General Specifications

MODEL MHF
Super High Speed Isolator

JUXTA

Model MHF Super High Speed Isolator is plug-in type signal conditioner to convert DC voltage or current signal into isolated DC voltage or current signal.

- 63% response, 50μs super high speed conversion
  (Available 2000V AC high voltage proof specifications upon request)

Input & Output	
Input signal	DC current or voltage signal
Input resistance	Voltage input : 1MΩ (100kΩ when power off) Current input : Receiving resistor value outset to socket Input Range 4～20mA DC : 250Ω　0～20mA DC : 250Ω　0～ 1mA DC : 1kΩ 2～10mA DC : 500Ω　0～16mA DC : 250Ω　10～50mA DC : 100Ω 1～ 5mA DC : 1kΩ　0～10mA DC : 500Ω
Permissible applicable input	When voltage input : Less than ±30V DC When current input : Current to satisfy (input current)² x input resistance ≦ 0.5W
Output signal	DC current or voltage signal
Permissible load resistance	Output Range　Output Range 4～20mA DC : less than 750Ω　0～10mV DC : more than 250kΩ 2～10mA DC : less than 1500Ω　0～100mV DC : more than 250kΩ 1～5mA DC : less than 3000Ω　0～1V DC : more than 2kΩ 0～20mA DC : less than 750Ω　0～10V DC : more than 10kΩ 0～16mA DC : less than 900Ω　0～ 5V DC : more than 2kΩ 0～10mA DC : less than 1500Ω　1～ 5V DC : more than 2kΩ 0～1mA DC : less than 15kΩ　-10～+10V DC : more than 10kΩ
Zero point adjust range	±5% of span
Span adjust	±5% of span
Standard Performance	
Accuracy rating	±0.1% of span (In case of current input, outer set resistor accuracy of ±0.1% is not included)
Response Speed	50μs 63% response (10～90% step)
Insulation resistance	100MΩ/500V DC between input～output～power supply～ground
Withstand voltage	1500V AC/1 minute between input～output～power supply～ground
Temperature range	0～50°C
Humidity range	5～90%RH (no condensation)
Power supply voltage	24V DC±10%, 85～132V AC (47～63Hz), 85～150V DC, 170～264V AC (47～63Hz)
Effect of power supply voltage fluctuation	Less than ±0.1% of span for power fluctuation of 24V DC±10%, 85～132V AC (47～63Hz), 85～150V DC, 170～264V AC (47～63Hz)
Effect of ambient temperature change	Less than ±0.2% of span for 10°C change
Current dissipation	24V DC 90mA, 110V DC 19mA
Power dissipation	100V AC 5.5VA, 200V AC 8.5VA
Mounting, Shape & Accessories	
Material	Case ABS plastic
Mounting method	Wall or DIN rail mounting (more than 5mm interval is required for access mounting)
Connecting method	M3.5 screw terminal
External dimension	85(H)x50(W)x123(D)mm (including socket)
Weight	Body : approx. 290g, Socket : approx. 60g
Accessories	Spacer : 1 (Use for DIN rail mounting), Tag Number Range Label : 2 Module Resistor : 1 (for use when current input)

MHF-□□-□

MODEL

INPUT
- A: 4～20mA DC
- B: 2～10mA DC
- C: 1～5mA DC
- D: 0～20mA DC
- E: 0～16mA DC
- F: 0～10mA DC
- G: 0～1mA DC
- H: 10～50mA DC
- Z: (CUSTOM ORDER) Current Signal Refer Table 1
- 3: 0～1V DC
- 4: 0～10V DC
- 5: 0～5V DC
- 6: 1～5V DC
- 7: -10～+10V DC
- 0: (CUSTOM ORDER) Voltage Signal Refer Table 1

OUTPUT
- A: 4～20mA DC
- B: 2～10mA DC
- C: 1～5mA DC
- D: 0～20mA DC
- E: 0～16mA DC
- F: 0～10mA DC
- G: 0～1mA DC
- Z: (CUSTOM ORDER) Current Signal Refer Table 1
- 1: 0～10mV DC
- 2: 0～100mV DC
- 3: 0～1V DC
- 4: 0～10V DC
- 5: 0～5V DC
- 6: 1～5V DC
- 7: -10～+10V DC
- 0: (CUSTOM ORDER) Voltage Signal Refer Table 1

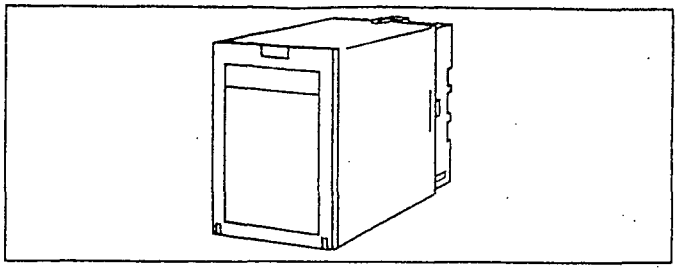
POWER SUPPLY
- 3: 24V DC±10%
- 4: 85～132V AC/85～150V DC
- 5: 170～264V AC

