

DC HIGH VOLTAGE EV RELAY

EVR600



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

▶ 코일정격 (Magnet coil ratings)

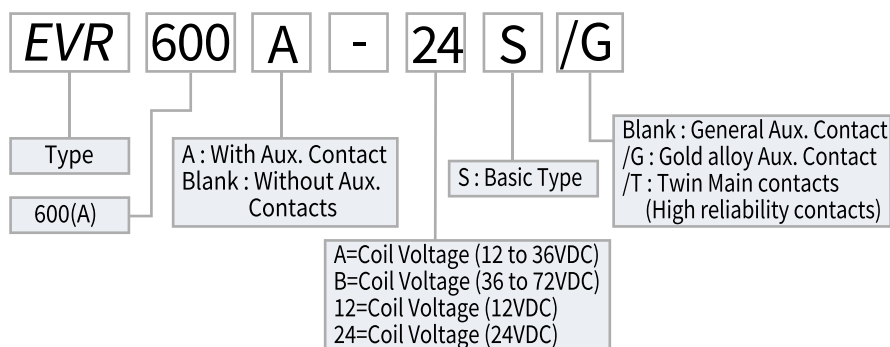
Nominal voltage(V)	Item	Inrush Coil current 100ms (Max.)	Holding Coil current	Pick-up voltage (V)max.	Drop-out voltage (V)min.	Holding voltage (V) min.	Max. voltage (V)
B	72	1.1A	0.04A	32VDC	18VDC	22VDC	95VDC
	60	1.0A	0.06A				
	36	0.9A	0.08A				
A	36	3.6A	0.11A	9VDC	6VDC	7.5VDC	36VDC
	24	3.2A	0.16A				
	12	3.2A	0.32A				
	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.

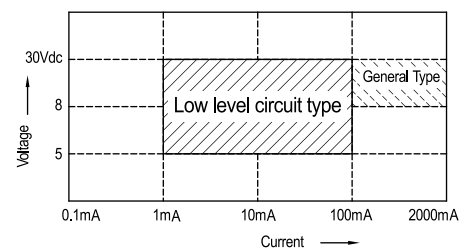
▶ 접점정격 (Contact ratings)

Item	Type	1Pole Resistor load
		EVR600
Max. Continuous current (wire size 185mm ² ×2)		600A
Max. switching current		600A
Max. switching voltages		900VDC
Contact Rating switching voltages		12~900VDC
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



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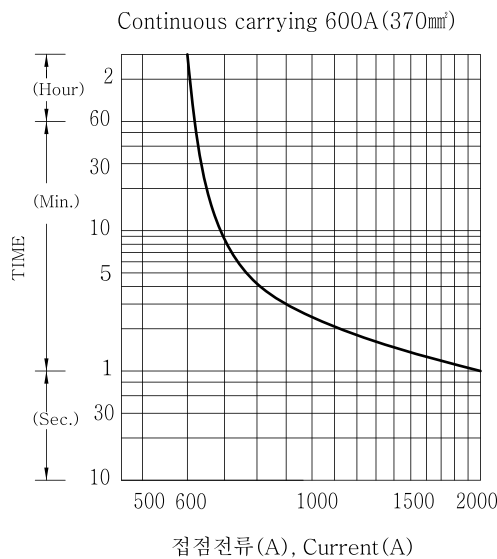
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▶ 성능 (Characteristics)

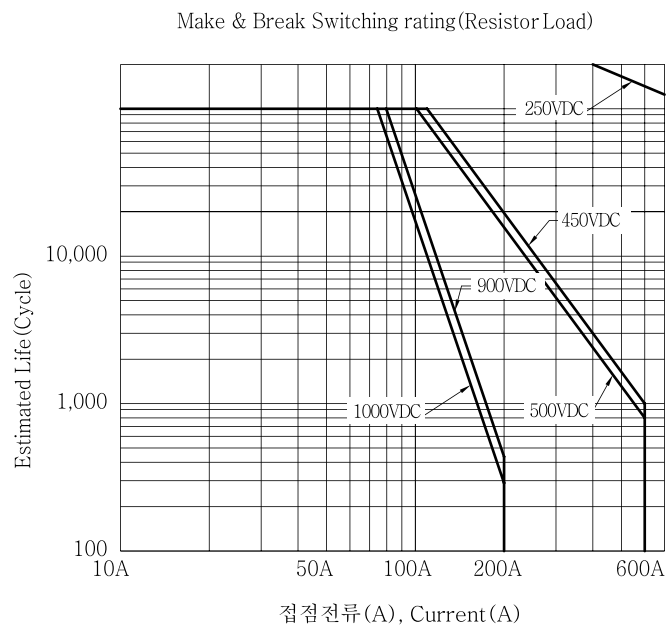
Expected life	Mechanical (Min.)		5×10^5
	Electric (Min.) (Resistor)	450VDC 600A	1×10^7
		250VDC 600A	1×10^7
Initial insulation resistance			Min. 100mΩ 500VDC
Initial breakdown voltage	Between open contacts		3500VAC 60 Sec. 5mA
	Between contacts & coil		3500VAC 60 Sec. 5mA
Operate time (at 20°C)			Max. 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			920g

