

DC HIGH VOLTAGE EV RELAY

EVR10



Application (응용분야) : Pre-Charge Relay, Electric Vehicle, Charging System, Solar System, etc.

Magnet coil ratings (코일정격)

Nominal voltage (V)	Item	Nominal Coil current (mA) 60Hz	Coil resistance (Ω)	Pick-up voltage (V) max.	Drop-out voltage (V) min.	Max. voltage (V)	Coil power (W) dissipation
AC	6	226.5	9.5	80%	30%	130%	1.5 to 1.8VA (60Hz)
	12	112	35				
	24	56	140				
	50	28	600				
	100/110	11.2/12.4	3,030				
	200/220	8.8/9.7	10,800				
DC	6	200	30	75%	10%	130%	1.1 to 1.3 Approx.
	12	100	120				
	28	43	650				
	24	50	480				
	36	34	1,080				
	48	25	1,920				
	60	20	3,000				
	72	17	4,320				
	100/110	11/12	9,350				

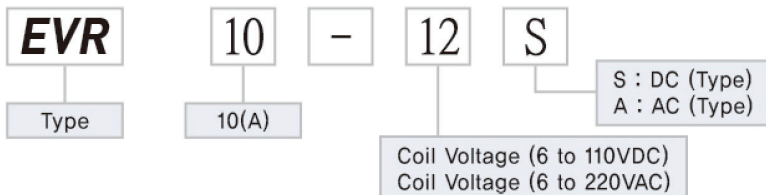
Notes : 1. Nominal current and coil resistance are measured at +20°C
 3. Performance characteristic coil temperature is measured at +20°C

2. Differences of coil resistance are ±10%

Contact ratings (접점정격)

Item	Type	1 Pole Resistor load
		EVR10
Max. switching current (wire size 2.0mm ²)		10A
Max. switching capacity		1200VDC 2A
Contact rating switching voltages		12 to 1200VDC
		900VDC 10A(Resistor load)(+ polarity Main Terminal A1 and A2) each NO contact connected in series
C-R Load (Pre-Charge)		550V 10A 150,000Ops
Max. contact performance (wire size 2.0mm ²)		30A 120Sec.
		20A 180Sec.
Voltage drop across contacts per 10A		0.3V Max. (At 5VDC)
Min. permissible load		12VDC 0.1A
Description		S.P.S.T On/Off (1a)

Ordering information (주문방법)



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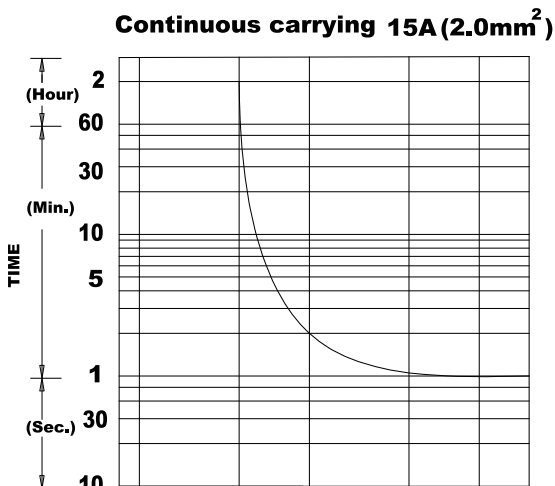
Characteristics (성능)

Expected life	Mechanical (Min.)		2×10 ⁶
	Electric (Min.) (Resistor)	450VDC 10A	7×10 ⁴
		400VDC 15A	15×10 ³
		250VDC 15A	2×10 ⁵
Initial insulation resistance			Min. 100MΩ 500VDC
Initial breakdown voltage	Between open contacts		2500VAC 60 Sec. 10mA
	Between contacts & coil		2500VAC 60 Sec. 10mA
Operate time (at 20°C)			Max. 20ms
Release time (at 20°C)			Max. 5ms
Shock resistance	Functional		Min. 196 m/s ² {20G}, (10μs)
	Destructive		Min. 490 m/s ² {50G}
Vibration resistance	Functional		43 m/s ² {4.4G} 10 to 200Hz, (10μs)
	Destructive		43 m/s ² {4.4G} 10 to 200Hz
Conditions for operation transport and storage	Ambient temperature		-40°C to +85°C
	Humidity		5 to 85% R.H.
Unit weight			65g

Reference data (특성곡선)

