DURAKOOL
A WT/AEC Brand

DEVR05 Series
HVDC contactor 55A / 900VDC



- HVDC 55A at 450VDC
- Max. Switching current = 500A
- $AgSnO_2$ contacts sealed in inert gas
- Magnet arc blowout
- Pre-charge relay
- Female M4 power terminals

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	55A 450VDC
Max. continuous thermal current	30s	150A
	10s	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	hold	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.	12ms
Electrical life		Voltage and current dependent - see fig. 1
Mechanical life		1 x 10^6

Environmental

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 47.82 (approx.)
Weight	approx.	120g ±5g

Ordering Code

D E V R 0 5 - 5 0 6 1 - S 8 - 1 0 2 4 - R 1

Series

Contact material
50: $AgSnO_2$

Contact arrangement
61: SPST-NO
81: SPST-NO (no polarity)

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

Coil code:
See table 1

Coil wire length
R: 400mm (standard)
T: 5.9" (150mm)

Coil wire & auxiliary contact termination
1: None
2: Yazaki 7282-5558-10 Male
Other terminations to special order

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

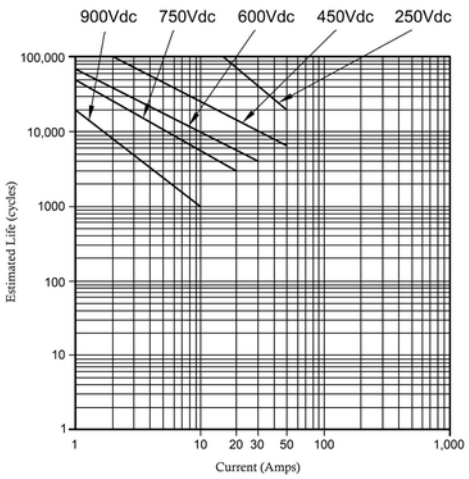
DEVR05 Series
HVDC contactor 55A / 900VDC

Coil Data — Table 1

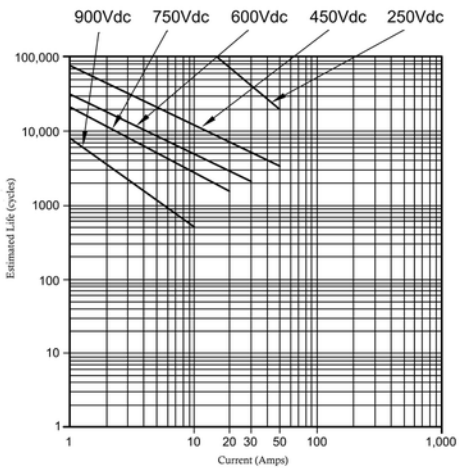
Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC@ 20°C)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance Ω ±5% (at 20°C)	Coil Current (mA)	Coil power (W @ 20°C)
1006	6	4.5	6.6	0.6	11	545.5	3.3
1012	12	9.0	13.2	1.2	45	266.7	3.2
1024	24	18.0	26.4	2.4	167	143.7	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

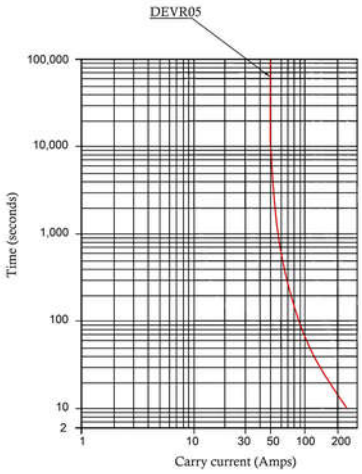
Electrical Performance — Fig. 1

Estimated Life - polarized contacts

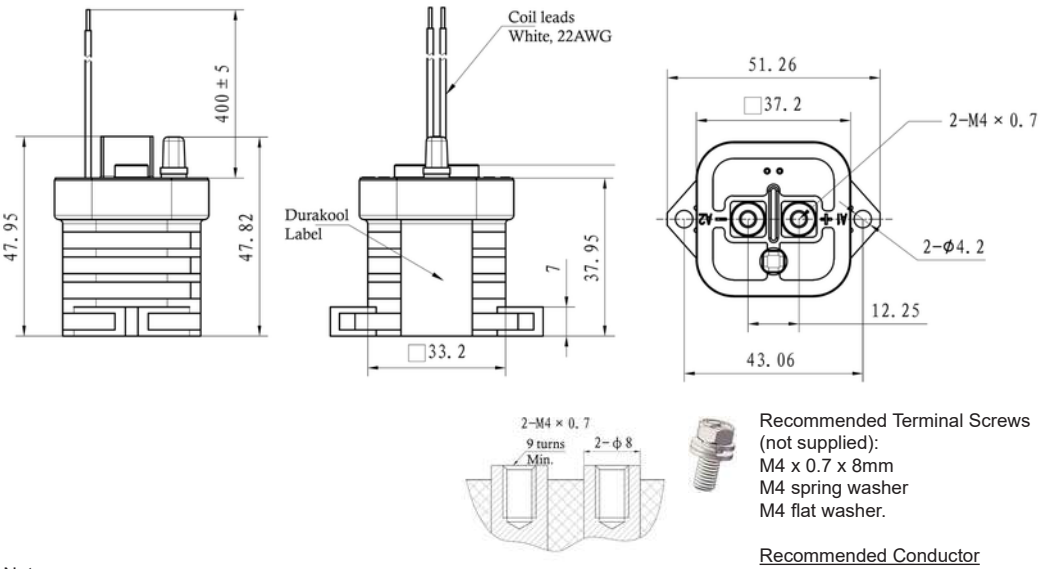


Estimated Life - non polarized contacts





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.
Preferred: 20mm²

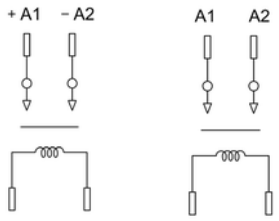
Torque settings
Terminals: 1.8 to 2.5Nm
Base Mounting: 1.8 to 2.5Nm

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

Power Terminals

Polarized | Non Polarized



Coil is not polarized

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