JUXTA D Series General Specifications

Model DH2
Isolator

JUXTA

1. General

This DSC correspondence nest stored type isolator converts DC current or voltage signals into various current or voltage signals.

Setting of zero/span of input range, adjustment of zero/span of input/output, I/O monitoring can be done in the field by handy terminal.

2. Specifications

Input & Output	
Input signal	DC voltage or current signals See Table 1
Input resistance	[Current input] 100Ω See Table 1 [Voltage input] 1MΩ(when power on), 10KΩ(when power off)
Permissible applied voltage	See Table 1
Ch1 output signal	1~5V DC
Ch2 output signal	DC voltage or current signals (In case of current output, output is available only either from front terminals ③~④ or connector)
Zero point adjustment range	±1% of span (input adjustment), 10% of span (output correction)
Span adjustment range	±1% of span (input adjustment), 10% of span (output correction)
Standard Performance	
Accuracy rating	±0.1% of span
Response speed	150ms 63% response (10~90%)
Insulation resistance	100MΩ or more (at 500V DC) between input~output, input~power supply, output~power supply.
Voltage withstand	1500V AC/minute between input~output, input~power supply 500V AC/minute between output~power supply
Ambient temperature and humidity	Normal operating condition : 0~50°C, 5~90% RH Operating limit : -10~60°C, 5~95% RH Storage condition : -10~70°C, 5~95% RH (no condensation)
Power supply voltage	24V DC±10% (ripple content 10% p-p or less)
Effect of power supply voltage fluctuation	±0.1% or less of span per 24V DC±10% fluctuation
Effect of ambient tempearture change	±0.2% or less of span per 10°C temperature change
Current dissipation	24V DC 90mA(4~20mA DC) 60mA(1~5V DC)
Mounting & Dimension	
Boards	Both sides glass-epoxy
Mounting method	Store in exclusive nest (signal·power supply be connected through back board and connector)
Wiring	External wiring : Connect to terminal M4 screw of input/output of exclusive nest. Connection to I/O card: By exclusive cable (connector)
External dimension	130.6 X 23.6 X 126mm (HxWxD)
Weight	About 120g
Accessories	
Tag number label ... 4	Range label ... 4

TABLE 1

Input Type	Input Range Setting	Permissible Applied Input	Input Resistance
1	-10~+10V DC, Span 1V min., Elevation -50~50%	±15V	1MΩ(when power on) 100KΩ(when power off)
2	-1~+1V DC, Span 0.1V min., Elevation -50~50%	±15V	
0	-30~+30V DC, Span 3V min., Elevation -50~50%	±50V	
A	0~50mA DC, Span 10mA min., Elevation 0~50%	70mA	100Ω
B	0~10mA DC, Span 1mA min., Elevation 0~50%	70mA	100Ω
Z	0~5mA DC, Elevation 0~50% Span should be $R_i \times I_s \geqq 1$(V) 100% point should be $R_i \times I_{100} \leqq 10$ (V)	Current I(mA) when $R_i \times I^2 \leqq 0.5$(W)	Specify by customer (satisfy conditions mentioned left)

R_i : Input resistance I_s : Input current span I : Permissible maximum input current
I_{100} : 100% input current

DH2-□6□*A

TYPE

INPUT SIGNAL
A : 0~5mA DC
B : 0~10mA DC
Z : (CUSTOM) Current Signal
1 : -10~+10V DC
2 : -1~+1V DC
0 : (CUSTOM) Voltage Signal

CH1 OUTPUT SIGNAL
6 : 1~5DV DC

CH2 OUTPUT SIGNAL
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) Current Signal (24mA or less)
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) Voltage Signal (±10V or less)

