

Protective Devices Add-on Residual Current Protection Unit PBSM



Catalog



Powering Business Worldwide

SG18211



Description

- Combining this device with a top-quality miniature circuit breaker of type PLS. will form a top-quality RCBO unit (combined RCD/MCB device)
- Draw-out connection bar locked in installation position
- For subsequent mounting onto 2-, 3-, 3+N- and 4-pole miniature circuit breakers PLS.
- Rated current 40 and 63 A

Add-on Residual Current Protection Unit PBSM (MW)

Max. nominal current of PLS./ $I_{\Delta n}$
(A)

Type
Designation

Article No. Units per
package

Type AC

Conditionally surge current-proof 250 A, type AC

SG17811



2-pole

40/0.03	PBSM-402/003	262323	1/20
40/0.10	PBSM-402/01	262324	1/20
40/0.30	PBSM-402/03	262325	1/20
40/0.50	PBSM-402/05	262326	1/20
40/1.00	PBSM-402/1	262327	1/20
63/0.03	PBSM-632/003	262426	1/20
63/0.10	PBSM-632/01	262427	1/20
63/0.30	PBSM-632/03	262428	1/20
63/0.50	PBSM-632/05	262429	1/20
63/1.00	PBSM-632/1	262431	1/20

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3-pole

40/0.03	PBSM-403/003	262537	1/20
40/0.10	PBSM-403/01	262538	1/20
40/0.30	PBSM-403/03	262539	1/20
40/0.50	PBSM-403/05	262541	1/20
40/1.00	PBSM-403/1	262542	1/20
63/0.03	PBSM-633/003	262556	1/20
63/0.10	PBSM-633/01	262557	1/20
63/0.30	PBSM-633/03	262558	1/20
63/0.50	PBSM-633/05	262559	1/20
63/1.00	PBSM-633/1	262560	1/20

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4-pole

40/0.03	PBSM-404/003	262568	1/13
40/0.10	PBSM-404/01	262569	1/13
40/0.30	PBSM-404/03	262570	1/13
40/0.50	PBSM-404/05	262571	1/13
40/1.00	PBSM-404/1	262572	1/13
63/0.03	PBSM-634/003	262590	1/13
63/0.10	PBSM-634/01	262591	1/13
63/0.30	PBSM-634/03	262592	1/13
63/0.50	PBSM-634/05	262595	1/13
63/1.00	PBSM-634/1	262596	1/13

Add-on Residual Current Protection Unit PBSM (MW)

Max. nominal current of PLS./I_{Δn}
(A)

Type
Designation

Article No. Units per
package

Type A

Conditionally surge current-proof 250 A, sensitive to residual pulsating DC, type A

SG17811



2-pole

40/0.03	PBSM-402/003-A	262328	1/20
40/0.10	PBSM-402/01-A	262329	1/20
40/0.30	PBSM-402/03-A	262420	1/20
40/1.00	PBSM-402/1-A	262421	1/20
63/0.03	PBSM-632/003-A	262530	1/20
63/0.10	PBSM-632/01-A	262531	1/20
63/0.30	PBSM-632/03-A	262532	1/20
63/1.00	PBSM-632/1-A	262533	1/20

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3-pole

40/0.03	PBSM-403/003-A	262543	1/20
40/0.03	PBSM-403/003-A-230	180634	1/20
40/0.10	PBSM-403/01-A	262544	1/20
40/0.30	PBSM-403/03-A	262545	1/20
40/1.00	PBSM-403/1-A	262546	1/20
63/0.03	PBSM-633/003-A	262561	1/20
63/0.03	PBSM-633/003-A-230	180635	1/20
63/0.10	PBSM-633/01-A	262562	1/20
63/0.30	PBSM-633/03-A	262563	1/20
63/1.00	PBSM-633/1-A	262564	1/20

