

RM-SC800 – Standard Controller

Description

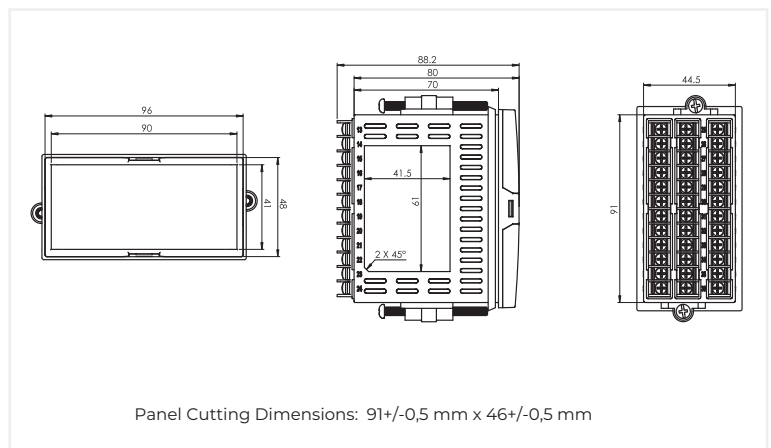
SC800 Model devices are 96x48 mm sized industrial controllers designed for the measurement, open/closed, and PID control of many process variables in industrial environments such as temperature, pressure, speed, level, humidity, current, voltage, resistance, and other physical units. They are completely modular, and each module can be configured independently. They are used in Food, Plastics, Iron and Steel, Chemistry, Metallurgy, Cement, Ceramics, Petro-Chemistry, Refineries, Glass, and other industrial branches. These are ergonomic devices designed with a foundation of compliance with international standards, reliability, and ease of use.



General Features

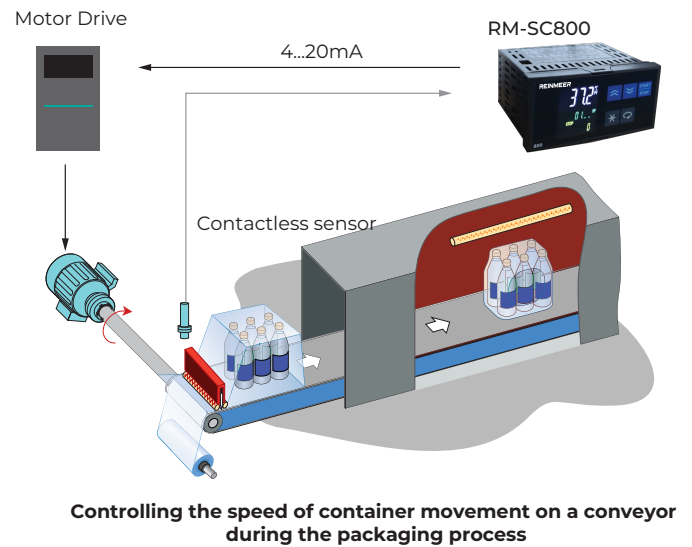
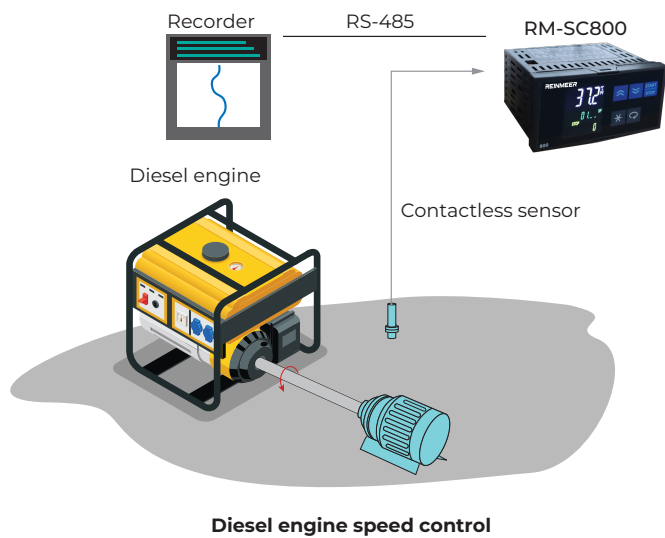
- On LCD Display: 2 Pieces 4-Digit Numeric Display
- Relay Indicators: LED Displays for Relays
- Touch Input: 4 Pieces Capacitive Touch Buttons
- Transmitter Supply: 1 Piece Transmitter Supply Output (24VDC)
- Sensor Input: 1 Piece Universal Sensor Input (TC, RT, mA, mV, V)
- Analog Output: 1 Piece Analog Output (0/4-20mA, 0/2-10V)
- Communication: 1 Piece RS485 Communication Unit
- Relay/Logic: 4 Pieces Relay or Logic Output (24VDC)
- Power Supply: 100-240V AC/DC Universal or 24V AC/DC Supply
- Isolation: Isolation Between Input and Output Modules
- Tuning: Auto-Tuning (Automatic adjustment of PID parameters)
- Diagnostics: Sensor Fault Detection
- Relay Functions: 9 Different Relay Functions
- Control Types: ON/OFF, P, PI, PD, PID Control
- Control Output: Linear and Time-Proportional Control Output
- Sampling: 100ms Sampling and Control Cycle
- Protocol: Standard MODBUS RTU Communication Protocol
- Configuration: Configuration via Computer

