

## RESIDUAL CURRENT CIRCUIT BREAKERS OFE (6 kA)

- They react to sine-wave residual current (type AC).
- For protection:
  - against dangerous contact with live parts ( $I_{\Delta n} \leq 30$  mA)
  - against dangerous contact with dead parts
  - against fire or short-circuit in reduced insulation capacity of electrical equipment ( $I_{\Delta n} \leq 300$  mA)
- Possibility of additional mounting of auxiliary switches PS-OF-1100 on the right side of the device.
- Surge current resistance up to 1 kA (8/20  $\mu$ s).
- Possibility of interconnection with circuit breakers LPE (LPN) by means of interconnecting busbars.
- N-pole of residual current circuit breakers in switching on it closes before and in switching off it opens after the other poles.

## Residual current circuit breakers, 2-pole, type AC

- Standard type for common use in building and housing installations up to 40 A, 230 V a.c.

$I_{\Delta n}$ [mA]	$I_n$ [A]	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
30	25	OFE-25-2-030AC	35299	2	0.28	1
30	40	OFE-40-2-030AC	35301	2	0.28	1
300	25	OFE-25-2-300AC	35300	2	0.28	1
300	40	OFE-40-2-300AC	35302	2	0.28	1



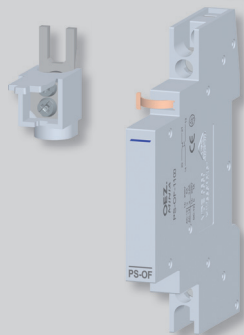
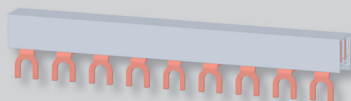
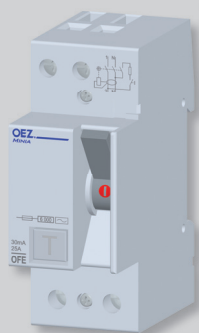
## Residual current circuit breakers, 4-pole, type AC

- Standard type for common use in building and housing installations up to 63 A, 230/400 V a.c.

$I_{\Delta n}$ [mA]	$I_n$ [A]	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
30	25	OFE-25-4-030AC	35303	4	0.52	1
	40	OFE-40-4-030AC	35305	4	0.52	1
	63	OFE-63-4-030AC	35307	4	0.52	1
300	40	OFE-40-4-300AC	35306	4	0.52	1
	63	OFE-63-4-300AC	35308	4	0.52	1





## Accessories to OFE

Auxiliary switch	PS-OF-1100	page C22
Interconnecting busbars	G2L-1000-16, G4L-1000-16	page E52
Terminal extensions	AS-25-G, AS-25-S	page E57



## RESIDUAL CURRENT CIRCUIT BREAKERS OFE (6 kA)

### Specifications

Type	OFE-...-2-..	OFE-...-4-..
Standards	EN 61008, IEC 755	EN 61008, IEC 755
Approval marks		
Number of poles	2	4
Type	AC 	AC 
Rated current	$I_n$ 25, 40 A	25, 40, 63 A
Rated residual current	$I_{\Delta n}$ 30, 300 mA	30, 300 mA
Rated operating voltage	$U_e$ 230 V a.c.	230/400 V a.c.
Min. operating voltage <sup>1)</sup>	$U_{min}$ 100 V a.c.	100 V a.c.
Max. operating voltage	$U_{max}$ 240 V a.c.	240/415 V a.c.
Rated frequency	$f_n$ 50/60 Hz	50/60 Hz
Rated conditional short-circuit current: <sup>3)</sup>	$I_{nc}$	
with back-up fuse $I_n \leq 63$ A gG	6 kA	-
with back-up fuse $I_n \leq 100$ A gG	-	6 kA
with back-up miniature circuit breaker LPE, LPN, L ST with $I_n$ max. 1:1	6 kA	6 kA
Rated making and breaking capacity	$I_m$ 500 A	800 A
Surge resistance (8/20 $\mu$ s)	1 kA	1 kA
Release delay	-	-
Mechanical endurance	>10 000 operating cycles	>10 000 operating cycles
EElectrical endurance	>10 000 operating cycles	>10 000 operating cycles
Degree of protection	IP20	IP20
Connection		
Conductor	1 ÷ 16 mm <sup>2</sup>	1.5 ÷ 25 mm <sup>2</sup>
Torque	3 Nm	3 Nm
Top or bottom connection	yes	yes
Operating conditions		
Ambient temperature	-5 ÷ 45 °C	-5 ÷ 45 °C
Working position	arbitrary	arbitrary
Seismic resistance	IEC 980:1993 <sup>2)</sup>	IEC 980:1993 <sup>2)</sup>

