

## Relay Output Modules

GT1-ROS16/ROP08

### Relay Output Module Compatible with MULTIPLE I/O TERMINAL

- 8- and 16-point relay output models are available.
- Dimensions of 8-point model:  
160 x 60 x 65 (W x H x D)
- Dimensions of 16-point model:  
160 x 60 x 65 (W x H x D)
- DIN track mounting.



### Ordering Information

I/O classification	Relay model	I/O points	Terminal	Power supply voltage	I/O specification	Model
Relay output	G6D-1A (24 VDC)	16	M3 terminal block	24 VDC	2 A/SPST-NO	GT1-ROS16
	G2R-1-SN (24 VDC)	8			5 A/SPST-NO	GT1-ROP08

**Note:** A communications cable, GCN1-004, is included with each module.

### Specifications

#### ■ Characteristics

I/O power supply voltage	24 VDC +10%/-15%			
Current consumption (See note.)	I/O Module interface		I/O power supply	
	GT1-ROP08	40 mA max.	GT1-ROP08	350 mA max.
	GT1-ROS16	50 mA max.	GT1-ROS16	250 mA max.
Connecting Units	8			
Dielectric strength	500 VAC (between isolated circuits)			
Noise immunity	±1,500 V (p-p) for 10 minutes with a pulse width of 0.1 to 1 μs			
Vibration resistance	10 to 55 Hz, 1.0-mm double amplitude or 70 m/s <sup>2</sup>			
Shock resistance	200 m/s <sup>2</sup>			
Mounting method	35-mm DIN track mounting			
Mounting strength	No damage when 100 N pull load was applied in all directions			
Terminal strength	No damage when 100 N pull load was applied			
Screw tightening torque	0.3 to 0.5 N • m			
Ambient temperature	Operating: -10°C to 55°C (with no icing or condensation)			
	Storage: -25°C to 65°C (with no icing or condensation)			
Ambient humidity	Operating: 25% to 85%			

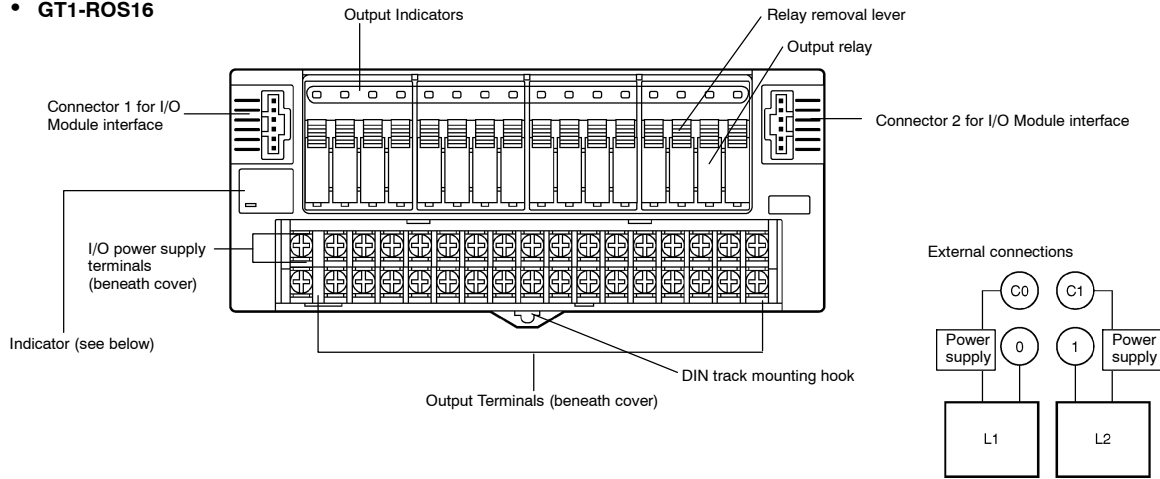
**Note:** The above current consumption is a value with all the points turned ON including the current consumption of the relay coils.

■ Relay Output Specifications

Item	G6D-1A	G2R-1-SN
Maximum contact current	2 A	5 A
Minimum applicable load (reference values)	5 VDC, 10 mA	5 VDC, 100 mA
Electrical life expectancy	100,000 operations min. with switching frequency of 1,800 operations per hour (at ambient temperature of 23°C with rated load)	
Mechanical life expectancy	20,000,000 operations min. with switching frequency of 18,000 operations per hour (at ambient temperature of 23°C with rated load)	

