

- General purpose automotive or electric vehicle relays
- Ideal for Head lights, Fog lamp, Horn, Air Cooling Motor Control, Starter, Radiator Cooling, Window Control and ABS Systems
- 60A continuous DC current capacity (at 23°C)
- Industry standard terminal arrangement

ROHS
Compliant

Contacts

Contact arrangement	SPST-NO (1 Form A), SPDT (1 Form C)		
Contact material	AgSnO ₂ , AgNi 0.15		
Max. switching voltage	DC	24VDC - current dependent (see Fig. 3)	
Contact rating		85°C	23°C
Max. switching current	SPST-NO	40A @ 14VDC	60A @ 14VDC
	SPDT (NO/NC)	40A/30A	60A/40A
Max. continuous current - make	SPST-NO	120A	
	SPDT (NO/NC)	120A / 45A	
Max. switching current - break	SPST-NO	40A	
	SPDT (NO/NC)	40A / 30A	
Min. switching current	1A/5VDC (AgNi 0.15)		
Initial contact resistance	<100mΩ, max. at 0.1A/6VDC		

Coil

Rated voltage	DC	12, 24
Must release voltage	0.10U _N - see coil table 1 for more information.	
Operating range of supply voltage	See coil table 1	
Rated power consumption	1.8W with resistor	

Insulation

Insulation resistance	100MΩ at 500VDC, 50%RH, 25°C	
Dielectric strength	coil to contact	500Vrms / 1 min

General Data

Operate time	typ.	7ms
Release time	typ.	2ms
Electrical Life	ops.	1x10 ⁶ (40A@14VDC SPST-NO)
Mechanical life	ops.	1 x 10 ⁷

Environmental

Environmental protection	IP54 Dust cover	
Ambient temperature	operating	-40 to +125°C - Consult factory for above 85°C
	storage	-40 to +155°C
Shock resistance	destructive	196m/s ² (20g)
	functional	98m/s ² (10g)
Vibration resistance	10 to 40Hz DA 1.27mm; 40 - 70Hz:5g /	
	70-100Hz DA 0.5mm, 100 - 500Hz:5g	
Dimensions	L x W x H	25.9 x 25.9 x 24.9mm (excluding terminals)
Weight	approx.	34g
Flammability	Meets the requirements of UL94V-0	

Ordering Code

D G 5 5 - 5 0 2 1 - 7 6 - 1 0 1 2 - D R			
Series		Coil code: see Table 1	
Contact material	50: AgSnO ₂ 80: AgNi 0.15		
Contact arrangement	11: SPDT (1 Form C) 21: SPST-NO (1N/O, 1 Form A)		
Mounting & terminations IP54	7: Dust cover 9: Dust cover Bracket mount (option M1 only)		
Connection mode	6: Flat blades (6.35mm)		
Options 1	Blank: No options M1: Metal bracket (Supplied fitted as standard. Consult factory for brackets supplied loose).		
Options 2	Blank: No options R: Integral resistor D: Integral diode +85, -86 DR: Integral diode (reversed) -85, +86 (Standard)		

Coil Data

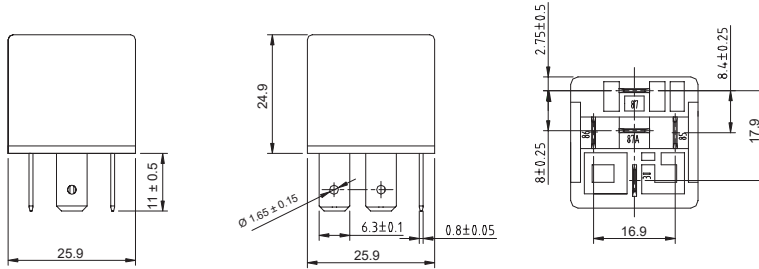
Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ± 10%	Must operate voltage max. (VDC)	Max allowable voltage (VDC)		Must release voltage min. (VDC)
				23°C	85°C	
1012	12	72	7.2	18.0	13.0	1.2
1024	24	288	14.4	35.0	25.2	2.4

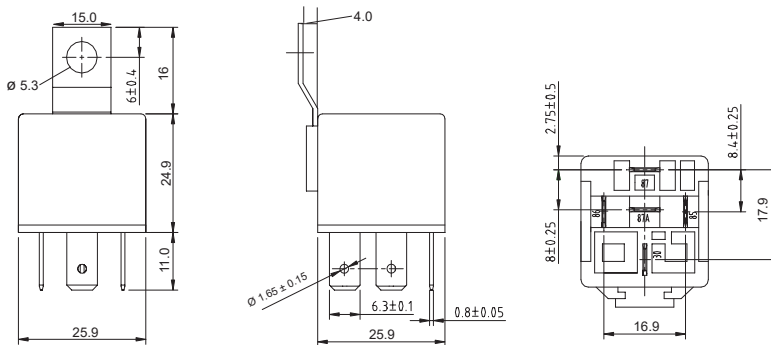
Overall Dimensions mm & Connection Diagrams

Fig. 1

Plug - in, no bracket (DG55-50**-76-10** Style)

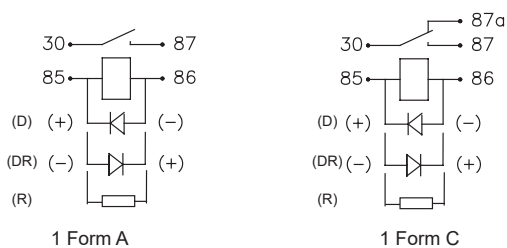


Plug - in, with metal bracket (DG55-50**-96-10**-M1 Style)



Connection Diagrams

Fig. 2



Max. DC Resistive Load Breaking Capacity

Fig. 3

