

## Products

# 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 a suitable output method according to 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 ~ 38,400 bps). The programmable PID control function allows the DTC to set up 64 sets of temperature and control times. DTC also supports 3 levels of password protection, synchronous communication protocol and auto ID setup.



## Electrical Specifications

Power supply	24 V <sub>DC</sub> , 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: 250 V <sub>AC</sub> , Resistive load: 3A
	Voltage pulse: 12 V <sub>DC</sub> , Max. output current: 40mA
	Current: DC 4 ~ 20mA (Load resistance: < 500WΩ)
	Analog voltage: 0 ~ 10V (Load resistance: > 1,000WΩ)
Sampling rate	Analog input: 0.15 second, Thermocouple or platinum RTD: 0.4 second
Communication	RS-485 digital communication, 2,400 ~ 38,400 bps
Communication protocol	MODBUS protocol, ASCII/RTU format
Vibration resistance	10 ~ 55Hz, 10 m/s <sup>2</sup> for 10 mins in X, Y, Z direction
Shock resistance	Max. 300 m/s <sup>2</sup> , 3 times in each of 3 axes, 6 directions
Ambient temperature	0°C ~ 50°C
Storage temperature	-20°C ~ +65°C
Altitude	< 2,000 m
Ambient humidity	35 ~ 85% RH (non-condensing)