

# 1.130 Protective Devices

xPole

Combined RCD/MCB Devices PKN4, 1+N-pole (MW)

SG13911



## Description

- High-quality residual current device / miniature circuit breaker combination, line voltage-independent
- Contact position indicator red - green
- Guide for secure terminal connection
- 3-position DIN rail clip, permits removal from existing busbar system
- Comprehensive range of accessories can be mounted subsequently
- Wide variety of rated tripping currents
- Rated currents up to 40 A
- Tripping characteristics B, C
- Rated breaking capacity 4.5 kA

$I_n/I_{\Delta n}$   
(A)

Type  
Designation

Article No. Units per  
package

**Type G**

**4.5 kA, 1+N-pole  
Surge current-proof 3 kA, type G (ÖVE E 8601)**

SG13911



**Characteristic B**

13/0.03	PKN4-13/1N/B/003-G	236993	1/60
16/0.03	PKN4-16/1N/B/003-G	237065	1/60
20/0.03	PKN4-20/1N/B/003-G	237099	1/60
25/0.03	PKN4-25/1N/B/003-G	237129	1/60
32/0.03	PKN4-32/1N/B/003-G	237159	1/60
40/0.03	PKN4-40/1N/B/003-G	237188	1/60
13/0.3	PKN4-13/1N/B/03-G	236994	1/60
16/0.3	PKN4-16/1N/B/03-G	237066	1/60
20/0.3	PKN4-20/1N/B/03-G	237100	1/60
25/0.3	PKN4-25/1N/B/03-G	237130	1/60
32/0.3	PKN4-32/1N/B/03-G	237160	1/60
40/0.3	PKN4-40/1N/B/03-G	237189	1/60

SG13911



**Characteristic C**

13/0.03	PKN4-13/1N/C/003-G	237005	1/60
16/0.03	PKN4-16/1N/C/003-G	237077	1/60
20/0.03	PKN4-20/1N/C/003-G	237109	1/60
25/0.03	PKN4-25/1N/C/003-G	237139	1/60
32/0.03	PKN4-32/1N/C/003-G	237169	1/60
40/0.03	PKN4-40/1N/C/003-G	237198	1/60
13/0.3	PKN4-13/1N/C/03-G	237006	1/60
16/0.3	PKN4-16/1N/C/03-G	237078	1/60
20/0.3	PKN4-20/1N/C/03-G	237110	1/60
25/0.3	PKN4-25/1N/C/03-G	237140	1/60
32/0.3	PKN4-32/1N/C/03-G	237170	1/60
40/0.3	PKN4-40/1N/C/03-G	237199	1/60

$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
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### Type A

