# General Specifications

# Model DH0 Output Isolator (Voltage I/O Type)

**NTXUL** 

GS 77J05H10-01E

#### ■ General

The DH0 is a nest-mounting type DCS-supported isolator that receives 1 to 5 V DC signals from DCS, and converts them into isolated DC voltage signals.

#### ■ Model and Suffix Codes

Power supply 24V DC±10%

(±10 V or less)

#### Ordering Information

Specify the following when ordering.

• Model and suffix codes: e.g. DH0-66N\*B

#### ■ Input/Output Specifications

Input signal: 1 to 5 V DC

Input resistance: 1  $M\Omega$  durning power on, 100  $k\Omega$ 

during power off Maximum allowable input:

Voltage input: Within ±30 V DC Output signal: DC voltage signal

Allowable load resistance:

| Output         | Allowable load resistance |
|----------------|---------------------------|
| 0 to 10 mV DC  | 250 kΩ or more            |
| 0 to 100 mV DC | 250 kΩ or more            |
| 0 to 1 V DC    | 2 kΩ or more              |
| 0 to 10 V DC   | 10 kΩ or more             |
| 0 to 5 V DC    | 2 kΩ or more              |
| 1 to 5 V DC    | 2 kΩ or more              |

Zero adjustment: -1 to +1% Span adjustment: 95 to 105%

#### ■ Standard Performance

Accuracy rating: ±0.1% of span

Response speed: 150 ms, 63% response (10 to 90%) Insulation resistance: 100 M $\Omega$  or more at 500 V DC

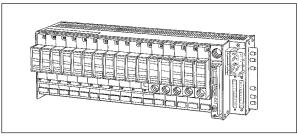
between input and output, output and power supply, and input and power supply.

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 the 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 50 mA

#### ■ Mounting and Dimensions

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

Note: DH0 cannot be mounted to DME and DMP which are dedicated nests for control output.

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

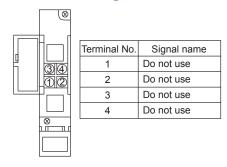
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## **■ Custom Order Specifications**

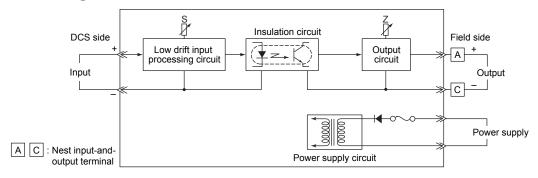
|                   | Voltage signal |
|-------------------|----------------|
| Output range (DC) | 0 to 10 V      |
| Span (DC)         | 10 mV to 10 V  |
| Zero elevation    | 0%             |



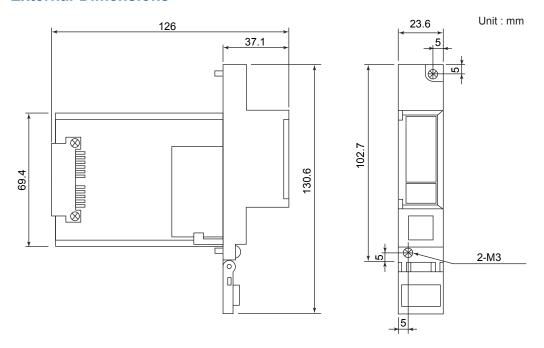
# ■ Terminal Assignments



## ■ 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.