

# DG86 series

## high current automotive relay

# DURAKOOL



- Limiting continuous current up to 200A
- IP67 Sealed
- Screw Clamp Terminals for contacts
- Shrouded coil terminals (fits Yazaki® connector)
- RoHS Compliant

### Contacts

Contact number & arrangement	SPST-NO	
Contact material	AgNi + W (Tungsten pre-contact)	
Max. switching voltage	DC	27V
Min. switching current / voltage		
Rated load (13.5VDC resistive at 23°C)	DC1	200A (5.5hrs continuous max. time with 25sqmm cable size)
Rated load (24VDC resistive at 23°C)	DC1	100A
Max. switching current (resistive)	13.5VDC	300A (3mins max.) / 400A (40secs max.) / 700A (5sec)
	24VDC	120A
Initial resistance	≤50mΩ (1A/24VDC)	

### Coil

Rated voltage	DC	12, 24V
Must release voltage	≥0.125Un	
Operating range of supply voltage	See coil table 1	
Rated power consumption	DC	3.6W

### Insulation

Insulation resistance	10MΩ at 500VDC, 25°C, 50%RH	
Dielectric strength		
	coil to contact	500Vrms, 1min
	contact to contact	500Vrms, 1min

### General Data

Operating time	mS	15mS max (excluding bounce, without coil suppression)
Release time	mS	10mS max (excluding bounce, without coil suppression)
Electrical Life	ops	1 x 10 <sup>5</sup>
Mechanical life	ops	1 x 10 <sup>6</sup>
Dimensions	L x W x H	73 x 43.8 x 43.8 mm (including bracket and terminals - see Fig.1)
Weight	Approx. 100g	
Ambient temperature	storage	-40 to 100°C
	operating	-40 to 85°C
Shock resistance	Functional: 6mS, 10g	
Vibration resistance	10Hz - 500Hz, 10g	

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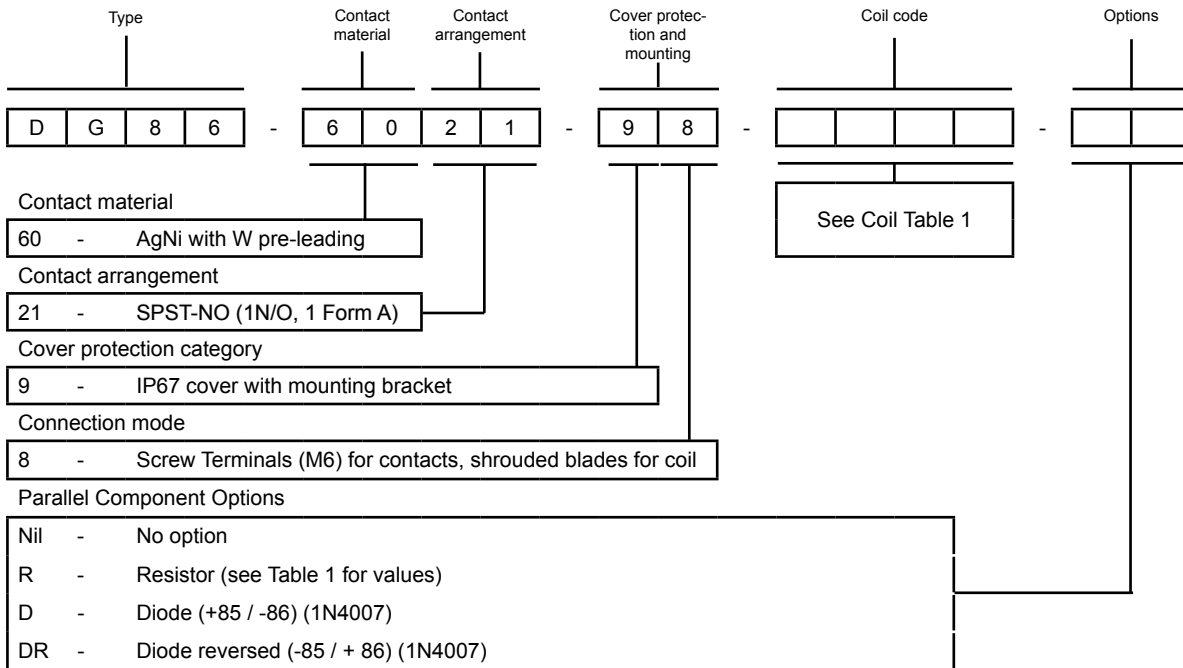
### Coil Data

Table 1

Coil Voltage Code	Nominal Voltage (VDC)	Coil Resistance ( $\Omega$ ) $\pm 10\%$	Must Operate Voltage Max. (VDC)	Must Release voltage min. (VDC)	Parallel Resistor (optional) $\pm 10\%$ ( $\Omega$ )
1012	12	40	9.6	4.5 - 1.5	560
1024	24	160	19.2	9.0 - 3.0	2200

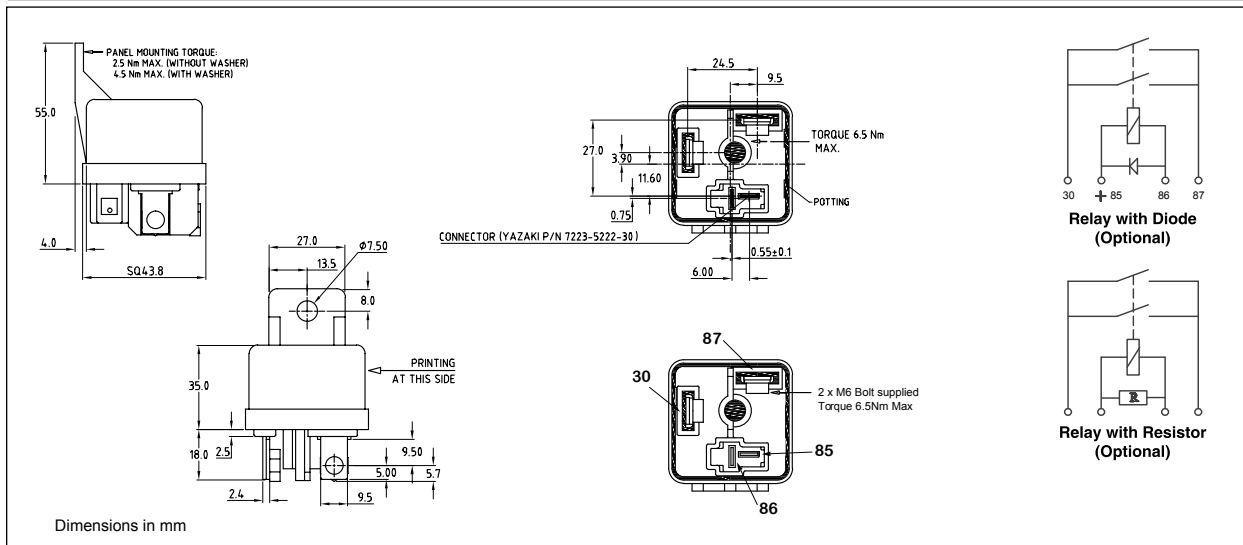
\* At ambient temperature of 85°C, maximum allowable voltage should be reduced by 28%

### Ordering codes



### Overall Dimensions

Fig. 1



### Notes:

1: All parameters, unless otherwise specified, are measured at ambient temperature of 23°C.

Specifications are subject to change without notice. E&OE.