온도상승곡선

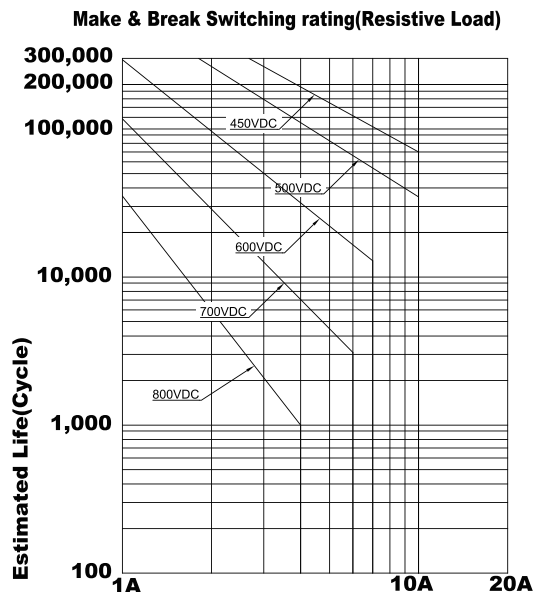
- 통전시간의 최대치 Max. Current capacity
- Max. Continuous thermal current rating (amperes)



접점전류(A), Current(A)

전기적 수명 곡선

(Estimated Switching Ratings)

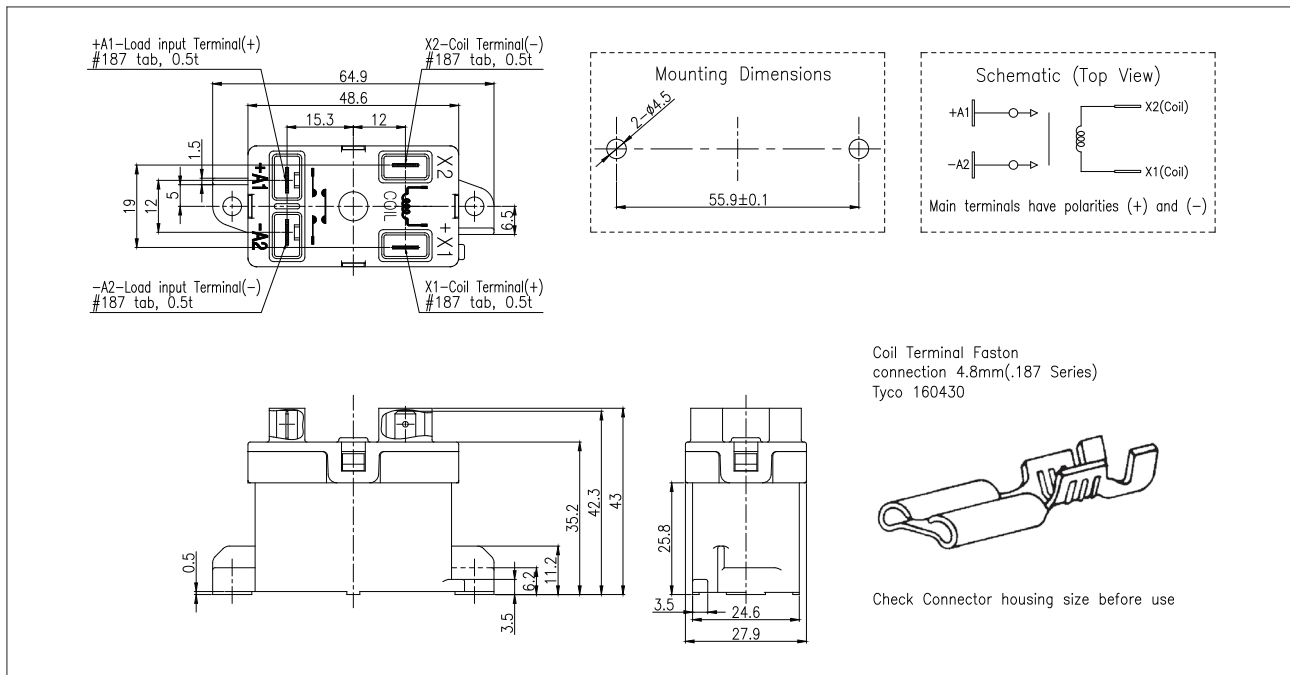


접점전류(A), Load Current(A)



Dimension in mm (외형치수도)

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



Circuit (회로)