#### 4.5 kA, 1+N-pole

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

SG13911



#### Characteristic B

2/0.01	PKN4-2/1N/B/001-A	236787	1/60
4/0.01	PKN4-4/1N/B/001-A	236817	1/60
6/0.01	PKN4-6/1N/B/001-A	236867	1/60
10/0.01	PKN4-10/1N/B/001-A	236927	1/60
13/0.01	PKN4-13/1N/B/001-A	236988	1/60
16/0.01	PKN4-16/1N/B/001-A	237060	1/60
2/0.03	PKN4-2/1N/B/003-A	236788	1/60
4/0.03	PKN4-4/1N/B/003-A	236818	1/60
6/0.03	PKN4-6/1N/B/003-A	236868	1/60
10/0.03	PKN4-10/1N/B/003-A	236928	1/60
13/0.03	PKN4-13/1N/B/003-A	236989	1/60
16/0.03	PKN4-16/1N/B/003-A	237061	1/60
20/0.03	PKN4-20/1N/B/003-A	237095	1/60
25/0.03	PKN4-25/1N/B/003-A	237125	1/60
32/0.03	PKN4-32/1N/B/003-A	237155	1/60
40/0.03	PKN4-40/1N/B/003-A	237184	1/60
2/0.1	PKN4-2/1N/B/01-A	236789	1/60
4/0.1	PKN4-4/1N/B/01-A	236819	1/60
6/0.1	PKN4-6/1N/B/01-A	236869	1/60
10/0.1	PKN4-10/1N/B/01-A	236929	1/60
13/0.1	PKN4-13/1N/B/01-A	236990	1/60
16/0.1	PKN4-16/1N/B/01-A	237062	1/60
20/0.1	PKN4-20/1N/B/01-A	237096	1/60
25/0.1	PKN4-25/1N/B/01-A	237126	1/60
32/0.1	PKN4-32/1N/B/01-A	237156	1/60
40/0.1	PKN4-40/1N/B/01-A	237185	1/60
2/0.3	PKN4-2/1N/B/03-A	236790	1/60
4/0.3	PKN4-4/1N/B/03-A	236820	1/60
6/0.3	PKN4-6/1N/B/03-A	236870	1/60
10/0.3	PKN4-10/1N/B/03-A	236930	1/60
13/0.3	PKN4-13/1N/B/03-A	236991	1/60
16/0.3	PKN4-16/1N/B/03-A	237063	1/60
20/0.3	PKN4-20/1N/B/03-A	237097	1/60
25/0.3	PKN4-25/1N/B/03-A	237127	1/60
32/0.3	PKN4-32/1N/B/03-A	237157	1/60
40/0.3	PKN4-40/1N/B/03-A	237186	1/60

SG13911



$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
<b>Characteristic C</b>			
2/0.01	PKN4-2/1N/C/001-A	236797	1/60
4/0.01	PKN4-4/1N/C/001-A	236827	1/60
6/0.01	PKN4-6/1N/C/001-A	236877	1/60
10/0.01	PKN4-10/1N/C/001-A	236937	1/60
13/0.01	PKN4-13/1N/C/001-A	237000	1/60
16/0.01	PKN4-16/1N/C/001-A	237072	1/60
2/0.03	PKN4-2/1N/C/003-A	236798	1/60
4/0.03	PKN4-4/1N/C/003-A	236828	1/60
6/0.03	PKN4-6/1N/C/003-A	236878	1/60
10/0.03	PKN4-10/1N/C/003-A	236938	1/60
13/0.03	PKN4-13/1N/C/003-A	237001	1/60
16/0.03	PKN4-16/1N/C/003-A	237073	1/60
20/0.03	PKN4-20/1N/C/003-A	237105	1/60
25/0.03	PKN4-25/1N/C/003-A	237135	1/60
32/0.03	PKN4-32/1N/C/003-A	237165	1/60
40/0.03	PKN4-40/1N/C/003-A	237194	1/60
2/0.1	PKN4-2/1N/C/01-A	236799	1/60
4/0.1	PKN4-4/1N/C/01-A	236829	1/60
6/0.1	PKN4-6/1N/C/01-A	236879	1/60
10/0.1	PKN4-10/1N/C/01-A	236939	1/60
13/0.1	PKN4-13/1N/C/01-A	237002	1/60
16/0.1	PKN4-16/1N/C/01-A	237074	1/60
20/0.1	PKN4-20/1N/C/01-A	237106	1/60
25/0.1	PKN4-25/1N/C/01-A	237136	1/60
32/0.1	PKN4-32/1N/C/01-A	237166	1/60
40/0.1	PKN4-40/1N/C/01-A	237195	1/60
2/0.3	PKN4-2/1N/C/03-A	236800	1/60
4/0.3	PKN4-4/1N/C/03-A	236830	1/60
6/0.3	PKN4-6/1N/C/03-A	236880	1/60
10/0.3	PKN4-10/1N/C/03-A	236940	1/60
13/0.3	PKN4-13/1N/C/03-A	237003	1/60
16/0.3	PKN4-16/1N/C/03-A	237075	1/60
20/0.3	PKN4-20/1N/C/03-A	237107	1/60
25/0.3	PKN4-25/1N/C/03-A	237137	1/60
32/0.3	PKN4-32/1N/C/03-A	237167	1/60
40/0.3	PKN4-40/1N/C/03-A	237196	1/60

