DEVR05 series
HVDC contactor 50A / 900VDC

- HVDC 50A at 450VDC.
- Max. Switching current = 500A.
- $AgSnO_2$ contacts sealed in inert gas.
- Magnet arc blowout.
- Pre-charge relay.
- Female M4 power terminals.

E325835 ROHS Compliant

Contacts		
Contact arrangement		SPST-NO-DM
Contact material		$AgSnO_2$
Max switching voltage	AC/DC	900VDC
Rated load (resistive, cos φ=1)	DC1	50A 450VDC
Max continuous thermal current	30 secs	150A
	10 secs	250A
Max. switching current	1 time only	500A 350VDC
Initial contact resistance	max	1mΩ (at 1A)
Coil		
Rated voltage (see page 2)	DC	6 ... 72VDC
Rated power consumption		3.2W @ 12VDC
Insulation		
Insulation resistance	Initial	100MΩ (Min.)
	Life end	50MΩ (Min.)
Dielectric strength	coil to contact	2500Vrms / 1mA / 1 min (at sea level)
	contact to contact	2500Vrms / 1mA / 1 min (at sea level)
General Data		
Operate time at 20°C	max.	25ms
Bounce time at 20°C	max.	7ms
Release time at 20°C	max.	12s
Electrical life		Voltage and Current Dependent - See Fig. 1
Mechanical life		1 x 10^6
Ambient temperature	operating	-40 to +85°C
Relative humidity		5 to 85%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 47.82mm (approx.)
Weight	approx.	120g ±5g

Ordering Code

DEVR05 - 50 61 - S8 - 1012 - R 1

Series

DEVR05

Contact Material

50: $AgSnO_2$

Contact Arrangement

61: SPST-NO

81: SPST-NO (no polarity)

Mounting & Connections

Bottom flange mounting base

S8: M4 Female power terminals

Coil by flying leads

Coil Code

See coil codes - Table 1

Coil Wire Length

R: 400mm (standard)

T: 5.9" (150mm)

Coil Wire Termination

1: None (standard)

2: Yazaki 7282-5558-10 Male

3: Molex Mini-Fit Female

Other terminations to special order

Specifications are liable to change without notice. E&OE.

