

# DC HIGH VOLTAGE EV RELAY

# EVR100



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

▶ **코일정격 (Magnet coil ratings)**

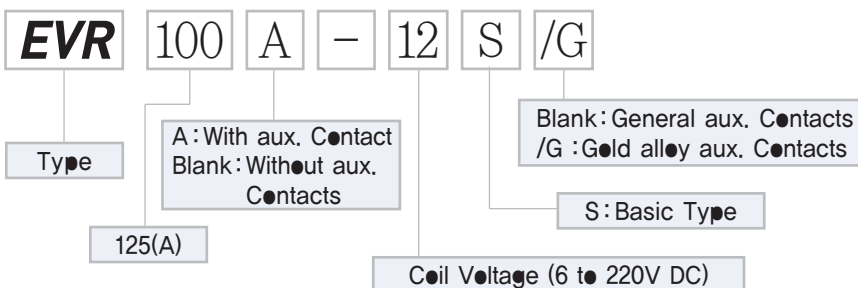
Nominal voltage(V)	Item	Nominal Coil current (mA)	Coil resistance (Ω)	Pick-up voltage (V)Max.	Drop-out voltage (V)Min.	Max. voltage (V)Max.	Coil power(W) dissipation
DC	220	27	8,600	75%	10%	130%	5.6 ~ 5.9
	110	52	2,100				
	72	83	870				
	60	95	630				
	48	117	410				
	36	156	230				
	24	245	110				
	12	480	25				
	6	952	6.3				

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.

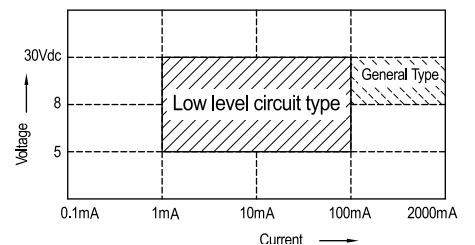
▶ **접점정격 (Contact ratings)**

Item	Type	1Pole Resistive load (L/R≤1ms)
		EVR100
Max. Continuous current (wire size 50mm <sup>2</sup> )		150A
Max. switching current		125A
Max. switching capacity		1200VDC 20A
Contact rating switching voltages		12~1200VDC
Max. cut-off current		300VDC 1000A 3 Ops
Voltage drop across contacts per 100A		30mV Max.
Min. permissible load		12V DC 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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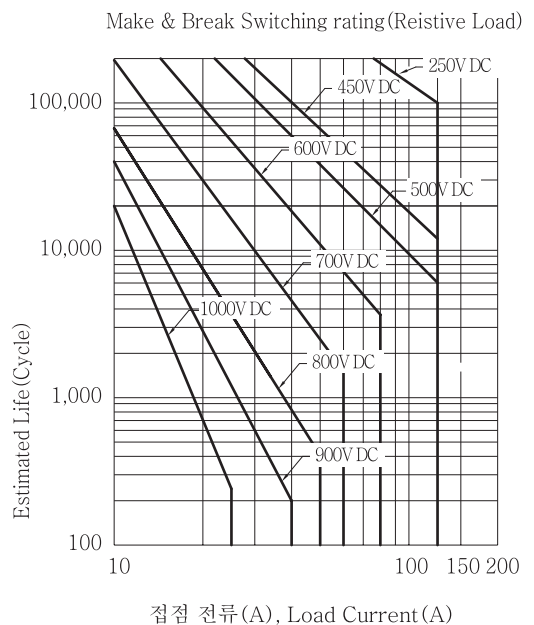
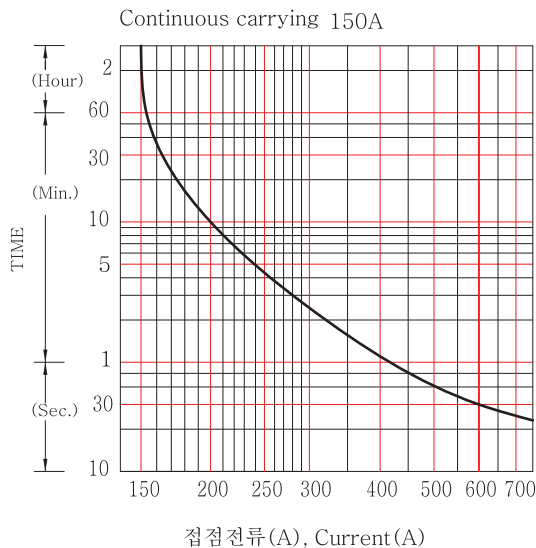
## ▶ 성능 (Characteristics)

