

# General Specifications

## Model MH7D Isolator (Dual-output and Unified Signal Type)



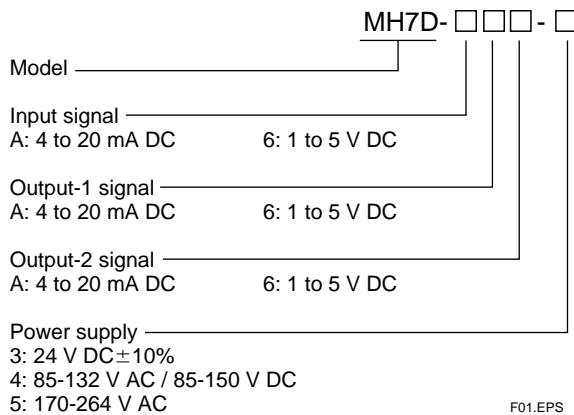
GS 77J04H07-02E

### General

The MH7D is a dual-output, plug-in type isolator that receives 1 to 5 V DC voltage or 4 to 20 mA DC current signals to convert them into isolated 1 to 5 V DC voltage or 4 to 20 mA DC current signals.

- Provided with Power indicator lamp

### Model and Suffix Codes



### Items to be specified when ordering

- Model and Suffix Codes: e.g. MH7D-6A6-4

Note: When output signals of 4 to 20 mA and 1 to 5 V DC are required, specify Output-1 as 4 to 20 mA DC because of the allowable load resistance.

### Input/Output Specifications

Input signal: 4 to 20 mA DC or 1 to 5 V DC signal  
Input resistance:  
4 to 20 mA DC: 250 Ω (Attach an external resistor.)

1 to 5 V DC: 1 MΩ

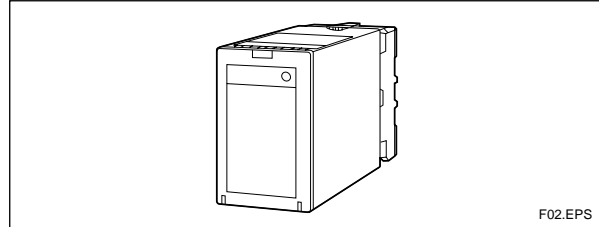
Output signal: 4 to 20 mA DC or 1 to 5 V DC insulated dual outputs

Allowable load resistance:

Output-1 Range	Allowable Load Resistance	Output-2 Range	Allowable Load Resistance
4 to 20 mA DC	750 Ω maximum	4 to 20 mA DC	350 Ω maximum
1 to 5 V DC	2 kΩ minimum	1 to 5 V DC	2 kΩ minimum

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Zero adjustment: -5 to +5%  
Span adjustment: 95 to 105%



### Standard Performance

Accuracy rating: ±0.1% of span (aside from the ±0.1% accuracy of the external resistor for current input)

Response speed: 150 ms, 63% response (10 to 90%)

Insulation resistance: 100 MΩ minimum at 500 V DC between input, output-1, output-2, power supply and grounding terminals mutually

Withstanding voltage: 2000 V AC for one minute between input, (output-1, output-2), power supply and grounding terminals mutually; 1000 V AC for one minute between output-1 and output-2 terminals

Operating temperature range: 0 to 50°C

Operating humidity range: 5 to 90% RH (no condensation)

Supply voltage range: 24 V DC ±10%, 85-150 V DC, 85-132 V AC, 170-264 V AC (47-63 Hz)

Effects of power line regulation: Up to ±0.1% of span for the regulation within allowable range of each supply voltage range

Effects of ambient temperature variations: Up to ±0.15% of span per 10°C

Power consumption: 1.8 W at 24 V DC; 1.7 W at 110 V DC; 3.4 VA at 100 V AC; 4.7 VA at 200 V AC

### Mounting and Appearance

Material: ABS resin (casing)

Mounting method: Wall or DIN rail mounting

More than 5 mm interval is required for side-by-side close mounting.

