



- Up to 40A /240VAC Continuous rating
- 110VDC Maximum switching voltage
- Industry standard style
- Cost effective



ROHS Compliant ✓

Contacts

Contact arrangement	SPST-NO (1 NO); SPDT (1 C/O)
Contact material	AgSnO ₂
Max. switching voltage	AC/DC 250VAC, 110VDC
Min. switching current / voltage	500mA / 12VDC
Max. continuous current	SPST-NO: 40A / SPDT: 40A (NO), 30A (NC)
Max. switching current	SPST-NO: 40A / SPDT: 40A (NO), 30A (NC)
Max. switching power	7200VA / 1100W
Initial resistance	≤100mΩ max. at 0.1A/6VDC

Coil

Nominal voltage	3...110VDC; 12...220VAC
Must release voltage	DC ≥ 0.1U _n ; AC ≥ 0.3U _n
Operating range	See tables 1 & 2
Rated power consumption	0.93W (DC), 1.2VA (AC)

Insulation

Insulation resistance	>100MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact 4000Vrms, 1min (50Hz)
	between open contacts 1500Vrms, 1min (50Hz)

General Data

Operating time	typ.	15ms
Release time	typ.	10ms
Electrical life (at rated load)	ops.	1 x 10 ⁵ (1s on / 1s off)
Mechanical life (no load)	ops.	1 x 10 ⁶

Environmental

Ambient temperature	operating	-40 to +125°C
	storage	-40 to +155°C
Shock resistance	functional	10g
	destructive	100g
Vibration resistance		DA 1.5mm 10-55Hz
Drop resistance		1M height drop on to concrete (sealed type only)
Dimensions	L x W x H	32x 27 x 29mm (excluding pins)
Weight	approx.	≤ 36g

Ordering Code

D G 3 8 - 3 0 2 1 - 3 0 - 1 0 1 2

Series

Coil code:

See tables

1 & 2

Contact material

30: AgSnO₂ (40A/30A)

Contact arrangement

11: SPDT (1 C/O)

21: SPST-NO (1 NO)

Environmental protection

3: In cover, sealed - IP67

7: Covered, dust cover

Mounting & terminations

0: PCB + QC Terminals for contacts

Notes:

