

# DG31

Subminiature PCB Power relays

# DURAKOOL



- Subminiature PCB Power relays
- Heavy duty contact, up to 12A, 120VAC
- Universal Footprint
- Applications include DC motor drives
- RoHS Compliant

## Contacts

Contact number & arrangement	SPST-NO (1NO), SPDT (1 C/O)
Contact material	AgSnO <sub>2</sub> , AgNi (90/10)
Max. switching voltage	30VDC, 250VAC
Rated load	AC1 12A/120VAC, 7A/250VAC DC1 12A/28VDC
Max. Switching Power	1250VA, 280W
Rated current	12A
Min. breaking capacity	0.5A / 12VDC
Min. switching current	10mA 12VDC (contact material dependent)
Resistance	< 100mΩ at 0.1A / 6VDC

## Coil

Rated voltage	3...48VDC
Must release voltage	≥ 0.125U <sub>n</sub>
Operating range of supply voltage	See Table 1
Rated power consumption	0.36W

## Insulation

Dielectric strength	
coil - contact	1500Vrms (50-60Hz) / 1min
contact - contact	750Vrms (50-60Hz) / 1min

## General data

Operating time (typical value)	≤8msec
Release Time	≤5msec (Typical)
Electrical Life	
resistive	> 1 x 10 <sup>5</sup>
Mechanical life	> 10 <sup>7</sup>
Dimensions (L x W x H)	18.7 x 15.4 x 15.6mm
Weight	10g approx
Ambient Temperature	
storage	-40... + 85°C
operating	-40... + 70°C
Cover protection category	IP67
Shock resistance	10g, 11ms
Vibration resistance	DA 1.5mm, 10-55Hz

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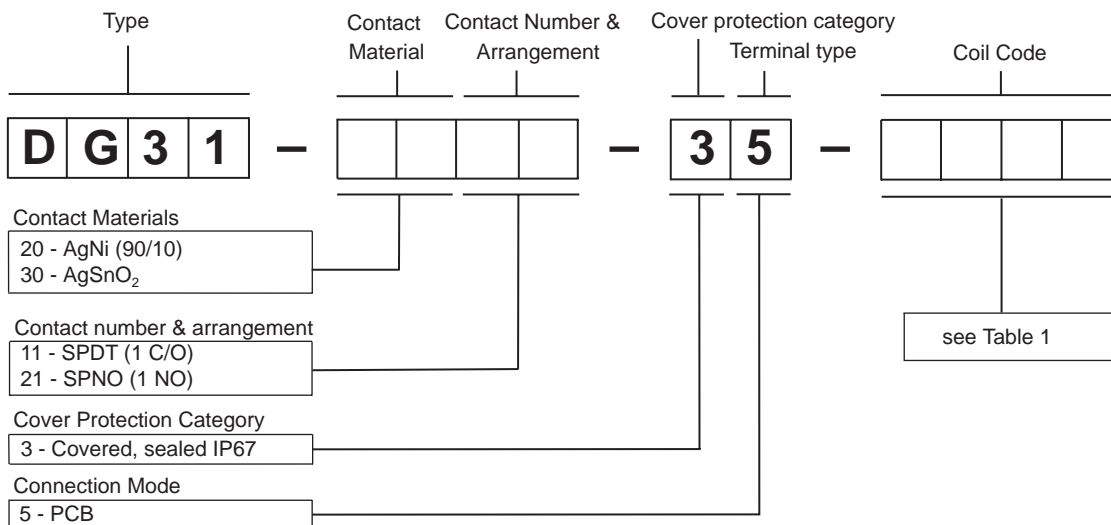


Coil Data - DC voltage version

Table 1

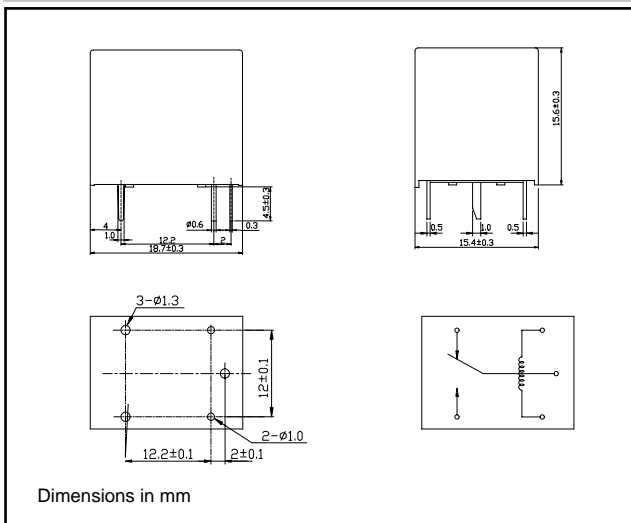
Coil Code	Rated Voltage V DC	Coil Resistance $\pm 10\%$ @ 23°C $\Omega$	Must Operate Voltage Max. V DC	Allowable Voltage V DC (max)	Must Release Voltage Min. V DC
1003	3	25	2.25	3.9	0.15
1005	5	69	3.75	6.5	0.25
1006	6	100	4.50	7.8	0.30
1009	9	225	6.75	11.7	0.45
1012	12	400	9.00	15.6	0.60
1024	24	1600	18.00	31.2	1.20
1048	48	6400	36.00	62.4	2.40

## Ordering Codes



Overall dimensions

Fig. 1



Reference data

Fig. 2

