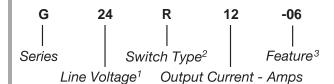


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Part Number	Description
G24R12-06	12A, 280 Vac
G24D12-06	12A, 280 Vac

# **Part Number Explanation**



#### NOTES

- 1) Line Voltage (nominal): 24 = 240 Vac
- 2) Switch Type: R = Random turn-on; D = Zero-cross turn-on 3) Feature: -06 = Faston terminals

#### **MECHANICAL SPECIFICATION**

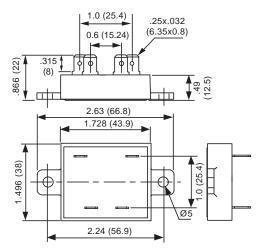
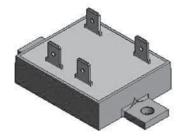


Figure 1 — G relays; dimensions in inches (mm)

#### INPUT (CONTROL) SPECIFICATION

B.4 ---

	win	wax	Units
Control Range			
G24R	3	32	Vdc
G24D	4	32	Vdc
Input Current Range			
G24R	2	30.5	mAdc
G24D	3	30.5	mAdc
Must Turn-Off Voltage	/lust Turn-Off Voltage		Vdc
Input Resistance (Typical)		1000	Ohms
Reverse Voltage Protection		32	V



### **FEATURES/BENEFITS**

- · Miniature size package
- · Power and control connections by Faston terminals
- Internal VDR protection
- · Excellent thermal performance
- High immunity to surges

### **DESCRIPTION**

The Series G relays are designed for medium-power loads. The design incorporates a thyristor output. The Series G relays utilize optical isolation to protect the control from load transients. An internal MOV is also provided to protect against transient voltages. Its compact size makes it ideal for designs where space is limited.

#### **APPLICATIONS**

- Heating control
- Motor control
- · Light dimmers
- Industrial and process control
- On/Off controls of medium-power AC equipment

# **APPROVALS**

UL pending.

# **CONTROL CHARACTERISTIC**

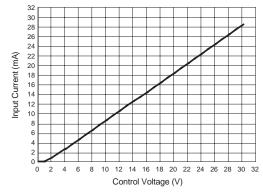


Figure 2 — G relays

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OUTPUT (LOAD) SPECIFICATION							
Mir	n Max	Units					
Operating Range (See Note 1) 12	320	Vrms					
MOV Clamping Voltage @ 1mA	520	V					
Output Current Range .00	1 12	Arms					
Maximum Surge Current Rating (Non-Repetitive)							
See Figure 4	260	А					
On-State Voltage Drop 0.75	(le)+0.02(le) <sup>2</sup>	V					
Zero-Cross Window (Typical)							
G24R R	NA						
G24D D	±12	Vac					
Off-State Leakage Current (60Hz	z) 0.1	mA					
Turn-On Time (60 Hz)							
FS24R	0.1	ms					
FS24D	8.3	ms					
Turn-Off Time (60 Hz)	8.3	ms					
Off-State dv/dt	500	V/μs					
Maximum di/dt (Non-Repetitive)	50	A/μs					
Operating Frequency Range 0.7	1 440	Hz					
I <sup>2</sup> t for Match Fusing (<8.3ms)	340	A <sup>2</sup> S					
Thermal Resistance Junction to	Case 5.6	°C/W					

# **ENVIRONMENTAL SPECIFICATION**

	Min	Max	Units
Operating Temperature	-40	100	°C
Storage Temperature	-40	100	°C
Input-Output Isolation	4000		Vrms
Output-Case Isolation	4000		Vrms
Rated Impulse Voltage	4000		Vi

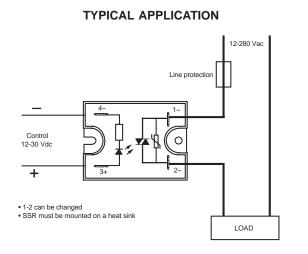


Figure 3 — G relays

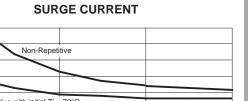


Figure 4 — G relays output current

t(s)

0.1

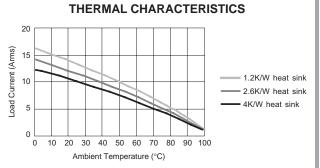


Figure 5 — G relays output current

# NOTES:

250 200

- 1. Maximum voltage limited by MOV.
- 2. Electrical specifications at 25°C unless otherwise specified.
- 3. For 800Hz applications, contact factory.
- 4. For additional/custom options, contact factory.

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