

DC HIGH VOLTAGE EV RELAY

EVH400

(H: 1500V Class)



EVH400

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

▶ 코일정격 (Magnet coil ratings)

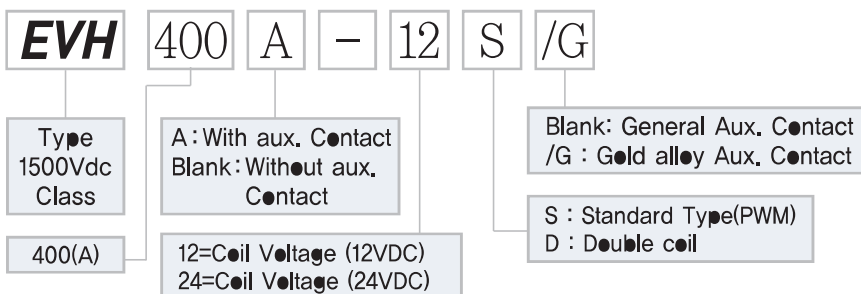
Nominal voltage(V)	Item	Inrush Coil current 150ms (Max.)	Holding Coil current	Pick-up voltage (V)max.	Drop-out voltage (V)min.	Holding voltage (V)min.	Max. voltage (V)	Remark
12S	12V	2,6A	0,45A	9VDC	6VDC	7,5VDC	18VDC	PWM economizer
24S	24V	1,4A	0,20A	18VDC	12VDC	15,0VDC	32VDC	
AS	12~36V	2,6A	0,15~0,45A	9VDC	6VDC	7,5VDC	36VDC	
12D	12V	4,4A	0,4A	9VDC	6VDC	7,5VDC	18VDC	Double coil economizer
24D	24V	2,6A	0,3A	18VDC	12VDC	15,0VDC	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.

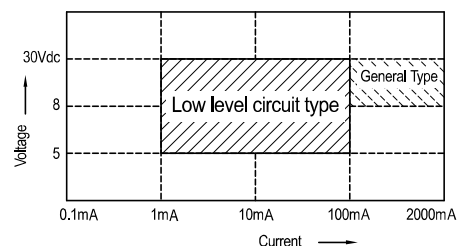
▶ 접점정격 (Contact ratings)

Item	Type	1Pole Resistor load
		EVH400
Max. Continuous current (wire size 240mm ²)		400A
Max. switching current		500VDC 900A
		1000VDC 600A
Contact rating switching voltages		12~1500VDC
Max. cut-off current		400VDC 2000A 10 Ops.
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. (Low level circuit type)		0.1A 30VDC / 0.1A 30VAC
Gold alloy Aux. Contacts Min. (Low level circuit type)		1mA 5VDC / 1mA 5VAC

▶ 주문방법 (Ordering information)



Permissible load of Aux. contact



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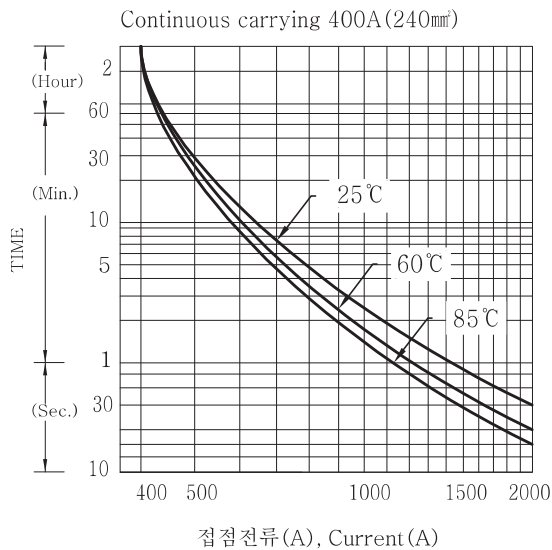


▶ 성능 (Characteristics)

Expected life	Mechanical (Min.)		5×10 ⁵
	Electric (Min.) (Resistor)	750VDC 400A	6×10 ³
		1000VDC 400A	1×10 ³
		1000VDC 200A	1×10 ⁴
		1500VDC 200A	2×10 ³
Initial insulation resistance			Min. 200M Ω 1000VDC
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 % {20G}
	Destructive		Min 490 % {50G}
Vibration resistance	Functional		196 % {20G} 80 to 500Hz
	Destructive		196 % {20G} 80 to 500Hz
Conditions for operation transport and storage	Ambient temperature		-40°C to +85°C
	Humidity		5 to 85% R.H.
Unit weight	PWM		950g
	Double coil		1000g

