



*Image is for illustrative purposes only. Please refer to datasheet for detail.

- HVDC 10A at 1000VDC
- Max. switching current = 300A
- Contacts sealed in inert gas
- Magnet arc blowout
- Pre-charge relay
- Female M4 power terminals
- Non-polarised (bi-directional) design



Contacts

Contact arrangement	SPST-NO-DM	
Contact material	T2+Ag	
Max. switching voltage	AC/DC	1000VDC
Rated load (resistive, $\cos \varphi=1$)	DC1	10A 1000VDC
Max. continuous thermal current	600s	18A
	30s	45A
Max switching current	1 time only	300A 450VDC
Initial contact resistance	max.	30m Ω (at 1A)
	typ.	1m Ω (at 1A)

Coil

Rated voltage (see page 2)	DC	12~48VDC
Rated power consumption	hold	3.2W @ 12VDC

Insulation

Insulation resistance	initial	100M Ω (min.)
	life end	50M Ω (max.)
Dielectric strength	coil to contact	3500Vrms / 10mA / 1 min (at sea level)
	contact to contact	3500Vrms / 10mA / 1 min (at sea level)

General Data

Operate time at 23°C	max.	30ms
Bounce time at 23°C	max.	7ms
Release time at 23°C	max.	12ms
Electrical life	Voltage and current dependent - see fig. 1	
Mechanical life	2 x 10 ⁵ (ON : OFF = 1s : 9s)	

Environmental

Environmental Seal	IP67	
Ambient temperature	operating	-40 to +85°C
Relative humidity	5 to 95%RH	
Shock resistance	20G peak, 11ms 1/2 sine	
Vibration resistance	20G sine peak (80 to 2000Hz)	
Dimensions	L x W x H	37.2 x 51.26 (over flanges) x 47.82 (approx.)
Weight	approx.	120g \pm 5g

Ordering Code

D E V R 0 1 - 5 0 8 1 - S 8 - 1 0 2 4 - R 1 / 1

Series

Coil code:

See table 1

Contact material

50: T2+Ag

Contact arrangement

81: SPST-NO (no polarity)

Mounting & terminations

Bottom flange mounting base
S8: M4 Female power terminals
Coil by flying leads

Coil wire length

R: 400mm (standard)
T: 5.9" (150mm)

Coil wire & auxiliary contact termination

1: None
2: Yazaki 7282-5558-10 Male, fitted to coil wires only.
Other terminations to special order

Version:

/1: Version 1

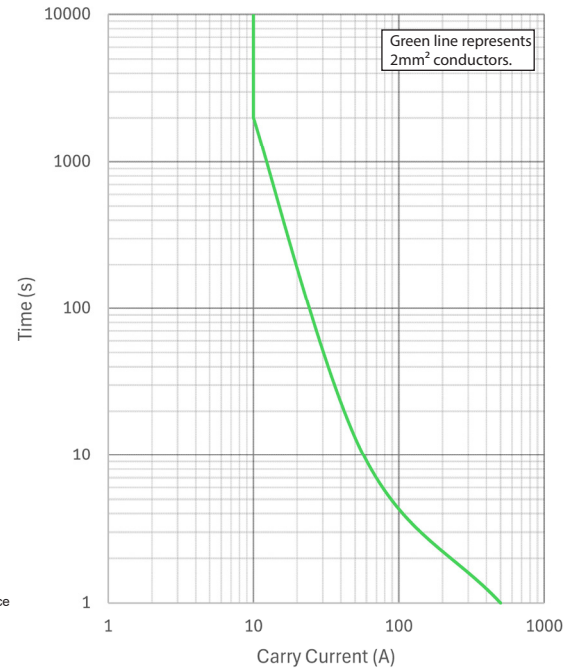
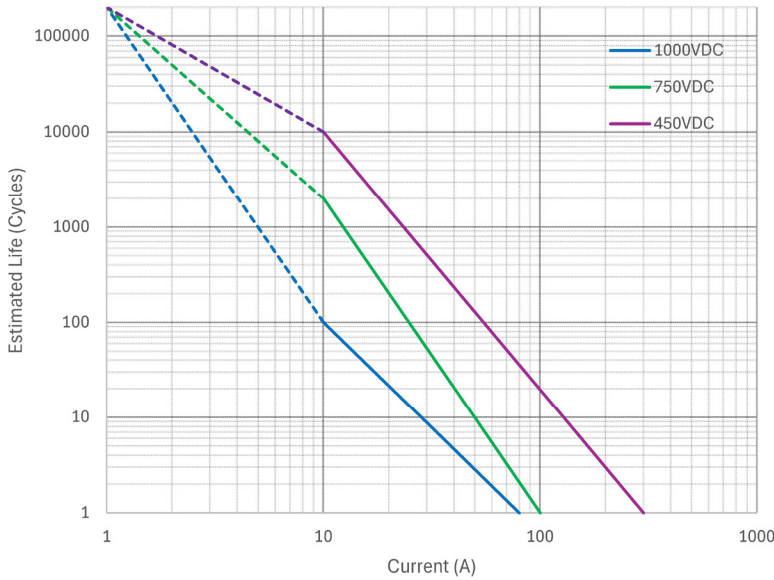
Coil Data