# 1.134 Protective Devices

## Combined RCD/MCB Devices PKN4, 1+N-pole (MW)

$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
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### Type AC

#### 4.5 kA, 1+N-pole Conditionally surge current-proof 250 A, type AC

#### Characteristic B

2/0.01	PKN4-2/1N/B/001	236782	1/60
4/0.01	PKN4-4/1N/B/001	236813	1/60
6/0.01	PKN4-6/1N/B/001	236862	1/60
10/0.01	PKN4-10/1N/B/001	236922	1/60
13/0.01	PKN4-13/1N/B/001	236983	1/60
16/0.01	PKN4-16/1N/B/001	237055	1/60
2/0.03	PKN4-2/1N/B/003	236783	1/60
4/0.03	PKN4-4/1N/B/003	236812	1/60
6/0.03	PKN4-6/1N/B/003	236863	1/60
10/0.03	PKN4-10/1N/B/003	236923	1/60
13/0.03	PKN4-13/1N/B/003	236984	1/60
16/0.03	PKN4-16/1N/B/003	237056	1/60
20/0.03	PKN4-20/1N/B/003	237091	1/60
25/0.03	PKN4-25/1N/B/003	237121	1/60
32/0.03	PKN4-32/1N/B/003	237151	1/60
40/0.03	PKN4-40/1N/B/003	237180	1/60
2/0.1	PKN4-2/1N/B/01	236784	1/60
4/0.1	PKN4-4/1N/B/01	236814	1/60
6/0.1	PKN4-6/1N/B/01	236864	1/60
10/0.1	PKN4-10/1N/B/01	236924	1/60
13/0.1	PKN4-13/1N/B/01	236985	1/60
16/0.1	PKN4-16/1N/B/01	237057	1/60
20/0.1	PKN4-20/1N/B/01	237092	1/60
25/0.1	PKN4-25/1N/B/01	237122	1/60
32/0.1	PKN4-32/1N/B/01	237152	1/60
40/0.1	PKN4-40/1N/B/01	237181	1/60
2/0.3	PKN4-2/1N/B/03	236785	1/60
4/0.3	PKN4-4/1N/B/03	236815	1/60
6/0.3	PKN4-6/1N/B/03	236865	1/60
10/0.3	PKN4-10/1N/B/03	236925	1/60
13/0.3	PKN4-13/1N/B/03	236986	1/60
16/0.3	PKN4-16/1N/B/03	237058	1/60
20/0.3	PKN4-20/1N/B/03	237093	1/60
25/0.3	PKN4-25/1N/B/03	237123	1/60
32/0.3	PKN4-32/1N/B/03	237153	1/60
40/0.3	PKN4-40/1N/B/03	237182	1/60

