OMRON ®

Relay Remote Output Blocks

SRT□-R

Space-saving CompoBus/S Relay Remote Output Terminal Blocks

■ Ultra compact size saves panel space; measures 51 H x 51 D mm, 101 L mm for 8-point; 156 L mm for 16-point

■ SRT2 terminals support both high-speed communications (750 kbps) and long-distance communications (500 m) systems, switch selected

■ SRT1 terminals support only high-speed communications systems

■ Power MOSFET and electromechanical relay models available

■ DIN track and screw mounting

Ordering Information

■ RELAY OUTPUT BLOCKS

I/O points	Communication system	I/O classification	Rated voltage	I/O rated voltage	Part number
8	High-speed	Relay output	24 VDC	24 VDC	**SRT1-ROC08**
		Power MOSFET relay output			**SRT1-ROF08**
16		Power MOSFET relay output			**SRT1-ROF16**
		Relay output			**SRT1-ROC16**
8	High-speed and long-distance	Relay output	24 VDC	24 VDC	**SRT2-ROC08**
		Power MOSFET relay output			**SRT2-ROF08**
16		Relay output			**SRT2-ROC16**
		Power MOSFET relay output			**SRT2-ROF16**

■ REPLACEMENT RELAYS

Item	Applicable output blocks	Part number
Electromechanical relay	SRT1-ROC08, SRT2-ROC16	**G6D-1A DC24**
Power MOSFET relay	SRT1-ROF08, SRT2-ROF16	**G3DZ-2R6PL DC24**

Specifications

■ RATINGS

Relay Output

Item	SRT□-ROC08, SRT□-ROC16
Applicable relay	G6D-1A (one for each output point)
Rated load	3 A at 250 VAC, 3 A at 30 VDC (resistive load)
Rated carry current	3 A (See Note 1)
Max. contact voltage	250 VAC, 30 VDC
Max. contact current	3 A
Max. switching capacity	730 VA (AC), 90 W (DC)
Min. permissible load (See Note 2)	10 mA at 5 VDC
Life expectancy	Electrical: 100,000 operations min. (rated load, at 1,800 operations/h) Mechanical: 20,000,000 operations min. (at 18,000 operations/h)

Note: 1. The maximum permissible current of COM0 to COM7 is 3 A.
2. This value fulfills the P reference value of opening/closing at a rate of 120 times per min (ambient operating environment and determination criteria according to JIS C5442).

Power MOSFET Output

Item	SRT□-ROF08, SRT□-ROF16
Applicable relay	G3DZ-2R6PL (one for each output point)
Load voltage	3 to 264 VAC, 3 to 125 VDC
Load current	100 μA to 0.3 A
Inrush current	6 A (10 ms)

■ CHARACTERISTICS

Power supply voltage	24 VDC $^{+10\%}/_{-15\%}$
Current consumption (See Note)	350 mA max. at 24 VDC
Connection method	Multi-drop method and T-branch method Secondary branches cannot be connected to T-branch lines.
Connecting units	8-point Units: 16 per Master 16-point Units: 8 per Master
Dielectric strength	2,000 VAC for 1 min (1 mA sensing current) between all output terminals and power supply, between communication terminals, and between contacts of different polarities 500 VAC for 1 min (1 mA sensing current) between all output terminals and power supply, between communication terminals, and between all power supply terminals and communications terminals
Noise immunity	Power supply normal: ±600 V for 10 min with a pulse width of 100 ns to 1 μs Power supply common: ±1,500 V for 10 min with a pulse width of 100 ns to 1 μs
Vibration resistance	10 to 55 Hz, 0.75-mm double amplitude
Shock resistance	Malfunction: 100 m/s^2 Destruction: 300 m/s^2
Mounting strength	No damage when 50 N pull load was applied for 10 s in all directions
Terminal strength	No damage when 50 N pull load was applied for 10 s
Screw tightening torque	0.6 to 1.18 N • m
Ambient temperature	Operating: 0°C to 55°C (32° to 131°F) with no icing or condensation Storage: −20°C to 65°C (−4° to 149°F) with no icing or condensation
Ambient humidity	Operating: 35% to 85%
Weight	8-point models: 145 g max., 16-point models: 240 g max.
Approved standards	UL 508, CSA C22.2 No. 14

Note: The above current consumption is a value with all the points turned ON including the current consumption of the G6D coil for the Remote Output Terminal.

