

This converter comes in handy when input and output signals need to be placed in a mutually inverse relationship. For example, as the input signal increases from 4 mA to 20 mA, the unit can work to conversely reduce the output signal from 20 mA to 4 mA. Its input and output can be isolated using photocoupler method.

## **Features**

- A wide range of I/O specifications capable of supporting diverse applications.
- 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.



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

- 1					
-	Input Signal				
		Input Resistance			
10	DC 0-10 mV	1 ΜΩ			
11	DC 0-100 mV	1 ΜΩ			
12	DC 0-1 V	1 MΩ			
13	DC 0-5 V	1 ΜΩ			
14	DC 1-5 V	1 ΜΩ			
15	DC 0-10 V	1 ΜΩ			
16	DC 0-50 mV	1 ΜΩ			
17	DC 0-60 mV	1 ΜΩ			
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.):				
İ	Over 10 mV·fs up to 300 V·fs				
	Over 10 µA · fs up to 20 mA · fs				

	Power Supply		
1	AC 100 V ± 10%, 50/60 Hz		
2	AC 100 V ± 10%, 50/60 Hz 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		

	Output Signal				
- 1		Allowable Load Resistance			
Α	DC 4-20 mA	750 Ω or less			
В	DC 1-5 mA	3 KΩ or less			
B C	DC 2-10 mA	1.5 KΩ or less			
D	DC 0-1 mA	15 KΩ or less			
Ε	DC 0-10 mA	1.5 KΩ or less			
D E F	DC 0-16 mA	937 $\Omega$ or less			
G	DC 0-20 mA	750 Ω or less			
Н	DC 1-5 V	2.5 KΩ or more			
J	DC 0-10 mV	10 KΩ or more			
Κ	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			
Р	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				

## **Specification**

Input signal:

DC voltage, DC current

**Output signal:** 

DC voltage, DC current

Accuracy:

±0.1% · fs (at 23°C)

Allowable load resistance:

For voltage output, use the converter with a load current of 2 mA or less (1  $\mu$ A 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.

Operating temperature and humidity: -5 to +55°C, 90% RH or less (without condensation)

Influence of ambient temperature:

±0.2% · fs/10°C

Insulation resistance:

100  $M\Omega$  or more with a 500 VDC megger between the input/output terminal and

power supply terminal, and between the input and output terminals (isolated

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)

Zero & span adjustment:

±20% · fs each (multi-turn trimmer)

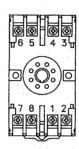
## **Major Applications**

Calibrating in an inverse relationship to detected analog values.

Configuration of a fail-safe circuit or subtraction circuit.

Use in other cases where control signals inverse to measured signals are required.

## **Explanation of Terminals**



No.	Symbol		Description
1	OUTPUT	. +	Output signal
2	001701	-	Output signal
3	INPUT	+	Input signal
4		-	
5			N.C.
6			N.C.
7	POWER	U (+)	Power supply
8		V (-)	