



- Universal input
- 0 / 1 / 2 / 3 / 4 setpoints
- Isolated 0/4~20 mA or 0-10 V DC transmission output
- 24 V DC transmitter supply
- RS485 / MODBUS RTU
- 85~265 V AC SMPS
- ONOFF control

SPECIFICATIONS

All specifications at ambient of 25 °C, unless specified otherwise

INPUTS

Input group 1

Thermocouple

RTD

Voltage

Current

B, E, J, K, N, R, S, T
Pt100, 3-wire
0~50 mV
0~20 mA, 4~20 mA

Input group 2

Thermocouple

RTD

Current

Voltage

B, C, D, E, G, J, K, N, R, S, T
Pt100, 3-wire, Cu53
0~20 mA, 4~20 mA,
Square root
0~50 mV
Through DIP selection following
voltage inputs are available :
0~1 V, 0~5 V, 0~10 V, 0~10 mV,
0~100 mV, 0~200 mV
22 V nominal, 30 mA max
See Table 1
See Table 1
Automatic
User programmable

Transmitter supply

Range limits

Accuracy

Cold junction compensation

Sensor break protection

INDICATION

Process variable

Setpoint

Status indication

Upper : 4 digit, 7 segment
0.56" (14.2 mm) red LED display
Lower : 4 digit, 7 segment
0.39" (9.9 mm) green LED display
LEDs for relay status

OUTPUTS

No. of relays

Relay contact type

Relay contact rating

SSR drive

Current output

Maximum load for current
output

Voltage output

Load for voltage output

0 / 1 / 2 / 3 / 4
NO-C-NC (RL1, RL2)
NO-C (RL3, RL4)
5A / 230V AC, resistive
12 V DC drive signal for
external SSR
4~20 mA / 0~20 mA / 20~4 mA /
20~0 mA isolated from input
500 ohms
0~10 V / user specified
>10 Kohms

COMMUNICATION

Port

Protocol

Slave ID

RS485
Modbus RTU
User programmable (1~256)

**PROGRAMMABLE
PARAMETERS**

Setpoint

Unit

Resolution

High scale

Low scale

Digital filter

Hysteresis

Bias (for process variable)

Relay logic

Full range (See Table 1)
°C, °F, EU
User selectable
0.01, 0.1 or 1 for linear input,
0.1 or 1 for temperature
Full range (See Table 1)
Full range (See Table 1)
A (minimum) ~ F (maximum)
0~25% span
-50 to 50% of range limit
a. Heat
b. Cool
c. Fullscale high alarm
d. Full scale low alarm
e. Deviation high alarm
f. Deviation low alarm
g. Inband alarm
h. Outband alarm
(e. to h. available for SP2, SP3,
SP4 only)

Alarm types

Alarm acknowledge

Setpoint lock

Level lock

Relay action

Self reset or latched and can be
disabled at power on
Front panel function used to
reset relay in alarm condition
ON, OFF
ON, OFF
Reverse / direct

OTHER

Programming

Dimensions (in mm)

Mounting

Panel cutout

Supply voltage

Power consumption

Operating ambient

temperature

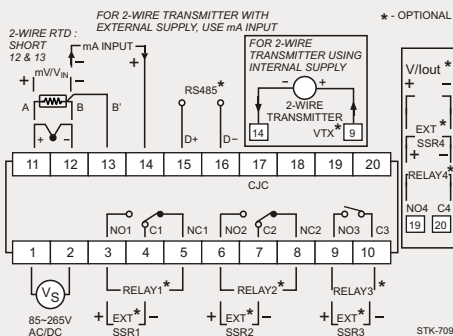
Relative humidity

Through 3 tactile keys
48(H) x 96(W) x 115(D)
Panel mount
48 (+0.8mm) x 92 mm
a) 85~265 V AC, 50/60 Hz
b) 20~35 V DC (optional)
4 watts maximum
0~50 °C
Below 90%, non condensing

TABLE 1

SENSOR / INPUT	RANGE LIMITS (°C / EU)		RANGE IN WHICH ACCURACY IS SPECIFIED		TYPICAL ACCURACY AT 30 °C (°C / EU)	WORST CASE ACCURACY (°C / EU)
	LOW SCALE	HIGH SCALE	LOW SCALE	HIGH SCALE		
Input Group 1						
Pt - 6% Rh / Pt - 30% Rh (B)	400	1820	400	1820	± 3	± 5
Chromel / Constantan (E)	-270	850	0	850	± 1	± 3
Iron / Constantan (J)	-210	760	0	760	± 1	± 3
Chromel / Alumel (K)	-270	1372	-50	1200	± 1	± 3
Nicrosil / Nisil (N)	-270	1300	-50	1200	± 1	± 3
Pt / Pt - 13% Rh (R)	0	1760	400	1760	± 2	± 5
Pt / Pt - 10% Rh (S)	0	1760	400	1760	± 2	± 5
Copper / Constantan (T)	-270	400	-200	400	± 1	± 3
Pt100, 3-wire	-200	850	-200	600	± 0.3	± 1.0
Linear (0~50 mV, 0~20 mA, 4~20 mA)	-1999	9999	-1999	9999	± 5 EU	± 20 EU
Input Group 2						
The following inputs are available in Input Group 2 in addition to inputs of Input Group 1.						
Tungsten - 5% Rh / Tungsten - 26% Rh (C)	0	2320	0	2320	± 3	± 5
Tungsten - 3% Rh / Tungsten - 25% Rh (D)	0	2310	0	2310	± 3	± 5
Tungsten / Tungsten - 26% Rh (G)	0	2310	0	2310	± 3	± 5
Cu53	0	180	0	180	± 0.3	± 0.5
Linear (0~10 mV, 0~100 mV, 0~200 mV, 0~1 V, 0~5 V, 0~10 V)	-1999	9999	-1999	9999	± 5 EU	± 20 EU
Linear (4~20 mA) with square root	0	9999	0	9999	± 10 EU	± 40 EU

CONNECTION DIAGRAM



ORDERING INFORMATION

