DURAKOOL
A WT/AEC Brand

DEVR10 Series
HVDC contactor 120A / 900VDC



- HVDC 120A at 450VDC
- Max. Switching current = 600A
- $AgSnO_2$ contacts sealed in inert gas
- Magnet arc blowout
- Auxiliary contact option
- Female M5 power terminals

CE cULus E305753 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	120A 450VDC
Max. continuous thermal current	600s	140A
	60s	180A
Max switching current	1 time only	600A 450VDC
Initial contact resistance	max.	1mΩ (at 1A)
Auxiliary contact when fitted	arrangement	SPST-NO (1 Form A)
	max. current	2A @ 30VDC / 3A @ 125VAC
	min. current	100mA @ 8V

Coil

Rated voltage (see page 2)	DC	6~72VDC
Rated power consumption	hold	5.54W @ 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	40 x 53.86 (over flanges) x 59.07 (approx.)
Weight	approx.	190g ±5g

Ordering Code

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

Series

Contact material
50: $AgSnO_2$

Contact arrangement
61: SPST-NO*
71: SPST-NO* + auxiliary
81: SPST-NO
* Polarised - see page 2

Mounting & terminations
Bottom flange mounting base
S8: M5 Female power terminals
Coil & auxiliary contacts by flying leads

Coil code:
See table 1

Coil wire length
R: 14.96" (380mm)
T: 5.9" (150mm)

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

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

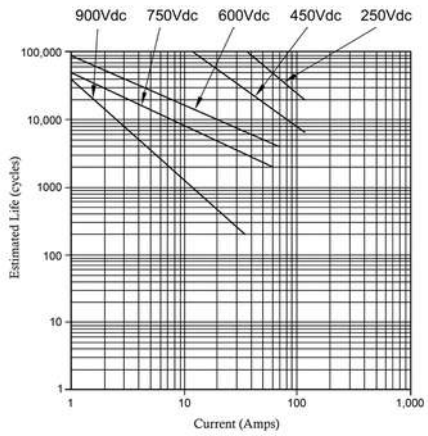
DEVR10 Series
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Coil Data — Table 1

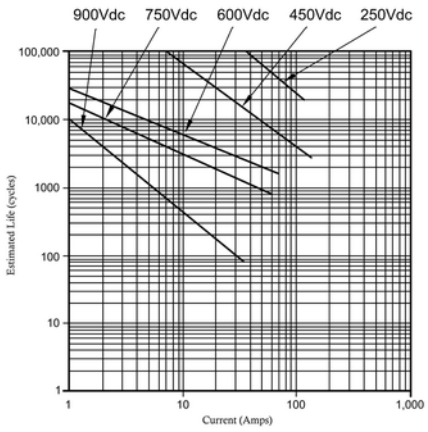
Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC@ 20°C)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Coil resistance Ω ±5% (at 20°C)	Coil Current (mA)	Coil power (W @ 20°C)
1006	6	4.5	6.6	0.6	6.3	952.4	5.71
1012	12	9.0	13.2	1.2	26.0	461.5	5.54
1024	24	18.0	26.4	2.4	96.4	249.0	5.98
1028	28	21.0	30.8	2.8	136.0	205.9	5.76
1036	36	27.0	39.6	3.6	227.0	158.6	5.71
1048	48	36.0	52.8	4.8	392.0	122.5	5.88
1072	72	54.0	79.2	7.2	868.0	83.0	5.97

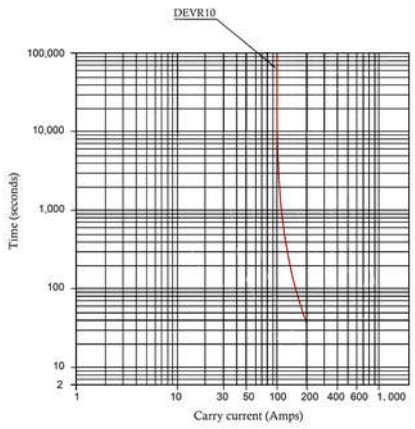
Electrical Performance — Fig. 1

Estimated Life - polarized contacts

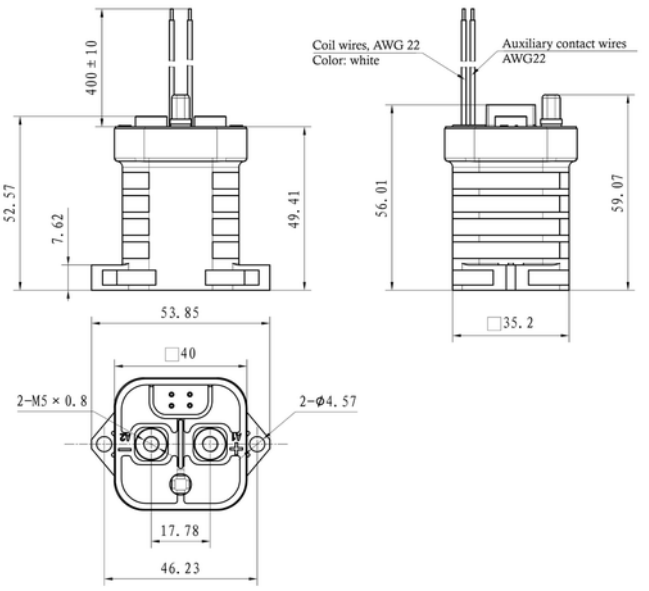


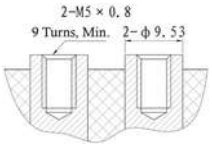
Estimated Life - non-polarized contacts





Dimensions (mm) — Fig. 2







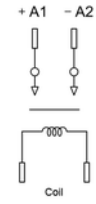
Recommended Terminal Screws (not supplied):
M5 x 0.8 x 10mm
M5 spring washer
M5 flat washer

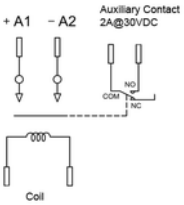
Recommended Conductor
50mm² min.
Preferred conductor 70mm²

Torque settings
Terminals: 3.5 to 4.4Nm
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





Polarized Power Terminals shown.

Power Terminals maybe polarized or non-polarized depending upon chosen option.

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