

MT50 SERIES - PID AUTOTUNE

MT50 SERIES SIZES



STANDARD FEATURES

- DUAL DISPLAY
- PID AUTOTUNE
- RAMP-TO-SETPOINT
- AUTO/MANUAL
- 15 SECURITY OPTIONS
- INPUT - THERMOCOUPLE, RTD, 4-20mA

ALARM FUNCTIONS

A1FU/A2FU	Alarm Type	Alarm Output
nonE	Alarm Function OFF	Output OFF
Hi	Process High Alarm	ALSP → PV
Lo	Process Low Alarm	ALSP → PV
DiFH	Deviation High Alarm	SP+ALSP → PV
DiFL	Deviation Low Alarm	SP+ALSP → PV
bdHi	Band High Alarm	SP-ALSP OFF SP SP+ALSP → PV
bdLo	Band Low Alarm	OFF SP-ALSP SP SP+ALSP OFF → PV
ton	On-Timer	ALSP SP OFF → PV
toFF	Off-Timer	ALSP SP OFF → PV

SPECIFICATIONS

1. INPUT

THERMOCOUPLE	J,K,T,E,B,R,S,N (IPTS68/DIN 43710)
RTD	Pt100 ohms RTD (DIN 43760/BS 1904 or JIS)
LINEAR VOLTAGE (CURRENT)	4-20mA, 0-5VDC, 0-10 VDC...
RANGE	User configurable
ACCURACY	+/-2C for T/C, +0.2C for RTD, +0.05% for Linear input
COLD JUNCTION	0.1% ambient typical.
INPUT IMPEDANCE	10M ohms T/C, 100K ohms for Linear Voltage
	2.7 Ohms for 0 (4) - 20 mA
Excitation Current for RTD	0.2mA Max
SAMPLE RATE	100 mS

2. CONTROL

PROPORTIONAL BAND	0.0-300.0%
REST (INTERGRAL)	0-3600 Sec.
RATE (DERIVATIVE)	0-900Sec.
Ramp Rate	Inhibit integral action outside Proportional Band
DWELL	0.0-500.0C/ minute
ON-OFF	With adjustable hysteresis
CYCLE TIME	0-99 seconds
CONTROL ACTION	Configurable for Direct (cooling) or Rev (heating)

3. OUTPUT

Relay	5A/240VAC resistive
pulsed voltage	Isolated 24 VDC 100mA max
current	Isolated 0 (4) - 20 mA max load 500 ohms
Alarm	Relay output, (SPST) 2A/240 VAC resistive

4. POWER

Rating	85-265VAC 50/60Hz 5VA max or 24VDC
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5. ENVIRONMENTAL

Operating Temp	-10 - 50C
Humidity	0-90%
Insulation	20M ohms minimum @ 500VDC
EMC Emission	EN500081-1:1992, EN55022:1994
EMC Immunity	EN50082-1:1992, IEC 801-3, IEC 801-4:1988
Weight	MT4850 180g, MT4950 240g, MT9650 240g

MT50 SERIES - ORDER CODE

MTXXXX	-	X	-	X	-	X	-	X	-	X	-	X
SIZE		INPUT		OUTPUT 1		OUTPUT 2		ALARM 1		ALARM 2		OPTIONS
4850 - 48mmW x 48mmH (1/16 DIN)		T - THERMOCOUPLE (J, K, T, E, R, S, N)		R - RELAY		N - NONE		N - NONE		N - NONE		N - NONE
4950 - 96mmW x 48mmH (1/8 DIN)		P - RTD PT100		P - SSR DRIVE (5VDC)		R - RELAY		R - RELAY		R - RELAY		C - RS-485 COMMUNICATIONS
9650 - 96mmW x 96mmH (1/4 DIN)		L - LINEAR (0-20mA, 4-20mA, 0-5VDC, 0-10VDC)		M - 4-20mA		P - SSR DRIVE (5VDC)		M - 4-20mA				E - 24VDC SENSOR EXCITATION
												R - REMOTE SENSOR