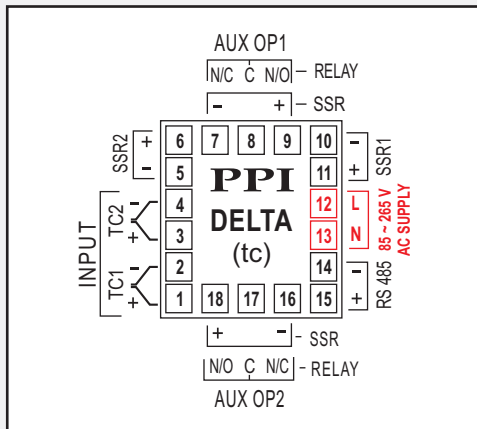


WIRING CONNECTION

RELAY BOARD



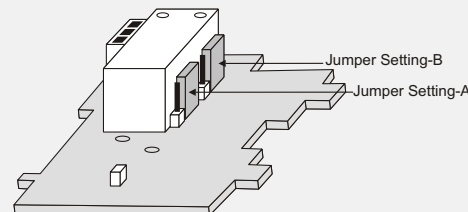
ELECTRICAL CONNECTIONS



JUMPER SETTINGS

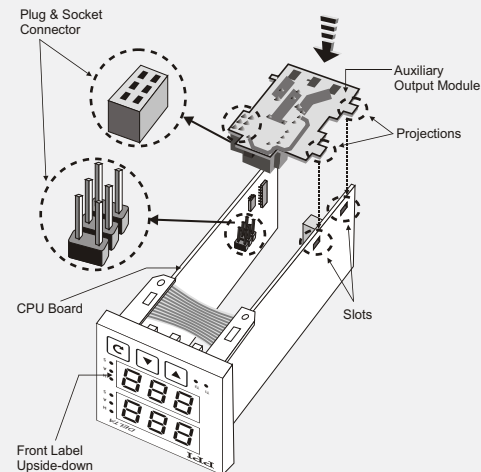
RELAY & SSR

Output Type	Jumper Setting - A	Jumper Setting - B
Relay (Arrangement shown in Figure1)		
SSR Voltage Pulses		



MOUNTING DETAILS

OUTPUT MODULE PID 2



MOUNTING DETAILS

SERIAL COMM. MODULE

