Dual-output RTD Converter

WSPF-RTW

This compact plug-in converter accepts a RTD input and provides optically isolated DC voltage or current outputs.
This converter has a linearizer and a burnout protection circuit as standard equipment which is required to measure temperature.

Features

★ Fine Zero & span adjustment by 15 turn trimmer
★ Zero & span adjustment ±10% full scale
★ Safe design by dielectric strength of 3000Vac
★ 5 years warranty, long life
★ CE approved
★ Linearizer and Burnout protection circuit built-in
★ High accuracy at 0.1% FS, Response time 25ms

Ordering code

WSPF- R T W - □ □□ □ □ - □□

Code	RTD	Manufacturable Range	
		Temp. Range	Min. Span
F	Pt100Ω	-200 to +850°C	50°C or more
P	JPt100Ω	-200 to +500°C	50°C or more
N	Ni508.4Ω	-50 to +200°C	30°C or more

Code	Measuring Temperature Range
10	0 to 50°C
11	0 to 100°C
12	0 to 150°C
13	0 to 200°C
25	0 to 250°C
30	0 to 300°C
35	0 to 350°C
40	0 to 400°C
50	0 to 500°C
60	0 to 600°C
14	-20 to +80°C
15	-50 to +50°C
16	-50 to +100°C
17	-100 to +100°C
18	-200 to +200°C
99 ＊1	Contact us for other than the above

Code	Output 1	Allowable Load Resistance
A	4 to 20mAdc	750Ω or less
B	1 to 5mAdc	3kΩ or less
D	0 to 1mAdc	15kΩ or less
E	0 to 10mAdc	1.5kΩ or less
G	0 to 20mAdc	750Ω or less
H	1 to 5Vdc	1kΩ or more
J	0 to 10mVdc	10kΩ or more
K	0 to 100mVdc	100kΩ or more
L	0 to 1Vdc	1kΩ or more
N	0 to 5Vdc	1kΩ or more
P	0 to 10Vdc	2kΩ or more
S ＊1	Contact us for other than the above Current output 20mA or less Voltage output 10V or less	

Code	Output 2	Allowable Load Resistance
A	4 to 20mAdc	550Ω or less
G	0 to 20mAdc	550Ω or less
H	1 to 5Vdc	1kΩ or more
N	0 to 5Vdc	1kΩ or more
P	0 to 10Vdc	2kΩ or more
S ＊1	Contact us for other than the above Current output 20mA or less Voltage output 10V or less	

Code	Power Supply
A	100 to 240Vac ±10% 50/60Hz
D ＊2	24Vdc ±10% 10.8 to 30Vdc
8	110Vdc ±10%

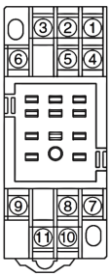
Code	Test Report
X	None
T	With Test report

＊**1**･･･CE approval do not adapt input range code 99 and output range code S.
＊**2**･･･CE approval do not adapt when power supply is 10.8Vdc to 30Vdc.

Specifications

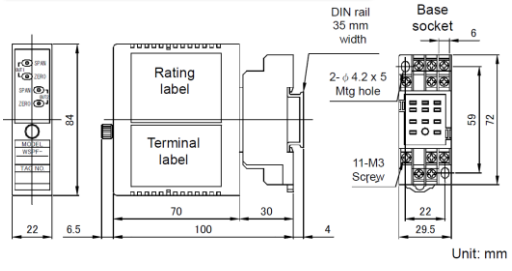
Accuracy	±0.1% FS (at 23°C)
Response time	Approx. 25ms (0 to 90%)
Allowable load	Current output First output : 15V or less of voltage drop between output Second output : 7V or less of voltage drop between output Voltage output Load current 5mA or less *1μA or less if the output is less than 1V FS
Zero & span adjustment	±10% FS (15 turn trimmer)
Operating temperature	-5 to +55°C
Operating relative humidity	90% or less (Non-condensing)
Storage temperature range	-10 to +60°C
Temperature coefficient	±0.015% of span per °C
Linearization	Available
Burnout protection	Upscale (less than 1.5sec) *Please contact us for downscale
Isolation	Between input, output, and power supply
Insulation resistance	100MΩ or more with 500Vdc megger Between input, output, and power supply terminal
Dielectric strength	3000Vac for 1 min between power supply and input/output terminal, 2000Vac for 1 min between input and output terminal
Power consumption	Approx. 5.6VA (AC), Approx. 90mA (DC)
Power supply variation	±0.1% FS (within the range of rated voltage)
Dimensions	84(H) X 29.5(W) X 106.5(D)mm
Weight	Approx. 150g
Structure	Plug-in (Body part and socket part)
Connection	M3 SEMS screw part of the base socket (Tightening torque 0.6N·m)
Mounting	DIN rail or wall surface
Case color and material	Ivory, ABS resin, flame retardant grade UL94V-0
EMC directive	EN61326-1, EN61010-1, EN50581 Installation category : II, Pollution degree : 2
Rated altitude	2000m or less

Terminal connections



No	Symbol		Description
1	INPUT	A	Input
2	OUTPUT-2	+	No.2 Output
3	INPUT	B	Input
4		B	
5	OUTPUT-2	-	No.2 Output
6	NC		No connection
7	OUTPUT-1	+	No.1 Output
8	NC		No connection
9	OUTPUT-1	-	No.1 Output
10	POWER	U(+)	Power Supply
11		V(-)	

Demensions



Unit: mm

＊ **Specification is subject to change without notice**