

General Specifications

Model DA7
Distributor
(with HART Communication)

JUXTA

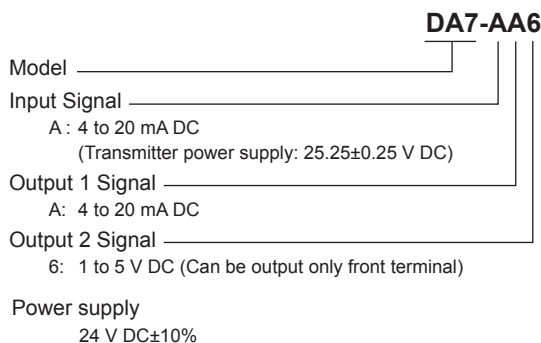
GS 77J05A07-01E

■ General

The DA7 is a nest-mounting type DCS-supported distributor, is used in combination with a two-wire transmitter, and converts 4 to 20 mA DC signals into isolated 4 to 20 mA DC signals.

- Bi-directional relay of HART communication signals is possible while the field devices and the DCS are isolated from each other.

■ Model and Suffix Codes



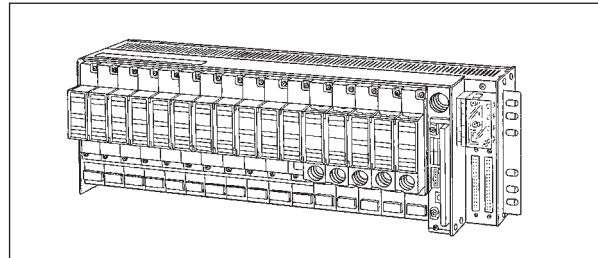
■ Ordering Information

Specify the following when ordering.

- Model and suffix codes: e.g. DA7-AA6

■ Input/Output Specifications

- Input signal: 4 to 20 mA DC signal from two-wire transmitter
 - Input resistance: 250 Ω equivalent
(Voltage drop 5 V or less at 20 mA input)
 - Maximum allowable input: 40 mA DC
 - Transmitter power supply: 25.25±0.25 V DC
(With a current limiting circuit to keep the current between 25 and 35 mA)
 - Allowable conductor resistance (RL):
Up to [(20 –transmitter's minimum operating voltage) V/0.02 A] Ω
 - Output 1 signal: 4 to 20 mA DC
 - Output 2 signal: 1 to 5 V DC (Can be output only front terminal (3)-(4))
 - Allowable load resistance:
350 Ω or less (Output 1 signal)
2 k Ω or more (Output 2 signal)
 - Zero adjustment: -1 to +1%
 - Span adjustment: 95 to 105%
 - Corresponding communication:
HART communication (Output 1 signal only) (Note1)(Note2)(Note3)
- Note1: When using with the following Yokogawa model, it is necessary to change the position of a switch for HART communication.
Temperature Transmitter YTA (Style 1 and 2) which was shipped before 2003
Vortex flowmeter DY, DYA which were shipped before 2003
Magnetic flowmeters AM11, AE, AE14, SE, SE14



Note2: HART communication does not work properly when using in combination with Yokogawa analytical EXA202 series (PH202G, PH202S, SC202G, SC202S, ISC202G, ISC202S, DO202G, and DO202S). The succession model, FLXA21 can be worked properly.

Note3: HART communication can only be used between the input and Output-1.

■ Standard Performance

- Accuracy rating: Output 1: ±0.1% of span
Output 2: Relative error between output 1 and 2 is within ±0.2%
- Response speed: 150 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 input and (output and power supply.)
500 V AC/min. between output 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 100 mA

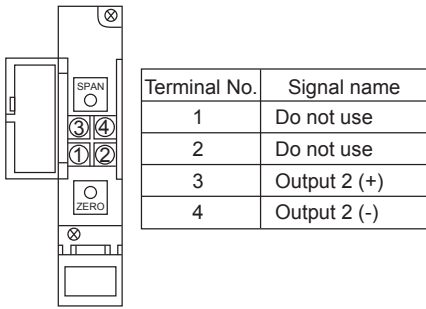
■ Mounting and Dimensions

- Mounting method: Nest-mounting (Signals and power supply are connected through back board and connector)
- Connection method: Connection to M4 screw terminals of the exclusive nest
- External dimensions: 130.6(H)×23.6(W)×126(D) mm
- Weight: Approx. 120 g

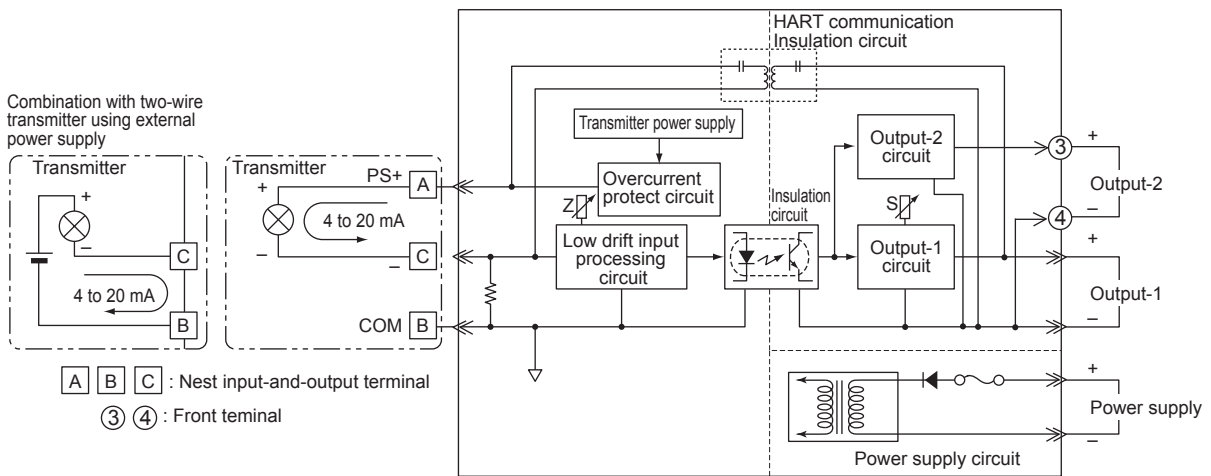
■ Standard Accessories

- Tag number label: 1

Terminal Assignments



Block Diagram



External Dimensions