SG13911



SG13911



$I_n/I_{\Delta n}$ (A)	Type Designation	Article No.	Units per package
<b>Characteristic C</b>			
2/0.01	PKN4-2/1N/C/001	236792	1/60
4/0.01	PKN4-4/1N/C/001	236822	1/60
6/0.01	PKN4-6/1N/C/001	236872	1/60
10/0.01	PKN4-10/1N/C/001	236932	1/60
13/0.01	PKN4-13/1N/C/001	236995	1/60
16/0.01	PKN4-16/1N/C/001	237067	1/60
2/0.03	PKN4-2/1N/C/003	236793	1/60
4/0.03	PKN4-4/1N/C/003	236823	1/60
6/0.03	PKN4-6/1N/C/003	236873	1/60
10/0.03	PKN4-10/1N/C/003	236933	1/60
13/0.03	PKN4-13/1N/C/003	236996	1/60
16/0.03	PKN4-16/1N/C/003	237068	1/60
20/0.03	PKN4-20/1N/C/003	237101	1/60
25/0.03	PKN4-25/1N/C/003	237131	1/60
32/0.03	PKN4-32/1N/C/003	237161	1/60
40/0.03	PKN4-40/1N/C/003	237190	1/60
2/0.1	PKN4-2/1N/C/01	236794	1/60
4/0.1	PKN4-4/1N/C/01	236824	1/60
6/0.1	PKN4-6/1N/C/01	236874	1/60
10/0.1	PKN4-10/1N/C/01	236934	1/60
13/0.1	PKN4-13/1N/C/01	236997	1/60
16/0.1	PKN4-16/1N/C/01	237069	1/60
20/0.1	PKN4-20/1N/C/01	237102	1/60
25/0.1	PKN4-25/1N/C/01	237132	1/60
32/0.1	PKN4-32/1N/C/01	237162	1/60
40/0.1	PKN4-40/1N/C/01	237191	1/60
2/0.3	PKN4-2/1N/C/03	236795	1/60
4/0.3	PKN4-4/1N/C/03	236825	1/60
6/0.3	PKN4-6/1N/C/03	236875	1/60
10/0.3	PKN4-10/1N/C/03	236935	1/60
13/0.3	PKN4-13/1N/C/03	236998	1/60
16/0.3	PKN4-16/1N/C/03	237070	1/60
20/0.3	PKN4-20/1N/C/03	237103	1/60
25/0.3	PKN4-25/1N/C/03	237133	1/60
32/0.3	PKN4-32/1N/C/03	237163	1/60
40/0.3	PKN4-40/1N/C/03	237192	1/60

## Specifications | Combined RCD/MCB Devices PKN4, 1+N-pole

### Description

- Combined RCD/MCB Devices
- Line voltage-independent tripping
- Compatible with standard busbar
- Twin-purpose terminal (lift/open-mouthed) above and below
- Busbar positioning optionally above or below
- Free terminal space despite installed busbar
- Guide for secure terminal connection
- Switching toggle (MCB component) in colour designating the rated current
- Contact position indicator red - green
- Comprehensive range of accessories can be mounted subsequently
- 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 intervall 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 intervalls (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:** 10 ms time delay in order to avoid unwanted tripping (e.g. during thunderstorms) according to ÖVE E 8601.  
Compulsory in Austria for any circuit where personal injury or damage to property may occur in case of unwanted tripping (ÖVE-EN1, Part 1, §12.14).

### Accessories:

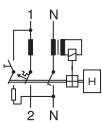
Auxiliary switch for subsequent installation	ZP-IHK	286052
	ZP-WHK	286053
Tripping signal switch for subsequent installation	ZP-NHK	248437
Shunt trip release	ZP-ASA/..	248438, 248439
Terminal cover cap	KLV-TC-2	276240
Additional terminal 35 mm <sup>2</sup>	Z-HA-EK/35	263960

**Technical Data**

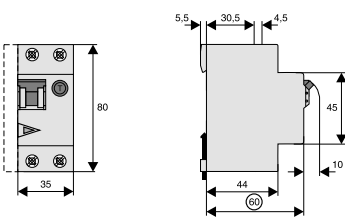
		<b>PKN4, 1+N-pole</b>
<b>Electrical</b>		
Design according to		IEC/EN 61009
Current test marks as printed onto the device		
Line voltage-independent tripping		instantaneous 250 A (8/20 μs), surge current proof
Type G		10 ms delay 3 kA (8/20 μs), surge current proof
Rated voltage	$U_e$	230 V AC; 50 Hz
Operational voltage range		196-253 V
Rated tripping current	$I_{\Delta n}$	10, 30, 100, 300 mA
Rated non-tripping current	$I_{\Delta no}$	0.5 $I_{\Delta n}$
Rated insulation voltage	$U_i$	440 VAC
Sensitivity		AC and pulsating DC
Selectivity class		3
Rated breaking capacity	$I_{cn}$	4.5 kA
Rated current		2 - 40 A
Rated impulse withstand voltage	$U_{imp}$	4 kV (1.2/50 μs)
Characteristic		B, C
Maximum back-up fuse (short circuit)		100 A gL (>4.5 kA)
Endurance		
electrical components		≥ 4,000 switching operations
mechanical components		≥ 20,000 switching operations
<b>Mechanical</b>		
Frame size		45 mm
Device height		80 mm
Device width		35 mm (2MU)
Mounting		3-position DIN rail clip, permits removal from existing busbar system
Degree of protection, switch		IP20
Degree of protection, built-in		IP40
Upper and lower terminals		open mouthed/lift terminals
Terminal protection		finger and hand touch safe, DGUV VS3, EN 50274
Terminal capacity		1 - 25 mm <sup>2</sup>
Terminal torque		2 - 2.4 Nm
Busbar thickness		0.8 - 2 mm
Tripping temperature		-25°C to +40°C
Storage- and transport temperature		-35°C to +60°C
Resistance to climatic conditions		according to IEC/EN 61009

