

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 $\pm 10\%$ 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- **RTW** - [] [] [] [] [] [] [] []

Code	RTD	Manufacturable Range	
		Temp. Range	Min. Span
F	Pt100 Ω	-200 to +850°C	50°C or more
P	JPt100 Ω	-200 to +500°C	50°C or more
N	Ni508.4 Ω	-50 to +200°C	30°C or more

Code	Test Report
X	None
T	With Test report

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	Contact us for other than the above

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

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

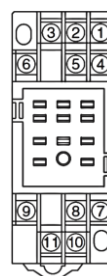
Code	Output 2	Allowable Load Resistance
A	4 to 20mA dc	550 Ω or less
G	0 to 20mA dc	550 Ω or less
H	1 to 5Vdc	1k Ω or more
N	0 to 5Vdc	1k Ω or more
P	0 to 10Vdc	2k Ω or more
S	Contact us for other than the above	Current output 20mA or less Voltage output 10V or less

- *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

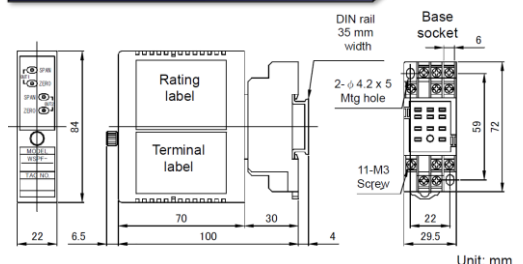
Accuracy	$\pm 0.1\%$ FS (at 23°C)
Response time	Approx. 25ms (0 to 90%)
Allowable load	Current output First output : 15V or less of voltage drop between output Second output : 7V or less of voltage drop between output Voltage output Load current 5mA or less *1 μ A or less if the output is less than 1V FS
Zero & span adjustment	$\pm 10\%$ 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	$\pm 0.015\%$ 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	100M Ω 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	$\pm 0.1\%$ 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, EN IEC 63000 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 Input
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(-) Power Supply

Dimensions



* Specification is subject to change without notice