

These products are obsolete.

OBSOLETE G4 DIGITAL DRY CONTACT OUTPUT MODULES TECHNICAL NOTE

This technical note contains information you may need about obsolete G4 digital dry contact output modules you're still using. Included are part numbers, descriptions, specifications, wiring diagrams, and dimensional drawings. In most cases, these parts have been removed from data sheets because we no longer sell them.

This document includes information on the following obsolete G4 Digital Dry Contact Output modules :

Part	Description
G4ODC5RFM	G4 Dry Contact Output, 5 VDC Logic, Normally Open
G4ODC5R5FM	G4 Dry Contact Output, 5 VDC Logic, Normally Closed

Note: Part numbers ending in FM were Factory Mutual approved prior to 2024.

- Specifications begin on [page 3](#)
- Dimensions begin on [page 5](#).
- Schematics begin on [page 5](#).

For Help

As always, if you are using Opto 22 products and cannot find the help you need in this technical note, contact Opto 22 Product Support. Product support is free.

Phone: 800-TEK-OPTO
(800-835-6786 toll-free in the U.S. and Canada)
951-695-3080
Monday through Friday,
7 a.m. to 5 p.m. Pacific Time

NOTE: Email messages and phone calls to Opto 22 Product Support are grouped together and answered in the order received.

Email: support@opto22.com

Opto 22 website: www.opto22.com

When calling for technical support, be prepared to provide a complete description of your hardware and operating system to the Product Support engineer.

This information should include:

- accessories installed
- type of power supply
- types of I/O modules and racks used
- third-party devices installed
- how the system is wired



G4 DIGITAL AC OUTPUT MODULES

Note: FM parts are no longer available, please contact Pre-Sales Engineering for more information.

For information about current G4 Digital Dry Contact Output Modules, see form 0364, G4 Digital Dry Contact Output Modules, Data Sheet.

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 modules include analog signal and communication line multiplexing.

Because of their low 10 VA rating, these modules are not recommended for inductive or capacitive loads (even very small loads), because the inrush current is likely to exceed the 10 VA rating.

IMPORTANT: Applications using 120 VAC are typically NOT suited to these modules. If you are considering using one of these modules for any application other than low-voltage purely resistive loads, see the detailed notes and rating curve on [page 2](#), and call Pre-sales Engineering for specific guidance.

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SPECIFICATIONS

	Units	G4ODC5RFM*	G4ODC5R5FM*
Contact form		Form A SPST mechanical relay	Form B SPST mechanical relay
Normal position		Open	Closed
Contact rating	VA	10	10
Maximum switching voltage (see NOTE)	VDC	100	100
	VAC	130	130
Maximum switching current	A	0.5 (see NOTE)	0.5 (see NOTE)
Contact resistance	Milliohms	200	200
Turn-on time	microseconds	500	500
Turn-off time	microseconds	500	500
Contact bounce	microseconds	250	250
Mechanical life	cycles	5 million	5 million
Logic voltage range	VDC	4.8–6	4.8–6
Logic OFF voltage range	VDC	0.0–0.8	0.0–0.8
Logic ON voltage range	VDC	3.8–6	3.8–6
Indeterminate range	VDC	0.8–3.8	0.8–3.8
Logic input current at nominal logic voltage	milliamps	14	14
Isolation voltage (transient) input-to-output	VDC	1,500	1,500
Ambient temperature:			
Operating	°C	0 to 70	0 to 70
Storage	°C	-60 to +105	-60 to +105
Agency Approvals		CE, CSA, UKCA	CE, CSA, UKCA

* Obsolete parts, please contact Pre-Sales Engineering for more information.