**Connection diagram**

1+N-pole



**Dimensions (mm)**



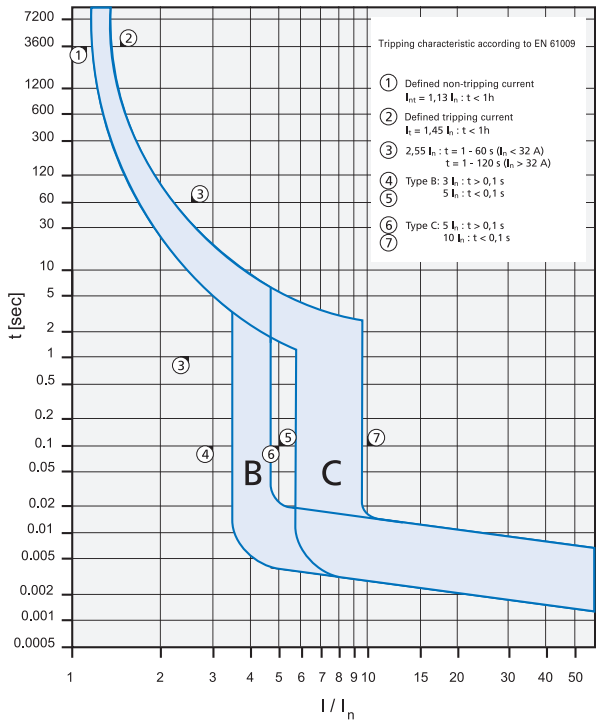


### Load Capacity PKN4-../1N/

Effect of ambient temperature (MCB component)

I <sub>n</sub> [A]	Ambient temperature T [°C]								
	-25	-20	-10	0	10	20	30	35	40
2	2.5	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9
4	4.9	4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.9
5	6.2	6.0	5.8	5.6	5.4	5.2	5.0	4.9	4.8
6	7.4	7.2	7.0	6.7	6.5	6.3	6.0	5.9	5.8
8	9.9	9.6	9.3	9.0	8.7	8.4	8.0	7.9	7.7
10	12	12	12	11	11	10	10	9.9	9.7
12	15	14	14	13	13	13	12	12	12
13	16	16	15	15	14	14	13	13	13
15	19	18	17	17	16	16	15	15	15
16	20	19	19	18	17	17	16	16	15
20	25	24	23	22	22	21	20	20	19
25	31	30	29	28	27	26	25	25	24
32	40	38	37	36	35	33	32	32	31
40	49	48	47	45	43	42	40	39	39

### Tripping Characteristic PKN4-../1N/, Characteristics B and C



### Short Circuit Selectivity PKN4-../1N/ towards DII-DIV fuse link

In case of short circuit, there is selectivity between the combined RCD/MCB devices PKN4-../1N/ and the upstream fuses up to the specified values of the selectivity limit current I<sub>s</sub> [kA] (i. e. in case of short-circuit currents I<sub>ks</sub> under I<sub>s</sub>, only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

