

DRY Contact Output Modules

G-1AMP Series

G-Type I/O

I/O Compatibility

G-Series
'G4' types
'C4' types
'G5' types

Overview

G-1AMP5 and G-1AMP5-B Type DRY OUTPUT modules fit a wide range of applications from 125 Vdc Power Plant Controls to AC Control Systems as well as Telco and Communications Switching circuits by complying with FCC Part 68.302 and 68.304 surge and dielectric rating requirements.

This series is available with full ratings in both FORM 1A (normally open) and FORM 1B (normally closed) types and provides control of AC, DC and composite voltages with zero off-state leakage current. Direct compatibility with industry standard I/O mounting racks and high reliability make this series ideal for harsh industrial control applications. The input is active-low and is compatible with TTL, CMOS and open-collector logic control signals. Available types include 5V, 12V, 15V and 24V logic operation.

Control System "power-down" defaults are easily configured by selecting FORM 1A and FORM 1B contacts for predetermined I/O points for fail-safe applications.



Product Features

- ▶ AC/DC Switching
- ▶ Integral LED Indicator
- ▶ G4, 70G, C4 Compatible
- ▶ 3 mS Switching Time (max)
- ▶ Black I/O Case
- ▶ High Reliability
- ▶ Captive #4-40 Screw
- ▶ 250VAC/125VDC, 1A, 60W
- ▶ Encapsulated Design
- ▶ Operating Temp -40°C to +70°C
- ▶ 3 Year Limited warranty**
- ▶ (N.O.) FORM 1A Standard
- ❖ (N.C.) FORM 1B (-B suffix)
- ❖ 4 pin version available (all types)

Available in 5V, 12V, 15V & 24V Logic Voltages.

Recommended Operating Parameters

SYMBOL	PARAMETER	LIMITS			UNIT	CONDITION
		MIN	TYP	MAX		
Vcc	Supply Voltage (G-1AMP5) (G-1AMP12) (G-1AMP15) (G-1AMP24)	4.50 10.00 13.50 21.60		5.25 14.00 18.00 28.00	Vdc	Pins 3 & 5
Icc	Supply Current		40	50	mAdc	K Energized
TA	Ambient Temp.	-40		+70	°C	Operating
ton	Pick-up Time (operate)		3		mSEC	
toff	Dropout Time (release)		2		mSEC	
VIL	Input Logic Voltage Low		1.0	0.8	V	G-1AMP5
VIH	Input Logic Voltage High	3.0	2.4		V	G-1AMP5
Ri	Insulation Resistance	10 ¹⁰				OHMS @ 20°C
IIL	Input Logic Low Current		-1.5	-2.5	mA	G-1AMP5, Note 1

Output Contact Ratings

SYMBOL	PARAMETER	LIMITS			UNIT	CONDITION
		MIN	NOM	MAX		
Vsw	Switching Voltage		125/250	150/300	Vdc/ac	125VA max
Isw	Switching Current	0.01		1	Amps	Notes 2, 3
VAsw	Switching Power			125/60	VA/W	

Note(s):

1. No input sourcing current is required. Unit may be driven by an Open-Collector logic circuit. (IIL = -7.5mA @ 24V LOGIC.)
2. Non-Inductive Load Rated.
3. Maximum switching current is rated @ 2 Amps up to 30 Vdc/ac. The contacts are derated at higher switching voltages to 60W or 125VA max load.
4. Models with 4 pins (S4 suffix) do not have pin 5 shown.

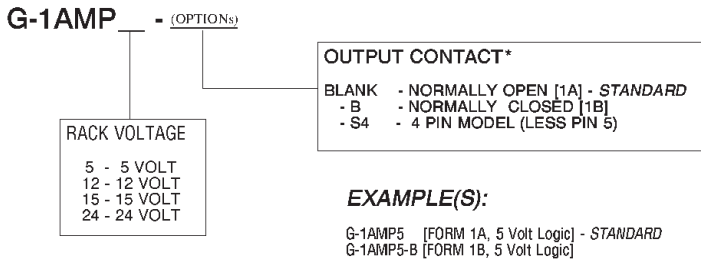
** Refer to warranty section for limited warranty details.

*Absolute Maximum Ratings

Supply Voltage (between pins 3 & 5)...	See Vcc below
Logic Input (pins 4 & 5).....	$\pm V_{CC}$
Contact Voltage (pins 1 & 2).....	150/300Vdc/Vac
Contact Switching Current.....	2 Amp
Contact Rating.....	60W /125VA
Ambient Operating Temperature	-40 to +70°C

***NOTE:** STRESSES ABOVE THOSE LISTED UNDER ABSOLUTE MAXIMUM RATINGS MAY CAUSE PERMANENT DEVICE DAMAGE. OPERATION AT THESE RATINGS FOR EXTENDED PERIODS MAY AFFECT RELIABILITY.

Part Numbering



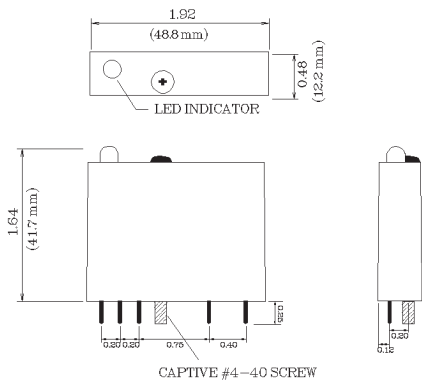
Contact Arrangements

	--- Output Contact ---	
	FORM 1A	FORM 1B
Power off	Open	Closed
Power on		
Pin 4 logic low [COIL ENERGIZED]	Closed	Open
Power on		
Pin 4 logic high [COIL DE-ENERGIZED]	Open	Closed

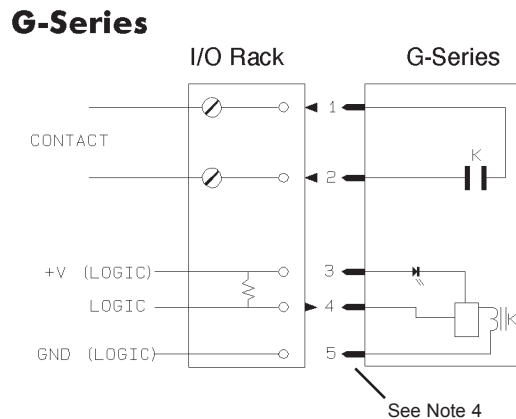
Operation

As a versatile Dry Contact output module, the G-1AMP5 employs an electromechanical Relay contact (pins 1 & 2). The standard model is a FORM 1A, normally open relay (FORM 1B is optional). Refer to Contact Arrangements (above).

Dimensions



Connection Diagram



Dimensions are in inches except where noted otherwise.