



# Residual Current Circuit Breaker With Overcurrent Protection ESRO Series RCBO

Leading Manufacturer Protects Solar Power Safety

Rev3.0 2023/05/04



# RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION

## ESRO2-63 RCBO



- Adopt integrated circuits
- Breaking capacity 6kA/10kA
- Comply with standard IEC61009-1



### Detail features

#### Fit for various connection terminal



Choice to use Busbar or cable in the same terminal cage, provides reliable termination

#### Test button



T: press test button monthly

### Select Code

E S RO 2 - 63 / □ □ / □ □ / □ □ / □ □ / □ □

1 2 3 4 5 6 7 8 9 10 11

#### Electrical Features

Code	Name	Description
1	ONCCY brand	E
2	AC	S
3	RCBO	RO
4	Series	2: Series2
5	Frame Current	63
6	Tripping curve	B / C / D
7	Rated current	6:6A 10:10A 16:16A 20:20A 25:25A 32:32A 40:40A 50:50A 63:63A
8	Poles	2:2P 4:4P 1P+N 3P+N
9	Type	A:A type AC:AC type B:B type
10	Mode	E:Electronic M:Electromagnetic
11	Operating Current	30mA 100mA 300mA

### Technical Data

Electrical Features		Electrical Features	
Mode	Electronic / Electromagnetic	Rated current	6-63A
Type	A / AC / B	Rated residual operating current(IΔn)	30.100.300mA 0.
Tripping curve	B C D	Residual operating current range	5 IΔn~IΔn
Pole No.	2P / 4P	Rated conditional short-circuit current(I <sub>nc</sub> )	6000A / 10000A
Rated voltage	230/400V~	Energy limiting	class 3
Rated frequency	50/60Hz	Electrical and Mechanical life	20000

# ESRO2-63 RCBO

Standard: IEC61009-1

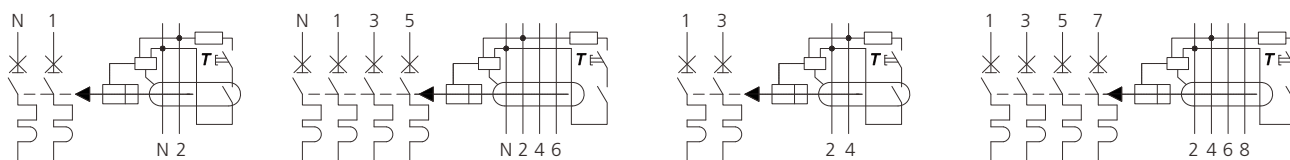
Overload Current Protection Characteristics						
Test Procedure	Type	Test Current	Initial State	Tripping or Non-tripping Time Limit	Expected Result	Remark
A	B.C.D	1.13I <sub>n</sub>	Cold	t ≤ 1h	no tripping	
B	B.C.D	1.45I <sub>n</sub>	After test A	t ≤ 1h	tripping	The current steadily rises to the specified value within 5s
C	B.C.D	2.55I <sub>n</sub>	Cold	1s < t < 60s	tripping	
D	B	3I <sub>n</sub>	Cold	t ≤ 0.1s	no tripping	Turn on the auxiliary switch to close the current
	C	5I <sub>n</sub>				
	D	10I <sub>n</sub>				
E	B	5I <sub>n</sub>	Cold	t ≤ 0.1s	tripping	Turn on the auxiliary switch to close the current
	C	10I <sub>n</sub>				
	D	20I <sub>n</sub>				

Residual Current Operating Breaking Time						
Type	I <sub>n</sub> /A	ΔI <sub>n</sub> /A	Residual Current(ΔI)Is Corresponding To The Following Breaking Time(S)			
AC type	Any value	Any value	I <sub>n</sub>	2I <sub>n</sub>	5I <sub>n</sub>	5A.10A.20A.50A.100A.200A.500A
A type		> 0.01	1.4I <sub>n</sub>	2.8I <sub>n</sub>	7I <sub>n</sub>	
			0.3	0.15	0.04	0.04

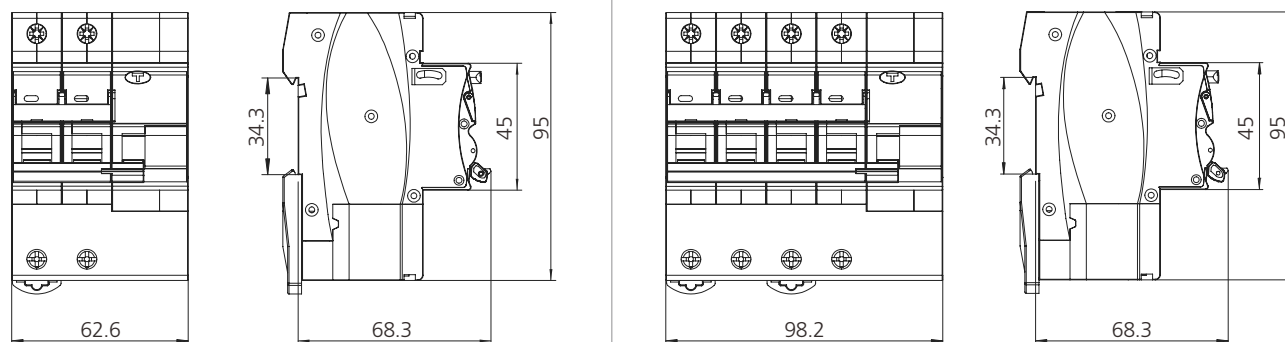
The general type RCBO whose current ΔI<sub>n</sub> is 0.03mA or less can use 0.25A instead of 5I<sub>n</sub>Δ<sub>n</sub>.

Installation			
Fault current indicator window	Yes	Terminal connection type	Cable / U-type busbar / Pin-type busbar
Protection degree	IP20	Terminal size top for cable	25mm <sup>2</sup>
Ambient temperature	-5~+40°C and its average over a period of 24h does not exceed +35°C	Tightening torque	2.5 N·m
Storage temperature	-25~+ 70°C	Mounting	On DIN rail FN 60715 (35mm)
		Connection	Top and bottom

## The wiring diagram



## Dimensions(mm)



2P

4P