

DC HIGH VOLTAGE EV RELAY

EVR600



EVR600

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

▶ **코일정격 (Magnet coil ratings)**

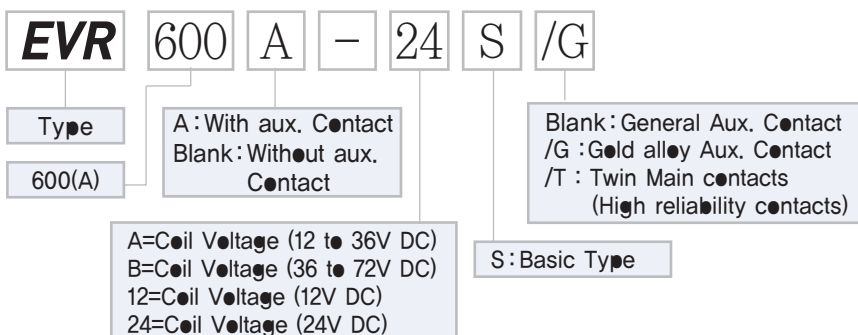
Nominal voltage(V)	Item	Inrush Coil current 100ms (Max.)	Holding Coil current (A)	Pick-up voltage (V)Max.	Drop-out voltage (V)Min.	Holding voltage (V)Min.	Max. voltage (V)Max.
B	72	1,3A	0,045~0.07A	32VDC	18VDC	22VDC	95VDC
	60						
	36						
A	36	3,8A	0.11A	9VDC	6VDC	7.5VDC	36VDC
	24		0.16A				
	12		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 ±10%.
3. Performance characteristic coil temperature is measured at +20°C.

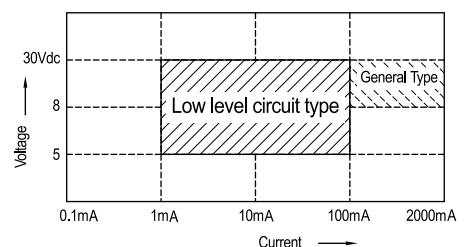
▶ **접점정격 (Contact ratings)**

Item	Type	1Pole Resistive load (L/R≤1ms)
		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.
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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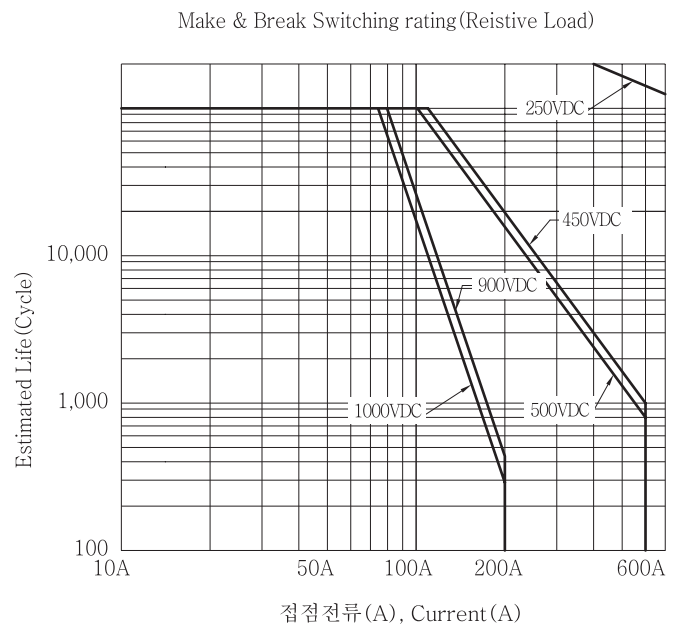
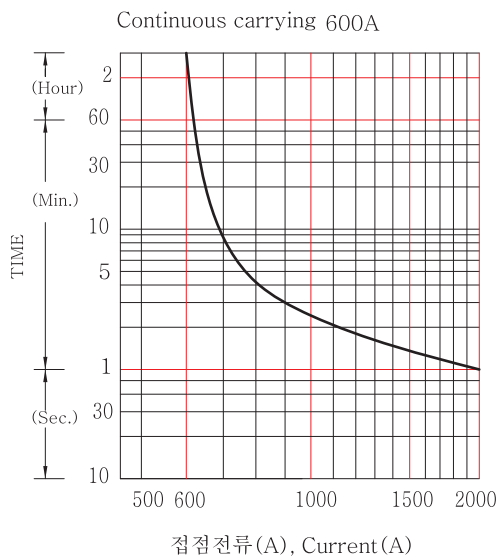
▶ 성능 (Characteristics)