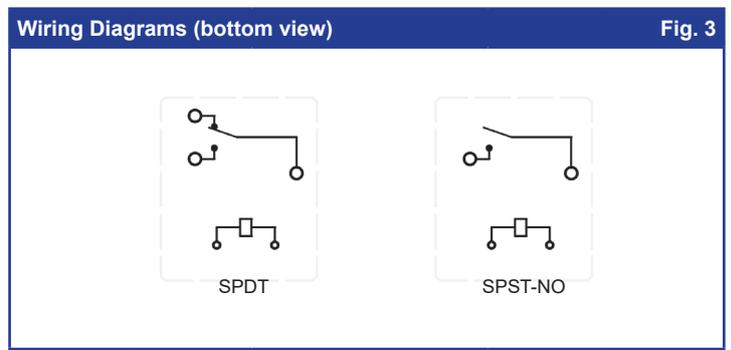
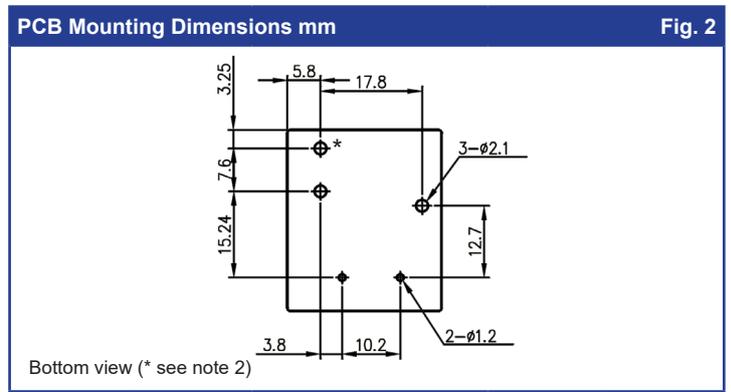
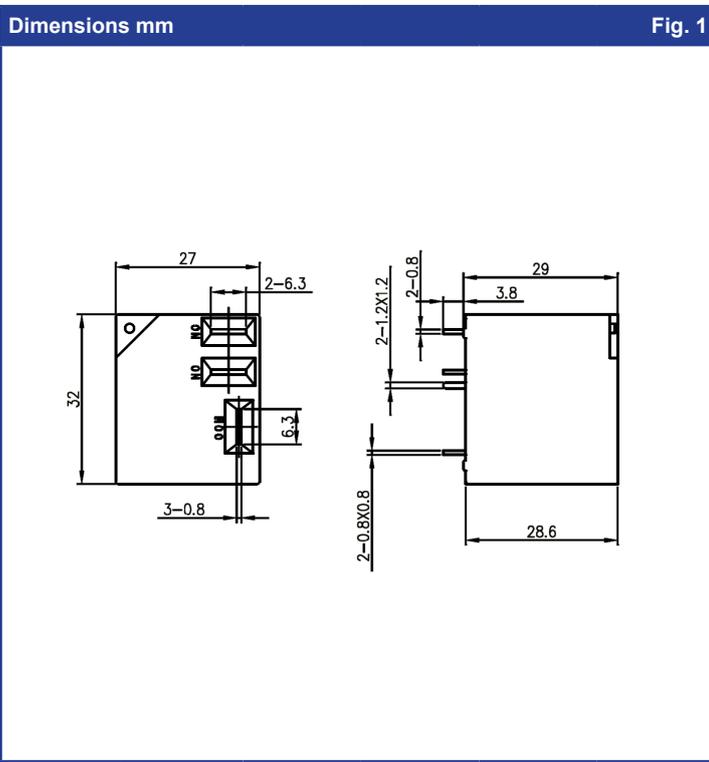
For AC loads this relay is designed for 50-60Hz standard industrial power and was tested according to AC1 category as defined by the IEC 60947-1 standard, covering low-frequency switchgear (typically 50-60 Hz). Operating at higher frequencies, places the component outside its certified utilisation category, invalidating all safety certifications (CE, UL, etc.) and manufacturer performance guarantees.

DC Coil Data							Table 1
Coil code	Nominal voltage (VDC)	Coil resistance Ω $\pm 10\%$	Nominal operating power	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Max. allowable voltage (VDC)	
1003	3	10	0.93W	2.25	0.30	130% of nominal	
1005	5	27		3.75	0.50		
1006	6	39		4.50	0.60		
1009	9	87		6.75	0.90		
1012	12	155		9.00	1.20		
1018	18	348		13.50	1.80		
1024	24	619		18.00	2.40		
1048	48	2,477		36.00	4.80		
1110	110	13,011		82.50	11.00		

UL Class F Coil insulation standard.

AC Coil Data							Table 2
Coil code	Nominal voltage (VAC)	Coil resistance Ω $\pm 10\%$	Nominal operating power	Must operate voltage max. (VAC)	Must release voltage min. (VAC)	Max. allowable voltage (VAC)	
5012	12	42	1.2VA	9.00	3.60	130% of nominal	
5024	24	168		18.00	7.20		
5110	110	3,529		82.50	33.00		
5120	120	4,200		90.00	36.00		
5220	220	14,117		165.00	66.00		

UL Class F Coil insulation standard.



Notes:

- 1) All parameters, unless otherwise specified, are measured at an ambient temperature of 23°C.
- 2) PCB Mounting Holes - the "*" hole is not needed for the SPST-NO version.
- 3) At an ambient temperature of 85°C, the maximum allowable coil voltage should be reduced to 72%.
- 4) Electrical life obtained at resistive or inductive load at 30A/15VDC with suitable arc suppression attached and with an operating frequency of 1 op/sec.