



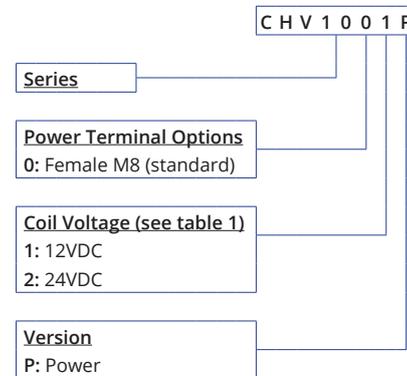
\*image is for illustrative purposes. Please refer to datasheet for detail.

- HVDC 2000A carry current (10s)
- Max. switching current = 2000A / 1000VDC
- Contacts sealed in inert gas
- Magnet arc blowout
- Non-polarised power terminals
- Ceramic arc chamber
- Dual coil economiser as standard
- Auxiliary contact as standard



Contacts	
Contact arrangement	SPST-NO-DM
Contact material	Oxygen Free Copper
Max. switching voltage	1500VDC
Rated load	DC1 1000A 1500VDC
Max. continuous thermal current	15min 1200A
	3min 1100A
	10s 2000A
	15ms 8000A
Max. switching current	1 time only 2000A 1000VDC
Initial contact resistance	max. 0.3mΩ @ 20A / 6VDC
Auxiliary Contact	arrangement SPST-NO (1 Form A)
	max. current 2A @ 24VDC
	min. current 5mA @ 12VDC
	resistance ≤300mΩ
Coil	
Nominal voltage (see page 2)	12VDC, 24VDC
Rated power consumption	hold <5W
Insulation	
Insulation resistance	Initial (min.) ≥1000MΩ, 1000VDC, 1 min*
Dielectric strength	coil to contact 4000Vrms / ≤10mA / 1 min*
	open contacts 4000Vrms / ≤10mA / 1 min*
General data	
Operate time at 20°C	max. 50ms
Bounce time at 20°C	max. 10ms
Release time at 20°C	max. 30ms
Electrical life (1s on/ 1s off)	Voltage and current dependant - see fig 1.
Mechanical life	≥ 2 x 10 <sup>5</sup> ops.
Environmental	
Environmental seal	power contacts IP67
Ambient temperature	operating -40 to 85°C
Relative humidity	5 to 85%RH
Altitude	≤4000m
Shock resistance	function 20G peak x-y axis, 10G peak z axis, 11ms ½ sine
	destructive 50G peak, 6ms ½ sine
Vibration resistance	(malfunction <10µs) 10Hz ~ 55Hz, single amplitude 1.5mm 55Hz ~ 2000Hz, 5G
Dimensions	L x W x H 104.0 x 70.0 x 108.1 mm
Weight	approx. 1100g

### Ordering code



#### Notes:

1: All parameters, unless otherwise specified, are measured at ambient temperature of 23°C.

2: Product can be oriented in any position.

3: Contacts are not polarised

4: Coil is polarised

\*6000Vrms / ≤1mA/ 2s

### Coil data

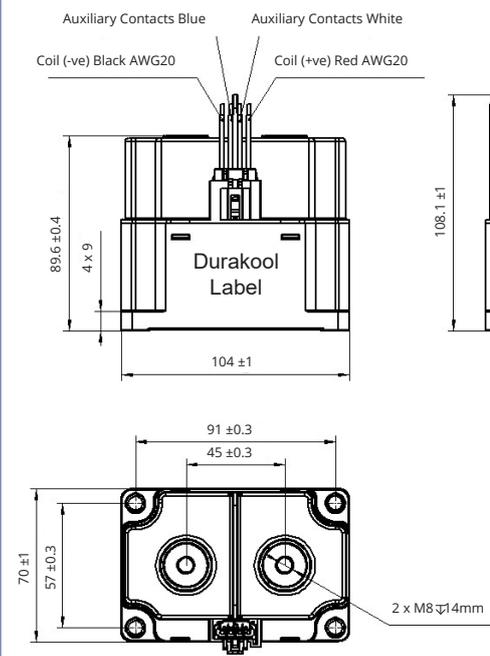
table 1

Coil code	Nominal coil voltage (VDC)	Must operate voltage max. (VDC)	Max. allowable voltage (VDC)	Must release voltage min. (VDC)	Making current (±10%) (A)	Holding Current (±10%) (A)	Rated coil power (W)	
							Operate	Hold
CHV1001P	12.0	8.0	16.0	1.2	4.2	0.42	50.0 0.3s	5.0
CHV1002P	24.0	16.0	32.0	2.4	2.1	0.21		

Dual coil product has been configured with coil surge absorption circuit, engineers do not need to configure.

