

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 ⁵
Mechanical life	ops	1 x 10 ⁶
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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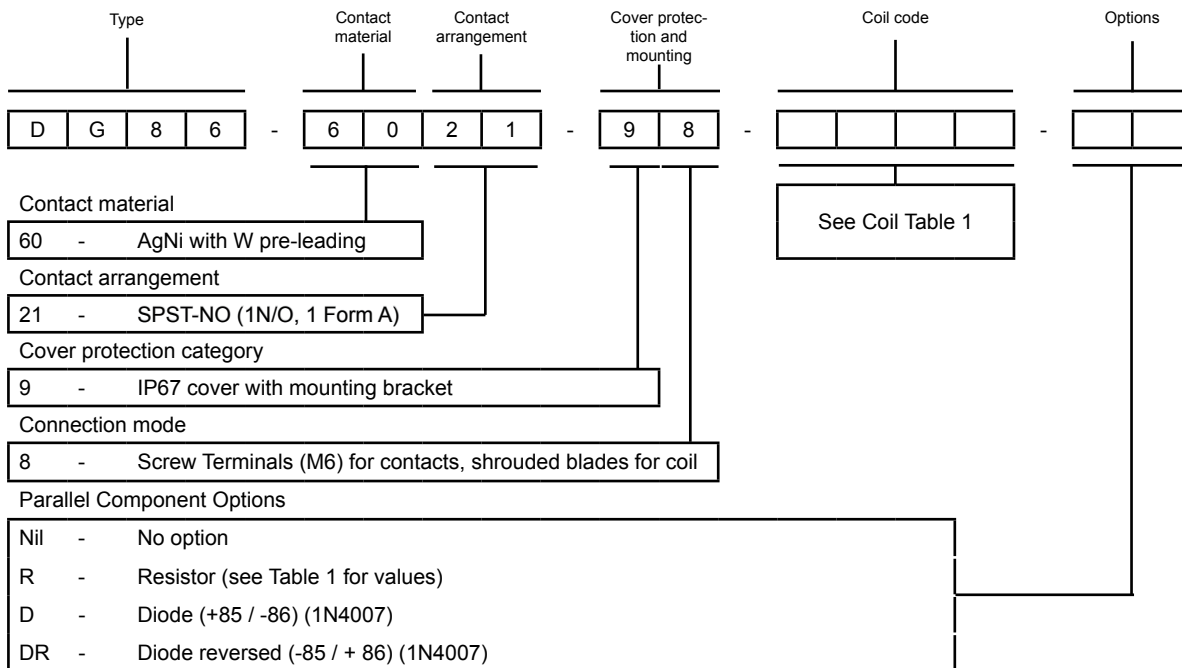
Coil Data

Table 1

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

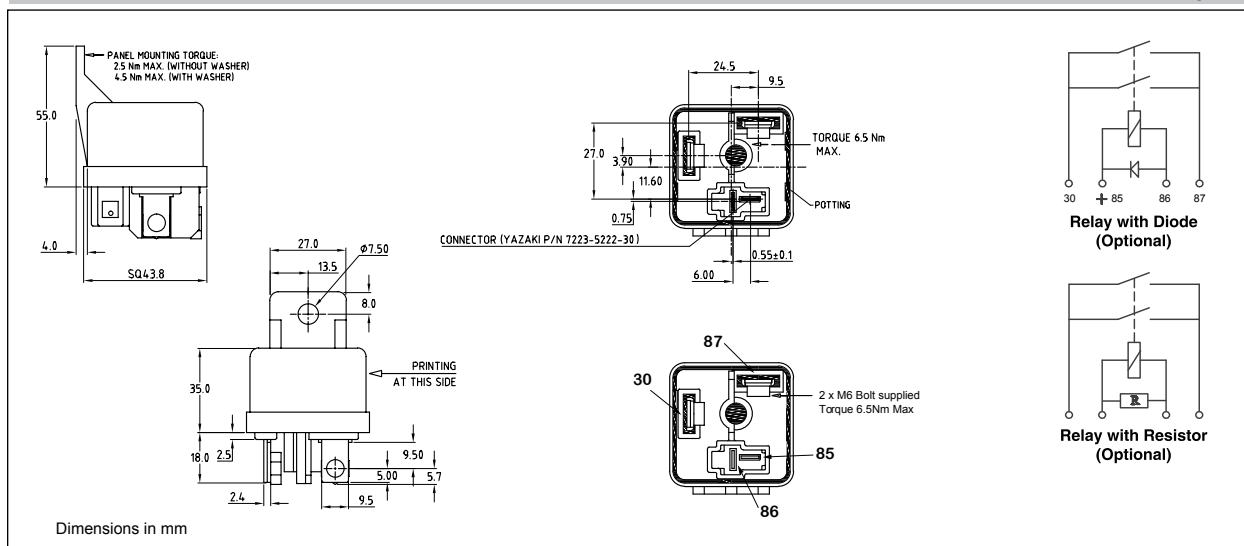
* At ambient temperature of 85°C, maximum allowable voltage should be reduced by 28%

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.

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