

2.170 Miniature Circuit Breakers

Miniature Circuit Breakers FAZ, FAZ-PN, FAZ-HS

SG55812



Description

FAZ

- High-quality miniature circuit breakers for industrial applications 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 suitable for subsequent installation
- Rated currents up to 63 A
- Tripping characteristics B, C, D, K, S, Z
- Rated breaking capacity up to 15 kA according to IEC/EN 60947-2

FAZ-PN

- Tripping characteristic B
- Rated breaking capacity up to 6 kA according to IEC/EN 60898-1
- Module width 1MU (1+N-poles)

FAZ-HS

- Tripping characteristic B
- Rated breaking capacity up to 10 kA according to IEC/EN 60898-1
- 1- and 2-poles available

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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Characteristic B

SG53112



1-pole

1	254	10	230	15	277	10	FAZ-B1/1	278520	12/120
1.5	254	10	230	15	277	10	FAZ-B1,5/1	278521	12/120
1.6	254	10	230	15	277	10	FAZ-B1,6/1	278522	12/120
2	254	10	230	15	277	10	FAZ-B2/1	278523	12/120
2.5	254	10	230	15	277	10	FAZ-B2,5/1	278524	12/120
3	254	10	230	15	277	10	FAZ-B3/1	278525	12/120
3.5	254	10	230	15	277	10	FAZ-B3,5/1	278526	12/120
4	254	10	230	15	277	10	FAZ-B4/1	278527	12/120
5	254	10	230	15	277	10	FAZ-B5/1	278528	12/120
6	254	10	230	15	277	10	FAZ-B6/1	278529	12/120
8	254	10	230	15	277	10	FAZ-B8/1	278530	12/120
10	254	10	230	15	277	10	FAZ-B10/1	278531	12/120
12	254	10	230	15	277	10	FAZ-B12/1	278532	12/120
13	254	10	230	15	277	10	FAZ-B13/1	278533	12/120
15	254	10	230	15	277	10	FAZ-B15/1	278534	12/120
16	254	10	230	15	277	10	FAZ-B16/1	278535	12/120
20	254	10	230	15	277	10	FAZ-B20/1	278536	12/120
25	254	10	230	15	277	10	FAZ-B25/1	278537	12/120
32	254	10	230	15	277	10	FAZ-B32/1	278538	12/120
40	254	10	230	15	277	5	FAZ-B40/1	278539	12/120
50	230	15	230	15	277	5	FAZ-B50/1	278540	12/120
63	230	15	230	15	277	5	FAZ-B63/1	278541	12/120

SG55612



1+N-poles

1	254	10	230	15	277	10	FAZ-B1/1N	278633	1/60
1.5	254	10	230	15	277	10	FAZ-B1,5/1N	278634	1/60
1.6	254	10	230	15	277	10	FAZ-B1,6/1N	278635	1/60
2	254	10	230	15	277	10	FAZ-B2/1N	278636	1/60
2.5	254	10	230	15	277	10	FAZ-B2,5/1N	278637	1/60
3	254	10	230	15	277	10	FAZ-B3/1N	278638	1/60
3.5	254	10	230	15	277	10	FAZ-B3,5/1N	278639	1/60
4	254	10	230	15	277	10	FAZ-B4/1N	278640	1/60
5	254	10	230	15	277	10	FAZ-B5/1N	278641	1/60
6	254	10	230	15	277	10	FAZ-B6/1N	278642	1/60
8	254	10	230	15	277	10	FAZ-B8/1N	278643	1/60
10	254	10	230	15	277	10	FAZ-B10/1N	278644	1/60
12	254	10	230	15	277	10	FAZ-B12/1N	278645	1/60
13	254	10	230	15	277	10	FAZ-B13/1N	278646	1/60
15	254	10	230	15	277	10	FAZ-B15/1N	278647	1/60
16	254	10	230	15	277	10	FAZ-B16/1N	278648	1/60
20	254	10	230	15	277	10	FAZ-B20/1N	278649	1/60
25	254	10	230	15	277	10	FAZ-B25/1N	278650	1/60
32	254	10	230	15	277	10	FAZ-B32/1N	278651	1/60
40	254	10	230	15	277	5	FAZ-B40/1N	278652	1/60
50	230	15	230	15	277	5	FAZ-B50/1N	278653	1/60
63	230	15	230	15	277	5	FAZ-B63/1N	278654	1/60

FAZ Miniature Circuit Breakers

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55112



2-poles

1	440	10	400	15	480Y/277	10	FAZ-B1/2	278719	1/60
1.5	440	10	400	15	480Y/277	10	FAZ-B1,5/2	278720	1/60
1.6	440	10	400	15	480Y/277	10	FAZ-B1,6/2	278721	1/60
2	440	10	400	15	480Y/277	10	FAZ-B2/2	278722	1/60
2.5	440	10	400	15	480Y/277	10	FAZ-B2,5/2	278723	1/60
3	440	10	400	15	480Y/277	10	FAZ-B3/2	278724	1/60
3.5	440	10	400	15	480Y/277	10	FAZ-B3,5/2	278725	1/60
4	440	10	400	15	480Y/277	10	FAZ-B4/2	278726	1/60
5	440	10	400	15	480Y/277	10	FAZ-B5/2	278727	1/60
6	440	10	400	15	480Y/277	10	FAZ-B6/2	278728	1/60
8	440	10	400	15	480Y/277	10	FAZ-B8/2	278729	1/60
10	440	10	400	15	480Y/277	10	FAZ-B10/2	278730	1/60
12	440	10	400	15	480Y/277	10	FAZ-B12/2	278731	1/60
13	440	10	400	15	480Y/277	10	FAZ-B13/2	278732	1/60
15	440	10	400	15	480Y/277	10	FAZ-B15/2	278733	1/60
16	440	10	400	15	480Y/277	10	FAZ-B16/2	278734	1/60
20	440	10	400	15	480Y/277	10	FAZ-B20/2	278735	1/60
25	440	10	400	15	480Y/277	10	FAZ-B25/2	278736	1/60
32	440	10	400	15	480Y/277	10	FAZ-B32/2	278737	1/60
40	440	10	400	15	480Y/277	5	FAZ-B40/2	278738	1/60
50	400	15	400	15	480Y/277	5	FAZ-B50/2	278739	1/60
63	400	15	400	15	480Y/277	5	FAZ-B63/2	278740	1/60

SG53412



3-poles

1	440	10	400	15	480Y/277	10	FAZ-B1/3	278832	1/40
1.5	440	10	400	15	480Y/277	10	FAZ-B1,5/3	278833	1/40
1.6	440	10	400	15	480Y/277	10	FAZ-B1,6/3	278834	1/40
2	440	10	400	15	480Y/277	10	FAZ-B2/3	278835	1/40
2.5	440	10	400	15	480Y/277	10	FAZ-B2,5/3	278836	1/40
3	440	10	400	15	480Y/277	10	FAZ-B3/3	278837	1/40
3.5	440	10	400	15	480Y/277	10	FAZ-B3,5/3	278838	1/40
4	440	10	400	15	480Y/277	10	FAZ-B4/3	278839	1/40
5	440	10	400	15	480Y/277	10	FAZ-B5/3	278840	1/40
6	440	10	400	15	480Y/277	10	FAZ-B6/3	278841	1/40
8	440	10	400	15	480Y/277	10	FAZ-B8/3	278842	1/40
10	440	10	400	15	480Y/277	10	FAZ-B10/3	278843	1/40
12	440	10	400	15	480Y/277	10	FAZ-B12/3	278844	1/40
13	440	10	400	15	480Y/277	10	FAZ-B13/3	278845	1/40
15	440	10	400	15	480Y/277	10	FAZ-B15/3	278846	1/40
16	440	10	400	15	480Y/277	10	FAZ-B16/3	278847	1/40
20	440	10	400	15	480Y/277	10	FAZ-B20/3	278848	1/40
25	440	10	400	15	480Y/277	10	FAZ-B25/3	278849	1/40
32	440	10	400	15	480Y/277	10	FAZ-B32/3	278850	1/40
40	440	10	400	15	480Y/277	5	FAZ-B40/3	278851	1/40
50	400	15	400	15	480Y/277	5	FAZ-B50/3	278852	1/40
63	400	15	400	15	480Y/277	5	FAZ-B63/3	278853	1/40

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55712



3+N-poles

1	440	10	400	15	480Y/277	10	FAZ-B1/3N	278934	1/30
1.5	440	10	400	15	480Y/277	10	FAZ-B1,5/3N	278935	1/30
1.6	440	10	400	15	480Y/277	10	FAZ-B1,6/3N	278936	1/30
2	440	10	400	15	480Y/277	10	FAZ-B2/3N	278937	1/30
2.5	440	10	400	15	480Y/277	10	FAZ-B2,5/3N	278938	1/30
3	440	10	400	15	480Y/277	10	FAZ-B3/3N	278939	1/30
3.5	440	10	400	15	480Y/277	10	FAZ-B3,5/3N	278940	1/30
4	440	10	400	15	480Y/277	10	FAZ-B4/3N	278941	1/30
5	440	10	400	15	480Y/277	10	FAZ-B5/3N	278942	1/30
6	440	10	400	15	480Y/277	10	FAZ-B6/3N	278943	1/30
8	440	10	400	15	480Y/277	10	FAZ-B8/3N	278944	1/30
10	440	10	400	15	480Y/277	10	FAZ-B10/3N	278945	1/30
12	440	10	400	15	480Y/277	10	FAZ-B12/3N	278946	1/30
13	440	10	400	15	480Y/277	10	FAZ-B13/3N	278947	1/30
15	440	10	400	15	480Y/277	10	FAZ-B15/3N	278948	1/30
16	440	10	400	15	480Y/277	10	FAZ-B16/3N	278949	1/30
20	440	10	400	15	480Y/277	10	FAZ-B20/3N	278950	1/30
25	440	10	400	15	480Y/277	10	FAZ-B25/3N	278951	1/30
32	440	10	400	15	480Y/277	10	FAZ-B32/3N	278952	1/30
40	440	10	400	15	480Y/277	5	FAZ-B40/3N	278953	1/30
50	400	15	400	15	480Y/277	5	FAZ-B50/3N	278954	1/30
63	400	15	400	15	480Y/277	5	FAZ-B63/3N	278955	1/30

SG55812



4-poles

1	440	10	400	15	480Y/277	10	FAZ-B1/4	279020	1/30
1.5	440	10	400	15	480Y/277	10	FAZ-B1,5/4	279021	1/30
1.6	440	10	400	15	480Y/277	10	FAZ-B1,6/4	279022	1/30
2	440	10	400	15	480Y/277	10	FAZ-B2/4	279023	1/30
2.5	440	10	400	15	480Y/277	10	FAZ-B2,5/4	279024	1/30
3	440	10	400	15	480Y/277	10	FAZ-B3/4	279025	1/30
3.5	440	10	400	15	480Y/277	10	FAZ-B3,5/4	279026	1/30
4	440	10	400	15	480Y/277	10	FAZ-B4/4	279027	1/30
5	440	10	400	15	480Y/277	10	FAZ-B5/4	279028	1/30
6	440	10	400	15	480Y/277	10	FAZ-B6/4	279029	1/30
8	440	10	400	15	480Y/277	10	FAZ-B8/4	279030	1/30
10	440	10	400	15	480Y/277	10	FAZ-B10/4	279031	1/30
12	440	10	400	15	480Y/277	10	FAZ-B12/4	279032	1/30
13	440	10	400	15	480Y/277	10	FAZ-B13/4	279033	1/30
15	440	10	400	15	480Y/277	10	FAZ-B15/4	279034	1/30
16	440	10	400	15	480Y/277	10	FAZ-B16/4	279035	1/30
20	440	10	400	15	480Y/277	10	FAZ-B20/4	279036	1/30
25	440	10	400	15	480Y/277	10	FAZ-B25/4	279037	1/30
32	440	10	400	15	480Y/277	10	FAZ-B32/4	279038	1/30
40	440	10	400	15	480Y/277	5	FAZ-B40/4	279039	1/30
50	400	15	400	15	480Y/277	5	FAZ-B50/4	279040	1/30
63	400	15	400	15	480Y/277	5	FAZ-B63/4	279041	1/30

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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Characteristic C

1-pole

0.16	254	10	230	15	277	5	FAZ-C0,16/1	278542	12/120
0.25	254	10	230	15	277	5	FAZ-C0,25/1	278543	12/120
0.5	254	10	230	15	277	10	FAZ-C0,5/1	278544	12/120
0.75	254	10	230	15	277	10	FAZ-C0,75/1	278545	12/120
1	254	10	230	15	277	10	FAZ-C1/1	278546	12/120
1.5	254	10	230	15	277	10	FAZ-C1,5/1	278547	12/120
1.6	254	10	230	15	277	10	FAZ-C1,6/1	278548	12/120
2	254	10	230	15	277	10	FAZ-C2/1	278549	12/120
2.5	254	10	230	15	277	10	FAZ-C2,5/1	278550	12/120
3	254	10	230	15	277	10	FAZ-C3/1	278551	12/120
3.5	254	10	230	15	277	10	FAZ-C3,5/1	278552	12/120
4	254	10	230	15	277	10	FAZ-C4/1	278553	12/120
5	254	10	230	15	277	10	FAZ-C5/1	278554	12/120
6	254	10	230	15	277	10	FAZ-C6/1	278555	12/120
8	254	10	230	15	277	10	FAZ-C8/1	278556	12/120
10	254	10	230	15	277	10	FAZ-C10/1	278557	12/120
12	254	10	230	15	277	10	FAZ-C12/1	278558	12/120
13	254	10	230	15	277	10	FAZ-C13/1	278559	12/120
15	254	10	230	15	277	10	FAZ-C15/1	278560	12/120
16	254	10	230	15	277	10	FAZ-C16/1	278561	12/120
20	254	10	230	15	277	10	FAZ-C20/1	278562	12/120
25	254	10	230	15	277	10	FAZ-C25/1	278563	12/120
32	254	10	230	15	277	10	FAZ-C32/1	278564	12/120
40	254	10	230	15	277	5	FAZ-C40/1	278565	12/120
50	230	15	230	15	277	5	FAZ-C50/1	278566	12/120
63	230	15	230	15	277	5	FAZ-C63/1	278567	12/120

SG53112



1+N-poles

0.16	254	10	230	15	277	5	FAZ-C0,16/1N	278655	1/60
0.25	254	10	230	15	277	5	FAZ-C0,25/1N	278656	1/60
0.5	254	10	230	15	277	10	FAZ-C0,5/1N	278657	1/60
0.75	254	10	230	15	277	10	FAZ-C0,75/1N	278658	1/60
1	254	10	230	15	277	10	FAZ-C1/1N	278659	1/60
1.5	254	10	230	15	277	10	FAZ-C1,5/1N	278660	1/60
1.6	254	10	230	15	277	10	FAZ-C1,6/1N	278661	1/60
2	254	10	230	15	277	10	FAZ-C2/1N	278662	1/60
2.5	254	10	230	15	277	10	FAZ-C2,5/1N	278663	1/60
3	254	10	230	15	277	10	FAZ-C3/1N	278664	1/60
3.5	254	10	230	15	277	10	FAZ-C3,5/1N	278665	1/60
4	254	10	230	15	277	10	FAZ-C4/1N	278666	1/60
5	254	10	230	15	277	10	FAZ-C5/1N	278667	1/60
6	254	10	230	15	277	10	FAZ-C6/1N	278668	1/60
8	254	10	230	15	277	10	FAZ-C8/1N	278669	1/60
10	254	10	230	15	277	10	FAZ-C10/1N	278670	1/60
12	254	10	230	15	277	10	FAZ-C12/1N	278671	1/60
13	254	10	230	15	277	10	FAZ-C13/1N	278672	1/60
15	254	10	230	15	277	10	FAZ-C15/1N	278673	1/60
16	254	10	230	15	277	10	FAZ-C16/1N	278674	1/60
20	254	10	230	15	277	10	FAZ-C20/1N	278675	1/60
25	254	10	230	15	277	10	FAZ-C25/1N	278676	1/60
32	254	10	230	15	277	10	FAZ-C32/1N	278677	1/60
40	254	10	230	15	277	5	FAZ-C40/1N	278678	1/60
50	230	15	230	15	277	5	FAZ-C50/1N	278679	1/60
63	230	15	230	15	277	5	FAZ-C63/1N	278680	1/60

SG55612



Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55112



2-poles

0.16	440	10	400	15	480Y/277	5	FAZ-C0,16/2	278741	1/60
0.25	440	10	400	15	480Y/277	5	FAZ-C0,25/2	278742	1/60
0.5	440	10	400	15	480Y/277	10	FAZ-C0,5/2	278743	1/60
0.75	440	10	400	15	480Y/277	10	FAZ-C0,75/2	278744	1/60
1	440	10	400	15	480Y/277	10	FAZ-C1/2	278745	1/60
1.5	440	10	400	15	480Y/277	10	FAZ-C1,5/2	278746	1/60
1.6	440	10	400	15	480Y/277	10	FAZ-C1,6/2	278747	1/60
2	440	10	400	15	480Y/277	10	FAZ-C2/2	278748	1/60
2.5	440	10	400	15	480Y/277	10	FAZ-C2,5/2	278749	1/60
3	440	10	400	15	480Y/277	10	FAZ-C3/2	278750	1/60
3.5	440	10	400	15	480Y/277	10	FAZ-C3,5/2	278751	1/60
4	440	10	400	15	480Y/277	10	FAZ-C4/2	278752	1/60
5	440	10	400	15	480Y/277	10	FAZ-C5/2	278753	1/60
6	440	10	400	15	480Y/277	10	FAZ-C6/2	278754	1/60
8	440	10	400	15	480Y/277	10	FAZ-C8/2	278755	1/60
10	440	10	400	15	480Y/277	10	FAZ-C10/2	278756	1/60
12	440	10	400	15	480Y/277	10	FAZ-C12/2	278757	1/60
13	440	10	400	15	480Y/277	10	FAZ-C13/2	278758	1/60
15	440	10	400	15	480Y/277	10	FAZ-C15/2	278759	1/60
16	440	10	400	15	480Y/277	10	FAZ-C16/2	278760	1/60
20	440	10	400	15	480Y/277	10	FAZ-C20/2	278761	1/60
25	440	10	400	15	480Y/277	10	FAZ-C25/2	278762	1/60
32	440	10	400	15	480Y/277	10	FAZ-C32/2	278763	1/60
40	440	10	400	15	480Y/277	5	FAZ-C40/2	278764	1/60
50	400	15	400	15	480Y/277	5	FAZ-C50/2	278765	1/60
63	400	15	400	15	480Y/277	5	FAZ-C63/2	278766	1/60

