

## RM-SC400 – Standard Controllers

### Description

SC400 Model devices are 48x48 mm sized devices 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.

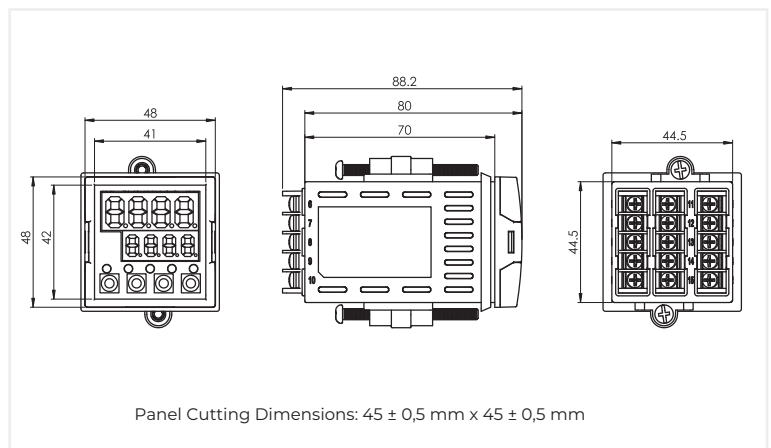
They are used in Food, Plastics, Iron and Steel, Chemistry, Metallurgy, Cement, Ceramics, Petro-Chemistry, Refineries, Glass, and other industrial branches. They are ergonomic devices designed with a focus on compliance with international standards, reliability, and ease of use.



### General Features

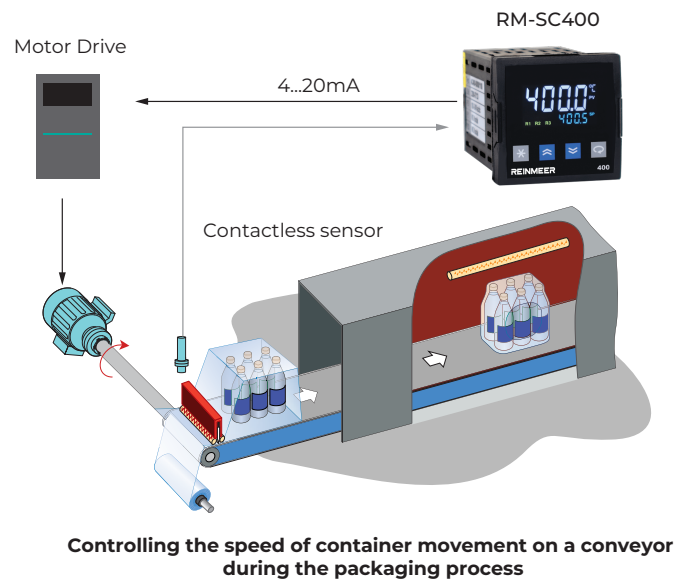
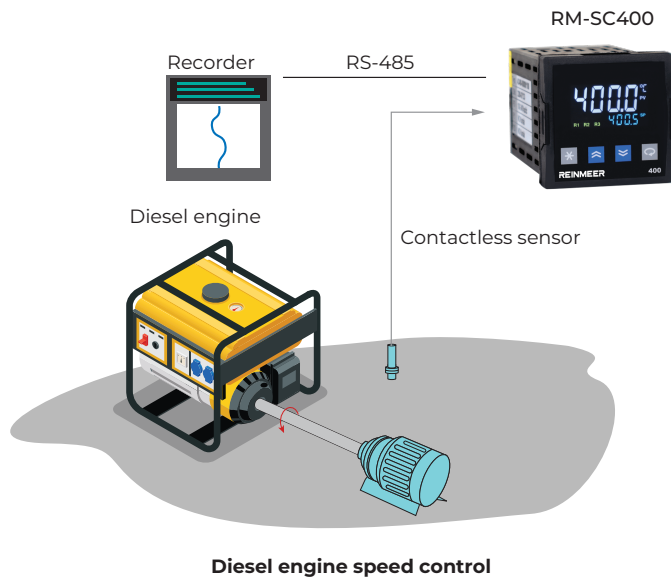
- 2-Unit 4-Digit Numeric Display on LCD
- LED Indicators for Relays
- 1 Transmitter Power Supply Output (24VDC)
- 1 Universal Sensor Input (TC, RT, mA, mV, V)
- 1 Analog Output (0/4-20mA, 0/2-10V)
- 1 RS485 Communication Unit
- 3 Relay or Logic Outputs (24VDC)
- 100-240V AC/DC Universal or 24V AC/DC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

### Device Dimensions



### Applications

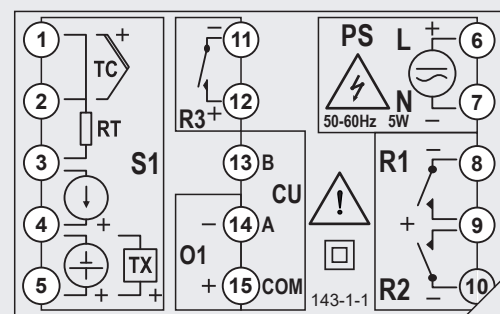
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## Technical Specifications

Supply Voltage (PS)	100-240 Vac/dc +10% -15% 24 Vac/dc +10% -20%
Power Consumption	4W, 6VA
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
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)	Contact (R1, R2, R3): 250VAC 10A Logic Output = 24Vdc 20mA
Contact Life	Unloaded = 10,000,000 Switching; 250V 10A Resistive Load = 1,000,000 Switching
Other	Memory: 100 Years, 100,000 Renewals 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: 48 mm Height: 48 mm Depth: 78.2 mm Weight: 154 g
Panel Cut-out Dimensions	45 +/- 0.5 mm x 45 +/- 0.5 mm

## Electrical Wiring Diagram



Module	Description
S1	Universal sensor input module.
O1	Analog output module.
R1,R2,R3	Relay output modules.
CU	RS485 communication module.
PS	Supply voltage input.



The communication module (RS-485) and the analog output module (4-20mA) cannot be used at the same time.