Table 1

Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC at 23°C)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance $\Omega \pm 10\%$ (at 23°C)	Coil Current (mA)	Coil power (W at 23°C)
1012	12.0	9.0	13.2	1.2	45.0	266.7	3.2
1024	24.0	18.0	26.4	2.4	167.0	143.7	3.5
1048	48.0	36.0	52.8	4.8	630.0	76.2	3.7

Electrical Performance

Fig. 1



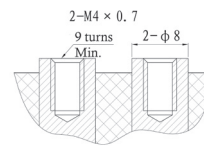
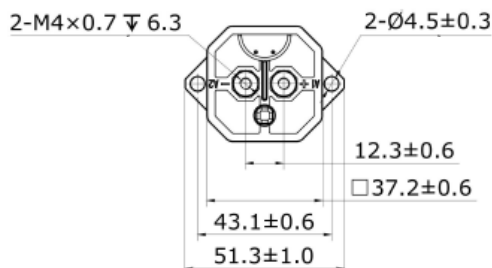
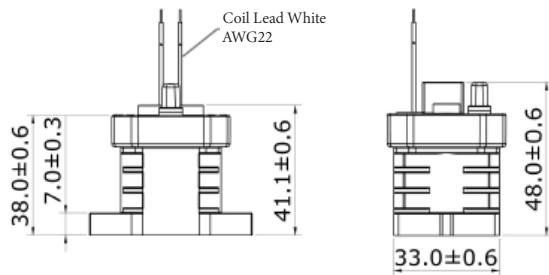
- Estimates are based on test and extrapolated data (extrapolated data can be seen with dotted line). The user is advised to confirm performance in their application.
- Recommended conductor size and terminal temperature rise maximum in accordance with ISO (EN) 60947.1 70°C.
- Estimated electrical life is based on make and break current.
- All data is based on resistive data.

Dimensions (mm)

Fig. 2

Circuit Diagram

Fig. 3



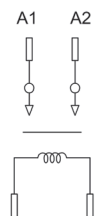
Recommended Terminal Screws (not supplied):
M4 x 0.7 x 8mm
M4 spring washer
M4 flat washer.

Recommended Conductor
2mm²

Torque settings
Terminals: 1.8 - 2.5Nm
Base Mounting: 1.8 - 2.5Nm

Power Terminals

Non Polarised



Coil is not polarised

Notes:

- Note coil is not polarised.
- Nominal dimensions in mm.
- Tolerances (nominal), <10mm: $\pm 0.3\text{mm}$, 10 ~ 50mm: $\pm 0.6\text{mm}$, >50mm: $\pm 1.0\text{mm}$.
- Coil wire length and terminations can be customised upon request.