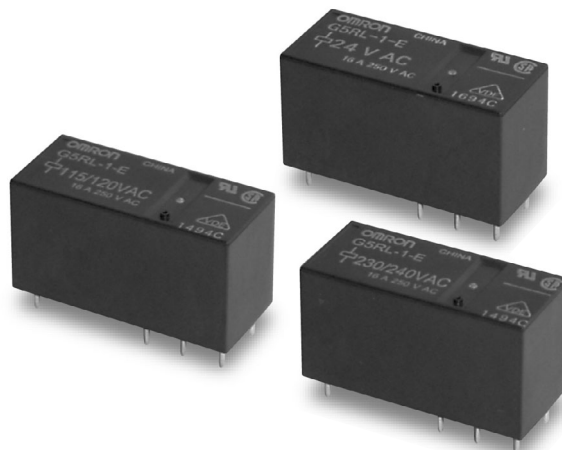


PCB Relay

G5RL(AC)

A Single-pole, 16-A Power Relay with AC Coil

- 29.0 × 12.7 × 15.7 mm (L × W × H)
Low profile: 15.7 mm in height
- UL class F insulation available.
- Clearance and creepage distance
Between coil and contacts: 8 mm/8 mm
Between contacts of the same polarity: 3 mm/4 mm
- Environment friendly:
Cd, Pb and Chromium free.



Ordering Information

Classification		Enclosure ratings	Contact form	
			SPST-NO	SPDT
Class F	High capacity	Flux protection	---	G5RL-1-E

Note: When ordering, add the rated coil voltage to the model number.

Examples: G5RL-1-E 100 VAC
└─ Rated coil voltage

Model Number Legend:

G5RL- -
1 2 3 4

1. Number of Poles

1: 1 pole

2. Contact Form/Contact Construction

None: SPDT

3. Enclosure Rating

None: Flux protection

4. Classification

E: High-capacity

Specifications

■ Coil Ratings

Rated voltage	24 VAC	100 VAC	115 VAC/120 VAC		200 VAC	230 VAC/240 VAC	
Rated current at 50 Hz (mA)	31.30	7.50	5.85	6.25	3.75	3.00	3.13
Rated current at 60 Hz (mA)	28.30	6.88	5.35	5.70	3.45	2.76	2.88
Coil resistance (Ω)	443	8,220	11,600		33,000	47,600	
Must operate voltage	75% of rated voltage (max.)						
Must release voltage	15% of rated voltage (min.)						
Max. voltage	90% to 110% of rated voltage						
Power consumption	Approx. 0.75 VA						

- Note:**
1. The above items are measured at a coil temperature of 23°C.
 2. The tolerance of the rated current is +15%/-20%.
 3. Power consumption drop was measured at 50 Hz.
 4. Coil resistances are provided as reference values.

■ Contact Ratings

Load	Resistive load (cos φ=1)
Rated load	16 A at 250 VAC (NO), 16 A at 24 VDC (NO), 5 A at 250 VAC (NC), 5 A at 24 VDC (NC)
Rated carry current	16 A (NO), 5 A (NC)
Max. switching voltage	250 VAC, 24 VDC
Max. switching current	16 A (NO), 5 A (NC)
Max. switching capacity	4,000 VA AC (NO), 1,250 VA AC (NC) 384 W DC (NO), 120 W DC (NC)
Min. permissible load	40 mA at 24 VDC

■ Approved Standards

UL 508 (File No. E41643 Vol. 4 Sec.38) and CSA C22.2 No. 1, C22.2 No. 14 (Certificate No.: 1419093)

Model	Coil Rating	Contact rating
G5RL-1-E	24 to 240 VAC	16 A, 277 VAC General, 50,000 c - NO 16 A, 250 VAC General, 50,000 c - NO TV-5, 25,000 c - NO A 300 Pilot Duty, 720 VA, 240 VAC, 30,000 c- NO 1/2 Hp, 120 VAC, 6,000 c - NO 60 LRA/10 FLA, 250 VAC, 6,000 c - NO 5 A, 250 VAC General, 50,000 c - NC 5 A, 24 VDC Resistive, 50,000 c - NC

VDE DIN EN 61810-1 Edition 2 and EN60255-25 (Reg. No. A662)

