

NOT FOR NEW DESIGNS



- Normally closed (1D) contacts
- Rated load: 50A at 48VDC
- M6 power terminations
- Battery storage applications
- Electric vehicles and DC motors

UK
CA

CE

UL
E305753

RoHS
Compliant

Contacts

Contact arrangement	SPST-NC-DB (1D)
Contact material	AgCuO
Max. switching voltage	DC 48VDC
Rated load (resistive $\cos \varphi=1$)	DC1 50A 48VDC
Continuous thermal current	max. 50A
Terminal temperature rise above ambient	<70°C. (IEC EN60947, GB14/140484)
Voltage drop	≤80mV @ 50A

Coil

Nominal voltage	DC 12, 24, 48, 60VDC - see table 1
Rated power consumption	max. 12W
Working duty	Continuous

Insulation

Insulation resistance	initial	100MΩ (Min.) @500VDC
	life end	50MΩ (Min.)
Dielectric strength	coil to contact	1000Vrms (50/60Hz) / <1mA / 1 min (at sea level)
	contact to contact	1000Vrms (50/60Hz) / <1mA / 1 min (at sea level)

General Data

Operate time inc. bounce at 20°C	<40ms
Release time	<40ms
Electrical life (at rated load)	ops. 20,000 operations
Mechanical life	ops. 1 x 10 ⁵

Environmental

Ambient temperature	operating	-25°C to +60°C
Relative humidity		20 to 98%RH (at 20°C)
Shock resistance		≤4g, (60 ~ 100ops/min)
Vibration resistance		≤3g 0.5mm (1 to 50Hz)
Dimensions	L x W x H	57.5 x 56 x 38.05 mm
Weight	approx.	175g

Ordering Code

DSC05D - 4 0 3 1 - 3 8 - 1 0 1 2 -

Series

Coil code:

See table 1

Contact arrangement

4031: SPST-NC-DB

Body style

38: Enclosed, M6 Male stud power terminals

Accessory options

Blank: No options

M: Dust-proof sealing ring

NB:

Mounting orientation:

The DSC05D may be mounted horizontally, but if mounted vertically, the coil should be positioned downwards, with the terminals uppermost.

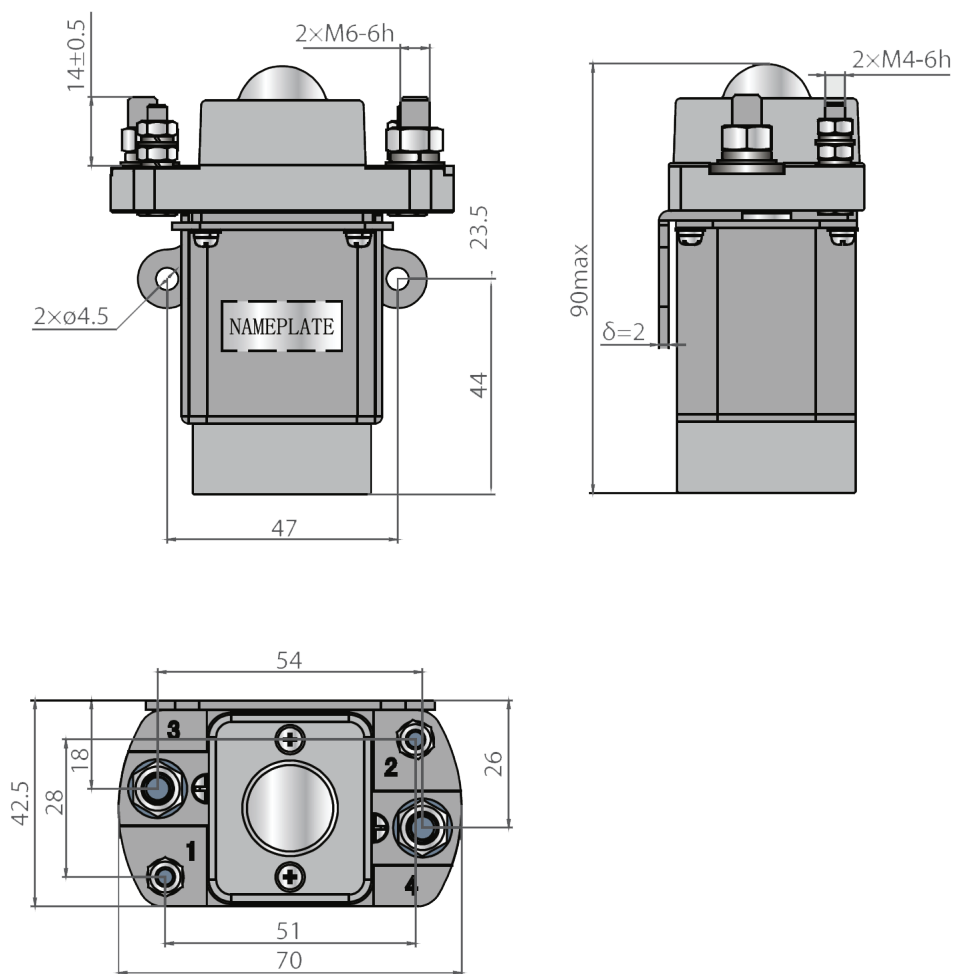
Coil Data

Table 1

Coil code	Nominal voltage (VDC) U_s	Working voltage range (V)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Holding current (A)
1012	12	$0.85U_s \sim 1.1U_s$	8.4	1.2	≤ 0.9
1024	24		16.8	2.4	≤ 0.5
1048	48		33.6	4.8	≤ 0.25
1060	60		42.0	6.0	≤ 0.15

Dimensions

Fig. 1



Dimensions in mm

Connections

Fig. 2

