

General Specifications

Model DC0
Output Isolator (Current I/O Type)

JUXTA

GS 77J05C10-01E

■ General

The DC0, a nest-mounting type DCS-supported isolator, receives 4 to 20 mA DC signals from DCS, and converts them into 4 to 20 mA DC or 10 to 50 mA DC current signals.

- When a load circuit opens, input resistance increases rapidly to 32 kΩ or more to detect the open state through the input device.
- Recommended arrester: AR-HA

■ Model and Suffix Codes

Model _____ **DC0-A□N*B**

Input Signal _____
A : 4 to 20 mA DC

Output signal _____
A : 4 to 20 mA DC
H : 10 to 50 mA DC

Power supply: 24 V DC±10%

■ Ordering Information

Specify the following when ordering.

- Model and suffix codes: e.g. DC0-AAN*B

■ Input/Output Specifications

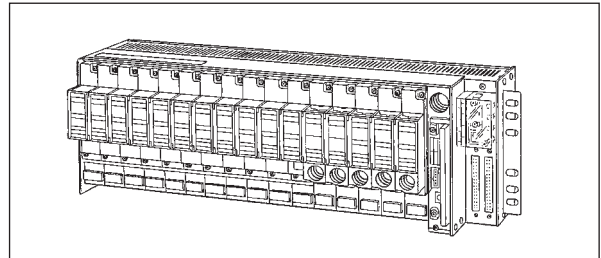
Input signal: 4 to 20 mA DC
Internal voltage drop:
5 V DC or less (4 to 20 mA DC output)
14 V DC or less (10 to 50 mA DC output)
Maximum allowable input: 40 mA or less
Output signal: 4 to 20 mA DC or 10 to 50 mA DC
Allowable load resistance:
750 Ω or less (4 to 20 mA DC output)
220 Ω or less (10 to 50 mA DC output)

■ Standard Performance

Accuracy rating:
±0.1% of span (4 to 20 mA DC output)
±0.3% of span (10 to 50 mA DC output)
Response speed: 10 ms, 63% response (10 to 90%)
Insulation resistance: 100 MΩ or more at 500 V DC
between input and output, output and power supply, and input and power supply.
Withstand voltage: 1500 V AC/min. between output and (input and power supply).
500 V AC/min. between input and power supply.

■ Environmental Conditions

Operating temperature range: 0 to 50°C
Operating humidity range:
5 to 90% RH (no condensation)
Power supply voltage: 24 V DC±10%
(ripple content 5% p-p or less)



Effect of power supply voltage fluctuations: ±0.1% of span or less for fluctuation within the operating range of power supply voltage specification.

Effect of ambient temperature change: ±0.2% of span or less for a temperature change of 10°C.

Current consumption: 24 V DC 60 mA (4 to 20 mA), 90 mA (10 to 50 mA)

■ Mounting and Dimensions

Mounting method: Nest-mounting to the DME, DMP (Signals and power supply are connected through back board and connector)

Note: DC0 cannot be mounted to DCE and DCP which are dedicated nests for I/O.

Connection method:

External wiring; connection to M4 screw terminals of the dedicated nest

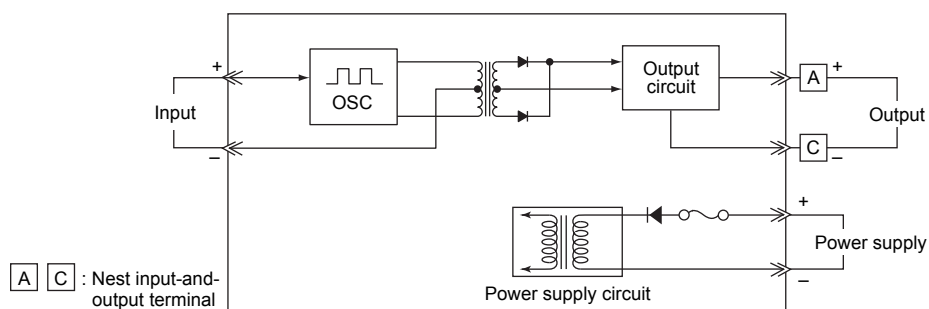
Connection to I/O card; via dedicated cable (connector)

External dimensions: 130.6(H)×23.6(W)×126(D) mm
Weight: Approx. 120 g

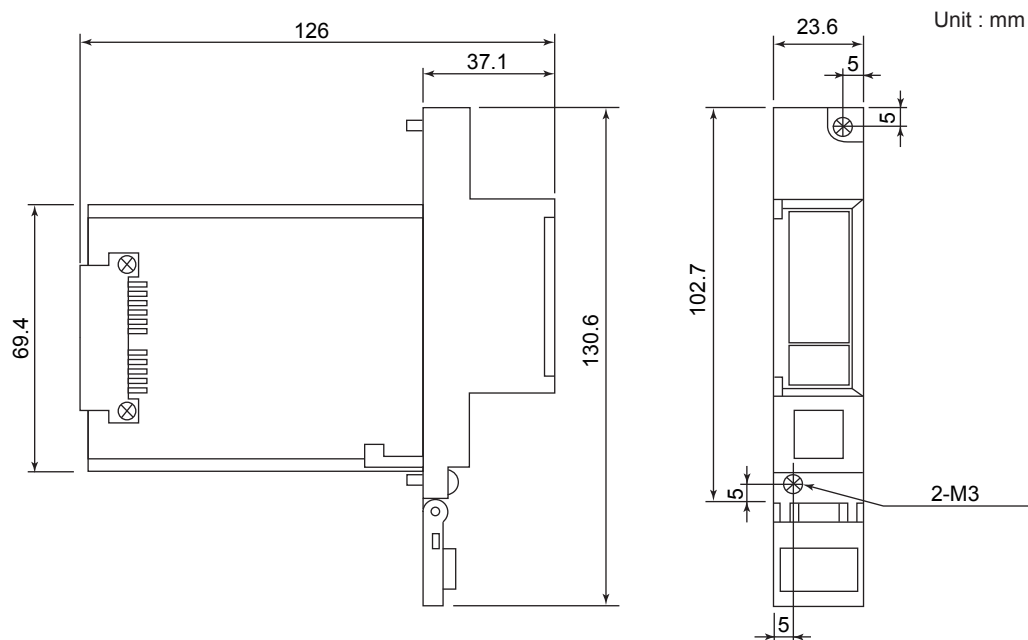
■ Standard Accessories

Tag number label: 1

■ Block Diagram



■ External Dimensions



■ Basic Conditions and Individual Contracts at the Time of Purchase

The warranty for this product is defined in the basic conditions and individual contracts at the time of purchase. The individual conditions are as follows.

• Handling of non-conforming products

If Yokogawa verifies a non-conformity of the product that is attributable to Yokogawa within the warranty period, we will deliver an equivalent product.

Yokogawa can not provide a free evaluation of non-conforming products. The investigation of the non-conforming products will be performed at the expense of the customer.