



- Up to 45A switching capability
- 80VDC maximum switching voltage
- Improved DG38 with magnetic arc quench
- PCB & QC terminals



Contacts				
Contact arrangement	SPST-NO (1 Form A); SPDT (1 Form C)			
Contact material	AgSnOInO			
Max. switching voltage	28VDC, 277VAC, (optionally 80VDC, SPST-NO only)			
Min. switching current / voltage	500mA / 12VDC			
	SPST-NO	SPDT		
		NO Contact	NC Contact	
Max. continuous current	45A	30A	15A	
Max. switching current	45A (20A@80VDC)	30A	15A	
Rating (not UL)	Motor 240VAC	3HP	2HP	0.75HP
	Motor 120VAC	1.5HP	1.5HP	0.375HP
	LRA/FLA 240VAC	120A/45A	75A/30A	30A/10.5A
	LRA/FLA 120VAC	147A/33A	75A/30A	30A/10.5A
* UL test rating	30A/28VDC 10K ops			
Initial resistance	50mΩ max. at 0.1A/6VDC			

Coil	
Nominal voltage	5...110VDC
Must release voltage	≥ 0.1U
Operating range	See table 1
Rated power consumption	0.9W

Insulation	
Insulation resistance	50mΩ at 500VDC, 50%RH
Dielectric strength	coil to contact 1500Vrms, 1min
	open contacts 1500Vrms, 1min (Contact Gap ≥1.2mm for P674)

General Data	
Operating time	max. 15ms
Release time	max. 10ms
Electrical life	ops. 1.0 x 10 ⁵ (24VDC/45A)
Mechanical life (no load)	ops. 1 x 10 ⁷

Environmental	
Ambient temperature	operating -55 to +85°C
	storage -40 to +130°C
Shock resistance	functional 10g 11ms
	destructive 100g
Vibration resistance	DA 1.5mm 10-55Hz
Dimensions	L x W x H 32.2 x 27.5 x 28mm
Weight	approx. 32g

Ordering Code

D G 3 8 L - 7 0 2 1 - 3 0 - 1 0 1 2 - P674

Series

Coil code:
See tables
1 & 2

Contact material

70: AgSnOInO

Contact arrangement

11: SPDT (1 C/O) not for P674

21: SPST-NO (1 NO)

Environmental protection

3: In cover, sealed - IP67*

* For optimum electrical life, sealed relays should be vented after board washing.

Mounting & terminations

0: PCB + QC Terminals for contacts

Options

P674: Increased contact gap for 80VDC

Notes:

*UL is for DC loads only

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.

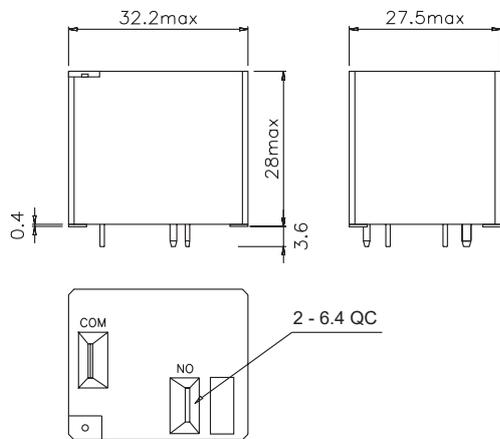
Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) $\pm 10\%$ at 23°C	Must operate voltage max. at 23°C (VDC)	Must release voltage min. at 23°C (VDC)
1005	5	27	3.75	0.5
1006	6	40	4.50	0.6
1009	9	97	6.75	0.9
1012	12	155	9.00	1.2
1024	24	660	18.00	2.4
1048	48	2560 $\pm 15\%$	36.00	4.8

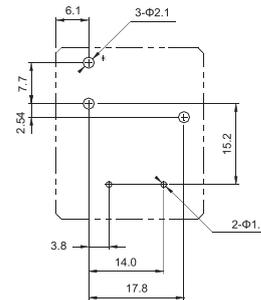
Dimensions mm

Fig. 1



PCB Mounting Dimensions mm (bottom view)

Fig. 2



Wiring Diagrams (bottom view)

Fig. 3

