

● Digital I/O Modules (CENTUM-ST Compatible)

The Digital I/O Modules (CENTUM-ST Compatible) receive contact or voltage status signals from the field, and/or output status signals to the field via transistor contacts.

| Item | Specifications | | |
|-----------------------------|---|------------------------------|---|
| | Model | ADV859 | ADV159 |
| Number of I/O channels | 16-channel input, 16-channel output | 32-channel input | 32-channel output |
| Signal isolation | Isolated channels | Isolated channels | Isolated channels |
| Input signal | Contact input: OFF signal 100 kΩ or more ON signal 200 Ω or less Minimum current value when contact is short-circuited: 1.25 mA Voltage input: OFF signal 4.5 to 25 V DC ON signal ±1 V DC, 200 Ω or less | | — |
| Input contact rating | 5 V DC, 20 mA or more | | — |
| Pushbutton input function | Not supported | Supported | — |
| Input response time | 8 ms (for status input) | 8 ms (for status input) | — |
| Minimum ON detection time | — | 20 ms (for pushbutton input) | — |
| Maximum ON/OFF cycle | — | 25 Hz (for pushbutton input) | — |
| Output signal | Transistor contact | — | Transistor contact |
| Output contact rating | Inductive load, resistive load: 30 V DC, 100 mA (*1) | — | Inductive load, resistive load: 30 V DC, 100 mA (*1) |
| Output response time | 16 ms or less | — | 16 ms or less |
| Pulse width | 8 ms to 7200 s | — | 8 ms to 7200 s |
| Pulse width resolution | 8 ms, add max. 1ms for ON/OFF delay time | — | 8 ms, add max. 1ms for ON/OFF delay time |
| Maximum current consumption | 450 mA (5 V DC) | 330 mA (5 V DC) | 570 mA (5 V DC) |
| Weight | Approx. 0.30 kg | Approx. 0.40 kg | Approx. 0.30 kg |
| External connection | Dedicated cable (KS2) | Dedicated cable (KS2) | Dedicated cable (KS2) |
| Compatible card | ST2 compatible | ST3 compatible | ST4 compatible |

*1: Connect a diode when driving DC relay.

| Item | Specifications | | |
|-----------------------------|---|-------------------------|---|
| | Model | ADV869 | ADV169 |
| Number of I/O channels | 32-channel input, 32-channel output | 64-channel input | 64-channel output |
| Signal isolation | Common every 16-channel | Common every 16-channel | Common every 16-channel |
| Input signal | Contact input: OFF signal 100 kΩ or more ON signal 200 Ω or less Minimum current value when contact is short-circuited: 1.25 mA Voltage input: OFF signal 4.5 to 25 V DC ON signal ±1 V DC, 200 Ω or less | | — |
| Input contact rating | 5 V DC, 20 mA or more | | — |
| Pushbutton input function | Not supported | Not supported | — |
| Input response time | 8 ms (for status input) | 8 ms (for status input) | — |
| Output signal | Transistor contact | — | Transistor contact |
| Output contact rating | Inductive load, resistive load: 30 V DC, 100 mA (*1) | — | Inductive load, resistive load: 30 V DC, 100 mA (*1) |
| Output response time | 16 ms or less | — | 16 ms or less |
| Pulse width | 8 ms to 7200 s | — | 8 ms to 7200 s |
| Pulse width resolution | 8 ms, add max. 1 ms for ON/ OFF delay time | — | 8 ms, add max. 1 ms for ON/ OFF delay time |
| Maximum current consumption | 800 mA (5 V DC) | 800 mA (5 V DC) | 800 mA (5 V DC) |
| Weight | Approx. 0.30 kg | Approx. 0.30 kg | Approx. 0.30 kg |
| External connection | Dedicated cable (KS9) | Dedicated cable (KS9) | Dedicated cable (KS9) |
| Compatible card | ST5 compatible | ST6 compatible | ST7 compatible |

*1: Connect a diode when driving DC relay.

Digital I/O Module

| | | Description |
|---------------------|--------|---|
| Model | ADV859 | Digital I/O Module for Compatible ST2 (16-channel input/16-channel output, Isolated channels) |
| Suffix Codes | -P | With pulse width function/time-proportional output function |
| | 0 | Always 0 |
| | 0 | Basic type |
| | 1 | With ISA Standard G3 option |

| | | Description |
|---------------------|--------|---|
| Model | ADV159 | Digital Input Module for Compatible ST3 (32-channel, Isolated channels) |
| Suffix Codes | -P | With pushbutton input |
| | 0 | Always 0 |
| | 0 | Basic type |
| | 1 | With ISA Standard G3 option |

| | | Description |
|---------------------|--------|---|
| Model | ADV559 | Digital Output Module for Compatible ST4 (32-channel output, Isolated channels) |
| Suffix Codes | -P | With pulse width function/time-proportional output function |
| | 0 | Always 0 |
| | 0 | Basic type |
| | 1 | With ISA Standard G3 option |

| | | Description |
|---------------------|--------|--|
| Model | ADV869 | Digital I/O Module for Compatible ST5 (32-channel input/32-channel output, Isolated, Common Minus Side Every 16-channel) |
| Suffix Codes | -P | With pulse width function/time-proportional output function |
| | 0 | Always 0 |
| | 0 | Basic type |
| | 1 | With ISA Standard G3 option |

| | | Description |
|---------------------|--------|--|
| Model | ADV169 | Digital Input Module for Compatible ST6 (64-channel, Isolated, Common Minus Side Every 16-channel) |
| Suffix Codes | -P | Standard type |
| | 0 | Always 0 |
| | 0 | Basic type |
| | 1 | With ISA Standard G3 option |

| | | Description |
|---------------------|--------|--|
| Model | ADV569 | Digital Output Module for Compatible ST7 (64-channel output, Isolated, Common Minus Side Every 16-channel) |
| Suffix Codes | -P | With pulse width function/time-proportional output function |
| | 0 | Always 0 |
| | 0 | Basic type |
| | 1 | With ISA Standard G3 option |

■ APPLICABLE STANDARDS

Refer to the GS “Integrated Production Control System CENTUM VP System Overview” (GS 33J01A10-01EN).

■ ORDERING INFORMATION

Specify the model and suffix codes.

For selecting the right products for explosion protection, please refer to TI 33Q01J30-01E without fail.

■ TRADEMARK

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