

Standard Step Control Devices



PC44

PC44 devices are 48 x 48 mm in size. Temperature, pressure, speed, level, humidity, current, voltage, resistance and other physical units of many process variables in industrial environments can be measured. Designed for on / off and PID control, 1 program and 10 steps can be entered. They are fully modular and each module can be configured as self-contained devices.



PC77

PC77 devices are 72 x 72 mm in size. Temperature, pressure, speed, level, humidity, current, voltage, resistance and other physical units of many process variables in industrial environments can be measured. Designed for on / off and PID control, 1 program and 10 steps can be entered. They are fully modular and each module can be configured as self-contained devices.



PC99

PC99 devices are 96 x 96 mm in size. Temperature, pressure, speed, level, humidity, current, voltage, resistance and other physical units of many process variables in industrial environments can be measured. Designed for on / off and PID control, 1 program and 10 steps can be entered. They are fully modular and each module can be configured as self-contained devices.

Device Features

- 2 pcs 4 Digit Numeric Indicator
- 3 pcs LED Indicator
- 1 pcs Transmitter Supply Output (24V)
- 1 pcs Universal Input (TC,RT,mV,V,mA)
- 1 pcs Analog Output (0/4-20mA,0/2-10V)
- 1 pcs RS485 Communication Unit
- 2 pcs Relay or Logic Output
- 100-240Vac/dc or 24Vac/dc Power Supply
- Isolation between Input/Output Modules
- 10 step 1 program Step Kontrol
- 2 different power-up behavior
- ON/OFF, P, PI, PID Control Options
- Auto-Tuning
- Sensor Error Detection
- 9 Different Relay Functions
- Linear and time-proportional control output
- 100ms Sampling and Control Cycle
- Standard MODBUS RTU
- Configuration via Computer

Device Features

- 2 pcs 4 Digit Numeric Indicator
- 4 pcs LED Indicator
- 1 pcs Transmitter Supply Output (24Vdc)
- 1 pcs Universal Input (TC,RT,mV,V,mA)
- 1 pcs Analog Output (0/4-20mA,0/2-10V)
- 1 pcs RS485 Communication Unit
- 3 pcs Relay or Logic Output
- 100-240Vac/dc or 24Vac/dc Power Supply
- Isolation between Input/Output Modules
- 10 Step 1 Program Step Control
- 2 Different power-up Behavior
- ON/OFF, P, PI, PID Control Options
- Auto-Tuning
- Sensor Error Detection
- 9 Different Relay Functions
- Linear and time-proportional control output
- 100ms Sampling and Control Cycle
- Standard MODBUS RTU
- Configuration via Computer

Device Features

- 2 pcs 4 Digit Numeric Indicator
- 5 pcs LED Indicator
- 1 pcs Transmitter Supply Output (24Vdc)
- 1 pcs Universal Input (TC,RT,mV,V,mA)
- 1 pcs Analog Output (0/4-20mA,0/2-10V)
- 1 pcs RS485 Communication Unit
- 4 pcs Relay or Logic Output
- 100-240Vac/dc or 24Vac/dc Power Supply
- Isolation between Input/Output Modules
- 10 Step 1 Program Step Control
- 2 Different power-up Behavior
- ON/OFF, P, PI, PID Control Options
- Auto-Tuning
- Sensor Error Detection
- 9 Different Relay Functions
- Linear and time-proportional control output
- 100ms Sampling and Control Cycle
- Standard MODBUS RTU
- Configuration via Computer

Technical Specifications

Supply Voltage (PS)	100-240Vac/dc=+10%-15%	24Vac/dc=+10%-20%	Power Consumption = 6W,10VA
Universal Sensor Input(S1)	Thermocouple = B, E, J, K, L, N, R, S, T, U	Resistance Thermometer = Pt-100	Current = 0/4-20mA
Transmitter Supply (TX)	Two Wired Transmitter = 4-20mA	Voltage = 0-50mV, 0/2-10V	
Analog Input Impedance	24Vdc (I _{sc} = 30mA)		
Analog Output (O1,O2)	Thermocouple, mV = 10MΩ	Current = 10Ω	Voltage = 1MΩ
Relay Output (R1,R2,R3,R4)	Current = 0/4-20mA (RL≥500Ω)		Voltage = 0/2-10V (RL≥1MΩ)
Contact Lifetime	Contact = 250VAC 10A		Logic Output = 24Vdc 20mA
Memory	No Load = 10.000.000 Switching		250V,10A Resistive Load = 1.000.000 Switching
Accuracy	100 Years, 100.000 Renewals		
Sampling Time	+/- 0,2%		
Environment Temperature	Working = -10...+55°C	Storage = -20...+65°C	
Protection Class	Front Panel = IP54	Trunk = IP20	
Panel Cutting Dimensions	45 +/- 0,5 mm x 45 +/- 0,5 mm	68 +/- 0,5 mm x 68 +/- 0,5 mm	92 +/- 0,5 mm x 92 +/- 0,5 mm
Weight	PC44 = 154 gr	PC77 = 292 gr	PC99 = 430 gr

