

- High current 12VDC motor reversing
- Small and compact size
- Easy mounting options
- Industry standard 'fast-on' style terminals
- Simplified electrical connections
- Cost effective

RoHS
Compliant ✓

Contacts

Contact arrangement	2 x SPDT configured for motor reversing
Contact material	AgSnInO
Max. switching voltage	DC 30VDC (current dependent - See Fig. 1)
Min. switching current / voltage	0.5A/12VDC
Rated load	DC1 80A/60A (limited by NC contact rating)
Max. switching current	make 180A
	break 60A
Initial contact resistance	<100mΩ at 0.1A/6VDC

Coil

Rated voltage (U _n)	DC 12V or 24VDC (See Table 1)
Must release voltage	≥0.1U _n
Operating range	See Table 1
Rated power consumption	1.6W

Insulation

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

General Data

Operating time	typ. 7ms
Release time	typ. 2ms
Electrical life	ops. 1 x 10 ⁵
Mechanical life	ops. 1 x 10 ⁷

Environmental

Ambient temperature	operating	-40 to +85°C
	storage	-40 to +155°C
Shock resistance	functional	20g, 11ms
	destructive	100g
Vibration resistance		DA 1.27mm 10-40Hz / 40-70Hz:5g
		DA 0.5mm 100-500Hz: 10g
Dimensions	L x W x H	58 x 35 x 46.5 (including terminals - see Fig. 4)
Weight	approx.	96g depending on mounting brackets

Ordering Code

D G R - 1 2 - M 1

Series

DGR

Coil code

12 : 12VDC

24 : 24VDC

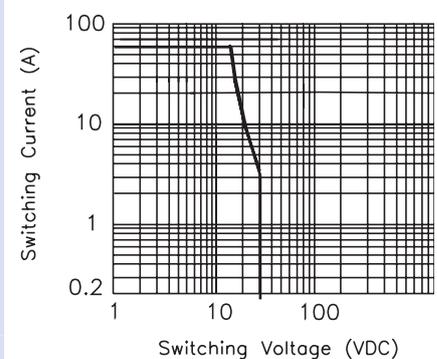
Mounting brackets

NIL : No brackets supplied.

M : 4 x metal brackets supplied loose.

M1 : 4 x metal brackets supplied fitted.

Fig. 1



Coil Data

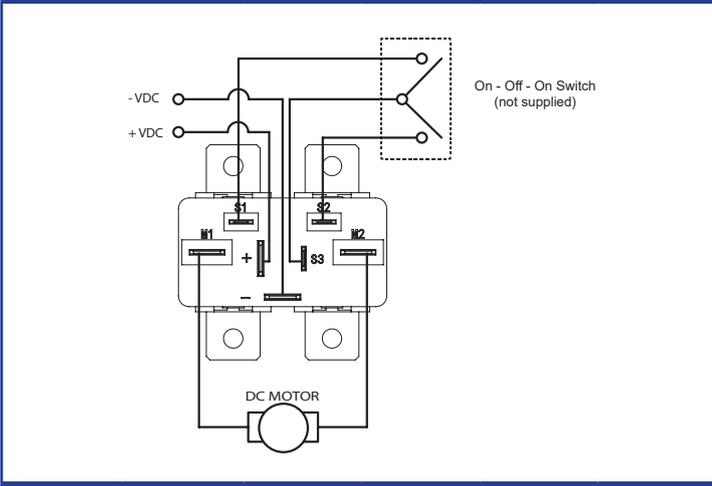
Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Must operate voltage max. (VDC)	Allowable voltage max. (VDC)*	Must release voltage min. (VDC)
12	12	90	7.2	20.5	1.2
24	24	330	14.4	39.1	2.4

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

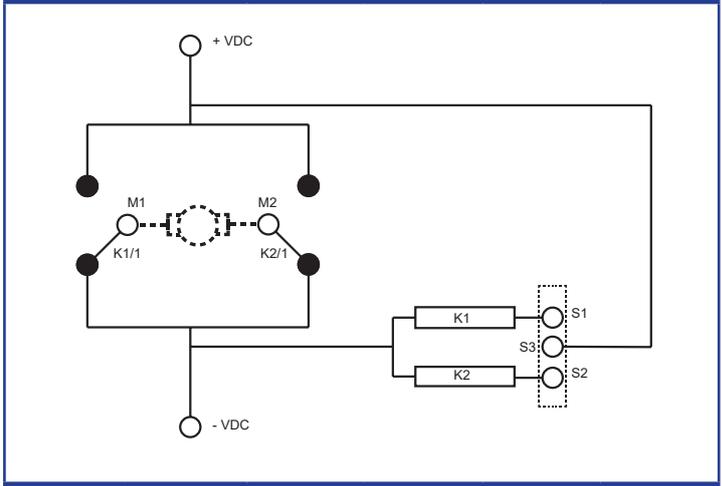
Connection diagram

Fig. 2



Circuit diagram

Fig. 3



Dimensions (mm)

Fig. 4