<sup>1)</sup> For preserving the function of the test push-button

<sup>2)</sup> It passed the seismic tests for NPP Dukovany and Temelín

<sup>3)</sup> Rated conditional short-circuit current relates to short-circuit protection. It is also possible to protect residual current circuit breakers against overload by circuit breaker and fuse-link. In this case  $I_n$  of MCB has to be equal or lower than  $I_n$  of RCCB ( $I_{n\text{ MCB}} \leq I_{n\text{ RCCB}}$ ) a  $I_n$  and  $I_n$  of fuse-link has to be by one degree lower than  $I_n$  of RCCB ( $I_n$  of fuse-link by one degree lower  $\leq I_{n\text{ RCCB}}$ )

### Powers losses P

#### OFE-...-2-...

$I_n$ [A]	$I_{\Delta n}$ [A]	P <sup>1)</sup> [W/pole]
25	0.03	2
	0.30	1
40	0.03	4
	0.30	2.5

<sup>1)</sup> Mean values

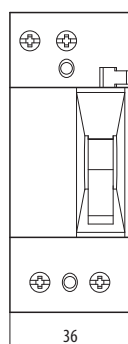
#### OFE-...-4-...

$I_n$ [A]	$I_{\Delta n}$ [A]	P <sup>1)</sup> [W/pole]
25	0.03	1.2
	0.30	3.2
40	0.03	1.65
	0.30	4
63	0.03	3.2
	0.30	3.2

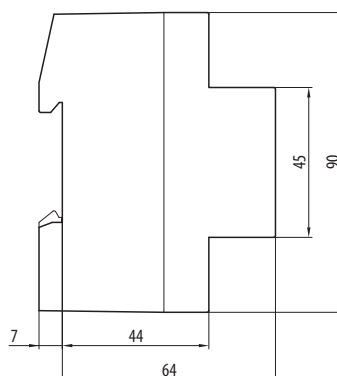
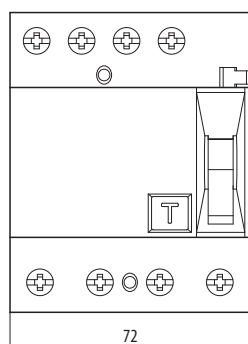
<sup>1)</sup> Mean values

### Dimensions

#### OFE-...-2-..



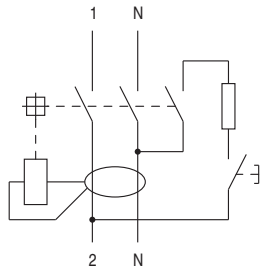
#### OFE-...-4-..



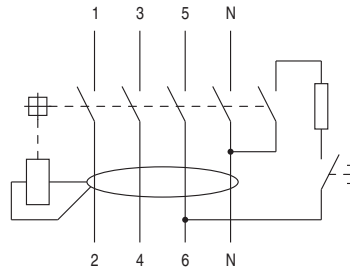
## RESIDUAL CURRENT CIRCUIT BREAKERS OFE (6 kA)

### Diagram

OFE...-2-..

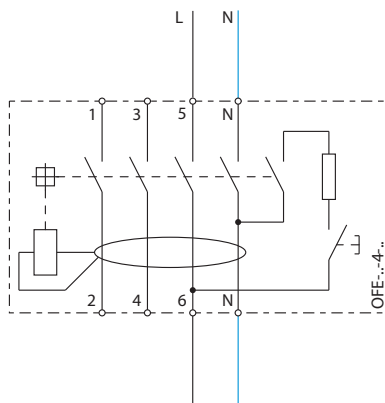


OFE...-4-..