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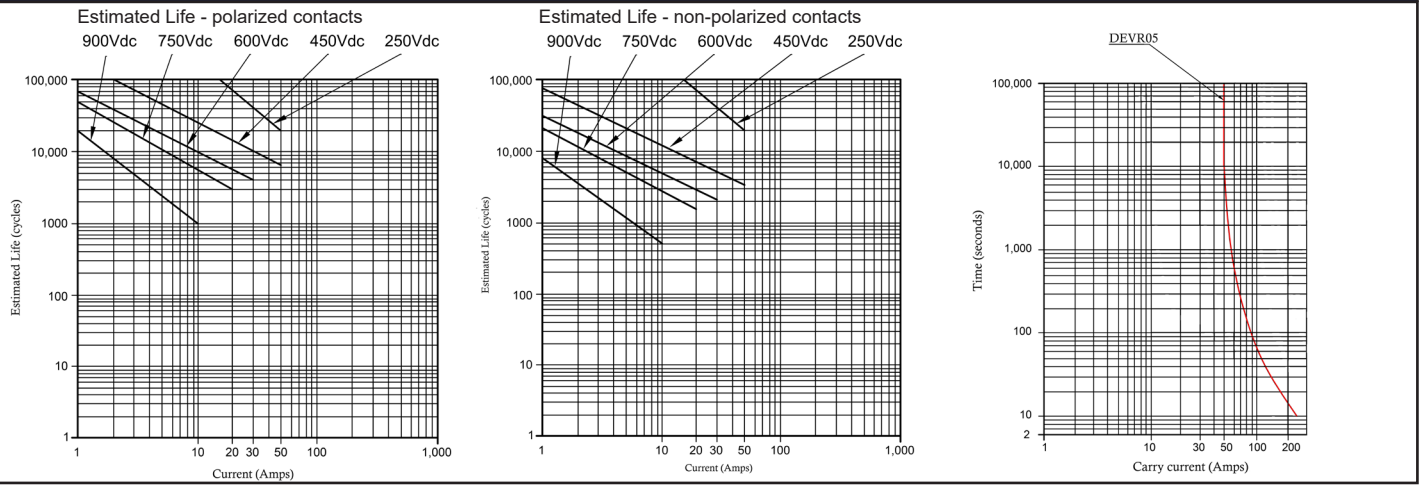
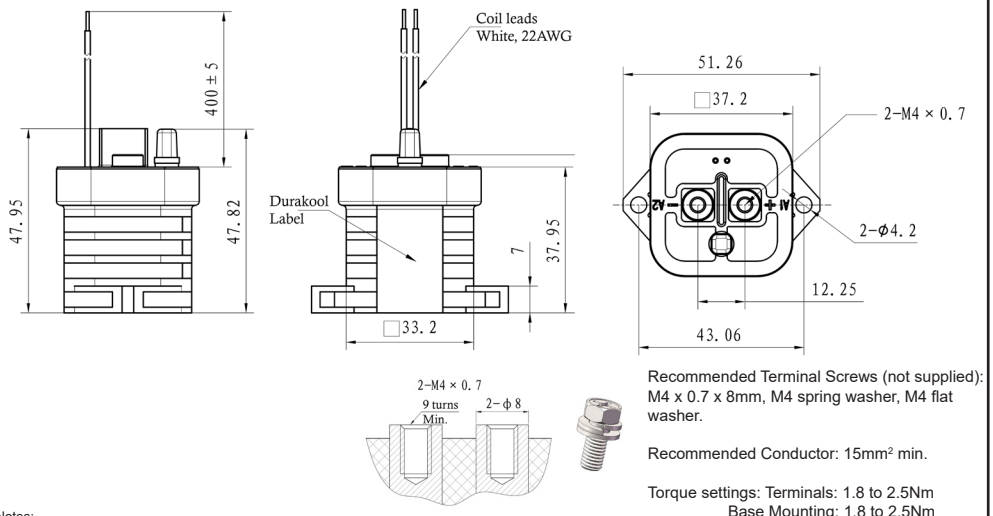
Coil Data Table 1

Coil code	Nominal voltage (VDC)	Must operate voltage Max. (VDC@ 20°C)	Maximum allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance Ω ±5% (at 20°C)	Coil Current (mA)	Coil Power (W @ 20°C)
1006	6	4.5	6.6	0.6	11	545.5	3.3
1012	12	9.0	13.2	1.2	45	266.7	3.2
1024	24	18.0	26.4	2.4	167	143.7	3.45
1028	28	21.0	30.8	2.8	240	116.7	3.3
1036	36	27.0	39.6	3.6	400	90.0	3.2
1048	48	36.0	52.8	4.8	730	65.8	3.2
1072	72	54.0	79.2	7.2	1600	45.0	3.2

Electrical Performance Fig 1



Dimensions (mm) Fig 2



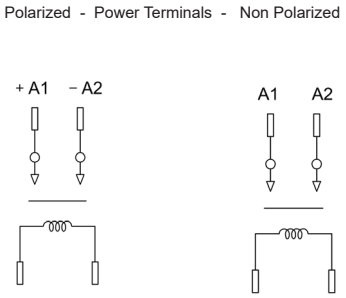
Recommended Terminal Screws (not supplied): M4 x 0.7 x 8mm, M4 spring washer, M4 flat washer.

Recommended Conductor: 15mm² min.

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

Notes:
1: Note coil is not polarized.
2: Polarity sensitive type: Observe contact polarity as indicated
Contactor life will be severely reduced if incorrectly connected.
3: Nominal dimensions in mm.
4: Tolerances (nominal), <10mm: ± 0.3mm, 10 ~ 50mm: ± 0.6mm, >50mm: ± 1.0mm.
5: Coil wire length and terminations can be customized upon request.

Circuit Diagram Fig 3



Coil is not polarized

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