REINMEER

RM-PC900 –
Advanced Step Controllers

Description

PC900 Model devices are completely modular devices, measuring 96x96 mm, designed for the measurement of many process variables in industrial environments such as temperature, pressure, speed, level, humidity, current, voltage, resistance, and other physical units, as well as for on/off and PID control purposes. 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.

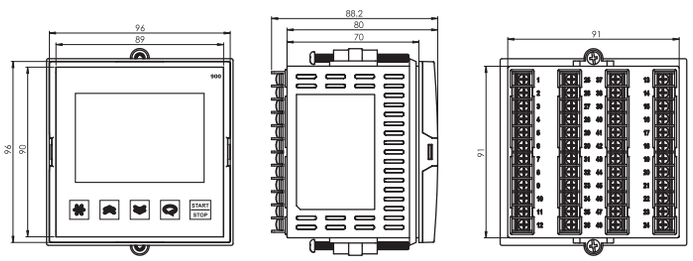
General Features

- 3 Units of 4-Digit Numeric Displays on LCD Display
- LED Indicators for Relays
- 5 Capacitive Touch Keys
- 1 Transmitter Supply Output (24VDC)
- 1 Universal Sensor Input (TC, RT, mA, mV, V)
- 1 Potentiometer Input
- 1 Auxiliary Analog Input (0/4-20mA)
- 2 Digital Inputs (15V)
- 2 Analog Outputs (0/4-20mA, 0/2-10V)
- 1 RS485 Communication Unit
- 4 Relay or Logic Outputs (24V)
- 100-240V AC/DC Universal or 24V AC/DC Supply
- Isolation Between Input and Output Modules
- 800 Steps, 100 Program Step Control Types
- Ability to Program Relay Positions in Steps
- 7 Different Power Failure Behaviors

Control Features

- Control Based on the Difference of Two Inputs
- Proportional Valve Control with Position Feedback
- Proportional Valve Control without Feedback (Floating Control)
- PID Heating/Cooling
- Auto-Tuning (Automatic adjustment of PID parameters)
- Self-Tune Feature
- Programmed/Automatic/Manual Operation Modes
- Bumpless Transfer Feature
- Sensor Failure Detection
- Remote Set Point (4 Selectable Set Points)
- 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

Device Dimensions



Panel Cutting Dimensions: 92 ± 0,5 mm x 92 ± 0,5 mm

Applications

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

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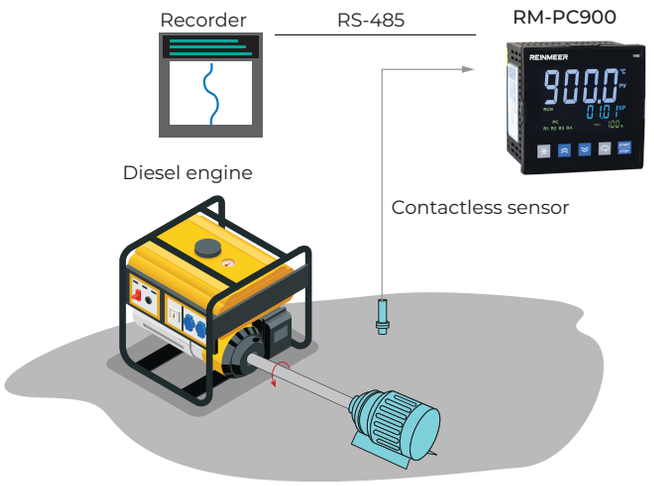
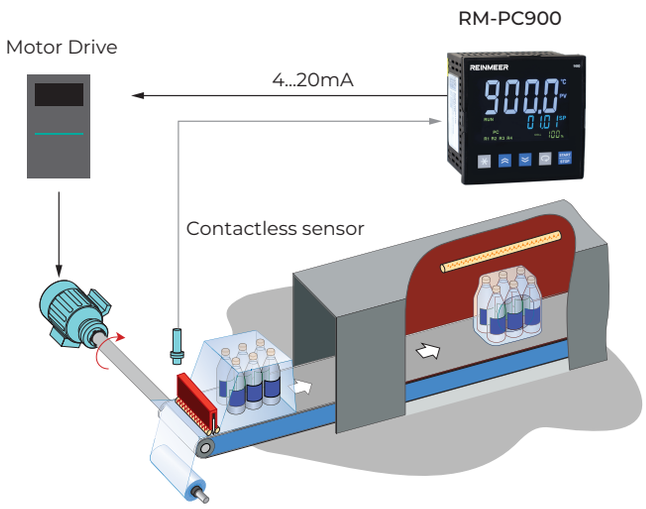


Diesel engine speed control

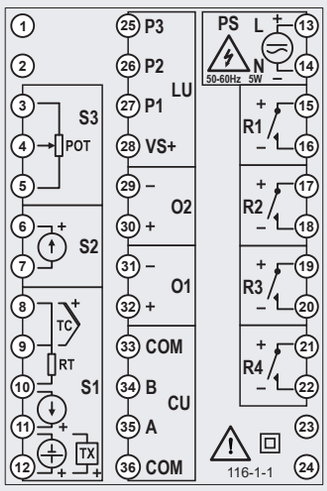


Controlling the speed of container movement on a conveyor during the packaging process

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	Without Load = 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: 96 mm Depth: 78.2 mm Weight: 430 gr
Panel Cut-out Dimensions	92 ± 0,5 mm x 92 ± 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).