

DTC

Modular Type

DTC features a modular and wire-saving structure, and is able to monitor many temperature points by parallel and modular extension.

The user is able to set up the suitable output method according to the actual demand. The built-in password protection prevents unauthorized operation or malicious damage from staff.

DTC series has a built-in RS-485 communication interface (MODBUS ASCII/RTU, 2,400 ~ 38,400bps). The programmable PID control function allows DTC to set up 64 sets of temperature and control time. DTC also supports 3 levels of password protection, synchronous communication protocol and auto ID setup.



Electrical Specifications

Power supply	24V, isolated switching power supply
Voltage range	90 ~ 110% rated voltage
Power consumption	3W + 3W x number of DTC2000 controllers connected in parallel (Max. 7)
Input temperature sensors	Thermocouple: K, J, T, E, N, R, S, B, L, U, TXK
	Platinum RTD: Pt100, JPt100
	Linear current: 0 ~ 5V, 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA, 0 ~ 50mV
Control methods	PID, programmable PID, ON/OFF, Manual
Output types	Relay: SPST, Max. load: 250VAC, Resistive load: 3A
	Voltage pulse: 12VDC, Max. output current: 40mA
	Current: DC 4 ~ 20mA (Load resistance: < 500Ω)
	Analog voltage: 0 ~ 10V (Load resistance: > 1,000Ω)
Sampling rate	Analog input: 0.15 second, Thermocouple or platinum RTD: 0.4 second
Communication	RS-485 digital communication, 2,400 ~ 38,400bps
Communication protocol	MODBUS protocol, ASCII/RTU format
Vibration resistance	10 ~ 55Hz, 10m/s ² for 10 mins in X, Y, Z direction
Shock resistance	Max. 300m/s ² , 3 times in each of 3 axes, 6 directions
Ambient temperature	0 ~ 50°C
Storage temperature	-20 ~ +65°C
Altitude	< 2,000m
Ambient humidity	35 ~ 85% RH (non-condensing)

Ordering Information

DTC

1 2 3 4 5

Series Name	DTC : Delta C series temperature controller
1 Controller Type	1 : Main unit 2 : Extension unit
2 Number of Auxiliary Outputs	0 : Standard 2 outputs, no auxiliary output
3 4 Optional Function	00 : Standard function 01 : With CT input
5 Output	R : Relay, SPST, 250VAC, 3A V : Voltage pulse, 12V +10% ~ -20% C : Current, 4 ~ 20mA L : Linear voltage, 0 ~ 10V

Dimensions

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