PC44 Product Code

PC44 - / 0 / 0

Power Supply :
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Module :
0 = N/A
3 = RS485 (MODBUS) Communication Module

Analog Output Module :
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1 Output Module :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

R2,R3 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)

Note : In this model can't be used with Communication module. Analog output module and R3 output module at the same time. Only one of these modules can be selected.

PC77 Product Code

PC77 - / 0 / 0

Power Supply :
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Module :
0 = N/A
3 = RS485 (MODBUS) Communication Module

Analog Output Module :
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1 Output Module :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

R2,R3 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)

Note : If the R3 relay output is coded, the relay outputs R1 and R2 must be coded in the same type. If the relay output R1 is coded as 3 (NO/NC), the R3 module must be 0.

PC99 Product Code

PC99 - / 0 /

Power Supply :
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Module :
0 = N/A
3 = RS485 (MODBUS) Communication Module

Analog Output Module :
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1,R2 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

R3,R4 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)

Note : If R1 relay is coded as 3 (NO / NC) when relay R2 is selected as contact, it should be coded as NO / NC. When relay R2 is selected as 3 (NO / NC) it must be coded as NO / NC. If R1, R2 module is selected as 3, then R4 module must be coded as 0.

PC44 Product Code

PC44 - / 0 / 0

Power Supply :
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Module :
0 = N/A
3 = RS485 (MODBUS) Communication Module

Analog Output Module :
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1 Output Module :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

R2,R3 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)

Note : In this model can't be used with Communication module. Analog output module and R3 output module at the same time. Only one of these modules can be selected.

PC77 Product Code

PC77 - / 0 / 0

Power Supply :
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Module :
0 = N/A
3 = RS485 (MODBUS) Communication Module

Analog Output Module :
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1 Output Module :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

R2,R3 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)

Note : If the R3 relay output is coded, the relay outputs R1 and R2 must be coded in the same type. If the relay output R1 is coded as 3 (NO/NC), the R3 module must be 0.

PC99 Product Code

PC99 - / 0 /

Power Supply :
0 = 100-240Vac (Universal)
1 = 24Vac/dc

Communication Module :
0 = N/A
3 = RS485 (MODBUS) Communication Module

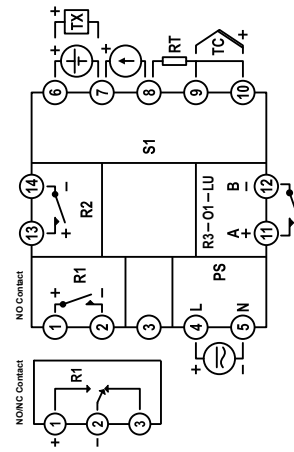
Analog Output Module :
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1,R2 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

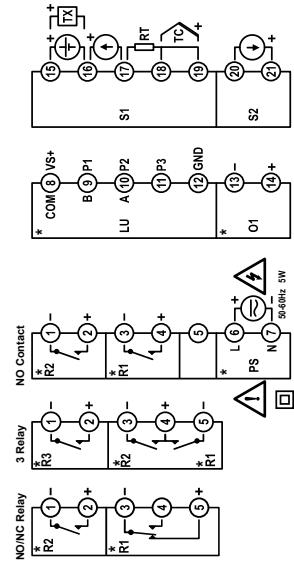
R3,R4 Output Modules :
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)

Note : If R1 relay is coded as 3 (NO / NC) when relay R2 is selected as contact, it should be coded as NO / NC. When relay R2 is selected as 3 (NO / NC) it must be coded as NO / NC. If R1, R2 module is selected as 3, then R4 module must be coded as 0.

PC44 Connection Diagram



PC77 Connection Diagram



PC99 Connection Diagram

