Relay Output Units

GT1-ROS16/ROP08/FOP08

Relay Output Unit Compatible with MULTIPLE I/O TERMINAL

- 8- and 16-point relay output models are available.
- Equipped with 8-point SSRs.
- · DIN track mounting.





Ordering Information

I/O classification	I/O points	I/O connections	Power supply voltage	I/O specification	Model
Relay output	16	M3 terminal block	24 VDC	2 A, SPST-NO	GT1-ROS16
	8			5 A, SPST-NO	GT1-ROP08
SSR	8				GT1-FOP08

General Specifications

I/O power supply voltage	20.4 to 26.4 VDC (24 VDC -15%/+10%)					
	I/O Unit	interface	I/O power supply			
C	GT1-ROP08	40 mA max.	GT1-ROP08	350 mA max.		
Current consumption *	GT1-FOP08	40 mA max.	GT1-FOP08			
	GT1-ROS16	50 mA max.	GT1-ROS16	250 mA max.		
Connectable Units	8					
Dielectric strength	500 VAC (between isolated circuits)					
Noise immunity	Conforms to IEC 61000-4-4, 2 kV (power line)					
Vibration resistance	10 to 55 Hz, 1.0-mm double amplitude or 70 m/s ²					
Shock resistance	200 m/s ²					
Mounting method	DIN 35 mm-track mounting					
Mounting strength	No damage when 100 N pull load was applied in all directions			ons		
Terminal strength	No damage when 100 N pull load was applied					
Screw tightening torque	0.3 to 0.5 N·m					
Ambient operating temperature	ture -10°C to 55°C					
Ambient operating humidity	ng humidity 25% to 85% (with no icing or condensation)					
Ambient storage temperature	-25°C to 65°C					
Accessories	cessories I/O Unit Connecting Cable (40 mm)					

^{*} The above current consumption is a value with all the points turned ON including the current consumption of the relay coils.

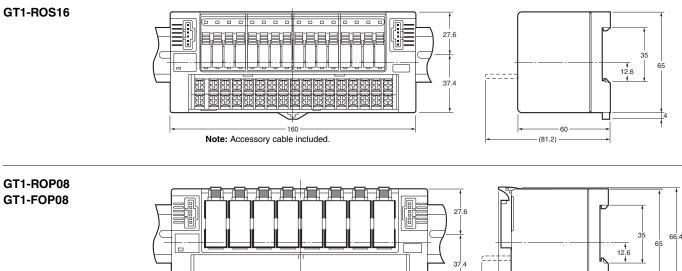
Relay Output Specifications

Item Model	GT1-ROS16	GT1-ROP08	GT1-FOP08
Relay model	G6D-1A (24 VDC)	G2R-1-SN (24 VDC)	G3R-ODX02SH-UTU (5 to 24 VDC)
Maximum contact current	2 A	5 A	0.01 to 1.5 A
Minimum applicable load (reference values)	5 VDC, 10 mA	5 VDC, 100 mA	4 to 48 VDC
Electrical life expectancy	100,000 operations min. with switching freque (at ambient temperature of 23°C with rated load		
Mechanical life expectancy	20,000,000 operations min. with switching free (at ambient temperature of 23°C with rated load		

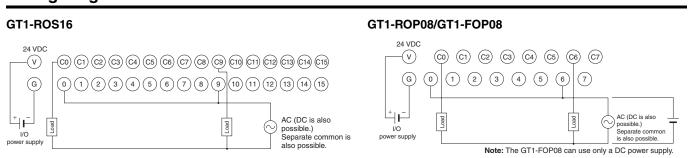
68

Internal Circuit Configuration

GT1-ROS16 GT1-ROP08 O V 24 VDC **⊚** G 0, 1, etc. G6D-1A **O** 0 \otimes * Internal \otimes Photocoupler O C0, C1, etc. circuit © C0 - ♥ V 24 VDC **-**⊚ G Internal circuit GT1-FOP08 G6D-1A Photocoupler (X)0, 1, etc. - © C1 SSR Internal Photocoupler © C0, C1, etc. circuit ∇ 24 VDC -**⊚** G **Dimensions** (Unit: mm) 27.6



Wiring Diagrams



160

Note: Accessory cable included.

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- · Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

2009.8

In the interest of product improvement, specifications are subject to change without notice.

