

DC HIGH VOLTAGE EV RELAY

EVR400



▶ 응용분야 (Application) : Electric Vehicle, Charging System, Battery Energy Storage System
Solar System, Golf Car, Fuel Cell Vehicle, etc.

▶ 코일정격 (Magnet coil ratings)

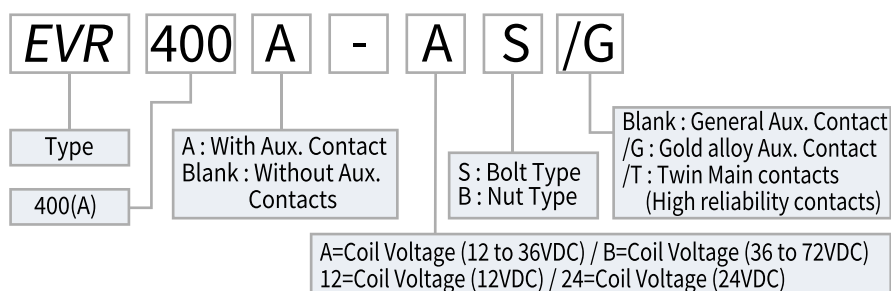
Nominal voltage(V)	Item	Inrush Coil current 100ms (Max.)	Holding Coil current	Pick-up voltage (V)max.	Drop-out voltage (V)min.	Holding voltage (V)min.	Max. voltage (V)
B	72	1.1A	0.06A	32VDC	18VDC	22VDC	95VDC
	60	1.0A	0.06A				
	36	0.95A	0.1A				
A	36	2.0A	0.09A	9VDC	6VDC	7.5VDC	36VDC
	24	1.8A	0.13A				
	12	1.4A	0.27A				
12		1.2A	0.32A	9VDC	6VDC	7.5VDC	18VDC
24		0.6A	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 $\pm 10\%$. 3. Performance characteristic coil temperature is measured at +20°C.

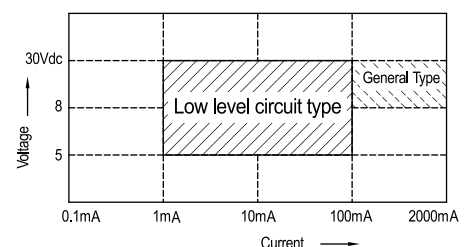
▶ 접점정격 (Contact ratings)

Item	Type	1Pole Resistor load	
		EVR400	
Max. Continuous current (wire size 150mm ² ×2)		500A	
Max. switching current		450VDC 400A	UL Certification
		1200VDC 80A	
		1000VDC 200A	
		1000VDC 100A	CE
Contact rating switching voltages		12~1500VDC	
Max. cut-off current		300VDC 2500A 3 Ops	
C-R load (charging)		500V 1500A 4,000 Ops / 500V 500A 30,000 Ops	
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. Contacts Max.		0.1A 30VDC / 0.1A 30VAC	
Gold alloy Aux. Contacts Min.		1mA 5VDC / 1mA 5VAC	

▶ 주문방법 (Ordering information)



Permissible load of Aux. contact



DC HIGH VOLTAGE EV RELAY

EVR400



EVR400

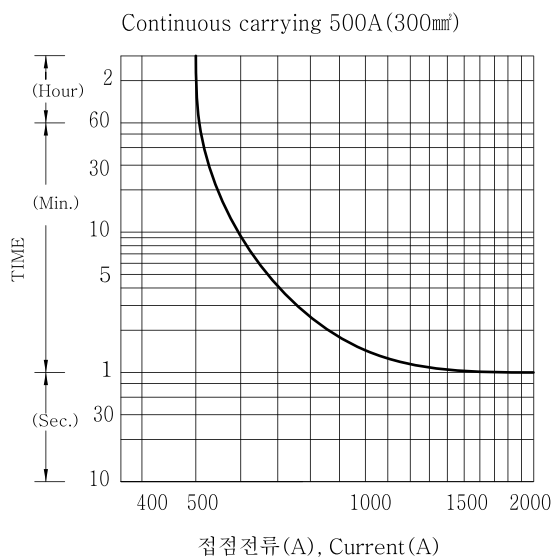
▶ 성능 (Characteristics)

Expected life	Mechanical (Min.)		5×10^6
	Electric (Min.) (Resistor)	450VDC 400A	3×10^3
		250VDC 400A	1×10^6
		1000VDC 100A	1×10^4
		1000VDC 200A	1×10^3
Initial insulation resistance			Min. 100mΩ 500VDC
Initial breakdown voltage	Between open contacts		3500VAC 60 Sec. 5mA
	Between contacts & coil		3500VAC 60 Sec. 5mA
Operate time (at 20°C)			Max. 30ms
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			660g

▶ 특성곡선 (Reference data)