SG53412



3-poles

0.16	440	10	400	15	480Y/277	5	FAZ-C0,16/3	278854	1/40
0.25	440	10	400	15	480Y/277	5	FAZ-C0,25/3	278855	1/40
0.5	440	10	400	15	480Y/277	10	FAZ-C0,5/3	278856	1/40
0.75	440	10	400	15	480Y/277	10	FAZ-C0,75/3	278857	1/40
1	440	10	400	15	480Y/277	10	FAZ-C1/3	278858	1/40
1.5	440	10	400	15	480Y/277	10	FAZ-C1,5/3	278859	1/40
1.6	440	10	400	15	480Y/277	10	FAZ-C1,6/3	278860	1/40
2	440	10	400	15	480Y/277	10	FAZ-C2/3	278861	1/40
2.5	440	10	400	15	480Y/277	10	FAZ-C2,5/3	278862	1/40
3	440	10	400	15	480Y/277	10	FAZ-C3/3	278863	1/40
3.5	440	10	400	15	480Y/277	10	FAZ-C3,5/3	278864	1/40
4	440	10	400	15	480Y/277	10	FAZ-C4/3	278865	1/40
5	440	10	400	15	480Y/277	10	FAZ-C5/3	278866	1/40
6	440	10	400	15	480Y/277	10	FAZ-C6/3	278867	1/40
8	440	10	400	15	480Y/277	10	FAZ-C8/3	278868	1/40
10	440	10	400	15	480Y/277	10	FAZ-C10/3	278869	1/40
12	440	10	400	15	480Y/277	10	FAZ-C12/3	278870	1/40
13	440	10	400	15	480Y/277	10	FAZ-C13/3	278871	1/40
15	440	10	400	15	480Y/277	10	FAZ-C15/3	278872	1/40
16	440	10	400	15	480Y/277	10	FAZ-C16/3	278873	1/40
20	440	10	400	15	480Y/277	10	FAZ-C20/3	278874	1/40
25	440	10	400	15	480Y/277	10	FAZ-C25/3	278875	1/40
32	440	10	400	15	480Y/277	10	FAZ-C32/3	278876	1/40
40	440	10	400	15	480Y/277	5	FAZ-C40/3	278877	1/40
50	400	15	400	15	480Y/277	5	FAZ-C50/3	278878	1/40
63	400	15	400	15	480Y/277	5	FAZ-C63/3	278879	1/40

FAZ Miniature Circuit Breakers

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55712



3+N-poles

0.16	440	10	400	15	480Y/277	5	FAZ-C0,16/3N	278956	1/30
0.25	440	10	400	15	480Y/277	5	FAZ-C0,25/3N	278957	1/30
0.5	440	10	400	15	480Y/277	10	FAZ-C0,5/3N	278958	1/30
0.75	440	10	400	15	480Y/277	10	FAZ-C0,75/3N	278959	1/30
1	440	10	400	15	480Y/277	10	FAZ-C1/3N	278960	1/30
1.5	440	10	400	15	480Y/277	10	FAZ-C1,5/3N	278961	1/30
1.6	440	10	400	15	480Y/277	10	FAZ-C1,6/3N	278962	1/30
2	440	10	400	15	480Y/277	10	FAZ-C2/3N	278963	1/30
2.5	440	10	400	15	480Y/277	10	FAZ-C2,5/3N	278964	1/30
3	440	10	400	15	480Y/277	10	FAZ-C3/3N	278965	1/30
3.5	440	10	400	15	480Y/277	10	FAZ-C3,5/3N	278966	1/30
4	440	10	400	15	480Y/277	10	FAZ-C4/3N	278967	1/30
5	440	10	400	15	480Y/277	10	FAZ-C5/3N	278968	1/30
6	440	10	400	15	480Y/277	10	FAZ-C6/3N	278969	1/30
8	440	10	400	15	480Y/277	10	FAZ-C8/3N	278970	1/30
10	440	10	400	15	480Y/277	10	FAZ-C10/3N	278971	1/30
12	440	10	400	15	480Y/277	10	FAZ-C12/3N	278972	1/30
13	440	10	400	15	480Y/277	10	FAZ-C13/3N	278973	1/30
15	440	10	400	15	480Y/277	10	FAZ-C15/3N	278974	1/30
16	440	10	400	15	480Y/277	10	FAZ-C16/3N	278975	1/30
20	440	10	400	15	480Y/277	10	FAZ-C20/3N	278976	1/30
25	440	10	400	15	480Y/277	10	FAZ-C25/3N	278977	1/30
32	440	10	400	15	480Y/277	10	FAZ-C32/3N	278978	1/30
40	440	10	400	15	480Y/277	5	FAZ-C40/3N	278979	1/30
50	400	15	400	15	480Y/277	5	FAZ-C50/3N	278980	1/30
63	400	15	400	15	480Y/277	5	FAZ-C63/3N	278981	1/30

SG55812



4-poles

0.16	440	10	400	15	480Y/277	5	FAZ-C0,16/4	279042	1/30
0.25	440	10	400	15	480Y/277	5	FAZ-C0,25/4	279043	1/30
0.5	440	10	400	15	480Y/277	10	FAZ-C0,5/4	279044	1/30
0.75	440	10	400	15	480Y/277	10	FAZ-C0,75/4	279045	1/30
1	440	10	400	15	480Y/277	10	FAZ-C1/4	279046	1/30
1.5	440	10	400	15	480Y/277	10	FAZ-C1,5/4	279047	1/30
1.6	440	10	400	15	480Y/277	10	FAZ-C1,6/4	279048	1/30
2	440	10	400	15	480Y/277	10	FAZ-C2/4	279049	1/30
2.5	440	10	400	15	480Y/277	10	FAZ-C2,5/4	279050	1/30
3	440	10	400	15	480Y/277	10	FAZ-C3/4	279051	1/30
3.5	440	10	400	15	480Y/277	10	FAZ-C3,5/4	279052	1/30
4	440	10	400	15	480Y/277	10	FAZ-C4/4	279053	1/30
5	440	10	400	15	480Y/277	10	FAZ-C5/4	279054	1/30
6	440	10	400	15	480Y/277	10	FAZ-C6/4	279055	1/30
8	440	10	400	15	480Y/277	10	FAZ-C8/4	279056	1/30
10	440	10	400	15	480Y/277	10	FAZ-C10/4	279057	1/30
12	440	10	400	15	480Y/277	10	FAZ-C12/4	279058	1/30
13	440	10	400	15	480Y/277	10	FAZ-C13/4	279059	1/30
15	440	10	400	15	480Y/277	10	FAZ-C15/4	279060	1/30
16	440	10	400	15	480Y/277	10	FAZ-C16/4	279061	1/30
20	440	10	400	15	480Y/277	10	FAZ-C20/4	279062	1/30
25	440	10	400	15	480Y/277	10	FAZ-C25/4	279063	1/30
32	440	10	400	15	480Y/277	10	FAZ-C32/4	279064	1/30
40	440	10	400	15	480Y/277	5	FAZ-C40/4	279065	1/30
50	400	15	400	15	480Y/277	5	FAZ-C50/4	279066	1/30
63	400	15	400	15	480Y/277	5	FAZ-C63/4	279067	1/30

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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Characteristic D

SG53112



1-pole

0.5	230	15	277	5	FAZ-D0,5/1	278568	12/120
1	230	15	277	5	FAZ-D1/1	278569	12/120
1.5	230	15	277	5	FAZ-D1,5/1	278570	12/120
1.6	230	15	277	5	FAZ-D1,6/1	278571	12/120
2	230	15	277	5	FAZ-D2/1	278572	12/120
2.5	230	15	277	5	FAZ-D2,5/1	278573	12/120
3	230	15	277	5	FAZ-D3/1	278574	12/120
3.5	230	15	277	5	FAZ-D3,5/1	278575	12/120
4	230	15	277	5	FAZ-D4/1	278576	12/120
5	230	15	277	5	FAZ-D5/1	278577	12/120
6	230	15	277	5	FAZ-D6/1	278578	12/120
8	230	15	277	5	FAZ-D8/1	278579	12/120
10	230	15	277	5	FAZ-D10/1	278580	12/120
12	230	15	277	5	FAZ-D12/1	278581	12/120
13	230	15	277	5	FAZ-D13/1	278582	12/120
15	230	15	277	5	FAZ-D15/1	278583	12/120
16	230	15	277	5	FAZ-D16/1	278584	12/120
20	230	15	277	5	FAZ-D20/1	278585	12/120
25	230	15	277	5	FAZ-D25/1	278586	12/120
32	230	15	277	5	FAZ-D32/1	278587	12/120
40	230	15	277	5	FAZ-D40/1	278588	12/120
50	230	10	-	-	FAZ-D50/1	115370	12/120
63	230	10	-	-	FAZ-D63/1	115371	12/120

SG55612



1+N-poles

0.5	230	15	277	5	FAZ-D0,5/1N	278681	1/60
1	230	15	277	5	FAZ-D1/1N	278682	1/60
1.5	230	15	277	5	FAZ-D1,5/1N	278683	1/60
1.6	230	15	277	5	FAZ-D1,6/1N	278684	1/60
2	230	15	277	5	FAZ-D2/1N	278685	1/60
2.5	230	15	277	5	FAZ-D2,5/1N	278686	1/60
3	230	15	277	5	FAZ-D3/1N	278687	1/60
3.5	230	15	277	5	FAZ-D3,5/1N	278688	1/60
4	230	15	277	5	FAZ-D4/1N	278689	1/60
5	230	15	277	5	FAZ-D5/1N	278690	1/60
6	230	15	277	5	FAZ-D6/1N	278691	1/60
8	230	15	277	5	FAZ-D8/1N	278692	1/60
10	230	15	277	5	FAZ-D10/1N	278693	1/60
12	230	15	277	5	FAZ-D12/1N	278694	1/60
13	230	15	277	5	FAZ-D13/1N	278695	1/60
15	230	15	277	5	FAZ-D15/1N	278696	1/60
16	230	15	277	5	FAZ-D16/1N	278697	1/60
20	230	15	277	5	FAZ-D20/1N	278698	1/60
25	230	15	277	5	FAZ-D25/1N	278699	1/60
32	230	15	277	5	FAZ-D32/1N	278700	1/60
40	230	15	277	5	FAZ-D40/1N	278701	1/60
50	230	10	-	-	FAZ-D50/1N	115378	1/60
63	230	10	-	-	FAZ-D63/1N	115379	1/60

2.178 Miniature Circuit Breakers

FAZ Miniature Circuit Breakers

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55112



2-poles

0.5	400	15	480Y/277	5	FAZ-D0,5/2	278767	1/60
1	400	15	480Y/277	5	FAZ-D1/2	278768	1/60
1.5	400	15	480Y/277	5	FAZ-D1,5/2	278769	1/60
1.6	400	15	480Y/277	5	FAZ-D1,6/2	278770	1/60
2	400	15	480Y/277	5	FAZ-D2/2	278771	1/60
2.5	400	15	480Y/277	5	FAZ-D2,5/2	278772	1/60
3	400	15	480Y/277	5	FAZ-D3/2	278773	1/60
3.5	400	15	480Y/277	5	FAZ-D3,5/2	278774	1/60
4	400	15	480Y/277	5	FAZ-D4/2	278775	1/60
5	400	15	480Y/277	5	FAZ-D5/2	278776	1/60
6	400	15	480Y/277	5	FAZ-D6/2	278777	1/60
8	400	15	480Y/277	5	FAZ-D8/2	278778	1/60
10	400	15	480Y/277	5	FAZ-D10/2	278779	1/60
12	400	15	480Y/277	5	FAZ-D12/2	278780	1/60
13	400	15	480Y/277	5	FAZ-D13/2	278781	1/60
15	400	15	480Y/277	5	FAZ-D15/2	278782	1/60
16	400	15	480Y/277	5	FAZ-D16/2	278783	1/60
20	400	15	480Y/277	5	FAZ-D20/2	278784	1/60
25	400	15	480Y/277	5	FAZ-D25/2	278785	1/60
32	400	15	480Y/277	5	FAZ-D32/2	278786	1/60
40	400	15	480Y/277	5	FAZ-D40/2	278787	1/60
50	400	10	-	-	FAZ-D50/2	115372	1/60
63	400	10	-	-	FAZ-D63/2	115373	1/60

SG53412



3-poles

0.5	400	15	480Y/277	5	FAZ-D0,5/3	278880	1/40
1	400	15	480Y/277	5	FAZ-D1/3	278881	1/40
1.5	400	15	480Y/277	5	FAZ-D1,5/3	278882	1/40
1.6	400	15	480Y/277	5	FAZ-D1,6/3	278883	1/40
2	400	15	480Y/277	5	FAZ-D2/3	278884	1/40
2.5	400	15	480Y/277	5	FAZ-D2,5/3	278885	1/40
3	400	15	480Y/277	5	FAZ-D3/3	278886	1/40
3.5	400	15	480Y/277	5	FAZ-D3,5/3	278887	1/40
4	400	15	480Y/277	5	FAZ-D4/3	278888	1/40
5	400	15	480Y/277	5	FAZ-D5/3	278889	1/40
6	400	15	480Y/277	5	FAZ-D6/3	278890	1/40
8	400	15	480Y/277	5	FAZ-D8/3	278891	1/40
10	400	15	480Y/277	5	FAZ-D10/3	278892	1/40
12	400	15	480Y/277	5	FAZ-D12/3	278893	1/40
13	400	15	480Y/277	5	FAZ-D13/3	278894	1/40
15	400	15	480Y/277	5	FAZ-D15/3	278895	1/40
16	400	15	480Y/277	5	FAZ-D16/3	278896	1/40
20	400	15	480Y/277	5	FAZ-D20/3	278897	1/40
25	400	15	480Y/277	5	FAZ-D25/3	278898	1/40
32	400	15	480Y/277	5	FAZ-D32/3	278899	1/40
40	400	15	480Y/277	5	FAZ-D40/3	278900	1/40
50	400	10	-	-	FAZ-D50/3	115374	1/40
63	400	10	-	-	FAZ-D63/3	115375	1/40

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55712



3+N-poles

0.5	400	15	480Y/277	5	FAZ-D0,5/3N	278982	1/30
1	400	15	480Y/277	5	FAZ-D1/3N	278983	1/30
1.5	400	15	480Y/277	5	FAZ-D1,5/3N	278984	1/30
1.6	400	15	480Y/277	5	FAZ-D1,6/3N	278985	1/30
2	400	15	480Y/277	5	FAZ-D2/3N	278986	1/30
2.5	400	15	480Y/277	5	FAZ-D2,5/3N	278987	1/30
3	400	15	480Y/277	5	FAZ-D3/3N	278988	1/30
3.5	400	15	480Y/277	5	FAZ-D3,5/3N	278989	1/30
4	400	15	480Y/277	5	FAZ-D4/3N	278990	1/30
5	400	15	480Y/277	5	FAZ-D5/3N	278991	1/30
6	400	15	480Y/277	5	FAZ-D6/3N	278992	1/30
8	400	15	480Y/277	5	FAZ-D8/3N	278993	1/30
10	400	15	480Y/277	5	FAZ-D10/3N	278994	1/30
12	400	15	480Y/277	5	FAZ-D12/3N	278995	1/30
13	400	15	480Y/277	5	FAZ-D13/3N	278996	1/30
15	400	15	480Y/277	5	FAZ-D15/3N	278997	1/30
16	400	15	480Y/277	5	FAZ-D16/3N	278998	1/30
20	400	15	480Y/277	5	FAZ-D20/3N	278999	1/30
25	400	15	480Y/277	5	FAZ-D25/3N	279000	1/30
32	400	15	480Y/277	5	FAZ-D32/3N	279001	1/30
40	400	15	480Y/277	5	FAZ-D40/3N	279002	1/30
50	400	10	-	-	FAZ-D50/3N	115380	1/30
63	400	10	-	-	FAZ-D63/3N	115381	1/30

SG55812



4-poles

0.5	400	15	480Y/277	5	FAZ-D0,5/4	279068	1/30
1	400	15	480Y/277	5	FAZ-D1/4	279069	1/30
1.5	400	15	480Y/277	5	FAZ-D1,5/4	279070	1/30
1.6	400	15	480Y/277	5	FAZ-D1,6/4	279071	1/30
2	400	15	480Y/277	5	FAZ-D2/4	279072	1/30
2.5	400	15	480Y/277	5	FAZ-D2,5/4	279073	1/30
3	400	15	480Y/277	5	FAZ-D3/4	279074	1/30
3.5	400	15	480Y/277	5	FAZ-D3,5/4	279075	1/30
4	400	15	480Y/277	5	FAZ-D4/4	279076	1/30
5	400	15	480Y/277	5	FAZ-D5/4	279077	1/30
6	400	15	480Y/277	5	FAZ-D6/4	279078	1/30
8	400	15	480Y/277	5	FAZ-D8/4	279079	1/30
10	400	15	480Y/277	5	FAZ-D10/4	279080	1/30
12	400	15	480Y/277	5	FAZ-D12/4	279081	1/30
13	400	15	480Y/277	5	FAZ-D13/4	279082	1/30
15	400	15	480Y/277	5	FAZ-D15/4	279083	1/30
16	400	15	480Y/277	5	FAZ-D16/4	279084	1/30
20	400	15	480Y/277	5	FAZ-D20/4	279085	1/30
25	400	15	480Y/277	5	FAZ-D25/4	279086	1/30
32	400	15	480Y/277	5	FAZ-D32/4	279087	1/30
40	400	15	480Y/277	5	FAZ-D40/4	279088	1/30
50	400	10	-	-	FAZ-D50/4	115376	1/30
63	400	10	-	-	FAZ-D63/4	115377	1/30

2.180 Miniature Circuit Breakers

xEffect

FAZ Miniature Circuit Breakers

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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Characteristic K

1-pole

0.5	240	10	277	5	FAZ-K0,5/1	278589	12/120
1	240	10	277	5	FAZ-K1/1	278590	12/120
1.6	240	10	277	5	FAZ-K1,6/1	278591	12/120
2	240	10	277	5	FAZ-K2/1	278592	12/120
3	240	10	277	5	FAZ-K3/1	278593	12/120
4	240	10	277	5	FAZ-K4/1	278594	12/120
6	240	10	277	5	FAZ-K6/1	278595	12/120
8	240	10	277	5	FAZ-K8/1	278596	12/120
10	240	10	277	5	FAZ-K10/1	278597	12/120
13	240	10	277	5	FAZ-K13/1	278598	12/120
16	240	10	277	5	FAZ-K16/1	278599	12/120
20	240	10	277	5	FAZ-K20/1	278600	12/120
25	240	10	277	5	FAZ-K25/1	278601	12/120
32	240	10	277	5	FAZ-K32/1	278602	12/120
40	240	10	277	5	FAZ-K40/1	278603	12/120
50	240	10	277	5	FAZ-K50/1	278604	12/120
63	240	10	277	5	FAZ-K63/1	278605	12/120

SG53112



1+N-poles

0.5	240	10	277	5	FAZ-K0,5/1N	278702	1/60
1	240	10	277	5	FAZ-K1/1N	278703	1/60
1.6	240	10	277	5	FAZ-K1,6/1N	278704	1/60
2	240	10	277	5	FAZ-K2/1N	278705	1/60
3	240	10	277	5	FAZ-K3/1N	278706	1/60
4	240	10	277	5	FAZ-K4/1N	278707	1/60
6	240	10	277	5	FAZ-K6/1N	278708	1/60
8	240	10	277	5	FAZ-K8/1N	278709	1/60
10	240	10	277	5	FAZ-K10/1N	278710	1/60
13	240	10	277	5	FAZ-K13/1N	278711	1/60
16	240	10	277	5	FAZ-K16/1N	278712	1/60
20	240	10	277	5	FAZ-K20/1N	278713	1/60
25	240	10	277	5	FAZ-K25/1N	278714	1/60
32	240	10	277	5	FAZ-K32/1N	278715	1/60
40	240	10	277	5	FAZ-K40/1N	278716	1/60
50	240	10	277	5	FAZ-K50/1N	278717	1/60
63	240	10	277	5	FAZ-K63/1N	278718	1/60

SG55612



Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55112



2-poles

0.5	415	10	480Y/277	5	FAZ-K0,5/2	278788	1/60
1	415	10	480Y/277	5	FAZ-K1/2	278789	1/60
1.6	415	10	480Y/277	5	FAZ-K1,6/2	278790	1/60
2	415	10	480Y/277	5	FAZ-K2/2	278791	1/60
3	415	10	480Y/277	5	FAZ-K3/2	278792	1/60
4	415	10	480Y/277	5	FAZ-K4/2	278793	1/60
6	415	10	480Y/277	5	FAZ-K6/2	278794	1/60
8	415	10	480Y/277	5	FAZ-K8/2	278795	1/60
10	415	10	480Y/277	5	FAZ-K10/2	278796	1/60
13	415	10	480Y/277	5	FAZ-K13/2	278797	1/60
16	415	10	480Y/277	5	FAZ-K16/2	278798	1/60
20	415	10	480Y/277	5	FAZ-K20/2	278799	1/60
25	415	10	480Y/277	5	FAZ-K25/2	278800	1/60
32	415	10	480Y/277	5	FAZ-K32/2	278801	1/60
40	415	10	480Y/277	5	FAZ-K40/2	278802	1/60
50	415	10	480Y/277	5	FAZ-K50/2	278803	1/60
63	415	10	480Y/277	5	FAZ-K63/2	278804	1/60

SG53412



3-poles

0.5	415	10	480Y/277	5	FAZ-K0,5/3	278901	1/40
1	415	10	480Y/277	5	FAZ-K1/3	278902	1/40
1.6	415	10	480Y/277	5	FAZ-K1,6/3	278903	1/40
2	415	10	480Y/277	5	FAZ-K2/3	278904	1/40
3	415	10	480Y/277	5	FAZ-K3/3	278905	1/40
4	415	10	480Y/277	5	FAZ-K4/3	278906	1/40
6	415	10	480Y/277	5	FAZ-K6/3	278907	1/40
8	415	10	480Y/277	5	FAZ-K8/3	278908	1/40
10	415	10	480Y/277	5	FAZ-K10/3	278909	1/40
13	415	10	480Y/277	5	FAZ-K13/3	278910	1/40
16	415	10	480Y/277	5	FAZ-K16/3	278911	1/40
20	415	10	480Y/277	5	FAZ-K20/3	278912	1/40
25	415	10	480Y/277	5	FAZ-K25/3	278913	1/40
32	415	10	480Y/277	5	FAZ-K32/3	278914	1/40
40	415	10	480Y/277	5	FAZ-K40/3	278915	1/40
50	415	10	480Y/277	5	FAZ-K50/3	278916	1/40
63	415	10	480Y/277	5	FAZ-K63/3	278917	1/40

SG55712



3+N-poles

0.5	415	10	480Y/277	5	FAZ-K0,5/3N	279003	1/30
1	415	10	480Y/277	5	FAZ-K1/3N	279004	1/30
1.6	415	10	480Y/277	5	FAZ-K1,6/3N	279005	1/30
2	415	10	480Y/277	5	FAZ-K2/3N	279006	1/30
3	415	10	480Y/277	5	FAZ-K3/3N	279007	1/30
4	415	10	480Y/277	5	FAZ-K4/3N	279008	1/30
6	415	10	480Y/277	5	FAZ-K6/3N	279009	1/30
8	415	10	480Y/277	5	FAZ-K8/3N	279010	1/30
10	415	10	480Y/277	5	FAZ-K10/3N	279011	1/30
13	415	10	480Y/277	5	FAZ-K13/3N	279012	1/30
16	415	10	480Y/277	5	FAZ-K16/3N	279013	1/30
20	415	10	480Y/277	5	FAZ-K20/3N	279014	1/30
25	415	10	480Y/277	5	FAZ-K25/3N	279015	1/30
32	415	10	480Y/277	5	FAZ-K32/3N	279016	1/30
40	415	10	480Y/277	5	FAZ-K40/3N	279017	1/30
50	415	10	480Y/277	5	FAZ-K50/3N	279018	1/30
63	415	10	480Y/277	5	FAZ-K63/3N	279019	1/30

2.182 Miniature Circuit Breakers

FAZ Miniature Circuit Breakers

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG55812



4-poles

0.5	415	10	480Y/277	5	FAZ-K0,5/4	279089	1/30
1	415	10	480Y/277	5	FAZ-K1/4	279090	1/30
1.6	415	10	480Y/277	5	FAZ-K1,6/4	279091	1/30
2	415	10	480Y/277	5	FAZ-K2/4	279092	1/30
3	415	10	480Y/277	5	FAZ-K3/4	279093	1/30
4	415	10	480Y/277	5	FAZ-K4/4	279094	1/30
6	415	10	480Y/277	5	FAZ-K6/4	279095	1/30
8	415	10	480Y/277	5	FAZ-K8/4	279096	1/30
10	415	10	480Y/277	5	FAZ-K10/4	279097	1/30
13	415	10	480Y/277	5	FAZ-K13/4	279098	1/30
16	415	10	480Y/277	5	FAZ-K16/4	279099	1/30
20	415	10	480Y/277	5	FAZ-K20/4	279100	1/30
25	415	10	480Y/277	5	FAZ-K25/4	279101	1/30
32	415	10	480Y/277	5	FAZ-K32/4	279102	1/30
40	415	10	480Y/277	5	FAZ-K40/4	279103	1/30
50	415	10	480Y/277	5	FAZ-K50/4	279104	1/30
63	415	10	480Y/277	5	FAZ-K63/4	279105	1/30

Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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Characteristic S

1-pole

1	240	10	277	5	FAZ-S1/1	278606	12/120
2	240	10	277	5	FAZ-S2/1	278607	12/120
3	240	10	277	5	FAZ-S3/1	278608	12/120
4	240	10	277	5	FAZ-S4/1	278609	12/120
6	240	10	277	5	FAZ-S6/1	278610	12/120
10	240	10	277	5	FAZ-S10/1	278611	12/120
16	240	10	277	5	FAZ-S16/1	278612	12/120
20	240	10	277	5	FAZ-S20/1	278613	12/120
25	240	10	277	5	FAZ-S25/1	278614	12/120
32	240	10	277	5	FAZ-S32/1	278615	12/120
40	240	10	277	5	FAZ-S40/1	278616	12/120

SG53112



2-poles

1	415	10	480Y/277	5	FAZ-S1/2	278805	1/60
2	415	10	480Y/277	5	FAZ-S2/2	278806	1/60
3	415	10	480Y/277	5	FAZ-S3/2	278807	1/60
4	415	10	480Y/277	5	FAZ-S4/2	278808	1/60
6	415	10	480Y/277	5	FAZ-S6/2	278809	1/60
10	415	10	480Y/277	5	FAZ-S10/2	278810	1/60
16	415	10	480Y/277	5	FAZ-S16/2	278811	1/60
20	415	10	480Y/277	5	FAZ-S20/2	278812	1/60
25	415	10	480Y/277	5	FAZ-S25/2	278813	1/60
32	415	10	480Y/277	5	FAZ-S32/2	278814	1/60
40	415	10	480Y/277	5	FAZ-S40/2	278815	1/60

SG55112



Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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Characteristic Z

1-pole

0.5	240	10	277	5	FAZ-Z0,5/1	278617	12/120
1	240	10	277	5	FAZ-Z1/1	278618	12/120
1.6	240	10	277	5	FAZ-Z1,6/1	278619	12/120
2	240	10	277	5	FAZ-Z2/1	278620	12/120
3	240	10	277	5	FAZ-Z3/1	278621	12/120
4	240	10	277	5	FAZ-Z4/1	278622	12/120
6	240	10	277	5	FAZ-Z6/1	278623	12/120
8	240	10	277	5	FAZ-Z8/1	278624	12/120
10	240	10	277	5	FAZ-Z10/1	278625	12/120
13	240	10	277	5	FAZ-Z13/1	106020	12/120
16	240	10	277	5	FAZ-Z16/1	278626	12/120
20	240	10	277	5	FAZ-Z20/1	278627	12/120
25	240	10	277	5	FAZ-Z25/1	278628	12/120
32	240	10	277	5	FAZ-Z32/1	278629	12/120
40	240	10	277	5	FAZ-Z40/1	278630	12/120
50	240	10	277	5	FAZ-Z50/1	278631	12/120
63	240	10	277	5	FAZ-Z63/1	278632	12/120

SG53112



2-poles

0.5	415	10	480Y/277	5	FAZ-Z0,5/2	278816	1/60
1	415	10	480Y/277	5	FAZ-Z1/2	278817	1/60
1.6	415	10	480Y/277	5	FAZ-Z1,6/2	278818	1/60
2	415	10	480Y/277	5	FAZ-Z2/2	278819	1/60
3	415	10	480Y/277	5	FAZ-Z3/2	278820	1/60
4	415	10	480Y/277	5	FAZ-Z4/2	278821	1/60
6	415	10	480Y/277	5	FAZ-Z6/2	278822	1/60
8	415	10	480Y/277	5	FAZ-Z8/2	278823	1/60
10	415	10	480Y/277	5	FAZ-Z10/2	278824	1/60
13	415	10	480Y/277	5	FAZ-Z13/2	106021	1/60
16	415	10	480Y/277	5	FAZ-Z16/2	278825	1/60
20	415	10	480Y/277	5	FAZ-Z20/2	278826	1/60
25	415	10	480Y/277	5	FAZ-Z25/2	278827	1/60
32	415	10	480Y/277	5	FAZ-Z32/2	278828	1/60
40	415	10	480Y/277	5	FAZ-Z40/2	278829	1/60
50	415	10	480Y/277	5	FAZ-Z50/2	278830	1/60
63	415	10	480Y/277	5	FAZ-Z63/2	278831	1/60

SG55112



Rated current I_n (A)	Rated voltage acc. to IEC/EN 60947-2 (V)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Rated voltage acc. to UL1077 (V)	Breaking capacity acc. to UL1077 (kA)	Type Designation	Article No.	Units per package
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SG53412



3-poles

0.5	415	10	480Y/277	5	FAZ-Z0,5/3	278918	1/40
1	415	10	480Y/277	5	FAZ-Z1/3	278919	1/40
1.6	415	10	480Y/277	5	FAZ-Z1,6/3	278920	1/40
2	415	10	480Y/277	5	FAZ-Z2/3	278921	1/40
3	415	10	480Y/277	5	FAZ-Z3/3	278922	1/40
4	415	10	480Y/277	5	FAZ-Z4/3	278923	1/40
6	415	10	480Y/277	5	FAZ-Z6/3	278924	1/40
8	415	10	480Y/277	5	FAZ-Z8/3	278925	1/40
10	415	10	480Y/277	5	FAZ-Z10/3	278926	1/40
13	415	10	480Y/277	5	FAZ-Z13/3	106022	1/40
16	415	10	480Y/277	5	FAZ-Z16/3	278927	1/40
20	415	10	480Y/277	5	FAZ-Z20/3	278928	1/40
25	415	10	480Y/277	5	FAZ-Z25/3	278929	1/40
32	415	10	480Y/277	5	FAZ-Z32/3	278930	1/40
40	415	10	480Y/277	5	FAZ-Z40/3	278931	1/40
50	415	10	480Y/277	5	FAZ-Z50/3	278932	1/40
63	415	10	480Y/277	5	FAZ-Z63/3	278933	1/40

SG55812



4-poles

0.5	415	10	480Y/277	5	FAZ-Z0,5/4	279106	1/60
1	415	10	480Y/277	5	FAZ-Z1/4	279107	1/60
1.6	415	10	480Y/277	5	FAZ-Z1,6/4	279108	1/60
2	415	10	480Y/277	5	FAZ-Z2/4	279109	1/60
3	415	10	480Y/277	5	FAZ-Z3/4	279110	1/60
4	415	10	480Y/277	5	FAZ-Z4/4	279111	1/60
6	415	10	480Y/277	5	FAZ-Z6/4	279112	1/60
8	415	10	480Y/277	5	FAZ-Z8/4	279113	1/60
10	415	10	480Y/277	5	FAZ-Z10/4	279114	1/60
13	415	10	480Y/277	5	FAZ-Z13/4	106023	1/60
16	415	10	480Y/277	5	FAZ-Z16/4	279115	1/60
20	415	10	480Y/277	5	FAZ-Z20/4	279116	1/60
25	415	10	480Y/277	5	FAZ-Z25/4	279117	1/60
32	415	10	480Y/277	5	FAZ-Z32/4	279118	1/60
40	415	10	480Y/277	5	FAZ-Z40/4	279119	1/60
50	415	10	480Y/277	5	FAZ-Z50/4	279120	1/60
63	415	10	480Y/277	5	FAZ-Z63/4	279121	1/60

FAZ-PN Miniature Circuit Breakers

Rated current I_n (A)	Rated voltage (V)	Breaking capacity acc. to IEC/EN 60898-1 (kA)	Breaking capacity acc. to IEC/EN 60947-2 (kA)	Type Designation	Article No.	Units per package
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Characteristic B

1+N-poles (1MU)

6	240	6	10	FAZ-PN-B6/1N	279146	12/120
10	240	6	10	FAZ-PN-B10/1N	279147	12/120
13	240	6	10	FAZ-PN-B13/1N	279148	12/120
16	240	6	10	FAZ-PN-B16/1N	279149	12/120
20	240	6	10	FAZ-PN-B20/1N	279150	12/120
25	240	6	10	FAZ-PN-B25/1N	279151	12/120
32	240	6	10	FAZ-PN-B32/1N	279152	12/120
40	240	6	10	FAZ-PN-B40/1N	279153	12/120

SG54212



Characteristic C

1+N-poles (1MU)

2	240	6	10	FAZ-PN-C2/1N	279154	12/120
4	240	6	10	FAZ-PN-C4/1N	279155	12/120
6	240	6	10	FAZ-PN-C6/1N	279156	12/120
10	240	6	10	FAZ-PN-C10/1N	279157	12/120
13	240	6	10	FAZ-PN-C13/1N	279158	12/120
16	240	6	10	FAZ-PN-C16/1N	279159	12/120
20	240	6	10	FAZ-PN-C20/1N	279160	12/120
25	240	6	10	FAZ-PN-C25/1N	279161	12/120
32	240	6	10	FAZ-PN-C32/1N	279162	12/120
40	240	6	10	FAZ-PN-C40/1N	279163	12/120

SG54212



Rated current I_n (A)	Rated voltage (V)	Breaking capacity acc. to IEC/EN 60898-1 (kA)	Type Designation	Article No.	Units per package
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Characteristic B

wa_sg00114



1-pole

4	240	10	FAZ-B4/1-HS	279274	12/120
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SG5512



2-poles

4	240	10	FAZ-B4/2-HS	279275	1/60
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Miniature Circuit Breakers FAZ

Accessories:

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	258288, 248289, 248290
	Z-USD	248292, 248291
Switching interlock	Z-IS/SPE-1TE	274418
Terminal cover		
1-pole	Z-TC/MCB-1P	178102
2-poles	Z-TC/SD-2P	178099
3-poles	Z-TC/SD-3P	178100
4-poles	Z-TC/SD-4P	178101

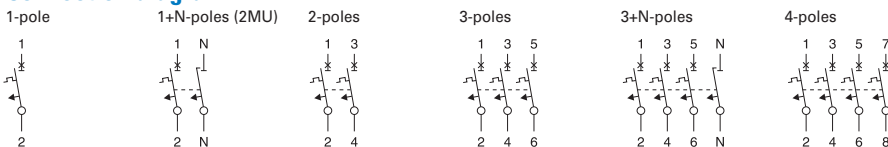
Technical Data

Electrical	B Characteristic		C Characteristic		D Characteristic
Approvals	UR (UL 1077), CSA (CSA 22.2 No. 235), CE, VDE				
Standards	IEC/EN 60947-2				
Short-circuit trip response	3–5 I _n		5–10 I _n		10–20 I _n
Supplementary Protectors - UL/CSA					
Current range	1–63 A		0.16–63 A		0.5–40 A
Maximum voltage ratings - UL/CSA					
Single-pole, single-pole + neutral	277 V AC 48 V DC		277 V AC 48 V DC		277 V AC 48 V DC
Two-, three-, four-pole and three-pole + neutral	480Y/277 V AC		480Y/277 V AC		480Y/277 V AC
Two poles in series	96 V DC		96 V DC		96 V DC
Thermal tripping characteristics					
Single-pole	< 1 hour @ 1.35 x I _n @ 40°C		< 1 hour @ 1.35 x I _n @ 40°C		< 1 hour @ 1.35 x I _n @ 40°C
Multi-pole	< 1 hour @ 1.45 x I _n @ 40°C		< 1 hour @ 1.45 x I _n @ 40°C		< 1 hour @ 1.45 x I _n @ 40°C
Short-circuit ratings (at max. voltage)					
Single-pole	10 kA (5 kA for 40–63A device)		10 kA (5 kA for 40–63A device)		5 kA
Two-, three-pole	10 kA (5 kA for 40–63A device)		10 kA (5 kA for 40–63A device)		5 kA
Single-pole	10 kA @ 48 V DC		10 kA @ 48 V DC		10 kA @ 48 V DC
Two poles in series	10 kA @ 96 V DC		10 kA @ 96 V DC		10 kA @ 96 V DC
Miniature Circuit Breaker - IEC					
Current range	1–40 A	50–63 A	0.16–40 A	50–63 A	0.5–63 A
Maximum voltage ratings - IEC 60947-2					
Single-pole, single-pole + neutral	254 V AC 60 V DC	230 V AC 60 V DC	254 V AC 60 V DC	230 V AC 60 V DC	230 V AC 60 V DC
Two-, three-, four-pole and three-pole + neutral	440 V AC	400 V AC	440 V AC	400 V AC	400 V AC
Maximum voltage ratings - IEC 60898					
Single-pole, single-pole + neutral	240 V AC	240 V AC	240 V AC	240 V AC	240 V AC
Two-, three-, four-pole and three-pole + neutral	415 V AC	415 V AC	415 V AC	415 V AC	415 V AC
Thermal tripping characteristics - IEC 60947-2					
	> 1 hour @ 1.05 x I _n @ 40°C		> 1 hour @ 1.05 x I _n @ 40°C		> 1 hour @ 1.05 x I _n @ 40°C
	< 1 hour @ 1.3 x I _n @ 40°C		< 1 hour @ 1.3 x I _n @ 40°C		< 1 hour @ 1.3 x I _n @ 40°C
Interrupt ratings (at max. voltage)					
IEC 60947-2	10 kA	15 kA	10 kA	15 kA	15 kA (type D50 and D63: 10k A)
IEC 60898	10 kA	10 kA	10 kA	10 kA	10 kA (type D50 and D63: not tested)
Operational switching capacity	7.5 kA	7.5 kA	7.5 kA	7.5 kA	7.5 kA (type D50 and D63: 6 kA)
Max. back-up fuse [gL/gG]	125 A	125 A	125 A	125 A	125 A
Rated impulse withstand voltage - U _{imp}	4000 V AC	4000 V AC	4000 V AC	4000 V AC	4000 V AC
Rated insulation voltage - U _i	440 V AC	440 V AC	440 V AC	440 V AC	440 V AC
Environmental / General					
Selectivity class	3		3		3
Endurance (operations)	>10000 (1 operation = ON/OFF)		>10000 (1 operation = ON/OFF)		>10000 (1 operation = ON/OFF)
Shock (IEC 68-2-22)	10 g / 120 ms		10 g / 120 ms		10 g / 120 ms
Operating temperature range	-40 up to +75°C		-40 up to +75°C		-40 up to +75°C
Mechanical					
Device height	80 mm		80 mm		80 mm
Terminal protection	Finger and back-of-hand proof		Finger and back-of-hand proof		Finger and back-of-hand proof
Mounting width per pole	17.5 mm		17.5 mm		17.5 mm
Mounting	IEC/EN 60715 top-hat rail		IEC/EN 60715 top-hat rail		IEC/EN 60715 top-hat rail
Degree of protection	IP20		IP20		IP20
Terminals top and bottom	Twin-purpose terminals		Twin-purpose terminals		Twin-purpose terminals
Supply connection	Line or load side		Line or load side		Line or load side
Terminal capacity [mm ²]	1 x 25 / 2 x 10		1 x 25 / 2 x 10		1 x 25 / 2 x 10
Torque of terminals	2.4 Nm		2.4 Nm		2.4 Nm
Thickness of busbar material	0.8 - 2 mm		0.8 - 2 mm		0.8 - 2 mm
Mounting position	As required		As required		As required

Technical Data

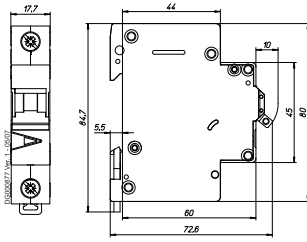
Electrical	K Characteristic	S Characteristic	Z Characteristic
Approvals	UR (UL 1077), CE	UR (UL 1077), CSA (CSA 22.2 No. 235) for 1-16 A, CE	UR (UL 1077), CE
Standards	IEC/EN 60947-2		
Short-circuit trip response	8–12 I _n	13–17 I _n	2–3 I _n
Supplementary Protectors - UL/CSA			
Current range	1–63 A	0.5–63 A	0.5–40 A
Maximum voltage ratings - UL/CSA			
Single-pole, single-pole + neutral	277 V AC 48 V DC	277 V AC 48 V DC	277 V AC 48 V DC
Two-, three-, four-pole and three-pole + neutral	480Y/277 V AC	480Y/277 V AC	480Y/277 V AC
Two poles in series	96 V DC	96 V DC	96 V DC
Thermal tripping characteristics			
Single-pole	< 1 hour @ 1.35 x I _n @ 40°C	< 1 hour @ 1.35 x I _n @ 40°C	< 1 hour @ 1.35 x I _n @ 40°C
Multi-pole	< 1 hour @ 1.45 x I _n @ 40°C	< 1 hour @ 1.45 x I _n @ 40°C	< 1 hour @ 1.45 x I _n @ 40°C
Short-circuit ratings (at max. voltage)			
Single-pole	5 kA @ 277 V AC	5 kA @ 277 V AC	5 kA @ 277 V AC
Single-pole + neutral	5 kA @ 277 V AC	5 kA @ 277 V AC	5 kA @ 277 V AC
Two-, three-, four-pole	5 kA @ 480Y/277 V AC	5 kA @ 480Y/277 V AC	5 kA @ 480Y/277 V AC
Miniature Circuit Breaker - IEC			
Current range	0.5–63 A	0.5–40 A	1–63 A
Maximum voltage ratings - IEC 60947-2			
Single-pole, single-pole + neutral	240 V AC	240 V AC	240 V AC
Single-pole	60 V DC	60 V DC	60 V DC
Two-, three-, four-pole and three-pole + neutral	415 V AC	415 V AC	415 V AC
Thermal tripping characteristics			
	> 1 hour @ 1.05 x I _n @ 40°C < 1 hour @ 1.3 x I _n @ 40°C	> 1 hour @ 1.05 x I _n @ 40°C < 1 hour @ 1.3 x I _n @ 40°C	> 1 hour @ 1.05 x I _n @ 40°C < 1 hour @ 1.3 x I _n @ 40°C
Interrupt ratings (at max. voltage)			
IEC 60947-2	10 kA	10 kA	10 kA
Operational switching capacity	7.5 kA	7.5 kA	7.5 kA
Max. back-up fuse [gL/gG]	125 A	125 A	125 A
Rated impulse withstand voltage - U _{imp}	4000 V AC	4000 V AC	4000 V AC
Rated insulation voltage - U _i	440 V AC	440 V AC	440 V AC
Environmental / General			
Selectivity class	3	3	3
Endurance (operations)	>10000 (1 operation = ON/OFF)	>10000 (1 operation = ON/OFF)	>10000 (1 operation = ON/OFF)
Shock (IEC 68-2-22)	10 g / 120 ms	10 g / 120 ms	10 g / 120 ms
Operating temperature range	-40 up to +75°C	-40 up to +75°C	-40 up to +75°C
Mechanical			
Device height	80 mm	80 mm	80 mm
Terminal protection	Finger and back-of-hand proof	Finger and back-of-hand proof	Finger and back-of-hand proof
Mounting width per pole	17.5 mm	17.5 mm	17.5 mm
Mounting	IEC/EN 60715 top-hat rail	IEC/EN 60715 top-hat rail	IEC/EN 60715 top-hat rail
Degree of protection	IP20	IP20	IP20
Terminals top and bottom	Twin-purpose terminals	Twin-purpose terminals	Twin-purpose terminals
Supply connection	Line or load side	Line or load side	Line or load side
Terminal capacity [mm ²]	1 x 25 / 2 x 10	1 x 25 / 2 x 10	1 x 25 / 2 x 10
Torque of terminals	2.4 Nm	2.4 Nm	2.4 Nm
Thickness of busbar material	0.8 - 2 mm	0.8 - 2 mm	0.8 - 2 mm
Mounting position	As required	As required	As required

Connection diagram

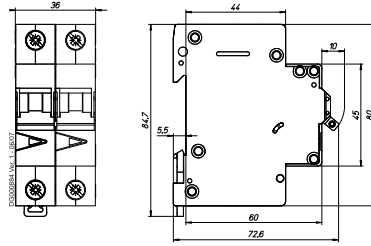


Dimensions (mm) FAZ

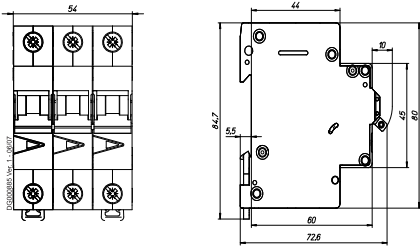
1-pole



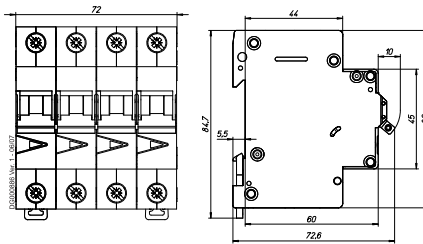
1+N-poles, 2-poles



3-poles

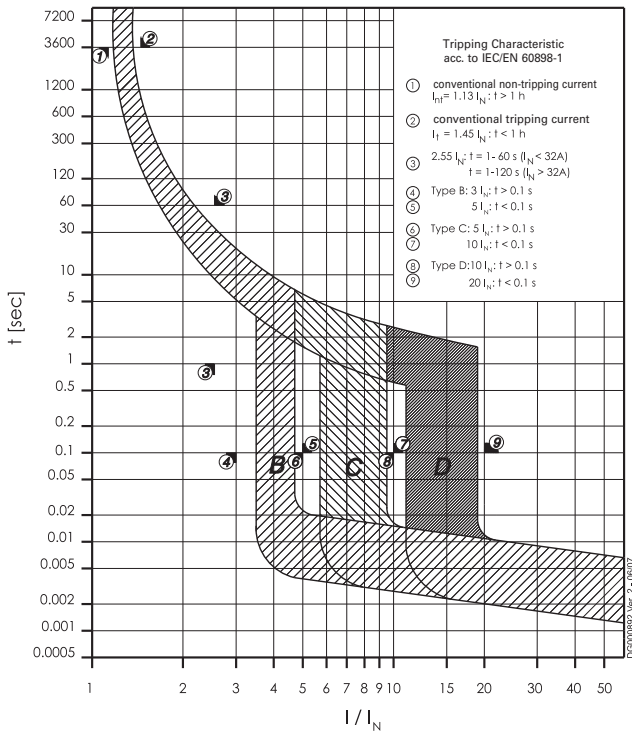


3+N-poles, 4-poles

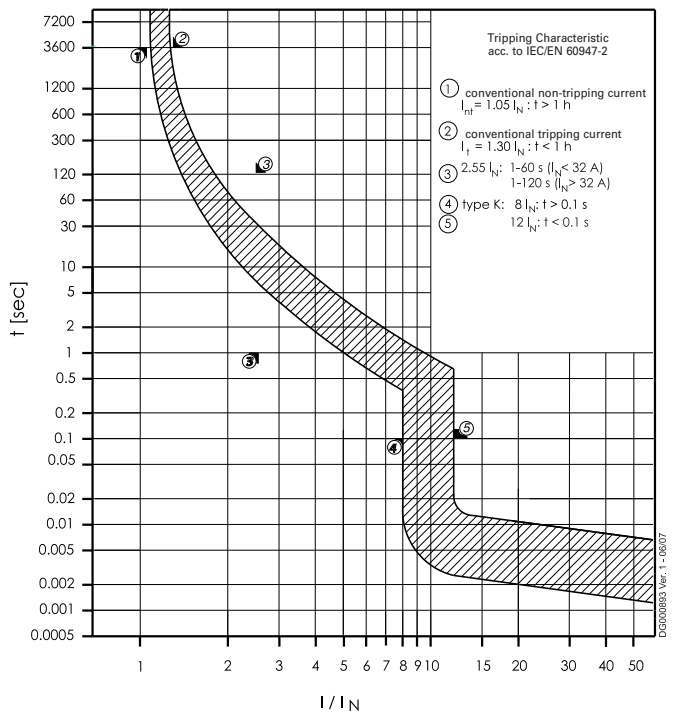


Tripping Characteristics FAZ

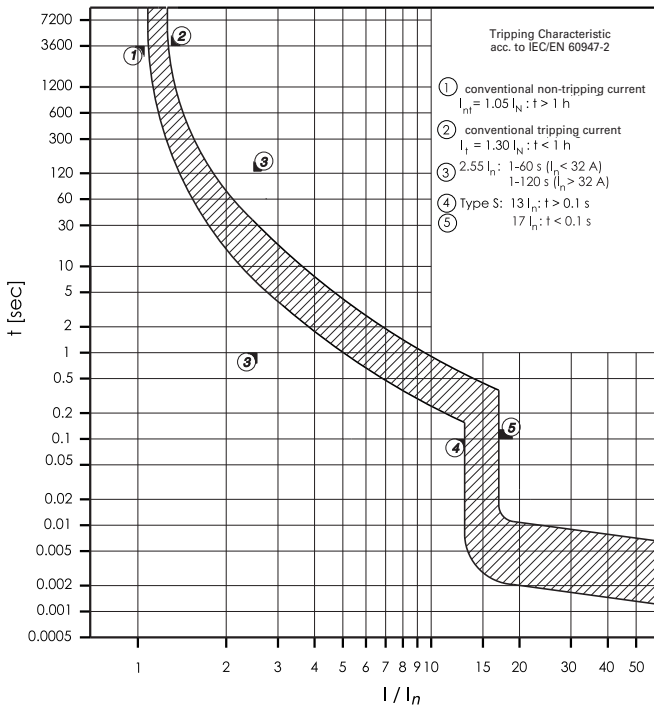
Characteristics B, C and D - IEC/EN60898-1



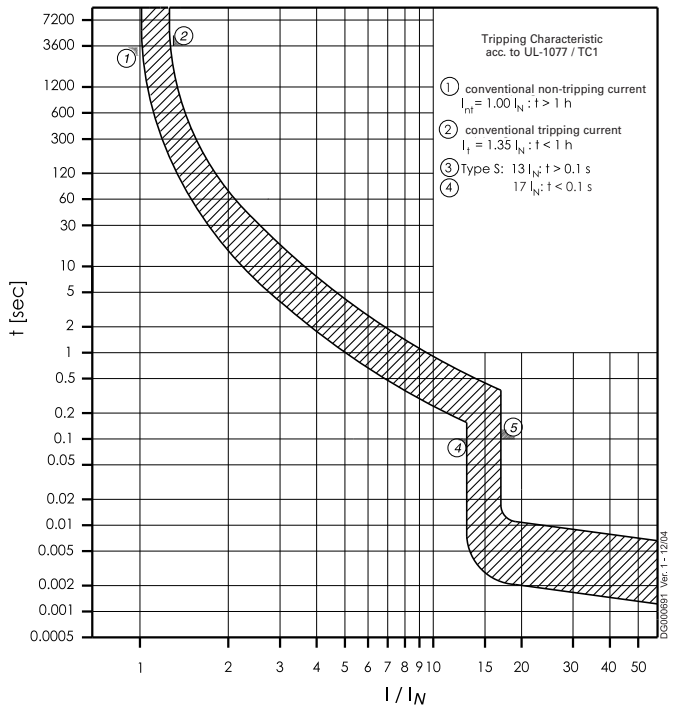
Characteristic K - IEC/EN 60947-2



Characteristic S - IEC/EN 60947-2

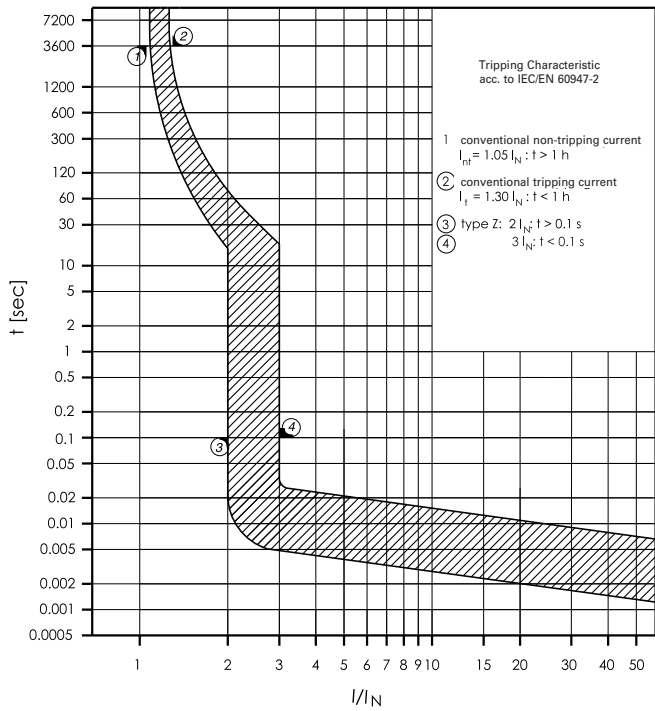


Characteristic S - UL1077

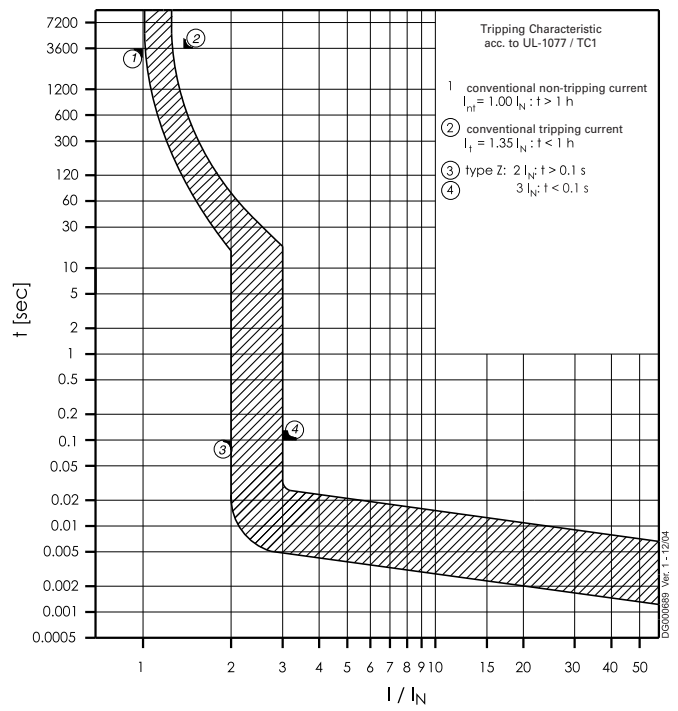


Tripping Characteristics FAZ

Characteristic Z - IEC/EN 60947-2



Characteristic Z - UL1077



Internal Resistance FAZ

Type B

At room temperature (single pole)

I_n [A]	Z^* [mΩ]	R^* [mΩ]
1	1120	1102
1.5	922	912
1.6	922	912
2	335	333
2.5	234	230
3	211	208
3.5	184	180
4	87.7	87.2
5	73.5	72.8
6	46.8	46.3
8	30.5	30.4
10	17.5	17.4
12	16.9	16.8
13	13.4	13.3
15	8.0	7.9
16	8.0	7.9
20	7.2	7.1
25	5.0	4.9
32	3.7	3.7
40	2.6	2.5
50	2.1	2.1
63	2.0	2.0

* 50 Hz

Type C

At room temperature (single pole)

I_n [A]	Z^* [mΩ]	R^* [mΩ]
0.16	68500	68300
0.25	27500	27400
0.5	4680	4670
0.75	2280	2250
1	1120	1100
1.5	589	587
1.6	589	587
2	335	333
2.5	234	230
3	131	130
3.5	143	141
4	87.7	87.2
5	73.5	72.8
6	39.3	39.1
8	30.5	30.4
10	14.1	14.0
12	13.5	13.4
13	13.4	13.3
15	8.0	7.9
16	8.0	7.9
20	7.2	7.1
25	5.0	4.9
32	3.7	3.7
40	2.6	2.5
50	2.1	2.1
63	2.0	2.0

* 50 Hz

Type D

At room temperature (single pole)

I_n [A]	Z^* [mΩ]	R^* [mΩ]
0.5	4680	4670
1	772	770
1.5	512	508
1.6	512	508
2	250	249
2.5	153	153
3	131	130
3.5	143	141
4	87.7	87.2
5	65.4	65.1
6	39.3	39.1
8	19.5	19.5
10	14.1	14.0
12	11.3	11.2
13	10.1	10.1
15	8.0	7.9
16	8.0	7.9
20	4.9	4.9
25	3.9	3.8
32	3.5	3.4
40	2.7	2.6

* 50 Hz

Fault Loop Impedance FAZ

Max. allowed value for the Fault Loop Impedance Z_s
(acc. to DIN VDE 0100. Teil 410)

$U_0 = 230 \text{ V}$

	Type B		Type C		Type D	
	0.4s	5s	0.4s	5s	0.4s	5s
I_n [A]	Z_s^* [mΩ]	R^* [mΩ]	Z_s^* [mΩ]	R^* [mΩ]	Z_s^* [mΩ]	R^* [mΩ]
1	40.4	40.4	24.3	40.4	12.4	40.4
1.5	26.9	26.9	16.2	26.9	8.3	26.9
2	20.2	20.2	12.2	20.2	6.2	20.2
2.5	16.1	16.1	9.7	16.1	5.0	16.1
3	13.5	13.5	8.1	13.5	4.1	13.5
3.5	11.5	11.5	7.0	11.5	3.6	11.5
4	10.1	10.1	6.1	10.1	3.1	10.1
5	8.1	8.1	4.9	8.1	2.5	8.1
6	6.7	6.7	4.1	6.7	2.1	6.7
8	5.0	5.0	3.0	5.0	1.6	5.0
10	4.0	4.0	2.4	4.0	1.2	4.0
12	3.4	3.4	2.0	3.4	1.0	3.4
13	3.1	3.1	1.9	3.1	1.0	3.1
15	2.7	2.7	1.6	2.7	0.8	2.7
16	2.5	2.5	1.5	2.5	0.8	2.5
20	2.0	2.0	1.2	2.0	0.6	2.0
25	1.6	1.6	1.0	1.6	0.5	1.6
32	1.3	1.3	0.8	1.3	0.4	1.3
40	1.0	1.0	0.6	1.0	0.3	1.0
50	0.8	0.8	0.5	0.8	0.2	0.8
63	0.6	0.6	0.4	0.6	0.2	0.6

$$Z_s = R_{M.C.B.} + R_{Loop}$$

Data/factors taken from the time-current characteristic FAZ

For other rated voltages U_0 :

$U_0 = 240 \text{ V}$: $Z_s^* \cdot 1.04$

$U_0 = 127 \text{ V}$: $Z_s^* \cdot 0.55$

Power Loss at I_n FAZ

Type B					
I_n [A]	1p P [W]	1pN P [W]	2p P [W]	3p P [W]	3pN* P [W]
1	1.6	1.7	3.1	4.7	4.8
1.5	2.3	2.5	4.6	6.9	7.2
1.6	2.5	2.7	4.9	7.4	7.6
2	1.4	1.5	2.8	4.1	4.3
2.5	1.5	1.7	3.1	4.6	4.7
3	2.5	2.7	5.0	7.6	7.8
3.5	2.5	2.8	5.1	7.8	8.0
4	1.4	1.6	2.9	4.4	4.5
5	1.9	2.1	3.8	5.8	6.0
6	1.8	2.0	3.6	5.5	5.6
8	2.1	2.3	4.1	6.3	6.5
10	1.9	2.1	3.9	5.9	6.1
12	2.8	3.2	5.9	8.7	9.0
13	2.5	2.9	5.3	7.8	8.1
15	2.1	2.4	4.4	6.5	6.7
16	2.2	2.6	4.7	6.9	7.2
20	3.2	3.6	6.6	9.8	10.1
25	3.0	3.5	6.4	9.4	9.7
32	3.7	4.4	8.1	12.1	12.5
40	3.4	4.1	7.5	11.2	11.5
50	4.5	5.4	9.9	14.9	15.3
63	5.2	6.3	11.5	17.2	17.7

* symmetrical load

Type C					
I_n [A]	1p P [W]	1pN P [W]	2p P [W]	3p P [W]	3pN* P [W]
0.16	2.2	2.4	4.4	6.7	6.9
0.25	2.0	2.2	4.0	6.1	6.3
0.5	1.2	1.3	2.4	3.5	3.7
0.75	1.3	1.4	2.6	3.9	4.1
1	1.6	1.7	3.1	4.7	4.8
1.5	1.5	1.6	2.9	4.4	4.6
1.6	1.6	1.7	3.1	4.7	4.9
2	1.4	1.5	2.8	4.1	4.3
2.5	1.5	1.7	3.1	4.6	4.7
3	1.2	1.3	2.4	3.6	3.7
3.5	1.3	1.4	2.6	3.9	4.0
4	1.4	1.6	2.9	4.4	4.5
5	1.9	2.1	3.8	5.8	6.0
6	1.5	1.6	2.9	4.4	4.6
8	2.1	2.3	4.1	6.3	6.5
10	1.5	1.7	3.0	4.6	4.7
12	2.1	2.4	4.4	6.5	6.8
13	2.5	2.9	5.3	7.8	8.1
15	2.1	2.4	4.4	6.5	6.7
16	2.2	2.6	4.7	6.9	7.2
20	3.2	3.6	6.6	9.8	10.1
25	3.0	3.5	6.4	9.4	9.7
32	3.7	4.4	8.1	12.1	12.5
40	3.4	4.1	7.5	11.2	11.5
50	4.5	5.4	9.9	14.9	15.3
63	5.2	6.3	11.5	17.2	17.7

* symmetrical load

Type D					
I_n [A]	1p P [W]	1pN P [W]	2p P [W]	3p P [W]	3pN* P [W]
0.5	1.2	1.3	2.4	3.5	3.7
1	0.8	0.9	1.6	2.4	2.5
1.5	1.2	1.3	2.3	3.5	3.6
1.6	1.3	1.4	2.5	3.8	3.9
2	1.0	1.1	2.0	3.0	3.1
2.5	1.0	1.1	1.9	2.9	3.0
3	1.2	1.3	2.4	3.6	3.7
3.5	1.3	1.4	2.6	3.9	4.0
4	1.4	1.6	2.9	4.4	4.5
5	1.7	1.8	3.3	5.1	5.3
6	1.5	1.6	2.9	4.4	4.6
8	1.3	1.5	2.6	4.0	4.2
10	1.5	1.7	3.0	4.6	4.7
12	1.7	2.0	3.6	5.3	5.4
13	1.9	2.2	4.0	5.9	6.1
15	2.1	2.4	4.4	6.5	6.7
16	2.2	2.6	4.7	6.9	7.2
20	2.0	2.2	4.1	6.1	6.2
25	2.5	2.9	5.2	7.7	7.9
32	3.4	4.0	7.4	11.1	11.4
40	3.2	3.8	7.0	10.4	10.7

* symmetrical load

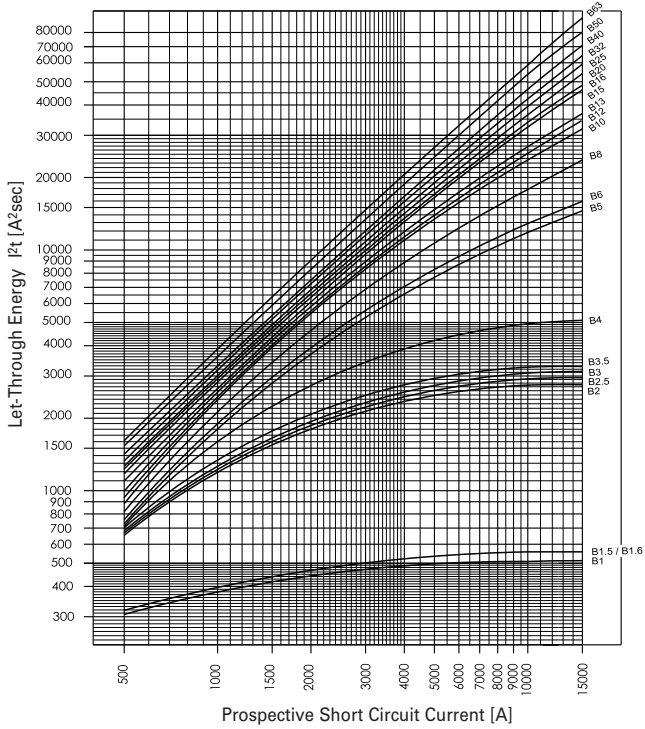
Influence of Ambient Temperature FAZ

On Load Carrying Capacity (temperature derating)

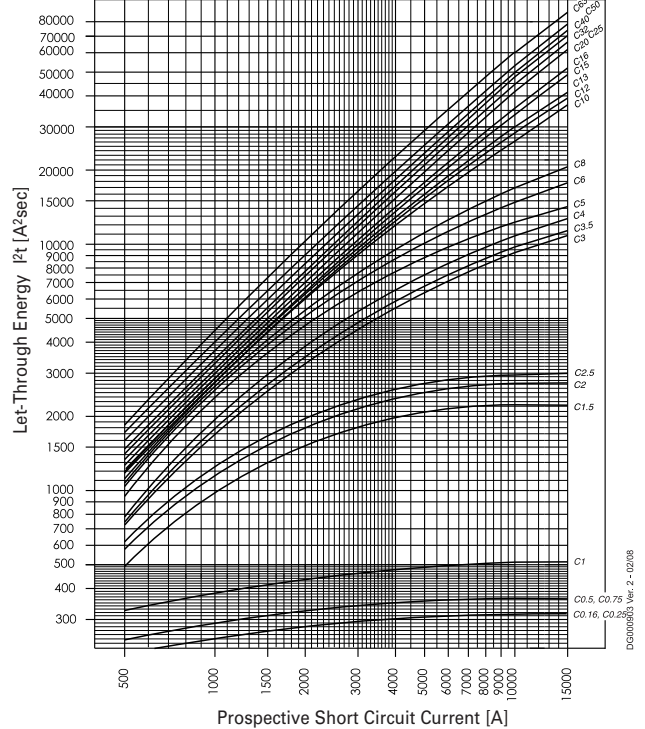
I_n [A]	Ambient temperature T [°C]																
	-40	-30	-20	-10	0	10	20	30	35	40	45	50	55	60	65	70	75
0.16	0.2	0.2	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
0.25	0.32	0.31	0.3	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21
0.5	0.64	0.62	0.6	0.58	0.56	0.54	0.52	0.5	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41
0.75	0.96	0.93	0.9	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	1.3	1.2	1.2	1.2	1.1	1.1	1	1	0.99	0.97	0.95	0.93	0.9	0.89	0.87	0.85	0.83
1.5	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	1.3	1.3	1.3	1.2
1.6	2	2	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	2.6	2.5	2.4	2.3	2.2	2.2	2.1	2	2	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.7
2.5	3.2	3.1	3	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	3.8	3.7	3.6	3.5	3.4	3.3	3.1	3	3	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.5
3.5	4.5	4.4	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	3	2.9
4	5.1	5	4.8	4.7	4.5	4.3	4.2	4	3.9	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.3
5	6.4	6.2	6	5.8	5.6	5.4	5.2	5	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1
6	7.7	7.5	7.2	7	6.7	6.5	6.3	6	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1	5
8	10.2	9.9	9.6	9.3	9	8.7	8.4	8	7.9	7.7	7.6	7.4	7.2	7.1	6.9	6.8	6.6
10	13	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9	8.9	8.7	8.5	8.3
12	15	15	14	14	13	13	13	12	12	12	11	11	11	11	10	10	10
13	17	16	16	15	15	14	14	13	13	13	12	12	12	12	11	11	11
15	19	19	18	17	17	16	16	15	15	15	14	14	14	13	13	13	12
16	20	20	19	19	18	17	17	16	16	15	15	15	14	14	14	14	13
20	26	25	24	23	22	22	21	20	20	19	19	19	18	18	17	17	17
25	32	31	30	29	28	27	26	25	25	24	24	23	23	22	22	21	21
32	41	40	38	37	36	35	33	32	32	31	30	30	29	28	28	27	26
40	51	50	48	47	45	43	42	40	39	39	38	37	36	35	35	34	33
50	64	62	60	58	56	54	52	50	49	48	47	46	45	44	43	42	41
63	81	78	76	73	71	68	66	63	62	61	60	58	57	56	55	53	52

Maximum Let-Through Energy FAZ

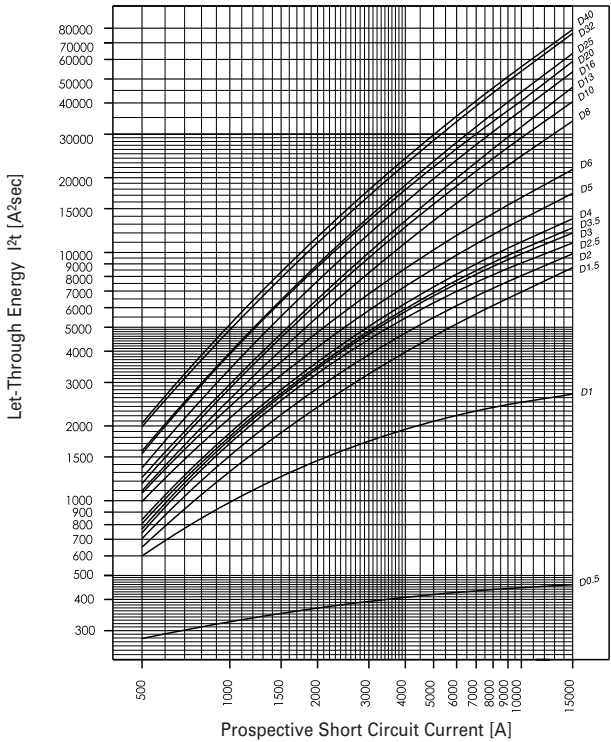
Type B (IEC/EN60947-2)



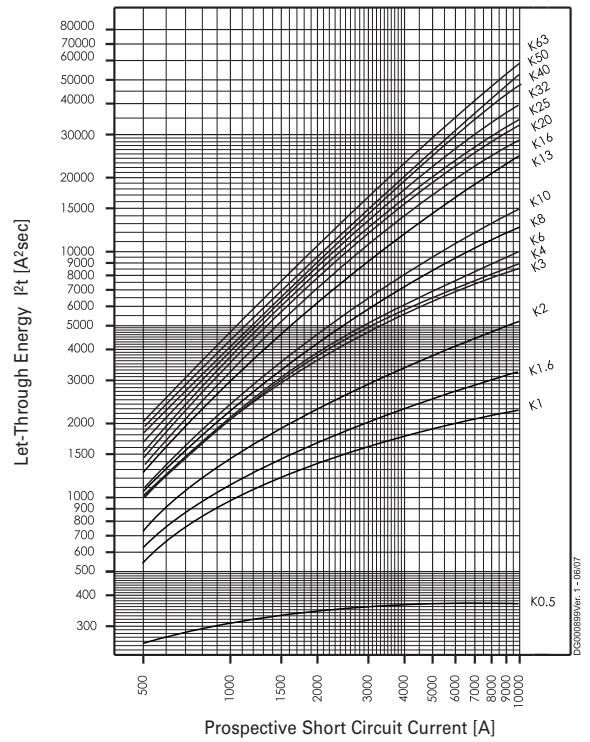
Type C (IEC/EN60947-2)



Type D (IEC/EN60947-2)

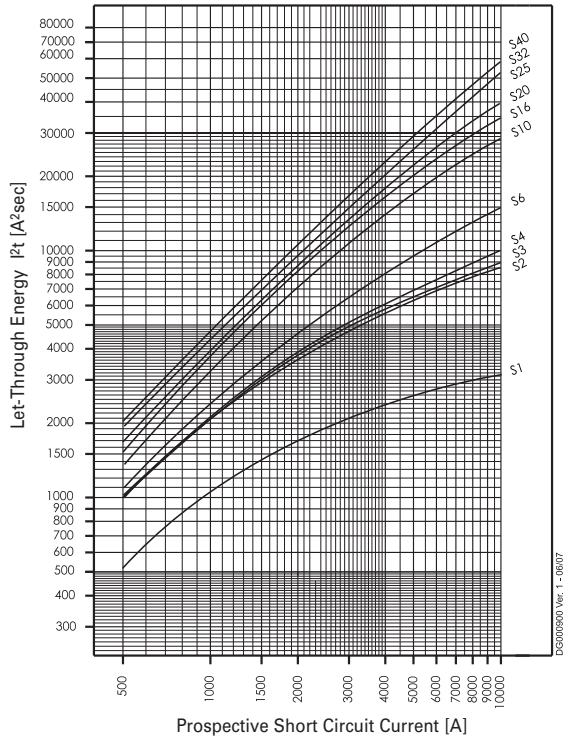


Type K

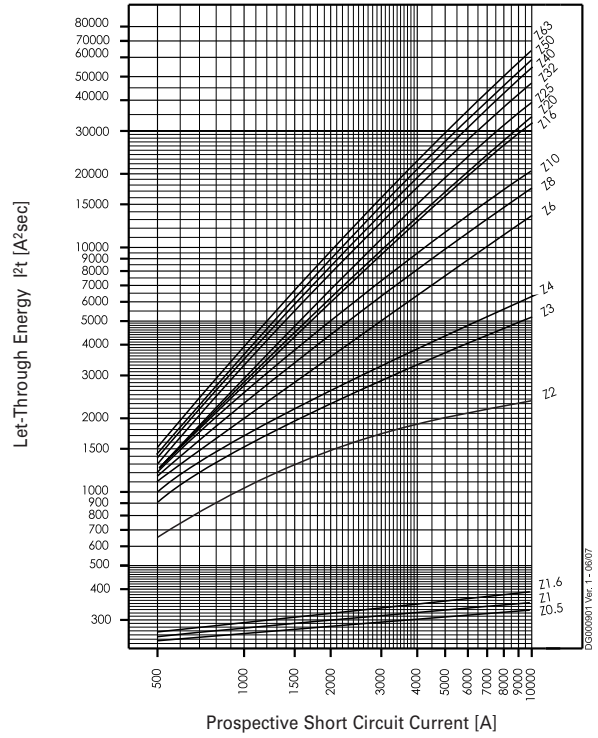


Maximum Let-Through Energy FAZ

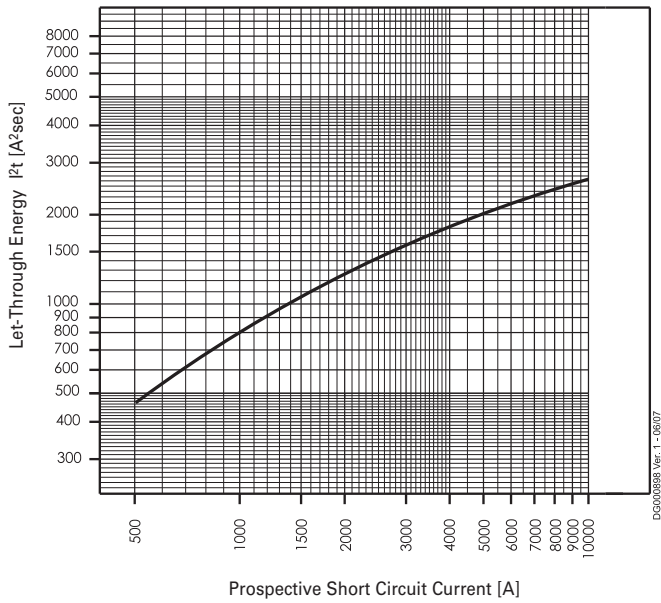
Type S



Type Z

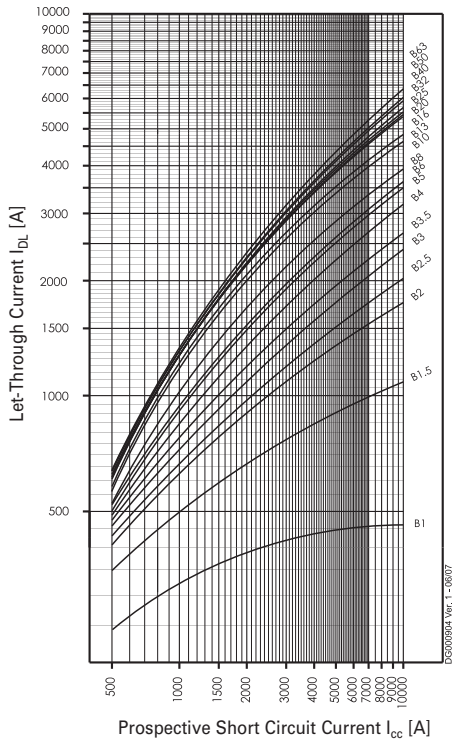


Type FAZ-...-HS

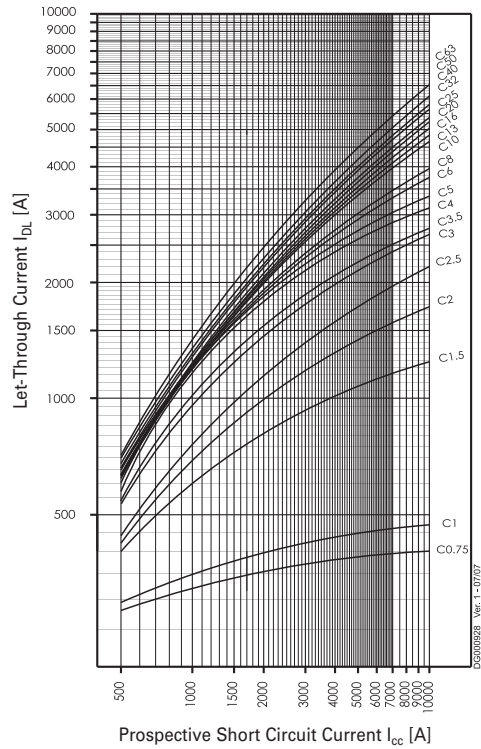


Maximum Let-Through Current FAZ

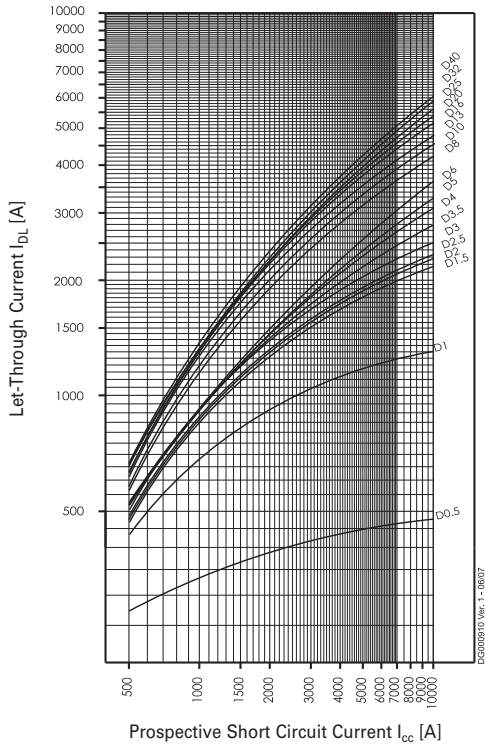
Type B (IEC/EN60898)



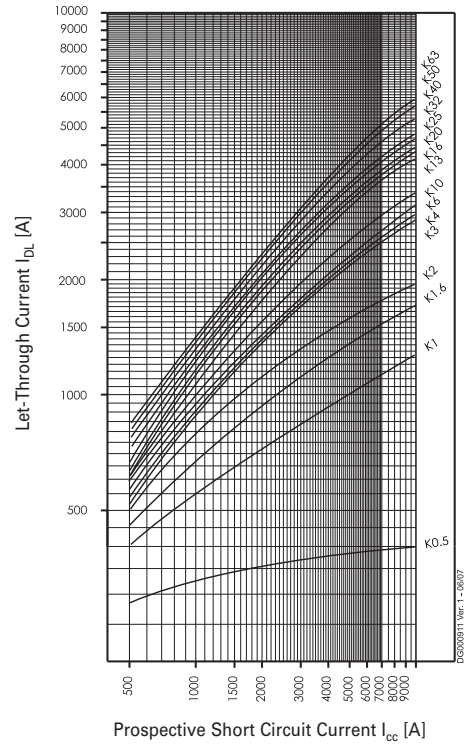
Type C (IEC/EN60898)



Type D (IEC/EN60898)

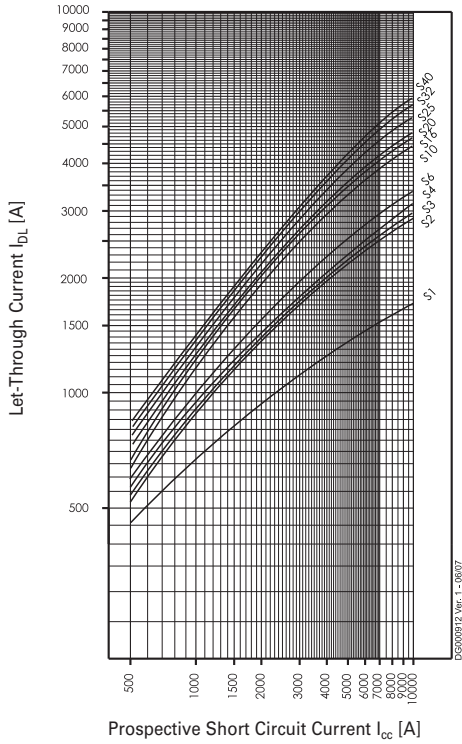


Type K

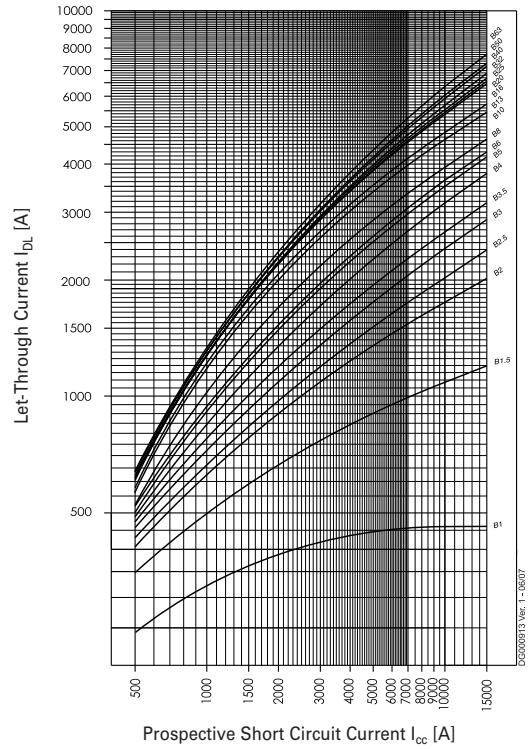


Maximum Let-Through Current FAZ

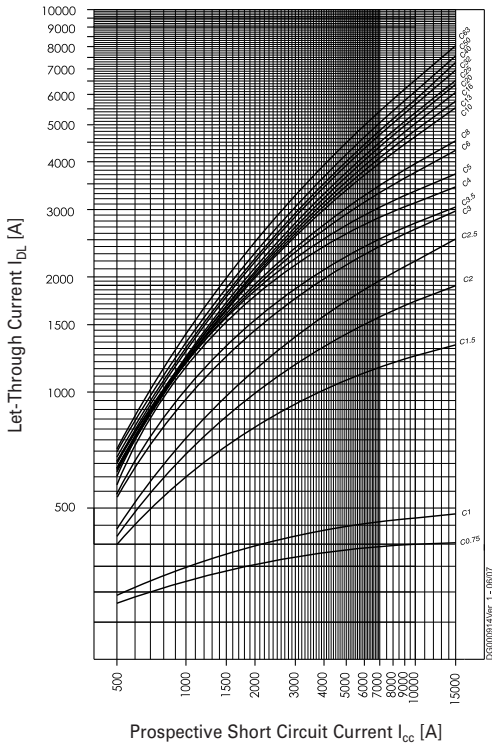
Type S



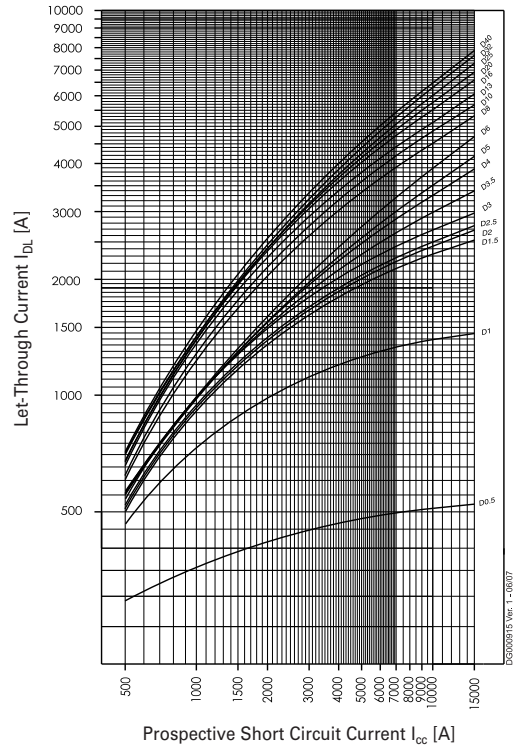
Type B (IEC/EN60947-2)



Type C (IEC/EN60947-2)



Type D (IEC/EN60947-2)



Short Circuit Selectivity FAZ

In case of short circuit, there is selectivity between the miniature circuit breakers FAZ and the upstream protection devices 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

FAZ towards NH-00 Fuses

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

FAZ	NH-00 gL/gG												
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
1.0	0.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	0.8	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	0.5	1.0	2.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	0.5	1.0	2.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	0.5	0.9	2.1	8.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	0.5	0.9	1.8	5.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.3	2.3	4.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.6	2.2	3.6	4.8	8.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
6	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.5	2.0	3.3	4.3	7.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
8	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	1.3	1.7	2.6	3.3	5.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
10	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	1.2	1.5	2.2	2.7	4.0	9.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
13	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.1	1.4	2.1	2.6	3.8	7.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
16			0.5	0.7	1.0	1.3	1.9	2.4	3.4	6.4	9.3	10.0 ²⁾	10.0 ²⁾
20				0.7	1.0	1.3	1.9	2.4	3.3	6.0	8.7	10.0 ²⁾	10.0 ²⁾
25				0.7	1.0	1.3	1.8	2.3	3.2	5.7	8.0	10.0 ²⁾	10.0 ²⁾
32					0.9	1.2	1.7	2.2	3.1	5.4	7.6	10.0 ²⁾	10.0 ²⁾
40								2.1	3.0	5.1	7.2	10.0 ²⁾	10.0 ²⁾
50								1.9	2.8	4.7	6.6	9.5	10.0 ²⁾
63									4.4	6.3	8.6	10.0 ²⁾	10.0 ²⁾

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

FAZ	NH-00 gL/gG												
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
0.75	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.0	0.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	0.6	1.3	4.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	0.6	1.0	2.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	0.5	1.0	2.1	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.2	1.8	2.6	4.7	6.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.7	2.4	4.2	6.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.0	1.5	2.1	3.6	5.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.2	1.7	2.8	3.8	8.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
6	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.8	1.2	1.5	2.5	3.3	5.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
8	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.8	1.1	1.5	2.3	2.9	4.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
10			0.5	0.7	1.0	1.4	2.0	2.5	3.8	8.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
13					1.0	1.3	1.9	2.4	3.6	7.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
16					1.0	1.3	1.8	2.3	3.3	6.0	8.8	10.0 ²⁾	10.0 ²⁾
20					1.0	1.2	1.7	2.2	3.2	5.5	7.7	10.0 ²⁾	10.0 ²⁾
25						1.6	2.1	3.0	5.2	7.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
32							2.1	2.9	5.0	7.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
40								2.8	4.8	6.7	10.0	10.0 ²⁾	10.0 ²⁾
50									4.5	6.3	9.5	10.0 ²⁾	10.0 ²⁾
63										5.9	8.4	10.0 ²⁾	10.0 ²⁾

