

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																																
	<table border="0"> <tr> <th colspan="3">Input Range</th> </tr> <tr> <td>4~20mA DC : 250Ω</td> <td>0~20mA DC : 250Ω</td> <td>0~1mA DC : 1kΩ</td> </tr> <tr> <td>2~10mA DC : 500Ω</td> <td>0~16mA DC : 250Ω</td> <td>10~50mA DC : 100Ω</td> </tr> <tr> <td>1~5mA DC : 1kΩ</td> <td>0~10mA DC : 500Ω</td> <td></td> </tr> </table>	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																					
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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	<table border="0"> <tr> <th colspan="2">Output Range</th> <th colspan="2">Output Range</th> </tr> <tr> <td>4~20mA DC : less than 750Ω</td> <td>0~10mV DC : more than 250kΩ</td> <td>0~100mV DC : more than 250kΩ</td> <td></td> </tr> <tr> <td>2~10mA DC : less than 1500Ω</td> <td>0~1V DC : more than 2kΩ</td> <td>0~10V DC : more than 10kΩ</td> <td></td> </tr> <tr> <td>1~5mA DC : less than 3000Ω</td> <td>0~5V DC : more than 2kΩ</td> <td>1~5V DC : more than 2kΩ</td> <td></td> </tr> <tr> <td>0~20mA DC : less than 750Ω</td> <td>0~10V DC : more than 10kΩ</td> <td></td> <td></td> </tr> <tr> <td>0~16mA DC : less than 900Ω</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0~10mA DC : less than 1500Ω</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0~1mA DC : less than 15kΩ</td> <td>-10~+10V DC : more than 10kΩ</td> <td></td> <td></td> </tr> </table>	Output Range		Output Range		4~20mA DC : less than 750Ω	0~10mV DC : more than 250kΩ	0~100mV DC : more than 250kΩ		2~10mA DC : less than 1500Ω	0~1V DC : more than 2kΩ	0~10V DC : more than 10kΩ		1~5mA DC : less than 3000Ω	0~5V DC : more than 2kΩ	1~5V DC : more than 2kΩ		0~20mA DC : less than 750Ω	0~10V DC : more than 10kΩ			0~16mA DC : less than 900Ω				0~10mA DC : less than 1500Ω				0~1mA DC : less than 15kΩ	-10~+10V DC : more than 10kΩ		
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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)																																

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MODEL _____

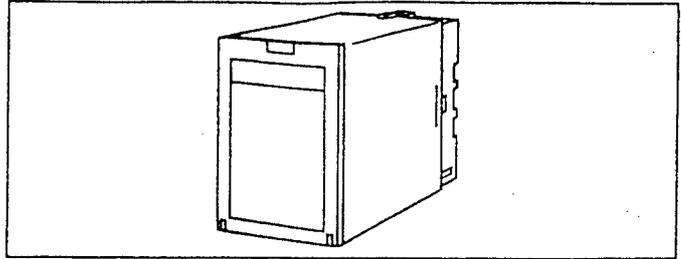
INPUT	
A: 4~20mA DC	3: 0~1V DC
B: 2~10mA DC	4: 0~10V DC
C: 1~5mA DC	5: 0~5V DC
D: 0~20mA DC	6: 1~5V DC
E: 0~16mA DC	7: -10~+10V DC
F: 0~10mA DC	0: (CUSTOM ORDER)
G: 0~1mA DC	Voltage Signal
H: 10~50mA DC	Refer Table 1
Z: (CUSTOM ORDER)	
Current Signal	
Refer Table 1	
OUTPUT	
A: 4~20mA DC	1: 0~10mV DC
B: 2~10mA DC	2: 0~100mV DC
C: 1~5mA DC	3: 0~1V DC
D: 0~20mA DC	4: 0~10V DC
E: 0~16mA DC	5: 0~5V DC
F: 0~10mA DC	6: 1~5V DC
G: 0~1mA DC	7: -10~+10V DC
Z: (CUSTOM ORDER)	0: (CUSTOM ORDER)
Current Signal	Voltage Signal
Refer Table 1	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