### Dimensions (mm)

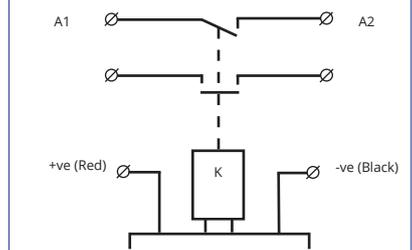
fig. 1



- Notes:  
 1: Nominal dimensions in mm.  
 2: Tolerances (nominal), <10mm: ±0.3mm, 10 - 50mm: ±0.6mm, >50mm: ±1.0mm.  
 3: Torque settings  
 Terminals: 12 - 15Nm  
 Base Mounting: 3 - 4Nm

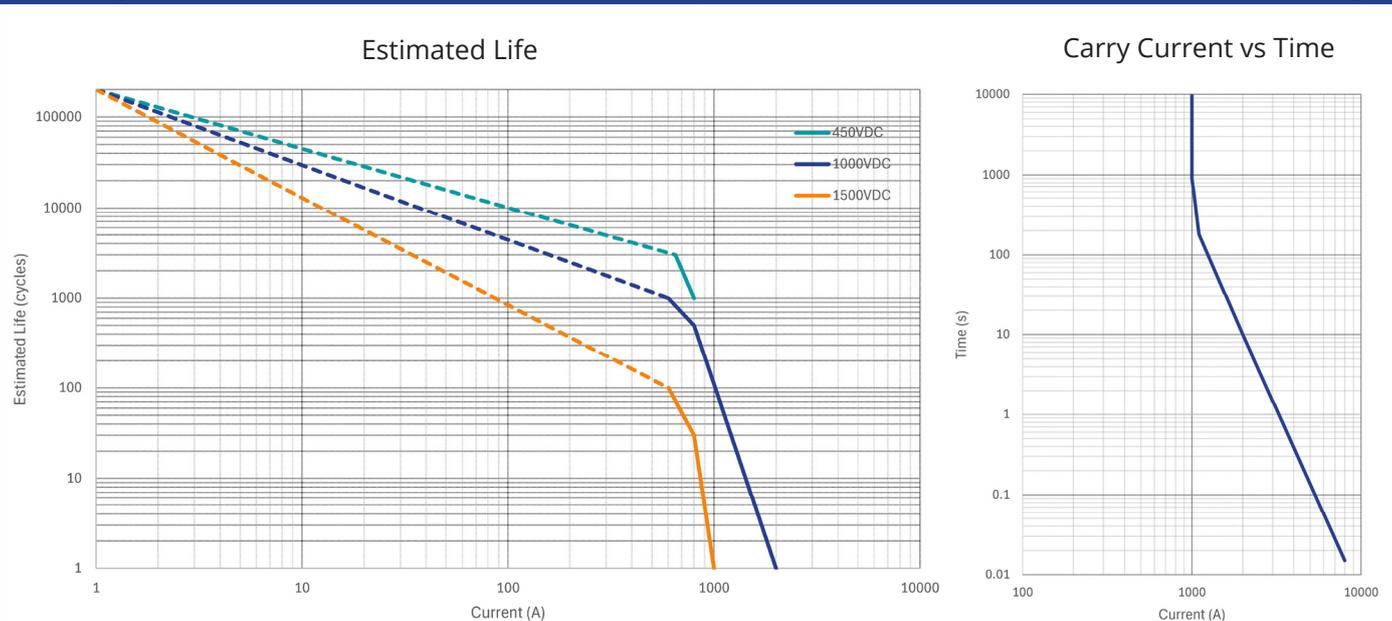
### Circuit diagram

fig. 2



### Electrical performance - Life and Endurance

fig. 3



Notes:

- Electrical performance estimates are based on tests and extrapolated data (extrapolated data can be seen with dotted line). The user is advised to confirm the performance in their application.
- Carry current data was tested at 85°C ambient temperature with bus bar ≥650mm². The data is for reference only and should not be used to select fuses directly.
- Dual coil economiser as standard.