



Application

XL7-63 PV DC breaker supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.

Specifications

XL7-63 PV Series Circuit Breaker		XL7-63 PV				
Frame Degree Rated Current (A)		63				
Pole		1P	2P	3P	4P	2P(CUSTOMIZED)
Rated Operating Voltage (V DC)		250	550	750	1000	800
Rated Insulation Voltage U_i (V DC)		1200V				
Rated Current I_n (A)		3,6,10,16,20,25,32,40,50,63A				
Rated Impact Voltage U_{imp} (kV)		4				
Ultimate Breaking Capacity I_{cu} (kA)		6				
Run Breaking Capacity I_{cs} (% I_{cu})		75%				
Curve Type		C				
Trip Type		Thermal-magnetic				
Mechanical	Actual average value	9700				
	Standard value	9700				
Electric	Actual average value	300				
	Standard value	300(accord to TUV standard)				

Control and Indication

Shunt release (SHT)	Option
Undervoltage release (UNT)	
Auxiliary contact (AX)	
Alarm contact (AL)	

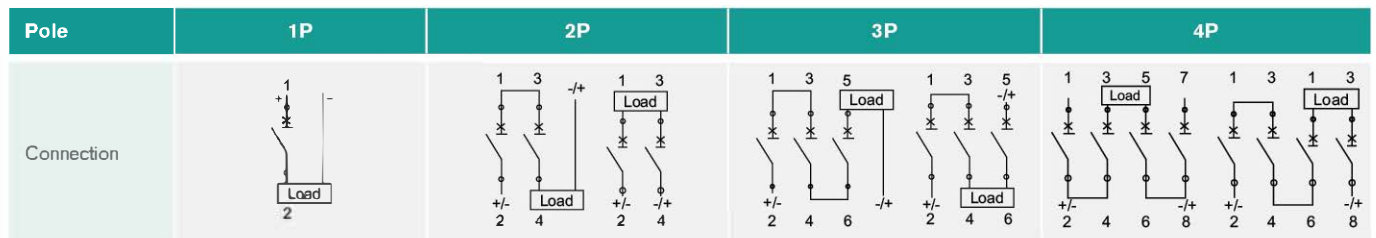
Condition and Installation

Wiring capacity (mm ²)		$I_n \leq 32A$, 1-6, $I_n \geq 40A$, 10~16			
Ambient temperature (°C)		-35~+70			
Altitude		≤2000			
Relative humidity		≤95%			
Pollution Level		3			
Installation Environment		No obvious shock and vibration			
Installation category		Class III			
Installation		DIN Standard rail			
Dimensions(W)x(H)x(Deep)	W	18	36	54	72
	H	80	80	80	80
	Deep	71	71	71	71
Weight (kg)		0.12	0.24	0.36	0.48

XL7-63 PV

SOLAR DC MINIATURE CIRCUIT BREAKER (DC MCB)

Connection



Over current tripping characteristic

Test	Test Current	Initial State	Limited Time	Expected Result	Remarks
a	1.05I _n	Cold state	t 1h	Non-tripping	
b	1.3I _n	Right after test number a	t < 1h	Tripping	The current is rising within 5s
c	7I _n	Cold state	t ≤ s	Non-tripping	
d	10I _n	Cold state	t 0.1s	Tripping	

Current correction values used at different ambient temperatures

Fixed current(A) Rated Current (A)	Temperature -10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
3A	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.49
6A	7.8	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98
10A	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4
16A	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44
20A	26.4	26.4	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8
25A	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21
32A	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88
40A	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6
50A	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5
63A	83.79	81.9	80.01	76.86	73.71	70.56	66.78	63	60.48	58.9	55.44	52.29

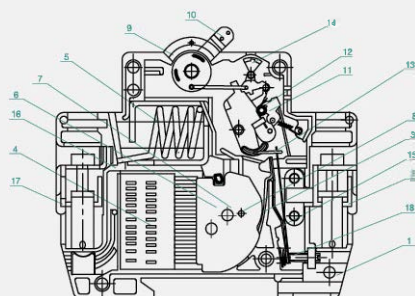
Current correction factor used at different altitudes

Rated Current (A)	Different altitude correction factors		
	≤ 2000m	2000~3000m	≥ 3000m
3,6,10,16,20,25,32,40,50,63A	1.0	0.9	0.8

XL7-63 PV

SOLAR DC MINIATURE CIRCUIT BREAKER (DC MCB)

Details

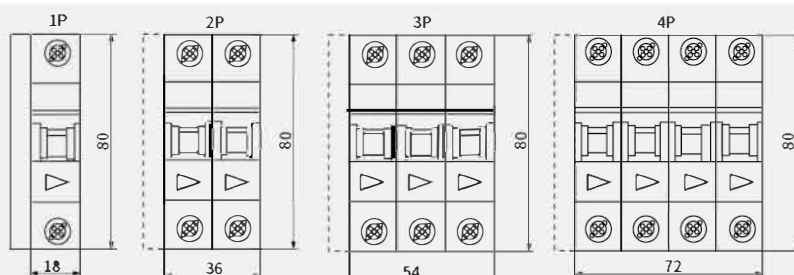


- | | |
|---------------------|------------------------|
| 1. Shell | 10. Handle |
| 2. Wiring board | 11. Lock catch knuckle |
| 3. Static contact | 12. Tripping chain |
| 4. Arc chamber | 13. Jump pin |
| 5. Copper coil | 14. Indicator |
| 6. Insulation plate | 15. Bimetal |
| 7. Moving contact | 16. Soft linking |
| 8. Fixed contact | 17. Wiring board |
| 9. Spring | 18. Adjusting screw |

Specifications

Rated current $I_n(A)$	Copper wire nominal cross sectional area(mm ²)
3,6	1
10	1.5
16,20	2.5
25	4
32	6
40,50	10
63	16

Dimensions(mm)



Characteristic Curve