● 온도상승곡선

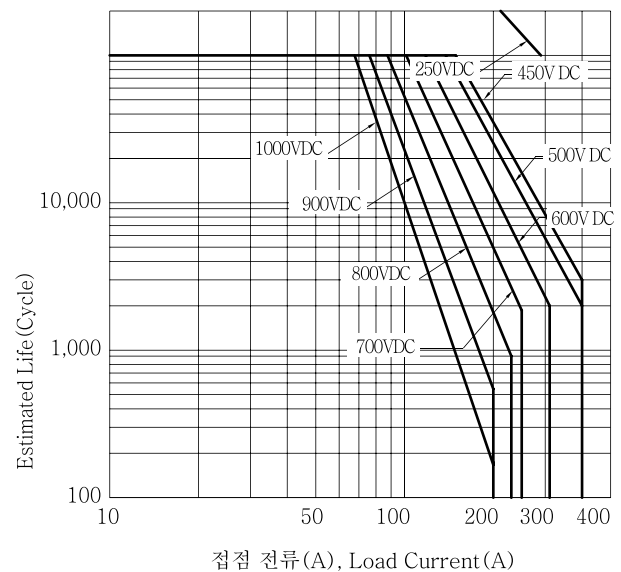
- ▶ 통전시간의 최대치 Max, Current capacity
Max, Continuous thermal current rating (amperes)



● 전기적 수명 곡선

(Estimated Switching Ratings)

Make & Break Switching rating (Resistor Load)



DC HIGH VOLTAGE EV RELAY

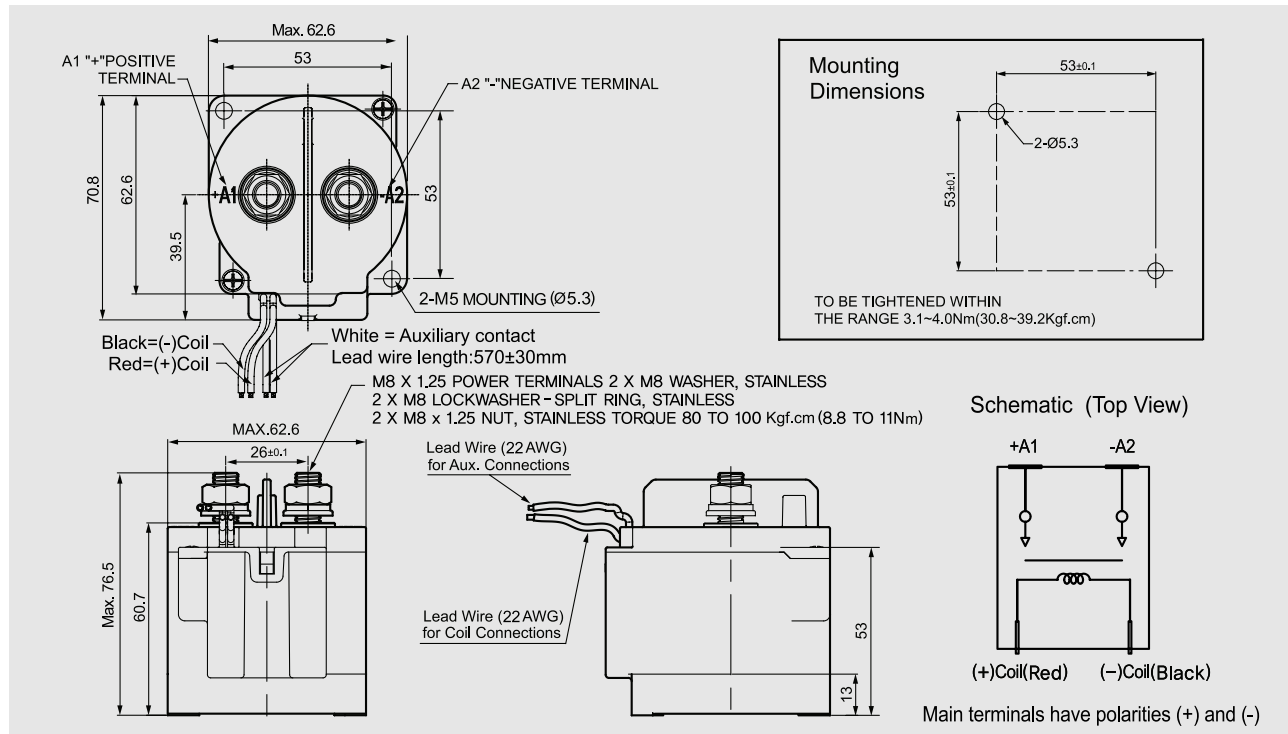
EVR400



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

▶ 외형치수도 (Dimension in mm)

S: Bolt Type



B: Nut Type