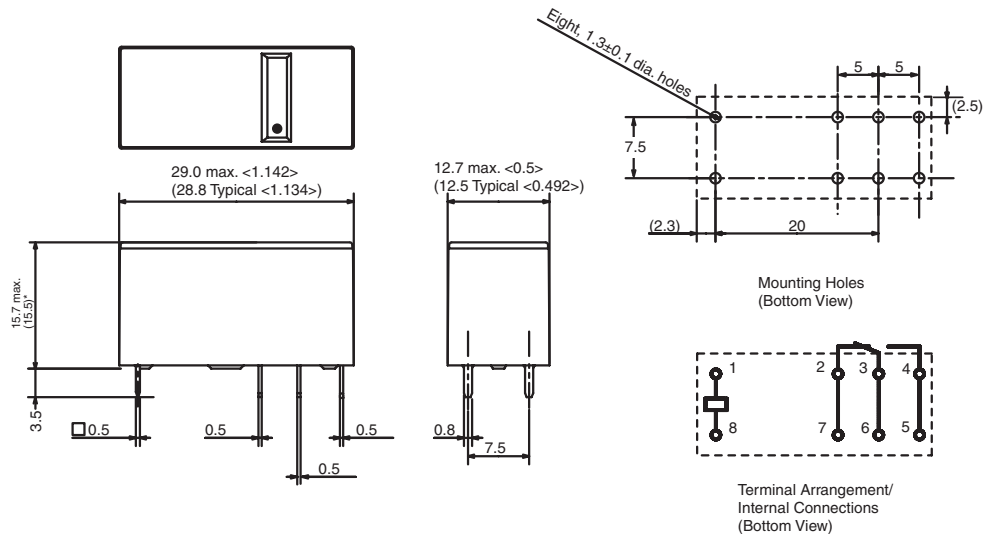
Model	Coil Rating	Contact rating
G5RL-1-E	24, 100, 115/120, 200, 230/240 VAC (50 Hz)	16 A, 250 VAC 15,000 c

■ Characteristics

Contact resistance	100 mΩ max.
Operate time	15 ms max.
Release time	5 ms max.
Max. switching frequency	Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr (under rated load)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	1,000 VAC, 50/60 Hz for 1 min. between contacts of same polarity 6,000 VAC, 50/60 Hz for 1 min. between coil and contacts
Impulse withstand voltage	10,000 V between coil and contacts, 1.2 × 50 μs
Vibration resistance	Destruction: 10 to 55 to 10 Hz, 1.5-mm double amplitude Malfunction: 10 to 55 to 10 Hz, 1.5-mm double amplitude
Shock resistance	Destruction: 1,000 m/s ² (approx. 100 G) Malfunction: 100 m/s ² (approx. 10 G)
Life expectancy	Mechanical: 10,000,000 operations min. (at 18,000 operations/hr) Electrical 50,000 operations min. (at 1,800 operations/hr, Resistive load, 16 A, 250 VAC, NO) (at 1,800 operations/hr, Resistive load, 16 A, 24 VDC, NO) (at 1,800 operations/hr, Resistive load, 5 A, 250 VAC, NC) (at 1,800 operations/hr, Resistive load, 5 A, 24 VDC, NC) 100,000 operations min. (at 1,800 operations/hr, Resistive load, 12 A, 24 VDC, NO)
Ambient temperature	Operating: -40°C to 70°C
Ambient humidity	Operating: 5% to 85%
Weight	Approx.: 10 g

Dimensions

Note: All units are in millimeters unless otherwise indicated.



Packaging

Note: All units are in millimeters unless otherwise indicated.

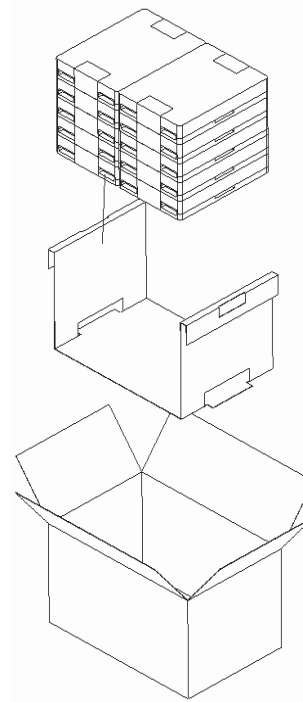
■ Polystyrene Tray Packing

- 1 Polystyrene tray = 100 relays
- 1 Sleeve = 5 polystyrene trays
- 1 Carton = 2 sleeves

= 1,000 relays

Weight = Approx. 12 kg per carton

- Size of polystyrene tray: 340 × 120 × 48 mm (L × W × H)
- Size of carton: 535 × 355 × 250 mm (L × W × H)



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 4. Delivery and shipping dates are estimates only.
 5. Seller will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.
11. Claims. Any claim by Buyer against Seller for shortage or damage to the Products occurring before delivery to the carrier must be presented in writing to Seller within 30 days of receipt of shipment and include the original transportation bill signed by the carrier noting that the carrier received the Products from Seller in the condition claimed.
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