Temperature Controller

DTC224 & DTC324



72 x 72mm



96 x 96mm

Features :

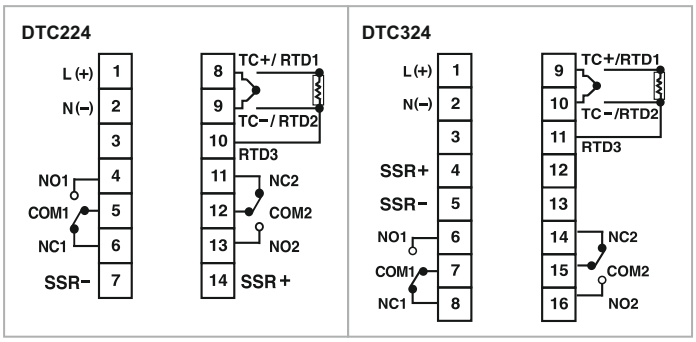
- 4+4 digits, 7 segment LED dual display
- Auto tune/ Self tune PID
- PID/ ON - OFF control
- TC/ RTD input
- Two set points
- Field selectable control output (Relay or SSR)
- Dwell timer
- Auxiliary output: Relay

Technical specifications

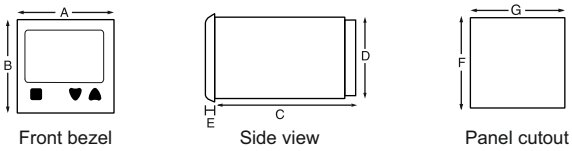
Display specifications	
Display	4+4 digits, 7 Segment LED dual display
LED indication	OUT 1: ON T: Auto Tune OUT 2: ON S:Dwell timer
Keys	3 keys of digital setting
Input specifications	
Inputs	Thermocouple (J, K, T, R, S)/ RTD (PT100)
Resolution	0.1/ 1° for TC/ RTD inputs (fixed 1° for R & S inputs)
Indication accuracy	For TC inputs : 0.25% of F.S. ±1° For R & S inputs : 0.5% of F.S. ±1° (30 min of warm up time) 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 contact (SPDT)	Main Output: NO :10A 250 VAC/ 24 VDC NO/ NC : 5A/5A 250 VAC/ 24V DC
SSR drive (Voltage pulse)	12 VDC, 50 mA
Auxiliary output	
Relay contact (SPDT)	Alarm Output: NO :10A 250 VAC/ 24VDC NO/ NC : 5A/5A 250 VAC/ 24 VDC
Functional specifications	
Control action	1) PID Control with auto tuning 2) ON-OFF control 3) Heat cool with auto tuning
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	SPLL to SPHL (Programmable)
Settings for alarm output	
Modes	Deviation, Absolute
Hysteresis	0.1 to 99.9°

Auxiliary supply specifications	
Supply voltage	90 to 270V AC / DC (50 / 60Hz)
Power consumption	5 VA max @ 230V AC
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	DTC224 - 164 gms ; DTC324 - 217 gms

Terminal connections



Dimensions (All are in mm)



MODELS / DIM	A	B	C	D	E	F	G
DTC224	76	76	44	67	4.5	69	69
DTC324	99	99	39	90.5	3.5	92	92

Ordering information

Product code	Output 1		Output 2	Supply voltage	Certification
	Relay	SSR			
DTC224	RELAY (5A)	SSR (12V DC)	RELAY (5A)	90 to 270V AC / DC	- - -
DTC324	RELAY (5A)	SSR (12V DC)	RELAY (5A)	90 to 270V AC / DC	- - -