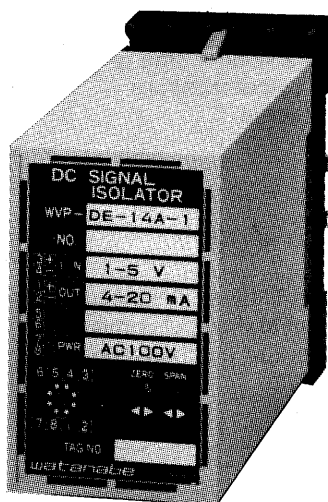


HIGH RESPONSE ISOLATOR (DC SIGNAL ISOLATOR)

DIELECTRIC STRENGTH 1,500 VAC

WVP-DCE



50 (W) x 96 (H) x 125.5 (D) mm Approx. 400 g

This plug-in high speed isolator isolates analog signals through the use of the pulse-width photocoupler method. It not only isolates signals of various levels from other circuits, but converts them into easy-to-handle signals for output to or input from measurement control devices. It also provides an effective means for achieving noise immunity and the standardization of signal levels.

Features

- Implements a step response of 500 μ sec (0–90%).
- Plug-in design. Mounted on DIN rails using a one-touch process.

* If the output of a DC-power-supply type of this unit is going to be coupled to an A/D converter, use a dual-slope-integration type A/D converter. If you plan to use a successive approximation-type A/D converter, please inquire in advance.

Model WVP - DCE - -

DCE Isolated; Dielectric strength 1,500 VAC (for 1 min.)

Power Supply	
1	AC 100 V \pm 10%, 50/60Hz
2	AC 200 V \pm 10%, 50/60Hz
3	DC 24 V \pm 10%
4	AC 110 V \pm 10%, 50/60Hz
5	AC 220 V \pm 10%, 50/60Hz

Input Signal		
		Input Resistance
10	DC 0–10 mV	1 M Ω
11	DC 0–100 mV	1 M Ω
12	DC 0–1 V	1 M Ω
13	DC 0–5 V	1 M Ω
14	DC 1–5 V	1 M Ω
15	DC 0–10 V	1 M Ω
16	DC 0–50 mV	1 M Ω
17	DC 0–60 mV	1 M Ω
20	DC \pm 10 mV	1 M Ω
21	DC \pm 50 mV	1 M Ω
22	DC \pm 100 mV	1 M Ω
23	DC \pm 1 V	1 M Ω
24	DC \pm 5 V	1 M Ω
25	DC \pm 10 V	1 M Ω
30	DC 0–10 μ A	1 K Ω
31	DC 0–100 μ A	100 Ω
32	DC 0–1 mA	100 Ω
33	DC 0–10 mA	50 Ω
34	DC 0–10 mA	50 Ω
35	DC 0–20 mA	50 Ω
36	DC 4–20 mA	50 Ω
40	DC \pm 1 mA	100 Ω
41	DC \pm 20 mA	50 Ω

Output Signal		
		Allowable Load Resistance
A	DC 4–20 mA	750 Ω or less
B	CD 1–5 mA	3 K Ω or less
C	DC 2–10 mA	1.5 K Ω or less
D	DC 0–1 mA	15 K Ω or less
E	DC 0–10 mA	1.5 K Ω or less
F	DC 0–16 mA	937 Ω or less
G	DC 0–20 mA	750 Ω or less
H	DC 1–5 V	2.5 K Ω or more
J	DC 0–10 mV	10 K Ω or more
K	DC 0–100 mV	100 K Ω or more
L	DC 0–1 V	500 Ω or more
N	DC 0–5 V	2.5 K Ω or more
P	DC 0–10 V	5 K Ω or more
R	DC \pm 10 V	5 K Ω or more

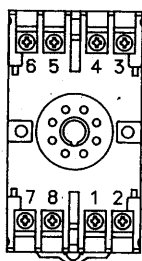
Specification

Input signal:	DC voltage, DC current
Output signal:	DC voltage, DC current
Accuracy:	$\pm 0.2\% \cdot fs$ (at 23°C)
Allowable load resistance:	For voltage output, use the isolator with a load current of 2 mA or less (1 μ A or less for an output below 1 V $\cdot fs$). For current output, use the isolator with a voltage drop of 15 V or less (10 V or less for an output over 20 mA) between output terminals.
Response time:	500 μ sec (time to reach 90% of the final value)
Frequency response:	800 Hz (-3 dB)
Adjustable ranges:	Zero: -20 to +20% $\cdot fs$ Span: 80 to 120% $\cdot fs$
Operating temperature and humidity:	-5 to +55°C, 90% RH or less (without condensation)
Influence of ambient temperature:	$\pm 0.2\% \cdot fs/10^\circ C$
Insulation resistance:	100 M Ω or more with a 500 VDC megger between the input/output terminal and power supply terminal, and between input and output terminals
Dielectric strength:	1,500 VAC for 1 minute between input, output and power supply terminals
Power consumption:	Approx. 4 VA (AC), Approx. 120 mA (DC)

Major Applications

- Isolation of sampling signals and real-time measurement signals.
- Isolation of control signals for rotating machines and stationary machines in motor circuits.
- Protection of equipment from external noise.

Explanation of Terminals



No.	Symbol		Description
1	OUTPUT	+	Output signal
2		-	
3	INPUT	+	Input signal
4		-	
5			N.C.
6			N.C.
7	POWER	U (+)	Power supply
8		V (-)	