DSC60D Series
LVDC NC Contactor 600A / 48VDC

NOT FOR NEW DESIGNS

- Normally closed (1D) contacts
- Rated load: 600A at 48VDC
- Double coil economiser
- Auxiliary contact option
- M12 power terminations
- Battery storage applications
- Electric vehicles and DC motors

UK CA CE cULus E305753 RoHS Compliant

Contacts

Contact arrangement		SPST-NC-DB
Contact material		AgCuO
Max. switching voltage	DC	48VDC
Rated load (resistive cos φ=1)	DC1	600A 48VDC
Continuous thermal current	max.	600A
Terminal temperature rise above ambient		<70°C. (IEC EN60947, GB14/140484)
Voltage drop		≤80mV @ 600A
Auxiliary contact (when fitted)	arrangement	SPST-NO + SPST-NC
	max. current	5A @ 24VDC / 2A @ 48VDC
	min. current	100mA @ 5VDC

Coil

Nominal voltage	DC	12, 24, 48, 60VDC - see table 1
Nominal “on hold” power consumption	max	30W (@ 12VDC)
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		<50ms
Release time		<50ms
Electrical life (at rated load)	ops.	6,000 operations
Mechanical life	ops.	1 x 10^5

Environmental

Ambient temperature	operating	-40°C to +65°C
Relative humidity		20 to 90%RH
Shock resistance		≤4g, (60 ~ 100ops/min)
Vibration resistance		≤3.5g sine peak (10 to 200Hz)
Dimensions	L x W x H	111 x 79 x 130mm (excluding aux.switch)
Weight	approx.	1500g

Ordering Code

DSC60D - 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, M12 Male stud power terminals

Accessory options
Blank: No options
S: Auxiliary switch

Power terminal options
Blank: Standard - 22.5mm length
L: Extended terminals - 27.5mm length

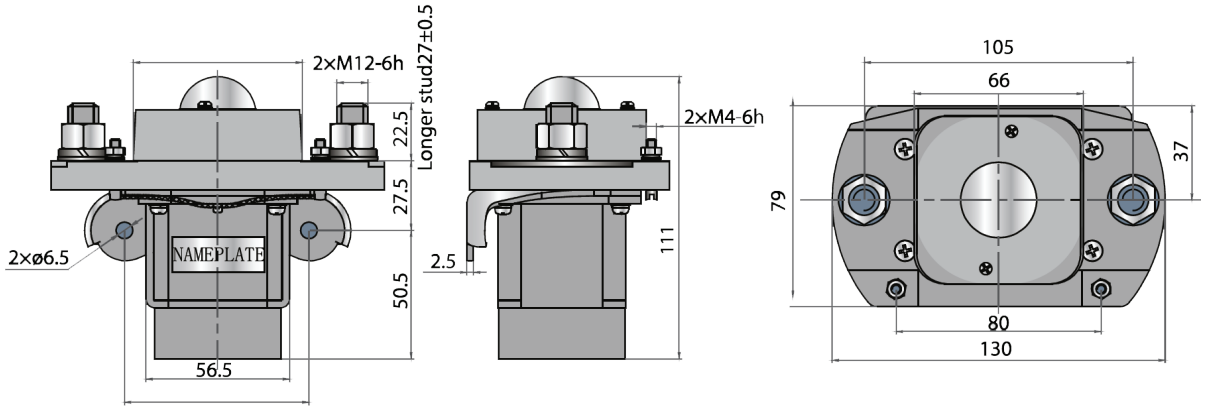
NB:
Mounting orientation:
The DSC60D may be mounted horizontally, but if mounted vertically, the coil should be positioned downwards, with the terminals uppermost.

Coil Data Table 1

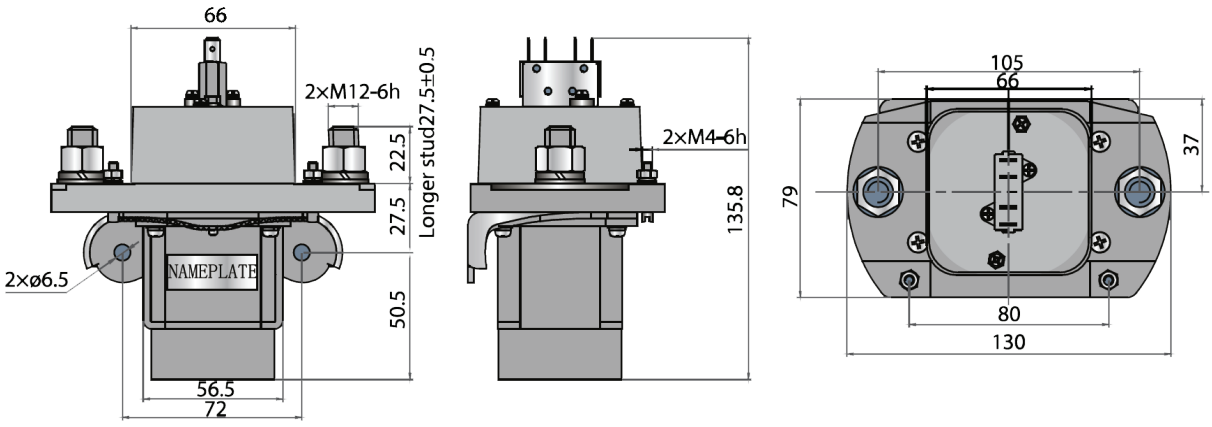
Coil code	Nominal voltage (VDC) U_s	Working voltage range (V)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Starting current (A)	Holding current (A)
1012	12	$0.85U_s \sim 1.1U_s$	8.4	1.2	≤ 13.0	≤ 2.5
1024	24		16.8	2.4	≤ 13.0	≤ 0.5
1048	48		33.6	4.8	≤ 6.0	≤ 0.2
1060	60		42.0	6.0	≤ 3.0	≤ 0.2

Dimensions Fig. 1

standard



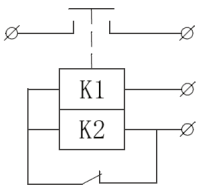
with auxiliary switch option



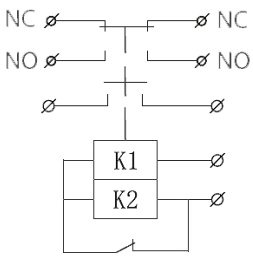
Dimensions in mm

Connections Fig. 2

DSC60D



standard



with auxiliary switch option