\*) basically in accordance with EN 60898-1 D.5.2.b

Short circuit selectivity **Characteristic B** towards fuse link **DII-DIV\***

PKN4 I <sub>n</sub> [A]	DII-DIV gL/gG								
	10	16	20	25	35	50	63	80	100
2	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	2.2	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
4	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.7	1.2	3.7	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
6		<0.5 <sup>1)</sup>	0.7	1.0	2.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
8		<0.5 <sup>1)</sup>	0.6	1.0	2.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
10			0.6	0.9	1.9	3.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
13			0.5	0.7	1.6	2.8	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
16				0.7	1.4	2.4	4.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
20					1.3	2.2	4.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
25						1.3	2.1	3.8	4.5 <sup>2)</sup>
32							2.0	3.5	4.5 <sup>2)</sup>
40								3.1	4.5 <sup>2)</sup>

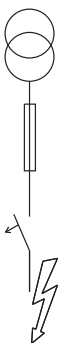
Short circuit selectivity **Characteristic C** towards fuse link **DII-DIV\***

PKN4 I <sub>n</sub> [A]	DII-DIV gL/gG								
	10	16	20	25	35	50	63	80	100
2	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	1.7	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
4	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.7	1.3	4.2	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
5	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.6	1.1	3.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
6		<0.5 <sup>1)</sup>	0.6	1.0	2.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
8		<0.5 <sup>1)</sup>	<0.5	0.9	2.5	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
10			<0.5	0.7	1.5	2.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
13					1.4	2.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
16						1.2	1.8	3.4	4.5 <sup>2)</sup>
20							1.2	1.7	3.1
25								1.6	2.9
32									2.3
40									2.9

<sup>1)</sup> Selectivity limit current I<sub>s</sub> under 0.5 kA.

<sup>2)</sup> Selectivity limit current I<sub>s</sub> = rated breaking capacity I<sub>cn</sub> of the RCD/MCB device

Darker areas: no selectivity



**Short Circuit Selectivity PKN4-../1N/ towards D01-D03 fuse link**

In case of short circuit, there is selectivity between the combined RCD/MCB devices PKN4-../1N/ and the upstream fuses up to the specified values of the selectivity limit current  $I_s$  [kA] (i. e. in case of short-circuit currents  $I_{ks}$  under  $I_s$ , only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

\*) basically in accordance with EN 60898-1 D.5.2.b

Short circuit selectivity **Characteristic B** towards fuse link **D01-D03\***

PKN4	D01-D03 gL/gG									
$I_n$ [A]	10	16	20	25	35	50	63	80	100	
2	<0.5 <sup>1)</sup>	0.7	1.6	3.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
4	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.6	0.9	2.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
6		<0.5 <sup>1)</sup>	0.5	0.8	2.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
8			0.6	0.8	2.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
10			0.5	0.8	1.6	3.7	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
13			0.6	0.7	1.4	3.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
16				0.6	1.2	2.6	3.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
20					1.2	2.5	3.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
25					1.2	2.3	3.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
32						2.3	3.1	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
40							2.8	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>

Short circuit selectivity **Characteristic C** towards fuse link **D01-D03\***

PKN4	D01-D03 gL/gG									
$I_n$ [A]	10	16	20	25	35	50	63	80	100	
2	<0.5 <sup>1)</sup>	0.5	0.5	2.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
4	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.9	3.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
5	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.9	2.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
6		<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.8	2.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
8			<0.5	0.7	2.1	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
10			<0.5	0.6	1.3	2.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
13					1.2	2.5	3.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
16					1.0	2.1	3.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
20					1.0	2.0	2.7	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
25						1.9	2.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
32							2.1	3.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
40								3.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>

**Short Circuit Selectivity PKN4-../1N/ towards NH-00 fuse link**

In case of short circuit, there is selectivity between the combined RCD/MCB devices PKN4-../1N/ and the upstream fuses up to the specified values of the selectivity limit current  $I_s$  [kA] (i. e. in case of short-circuit currents  $I_{ks}$  under  $I_s$ , only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