Nomenclature

SRT2-ROC16
SRT2-ROF16

PWR
COMM
ERR

Mounting Holes

0 to 15

Mounting Holes

Output Terminals

I/O Power Supply Terminals
Connect 24 VDC power supply.

Communications Power Supply Terminals
Connect 24 VDC power supply.

CompoBus/S Terminals
Connect the CompoBus/S communications cable.

DIP Switch
Used for node number setting and holding or
clearing outputs for communications error.

→ ON

Output HOLD/CLEAR setting (Output model only)
Baud rate setting

Node address setting

Note: Always turn off the Module before changing DIP
switch settings.

SRT1-ROC08
SRT1-ROF08

Mounting Holes

Mounting Holes

Output Terminals

I/O Power Supply Terminals
Connect 24 VDC power supply.

Communications Power Supply Terminals
Connect 24 VDC power supply.

CompoBus/S Terminals
Connect the CompoBus/S communications cable.

DIP Switch
Used for node number setting and holding or clearing outputs for communications error.

Note: Always turn off the Module before changing DIP
switch settings.

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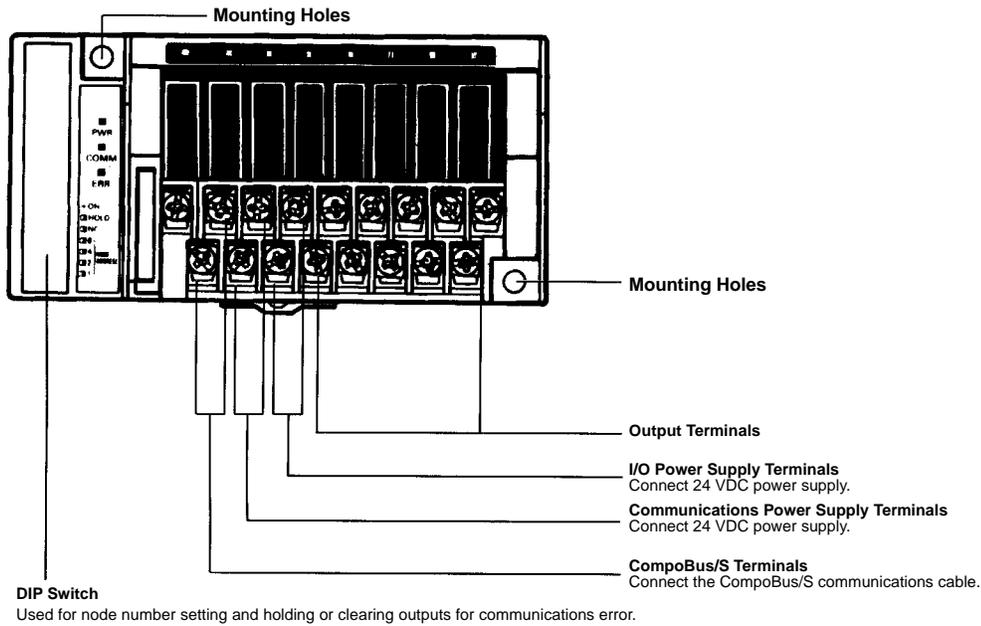
■ INDICATORS

Indicator	Display	Color	Meaning
PWR	Lit	Green	The communications power supply is ON.
	Not lit		The communications power supply is OFF.
COMM	Lit	Yellow	Normal communications
	Not lit		A communications error has occurred or the Unit is in standby status.
ERR	Lit	Red	A communications error has occurred.
	Not lit		Normal communications or the Unit is in standby status.
0 to 15	Lit	Yellow	The corresponding I/O signal is ON.
	Not lit		The corresponding I/O signal is OFF.

■ DIP SWITCH SETTINGS

Output HOLD/CLEAR setting
Baud rate setting (not functional on SRT1 models)

Node address setting
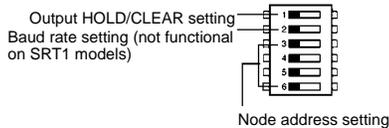
Output HOLD/CLEAR Mode

Mode	Pin 1	Setting
HOLD	ON	Output status is maintained.
CLEAR	OFF (default)	Output status is cleared when a communications error occurs.

Baud Rate Setting (SRT2 models only)

Mode	Pin 2	Setting
Long distance	ON	Sets the I/O block to communicate in a long distance (93.75 kbps at 500 m) CompoBus/S system
High speed	OFF (default)	Sets the I/O block to communicate in a high speed (750 kbps at 100 m) CompoBus/S system

Note: The baud rate cannot be set on SRT1 models. Leave Pin 2 set to OFF.