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4-pole

40/0.03	PBSM-404/003-A	262573	1/13
40/0.10	PBSM-404/01-A	262574	1/13
40/0.30	PBSM-404/03-A	262575	1/13
40/1.00	PBSM-404/1-A	262576	1/13
63/0.03	PBSM-634/003-A	262597	1/13
63/0.10	PBSM-634/01-A	262598	1/13
63/0.30	PBSM-634/03-A	262600	1/13
63/1.00	PBSM-634/1-A	262602	1/13

Add-on Residual Current Protection Unit PBSM (MW)

Max. nominal current of PLS./ $I_{\Delta n}$
(A)

Type
Designation

Article No. Units per
package

Type G

Surge current-proof 3 kA, type G (ÖVE E 8601)

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2-pole

40/0.03	PBSM-402/003-G	262422	1/20
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3-pole

40/0.03	PBSM-403/003-G	262552	1/20
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4-pole

40/0.03	PBSM-404/003-G	262577	1/13
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Type S

Selective + surge current-proof 5 kA, type S

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2-pole

40/0.10	PBSM-402/01-S	262423	1/20
40/0.30	PBSM-402/03-S	262424	1/20
40/1.00	PBSM-402/1-S	262425	1/20
63/0.10	PBSM-632/01-S	262534	1/20
63/0.30	PBSM-632/03-S	262535	1/20
63/1.00	PBSM-632/1-S	262536	1/20

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3-pole

40/0.10	PBSM-403/01-S	262553	1/20
40/0.30	PBSM-403/03-S	262554	1/20
40/1.00	PBSM-403/1-S	262555	1/20
63/0.10	PBSM-633/01-S	262565	1/20
63/0.30	PBSM-633/03-S	262566	1/20
63/1.00	PBSM-633/1-S	262567	1/20

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4-pole

40/0.10	PBSM-404/01-S	262586	1/13
40/0.30	PBSM-404/03-S	262587	1/13
40/1.00	PBSM-404/1-S	262588	1/13
63/0.10	PBSM-634/01-S	262603	1/13
63/0.30	PBSM-634/03-S	262605	1/13
63/1.00	PBSM-634/1-S	262607	1/13

Add-on Residual Current Protection Unit PBSM (MW)

Max. nominal current of PLS./ $I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
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Type S/A

Selective + surge current-proof typ. 5 kA, sensitive to residual pulsating DC, type S/A

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2-pole

63/0.30	PBSM-632/03-S/A	167017	1/20
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3-pole

63/0.30	PBSM-633/03-S/A	167020	1/20
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4-pole

63/0.30	PBSM-634/03-S/A	167023	1/13
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Specifications | Add-on Residual Current Protection Unit PBSM

Description

- Add-on residual current unit
- Line voltage-independent tripping
- By combining this device with a top-quality miniature circuit breaker type PLS, a top-quality RCBO unit (combined RCD/MCB device) is formed.
- Rated current 40 and 63 A
- Permits combinations with a variety of characteristics thanks to the different rated currents and characteristics of the PLS.-miniature circuit breakers which can be connected
- Comprehensive range of accessories suitable for subsequent installation onto PLS.
- The test key "T" must be pressed every 6 month. The system operator must be informed of this obligation and his responsibility in a way that can be proven (self-adhesive RCD-label enclosed). The test interval of 6 month is valid for residential and similar applications. Under all other conditions (e.g. damply or dusty environments), it's recommended to test in shorter intervals (e.g. monthly).
- Pressing the test key "T" serves the only purpose of function testing the residual current device (RCD). This test does not make earthing resistance measurement (R_E), or proper checking of the earth conductor condition redundant, which must be performed separately.
- **Type -A:** Protects against special forms of residual pulsating DC which have not been smoothed.
- **Type -G:** High reliability against unwanted tripping. Suitable for any circuit where personal injury or damage to property may occur in case of unwanted tripping.
- **Type -S:** Selective residual current device, either sensitive to AC, type -S, or sensitive to pulsating DC, type -S/A, for protection against special forms of residual pulsating DC which have not been smoothed. Suitable for systems with surge arresters downstream of the RCD.

