Temperature Controller

DTC524



48 x 48mm

Features :

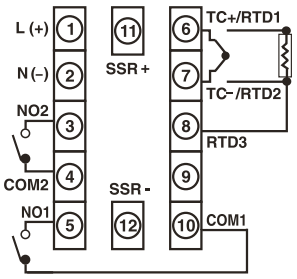
- 4+4 digits, 7 segment LED dual display
- Auto tune/ Self tune PID
- PID/ ON - OFF control
- TC/ RTD input
- Two set points
- °C/°F selectable
- Field selectable control output (Relay or SSR)
- Dwell timer
- Auxiliary output: Relay

Technical specifications

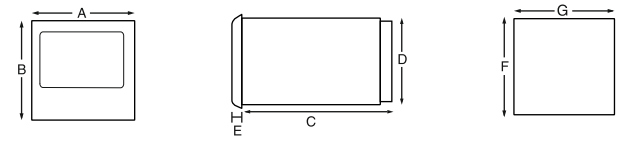
Display specifications	
Display	4+4 digits, 7 Segment LED dual display
Height of display	Upper display: 15.3 mm, Lower display: 8 mm
LED indication	1. Output 1 ON T: Auto tune 2. Output 2 ON S: Dwell timer
Input specifications	
Inputs	Thermocouple (J, K, T, R, S)/ RTD (PT100)
Resolution	0.1 / 1° for TC/ RTD input (fixed 1° for R & S type TC input)
Indication accuracy	For J, K & T inputs: 0.25% of F.S. ±1° For R & S inputs: 0.5% of F.S. ±2° (20 min of warm up time for TC inputs) For RTD inputs: 0.1% of F.S. ±1° (F.S. = Full scale)
Temperature unit	°C/°F selectable
Input filter (FTC)	0.2 to 10.0 sec
Sampling time	250 ms
Output specifications	
Control output (Relay or SSR user selectable)	
Relay contact (SPST)	5A resistive @ 230 VAC/ 30 VDC
SSR drive (Voltage pulse)	12 VDC, 30 mA
Auxiliary output	
Relay contact (SPST)	5A resistive @ 230 VAC/ 30 VDC
Functional specifications	
Control action	1) PID Control with auto tuning 2) ON-OFF control
Proportional band (P)	1.0 to 400.0°C
Integral time (I)	0 to 9999 sec
Derivative time (D)	0 to 9999 sec
Cycle time	0.1 to 99.9 sec
Hysteresis width	0.1 to 99.9°
Manual reset value	-19.9 to 19.9°
Heat- cool	
Control action	PID
Proportional band-cool	0.0 to 400.0°
Cycle time-cool	0.1 to 99.9 sec
Dead band	Programmable from set point low limit to set point high limit.
Settings for alarm output	
Modes	Deviation, Absolute
Hysteresis	0.1 to 99.9°

Auxiliary supply specifications	
Supply voltage	90 to 270 VAC/ DC (50/ 60Hz)
Power consumption	6 VA max @ 230 VAC
Environment specifications	
Temperature	Operating: 0°C to 50°C; Storage: -20°C to 75°C
Humidity (non - condensing)	95% RH
Mechanical specifications	
Mounting	Panel
Weight	116 gms

Terminal connections



Dimensions (All are in mm)



MODELS / DIM	A	B	C	D	E	F	G
DTC524	52	52	76	45	3.5	46	46

Ordering information

Product code	Output 1		Output 2	Supply voltage	Certification
	Relay	SSR			
DTC524	RELAY (5A)	SSR (12 VDC)	RELAY (5A)	90 to 270 VAC/ DC	- - -