Node Number Settings

| Node number	Pin 3	Pin 4	Pin 5	Pin 6
	8	4	2	1
0	OFF	OFF	OFF	OFF
1	OFF	OFF	OFF	ON
2	OFF	OFF	ON	OFF
3	OFF	OFF	ON	ON
4	OFF	ON	OFF	OFF
5	OFF	ON	OFF	ON
6	OFF	ON	ON	OFF
7	OFF	ON	ON	ON
8	ON	OFF	OFF	OFF
9	ON	OFF	OFF	ON
10	ON	OFF	ON	OFF
11	ON	OFF	ON	ON
12	ON	ON	OFF	OFF
13	ON	ON	OFF	ON
14	ON	ON	ON	OFF
15	ON	ON	ON	ON

Note: 1. The node number is factory-set to 0.
2. For node number settings, refer to the *CompoBus/S Operation Manual (W266)*.

Dimensions

Unit: mm (inch)

SRT1-ROC08, SRT1-ROF08
**SRT2-ROC08, SRT2-ROF08**

Mounting Holes

Two, 4.2 dia. or M4

100 (3.94)
80
54 (2.12)
50
40
21.5
11.5
Sixteen, M3
6
7
50 (1.97)
41
6
31
65 (2.56)
50 (1.97)
25 (0.98)

41 ±0.2 (1.61 ±0.008)
80 ±0.2 (3.15 ±0.008)
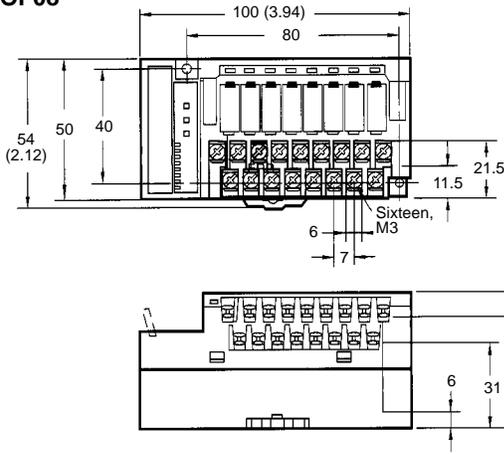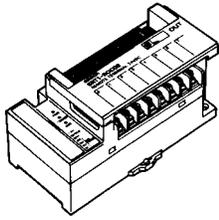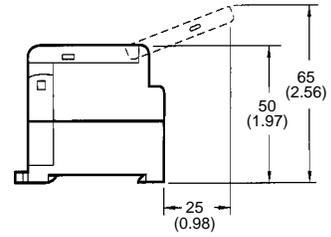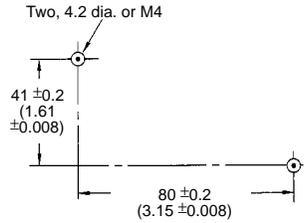
SRT1-ROC16, SRT1-ROF16
SRT2-ROC16, SRT2-ROF16

Mounting Holes

Two, 4.2 dia. or M4

155 (6.10)
135
50
40
54 (2.12)
21.5
11.5
Thirty-two, M3
7
6
50 (1.97)
41
6
31
65 (2.56)
50 (1.97)
25 (0.98)

41 ±0.2 (1.61 ±0.008)
135 ±0.2 (5.31 ±0.008)

