

DIN RAIL TEMPERATURE/PROCESS CONTROLLERS

Universal Inputs, Up to 8 PID Loops, Modbus® Communications



The **Series SCD DIN Rail Temperature/Process Controllers** offer multiple PID loops in a compact size. Each SCD-1000 master controller can be combined with up to seven SCD-2000 slave controllers without any wires. Each controller has one universal input, one relay output and one user selected output.

FEATURES/BENEFITS

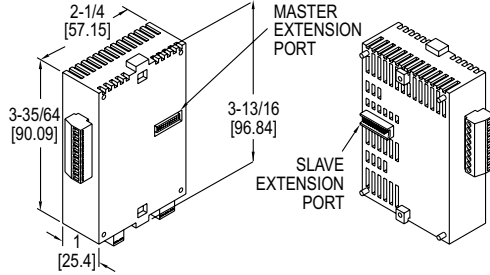
- Expandable from 1 to 8 process control loops
- Universal transmitter or temperature sensor inputs
- RS-485 Modbus® communication
- Dual loop or single loop/alarm output control

APPLICATIONS

- Oven, boiler, or chiller control
- Hot plates/melt pots
- Packaging equipment
- Environmental chambers
- Medical equipment
- Food service equipment

MODEL CHART			
Model	Controller	Output 1	Output 2
SCD-1023	Master	Voltage pulse	Relay
SCD-1033	Master	Relay	Relay
SCD-1053	Master	Current	Relay
SCD-1063	Master	Linear voltage	Relay
SCD-2023	Slave	Voltage pulse	Relay
SCD-2033	Slave	Relay	Relay
SCD-2053	Slave	Current	Relay
SCD-2063	Slave	Linear voltage	Relay

*DC current input requires 250 Ω precision resistor



SPECIFICATIONS

Inputs: Thermocouple, RTD, DC linear voltage, and DC currents.*
Supply Voltage: 24 VDC.
Power Consumption: 3 W.
Operating Temperature: 32 to 122°F (0 to 50°C).
Memory Backup: Non-volatile.

Control Output Ratings: Relay: 3 A @ 250 VAC resistive; Voltage pulse: 12 VDC, max. output current: 40 mA; Current: 4-20 mA output; Linear voltage: 0-10 VDC.
Communication: RS-485 Modbus® A-5-11/RTU communication protocol.
Weight: 2.7 oz (76.5 g).
Agency Approvals: CE, cULus.

ACCESSORIES

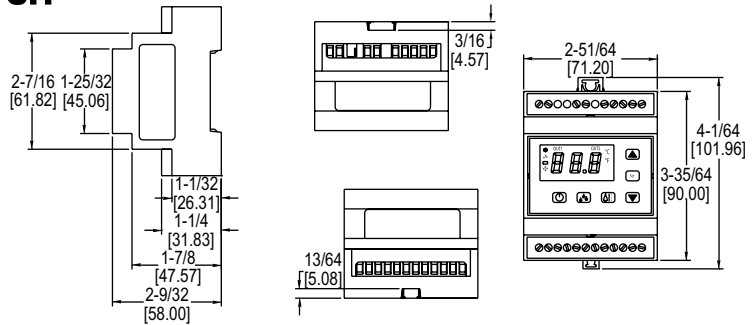
Model	Description
SCD-PS	100-240 VAC/VDC to 24 VDC power supply
SCD-SW	Configuration software
A-277	250 ohm precision resistor
MN-1	Mini-Node™ USB/RS-485 converter
A-600	R/C snubber

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SERIES TSDIN

DIN RAIL MOUNT TEMPERATURE SWITCH

HACCP Alarm Logging, Intelligent Defrost



The **Series TSDIN DIN Rail Mount Temperature Switch** is ideally designed to control compressor, defrost, and fan cycles in refrigeration applications. The digital input can be used to remotely trigger a defrost cycle, monitor cooler door status, or act as an external alarm. Three other probe inputs measure cabinet, defrost, and product temperature. Programming performed on the 6 button keypad or with the Model TS2-K configuration key.

FEATURES/BENEFITS

- 3 temperature probe inputs
- Real-time clock used for HACCP logging of temperature limit alarms or loss of power
- Intelligent Defrost parameters manage defrost cycle in order to save energy cost

APPLICATIONS

- Refrigerated cabinets
- Walk in coolers
- Applications requiring defrost cycles

MODEL CHART			
Model	Supply Power	# of Outputs	Display Color
TSDIN-013	115 VAC	1, 2, 3	Red
TSDIN-015	115 VAC	1, 2, 3, 4, 5	Red
TSDIN-023	230 VAC	1, 2, 3	Red
TSDIN-025	230 VAC	1, 2, 3, 4, 5	Red
TSDIN-033	12 VAC/VDC	1, 2, 3	Red
TSDIN-043	24 VAC/VDC	1, 2, 3	Red
TSDIN-213	115 VAC	1, 2, 3	Blue
TSDIN-215	115 VAC	1, 2, 3, 4, 5	Blue
TSDIN-223	230 VAC	1, 2, 3	Blue
TSDIN-225	230 VAC	1, 2, 3, 4, 5	Blue
TSDIN-233	12 VAC/VDC	1, 2, 3	Blue
TSDIN-243	24 VAC/VDC	1, 2, 3	Blue

SPECIFICATIONS

Probe Range: PTC: -58 to 302°F (-50 to 150°C); NTC: -58 to 230°F (-50 to 110°C).
Input: PTC/NTC.
Output: Output 1: SPST relay rated 16A @ 240 VAC resistive, 10 FLA, 60 LRA, 1HP @ 240 VAC inductive; Output 2: SPDT relay rated 8A @ 240 VAC resistive; Output 3: SPST relay rated 8A @ 240 VAC resistive; Output 4: SPDT relay rated 8A @ 240 VAC resistive; Output 5: SPST relay rated 16A @ 240 VAC resistive, 10 FLA, 60 LRA, 1HP @ 240 VAC inductive.
Control Type: On/off.
Power Requirement: 115 VAC, 230 VAC, 12 VAC/VDC, 24 VAC/VDC (±10% depending on model).
Power Consumption: 6 VA.
Accuracy: Better than 1% of full-scale.
Display: 3-digits plus sign.
Resolution: 0.1°.
Memory Backup: Non-volatile memory.
Temperature Limits: Operating: 32 to 131°F (0 to 55°C); Storage: -4 to 176°F (-20 to 80°C).
Weight: 10.8 oz (306 g).
Agency Approvals: CE, cURus.

ACCESSORIES

See page reference 1 below.

1 Digital Temperature Switch Probes and Accessories: See page 131 (Series TS-Probes)