

Series	EVR SERIES							* Single Coil	** PWM External Location	*** PWM Built-in	EVC SERIES			
Model	EVR20	EVR40	EVR100	EVR120	EVR150	EVR200/250 w/ Double Coil	EVR300	EVC50	EVC100	EVC135	EVC150	EVC250		
Product Photo														
								UL/CUL File #492594					PENDING	
Current Rating	400													
	300													
	200													
	100													
	50													
	0													
Minimum Switching Capacity	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC	1A 12V DC		
Rated Switching Capacity	20A 750VDC	40A 750VDC	100A 750VDC	120A 750VDC	150A 750VDC	200/250A 750VDC	300A 450VDC	50A 750VDC	100A 750VDC	135A 750VDC	150A 750VDC	250A 750VDC		
Maximum Cut Off	1000VDC 200A 300VDC (1 Ops)	1000VDC 400A 300VDC (1 Ops)	1000VDC 1000A 300VDC (1 Ops)	1000VDC 1200A 300VDC (1 Ops)	1000VDC 1500A 300VDC (1 Ops)	1000VDC 2000A/2500A 450VDC (1 Ops)	1000VDC 1800A 450VDC	1000VDC 800A 300VDC (1 Ops)	1000VDC 1000A 300VDC (1 Ops)	1000VDC 1000A 300VDC (1 Ops)	1000VDC 1500A 300VDC (1 Ops)	1000VDC 2500A 300VDC (1 Ops)		
Short Term Current	30A 1h 40A 20min 80A 30s 120A 10s 200A 0.6s (≥4mm ²)	60A 1h 80A 20min 160A 30s 320A 2s 400A 0.6s (≥10mm ²)	150A 2h 200A 10min 300A 2min 400A 30s 600A 4s 900A 4s (≥35mm ²)	150A 2h 200A 10min 300A 2min 400A 30s 600A 4s 900A 6s (≥50mm ²)	180A 2h 225A 10min 320A 2min 400A 60s 600A 20s 900A 8s (≥50mm ²)	300A 15min/375A 10min 400A 240s/500A 120s 800A 30s/1000A 30s 2000A 0.6s/2500A 0.6s (≥60mm ²)	450A 1hr 600A 20min 1200A 30s 3000A 0.6s (≥100mm ²)	80A 60min 120A 20min 500A 30s (≥13mm ²)	200A 90s 300A 30s 1000A 0.6s (≥35mm ²)	200A 90s 300A 30s 1000A 0.6s (≥35mm ²)	200A 10min 300A 1min 1500A 1s (≥50mm ²)	320A 10min 500A 1min 2000A 1s (≥100mm ²)		
Contact Arrangement	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A		
Auxiliary Contact	/	/	/	/	/	/	/	Optional (wire + quickplug)	Optional (wire + quickplug)	Optional (wire + quickplug)	Optional (wire + quickplug)	Optional (wire + quickplug)		
Coil Rating Voltage	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	*12VDC / 24 VDC **9-36V DC	*12VDC / 24 VDC **9-36V DC	12VDC / 24VDC	*12VDC / 24 VDC ***9-36V DC	*12VDC / 24 VDC ***9-36V DC		
Coil Power Consumption	3.6W	3W	4.5W	4.5W	6W	Connected 34W (0.12) Keep 4W	Connected 45W (0.12) Keep 4W	12VDC@5.5W 24VDC@6W	**0.6W	12VDC@5.5W 24VDC@6W	**0.6W	12VDC @ 5.5W 24VDC @ 6W	*8W *** 0.13A@12VDC 0.07A@24VDC	*8W *** 0.13A@12VDC 0.07A@24VDC
Insulation Resistance	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC		
Lifespan	Mechanical	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops		
	Electrical	450V	100,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops	6,000 Ops/3000Ops	
		750V	20,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops	1,000 Ops/500Ops	
Dielectric Strength	Between Open Contacts	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA		
	Between Contact and Coil	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA		
Vibration	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	43"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)	49"/g(5G)10 to 500Hz (10μS)		
Humidity and Temperature Range	5% to95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C	5% to 95% R.H. -40°C to+85°C		
Outline Size DWH (mm)	78x39.2x46	72x32.6x57.7	79.8x40.4x76.2 75.8x41x71.2	79.8x40.4x76.2	81.7x41.1x84.3	96x45x82	114x59x78.4	*55x39.5 x58.5	**55x41.3 x57.8	*55x39.5 x58.5	**55x41.3 x57.8	55x39.5 x58.5	80.4x60.8x73	80.4x60.8x73

APPLICATIONS

- Clean Energy Vehicles (BEV, HEV, FCEV)
- Charging Station and Charging Pile
- Renewable Energy: Solar Energy / Wind Power Generation System
- Construction Vehicles
- Cloud Server Commercial Vehicles / Transport
- Ground Heating System; Quick / Rapid Charging Stations
- Battery Charging and Discharging System