Device Dimensions



Applications

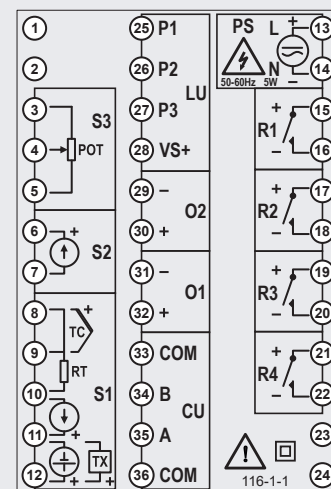
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Technical Specifications

Supply Voltage (PS)	100-240V AC/DC (+10% / -15%) or 24V AC/DC (+10% / -20%).
Power Consumption	6W / 10VA.
Universal Sensor Input (S1)	Thermocouple = B, E, J, K, L, N, R, S, T, U Two-Wire Transmitter = 4-20mA Resistance Thermometer = Pt-100 Current = 0/4-20mA Voltage = 0-50mV, 0/2-10V
Auxiliary Analog Input (S2)	0/4-20mA
Potentiometer Input (S3)	100-15000Ω
Transmitter Supply (TX)	24Vdc (Isc=30mA)
Analog Input Impedances	Thermocouple, mV: 10MΩ Current: 10Ω Voltage: 1MΩ
Analog Outputs (O1, O2)	Current: 0/4-20mA (RL ≥ 500Ω) Voltage: 0/2-10V (RL ≥ 1MΩ)
Relay Outputs (R1, R2, R3, R4)	Contact (R1, R2, R3, R4) : 250VAC 10A Logic Output = 24Vdc 20mA
Contact Life	No Load = 10,000,000 Switching; 250V 10A Resistive Load = 1,000,000 Switching
Other	Memory: 100 Years, 100,000 Updates Accuracy: ± 0.2% Sampling time: 100 ms Operating temperature: -10...+55°C Storage temperature: -20...+65°C
Protection class:	Front panel IP54 / Rear panel IP20
Mechanical Specifications	Width: 96 mm Height: 48 mm Depth: 78.2 mm Weight: 430 gr
Panel Cut-out Dimensions	91+/-0.5 mm x 46+/-0.5 mm

Electrical Wiring Diagram



Module	Description
S1	Universal sensor input module (The sensor used for process value measurement is connected to the terminals with the appropriate symbol on this module).
S2,S3	Not used in this model.
LU	Not used in this model.
CU	RS485 communication module. (The content of this module is determined by the product code, and its functions can be selected on the device).
O1	Analog output modules (The content of this module is determined by the product code, while its functions can be selected via the device).
O2	Not used in this model.
R1, R2, R3, R4	Relay output modules. (The content of this module is determined by the product code, and its function is selected via the device).
PS	Supply voltage input (Supply voltage is determined by the product code).