DEVR20 Series
HVDC Contactor 500A / 1000VDC



- HVDC 400A continuous
- Max. switching current = 2000A
- Contacts sealed in inert gas
- Magnet arc blowout
- Auxiliary contact option
- PWM Coil economiser standard
- Female M6 or M8 male power terminals

UK CA CE cULus E305753 RoHS Compliant

Contacts

Contact arrangement		SPST-NO-DM
Contact material		T2+Ag
Max. switching voltage	AC/DC	1000VDC
Rated load	DC1	400A 1000VDC (break only above 200A)
Max. continuous thermal current	600s	500A (with 150mm² conductors)
	60s	650A (with 150mm² conductors)
Max switching current	1 time only	2000A 350VDC
Initial contact resistance	max.	1mΩ (at 1A)
Auxiliary contact (when fitted)	arrangement	SPST-NO (1 Form A), (SPST-NC by request)
	max. current	2A @ 30VDC / 3A @ 125VAC
	min. current	100mA @ 5V

Coil

Nominal voltage (see page 2)	DC	9~36VDC, 32~95VDC (with coil economiser)
Rated power consumption	hold	1.56W @ 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 / bounce time at 20°C	max.	25ms / 7ms
Release time	max.	12ms
Electrical life	ops.	Voltage and current dependent - see fig. 1
Mechanical life	ops.	2 x 10^5

Environmental

Environmental sealing	IP rating	Contacts are inside hermetically sealed can,
		economiser is protected by dust cover only.
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	58.2 x 80.48 (over flanges) x 72.11 (max.)
Weight	approx.	430g±10g

Ordering Code

D E V R 2 0 - 5 0 6 1 - S 8 - 0 9 3 6 - R 1

Series

Contact material
50: T2+Ag

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

Mounting & terminations
Bottom flange mounting base
S8: M8 male stud power terminals
S9: M6 female thread 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
Other terminations to special order

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

Coil Data

Table 1

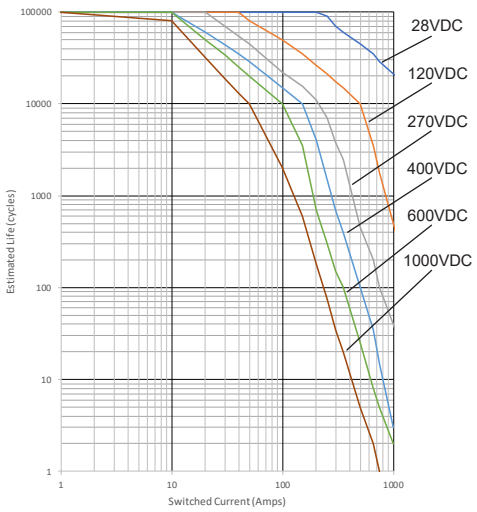
Coil code	Nominal voltage (VDC)	Must operate voltage max. (VDC)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Inrush current max. (A)	Hold voltage min. (VDC)	Holding current (average)
0936	9 - 36	9	36	6	3.8	7.5	130mA@12VDC 70mA @ 24VDC
3295	32 - 95	32	95	18	1.3	22	30mA @ 48VDC

PWM Coil economiser standard, no additional coil surge suppression required

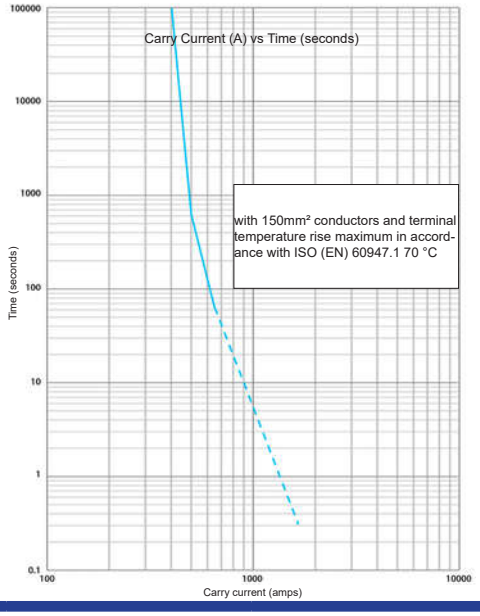
Other voltages available upon special request and subject to minimum quantity.

Electrical Performance

Fig. 1

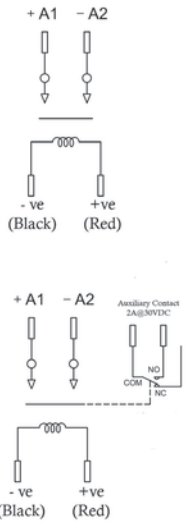


Estimates are based on tests and extrapolated data.
The user is advised to confirm the performance in their application.
For non-polarised contacts derate estimated life by 50%.



Circuit Diagram

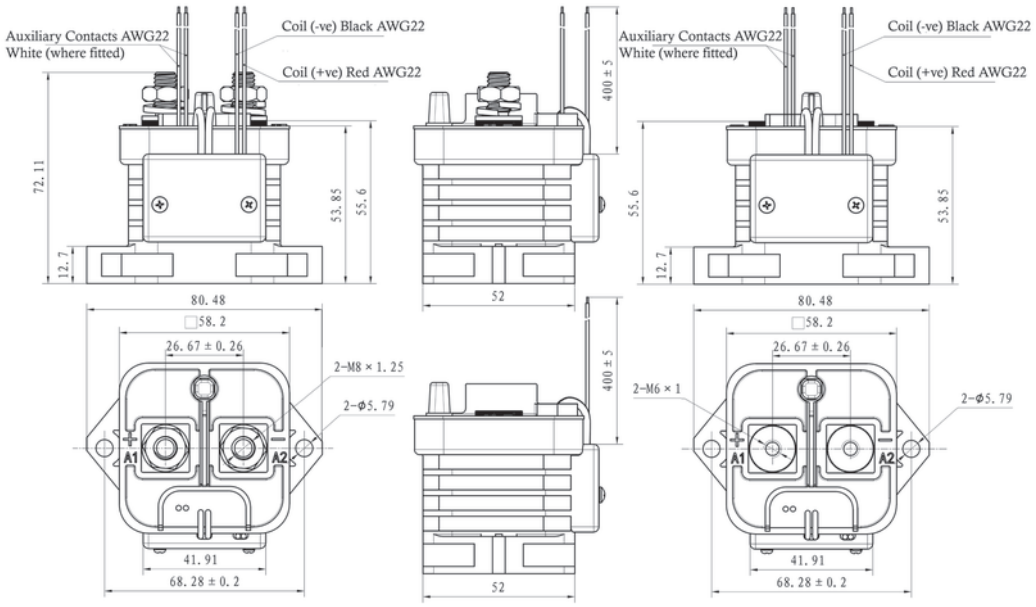
Fig. 2

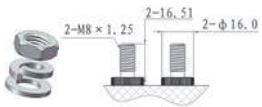


Power Terminals maybe polarised or non-polarised depending upon chosen option.
Note: Coil is polarised.

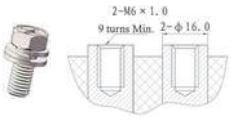
Dimensions

Fig. 3





Male Power Terminals:
M8 Nut
Spring Washer and Washer (supplied)



Female Power Terminals
Recommended Terminal Screws (not supplied):
M6 x 1 x 14mm
M6 spring washer
M6 flat washer

Recommended Minimum Conductor
100mm².
Preferred conductor: 150mm²

Torque settings
Terminals: 9.0-12.0Nm
Base Mounting: 1.8 to 3.5Nm

Notes:
1: Note coil polarity
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 customised upon request.

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