Series	* Double Coil ** PWM		EVC SERIES			LEV SERIES				HEV SERIES	
Model	EVC300	EVC350	EVC400	EVC100 Modular	EVC250 Modular <small>*Single Coil **PWM Built-in</small>	LEV100	LEV150	LEV200	LEV250	HEV20D/40D	HEV20W/40W
Product Photo											
Current Rating	400										
	300										
Minimum Switching Capacity	200										
	100										
	50										
	0										
Rated Switching Capacity	300A 750VDC	350A 750VDC	400A 750VDC	100A 750VDC	250A 750VDC	100A 450VDC	150A 450VDC	200A 450VDC	250A 450VDC	20A/40A 750VDC	20A/40A 750VDC
Maximum Cut Off	1000VDC 3000A 300VDC (1 Ops)	1000VDC 3500A 300VDC (1 Ops)	1000VDC 3500A 300VDC (1 Ops)	1000VDC 1000A 300VDC (1 Ops)	1000VDC 2500A 300VDC (1 Ops)	450VDC 200A 300VDC (1 Ops)	450VDC 250A 300VDC (1 Ops)	450VDC 300A 300VDC (1 Ops)	450VDC 350A 300VDC (1 Ops)	1000VDC 50A/80A 450VDC (1 Ops)	1000VDC 50A/80A 450VDC (1 Ops)
Short Term Current	450A 1h 600A 20min 1200A 30s 3000A 0.6s (≥100mm²)	450A 1h 600A 20min 1200A 30s 3000A 0.6s (≥100mm²)	450A 2h 600A 20min 1200A 30s 3000A 0.6s (≥120mm²)	200A 90s 300A 30s 1000A 0.6s (≥35mm²)	320A 10min 500A 1min 2000A 1s (≥100mm²)	200A 20min 400A 30s 1000A 0.6s (≥40mm²)	200A 20min 400A 30s 1000A 0.6s (≥40mm²)	300A 5min 400A 30s 800A 10s 1000A 1s (≥40mm²)	300A 5min 400A 30s 800A 10s 1000A 1s (≥40mm²)	30A/60A 1h 40A/80A 20min 80A 30s/160A 20min 120A/240A 10s 200A/400A 0.6s (≥4/≥10mm²)	30A/60A 1h 40A/80A 20min 80A 30s/160A 20min 120A/240A 10s 200A/400A 0.6s (≥4/≥10mm²)
Contact Arrangement	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Auxiliary Contact	Optional (wire + quickplug)	Optional (wire + quickplug)	Optional (wire + quickplug)	Optional (wire + quickplug)	Optional (wire + quickplug)	/	/	/	/	/	/
Coil Rating Voltage	**12VDC / 24 VDC ** 9-36V DC	**12VDC / 24 VDC ** 9-36V DC	**12VDC / 24 VDC ** 9-36V DC	12VDC / 24VDC	**12VDC / 24 VDC ** 9-36V DC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC	12VDC / 24VDC
Coil Power Consumption	*Connected 26.4W (0.12s) Keep 4W **0.27A@12VDC 0.12A@24VDC	*Connected 26.4W (0.12s) Keep 4W **0.27A@12VDC 0.12A@24VDC	*Connected 26.4W (0.12s) Keep 4W **0.27A@12VDC 0.12A@24VDC	12VDC@11W 24VDC@12W	*16W **0.26A@12VDC 0.14A@24VDC	4.5W	4.5W	4.5W	4.5W	3.0W	3.0W
Insulation Resistance	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC	Min. 100Ω 500VDC
Lifetime	Mechanical	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops	2x10 ⁶ Ops
	Electrical	450V 6,000 Ops	6,000 Ops	3,000 Ops	6,000 Ops	6,000 Ops	1,000 Ops	1,000 Ops	400 Ops	300 Ops	100,000/10,000 Ops
Dielectric Strength	750V 1,000 Ops	1,000 Ops	500 Ops	1,000 Ops	1,000 Ops	/	/	/	/	20,000/1,000 Ops	20,000/1,000 Ops
	Between Open Contacts	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	2000V AC 60 Sec. 1mA
Between Contact and Coil	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	2500V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA	3000V AC 60 Sec. 1mA
Vibration	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 200Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)	43 ^{m/s²} (5G)10 to 500Hz	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)	49 ^{m/s²} (5G)10 to 500Hz (10μS)
Humidity and Temperature Range	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C	5% to95% R.H. -40°C to+85°C
Outline Size DWH (mm)	70.7x62.5x77.6	70.7x62.5x77.6	70.7x62.5x77.6	100x40x56.5	143x55.5x61.5	75.8x41x68	75.8x41x68	75.8x41x68	75.8x41x68	44x30x41.1	29.2x30x35.7

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