POWER SUPPLY
24V DC±10%

ORDERING INFORMATION
(Example) Type Code : DH2-16A*A
Input Range : 0~5V DC

TABLE 2

Output resistance and permissible load resistance

(DC current output type)		
Output signal	Output resistance	Permissible load resistance
4~ 20mA DC	5MΩ or less	0~ 750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~ 750Ω
0~16mA DC		0~ 900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~ 15KΩ
Others, in case of $I_{...}$=24mA or less		(15/$I_{...}$)Ω or less

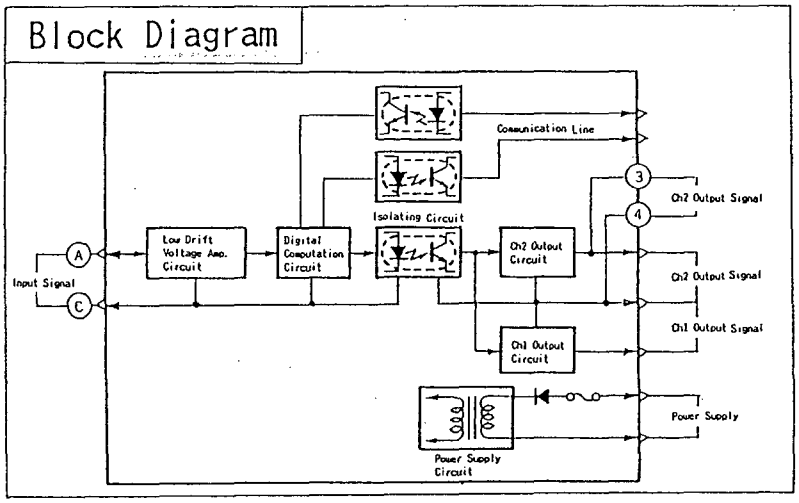
$I_{...}$=100% output current value

(DC voltage output type)			
Output signal		Output resistance	Permissible load resistance
0~ 10mV DC		100Ω or less	250KΩ or more
0~100mV DC			
0~1V DC		1Ω or less	2KΩ or more
0~10V DC			10KΩ or more
0~5V DC			2KΩ or more
1~5V DC			2KΩ or more
-10~+10V DC			10KΩ or more
Others, in case of $I_{...}$=10V or less	$V_{...}$≦100mV	100Ω or less	250KΩ or more
	$V_{...}$>100mV	1Ω or less	10KΩ or more

$I_{...}$=100% output voltage value

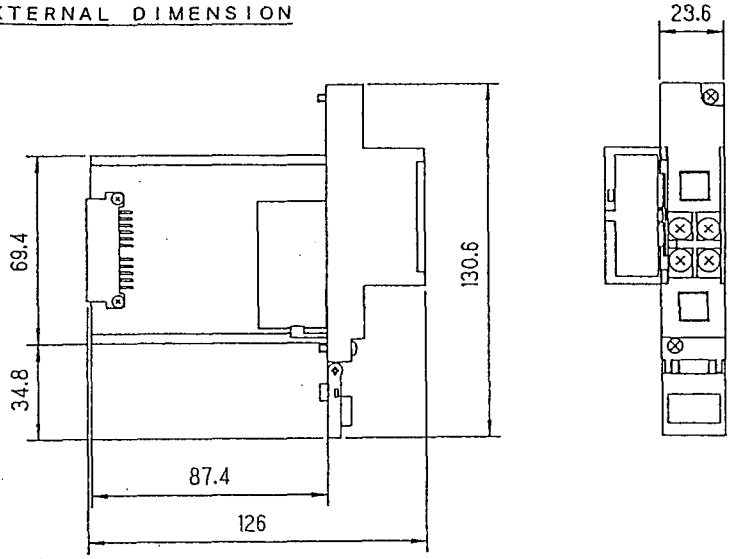
(Note) At 0~XmA of current output type, output value of 0.5% or less would be out of warranty regarding relative accuracy for Ch1 output.

Block Diagram



EXTERNAL DIMENSION

Unit : mm



Subject to change without notice for grade up quality and performance