

DC HIGH VOLTAGE Bi-directional SWITCHING RELAY

EVHB500

(H: 1500V Class)



Application (응용분야) : Electric Vehicle, Charging System, Battery Energy Storage System, Solar System, etc. Bi-directional switching systems and AC systems

Magnet coil ratings (코일정격)

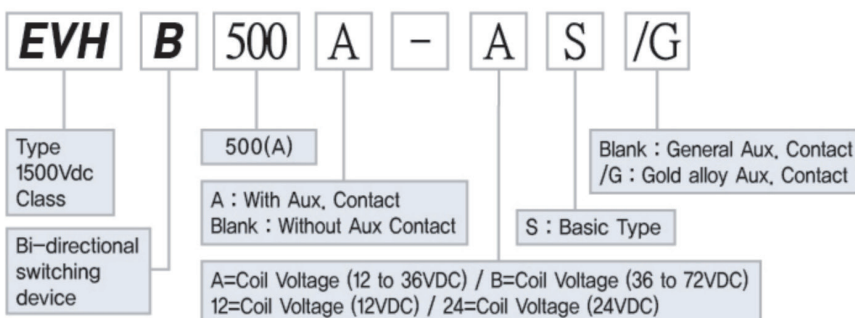
Nominal voltage (V)		Item	Inrush Coil current 100ms (Max.)	Holding Coil current	Pick-up voltage (V) max.	Drop-out voltage (V) min.	Holding voltage (V) min.	Max. voltage (V)
B	72		1.3A	0.08A	32VDC	18VDC	22VDC	95VDC
	60		1.1A	0.08A				
	36		1.0A	0.12A				
A	36		3.8A	0.10A	9VDC	6VDC	7.5VDC	36VDC
	24		1.8A	0.16A				
	12		1.4A	0.35A				
12			1.4A	0.32A	9VDC	6VDC	7.5VDC	18VDC
24			1.1A	0.16A	18VDC	12VDC	13.5VDC	32VDC

Notes : 1. Nominal current and coil resistance are measured at +20°C. 2. Differences of coil resistance are ±10%.
3. Performance characteristic coil temperature is measured at +20°C.

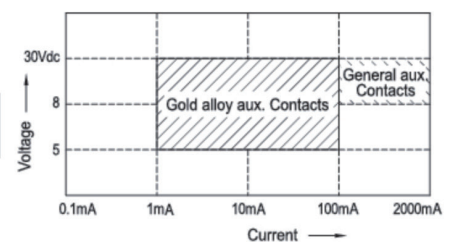
Contact ratings (접점정격)

Item	Type	1 Pole Resistor load	
		EVHB500	
Continuous current (wire size 325mm ²)		500A	
Max. switching current		750VDC 500A	UL Certification
		1000VDC 300A	
		1500VDC 100A	
Max. switching voltages		1500VDC / 1000VAC	
Contact Rating switching voltages		12 to 1500VDC / 1000VAC	
Voltage drop across contacts per 100A		30mV Max. (At 5VDC)	
Min. permissible load		12VDC 0.5A	
Description		S.P On/Off (a)	
Contact Arrangement, auxiliary contacts		1Form A (SPST-NO.)	
General Aux, Contact Current, Max.		2A 30VDC / 3A 125VAC	
General Aux, Contact Current, Min.		100mA 8VDC	
Gold alloy Aux, Contact Current, Max.		0.1A 30VDC / 0.1A 30VAC	
Gold alloy Aux, Contact Current, Min.		1mA 5VDC / 1mA 5VAC	

Ordering information (주문방법)



Permissible load of Aux. contact



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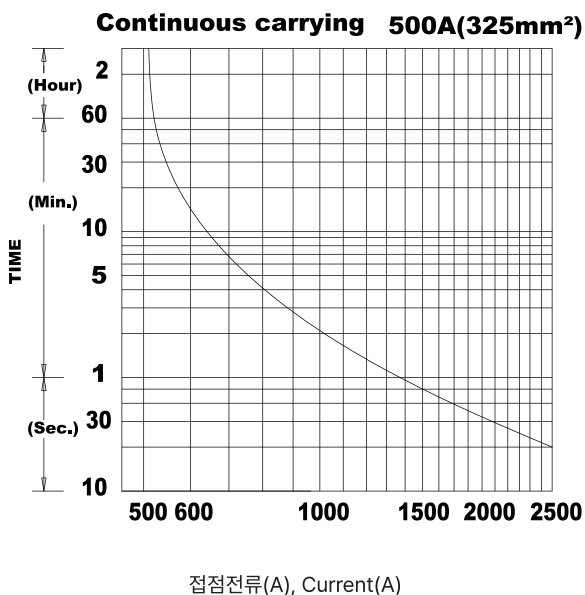
Characteristics (성능)

Expected life	Mechanical (Min.)		5×10 ⁵
	Electric (Min.) (Resistor)	750VDC(+), (-) 500A	1×10 ³
		1000VDC(+), (-) 300A	1×10 ³
		1500VDC(+), (-) 100A	1×10 ³
Initial insulation resistance			Min. 100MΩ 500VDC
Initial breakdown voltage	Between open contacts		4500VAC 60 Sec. 5mA
	Between contacts & coil		4500VAC 60 Sec. 5mA
Operate time (at 20°C)			Max. 40ms
Release time (at 20°C)			Max. 10ms
Shock resistance	Functional		Min. 196 m/s ² {20G}
	Destructive		Min. 490 m/s ² {50G}
Vibration resistance	Functional		196 m/s ² {20G} 80 to 2000Hz
	Destructive		196 m/s ² {20G} 80 to 2000Hz
Conditions for operation, transport and storage	Ambient temperature		-40°C to +85°C
	Humidity		5 to 85% R.H.
Unit weight			980g