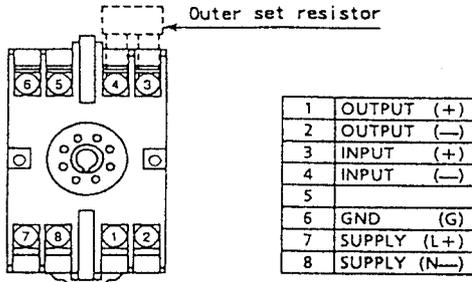
CUSTOM ORDER SPECIFICATIONS

Table 1 Manufacturable Range

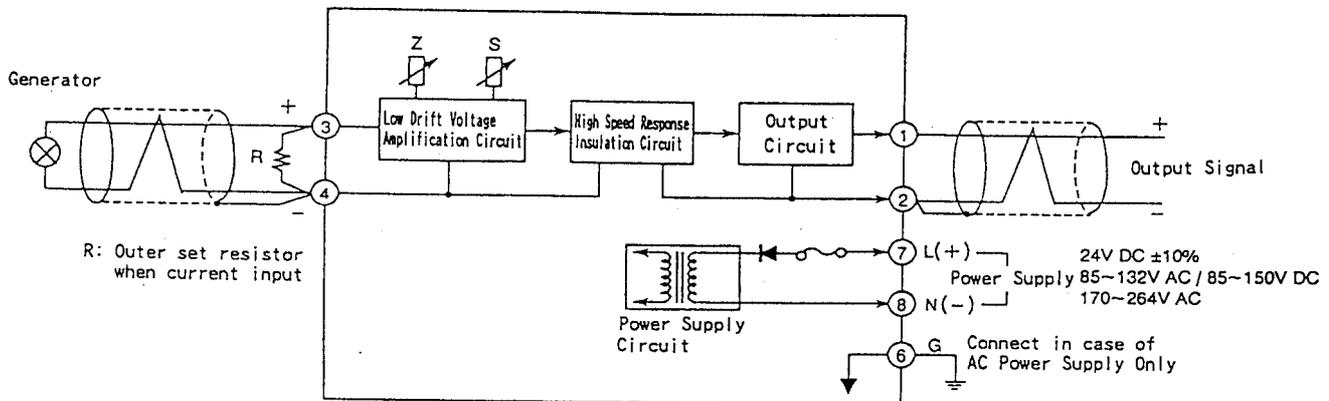
	Current Signal	Voltage Signal
Input Range	0~70mA	-300~+300V
Span	1mA~70mA	1V~600V
Zero Elevation	0~25%	-125~25%
Output Range	0~24mA	-10~10V DC
Span	1~24mA	10mV~20V DC
Zero Elevation	0~200%	-100~200%



TERMINAL ARRANGEMENT

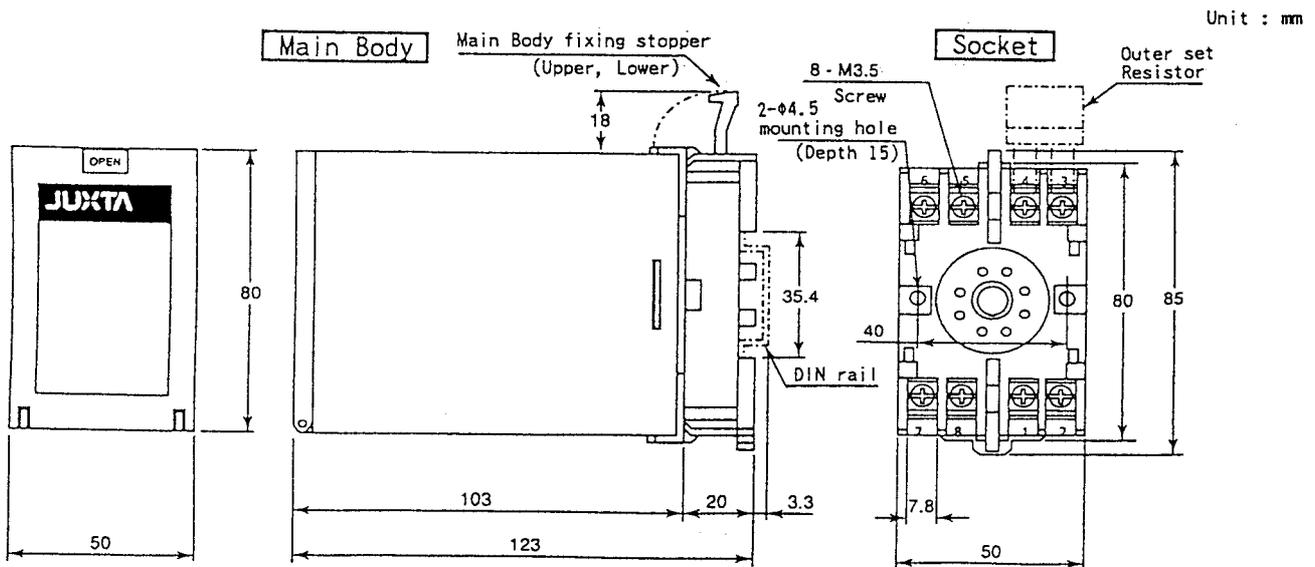


BLOCK DIAGRAM



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

EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance