

SG62211



Description

- High-quality miniature circuit breakers for commercial and residential applications
- 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
- Rated currents up to 63 A
- Tripping characteristics B, C, D
- Rated breaking capacity 6 kA according to IEC/EN 60898-1

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Rated current
 I_n (A)

Type
Designation

Article No.

Units per
package

6 kA, Characteristic B

1-pole

1	PL6-B1/1	164740	12/120
1.5	PL6-B1,5/1	164736	12/120
1.6	PL6-B1,6/1	164737	12/120
2	PL6-B2/1	286516	12/120
2.5	PL6-B2,5/1	164741	12/120
3	PL6-B3/1	164743	12/120
3.5	PL6-B3,5/1	164742	12/120
4	PL6-B4/1	286517	12/120
5	PL6-B5/1	164744	12/120
6	PL6-B6/1	286518	12/120
8	PL6-B8/1	164745	12/120
10	PL6-B10/1	286519	12/120
12	PL6-B12/1	164738	12/120
13	PL6-B13/1	286520	12/120
15	PL6-B15/1	164739	12/120
16	PL6-B16/1	286521	12/120
20	PL6-B20/1	286522	12/120
25	PL6-B25/1	286523	12/120
32	PL6-B32/1	286524	12/120
40	PL6-B40/1	286525	12/120
50	PL6-B50/1	286526	12/120
63	PL6-B63/1	286527	12/120

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1+N-pole

1	PL6-B1/1N	164903	8/80
1.5	PL6-B1,5/1N	164901	8/80
1.6	PL6-B1,6/1N	164902	8/80
2	PL6-B2/1N	164907	8/80
2.5	PL6-B2,5/1N	164906	8/80
3	PL6-B3/1N	164911	8/80
3.5	PL6-B3,5/1N	164910	8/80
4	PL6-B4/1N	164913	8/80
5	PL6-B5/1N	164914	8/80
6	PL6-B6/1N	106025	8/80
8	PL6-B8/1N	164915	8/80
10	PL6-B10/1N	106026	8/80
12	PL6-B12/1N	164904	8/80
13	PL6-B13/1N	106027	8/80
15	PL6-B15/1N	164905	8/80
16	PL6-B16/1N	106028	8/80
20	PL6-B20/1N	164908	8/80
25	PL6-B25/1N	164909	8/80
32	PL6-B32/1N	164912	8/80

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Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
1	PL6-B1/2	164803	6/60
1.5	PL6-B1,5/2	164801	6/60
1.6	PL6-B1,6/2	164802	6/60
2	PL6-B2/2	286550	6/60
2.5	PL6-B2,5/2	164806	6/60
3	PL6-B3/2	164808	6/60
3.5	PL6-B3,5/2	164807	6/60
4	PL6-B4/2	286551	6/60
5	PL6-B5/2	164809	6/60
6	PL6-B6/2	286552	6/60
8	PL6-B8/2	164810	6/60
10	PL6-B10/2	286553	6/60
12	PL6-B12/2	164804	6/60
13	PL6-B13/2	286554	6/60
15	PL6-B15/2	164805	6/60
16	PL6-B16/2	286555	6/60
20	PL6-B20/2	286556	6/60
25	PL6-B25/2	286557	6/60
32	PL6-B32/2	286558	6/60
40	PL6-B40/2	286559	6/60
50	PL6-B50/2	286560	6/60
63	PL6-B63/2	286561	6/60

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3-pole			
1	PL6-B1/3	164868	4/40
1.5	PL6-B1,5/3	164866	4/40
1.6	PL6-B1,6/3	164867	4/40
2	PL6-B2/3	286584	4/40
2.5	PL6-B2,5/3	164871	4/40
3	PL6-B3/3	164873	4/40
3.5	PL6-B3,5/3	164872	4/40
4	PL6-B4/3	286585	4/40
5	PL6-B5/3	164874	4/40
6	PL6-B6/3	286586	4/40
8	PL6-B8/3	164875	4/40
10	PL6-B10/3	286587	4/40
12	PL6-B12/3	164869	4/40
13	PL6-B13/3	286588	4/40
15	PL6-B15/3	164870	4/40
16	PL6-B16/3	286589	4/40
20	PL6-B20/3	286590	4/40
25	PL6-B25/3	286591	4/40
32	PL6-B32/3	286592	4/40
40	PL6-B40/3	286593	4/40
50	PL6-B50/3	286594	4/40
63	PL6-B63/3	286595	4/40

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Rated current
 I_n (A)

Type
Designation

Article No.

Units per
package

3+N-pole

1	PL6-B1/3N	165002	3/30
1.5	PL6-B1,5/3N	165000	3/30
1.6	PL6-B1,6/3N	165001	3/30
2	PL6-B2/3N	165007	3/30
2.5	PL6-B2,5/3N	165006	3/30
3	PL6-B3/3N	165009	3/30
3.5	PL6-B3,5/3N	165008	3/30
4	PL6-B4/3N	165010	3/30
5	PL6-B5/3N	165011	3/30
6	PL6-B6/3N	106035	3/30
8	PL6-B8/3N	165012	3/30
10	PL6-B10/3N	106036	3/30
12	PL6-B12/3N	165003	3/30
13	PL6-B13/3N	165004	3/30
15	PL6-B15/3N	165005	3/30
16	PL6-B16/3N	106037	3/30
20	PL6-B20/3N	106038	3/30
25	PL6-B25/3N	106039	3/30
32	PL6-B32/3N	106040	3/30
40	PL6-B40/3N	106041	3/30
50	PL6-B50/3N	106903	3/30
63	PL6-B63/3N	106904	3/30

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4-pole

1	PL6-B1/4	166489	3/30
1.5	PL6-B1,5/4	166487	3/30
1.6	PL6-B1,6/4	166488	3/30
2	PL6-B2/4	166496	3/30
2.5	PL6-B2,5/4	166495	3/30
3	PL6-B3/4	166499	3/30
4	PL6-B4/4	166501	3/30
5	PL6-B5/4	166503	3/30
6	PL6-B6/4	166505	3/30
8	PL6-B8/4	166507	3/30
10	PL6-B10/4	166490	3/30
12	PL6-B12/4	166491	3/30
13	PL6-B13/4	166492	3/30
15	PL6-B15/4	166493	3/30
16	PL6-B16/4	166494	3/30
20	PL6-B20/4	166497	3/30
25	PL6-B25/4	166498	3/30
32	PL6-B32/4	166500	3/30
40	PL6-B40/4	166502	3/30
50	PL6-B50/4	166504	3/30
63	PL6-B63/4	166506	3/30

Rated current
 I_n (A)

Type
Designation

Article No.

Units per
package

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6 kA, Characteristic C

1-pole

0.16	PL6-C0.16/1	164746	12/120
0.25	PL6-C0.25/1	164747	12/120
0.5	PL6-C0.5/1	164748	12/120
0.75	PL6-C0.75/1	164749	12/120
1	PL6-C1/1	164754	12/120
1.5	PL6-C1.5/1	164750	12/120
1.6	PL6-C1.6/1	164751	12/120
2	PL6-C2/1	286528	12/120
2.5	PL6-C2.5/1	164755	12/120
3	PL6-C3/1	164757	12/120
3.5	PL6-C3.5/1	164756	12/120
4	PL6-C4/1	286529	12/120
5	PL6-C5/1	164758	12/120
6	PL6-C6/1	286530	12/120
8	PL6-C8/1	164759	12/120
10	PL6-C10/1	286531	12/120
12	PL6-C12/1	164752	12/120
13	PL6-C13/1	286532	12/120
15	PL6-C15/1	164753	12/120
16	PL6-C16/1	286533	12/120
20	PL6-C20/1	286534	12/120
25	PL6-C25/1	286535	12/120
32	PL6-C32/1	286536	12/120
40	PL6-C40/1	286537	12/120
50	PL6-C50/1	286538	12/120
63	PL6-C63/1	286539	12/120

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1+N-pole

0.16	PL6-C0.16/1N	164916	8/80
0.25	PL6-C0.25/1N	164917	8/80
0.5	PL6-C0.5/1N	164918	8/80
0.75	PL6-C0.75/1N	164919	8/80
1	PL6-C1/1N	164922	8/80
1.5	PL6-C1.5/1N	164920	8/80
1.6	PL6-C1.6/1N	164921	8/80
2	PL6-C2/1N	106029	8/80
2.5	PL6-C2.5/1N	164925	8/80
3	PL6-C3/1N	164929	8/80
3.5	PL6-C3.5/1N	164928	8/80
4	PL6-C4/1N	106030	8/80
5	PL6-C5/1N	164931	8/80
6	PL6-C6/1N	106031	8/80
8	PL6-C8/1N	164932	8/80
10	PL6-C10/1N	106032	8/80
12	PL6-C12/1N	164923	8/80
13	PL6-C13/1N	106033	8/80
15	PL6-C15/1N	164924	8/80
16	PL6-C16/1N	106034	8/80
20	PL6-C20/1N	164926	8/80
25	PL6-C25/1N	164927	8/80
32	PL6-C32/1N	164930	8/80

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Rated current
 I_n (A)

Type
Designation

Article No.

Units per
package

2-pole

0.16	PL6-C0.16/2	164811	6/60
0.25	PL6-C0.25/2	164812	6/60
0.5	PL6-C0.5/2	164813	6/60
0.75	PL6-C0.75/2	164814	6/60
1	PL6-C1/2	164817	6/60
1.5	PL6-C1.5/2	164815	6/60
1.6	PL6-C1.6/2	164816	6/60
2	PL6-C2/2	286562	6/60
2.5	PL6-C2.5/2	164820	6/60
3	PL6-C3/2	164822	6/60
3.5	PL6-C3.5/2	164821	6/60
4	PL6-C4/2	286563	6/60
5	PL6-C5/2	164823	6/60
6	PL6-C6/2	286564	6/60
8	PL6-C8/2	164824	6/60
10	PL6-C10/2	286565	6/60
12	PL6-C12/2	164818	6/60
13	PL6-C13/2	286566	6/60
15	PL6-C15/2	164819	6/60
16	PL6-C16/2	286567	6/60
20	PL6-C20/2	286568	6/60
25	PL6-C25/2	286569	6/60
32	PL6-C32/2	286570	6/60
40	PL6-C40/2	286571	6/60
50	PL6-C50/2	286572	6/60
63	PL6-C63/2	286573	6/60

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3-pole

0.16	PL6-C0.16/3	164876	4/40
0.25	PL6-C0.25/3	164877	4/40
0.5	PL6-C0.5/3	164878	4/40
0.75	PL6-C0.75/3	164879	4/40
1	PL6-C1/3	164882	4/40
1.5	PL6-C1.5/3	164880	4/40
1.6	PL6-C1.6/3	164881	4/40
2	PL6-C2/3	286596	4/40
2.5	PL6-C2.5/3	164885	4/40
3	PL6-C3/3	164887	4/40
3.5	PL6-C3.5/3	164886	4/40
4	PL6-C4/3	286597	4/40
5	PL6-C5/3	164888	4/40
6	PL6-C6/3	286598	4/40
8	PL6-C8/3	164889	4/40
10	PL6-C10/3	286599	4/40
12	PL6-C12/3	164883	4/40
13	PL6-C13/3	286600	4/40
15	PL6-C15/3	164884	4/40
16	PL6-C16/3	286601	4/40
20	PL6-C20/3	286602	4/40
25	PL6-C25/3	286603	4/40
32	PL6-C32/3	286604	4/40
40	PL6-C40/3	286605	4/40
50	PL6-C50/3	286606	4/40
63	PL6-C63/3	286607	4/40

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Rated current I_n (A)	Type Designation	Article No.	Units per package
3+N-pole			
0.16	PL6-C0.16/3N	165013	3/30
0.25	PL6-C0.25/3N	165014	3/30
0.5	PL6-C0.5/3N	165015	3/30
0.75	PL6-C0.75/3N	165016	3/30
1	PL6-C1/3N	165019	3/30
1.5	PL6-C1.5/3N	165017	3/30
1.6	PL6-C1.6/3N	165018	3/30
2	PL6-C2/3N	106905	3/30
2.5	PL6-C2.5/3N	165022	3/30
3	PL6-C3/3N	165024	3/30
3.5	PL6-C3.5/3N	165023	3/30
4	PL6-C4/3N	106906	3/30
5	PL6-C5/3N	165025	3/30
6	PL6-C6/3N	106907	3/30
8	PL6-C8/3N	165026	3/30
10	PL6-C10/3N	106908	3/30
12	PL6-C12/3N	165020	3/30
13	PL6-C13/3N	106909	3/30
15	PL6-C15/3N	165021	3/30
16	PL6-C16/3N	106910	3/30
20	PL6-C20/3N	106911	3/30
25	PL6-C25/3N	106912	3/30
32	PL6-C32/3N	106913	3/30
40	PL6-C40/3N	106914	3/30
50	PL6-C50/3N	106915	3/30
63	PL6-C63/3N	106916	3/30

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4-pole			
0.16	PL6-C0.16/4	166508	3/30
0.25	PL6-C0.25/4	166509	3/30
0.5	PL6-C0.5/4	166510	3/30
0.75	PL6-C0.75/4	166511	3/30
1	PL6-C1/4	166514	3/30
1.5	PL6-C1.5/4	166512	3/30
1.6	PL6-C1.6/4	166513	3/30
2	PL6-C2/4	166521	3/30
2.5	PL6-C2.5/4	166520	3/30
3	PL6-C3/4	166525	3/30
3.5	PL6-C3.5/4	166524	3/30
4	PL6-C4/4	166527	3/30
5	PL6-C5/4	166529	3/30
6	PL6-C6/4	166531	3/30
8	PL6-C8/4	166533	3/30
10	PL6-C10/4	166515	3/30
12	PL6-C12/4	166516	3/30
13	PL6-C13/4	166517	3/30
15	PL6-C15/4	166518	3/30
16	PL6-C16/4	166519	3/30
20	PL6-C20/4	166522	3/30
25	PL6-C25/4	166523	3/30
32	PL6-C32/4	166526	3/30
40	PL6-C40/4	166528	3/30
50	PL6-C50/4	166530	3/30
63	PL6-C63/4	166532	3/30

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Rated current
 I_n (A)

Type
Designation

Article No. Units per
package

6 kA, Characteristic D

1-pole

0.5	PL6-D0,5/1	164760	12/120
1	PL6-D1/1	164765	12/120
1.5	PL6-D1,5/1	164761	12/120
1.6	PL6-D1,6/1	164762	12/120
2	PL6-D2/1	286540	12/120
2.5	PL6-D2,5/1	164766	12/120
3	PL6-D3/1	164768	12/120
3.5	PL6-D3,5/1	164767	12/120
4	PL6-D4/1	286541	12/120
5	PL6-D5/1	164769	12/120
6	PL6-D6/1	286542	12/120
8	PL6-D8/1	164770	12/120
10	PL6-D10/1	286543	12/120
12	PL6-D12/1	164763	12/120
13	PL6-D13/1	286544	12/120
15	PL6-D15/1	164764	12/120
16	PL6-D16/1	286545	12/120
20	PL6-D20/1	286546	12/120
25	PL6-D25/1	286547	12/120
32	PL6-D32/1	286548	12/120
40	PL6-D40/1	286549	12/120

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1+N-pole

0.5	PL6-D0,5/1N	164933	8/80
1	PL6-D1/1N	164936	8/80
1.5	PL6-D1,5/1N	164934	8/80
1.6	PL6-D1,6/1N	164935	8/80
2	PL6-D2/1N	164943	8/80
2.5	PL6-D2,5/1N	164942	8/80
3	PL6-D3/1N	164947	8/80
3.5	PL6-D3,5/1N	164946	8/80
4	PL6-D4/1N	164948	8/80
5	PL6-D5/1N	164949	8/80
6	PL6-D6/1N	164950	8/80
8	PL6-D8/1N	164951	8/80
10	PL6-D10/1N	164937	8/80
12	PL6-D12/1N	164938	8/80
13	PL6-D13/1N	164939	8/80
15	PL6-D15/1N	164940	8/80
16	PL6-D16/1N	164941	8/80
20	PL6-D20/1N	164944	8/80
25	PL6-D25/1N	164945	8/80

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Rated current I_n (A)	Type Designation	Article No.	Units per package
2-pole			
0.5	PL6-D0,5/2	164825	6/60
1	PL6-D1/2	164828	6/60
1.5	PL6-D1,5/2	164826	6/60
1.6	PL6-D1,6/2	164827	6/60
2	PL6-D2/2	286574	6/60
2.5	PL6-D2,5/2	164831	6/60
3	PL6-D3/2	164833	6/60
3.5	PL6-D3,5/2	164832	6/60
4	PL6-D4/2	286575	6/60
5	PL6-D5/2	164834	6/60
6	PL6-D6/2	286576	6/60
8	PL6-D8/2	164835	6/60
10	PL6-D10/2	286577	6/60
12	PL6-D12/2	164829	6/60
13	PL6-D13/2	286578	6/60
15	PL6-D15/2	164830	6/60
16	PL6-D16/2	286579	6/60
20	PL6-D20/2	286580	6/60
25	PL6-D25/2	286581	6/60
32	PL6-D32/2	286582	6/60
40	PL6-D40/2	286583	6/60

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3-pole			
0.5	PL6-D0,5/3	164890	4/40
1	PL6-D1/3	164893	4/40
1.5	PL6-D1,5/3	164891	4/40
1.6	PL6-D1,6/3	164892	4/40
2	PL6-D2/3	286608	4/40
2.5	PL6-D2,5/3	164896	4/40
3	PL6-D3/3	164898	4/40
3.5	PL6-D3,5/3	164897	4/40
4	PL6-D4/3	286609	4/40
5	PL6-D5/3	164899	4/40
6	PL6-D6/3	286610	4/40
8	PL6-D8/3	164900	4/40
10	PL6-D10/3	286611	4/40
12	PL6-D12/3	164894	4/40
13	PL6-D13/3	286612	4/40
15	PL6-D15/3	164895	4/40
16	PL6-D16/3	286613	4/40
20	PL6-D20/3	286614	4/40
25	PL6-D25/3	286615	4/40
32	PL6-D32/3	286616	4/40
40	PL6-D40/3	286617	4/40

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Rated current
 I_n (A)

Type
Designation

Article No. Units per
package

3+N-pole

0.5	PL6-D0,5/3N	165027	3/30
1	PL6-D1/3N	165030	3/30
1.5	PL6-D1,5/3N	165028	3/30
1.6	PL6-D1,6/3N	165029	3/30
2	PL6-D2/3N	165037	3/30
2.5	PL6-D2,5/3N	165036	3/30
3	PL6-D3/3N	165041	3/30
3.5	PL6-D3,5/3N	165040	3/30
4	PL6-D4/3N	165043	3/30
5	PL6-D5/3N	165045	3/30
6	PL6-D6/3N	165046	3/30
8	PL6-D8/3N	165047	3/30
10	PL6-D10/3N	165031	3/30
12	PL6-D12/3N	165032	3/30
13	PL6-D13/3N	165033	3/30
15	PL6-D15/3N	165034	3/30
16	PL6-D16/3N	165035	3/30
20	PL6-D20/3N	165038	3/30
25	PL6-D25/3N	165039	3/30
32	PL6-D32/3N	165042	3/30
40	PL6-D40/3N	165044	3/30

SG26612



4-pole

0.5	PL6-D0,5/4	166534	3/30
1	PL6-D1/4	166537	3/30
1.5	PL6-D1,5/4	166535	3/30
1.6	PL6-D1,6/4	166536	3/30
2	PL6-D2/4	166544	3/30
2.5	PL6-D2,5/4	166543	3/30
3	PL6-D3/4	166548	3/30
3.5	PL6-D3,5/4	166547	3/30
4	PL6-D4/4	166550	3/30
5	PL6-D5/4	166552	3/30
6	PL6-D6/4	166553	3/30
8	PL6-D8/4	166554	3/30
10	PL6-D10/4	166538	3/30
12	PL6-D12/4	166539	3/30
13	PL6-D13/4	166540	3/30
15	PL6-D15/4	166541	3/30
16	PL6-D16/4	166542	3/30
20	PL6-D20/4	166545	3/30
25	PL6-D25/4	166546	3/30
32	PL6-D32/4	166549	3/30
40	PL6-D40/4	166551	3/30

Specifications | Miniature Circuit Breakers PL6

Description

- High selectivity between MCB and back-up fuse due to low let-through energy
- Compatible with standard busbar
- Twin-purpose terminal (lift/open-mouthed) above and below
- Busbar positioning optionally above or below
- Meets the requirements of insulation co-ordination, distance between contacts ≥ 4 mm, for secure isolation
- Suitable for applications up to 48 V DC

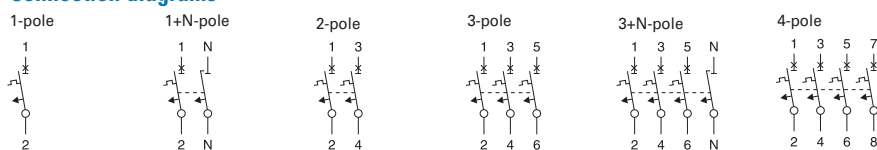
Accessories:

Auxiliary switch for subsequent installation	ZP-IHK	286052
	ZP-WHK	286053
Tripping signal switch for subsequent installation	ZP-NHK	248437
Remote control and automatic switching device	Z-FW/LP	248296
Shunt trip release	ZP-ASA/..	248438, 248439
Undervoltage release	Z-USA/..	248288-248291
Compact enclosure	KLV-TC-2	276240
	KLV-TC-4	276241
Additional terminal 35 mm ²	Z-HA-EK/35	263960
Switching interlock	Z-IS/SPE-1TE	274418

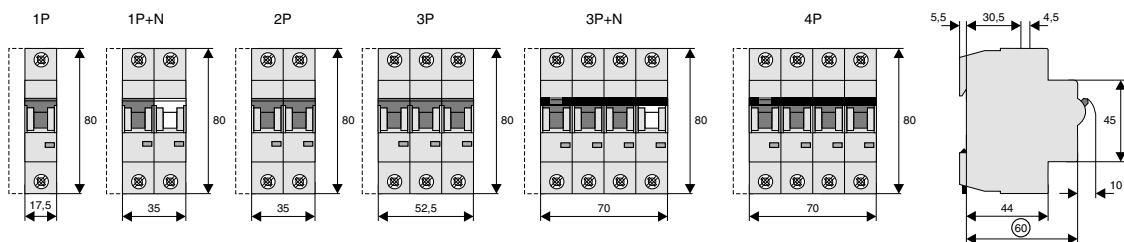
Technical Data

PL6		
Electrical		
Design according to	IEC/EN 60898-1	
Current test marks as printed onto the device		
Rated voltage	U_n	AC: 230/400 V DC: 48 V (per pole, max. 2 poles)
Rated frequency		50/60 Hz
Rated breaking capacity according to IEC/EN 60898-1	I_{cn}	6 kA
Characteristic		B, C, D
Back-up fuse		max. 100 A gL
Selectivity class		3
Rated impulse withstand voltage	U_{imp}	4 kV (1.2/50 μ s)
Endurance		
electrical components		$\geq 10,000$ switching operations
mechanical components		$\geq 20,000$ switching operations
Line voltage connection		at will (above/below)
Minimal voltage		12 V AC/DC
Mechanical		
Frame size		45 mm
Device height		80 mm
Device width		17.5 mm per pole (1MU)
Mounting		quick fastening with 3 lock-in positions on DIN rail IEC/EN 60715
Degree of protection		IP20
Upper and lower terminals		open mouthed/lift terminals
Terminal protection		finger and hand touch safe, DGUV VS3, EN 50274
Terminal capacity		1-25 mm ²
Terminal torque		2-2.4 Nm
Busbar thickness		0.8 - 2 mm
Mounting		independent of position

Connection diagrams

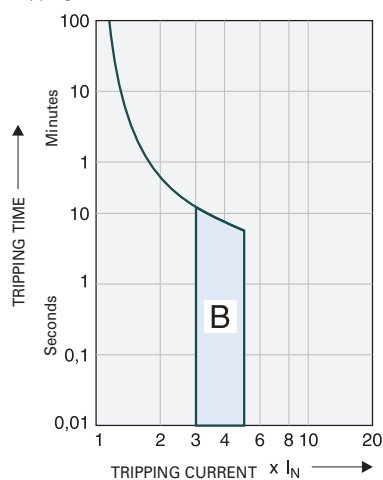


Dimensions (mm)

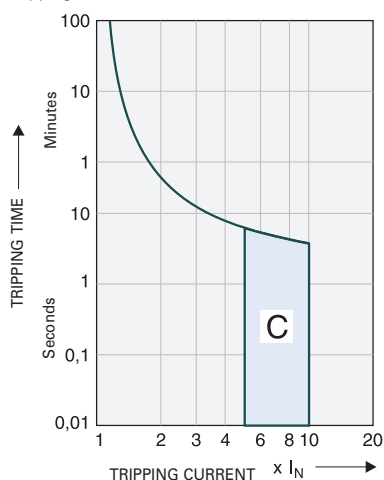


Tripping Characteristics (IEC/EN 60898-1)

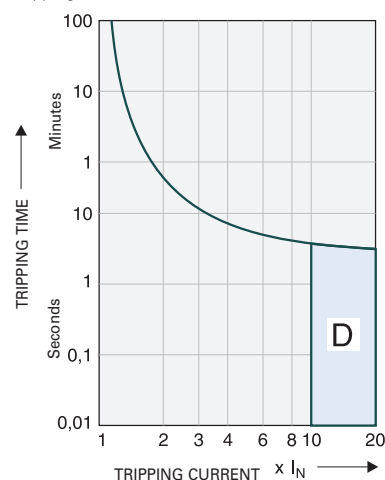
Tripping characteristic B



Tripping characteristic C



Tripping characteristic D



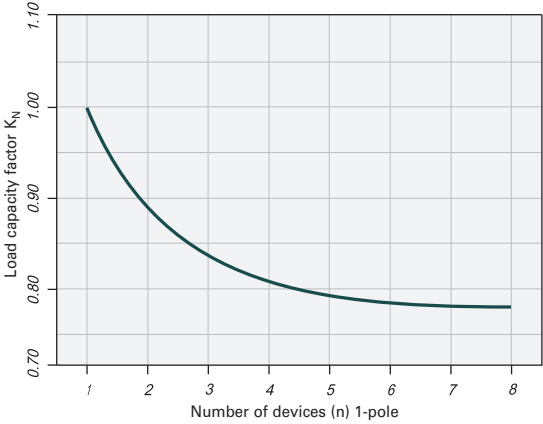
Quick-acting (B), slow (C), very slow (D)

Effect of the Ambient Temperature on Thermal Tripping Behaviour

Adjusted rated current values according to the ambient temperature

I _n [A]	Ambient temperature T [°C]															
	-25	-20	-10	0	10	20	30	35	40	45	50	55	60	65	70	75
0.16	0.20	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
0.25	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21
0.5	0.61	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41
0.75	0.92	0.90	0.87	0.84	0.81	0.78	0.75	0.74	0.73	0.71	0.69	0.68	0.66	0.65	0.64	0.62
1	1.2	1.2	1.2	1.1	1.1	1.0	1.0	0.99	0.97	0.95	0.93	0.90	0.89	0.87	0.85	0.83
1.5	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.2
1.6	2.0	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.3
2	2.4	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.7
2.5	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.1	2.1
3	3.7	3.6	3.5	3.4	3.3	3.1	3.0	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.5
3.5	4.3	4.2	4.1	3.9	3.8	3.7	3.5	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2.9
4	4.9	4.8	4.7	4.5	4.3	4.2	4.0	3.9	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.3
5	6.1	6.0	5.8	5.6	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1
6	7.3	7.2	7.0	6.7	6.5	6.3	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1	5.0
8	9.8	9.6	9.3	9.0	8.7	8.4	8.0	7.9	7.7	7.6	7.4	7.2	7.1	6.9	6.8	6.6
10	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9.0	8.9	8.7	8.5	8.3
12	15	14	14	13	13	13	12	12	12	11	11	11	11	10	10	10
13	16	16	15	15	14	14	13	13	13	12	12	12	12	11	11	11
15	18	18	17	17	16	16	15	15	15	14	14	14	13	13	13	12
16	20	19	19	18	17	17	16	16	15	15	15	14	14	14	14	13
20	24	24	23	22	22	21	20	20	19	19	19	18	18	17	17	17
25	31	30	29	28	27	26	25	25	24	24	23	23	22	22	21	21
32	39	38	37	36	35	33	32	32	31	30	30	29	28	28	27	26
40	49	48	47	45	43	42	40	39	39	38	37	36	35	35	34	33
50	61	60	58	56	54	52	50	49	48	47	46	45	44	43	42	41
63	77	76	73	71	68	66	63	62	61	60	58	57	56	55	53	52

Load Capacity of Series Connected Miniature Circuit Breakers



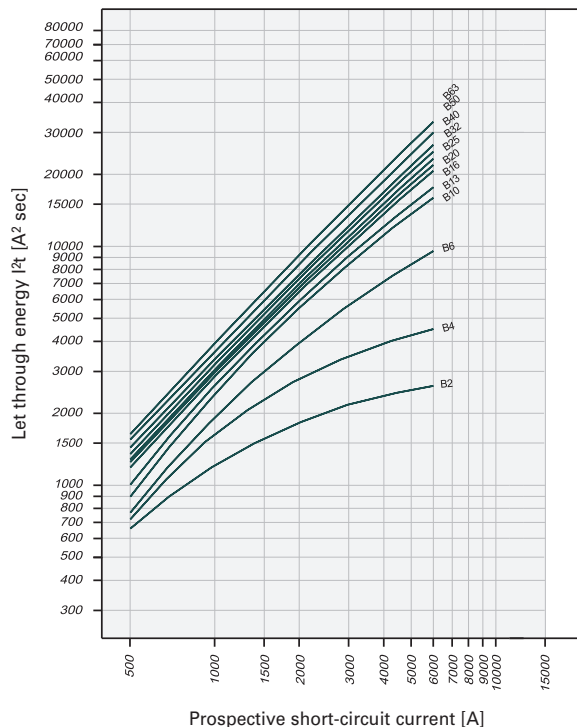
Effect of Power Frequency

Effect of power frequency on the tripping behaviour I_{MA} of the quick release

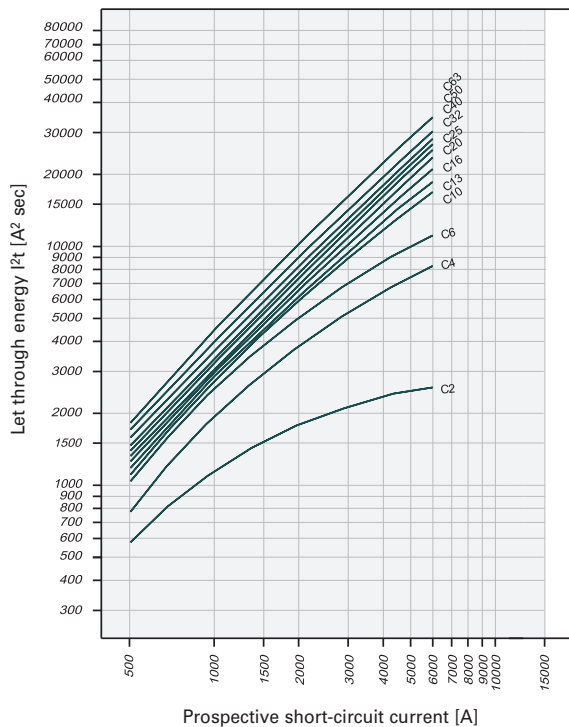
	Power frequency f [Hz]						
	16 ² / ₃	50	60	100	200	300	400
I _{MA} (f)/I _{MA} (50 Hz) [%]	91	100	101	106	115	134	141

Let-through Energy PL6

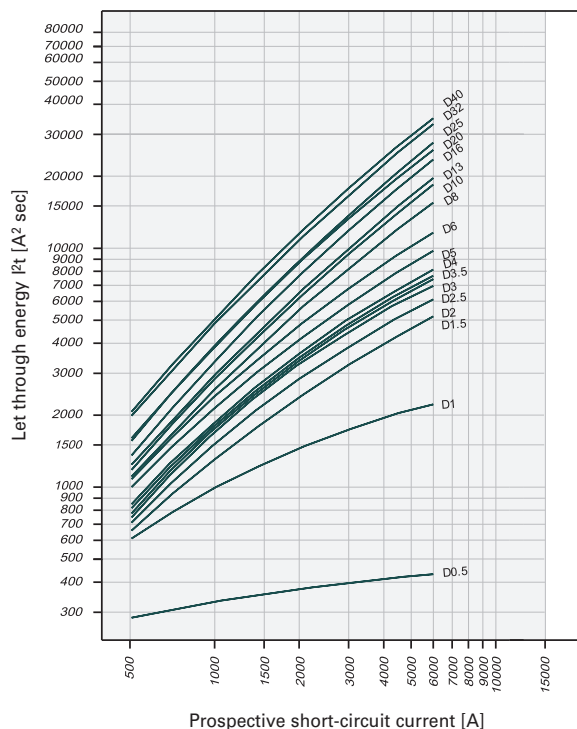
Let-through Energy PL6, Characteristic B, 1-pole



Let-through Energy PL6, Characteristic C, 1-pole



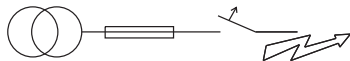
Let-through Energy PL6, Characteristic D, 1-pole



Short Circuit Selectivity PL6 towards DII-DIV fuse link

In case of short circuit, there is selectivity between the miniature circuit breakers PL6 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 **DII-DIV***)

PL6	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.0	3.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	0.6	0.9	1.8	3.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8		<0.5 ¹⁾	0.5	0.8	1.6	2.6	5.2	6.0 ²⁾	6.0 ²⁾
10			0.5	0.8	1.4	2.2	3.9	6.0 ²⁾	6.0 ²⁾
13			0.5	0.7	1.3	2.0	3.6	5.4	6.0 ²⁾
16				0.6	1.2	1.9	3.2	4.6	6.0 ²⁾
20					1.2	1.8	3.1	4.4	6.0 ²⁾
25					1.2	1.8	3.0	4.2	6.0 ²⁾
32						1.7	2.8	3.9	6.0 ²⁾
40							2.7	3.8	6.0 ²⁾
50							2.5	3.5	5.7
63									5.3

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

PL6	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.8	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.7	1.5	2.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	0.5	0.6	1.4	2.4	5.5	6.0 ²⁾	6.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.3	2.2	4.7	6.0 ²⁾	6.0 ²⁾
10			<0.5 ¹⁾	0.6	1.3	2.0	3.6	6.0 ²⁾	6.0 ²⁾
13					1.3	1.9	3.3	5.0	6.0 ²⁾
16					1.2	1.8	3.2	4.4	6.0 ²⁾
20						1.2	1.8	3.1	4.1
25							1.7	2.8	3.8
32								2.7	3.7
40									3.5
50									5.5

Short circuit selectivity **Characteristic D** towards fuse link **DII-DIV***)

PL6	DII-DIV gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	2.8	5.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4		<0.5 ¹⁾	0.6	0.9	2.0	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	0.5	0.7	1.7	3.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6			0.5	0.7	1.5	2.6	5.3	6.0 ²⁾	6.0 ²⁾
8			<0.5 ¹⁾	0.7	1.4	2.2	3.9	6.0 ²⁾	6.0 ²⁾
10				0.7	1.2	1.9	3.4	5.0	6.0 ²⁾
13					1.2	1.8	3.2	4.6	6.0 ²⁾
16						1.6	2.7	4.0	6.0 ²⁾
20						1.5	2.5	3.5	6.0 ²⁾
25							2.4	3.4	6.0 ²⁾
32								2.8	5.0
40									4.8

¹⁾ Selectivity limit current I_s under 0.5 kA

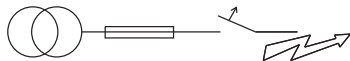
²⁾ Selectivity limit current I_s = rated breaking capacity I_{cn} of the MCB

Darker areas: no selectivity

Short Circuit Selectivity PL6 towards D01-D03 fuse link

In case of short circuit, there is selectivity between the miniature circuit breakers PL6 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*)**

PL6	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.9	2.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	0.5	0.8	1.7	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	0.5	0.8	1.6	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8			0.5	0.8	1.4	2.8	4.3	6.0 ²⁾	6.0 ²⁾
10			0.5	0.7	1.3	2.4	3.4	6.0 ²⁾	6.0 ²⁾
13			<0.5 ¹⁾	0.7	1.2	2.3	3.2	5.3	6.0 ²⁾
16				0.6	1.1	2.2	2.9	4.6	6.0 ²⁾
20					1.1	2.1	2.8	4.4	6.0 ²⁾
25					1.1	2.0	2.7	4.2	6.0 ²⁾
32						2.0	2.6	4.0	6.0 ²⁾
40							2.5	3.8	6.0 ²⁾
50							2.3	3.4	6.0 ²⁾
63									6.0 ²⁾

