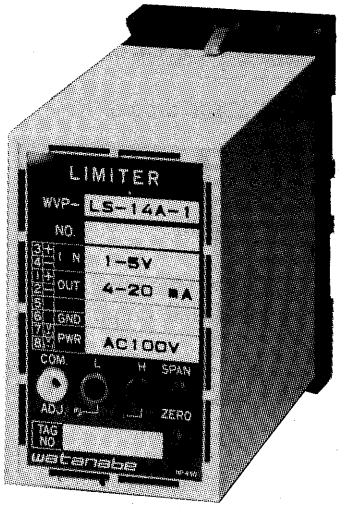
LIMITER (SIGNAL LIMITING CONVERTER) WVP-LM/LS



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

This unit limits the variation range of its output signals. If the unit receives an input signal that is out of the limitation range defined by a preset upper-limit value and lower-limit value, it blocks the signal from going out, so that no signal lower than the lower limit or higher than the upper limit will be delivered to the outside. Needless to say, it works as an ordinary converter, as long as the output signals are between the upper and lower limits. Its input and output can be isolated from each other using a photocoupler. This converter is highly reliable and can be used for a wide variety of circuit configurations.

Features

- A wide range of standard I/O specifications capable of supporting diverse signal levels.
- Equipped with monitoring terminals that come in handy for setting up the upper-limit and the lower-limit values.
- Input and output can be isolated from each other using the highly reliable photocoupler method.
- Plug-in design enables mounting on DIN rails or direct installation.

Model WVP-□□-□□□-□

LM	Non-isolated; Response time 200 msec (0–90%)
LS	Isolated; Response time 25 msec (0–90%)

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

	Input Signal	Input Resistance
10	DC 0–10 mV	1 MΩ
11	DC 0–100 mV	1 MΩ
12	DC 0–1 V	1 MΩ
13	DC 0–5 V	1 MΩ
14	DC 1–5 V	1 MΩ
15	DC 0–10 V	1 MΩ
16	DC 0–50 mV	1 MΩ
17	DC 0–60 mV	1 MΩ
31	DC 0–100 μA	100 Ω
32	DC 0–1 mA	100 Ω
33	DC 0–10 mA	50 Ω
34	DC 0–16 mA	50 Ω
35	DC 0–20 mA	50 Ω
36	DC 4–20 mA	50 Ω
99	Other than the above (Please consult with us.): Over 10 mV·fs up to 300 V·fs Over 10 μA·fs up to 20 mA·fs	

	Output Signal	Allowable Load Resistance
A	DC 4–20 mA	750 Ω or less
B	DC 1–5 mA	3 KΩ or less
C	DC 2–10 mA	1.5 KΩ or less
D	DC 0–1 mA	15 KΩ or less
E	DC 0–10 mA	1.5 KΩ 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 KΩ or more
J	DC 0–10 mV	10 KΩ or more
K	DC 0–100 mV	100 KΩ or more
L	DC 0–1 V	500 Ω or more
N	DC 0–5 V	2.5 KΩ or more
P	DC 0–10 V	5 KΩ or more
S	Other than the above (Please consult with us.): Voltage output 10 V or less Current output 20 mA or less	

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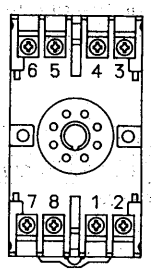
Specification

Input signal:	DC voltage, DC current
Output signal:	DC voltage, DC current
Accuracy:	±0.1%·fs (at 23°C)
Setting accuracy:	±0.25%·fs
Allowable load resistance:	For voltage output, use the converter with a load current of 2 mA or less (1 μA or less for an output below 1 V·fs). For current output, use the converter with a voltage drop of 15 V or less between output terminals.
Influence of ambient temperature:	±0.2%·fs/10°C
Insulation resistance:	100 MΩ or more with a 500 VDC megger between the input/output terminal and power supply terminal, and between the input and output terminals (isolated type)
Dielectric strength:	2,000 VAC for 1 minute between the input and output terminals (isolated type), and between the input/output terminal and power supply terminal
Power consumption:	Approx. 4 VA (AC), approx. 120 mA (DC)
Setting range:	Lower limit: 0–50%·fs Upper limit: 50–100%·fs
Preset monitor voltage:	0–1 VDC/0–100%·fs
Zero & span adjustment:	±20%·fs each (multi-turn trimmer)

Limit Setting Method

The converter outputs signals from 0 to 1 VDC corresponding to 0% to 100% of the input signals to the monitoring terminal on the front panel. First, couple the power supply to terminals Nos. 7 and 8, and connect a voltmeter to the monitoring terminal. While observing the voltmeter, set the lower limit using button L located on the front panel, and the upper limit using button H.

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 (-)	