DSC100D series
LVDC NC Contactor 1000A / 48VDC

NOT FOR NEW DESIGNS

- Normally closed (1D) contacts
- Rated load: 1000A at 48VDC
- Double coil economiser
- Auxiliary contact option
- Busbar power terminations
- For battery storage applications

UK CA CE c UL us E305753 RoHS Compliant

Contacts

Contact arrangement		SPST-NC-DB
Contact material		AgCu Alloy + Ag plating
Max. switching voltage	DC	48VDC
Rated load (resistive, cos φ=1)	DC1	1000A 48VDC
Max. continuous thermal current		1000A
Fault current breaking capacity (resistive)		3000A @ 48VDC (UL508)
Terminal temperature rise above ambient		<70°C. IEC EN60947, GB14/14048.4
Contact voltage drop	max.	≤80mV @ 1000A
Auxiliary contact (when fitted)	arrangement	SPST-NO + SPST-NC
	max. current	5A @ 24VDC / 2A @ 48VDC
	min. current	100mA @ 5V

Coil

Nominal Voltage (see Table 1)	DC	12, 24, 48, 60VDC
Nominal “on hold” power consumption	max	30W (@ 24VDC)
Working duty		Continuous

Insulation

Insulation resistance	initial	100MΩ (Min.) @500VDC
	life end	50MΩ (Min.)
Dielectric strength	coil to contact	2500Vrms (50/60Hz) / <1mA / 1 min (at sea level)
	contact to contact	1500Vrms (50/60Hz) / <1mA / 1 min (at sea level)

General Data

Operate / bounce time at 20°C	max.	60ms / 5ms
Release time		60ms
Electrical life	at rated load	6000 operations
Mechanical life	operations	1 x 10^5

Environmental

Ambient temperature	operating	-25°C to +65°C
Shock resistance		≤4g, (60 ~ 100ops/min)
Vibration resistance		≤3.5g sine peak (10 to 200Hz)
Relative humidity	RH	20 to 90%
Dimensions (mm)	L x W x H	135.5 x 88.4 x 150.4 (over busbar terminations)
Weight	approx.	3.02kgs

Ordering Code

DSC100D - 4 0 3 1 - 3 8 - 1 0 2 4 - S

DSC Series
100D: Standard

Coil codes
See table 1

Contact arrangement
4031: SPST-NC-DB

Body style
38: Open frame, or busbar connections

Accessory options
Blank: No option
S: Auxiliary switch

Mounting & terminations
Blank: No bracket

NB: Mounting orientation:

The DSC100D may be mounted horizontally, but if mounted vertically, the coil should be positioned downwards.

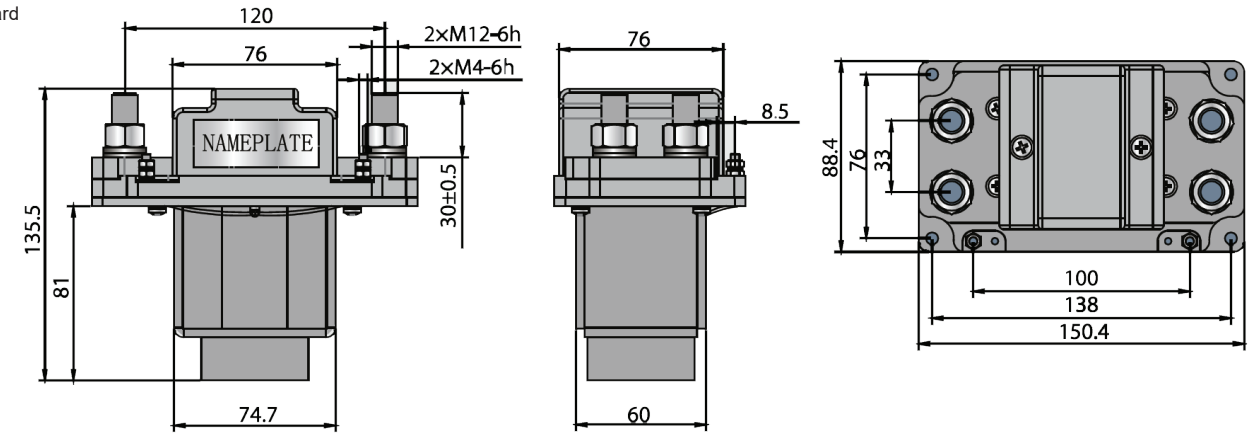
DC Coil Data — Table 1

Coil code	Nominal voltage (VDC) U_s	Coil working voltage range (V)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Coil starting current (A)	Holding current (A)
1012	12	$0.85U_s$ ~ $1.1U_s$	8.4	1.2	≤16.5	≤1.5
1024	24		16.8	2.4	≤13.5	≤1.2
1048	48		33.6	4.8	≤6.5	≤0.4
1060	60		42.0	6.0	≤5.5	≤0.4

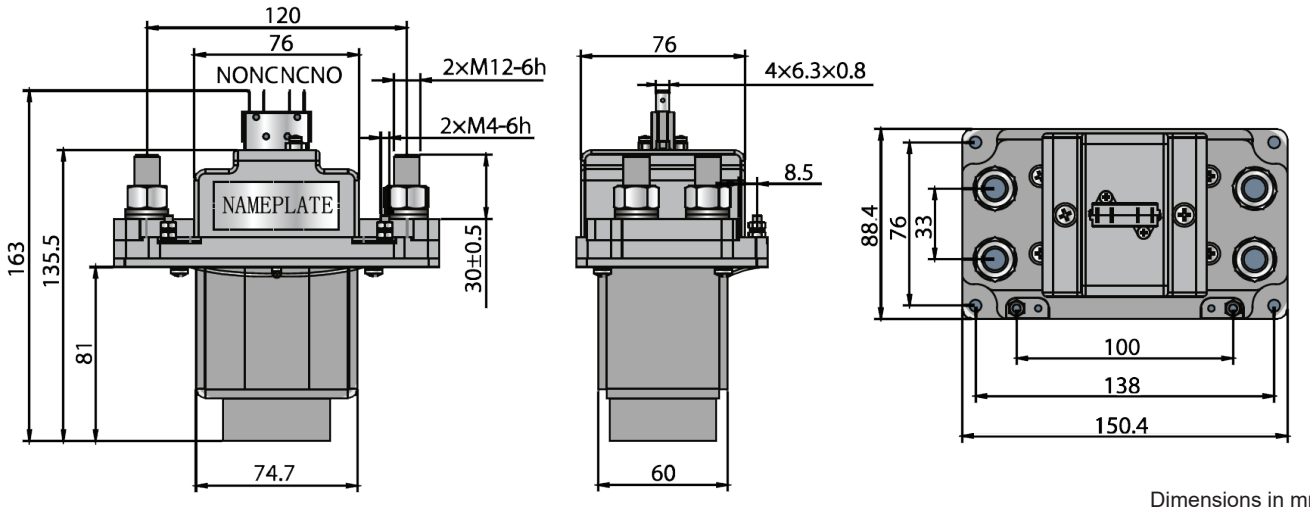
Other coils available upon special request. MOQ's will apply.

Dimensions — Fig. 1

standard



with auxiliary switch option



Dimensions in mm

Connections — Fig. 2