Standard Control Device with Four Input

Configuration Via Computer

SC994

SC994 devices are 96 x 96 mm in size. They are designed to measure the temperature, pressure, speed, level, humidity, current, voltage, resistance and other physical units, as well as the on / off and PID control of many process variables in industrial environments. They are completely modular and each module can be configured individually. It is used in Food, Plastic, Iron Steel, Chemistry, Metallurgy, Cement, Ceramic, Petro-Chemistry, Refineries, Glass and other industries. They are ergonomic devices whose compliance with international standards, reliability and ease of use have been ensured at the design stage.

Device Features

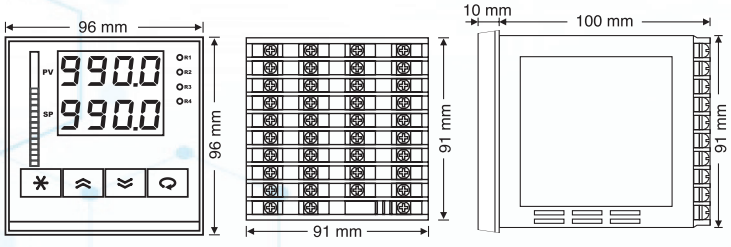
2 pcs 4 Digit Display
4 pcs LED Display
4 pcs Universal Sensor Input (TC, RT, mA, mV, V)
1 pcs Analog Output (0/4-20mA.0/2-10V)
1 pcs RS485 Communication Unit
4 pcs Relay or Logic Output (24VDC)
100-240V AC/DC Universal or 24V AC/DC Supply Voltage
Isolation Between Input/Output Modules

ON / OFF Heating-Cooling
Sensor Fault Detection
4 Different Relay Functions
ON/OFF Controls
100ms Sampling and Control Cycle
Standard MODBUS RTU communication protocol
Configuration via computer

Input Types

Sensor Type	Standard	Min.	Max.
Type-T (Cu-Const)	IEC60584	-200 °C	300 °C
Type-U (Cu-Const)	IEC60584	-200 °C	600 °C
Type-J (Fe-Const)	IEC60584	-200 °C	800 °C
Type-L (Fe-Const)	IEC60584	-200 °C	900 °C
Type-K (NiCr-Ni)	IEC60584	-200 °C	1200 °C
Type-E (Cr-Const)	IEC60584	-200 °C	1200 °C
Type-N (Nicrosil-Nisil)	IEC60584	0 °C	1200 °C
Type-S (Pt%10Rh-Pt)	IEC60584	0 °C	1500 °C
Type-R (Pt%13Rh-Pt)	IEC60584	0 °C	1600 °C
Type-B (Pt%18Rh-Pt)	IEC60584	0 °C	1800 °C
0 / 4-20 mA		0 mA	20 mA
0 / 2-10 VDC		0 VDC	10 VDC

Device Dimensions

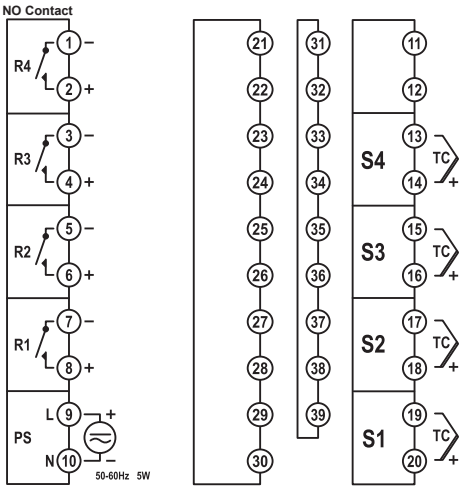


Panel Cutting Dimensions = 92 ± 0,5 mm x 92 ± 0,5 mm

Technical Specifications

Power Supply (PS)	100-240 Vac/dc +10%-15% 24 Vac/dc +10%-20%
Power Consumption	6W, 10VA
Universal Sensor Input (S1)	Thermocouple = B, E, J, K, L, N, R, S, T, U Two Wired 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 Impedance	Thermocouple, mV = 10MΩ Current = 10Ω Voltage = 1MΩ
Analog Output (O1)	Current = 0/4-20mA (RL≥500Ω) Voltage = 0/2-10V (RL≥1MΩ)
Relay Output (R1,R2,R3,R4)	Contact = 250VAC 10A Logic Output = 24Vdc 20mA
Contact Lifetime	No Load = 10.000.000 Switching 250V,10A Resistive Load = 1.000.000 Switching
Memory	100 Years, 100.000 Renewals
Accuracy	+/- 0,2%
Sampling Time	100 ms
Environment Temperature	Working = -10...+55°C Storage = -20...+65°C
Protection Class	Front Panel = IP54 Trunk = IP20
Dimensions	Width = 96 mm Height = 96 mm Depth = 110 mm
Panel Cutting Dimensions	92 +/- 0,5 mm x 92 +/- 0,5 mm
Weight	430 gr

Modular Structure and Connection Diagram



Module	Description
S1,S2,S3,S4	Shows first and second universal sensor inputs (Input types are selected from the configuration page).
LU	This module is RS485 communication unit (The content of this module is determined by the product code, function is selected from the configuration page).
O1,O2	Analog output (The content of this module is determined by the product code, function is selected from the configuration page).
R1,R2,R3,R4	Relay output modules (The content of this module is determined by the product code, function is selected from the configuration page).
PS	Supply voltage input (Supply voltage is determined by product code).

Product Code

SC994 - _ _ / _ 0 / _ _ _ _ / _ / _

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

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

Analog Output Module : (O1)
0 = N/A
1 = 0/4-20mA Current Output
2 = 0/2-10Vdc Voltage Output

R1,R2,R3,R4 Output Modules : (R1-R2-R3-R4)
0 = N/A
1 = NO Contact
2 = 24V Logic Output (to drive SSR)
3 = NO/NC Contact

Number of Input : (C)
2= Two Inputs
4= Four Inputs

S1-S4 Sensor Inputs : (S1....S4)
2 = -75....+75mV
3 = -15....+15V
4 = -30....+30mA
5 = Thermocouple (B,E,J,K,L,N,R,S,T,U)

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