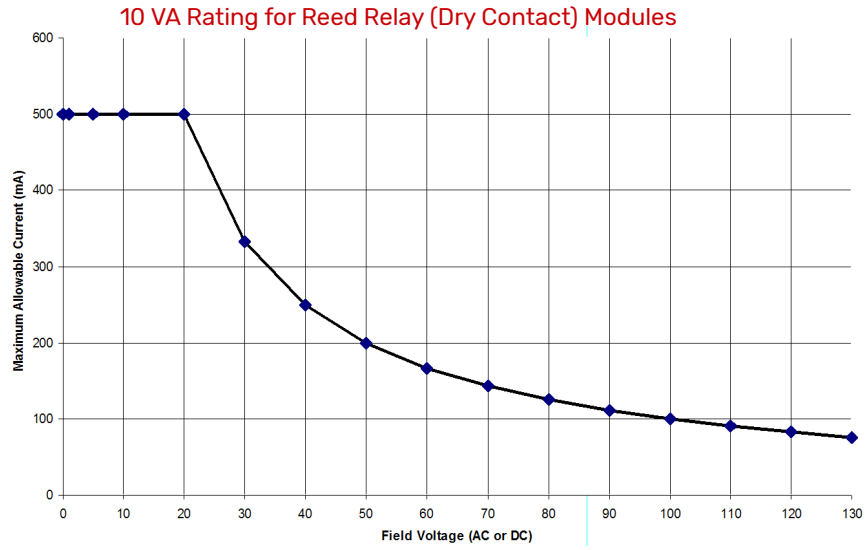
NOTE: The application of the dry contact module must not exceed 10 VA under steady-state or momentary in-rush conditions.

- 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:

Maximum Current = 10 VA / Voltage



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Current Limit at Key Voltages

V	mA
5	500
12	500
24	416
100 ¹	100
120	83
130 ²	76

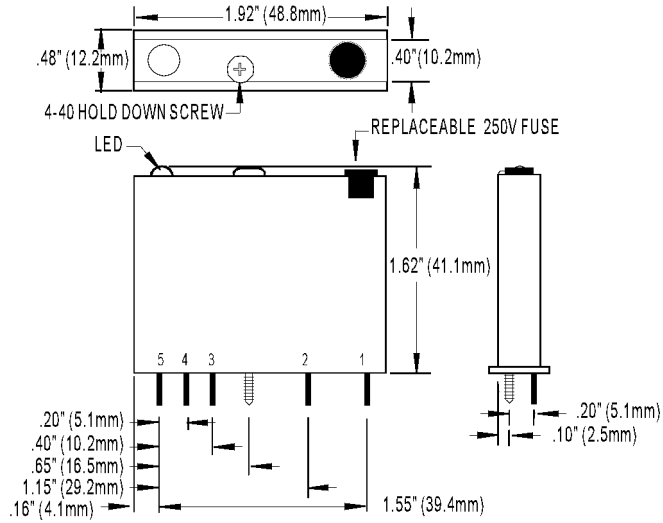
¹ Maximum DC voltage is 100 VDC.

² Maximum AC voltage is 130 VAC.



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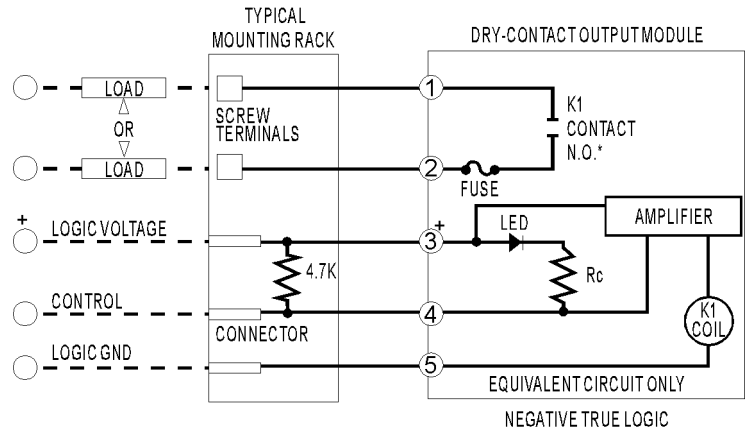
DIMENSIONS



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.



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

TYPICAL WIRING EXAMPLES

* Normally open for G4ODC5R, normally closed for G4ODC5R5.

NOTE: Commutating diode* must be used on inductive loads (Typical: 1N4005)

