DC Isolator Switch ELR2 Series

FMELEC®



Application

ELR2 Series DC Isolator Switch in plastic enclosure is applied to 1~20 KW residential or commercial photovoltaic system, placed between photovoltage modules and inverters. Arcing time is less than 8ms, that keeps solar system more safe. To ensure its stability and long service life, our products are made by components with optimum quality. Max voltage is up to 1200V DC. It holds a safe lead among similar products.

Feature

- IP66 rated enclosure, UV Resistant
- 4 x M20 knock holes
- The handle can be padlocked in the "OFF" position
- MC4 plugs can be selected for Convenient connection and space saving
- 2 Pole, 4 Poles are viable (Single I Double String)
- Standard: IEC60947-3, AS60947.3
- DC-PV2, DC-PV1, DC-21B
- 16A, 25A, 32A, 1200V DC







Electrical Characteristics		
Type		FMPV16-ELR2, FMPV25-ELR2, FMPV32-ELR2
Function		Isolator, Control
Standard		IEC60947-3, AS60947. 3
Utilization category		DC-PV2/DC-PV1/DC-21B
Pole		4P
Rated frequency		DC
Rated operational voltage (U_e)		300V, 600V, 800V, 1000V, 1200V
Rated operational voltage (I_e)		See the next page
Rated insulation voltage (U_i)		1200V
Conventional free air themal current(I_{th})		//
Conventional enclosed thermal current(I_{the})		Same as I_e
Rated short-time withstand current(I_{cw})		1kA, 1s
Rated impulsed withstand voltage(U_{imp})		8. 0kV
Overvoltage category		II
Suitability for isolation		Yes
Polarity		No polarity, "+"and"-"polarities could be interchanged.
Service life/cycle operation		
Mechanical		18000
Electrical		2000
Installation Environment		
ingress protection	Enclosure	IP66
Storge temperature		-40℃~+85℃
Mounting Type		Vertically or horizontally
Pollution degree		3

SAA CE CB

Certificate No.:
SAA-190372-EA

FMPV16-ELR2 Series
PV DC Isolator Switches

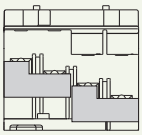
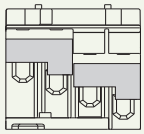
Wiring Diagram for Rated operational voltage Ue(V)& Rated operational current Ie (A)

Contacts wiring diagram	300V	600V	800V	1000V	1200V	Poles in series	Number of strings	Type Number	Weight kg/PCS
5 7 6 8	16A	16A	12A	8A	6A	2	1	2P	
1 3 5 7 2 4 6 8	16A	16A	12A	8A	6A	2	2	4P	
1 3 5 7 2 4 6 8	16A	16A	16A	16A	16A	2	1	4T	
1 3 5 7 2 4 6 8	16A	16A	16A	16A	16A	2	1	4B	
1 3 5 7 2 4 6 8	16A	16A	16A	16A	16A	4	1	4S	
1 3 5 7 2 4 6 8	35A	35A	/	/	/	2	1	2H	

Switching Configurations

Type	2-pole	4-pole	2-pole 4 poles in series Input and Output bottom	2-pole 4 poles in series Input and Output on top	2-pole 4 poles in series Input on top Output bottom	2-pole 4 paralleled Poles
/	2P	4P	4T	4B	4S	2H
Contacts Wiring graph	5 7 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8
Switching example						

Bridging links installation

installed incorrectly	installed correctly
	

*Please note that all connections (including bridging link connections) should be tightened before energization.

FMPV25-ELR2 Series
PV DC Isolator Switches

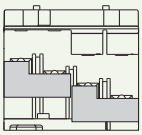
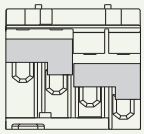
Wiring Diagram for Rated operational voltage Ue(V)& Rated operational current Ie (A)

Contacts wiring diagram	300V	600V	800V	1000V	1200V	Poles in series	Number of strings	Type Number	Weight kg/PCS
5 7 6 8	25A	25A	15A	9A	7A	2	1	2P	
1 3 5 7 2 4 6 8	25A	25A	15A	9A	7A	2	2	4P	
1 3 5 7 2 4 6 8	25A	25A	25A	25A	25A	2	1	4T	
1 3 5 7 2 4 6 8	25A	25A	25A	25A	25A	2	1	4B	
1 3 5 7 2 4 6 8	25A	25A	25A	25A	25A	4	1	4S	
1 3 5 7 2 4 6 8	40A	40A	/	/	/	2	1	2H	

Switching Configurations

Type	2-pole	4-pole	2-pole 4 poles in series Input and Output bottom	2-pole 4 poles in series Input and Output on top	2-pole 4 poles in series Input on top Output bottom	2-pole 4 paralleled Poles
/	2P	4P	4T	4B	4S	2H
Contacts Wiring graph	5 7 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8
Switching example						

Bridging links installation

installed incorrectly	installed correctly
	

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FMPV32-ELR2 Series
PV DC Isolator Switches

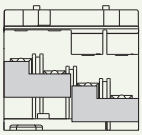
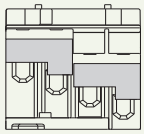
Wiring Diagram for Rated operational voltage Ue(V)& Rated operational current Ie (A)

Contacts wiring diagram	300V	600V	800V	1000V	1200V	Poles in series	Number of strings	Type Number	Weight kg/PCS
5 7 6 8	32A	27A	17A	10A	8A	2	1	2P	
1 3 5 7 2 4 6 8	32A	27A	17A	10A	8A	2	2	4P	
1 3 5 7 2 4 6 8	32A	32A	32A	32A	32A	2	1	4T	
1 3 5 7 2 4 6 8	32A	32A	32A	32A	32A	2	1	4B	
1 3 5 7 2 4 6 8	32A	32A	32A	32A	32A	4	1	4S	
1 3 5 7 2 4 6 8	45A	40A	/	/	/	2	1	2H	

Switching Configurations

Type	2-pole	4-pole	2-pole 4 poles in series Input and Output bottom	2-pole 4 poles in series Input and Output on top	2-pole 4 poles in series Input on top Output bottom	2-pole 4 paralleled Poles
/	2P	4P	4T	4B	4S	2H
Contacts Wiring graph	5 7 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8
Switching example						

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Dimensions(mm)

