General **Specifications**

Model MH7 Isolator (Unified Signal Type) **NTXUL**

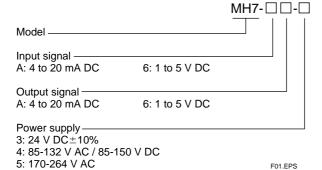
GS 77J04H07-01E

General

The MH7 is a 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. MH7-66-3

■ 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 M Ω

Output signal: 4 to 20 mA DC or 1 to 5 V DC signal Allowable load resistance:

> 4 to 20 mA DC: 750 Ω maximum 1 to 5 V DC: 2 k Ω minimum

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

■ Standard Performance

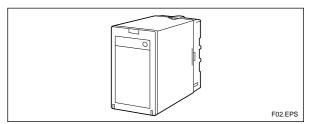
Accuracy rating: $\pm 0.1\%$ of span (aside from the ±0.1% accuracy of the external resistor for current input)

Response speed: 150 ms, 63% response (10 to 90%) Insulation resistance: 100 M Ω minimum at 500 V DC between input, output, power supply and grounding terminals mutually

Withstanding voltage: 2000 V AC for one minute between input, output, power supply and grounding terminals mutually

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 $\pm 0.1\%$ of span for the regulation within allowable range of each supply voltage range

Effects of ambient temperature variations: Up to $\pm 0.15\%$ of span per 10°C

Power consumption: 1.2 W at 24 V DC; 1.1 W at 110 V DC; 2.5 VA at 100 V AC; 3.8 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)×123 (D) mm (including a socket)

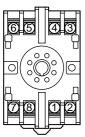
Weight: Approx. 250 g (main unit), approx. 60 g (socket)

Accessories

Spacer: One (used for DIN rail mounting)

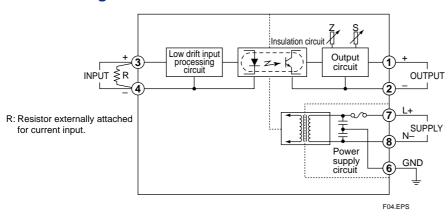


■ Terminal Assignments

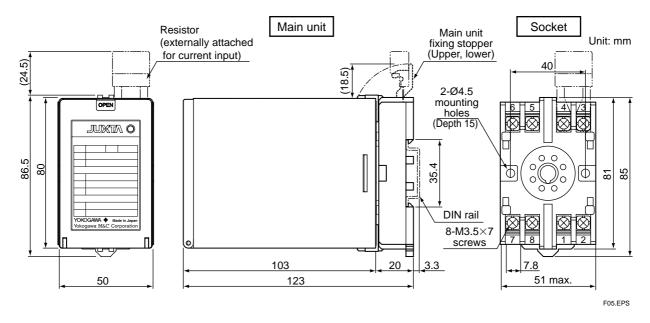


1	OUTPUT	(+)
2	OUTPUT	(-)
3	INPUT	(+)
4	INPUT	(-)
5	N.C.	
6	GND	
7	SUPPLY	(L+)
8	SUPPLY	(N-)
	•	

■ 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.