

SR04D Four loop din rail controller



General Features:

- Standard din rail mount temperature controller
- Four channel 4 outputs
- 24VDC power supply for maximum safety
- C/F display selectable
- Maximum 15 units can be daisy chained together
- Wiring on the power supply and RS-485 can be done at once
- TC input(K,E,J,T,S,R,B,N,Wu3_Re25)
- Heating or cooling selectable
- RS-485 modbus RTU communication as standard feature
- PID control mode or ON/OFF control mode selectable
- 0.3%FS measuring accuracy, maximum 0.1 resolution
- Auto/manual control bumpless transfer
- Soft-start for analog output
- Run/Stop function
- Output high/low limits configurable
- With dual line 4 digits LED display in front of the panel
- Four rubber keys for setting purpose, programming is possible even without the master device

Ordering Information

SR04D
1 2 3

1:Factory default input

Input Code	Type of input and range
K	Thermocouple type K, range -30~1300°C/-20~2372°F
E	Thermocouple type E, range -30~600°C/-20~1112°F
J	Thermocouple type J, range -30~800°C/-20~1472°F
N	Thermocouple type N, range -30~1300°C/-20~2372°F
W	Thermocouple type Wu3_Re25, range 600~2000°C/1000~3632°F
S	Thermocouple type S, range 0~1600°C/0~2912°F
T	Thermocouple type T, range -30~400°C/-20~752°F
R	Thermocouple type R, range 0~1700°C/0~3092°F
B	Thermocouple type B, range 200~1800°C/400~3272°F

The type of inputs is configurable via master device or via front setting keys, but still the user have to choose one as the factory default input, in most of cases, K is the options and you can change it to other inputs later on. the accuracy of type S and R is not guaranteed when the process value is less than 200°C

2:Specify OP1/OP2/OP3/OP4 output type

Code	OP1/OP2	OP3/OP4
1	Relay output(NO) 3A/250V	Relay output(NO) 3A/250V
2	Voltage pulse(SSR drive 12Vdc)	Voltage pulse(SSR drive 12Vdc)
3	Voltage pulse(SSR drive 12Vdc)	Relay output(NO)3A 250V
4	Relay output(NO)3A 250V	Voltage pulse(SSR drive 12Vdc)
9	Analog output	Analog output

Remark: The OP1 and OP2 output have to be the same, OP3 and OP4 have to be the same as well, for example, if you choose relay output for OP1, then OP2 will be relay too, and if you choose 4-20mA for OP3, then the output for OP4 will be 4-20mA as well, it's not possible to choose different output type on OP1 and OP2 same goes to OP3 and OP4, they have to be the same output

3:Specify the output when OP1/OP2/OP3/OP4 are analog output

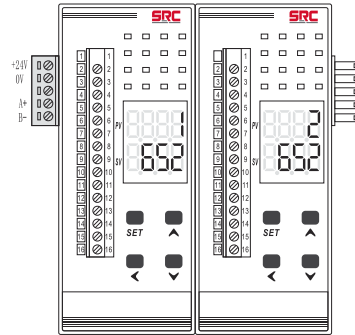
N	OP1/OP2 is not analog output
2	DC 0~20mA
8	DC 4~20mA
5	DC 0~5Vdc
6	DC 0~10Vdc
7	DC 1~5Vdc

SR04D-K-3-N
1 2 3

SR04D Din rail mount temperature controller

- 1: Default input type K configurable via master device or via front key
- 2: Output 1 and 2 SSR Drive (12VDC 20 mA)
- 3: Output 3 and 4 Relay output (3A/250Vac)

Four Channels four inputs

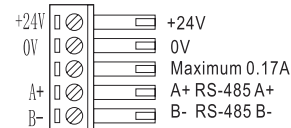


Further elaboration on features of this model

1. This is four channel 4 outputs controller, it's four loop so the input will be 4 inputs and with 4 outputs
2. Control mode can be standard PID mode or ON/OFF mode
3. Soft-start function available for analog output
4. Auto/manual control bumpless transfer for each channel
5. RUN/STOP function for each channel
6. Output high/low configurable
7. Four separate groups of PID
8. Auto-tuning can be activated on each channel
9. The wiring on this device is extremely easy, the power source and RS-485 shares the same terminals, the wiring on the RS-485 and power source can be done at once together
10. Up to 15 units can be daisy chained and powered by single 24VDC source
11. Display and setting buttons available on the panel makes the configuration possible even without master device