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

PL6	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.6	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.5	1.3	3.1	5.7	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.7	4.5	6.0 ²⁾	6.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.5	4.0	6.0 ²⁾	6.0 ²⁾
10			<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.3	3.1	5.4	6.0 ²⁾
13					1.1	2.2	3.0	4.9	6.0 ²⁾
16					1.1	2.1	2.8	4.4	6.0 ²⁾
20					1.0	2.0	2.6	4.0	6.0 ²⁾
25						1.9	2.5	3.8	6.0 ²⁾
32							2.5	3.7	6.0 ²⁾
40								3.5	6.0 ²⁾
50									6.0 ²⁾

Short circuit selectivity **Characteristic D** towards fuse link **D01-D03*)**

PL6	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
2	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	2.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4		<0.5 ¹⁾	0.5	0.7	1.7	4.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.5	3.5	5.8	6.0 ²⁾	6.0 ²⁾
6			<0.5 ¹⁾	0.5	1.3	2.9	4.5	6.0 ²⁾	6.0 ²⁾
8			<0.5 ¹⁾	0.5	1.2	2.4	3.5	6.0 ²⁾	6.0 ²⁾
10				0.5	1.1	2.2	3.0	5.0	6.0 ²⁾
13					1.1	2.1	2.9	4.6	6.0 ²⁾
16						1.9	2.6	3.9	6.0 ²⁾
20						1.7	2.3	3.5	6.0 ²⁾
25							2.2	3.4	6.0 ²⁾
32								2.9	6.0 ²⁾
40									5.7

¹⁾ Selectivity limit current I_s under 0.5 kA

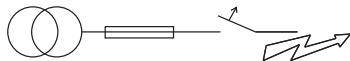
²⁾ Selectivity limit current I_s = rated breaking capacity I_{cn} of the MCB

Darker areas: no selectivity

Short Circuit Selectivity PL6 towards NH-00 fuse link

In case of short circuit, there is selectivity between the miniature circuit breakers PL6 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***

PL6	NH-00 gL/gG												
I _n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
2	<0.5 ¹⁾	0.5	1.0	2.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
4	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.3	2.3	4.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.6	2.2	3.6	4.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
6	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.5	2.0	3.3	4.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
8	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	1.3	1.7	2.6	3.3	5.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
10		<0.5 ¹⁾	0.6	0.9	1.2	1.5	2.2	2.7	4.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
13		<0.5 ¹⁾	0.6	0.8	1.1	1.4	2.1	2.6	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
16			0.5	0.7	1.0	1.3	1.9	2.4	3.4	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
20				0.7	1.0	1.3	1.9	2.4	3.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	
25				0.7	1.0	1.3	1.8	2.3	3.2	5.7	6.0 ²⁾	6.0 ²⁾	
32					0.9	1.2	1.7	2.2	3.1	5.4	6.0 ²⁾	6.0 ²⁾	
40								2.1	3.0	5.1	6.0 ²⁾	6.0 ²⁾	
50								1.9	2.8	4.7	6.0 ²⁾	6.0 ²⁾	
63										4.4	6.0 ²⁾	6.0 ²⁾	

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

PL6	NH-00 gL/gG											
I _n [A]	16	20	25	32	35	40	50	63	80	100	125	160
2	<0.5 ¹⁾	0.6	1.0	2.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.0	1.5	2.1	3.6	5.0	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.2	1.7	2.8	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.8	1.2	1.5	2.5	3.3	5.7	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.8	1.1	1.5	2.3	2.9	4.9	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10			0.5	0.7	1.0	1.4	2.0	2.5	3.8	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
13					1.0	1.3	1.9	2.4	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
16					1.0	1.3	1.8	2.3	3.3	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
20					1.0	1.2	1.7	2.2	3.2	5.5	6.0 ²⁾	6.0 ²⁾
25							1.6	2.1	3.0	5.2	6.0 ²⁾	6.0 ²⁾
32								2.1	2.9	5.0	6.0 ²⁾	6.0 ²⁾
40									2.8	4.8	6.0 ²⁾	6.0 ²⁾
50										4.5	6.0 ²⁾	6.0 ²⁾
63											5.9	6.0 ²⁾

Short circuit selectivity **Characteristic D** towards fuse link **NH-00***

PL6	NH-00 gL/gG											
I _n [A]	16	20	25	32	35	40	50	63	80	100	125	160
2	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.3	2.1	3.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.0	1.6	2.2	3.8	5.2	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
5		<0.5 ¹⁾	0.6	0.9	1.4	1.9	3.2	4.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
6		<0.5 ¹⁾	0.5	0.8	1.2	1.6	2.6	3.3	5.5	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
8			0.5	0.8	1.1	1.5	2.2	2.7	4.1	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
10			0.5	0.7	1.0	1.3	1.9	2.5	3.6	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
13					1.0	1.3	1.9	2.3	3.4	6.0 ²⁾	6.0 ²⁾	6.0 ²⁾
16						1.1	1.6	2.0	3.0	5.5	6.0 ²⁾	6.0 ²⁾
20							1.4	1.8	2.8	5.0	6.0 ²⁾	6.0 ²⁾
25								1.8	2.7	4.8	6.0 ²⁾	6.0 ²⁾
32									2.4	4.1	6.0 ²⁾	6.0 ²⁾
40										4.0	6.0 ²⁾	6.0 ²⁾

¹⁾ Selectivity limit current I_s under 0.5 kA

²⁾ Selectivity limit current I_s = rated breaking capacity I_{cn} of the MCB

Darker areas: no selectivity