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

FAZ	NH-00 gL/gG												
I_n [A]	16	20	25	32	35	40	50	63	80	100	125	160	
0.5	2.1	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.0	<0.5 ¹⁾	0.6	1.4	4.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	<0.5 ¹⁾	0.9	1.6	2.7	4.0	8.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.3	2.1	3.1	6.0	8.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.2	1.8	2.6	4.8	6.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.7	2.4	4.3	6.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.1	1.7	2.4	4.2	5.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.0	1.6	2.2	3.8	5.2	10.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
5		<0.5 ¹⁾	0.6	0.9	1.4	1.9	3.2	4.1	7.1	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
6		<0.5 ¹⁾	0.5	0.8	1.2	1.6	2.6	3.3	5.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
8			0.5	0.8	1.1	1.5	2.2	2.7	4.1	8.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
10			0.5	0.7	1.0	1.3	1.9	2.5	3.6	7.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
13					1.0	1.3	1.9	2.3	3.4	6.5	9.5	10.0 ²⁾	10.0 ²⁾
16						1.1	1.6	2.0	3.0	5.5	8.0	10.0 ²⁾	10.0 ²⁾
20							1.4	1.8	2.8	5.0	7.5	10.0 ²⁾	10.0 ²⁾
25								1.8	2.7	4.8	7.0	10.0 ²⁾	10.0 ²⁾
32									2.4	4.1	6.2	9.3	10.0 ²⁾
40										4.0	6.0	9.0	10.0 ²⁾

¹⁾ Selectivity limiting current I_s under 0.5 kA

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

Shaded fields: no selectivity

FAZ towards D01-D03 Fuses

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

FAZ	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
1.0	<0.5 ¹⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	4.1	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.5	1.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.9	7.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.9	2.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
5		<0.5 ¹⁾	0.5	0.8	1.7	4.0	7.0	10.0 ²⁾	10.0 ²⁾
6		<0.5 ¹⁾	0.5	0.8	1.6	3.6	6.0	10.0 ²⁾	10.0 ²⁾
8			0.5	0.8	1.4	2.8	4.3	8.2	10.0 ²⁾
10			0.5	0.7	1.3	2.4	3.4	6.0	10.0 ²⁾
13			<0.5 ¹⁾	0.7	1.2	2.3	3.2	5.3	10.0 ²⁾
16				0.6	1.1	2.2	2.9	4.6	10.0
20					1.1	2.1	2.8	4.4	9.3
25					1.1	2.0	2.7	4.2	8.7
32						2.0	2.6	4.0	8.0
40							2.5	3.8	7.5
50							2.3	3.4	6.7
63									6.2

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

FAZ	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
0.75	<0.5 ¹⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.0	<0.5 ¹⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	0.5	0.6	0.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.9	5.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.8	4.7	9.5	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.6	4.0	7.6	10.0 ²⁾	10.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.5	1.3	3.1	5.7	10.0 ²⁾	10.0 ²⁾
6		<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.7	4.5	10.0 ²⁾	10.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.5	4.0	8.6	10.0 ²⁾
10			<0.5 ¹⁾	<0.5 ¹⁾	1.2	2.3	3.1	5.4	10.0 ²⁾
13					1.1	2.2	3.0	4.9	10.0 ²⁾
16					1.1	2.1	2.8	4.4	9.5
20					1.0	2.0	2.6	4.0	8.3
25						1.9	2.5	3.8	7.8
32							2.5	3.7	7.3
40								3.5	7.0
50									6.5
63									

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

FAZ	D01-D03 gL/gG								
I_n [A]	10	16	20	25	35	50	63	80	100
0.5	<0.5 ¹⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.0	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.8	9.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	2.2	6.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	1.9	5.4	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	1.8	4.8	9.3	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.5	0.7	1.7	4.7	8.6	10.0 ²⁾	10.0 ²⁾
4		<0.5 ¹⁾	0.5	0.7	1.7	4.6	7.7	10.0 ²⁾	10.0 ²⁾
5		<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.5	3.5	5.8	10.0 ²⁾	10.0 ²⁾
6			<0.5 ¹⁾	0.5	1.3	2.9	4.5	9.0	10.0 ²⁾
8			<0.5 ¹⁾	0.5	1.2	2.4	3.5	6.0	10.0 ²⁾
10				0.5	1.1	2.2	3.0	5.0	10.0 ²⁾
13					1.1	2.1	2.9	4.6	10.0 ²⁾
16						1.9	2.6	3.9	9.0
20						1.7	2.3	3.5	8.0
25							2.2	3.4	7.5
32								2.9	6.0
40									5.7

¹⁾ Selectivity limiting current I_s under 0.5 kA

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

Shaded fields: no selectivity

FAZ towards DII-DIV Fuses

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

FAZ	DII-DIV gL/gG								
I _n [A]	10	16	20	25	35	50	63	80	100
1.0	<0.5 ¹⁾	1.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	1.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.4	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	3.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.0	3.5	8.5	10.0 ²⁾	10.0 ²⁾
6		<0.5 ¹⁾	0.6	0.9	1.8	3.2	7.4	10.0 ²⁾	10.0 ²⁾
8		<0.5 ¹⁾	0.5	0.8	1.6	2.6	5.2	8.3	10.0 ²⁾
10			0.5	0.8	1.4	2.2	3.9	6.0	10.0 ²⁾
13			0.5	0.7	1.3	2.0	3.6	5.4	10.0 ²⁾
16				0.6	1.2	1.9	3.2	4.6	8.4
20					1.2	1.8	3.1	4.4	7.8
25					1.2	1.8	3.0	4.2	7.3
32						1.7	2.8	3.9	6.8
40							2.7	3.8	6.5
50							2.5	3.5	5.7
63									5.3

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

FAZ	DII-DIV gL/gG								
I _n [A]	10	16	20	25	35	50	63	80	100
0.75	1.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.0	<0.5 ¹⁾	1.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	<0.5 ¹⁾	1.0	2.2	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.8	1.4	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.8	0.9	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.2	4.5	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.8	1.8	3.6	9.7	10.0 ²⁾	10.0 ²⁾
5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.7	1.5	2.7	7.3	10.0 ²⁾	10.0 ²⁾
6		<0.5 ¹⁾	0.5	0.6	1.4	2.4	5.5	10.0 ²⁾	10.0 ²⁾
8		<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.3	2.2	4.7	8.7	10.0 ²⁾
10			<0.5 ¹⁾	0.6	1.3	2.0	3.6	5.4	10.0 ²⁾
13					1.3	1.9	3.3	5.0	9.4
16					1.2	1.8	3.2	4.4	8.0
20					1.2	1.8	3.1	4.1	7.0
25						1.7	2.8	3.8	6.5
32							2.7	3.7	6.2
40								3.5	5.9
50									5.5
63									

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

FAZ	DII-DIV gL/gG								
I _n [A]	10	16	20	25	35	50	63	80	100
0.5	0.5	3.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.0	<0.5 ¹⁾	<0.5 ¹⁾	1.0	2.4	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
1.5	<0.5 ¹⁾	<0.5 ¹⁾	0.7	1.2	3.5	7.7	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.0	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.0	2.8	5.8	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
2.5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	1.4	2.3	4.6	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.0	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.3	4.3	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
3.5	<0.5 ¹⁾	<0.5 ¹⁾	0.6	0.9	2.1	4.0	10.0 ²⁾	10.0 ²⁾	10.0 ²⁾
4		<0.5 ¹⁾	0.6	0.9	2.0	3.8	9.5	10.0 ²⁾	10.0 ²⁾
5		<0.5 ¹⁾	0.5	0.7	1.7	3.1	7.0	10.0 ²⁾	10.0 ²⁾
6			0.5	0.7	1.5	2.6	5.3	9.1	10.0 ²⁾
8			<0.5 ¹⁾	0.7	1.4	2.2	3.9	6.0	10.0 ²⁾
10				0.7	1.2	1.9	3.4	5.0	9.5
13					1.2	1.8	3.2	4.6	8.6
16						1.6	2.7	4.0	7.4
20						1.5	2.5	3.5	6.7
25							2.4	3.4	6.2
32								2.8	5.0
40									4.8

¹⁾ Selectivity limiting current I_s under 0.5 kA

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

Shaded fields: no selectivity

FAZ-B and NZM 1/2

Selectivity limiting current I_s [kA] for selectivity between FAZ-B and NZM (overload and short-circuit release unit NZM at max. value).

FAZ-B	NZM...1-A... $I_{cu} = 25 (50) \text{ kA}$						FAZ-B	NZM...2-A... $I_{cu} = 25 (50)(100)(150) \text{ kA}$								
	40	50	63	80	100	125		40	50	63	80	100	125	160	200	250
1	15	15	15	15	15	15	1	15	15	15	15	15	15	15	15	15
2	2	15	15	15	15	15	2	3	15	15	15	15	15	15	15	15
3	1.2	2	3	3	10	15	3	1.5	1.5	3	5	15	15	15	15	15
4	1.2	2	3	3	8	15	4	1.2	1.5	3	4	15	15	15	15	15
6	1.2	2	2.5	3	5	10	6	1.2	1.5	2.5	3	15	15	15	15	15
10	1.2	1.5	2	2	4	10	10	1	1.5	2.5	3	10	10	10	10	10
13	1	1.5	2	2	4	10	13	1	1.2	2	3	10	10	10	10	10
16	1	1.2	1.5	2	3	8	16	1	1.2	1.5	2.5	10	10	10	10	10
20	0.8	1.2	1.5	1.5	3	8	20	1	1.2	1.5	1.5	10	10	10	10	10
25	0.7	1.2	1.5	1.5	3	7	25	0.8	1	1.5	2	10	10	10	10	10
32	-	1.2	1	1.5	2	6	32	-	1	1.5	2	8	8	8	8	10
40	-	-	1	1.5	2	5	40	-	-	1.2	1.5	7	7	7	7	10
50	-	-	-	1.2	1.5	4	50	-	-	-	1.5	6	6	6	6	10
63	-	-	-	-	1.5	3	63	-	-	-	-	6	6	6	6	10

FAZ-C and NZM 1/2

Selectivity limiting current I_s [kA] for selectivity between FAZ-C and NZM (overload and short-circuit release unit NZM at max. value).

FAZ-C	NZM...1-A... $I_{cu} = 25 (50) \text{ kA}$						FAZ-C	NZM...2-A... $I_{cu} = 25 (50)(100)(150) \text{ kA}$								
	40	50	63	80	100	125		40	50	63	80	100	125	160	200	250
0.5	15	15	15	15	15	15	0.5	15	15	15	15	15	15	15	15	15
1	15	15	15	15	15	15	1	15	15	15	15	15	15	15	15	15
2	2	15	15	15	15	15	2	3	15	15	15	15	15	15	15	15
3	1.2	2	3	3	10	15	3	1.5	1.5	3	5	15	15	15	15	15
4	1.2	2	3	3	8	15	4	1.2	1.5	3	4	15	15	15	15	15
6	1.2	2	2.5	3	5	10	6	1.2	1.5	2.5	3	15	15	15	15	15
10	1.2	1.5	2	2	4	10	10	1	1.5	2.5	3	10	10	10	10	10
13	1	1.5	2	2	4	10	13	1	1.2	2	3	10	10	10	10	10
16	1	1.2	1.5	2	3	8	16	1	1.2	1.5	2.5	10	10	10	10	10
20	0.8	1.2	1.5	1.5	3	8	20	1	1.2	1.5	1.5	10	10	10	10	10
25	0.7	1.2	1.5	1.5	3	7	25	0.8	1	1.5	2	10	10	10	10	10
32	-	1.2	1	1.5	2	6	32	-	1	1.5	2	8	8	8	8	10
40	-	-	1	1.5	2	5	40	-	-	1.2	1.5	7	7	7	7	10
50	-	-	-	1.2	1.5	4	50	-	-	-	1.5	6	6	6	6	10
63	-	-	-	-	1.5	3	63	-	-	-	-	6	6	6	6	10

FAZ-D and NZM 1/2

Selectivity limiting current I_s [kA] for selectivity between FAZ-D and NZM (overload and short-circuit release unit NZM at max. value).

FAZ-D	NZM...1-A...					
	$I_{cu} = 25 (50) \text{ kA}$					
	40	50	63	80	100	125
0.5	9	15	15	15	15	15
1	0.5	0.7	1.1	1.9	4.2	15
1.5	0.3	0.6	0.8	1.1	1.6	2.6
2	0.3	0.5	0.75	0.95	1.4	2.4
2.5	0.3	0.5	0.75	0.95	1.3	2.3
3	0.3	0.5	0.7	0.9	1.3	2.1
3.5	0.3	0.5	0.7	0.9	1.3	2
4	0.3	0.5	0.7	0.9	1.3	1.9
5	0.3	0.5	0.7	0.9	1.3	1.9
6	0.3	0.5	0.6	0.9	1.3	1.8
8	0.3	0.3	0.6	0.75	1	1.3
10	0.3	0.3	0.6	0.75	0.95	1.2
13	0.3	0.3	0.5	0.7	0.9	1.1
16	-	0.3	0.5	0.65	0.8	1.1
20	-	-	0.5	0.65	0.8	1.1
25	-	-	0.5	0.65	0.8	1.1
32	-	-	-	-	0.8	1.1
40	-	-	-	-	-	1

FAZ-D	NZM...2-A...									
	$I_{cu} = 25 (50)(100)(150) \text{ kA}$									
	40	50	63	80	100	125	160	200	250	
0.5	9	15	15	15	15	15	15	15	15	
1	0.5	0.7	1.1	1.9	4.2	15	15	15	15	
1.5	0.3	0.6	0.8	1.1	1.6	2.6	5	15	15	
2	0.3	0.5	0.75	0.95	1.4	2.4	4.5	10	15	
2.5	0.3	0.5	0.75	0.95	1.3	2.3	4.2	9	15	
3	0.3	0.5	0.7	0.9	1.3	2.1	3.6	7	15	
3.5	0.3	0.5	0.7	0.9	1.3	2	3.3	5.6	10	
4	0.3	0.5	0.7	0.9	1.3	1.9	3	4.7	8	
5	0.3	0.5	0.7	0.9	1.3	1.9	3	4.4	7	
6	0.3	0.5	0.6	0.9	1.3	1.8	2.8	4	6	
8	0.3	0.3	0.6	0.75	1	1.3	1.8	2.7	4	
10	0.3	0.3	0.6	0.75	0.95	1.2	1.7	2.4	3.6	
13	0.3	0.3	0.5	0.7	0.9	1.1	1.6	2.2	3.2	
16	-	0.3	0.5	0.65	0.8	1.1	1.5	2.1	3	
20	-	-	0.5	0.65	0.8	1.1	1.4	2.1	3	
25	-	-	0.5	0.65	0.8	1.1	1.4	1.9	2.7	
32	-	-	-	-	0.8	1.1	1.4	1.9	2.7	
40	-	-	-	-	-	1	1.4	1.8	2.6	

Back-up Protection FAZ

The up-stream protective devices will protect the down-stream FAZ up to the short-circuit current specified.

FAZ/C and AZ/C

FAZ/C	AZ/C								
I_n [A]	20	25	32	40	50	63	80	100	125
1	25	25	25	25	25	25	20	20	15 kA
2	25	25	25	25	25	25	20	20	15 kA
4	25	25	25	25	25	25	20	20	15 kA
6	25	25	25	25	25	25	20	20	15 kA
10	25	25	25	25	25	25	20	20	15 kA
13	25	25	25	25	25	25	20	20	15 kA
16	25	25	25	25	25	25	20	20	15 kA
20	1)	25	25	25	25	25	20	20	15 kA
25	1)	1)	25	25	25	25	20	20	15 kA
32	1)	1)	1)	25	25	25	20	20	-
40	1)	1)	1)	1)	25	25	20	20	-
50	1)	1)	1)	1)	1)	25	20	20	-
63	1)	1)	1)	1)	1)	1)	-	-	-

1) I_n (AZ) $\leq I_n$ (FAZ)

FAZ and CL-PKZ0

Back-up tests acc. to EN/IEC 60947-2, App. A: $U = 1.05 U_e$, (O - t - W)

FAZ B, C	CL-PKZ0
I_n [A]	$U_e = 230/400$ V
0.16	25 kA
0.25	25 kA
0.5	25 kA
0.75	25 kA
1	25 kA
1.5	25 kA
2	25 kA
2.5	25 kA
3	25 kA
3.5	25 kA
4	25 kA
5	20 kA
6	20 kA
8	20 kA
10	20 kA
12	20 kA
13	20 kA
15	20 kA
16	20 kA
20	18 kA
25	18 kA
32	18 kA
40	18 kA
50	15 kA
63	15 kA

FAZ and NZM7

FAZ B, C	NZM7-40(...100)
I_n [A]	$U_e = 230/400$ V
0.16	25 kA
0.25	25 kA
0.5	25 kA
0.75	25 kA
1	25 kA
1.5	25 kA
2	25 kA
2.5	25 kA
3	25 kA
3.5	25 kA
4	25 kA
5	20 kA
6	20 kA
8	20 kA
10	20 kA
12	20 kA
13	20 kA
15	20 kA
16	20 kA
20	18 kA
25	18 kA
32	18 kA
40	18 kA
50	15 kA
63	15 kA

FAZ and NZMB1

$U_e = 230/400\text{ V}$: I_{cu} (FAZ) = 15 kA
 $U_e = 230/400\text{ V}$: I_{cu} (NZMB1) = 25 kA
 Back-up test acc. to EN/IEC 60947-2, app. A: $U = 1.05U_e$, (O - t - W)
 (Settings NZMB1: I_r , I_m at max. volumes)

FAZ B, C	NZMB1
I_n [A]	$U_e = 230/400\text{ V}$
0.16	25 kA
0.25	25 kA
0.5	25 kA
0.75	25 kA
1	25 kA
1.5	25 kA
2	25 kA
2.5	25 kA
3	25 kA
3.5	25 kA
4	25 kA
5	25 kA
6	25 kA
8	25 kA
10	25 kA
12	25 kA
13	25 kA
15	25 kA
16	25 kA
20	20 kA
25	20 kA
32	20 kA
40	20 kA
50	15 kA
63	15 kA

FAZ and NZMN1

$U_e = 230/400\text{ V}$: I_{cu} (FAZ) = 15 kA
 $U_e = 230/400\text{ V}$: I_{cu} (NZMN1) = 25 kA
 Back-up test acc. to EN/IEC 60947-2, app. A: $U = 1.05U_e$, (O - t - W)
 (Settings NZM at max. volumes)

