

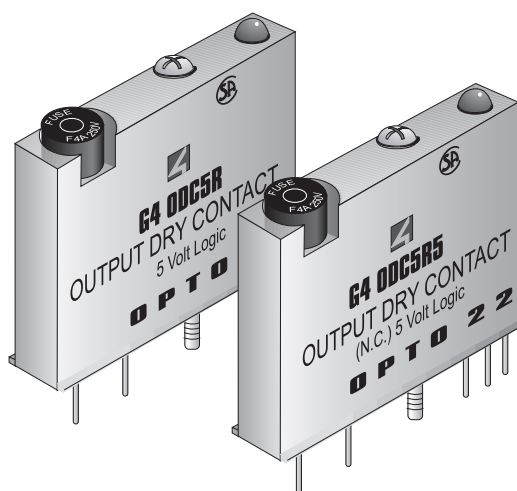
Description

Opto 22's G4 family of modules includes two dry-contact, low-contact-resistance DC output modules, the G4ODC5R and the G4ODC5R5.

The G4ODC5R is a single-pole, single-throw, normally open mechanical relay (Form A, SPST-NO). The G4ODC5R5 is a single-pole, single-throw, normally closed mechanical relay (Form B, SPST-NC).

Typical applications for these dry-contact modules include analog signal and communication line multiplexing.

Part Number	Description
G4ODC5R	G4 Reed Relay Output, 5 VDC Logic
G4ODC5R5	G4 Reed Relay Output, 5 VDC Logic, NC



Features

- Contact switching voltage of 100 VDC or 130 VAC maximum
- Contact switching current of 0.5 A maximum
- Contact resistance of 200 mΩ maximum
- Mechanical life of 5x10⁶ cycles
- Coil 5 VDC at 14 mA
- Operating temperature: -30° C to 70° C
- CE approved
- Passes NEMA Showering Arc Test (ICS 2-230)
- Meets IEEE Surge Withstand Specification (IEEE-472)

Specifications

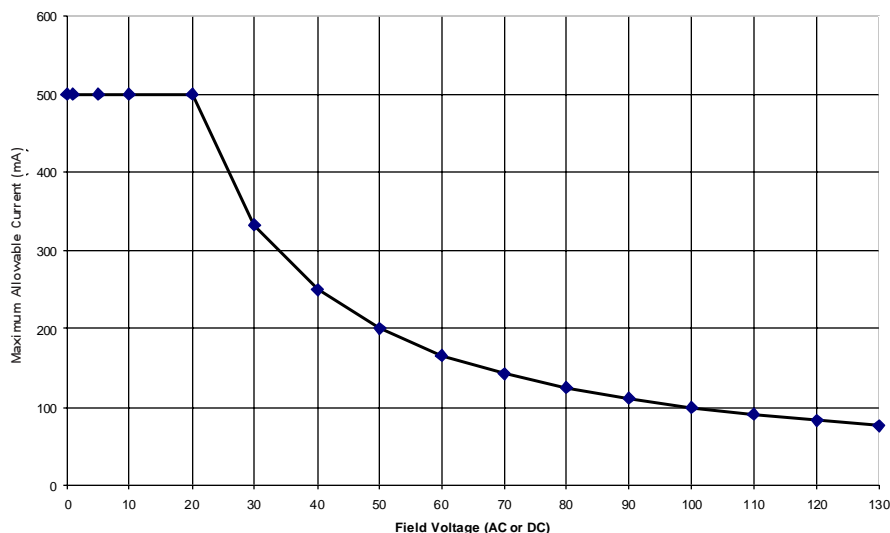
	Units	G4ODC5R ^{ab}	G4ODC5R5 ^{ab}
Contact form		Form A SPST mechanical relay	Form B SPST mechanical relay
Normal position	-----	Open	Closed
Line Voltage - Range	VDC VAC	0-100 VDC 0-130 VAC (see note 1)	0-100 VDC 0-130 VAC (see note 1)
Current Rating 0°C to 70°C Ambient	Amps	0.5 Switching (see note 1)	0.5 Switching (see note 1)
Contact rating	VA	10	10
Switching voltage	VDC VAC	100 max 130 max	100 max 130 max
Switching current	A max	0.5	0.5
Carry current	A max	1.5	1.5
Contact resistance	mΩ	200	200
Turn-on time	μs	500	500
Turn-off time	μs	500	500
Contact bounce	μs	250	250
Mechanical life	cycles	5 x 10 ⁶	5 x 10 ⁶
Logic voltage range	VDC	4.8-6	4.8-6
Logic pickup voltage ^a	VDC	0.8	0.8
Logic dropout voltage ^a	VDC	3.8	3.8
Logic input current at nominal logic voltage	mA	14	14
Isolation voltage Input-to-output	VDC	1,500	1,500
Ambient temperature: Operating Storage	°C °C	0 to 70 -60 to +105	0 to 70 -60 to +105
^a Pickup and dropout voltages are measured from 5 VDC logic ground.			
^b Also available with an FM rating; add FM to the part number (example: G4ODC5RFM).			