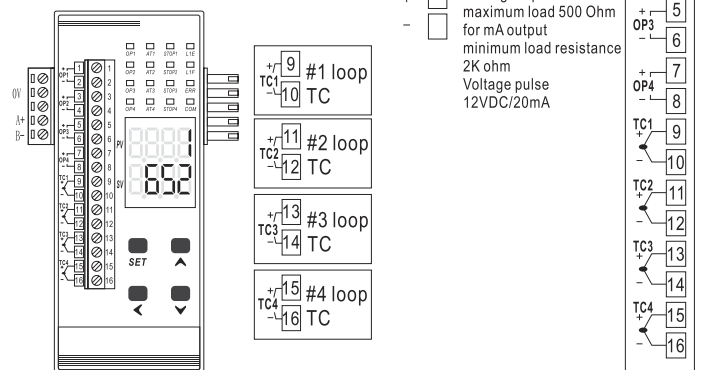
Wiring

Power source and communication



: Relay output
3A/250Vac

: Analog output
maximum load 500 Ohm
for mA output
minimum load resistance
2K ohm
Voltage pulse
12VDC/20mA

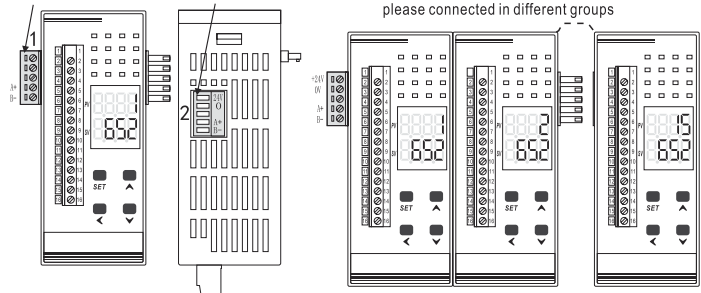


You can choose either #1 connector or #2 based on your field application

Power&RS-485 connector #1

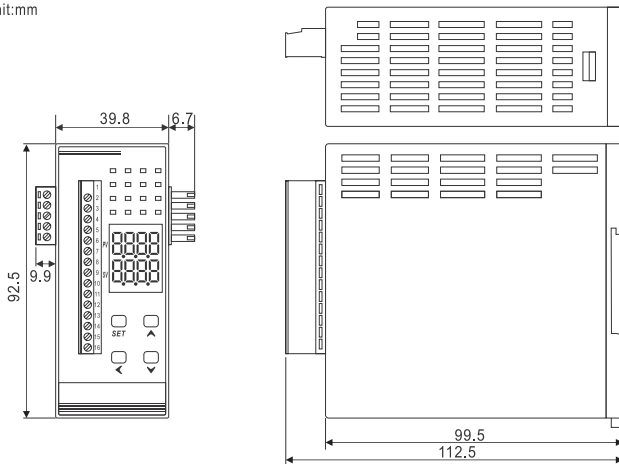
Power&RS-485 connector #2

Multiple controller can be daisy chained if the total number of controller is less than 15PCS
if the total number of controller more than 15pcs,
please connected in different groups

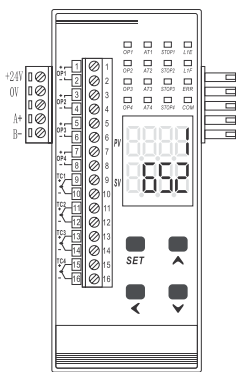


Size and Dimension

Unit:mm



Panel Description



- 1 Display PV, address, parameter notation
- 2 Display SV, software version, parameter value
- 3 OP1: Output indicator for #1 loop
OP2: Output indicator for #2 loop
OP3: Output indicator for #3 loop
OP4: Output indicator for #4 loop
AT1:Auto-tuning indicator for #1 loop
AT2:Auto-tuning indicator for #2 loop
AT3:Auto-tuning indicator for #3 loop
AT4:Auto-tuning indicator for #4 loop
STOP1: Output stop indicator for #1 loop
STOP2: Output stop indicator for #2 loop
STOP3: Output stop indicator for #3 loop
STOP4: Output stop indicator for #4 loop
L1E:Not applicable at this moment
L1F:Not applicable at this moment
ERR: Loop break or over range indication
COM: Communication RS-485 indication
- 4 SET: SET key, function key
- 5 ◀ :shift key
- 6 ▲ :Increment key
- 7 ▼ :Decrement key

Typical Application with HMI