FAZ B, C	NZMN1
I_n [A]	$U_e = 230/400\text{ V}$
0.16	25 kA
0.25	25 kA
0.5	25 kA
0.75	25 kA
1	25 kA
1.5	25 kA
2	25 kA
2.5	25 kA
3	25 kA
3.5	25 kA
4	25 kA
5	25 kA
6	25 kA
8	25 kA
10	25 kA
12	25 kA
13	25 kA
15	25 kA
16	25 kA
20	20 kA
25	20 kA
32	20 kA
40	20 kA
50	15 kA
63	15 kA

FAZ and NZMB2

$U_e = 230/400\text{ V}$: I_{cu} (FAZ) = 15 kA

$U_e = 230/400\text{ V}$: I_{cu} (NZMB2) = 25 kA

$U_e = 133/230\text{ V}$: I_{cu} (FAZ) = 20 kA

$U_e = 133/230\text{ V}$: I_{cu} (NZMB2) = 30 kA

Back-up test acc. to EN/IEC 60947-2, app. A: $U = 1.05U_e$, (O - t - W)

(Settings NZM at max. volumes)

FAZ B, C	NZMB2	
	$U_e = 230/400\text{ V}$	$U_e = 133/230\text{ V}$
I_n [A]		
0.16	25 kA	30 kA
0.25	25 kA	30 kA
0.5	25 kA	30 kA
0.75	25 kA	30 kA
1	25 kA	30 kA
1.5	25 kA	30 kA
2	25 kA	30 kA
2.5	25 kA	30 kA
3	25 kA	30 kA
3.5	25 kA	30 kA
4	25 kA	30 kA
5	25 kA	25 kA
6	25 kA	25 kA
8	25 kA	25 kA
10	25 kA	25 kA
12	20 kA	25 kA
13	20 kA	25 kA
15	20 kA	25 kA
16	20 kA	25 kA
20	20 kA	25 kA
25	20 kA	25 kA
32	20 kA	25 kA
40	15 kA	20 kA
50	15 kA	20 kA
63	15 kA	20 kA

FAZ and NZMN2

$U_e = 230/400\text{ V}$: I_{cu} (FAZ) = 15 kA

$U_e = 230/400\text{ V}$: I_{cu} (NZMN2) = 50 kA

$U_e = 133/230\text{ V}$: I_{cu} (FAZ) = 20 kA

$U_e = 133/230\text{ V}$: I_{cu} (NZMN2) = 85 kA

Back-up test acc. to EN/IEC 60947-2, app. A: $U = 1.05U_e$, (O - t - W)

(Settings NZM at max. volumes)

FAZ B, C	NZMN2	
	$U_e = 230/400\text{ V}$	$U_e = 133/230\text{ V}$
I_n [A]		
0.16	50 kA	85 kA
0.25	50 kA	85 kA
0.5	50 kA	85 kA
0.75	50 kA	85 kA
1	50 kA	85 kA
1.5	50 kA	85 kA
2	50 kA	85 kA
2.5	50 kA	85 kA
3	50 kA	85 kA
3.5	50 kA	85 kA
4	50 kA	85 kA
5	50 kA	80 kA
6	50 kA	80 kA
8	50 kA	80 kA
10	50 kA	80 kA
12	30 kA	60 kA
13	30 kA	60 kA
15	30 kA	60 kA
16	30 kA	60 kA
20	30 kA	60 kA
25	30 kA	60 kA
32	30 kA	60 kA
40	20 kA	40 kA
50	20 kA	40 kA
63	20 kA	40 kA

FAZ and NZMH2

$U_e = 230/400\text{ V}$: I_{cu} (FAZ) = 15 kA
 $U_e = 230/400\text{ V}$: I_{cu} (NZMH2) = 150 kA
 $U_e = 133/230\text{ V}$: I_{cu} (FAZ) = 20 kA
 $U_e = 133/230\text{ V}$: I_{cu} (NZMH2) = 150 kA
 Back-up test acc. to EN/IEC 60947-2, app. A: $U = 1.05U_e$, (O - t - W)
 (Settings NZM at max. volumes)

FAZ B, C	NZMH2	
	$U_e = 230/400\text{ V}$	$U_e = 133/230\text{ V}$
I_n [A]		
0.16	50 kA	85 kA
0.25	50 kA	85 kA
0.5	50 kA	85 kA
0.75	50 kA	85 kA
1	50 kA	85 kA
1.5	50 kA	85 kA
2	50 kA	85 kA
2.5	50 kA	85 kA
3	50 kA	85 kA
3.5	50 kA	85 kA
4	50 kA	85 kA
5	50 kA	80 kA
6	50 kA	80 kA
8	50 kA	80 kA
10	50 kA	80 kA
12	30 kA	60 kA
13	30 kA	60 kA
15	30 kA	60 kA
16	30 kA	60 kA
20	30 kA	60 kA
25	30 kA	60 kA
32	30 kA	60 kA
40	20 kA	40 kA
50	20 kA	40 kA
63	20 kA	40 kA

FAZ and NZML2

$U_e = 230/400\text{ V}$: I_{cu} (FAZ) = 15 kA
 $U_e = 230/400\text{ V}$: I_{cu} (NZML2) = 150 kA
 $U_e = 133/230\text{ V}$: I_{cu} (FAZ) = 20 kA
 $U_e = 133/230\text{ V}$: I_{cu} (NZML2) = 150 kA
 Back-up test acc. to EN/IEC 60947-2, app. A: $U = 1.05U_e$, (O - t - W)
 (Settings NZM at max. volumes)

FAZ B, C	NZML2	
	$U_e = 230/400\text{ V}$	$U_e = 133/230\text{ V}$
I_n [A]		
0.16	50 kA	85 kA
0.25	50 kA	85 kA
0.5	50 kA	85 kA
0.75	50 kA	85 kA
1	50 kA	85 kA
1.5	50 kA	85 kA
2	50 kA	85 kA
2.5	50 kA	85 kA
3	50 kA	85 kA
3.5	50 kA	85 kA
4	50 kA	85 kA
5	50 kA	80 kA
6	50 kA	80 kA
8	50 kA	80 kA
10	50 kA	80 kA
12	30 kA	60 kA
13	30 kA	60 kA
15	30 kA	60 kA
16	30 kA	60 kA
20	30 kA	60 kA
25	30 kA	60 kA
32	30 kA	60 kA
40	20 kA	40 kA
50	20 kA	40 kA
63	20 kA	40 kA

2.210 Miniature Circuit Breakers

FAZ - Technical Data

xEffect

FAZ and NH

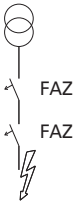
$U_e = 230\text{ V}$: I_{cu} (FAZ) = 15 (10) kA (acc. to IEC/EN 60947)

$U_e = 500\text{ V}$: I_{cu} (NH00 125 A gL / gG) = 120kA

FAZ B, C, D	NH00 125 A gL/gG
I_n [A]	IT-system U = 230 V
0.5	50 kA
1	50 kA
2	50 kA
3	50 kA
4	50 kA
6	50 kA
10	50 kA
13	50 kA
16	50 kA
20	50 kA
25	50 kA
32	50 kA
40	50 kA
50	50 kA
63	50 kA

Overload Selectivity FAZ

FAZ-B(C)(D) to FAZ-B



Upstream side FAZ, Characteristic B
Downstream side FAZ, Characteristic B, C, D

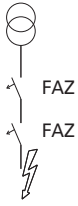
x ... Selectivity range (i.e. only the downstream switch drops in case $I < I_s$)

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side —> FAZ Characteristic B												
	2	3	4	6	10	13	16	20	25	32	40	50	63
2		x	x	x	x	x	x	x	x	x	x	x	x
3			x	x	x	x	x	x	x	x	x	x	x
4				x	x	x	x	x	x	x	x	x	x
6					x	x	x	x	x	x	x	x	x
10						x	x	x	x	x	x	x	x
13							x	x	x	x	x	x	x
16								x	x	x	x	x	x
20									x	x	x	x	x
25										x	x	x	x
32											x	x	x
40												x	x
50													x
63													

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side —> FAZ Characteristic B												
	2	3	4	6	10	13	16	20	25	32	40	50	63
0.5	x	x	x	x	x	x	x	x	x	x	x	x	x
1	x	x	x	x	x	x	x	x	x	x	x	x	x
2			x	x	x	x	x	x	x	x	x	x	x
3				x	x	x	x	x	x	x	x	x	x
4					x	x	x	x	x	x	x	x	x
6						x	x	x	x	x	x	x	x
8							x	x	x	x	x	x	x
10								x	x	x	x	x	x
13									x	x	x	x	x
16										x	x	x	x
20											x	x	x
25												x	x
32													x
40													
50													
63													

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side —> FAZ Characteristic B												
	2	3	4	6	10	13	16	20	25	32	40	50	63
2					x	x	x	x	x	x	x	x	x
4							x	x	x	x	x	x	x
6								x	x	x	x	x	x
10									x	x	x	x	x
13										x	x	x	x
16											x	x	x
20												x	x
25													x
32													
40													

FAZ-B(C)(D) to FAZ-C



Upstream side FAZ, Characteristic C
Downstream side FAZ, Characteristic B, C, D

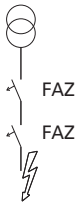
x ... Selectivity range (i.e. only the downstream switch drops in case $I < I_s$)

Type B Rated current I_n [A]	Upstream side → FAZ Characteristic C															
	0.5	1	2	3	4	6	8	10	13	16	20	25	32	40	50	63
Selectivity limiting current I_s [A]	2.85	5.7	11.4	17.1	22.8	34.2	45.6	57	74.1	91.2	114	142.5	182.4	228	285	359.1
Downstream side FAZ Characteristic B	2			x	x	x	x	x	x	x	x	x	x	x	x	x
	3				x	x	x	x	x	x	x	x	x	x	x	x
	4					x	x	x	x	x	x	x	x	x	x	x
	6						x	x	x	x	x	x	x	x	x	x
	10								x	x	x	x	x	x	x	x
	13									x	x	x	x	x	x	x
	16										x	x	x	x	x	x
	20											x	x	x	x	x
	25												x	x	x	x
	32													x	x	x
	40														x	x
	50															x
	63															

Type B Rated current I_n [A]	Upstream side → FAZ Characteristic C															
	0.5	1	2	3	4	6	8	10	13	16	20	25	32	40	50	63
Selectivity limiting current I_s [A]	2.85	5.7	11.4	17.1	22.8	34.2	45.6	57	74.1	91.2	114	142.5	182.4	228	285	359.1
Downstream side FAZ Characteristic C	0.5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1		x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2			x	x	x	x	x	x	x	x	x	x	x	x	x
	3				x	x	x	x	x	x	x	x	x	x	x	x
	4					x	x	x	x	x	x	x	x	x	x	x
	6						x	x	x	x	x	x	x	x	x	x
	8							x	x	x	x	x	x	x	x	x
	10								x	x	x	x	x	x	x	x
	13									x	x	x	x	x	x	x
	16										x	x	x	x	x	x
	20											x	x	x	x	x
	25												x	x	x	x
	32													x	x	x
40														x	x	
50															x	
63																

Type B Rated current I_n [A]	Upstream side → FAZ Characteristic C															
	0.5	1	2	3	4	6	8	10	13	16	20	25	32	40	50	63
Selectivity limiting current I_s [A]	2.85	5.7	11.4	17.1	22.8	34.2	45.6	57	74.1	91.2	114	142.5	182.4	228	285	359.1
Downstream side FAZ Characteristic D	2					x	x	x	x	x	x	x	x	x	x	x
	4						x	x	x	x	x	x	x	x	x	x
	6								x	x	x	x	x	x	x	x
	10										x	x	x	x	x	x
	13											x	x	x	x	x
	16												x	x	x	x
	20													x	x	x
	25														x	x
	32															
	40															

FAZ-B(C)(D) to FAZ-D



Upstream side FAZ, Characteristic D
Downstream side FAZ, Characteristic B, C, D

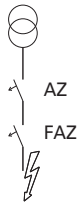
x ...Selectivity range (i.e. only the downstream switch drops in case $I < I_s$)

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side → FAZ Characteristic D										
	2	4	6	10	13	16	20	25	32	40	
	21	42	63	105	136.5	168	210	262.5	336	420	
Downstream side FAZ Characteristic B	2	x	x	x	x	x	x	x	x	x	
	3		x	x	x	x	x	x	x	x	
	4			x	x	x	x	x	x	x	
	6				x	x	x	x	x	x	
	10					x	x	x	x	x	
	13						x	x	x	x	
	16							x	x	x	
	20								x	x	
	25									x	x
	32										x
	40										
	50										
63											

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side → FAZ Characteristic D										
	2	4	6	10	13	16	20	25	32	40	
	21	42	63	105	136.5	168	210	262.5	336	420	
Downstream side FAZ Characteristic C	0.5	x	x	x	x	x	x	x	x	x	
	1	x	x	x	x	x	x	x	x	x	
	2		x	x	x	x	x	x	x	x	
	3			x	x	x	x	x	x	x	
	4				x	x	x	x	x	x	
	6					x	x	x	x	x	
	8						x	x	x	x	
	10							x	x	x	
	13								x	x	
	16									x	x
	20										x
	25										
	32										
	40										
	50										
63											

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side → FAZ Characteristic D										
	2	4	6	10	13	16	20	25	32	40	
	21	42	63	105	136.5	168	210	262.5	336	420	
Downstream side FAZ Characteristic D	2	x	x	x	x	x	x	x	x	x	
	4			x	x	x	x	x	x	x	
	6				x	x	x	x	x	x	
	10					x	x	x	x	x	
	13						x	x	x	x	
	16							x	x	x	
	20								x	x	
	25									x	x
	32										x
	40										

FAZ-B(C)(D) to AZ-C



Upstream side AZ, Characteristic C
Downstream side FAZ, Characteristic B, C, D

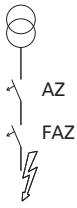
x ... Selectivity range (i.e. only the downstream switch drops in case $I < I_s$)

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side → AZ Characteristic C								
	20	25	32	40	50	63	80	100	125
	130	163	208	260	325	410	520	650	813
Downstream side FAZ Characteristic B	2	x	x	x	x	x	x	x	x
	3	x	x	x	x	x	x	x	x
	4	x	x	x	x	x	x	x	x
	6	x	x	x	x	x	x	x	x
	10	x	x	x	x	x	x	x	x
	13	x	x	x	x	x	x	x	x
	16	x	x	x	x	x	x	x	x
	20		x	x	x	x	x	x	x
	25			x	x	x	x	x	x
	32				x	x	x	x	x
	40					x	x	x	x
	50						x	x	x
	63							x	x

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side → AZ Characteristic C								
	20	25	32	40	50	63	80	100	125
	130	163	208	260	325	410	520	650	813
Downstream side FAZ Characteristic C	0.5	x	x	x	x	x	x	x	x
	1	x	x	x	x	x	x	x	x
	2	x	x	x	x	x	x	x	x
	3	x	x	x	x	x	x	x	x
	4	x	x	x	x	x	x	x	x
	6	x	x	x	x	x	x	x	x
	8	x	x	x	x	x	x	x	x
	10	x	x	x	x	x	x	x	x
	13	x	x	x	x	x	x	x	x
	16	x	x	x	x	x	x	x	x
	20		x	x	x	x	x	x	x
	25			x	x	x	x	x	x
	32				x	x	x	x	x
40					x	x	x	x	
50						x	x	x	
63							x	x	

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side → AZ Characteristic C								
	20	25	32	40	50	63	80	100	125
	130	163	208	260	325	410	520	650	813
Downstream side FAZ Characteristic D	2	x	x	x	x	x	x	x	x
	4	x	x	x	x	x	x	x	x
	6	x	x	x	x	x	x	x	x
	10	x	x	x	x	x	x	x	x
	13		x	x	x	x	x	x	x
	16			x	x	x	x	x	x
	20				x	x	x	x	x
	25					x	x	x	x
	32						x	x	x
	40							x	x

FAZ-B(C)(D) to AZ-D



Upstream side AZ, Characteristic D
Downstream side FAZ, Characteristic B, C, D

x ... Selectivity range (i.e. only the downstream switch drops in case $I < I_s$)

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side —> AZ Characteristic D							
	20	25	32	40	50	63	80	100
	230	285	365	450	550	680	850	1020
Downstream side FAZ Characteristic B	2	x	x	x	x	x	x	x
	3	x	x	x	x	x	x	x
	4	x	x	x	x	x	x	x
	6	x	x	x	x	x	x	x
	10	x	x	x	x	x	x	x
	13	x	x	x	x	x	x	x
	16	x	x	x	x	x	x	x
	20		x	x	x	x	x	x
	25			x	x	x	x	x
	32				x	x	x	x
	40					x	x	x
	50						x	x
	63							x

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side —> AZ Characteristic D							
	20	25	32	40	50	63	80	100
	230	285	365	450	550	680	850	1020
Downstream side FAZ Characteristic C	0.5	x	x	x	x	x	x	x
	1	x	x	x	x	x	x	x
	2	x	x	x	x	x	x	x
	3	x	x	x	x	x	x	x
	4	x	x	x	x	x	x	x
	6	x	x	x	x	x	x	x
	8	x	x	x	x	x	x	x
	10	x	x	x	x	x	x	x
	13	x	x	x	x	x	x	x
	16	x	x	x	x	x	x	x
	20		x	x	x	x	x	x
	25			x	x	x	x	x
	32				x	x	x	x
	40					x	x	x
50						x	x	
63							x	

Type B Rated current I_n [A] Selectivity limiting current I_s [A]	Upstream side —> AZ Characteristic D							
	20	25	32	40	50	63	80	100
	230	285	365	450	550	680	850	1020
Downstream side FAZ Characteristic D	2	x	x	x	x	x	x	x
	4	x	x	x	x	x	x	x
	6	x	x	x	x	x	x	x
	10	x	x	x	x	x	x	x
	13	x	x	x	x	x	x	x
	16	x	x	x	x	x	x	x
	20		x	x	x	x	x	x
	25			x	x	x	x	x
	32				x	x	x	x
40					x	x	x	

Influence of the Line Frequency FAZ

On the Instantaneous Tripping Current I_{MA}

	Line Frequency f [Hz]						
	16²/₃	50	60	100	200	300	400
$I_{MA}(f)/I_{MA}(50\text{ Hz})$ [%]	91	100	101	106	115	134	141