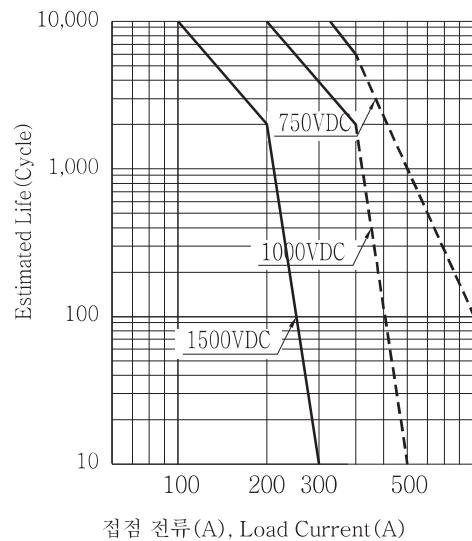
▶ 특성곡선 (Reference data)

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



- 전기적 수명 곡선
(Estimated Switching RatingsCurves)

Make & Break Switching rating (Resistor Load)



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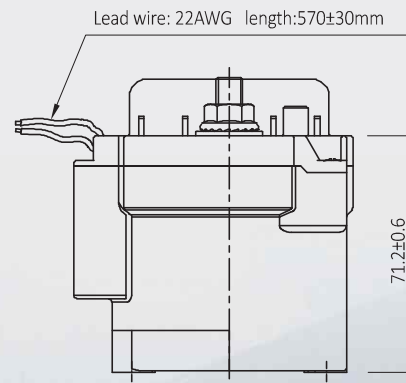
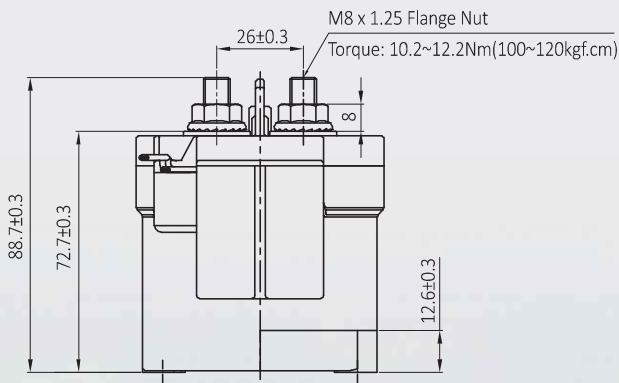
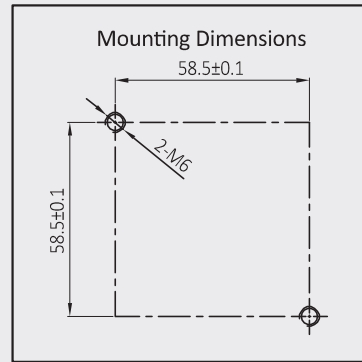
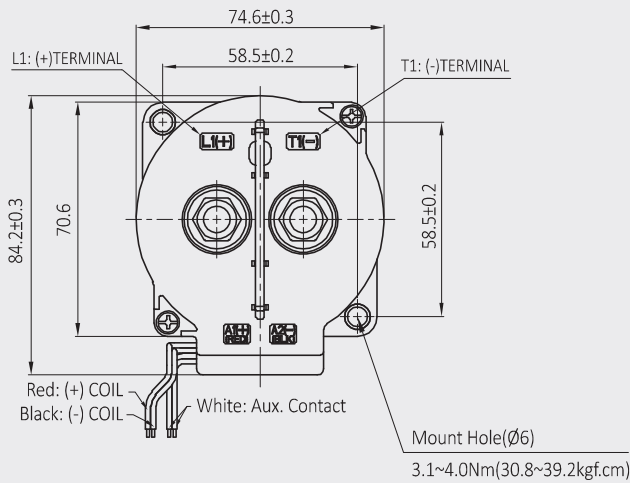
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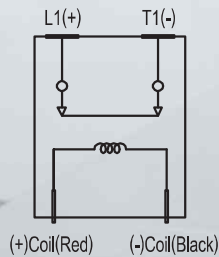
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▶ 외형치수도 (Dimension in mm)

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



Schematic (Top View)



Main terminals have polarities (+) and (-)