ORDERING INFORMATION
(Example) Model Code : MHF-66-3

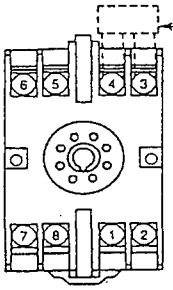
CUSTOM ORDER SPECIFICATIONS

Table 1 Manufacturable Range

	Current Signal	Voltage Signal
Input Range	0～70mA	-300～+300V
Span	1mA～70mA	1V～600V
Zero Elevation	0～25%	-125～25%
Output Range	0～24mA	-10～10V DC
Span	1～24mA	10mV～20V DC
Zero Elevation	0～200%	-100～200%

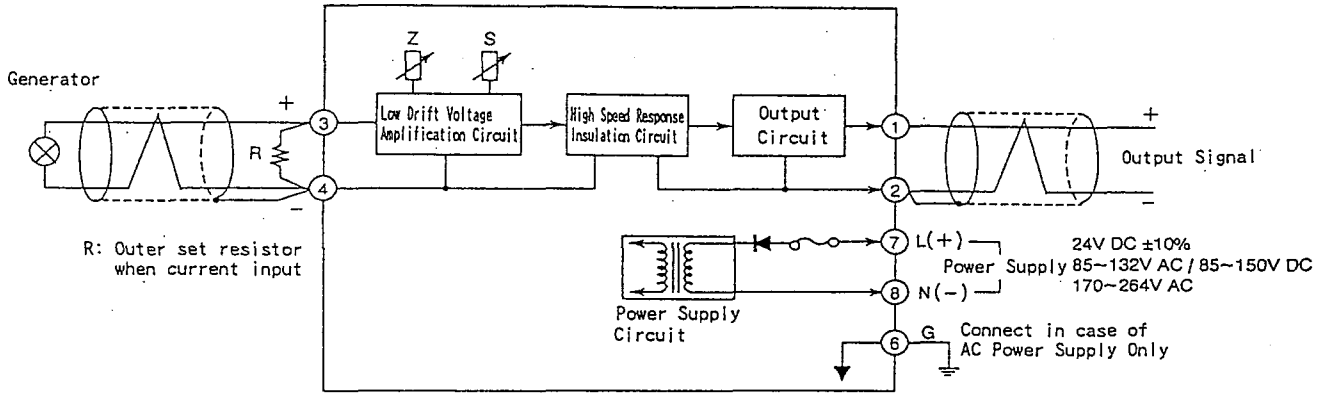


TERMINAL ARRANGEMENT



1	OUTPUT (+)
2	OUTPUT (—)
3	INPUT (+)
4	INPUT (—)
5	
6	GND (G)
7	SUPPLY (L+)
8	SUPPLY (N—)

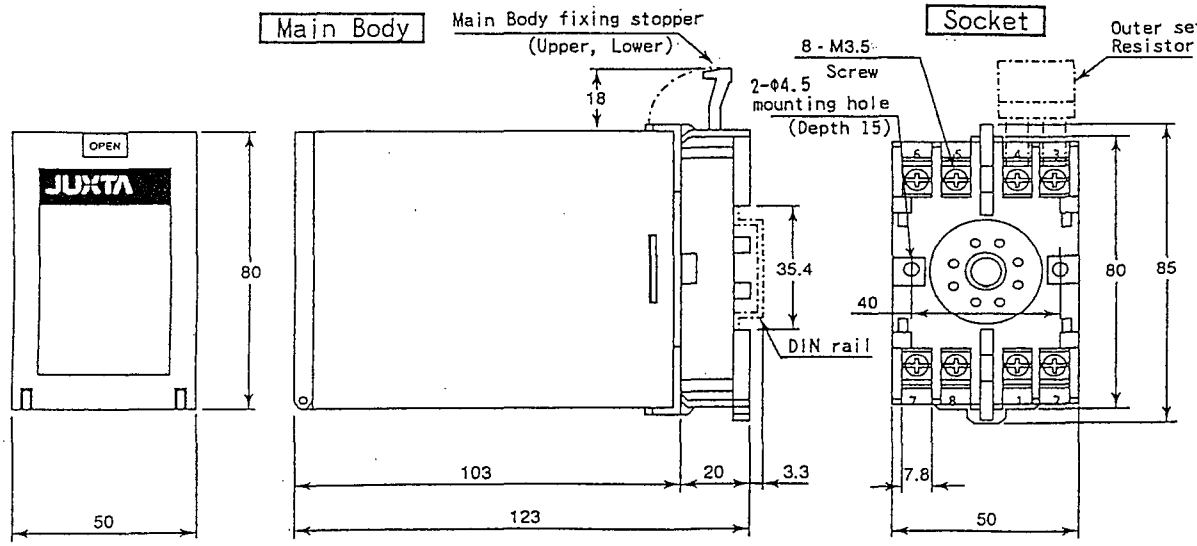
BLOCK DIAGRAM



(Note) Noise containing frequency elements within measuring range (less than 10kHz) would not be attenuated in principle since this instrument is deviced as super high speed response. Therefore, use shield twisted cable so as noise would not be induced in signal cable.

EXTERNAL DIMENSION

Unit : mm



Subject to change without notice for grade up quality and performance