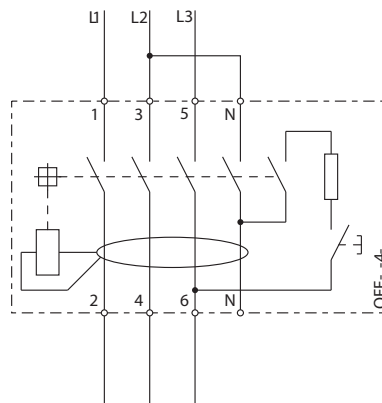


### Connection

**residual current circuit breaker 4-pole  
in 1-phase circuits with N-pole**



**residual current circuit breaker 4-pole  
in 3-phase circuits without N-pole**



## ACCESSORIES FOR OFE, OFI





## Auxiliary switches for residual current circuit breakers

- Accessories to: OFI and OFE.
- Installation: on the right side of the residual current circuit breaker.
- For signalling the position of contacts of residual current circuit breakers.

Accessories to	Type	Product code	Arrangement of contacts <sup>1)</sup>	Number of modules	Weight [kg]	Package [pcs]
OFI, OFE do 80 A	<b>PS-OF-1100</b>	35309	11	0.5	0.07	1
OFI 100, 125 A	<b>PS-OF125-1100</b>	36840	11	0.5	0.07	1

<sup>1)</sup> Each digit indicates successively the number of make and break contacts

## Specifications

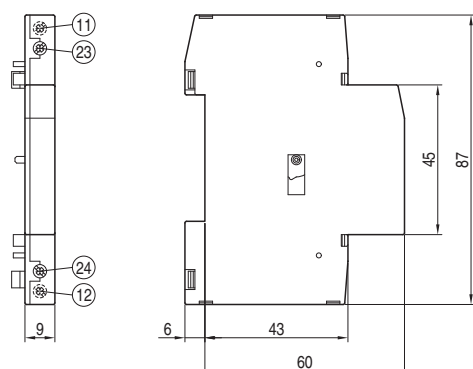
Type	PS-OF-1100	PS-OF125-1100
Standards	EN 62019	EN 62019 EN 60947-5-1
Approval marks		
Arrangement of contacts <sup>1)</sup>	11	11
Rated operating voltage / current $U_e / I_e$	AC-12	230 V a.c. / 6 A
	AC-14	230 V a.c. / 3.6 A
	DC-12	220 V d.c. / 1 A
Min. voltage / current	24 V a.c. / 50 mA	24 V a.c. / 50 mA
Short-circuit protection	MCB 6 A, characteristic B or C	MCB 6 A, characteristic B or C
	fuse 6 A gG	fuse 6 A gG
Electrical endurance	10 000 operating cycles	10 000 operating cycles
Degree of protection	IP20	IP20
Mounting	on the right side of the device	on the right side of the device
Connection		
Conductor rigid (solid, stranded)	0.75 ÷ 2.5 mm <sup>2</sup>	0.75 ÷ 2.5 mm <sup>2</sup>
Conductor flexible	0.75 ÷ 2.5 mm <sup>2</sup>	0.75 ÷ 2.5 mm <sup>2</sup>
Torque	0.8 Nm	0.8 Nm
Top or bottom connection	yes	yes
Operating conditions		
Ambient temperature	-25 ÷ 45 °C	-25 ÷ 45 °C
Working position	arbitrary	arbitrary

<sup>1)</sup> Each digit indicates successively the number of make and break contacts

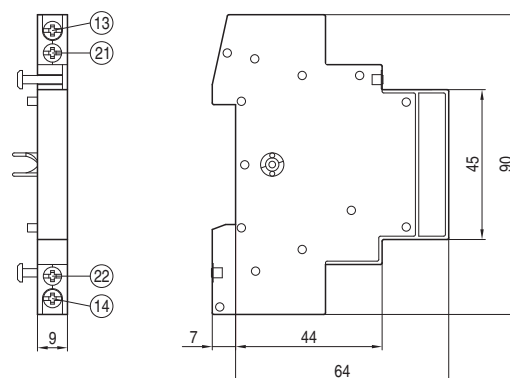
## ACCESSORIES FOR OFE, OFI

### Dimensions

PS-OF125-1100

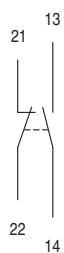


PS-OF-1100



### Diagram

PS-OF-1100



PS-OF125-1100

