

**NOT FOR NEW DESIGN**



- Rated load: 200A at 48VDC
- Double coil economiser
- Auxiliary contact option
- M8 Power terminations
- Battery storage applications
- Electric vehicles and DC motors



RoHS Compliant

## Contacts

Contact arrangement	SPST-NO-DM
Contact material	AgCu alloy
Max. switching voltage	DC 48VDC
Rated load (resistive cos $\phi=1$ )	DC1 200A 48VDC
Continuous thermal current	max. 200A
Terminal temperature rise above ambient	<70°C. (IEC EN60947, GB14/140484)
Voltage drop	≤80mV @ 200A
Auxiliary contact (when fitted)	<div> <div>arrangement</div> <div>SPST-NO + SPST-NC</div> </div> <div> <div>max. current</div> <div>5A @ 24VDC / 2A @ 48VDC</div> </div> <div> <div>min. current</div> <div>100mA @ 5VDC</div> </div>

## Coil

Rated voltage	DC 12, 24, 48, 60VDC - see table 1
Nominal "on hold" power consumption	max 9W
Working duty	Continuous

## Insulation

Insulation resistance	initial	100M $\Omega$ (Min.) @500VDC
	life end	50M $\Omega$ (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. 50,000 operations
Mechanical life	ops. 1 x 10 <sup>5</sup>

## 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	85 x 56.5 x 76mm (excluding aux.switch)
Weight	approx.	495g

## Ordering Code

D J Q 2 0 - 4 0 2 1 - 3 8 - 1 0 1 2 -

Series

Coil code:

See table 1

Contact arrangement

4021: SPST-NO-DM

Body style

38: Enclosed, M8 Male stud power terminals

Accessory options

Blank: No options

S: Auxiliary switch

M: Dust-proof sealing ring

Power terminal options

Blank: Standard - 14mm length

L: Extended terminals - 23mm length

NB:

Mounting orientation:

The DJQ20 may be mounted horizontally, but if mounted vertically, the coil should be positioned downwards, with the terminals uppermost.

Coil Data

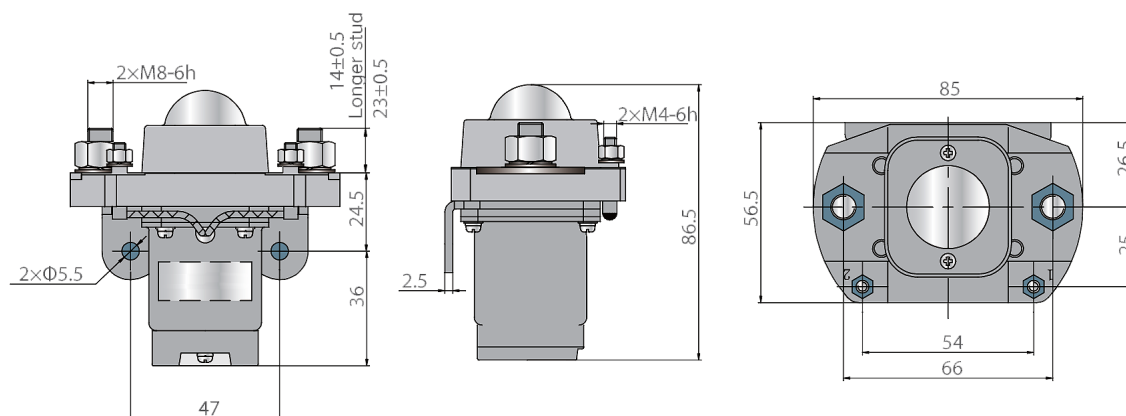
Table 1

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	$\leq 9.0$	$\leq 0.6$
1024	24		16.8	2.4	$\leq 4.5$	$\leq 0.35$
1048	48		33.6	4.8	$\leq 3.5$	$\leq 0.15$
1060	60		42.0	6.0	$\leq 2$	$\leq 0.15$

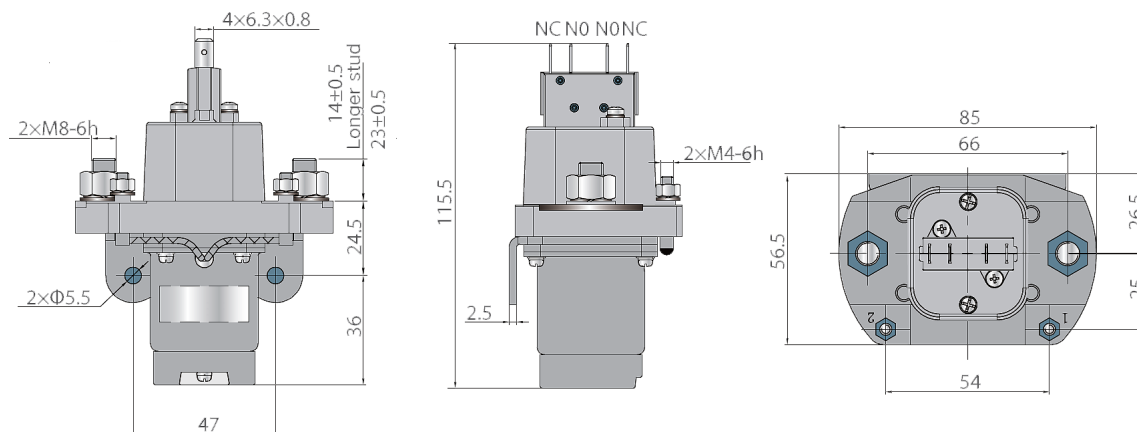
Dimensions

Fig. 1

standard



with auxiliary switch option

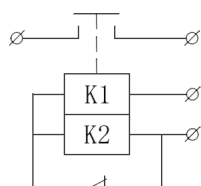


Dimensions in mm

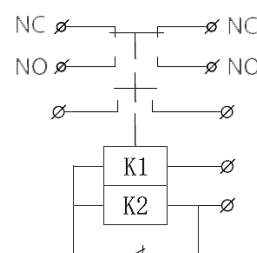
Connections

Fig. 2

DJQ20



standard



with auxiliary switch option