\*) basically in accordance with EN 60898-1 D.5.2.b

Short circuit selectivity **Characteristic B** towards fuse link **NH-00\***

PKN4	NH-00 gL/gG											
$I_n$ [A]	16	20	25	32	35	40	50	63	80	100	125	160
2	<0.5 <sup>1)</sup>	1.1	3.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
4	<0.5 <sup>1)</sup>	0.5	0.9	1.6	2.8	4.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
6	<0.5 <sup>1)</sup>	0.5	0.8	1.4	2.2	3.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
8	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.7	1.0	1.9	2.8	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
10		<0.5 <sup>1)</sup>	0.7	0.9	1.5	2.1	3.4	4.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
13		<0.5 <sup>1)</sup>	0.6	0.8	1.4	1.8	2.8	3.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
16			0.6	0.7	1.2	1.5	2.4	3.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
20				0.7	1.1	1.5	2.2	2.8	4.2	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
25				0.7	1.1	1.4	2.1	2.6	4.0	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
32					1.0	1.4	2.0	2.5	3.7	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
40							2.3	3.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>

Short circuit selectivity **Characteristic C** towards fuse link **NH-00\***

PKN4	NH-00 gL/gG											
$I_n$ [A]	16	20	25	32	35	40	50	63	80	100	125	160
2	<0.5 <sup>1)</sup>	0.6	2.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
4	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.9	1.8	3.2	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
5	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.8	1.6	2.7	4.1	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
6	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.7	1.3	2.2	3.3	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
8	<0.5 <sup>1)</sup>	<0.5 <sup>1)</sup>	0.6	1.1	1.9	2.8	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
10			0.5	0.8	1.2	1.7	2.7	3.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
13					1.1	1.5	2.3	2.9	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
16					1.0	1.3	1.8	2.3	3.7	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
20					0.9	1.1	1.7	2.2	3.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
25						1.6	2.1	3.2	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
32							1.7	2.6	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>
40								2.4	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>	4.5 <sup>2)</sup>

<sup>1)</sup> Selectivity limit current  $I_s$  under 0.5 kA.

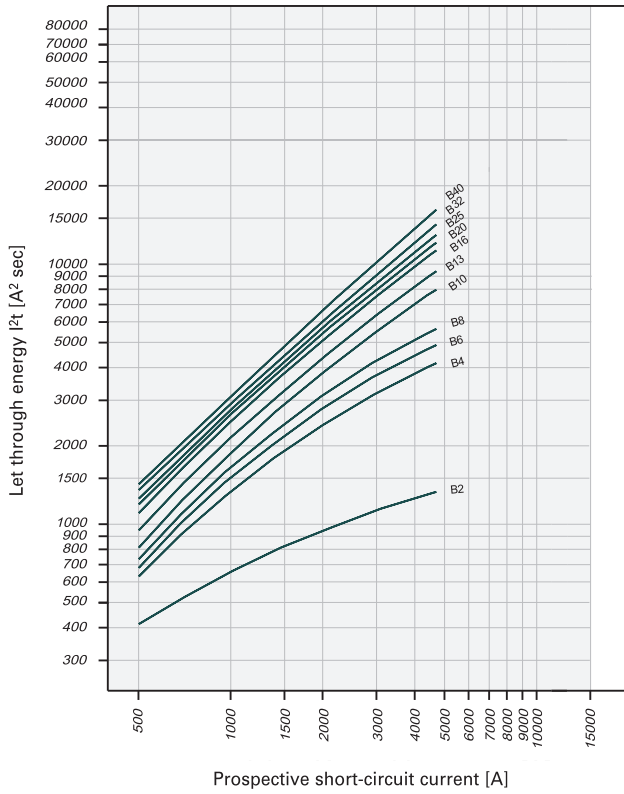
<sup>2)</sup> Selectivity limit current  $I_s$  = rated breaking capacity  $I_{cn}$  of the RCD/MCB device

Darker areas: no selectivity



### Let-through Energy PKN4-../1N/

Let-through Energy PKN4, Characteristic B, 1+N-pole



Let-through Energy PKN4, Characteristic C, 1+N-pole

