

## 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

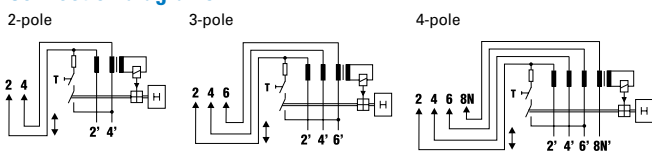
### Accessories (on PLS.):

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 <sup>2</sup>	BB-UL-TEPA/35	169823

**Technical Data**

		<b>PBSM</b>
<b>Electrical</b>		
Design according to		IEC/EN 61009
Current test marks as printed onto the device		
Tripping		instantaneous 250 A (8/20 $\mu$ s), surge current proof
Type G		10 ms delay 3 kA (8/20 $\mu$ s), 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
<b>Mechanical</b>		
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 <sup>2</sup>
Flexible conductors (with wire end sleeve)		1 x (0.75 - 35) mm <sup>2</sup>
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)**

