

# General Specifications

## Model DC7 Output Isolator (Current I/O Type) (with HART Communication)

JUXTA

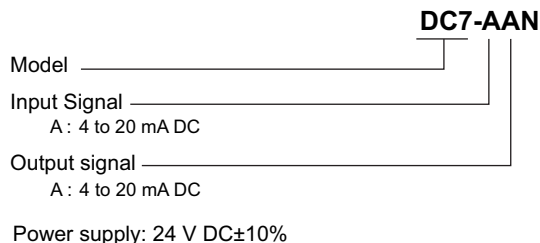
GS 77J05C17-01E

### ■ General

The DC7, 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 current signals

- Bi-directional relay of HART communication signals is possible while the DCS and the field devices are isolated from each other
- When a load circuit opens, input resistance increases rapidly to 48 kΩ or more to detect the open state through the input device.
- Recommended arrester: AR-SA or AR2-SA

### ■ Model and Suffix Codes



### ■ Ordering Information

Specify the following when ordering.

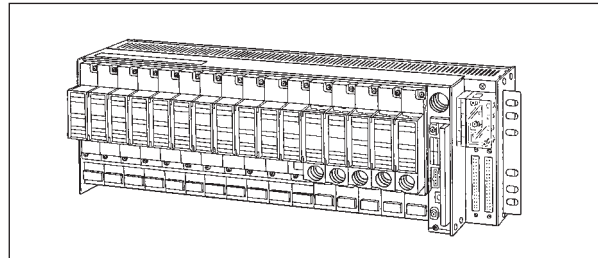
- Model and suffix codes: e.g. DC7-AAN

### ■ Input/Output Specifications

Input signal: 4 to 20mA DC  
 Internal voltage drop: 5 V DC or less  
 Maximum allowable input: 40 mA or less  
 Output signal: 4 to 20mA DC  
 Allowable load resistance: 750Ω or less  
 Zero adjustment: -1 to +1%  
 Span adjustment: 95 to 105%  
 Corresponding communication:  
 HART communication

### ■ Standard Performance

Accuracy rating: ±0.1% of span  
 Response speed: 25 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

### ■ Mounting and Dimensions

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

Note: DC7 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)

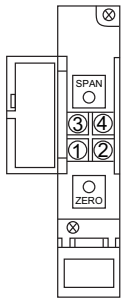
External dimensions: 130.6(H)×23.6(W)×126(D) mm

Weight: Approx. 120 g

### ■ Standard Accessories

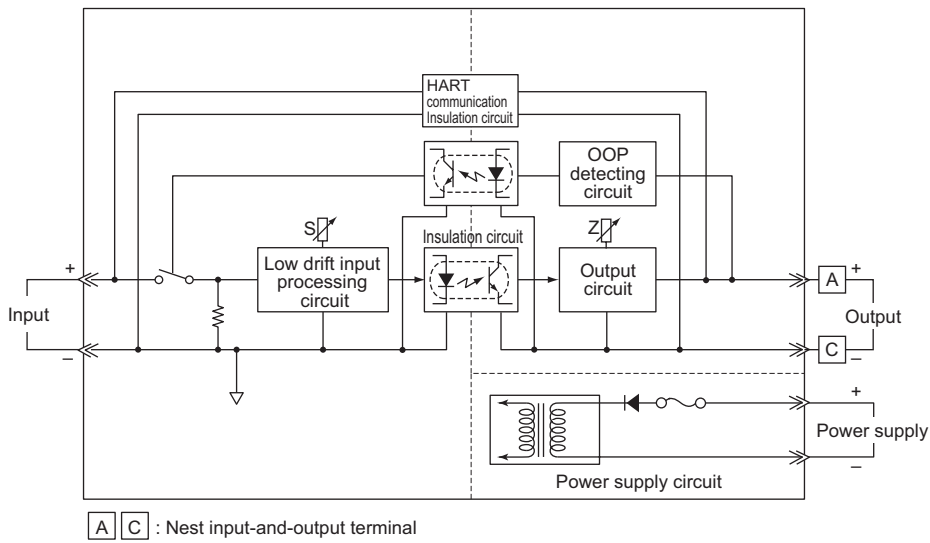
Tag number label: 1

### Terminal Assignments



Terminal No.	Signal name
1	Not Connected
2	Not Connected
3	Not Connected
4	Not Connected

### Block Diagram



### External Dimensions