Initial insulation resistance		Min. 100M $\Omega$ 500V DC
Expected life	Mechanical (Min.)	
	Electric (L/R $\leq$ 1ms)	450V DC 125A
		250V DC 125A
Initial breakdown voltage	Between open contacts	3500V AC 60 Sec. 10mA
	Between contacts & coil	3500V AC 60 Sec. 10mA
Operate time (at 20 $^{\circ}$ C)		Max. 20ms
Release time (at 20 $^{\circ}$ C)		Max. 5ms
Shock resistance	Functional	Min 147 % $\{$ 15G $\}$
	Destructive	Min 490 % $\{$ 50G $\}$
Vibration resistance	Functional	100 % $\{$ 10G $\}$ 10 to 500Hz
	Destructive	100 % $\{$ 10G $\}$ 10 to 500Hz
Conditions for operation transport and storage	Ambient temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C
	Humidity	5 to 85% R.H.
Unit weight		300g

## ▶ 특성곡선 (Reference data)

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

- 전기적 수명 곡선  
(Estimated Switching Ratings)



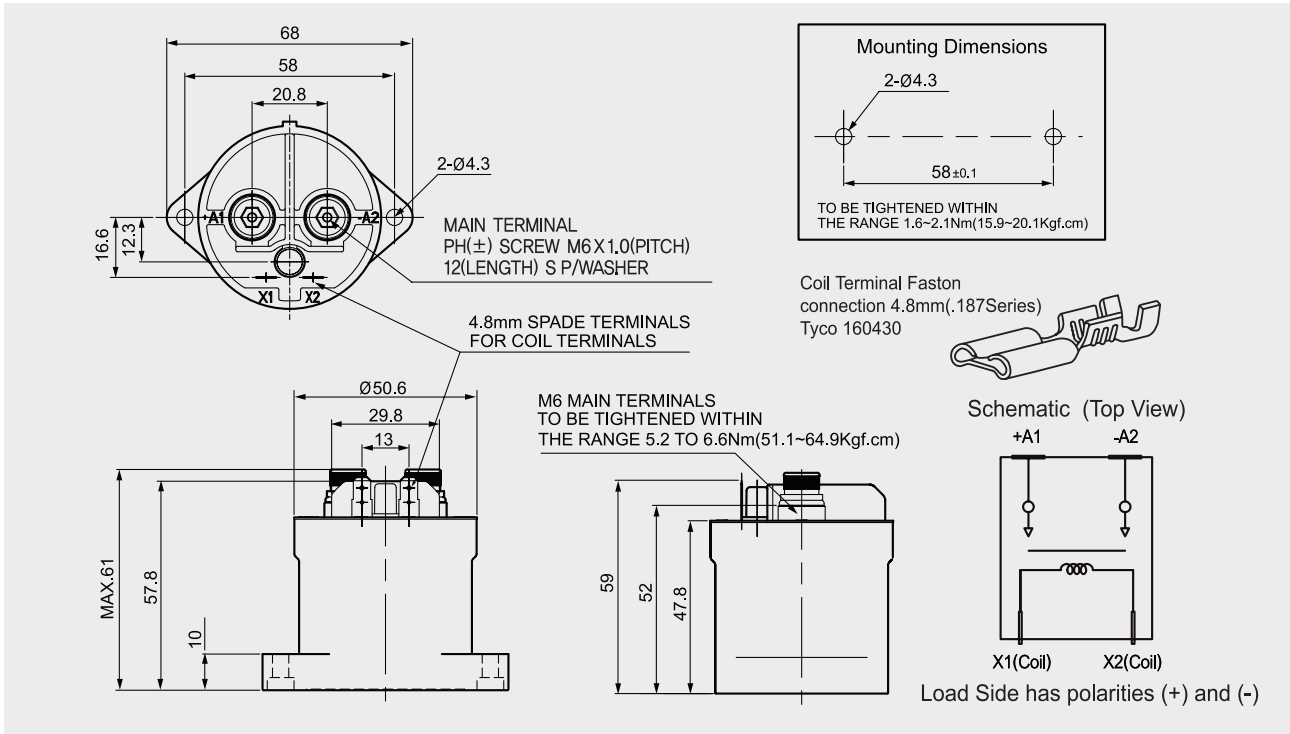
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## ▶ 외형치수도 (Dimension in mm)

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



(Aux. Type)