▶ 특성곡선 (Reference data)

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



- 전기적 수명 곡선
(Estimated Switching Ratings)



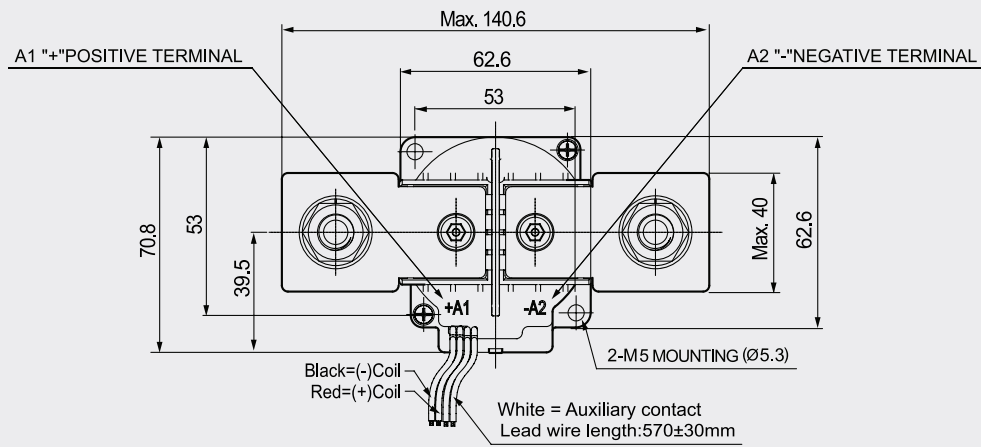
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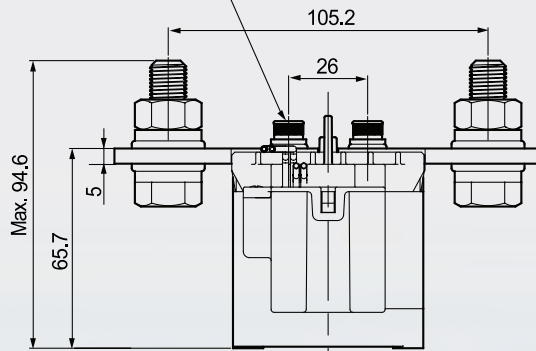


▶ 외형치수도 (Dimension in mm)

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



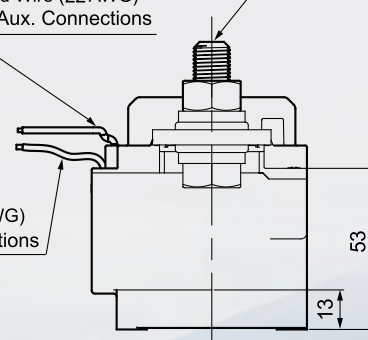
M6 Hex Socket Head Cap Screw



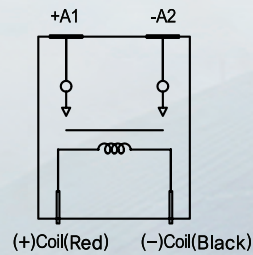
M12X40 MAIN TERMINALS TO BE TIGHTENED WITHIN THE RANGE 24.3~30.8Nm(238~302Kgf.cm)

Lead Wire (22 AWG) for Aux. Connections

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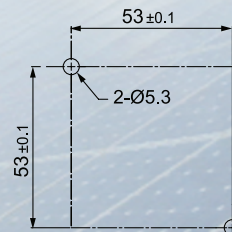


Schematic (Top View)



Main terminals have polarities (+) and (-)

Mounting Dimensions



TO BE TIGHTENED WITHIN THE RANGE 3.1~4.0Nm(30.8~39.2Kgf.cm)