Nomenclature

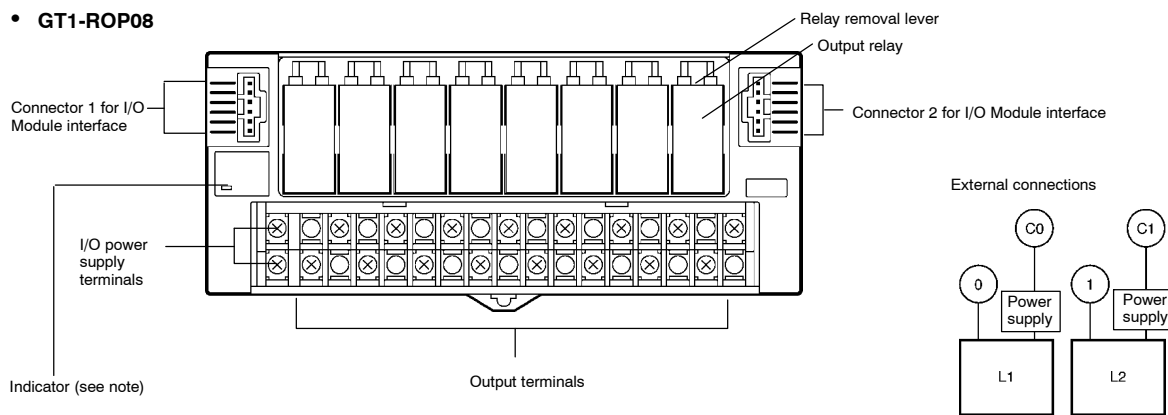
• GT1-ROS16



Indicators

Indicator	Display	Color	Meaning
TS	Lit	Green	The Module is normal.
	Lit	Red	The I/O Module interface has an error.
	Not lit	---	No power is supplied to the Module or the Module is being initialized.

• GT1-ROP08

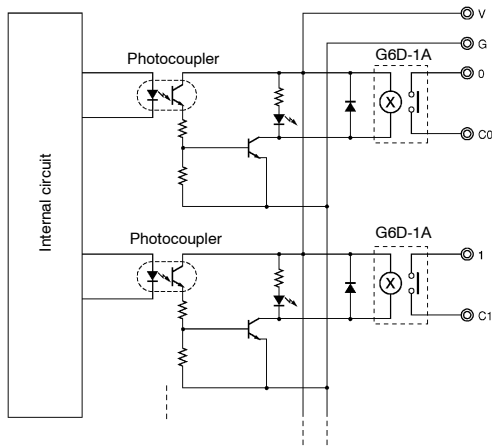


**Note:** The indicators for the GT1-ROP08 are the same as for the GT1-ROS16.

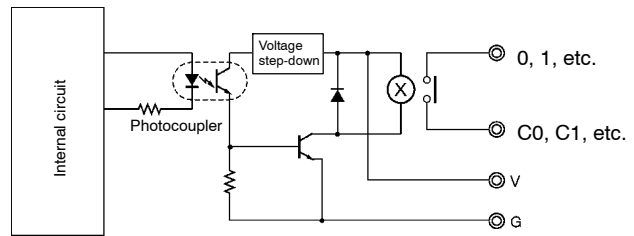
# Operation

## Internal Circuit Configuration

GT1-ROS16



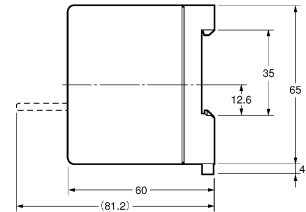
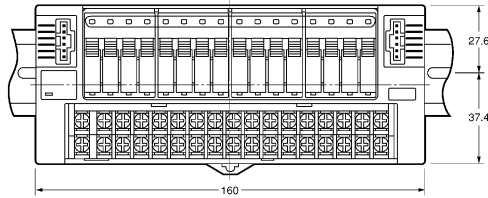
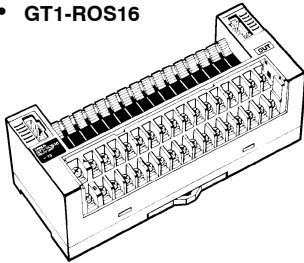
GT1-ROP08



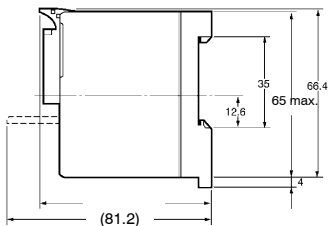
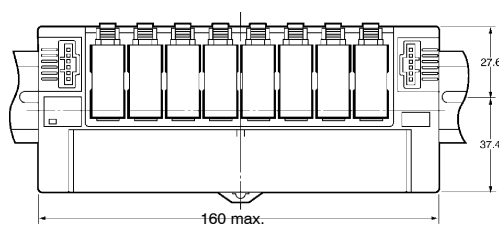
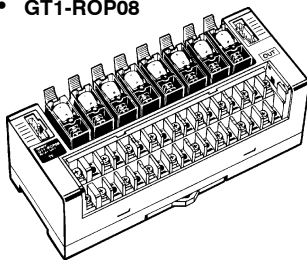
# Dimensions

Note: All units are in millimeters unless otherwise indicated.

• GT1-ROS16



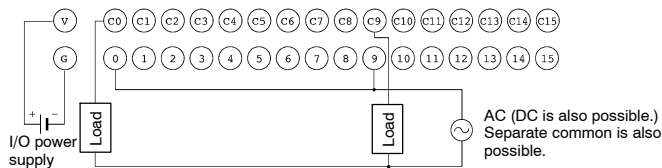
• GT1-ROP08



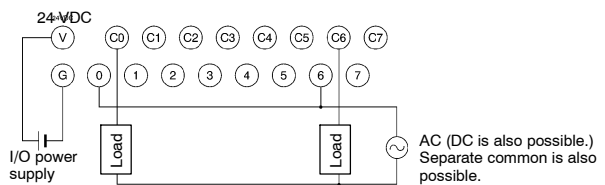
# Installation

## Wiring

GT1-ROS16



GT1-ROP08



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

**OMRON**<sup>®</sup>  
**OMRON ELECTRONICS, INC.**  
One East Commerce Drive  
Schaumburg, IL 60173  
**1-800-55-OMRON**

**OMRON CANADA, INC.**  
885 Milner Avenue  
Scarborough, Ontario M1B 5V8  
**416-286-6465**