

RM-PC800 – Advanced Step Controllers

Description

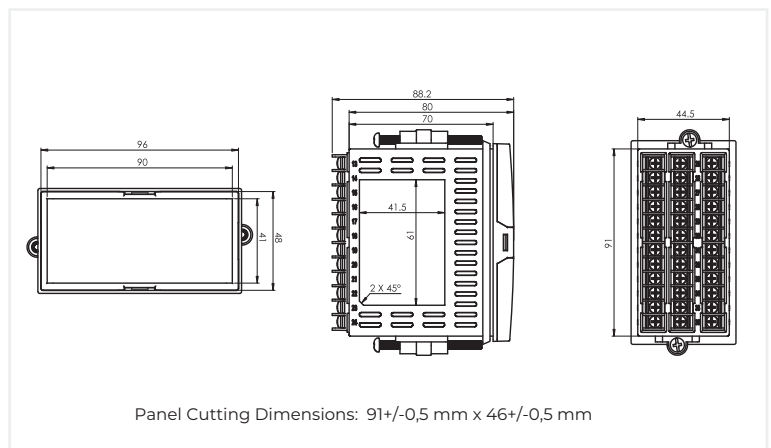
PC800 Model devices are fully modular devices designed for the measurement of temperature, pressure, speed, level, humidity, current, voltage, resistance, and other physical units of many process variables in industrial environments with 96x48 mm dimensions, for open/closed and PID control purposes, and each module can be configured independently. They are used in Food, Plastics, Iron & Steel, Chemistry, Metallurgy, Cement, Ceramics, Petro-Chemistry, Refineries, Glass, and other industrial branches. They are ergonomic devices based on compliance with international standards, reliability, and ease of use during the design phase.



General Features

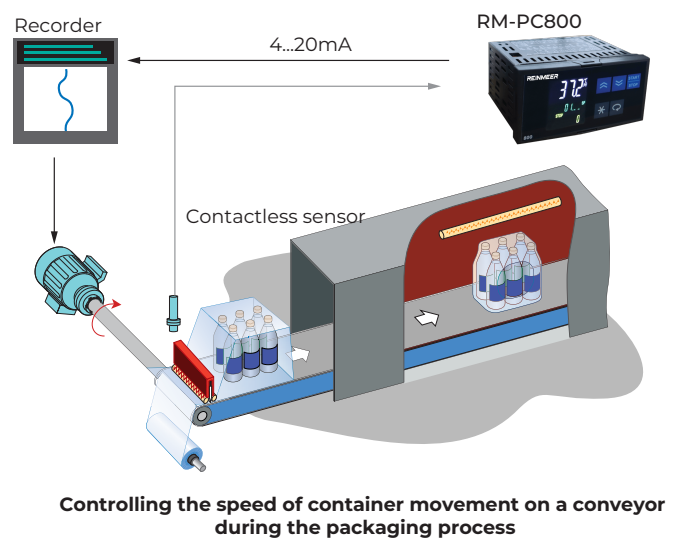
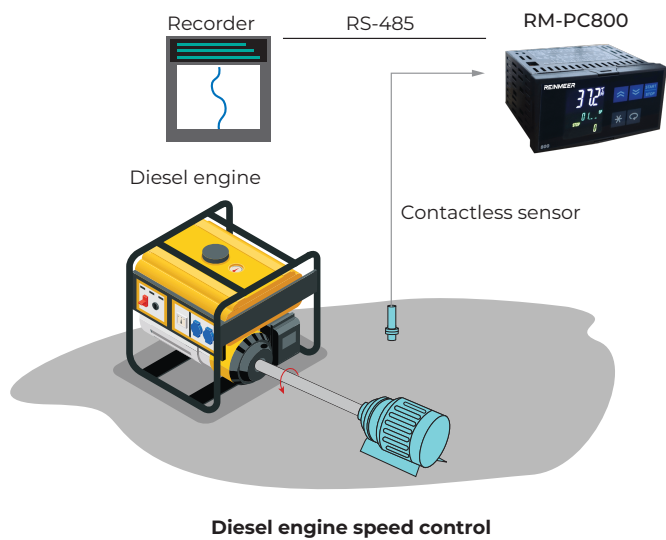
- On LCD Display
- 3 Pieces 4-Digit Numeric Displays
- LED Displays for Relays
- 5 Pieces Capacitive Touch Keys
- 1 Piece Transmitter Power Supply Output (24VDC)
- 1 Piece Universal Sensor Input (TC, RT, mA, mV, V)
- 1 Piece Potentiometer Input
- 1 Piece Auxiliary Analog Input (0/4-20mA)
- 3 Pieces Digital Inputs (15V)
- 2 Pieces Analog Outputs (0/4-20mA, 0/2-10V)
- 1 Piece RS485 Communication Unit
- 4 Pieces Relay or Logic Outputs (24V)
- 100-240V AC/DC Universal or 24V AC/DC Supply
- Isolation Between Input and Output Modules
- 800 Steps, 100 Programs Step Control Types
- Ability to Program Relay Positions in Steps
- 7 Different Power Outage Behaviors
- Control Based on Two Input Difference
- Proportional Valve Control with Position Feedback
- Proportional Valve Control Without Feedback (Floating Control)
- PID Heating/Cooling
- Auto-Tuning (Automatic tuning of PID parameters)
- Self-Tune Feature
- Programmed/Automatic/Manual Operation Modes
- Bumpless Transfer Feature
- Sensor Fault Detection
- Remote Set Point
- 4 Selectable Setpoints
- Ramp Function
- Retransmission (For Process and Set Value)
- 18 Different Relay Functions
- ON/OFF, P, PI, PD, PID Control
- Linear and Time-Proportional Control Output
- 100ms Sampling and Control Cycle
- Standard MODBUS RTU Communication Protocol
- Master-Slave and Cascade Control Applications
- Configuration via Computer
- Panel Cutout Dimensions: 91+/-0.5 mm x 46+/-0.5 mm

Device Dimensions



Applications

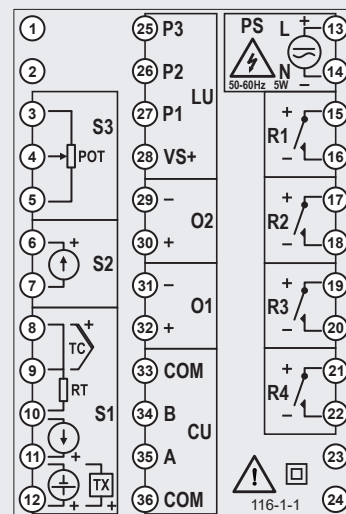
Food, Plastic, Iron & Steel, Chemical, Metallurgy, Cement, Ceramic, Petrochemical, Refineries, Glass, and other industrial sectors.



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	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: 96 mm Height: 48 mm Depth: 78.2 mm Weight: 430 gr
Panel Cut-out Dimensions	92 +/- 0,5 mm x 45,5 +/- 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	0/4-20mA auxiliary analog input module (The function of this module can be selected via the device).
S3	100-1500Ω Potentiometer input or
LU	Logic input module.
CU	RS485 MODBUS RTU module.
O1, O2	Analog output modules (The content of this module is determined by the product code, while its functions can be selected via the device).
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).