* Note 1:

The power rating of the dry contact module must not exceed 10 VA under steady state or momentary in-rush conditions. For voltages at or below 20 volts, the current limit is 0.5 amps. For voltages above 20 volts, the maximum allowable current is determined by the following equation:

$$\frac{10 \text{ VA}}{\text{Voltage}} = \text{Current maximum}$$

10 VA RATING FOR REED RELAY (DRY CONTACT) MODULES

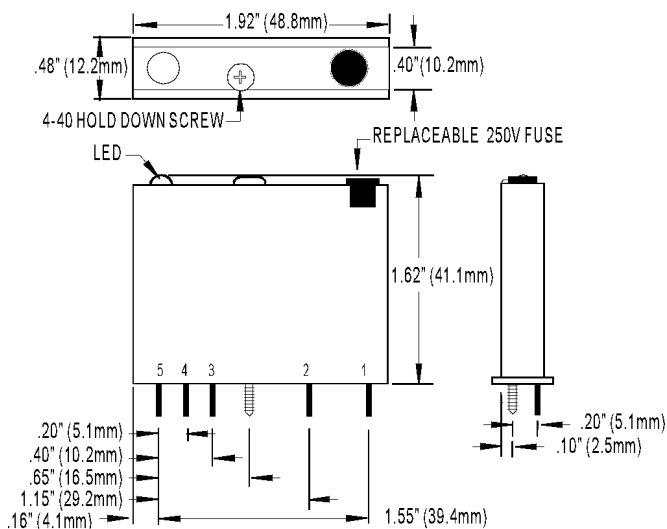


Current Limit at Key Voltages	
V	mA
5	500
12	500
24	416
100 ¹	100
120	83
130 ²	76

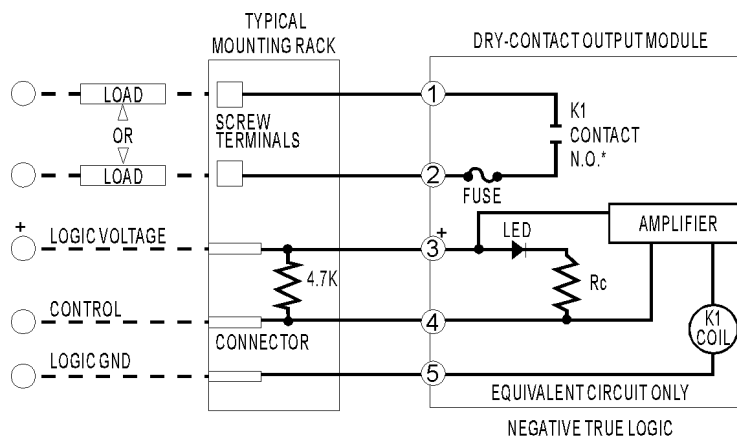
Note 1: Maximum DC voltage is 100 VDC.

Note 2: Maximum AC voltage is 130 VAC.

Dimensions



Schematics



Note: Also compatible with Totem Pole or Tri-State Output.
Will not plug into G4PB4R mounting rack.

* Normally open for G4ODC5R, normally closed for G4ODC5R5.

Products

Opto 22 produces a broad array of reliable, flexible hardware and software for industrial automation and remote monitoring. Opto 22's diverse and complete product range allows you to buy in at any level, from solid-state relays to fully integrated control systems.

SNAP Ultimate I/O™

The most intelligent and powerful I/O system available, SNAP Ultimate I/O effectively combines I/O, control, networking, and enterprise connectivity into a single cohesive system. SNAP Ultimate I/O has the ability to communicate *directly* with enterprise systems, eliminating the need for complex middleware and the significant investments associated with it. Software and utilities for use with SNAP Ultimate I/O include ioControl™ flowchart-based control programming software and ioDisplay™, a Windows-based HMI development package.



SNAP Ethernet I/O™

Using SNAP Ethernet I/O systems, you can connect a wide variety of electronic and mechanical devices such as lights, temperature and pressure sensors, motors, and serial devices to computers via a standard Ethernet network, wireless LAN, or even the Internet.



SNAP-IT™ Systems

A packaged solution that brings industry-proven SNAP Ethernet technology to your enterprise faster and easier than ever before, SNAP-IT is a network-ready hardware appliance that connects environmental, device, and other sensors directly to your enterprise applications. The connected devices can then be controlled and real-time operational data can be collected, monitored, and delivered via a standard Ethernet, wireless LAN, or dial-up network.



Opto 22 FactoryFloor™ Software

FactoryFloor is an integrated suite of industrial control software applications designed to help you develop control automation solutions, build easy-to-use operator interfaces, and expand your manufacturing systems' connectivity.



Other Software and Hardware

Software developer kits (SDKs), diagnostic utilities, support for the Linux operating system, and a full line of SNAP industrial controllers are also available from Opto 22.



Quality

In delivering hardware and software solutions for worldwide device management and control, Opto 22 retains the highest commitment to quality.

We do no statistical testing; each product is made in the U.S.A. and is tested twice before leaving our 160,000 square-foot manufacturing facility in Temecula, California. That's why we can guarantee solid-state relays and all optically-isolated I/O modules *for life*.

Product Support

Opto 22's Product Support Group offers comprehensive technical support for Opto 22 products. The staff of support engineers represents years of training and experience, and can assist with a variety of project implementation questions. Product support is available in English and Spanish from Monday through Friday, 8 a.m. to 5 p.m. Pacific Standard Time.

Opto 22 Web Sites

www.opto22.com
www.m2m.opto22.com
www.internetio.com (live Internet I/O demo)
www.ultimateio.com (SNAP Ultimate I/O information)

Other Resources

- OptoInfo CDs
- Ongoing, up-to-date training
- Integration support
- FaxBack service: (800) 474-OPTO

About Opto 22

Founded in 1974, Opto 22 is a leading manufacturer



of high-quality hardware and software solutions for connecting real-world devices with computer networks. Customer applications include enterprise management, remote

monitoring and control, industrial automation, and data acquisition. Opto 22 was one of the first companies to recognize and implement solutions involving networks, computers, and real-world equipment and devices. More than 75 million devices worldwide are reliably connected to Opto 22 systems.