Connection method: M3.5 screw terminals

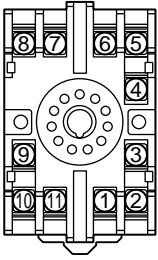
External dimensions: 85 (H)×51 (W)×132 (D) mm (including a socket)

Weight: Approx. 250 g (main unit), approx. 80 g (socket)

### Accessories

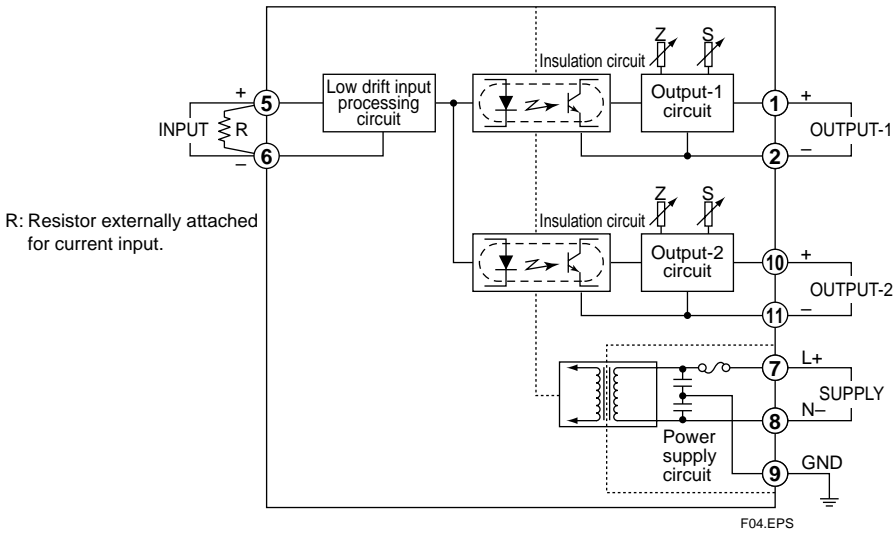
Spacer: One (used for DIN rail mounting)

## Terminal Assignments

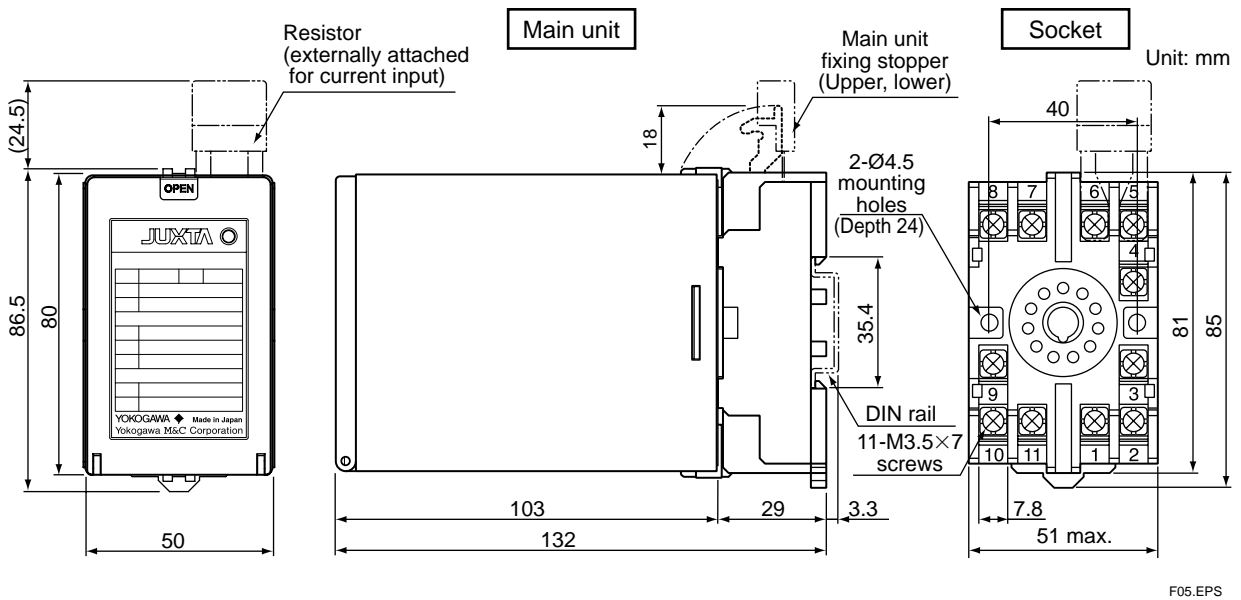


1	OUTPUT-1	(+)
2	OUTPUT-1	(-)
3	N.C.	
4	N.C.	
5	INPUT	(+)
6	INPUT	(-)
7	SUPPLY	(L+)
8	SUPPLY	(N-)
9	GND	
10	OUTPUT-2	(+)
11	OUTPUT-2	(-)

## Block Diagrams



## External Dimensions



- The information covered in this document is subject to change without notice for reasons of improvements in quality and/or performance.