5
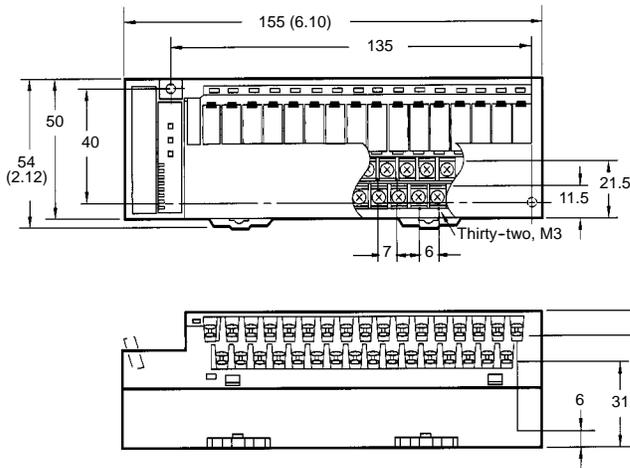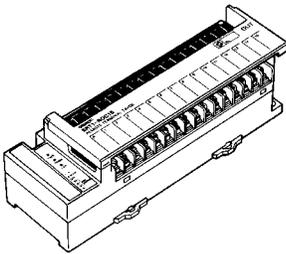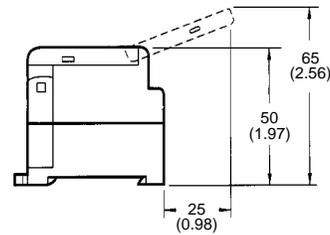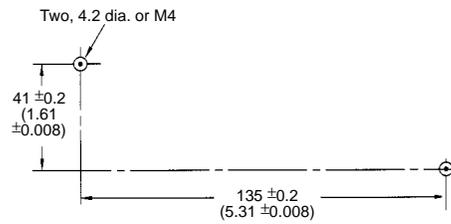
Installation

■ INTERNAL CIRCUIT CONFIGURATION

SRT1-ROC08
SRT2-ROC16
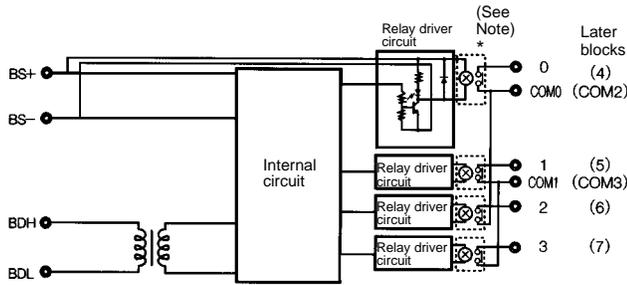
Note: The G3DZ-2R6PL Power MOSFET Relay is inserted into this portion of the SRT□-ROF08 and SRT□-ROF16.

■ EXTERNAL CONNECTIONS
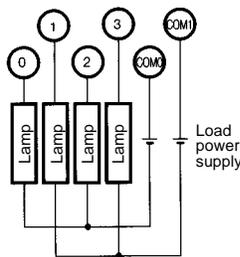
■ TERMINAL ARRANGEMENT AND I/O DEVICE CONNECTION EXAMPLE

Output

SRT2-ROC16
SRT2-ROF16
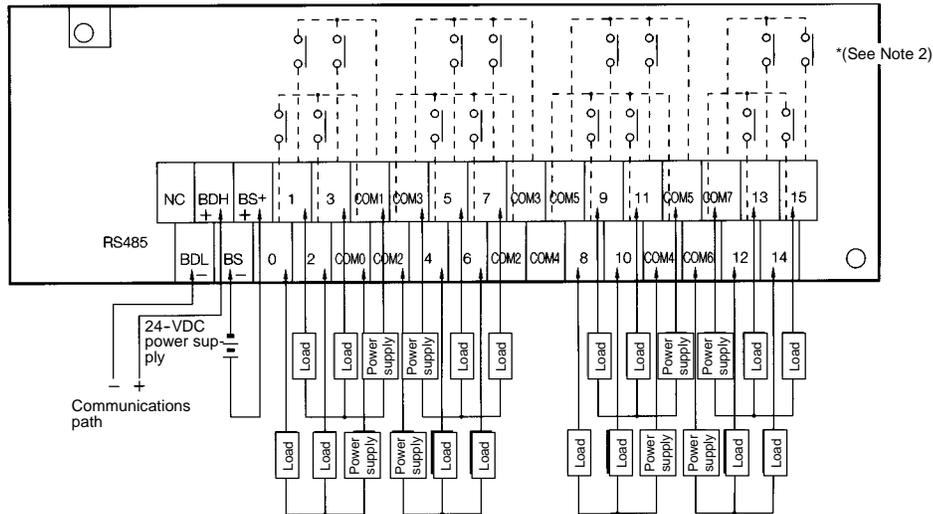
Note: 1. Dotted lines indicate internal connections.
SRT□-ROC08 and SRT□-ROF08 have the 0 to 7 and COM0 to COM3 terminals only.
2. The above is a connection example of the SRT□-ROC16 with G6D Relays mounted.
G3DZ Power MOSFET Relays are mounted to the SRT□-ROF08 and SRT□-ROF16.

Precautions

Refer to the *CompoBus/S Operation Manual (W266)* before using the Unit.

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NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.