Expected life	Mechanical (Min.)		2×10^6
	Electric (L/R \leq 1ms)	450V DC 600A	1×10^3
		250V DC 600A	1×10^5
Initial insulation resistance			Min. 100M Ω 500V DC
Initial breakdown voltage	Between open contacts		3500V AC 60 Sec. 5mA
	Between contacts & coil		3500V AC 60 Sec. 5mA
Operate time (at 20°C)			Max. 30ms
Release time (at 20°C)			Max. 10ms
Shock resistance	Functional		Min 196 % {20G}
	Destructive		Min 490 % {50G}
Vibration resistance	Functional		100 % {20G} 80 to 2000Hz
	Destructive		100 % {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, Continous thermal current rating (amperes)

- 전기적 수명 곡선
(Estimated Switching Ratings)



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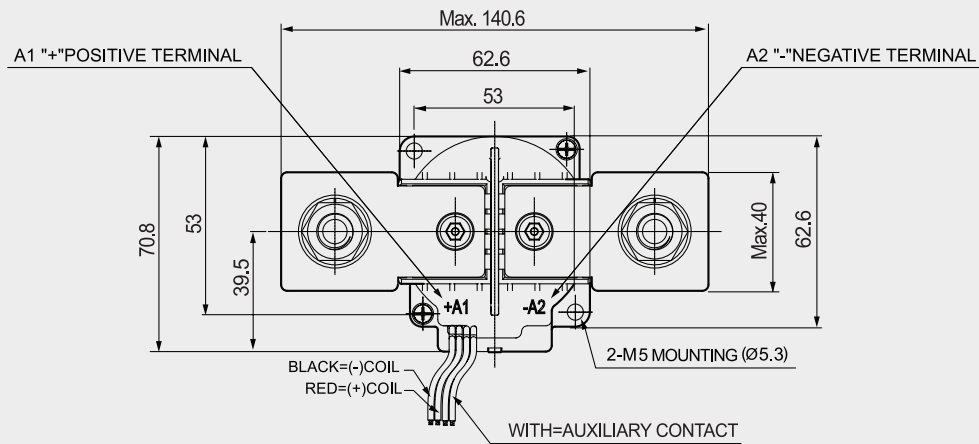
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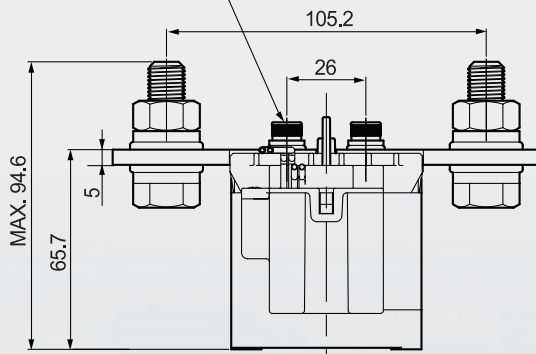
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▶ 외형치수도 (Dimension in mm)

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



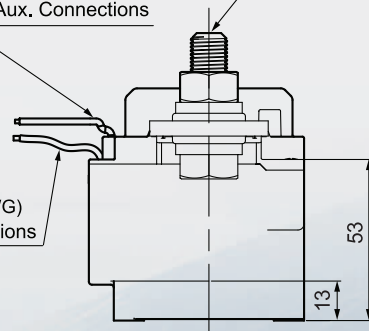
M6 Hex SocketHead Cap Screw



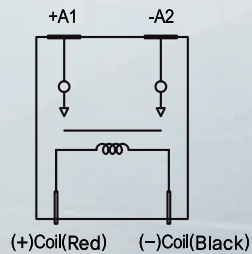
M12X40 MAIN TERMINALS TO BE TIGHTENED WITHIN THE RANGE 24.3~30.8Nm(238~302Kgf.cm)

Lead Wire (22 AWG) for Aux. Connections

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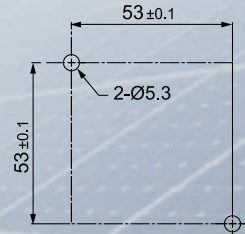


Schematic (Top View)



Load Side has polarities (+) and (-)

Mounting Dimensions



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