Accessories:

Cover cap for busbar mounting bracket	In the scope of delivery
Disposable cylinder head bolt with slot	In the scope of delivery

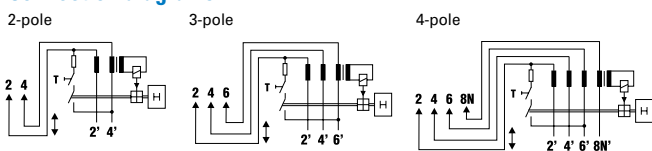
Accessories (on PLS):

Auxiliary switch for subsequent installation	ZP-IHK	286052
	ZP-WHK	286053
Tripping signal contact for subsequent installation	ZP-NHK	248437
Shunt trip release	ZP-ASA/..	248438, 248439
Undervoltage release	Z-USA/..	248288-248291
Additional terminal 35 mm ²	BB-UL-TEPA/35	169823

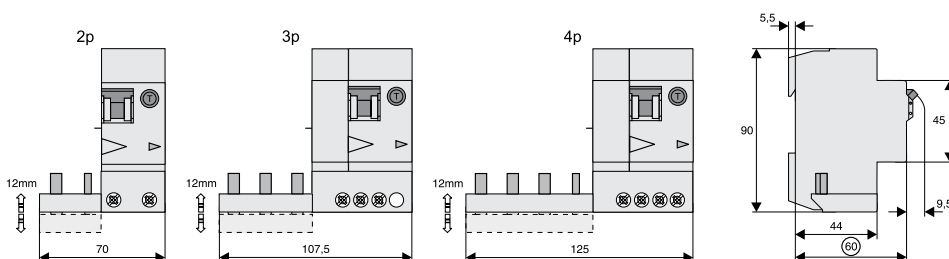
Technical Data

		PBSM
Electrical		
Design according to		IEC/EN 61009
Current test marks as printed onto the device		
Tripping		instantaneous 250 A (8/20 μs), surge current proof
Type G		10 ms delay 3 kA (8/20 μs), surge current proof
Type S		40 ms delay 6 kA, selective disconnecting function
Rated voltage	U_n	230/400 V AC
Limits operation voltage test circuit		
2-pole, 30 mA		196-264 V
2-pole, 100, 300, 500, 1000 mA		196-456 V
3-pole, 30 mA		340-456 V
3-pole, 30 mA-230		196-264 V
3-pole, 100, 300, 500, 1000 mA		196-456 V
4-pole, 30 mA		340-456 V
4-pole, 100, 300, 500, 1000 mA		196-456 V
Rated frequency		50 Hz
Rated current	I_n	$\leq 40 A, \leq 63 A$
Rated tripping current	$I_{\Delta n}$	30, 100, 300, 500, 1000 mA
Rated non-tripping current	$I_{\Delta no}$	$0.5 I_n$
Sensitivity		AC and pulsating DC
Rated breaking capacity	I_{cn}	same as connected PLS. up to max. 10 kA
Rated fault breaking capacity	$I_{\Delta m}$	
$U_n = 230 V$		6 kA
$U_n = 400 V$		3 kA
Mechanical		
Frame size		45 mm
Device height		90 mm
Device width		70 mm (2p), 107,5 mm (3p), 125 mm (4p)
Mounting		fix mounted onto PLS.
Degree of protection, built-in		IP40
Fastening screw		M 2.5 (slotted one-way cheese head screw; > 0.6 Nm)
Upper and lower terminals		lift terminals
Terminal protection		finger and hand touch safe, DGUV VS3, EN 50274
Terminal capacity		
Rigid conductors		1 x (1 - 35) mm ²
Flexible conductors (with wire end sleeve)		1 x (0.75 - 35) mm ²
Busbar thickness		0.8 - 2 mm
Operating temperature		-25°C to +40°C
Storage- and transport temperature		-35°C to +60°C
Resistance to climatic conditions		25-55°C/90-95% relative humidity according to IEC 60068-2

Connection diagrams



Dimensions (mm)



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