

FPC - 3T

Flame-Proof Temperature Controller with Programmable Alarm

Operation Manual

This brief manual is primarily meant for quick reference to wiring connections and parameter searching. For more details on operation and application; please log on to www.ppiindia.net

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INPUT / OUTPUT CONFIGURATION PARAMETERS : PAGE-12	
Parameters	Settings
Input Type InPt	Refer Table 1 for various available 'Input Types' along with their respective Ranges and Resolutions (Default : Type K)
Control Logic CLOG	rEu Reverse dir Direct (Default : Reverse)
Setpoint Low SPLO	Min. Range to Setpoint High for the selected Input type (Default : Min. Range for the Selected Input Type)
Setpoint High SPHI	Setpoint Low to Max. Range for the selected Input type (Default : Max. Range for the Selected Input Type)
Offset For Measured Temperature OFSE	-1999 to 9999 or -199.9 to 999.9 (Default : 0)
Digital Filter FILT	0.5 to 25.0 Seconds (in steps of 0.5 Seconds) (Default : 1.0)

CONTROL PARAMETERS : PAGE-10	
Parameters	Settings
Control Mode Ctrl	OnOff On-Off PId PID (Default : PID)
Hysteresis (For On-Off Control only) HYSL	1 to 999 or 0.1 to 99.9 (Default : 2 or 0.2)
Cycle Time (For PID Control only) CT	0.5 to 120.0 Seconds (in steps of 0.5 Seconds) (Default : 20.0 Sec)
Proportional Band (For PID Control only) Pb	0.1 to 999.9 (Default : 10.0)
Integral Time (For PID Control only) IT	0 to 1000 Seconds (Default : 100 Sec)
Derivative Time (For PID Control only) dt	0 to 250 Seconds (Default : 25 Sec)

OPERATOR PARAMETER : PAGE-0	
Parameters	Settings
Alarm Setpoint ALSP	Minimum to Maximum Range specified for the selected Input Type (Default : 0)
Alarm Deviation ALDE	-1999 to 9999 or -199.9 to 999.9 (Default : 3 or 0.3)
Alarm Band ALbA	3 to 999 or 0.3 to 99.9 (Default : 3 or 0.3)
Setpoint Locking SLOC	YES Yes no No (Default : No)

TABLE 1			
Option	What it means	Range (Min to Max)	Resolution
tc-u	Type J Thermocouple	0 to +960°C	1°C
tc-K	Type K Thermocouple	-200 to +1375°C	1°C
rtd	3-wire, RTD Pt100	-199 to +600°C	1°C
rtd.i	3-wire, RTD Pt100	-199.9 to +600.0°C	0.1°C

Key Definitions		
Symbol	Button	Function
	PAGE	Press to enter / exit Set-up mode.
	DOWN	Press to decrease the parameter value. Pressing once decreases the value by one count; holding the button pressed speeds up the change.
	UP	Press to increase the parameter value. Pressing once increases the value by one count; holding the button pressed speeds up the change.
	ENTER	Press to store the set parameter value and to scroll to the next parameter.

PV Error Indications	
Message	PV Error Type
Or	Over-range (Temperature above Max. Range)
Ur	Under-range (Temperature below Min. Range)
OPEN	Open (Sensor open / broken)

ALARM PARAMETERS : PAGE-11	
Parameters	Settings
Alarm Type ALrn	nOnE None P_lo Process Low P_hi Process High dEu Deviation Band bRnd Window Band (Default : None)
Alarm Inhibit ALih	YES Yes no No (Default : Yes)
Alarm Logic ALLG	nor Normal rEu Reverse (Default : Normal)

SUPERVISORY PARAMETERS : PAGE-13	
Parameters	Settings
Self-tune Command tUnE	no No YES Yes (Default : No)
Overshoot Inhibit Enable / Disable OSH	dSbL Disable EnbL Enable (Default : Disable)
Overshoot Inhibit Factor O.h.F	1.0 to 2.0 (Default : 1.2)
OP2 Setpoint Editing Permission on Operator Page SPOP	dSbL Disable EnbL Enable (Default : Enable)