Reference data (특성곡선)

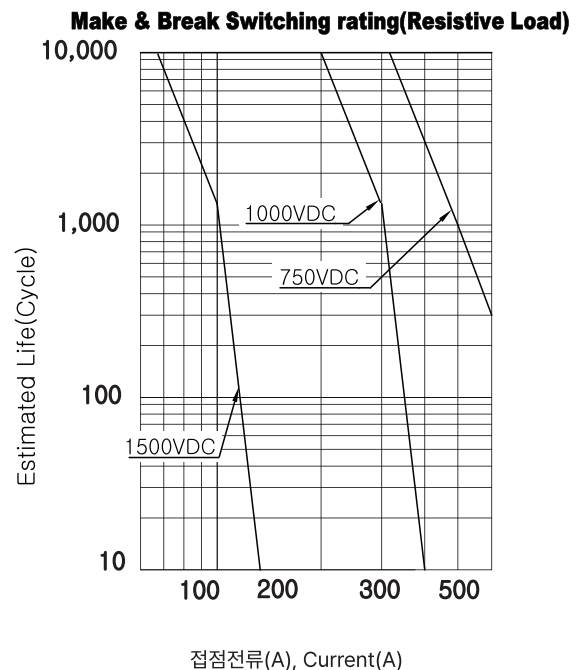
온도상승곡선

- 통전시간의 최대치 Max. Current capacity
- Max. Continuous thermal current rating (amperes)



전기적 수명 곡선

(Estimated Switching Ratings)

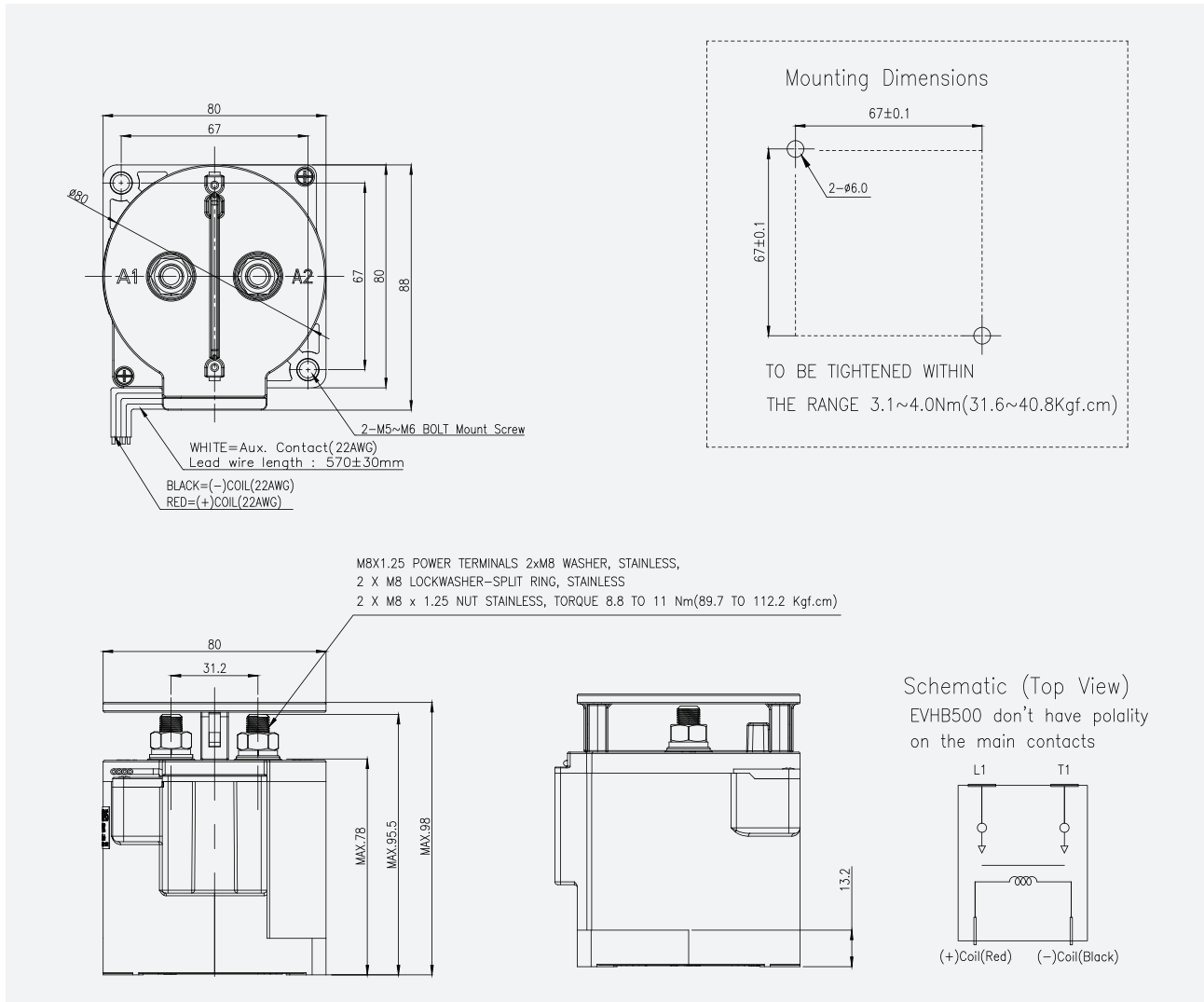




Dimension in mm (외형치수도)

Tolerance(공차) : 10mm 이하±0.3, 10~50mm ±0.6, 50mm 이상±1.0

(Basic Type)



Application Circuit (응용 회로)

