

SG08911



## Description

- 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

Rated  
current  
 $I_n$  (A)

Type  
Designation

Article No.

Units per  
package

**Characteristic B**

SG11911



**1-pole**

1	FAZ6-B1/1	177373	12/120
1.5	FAZ6-B1,5/1	177374	12/120
1.6	FAZ6-B1,6/1	177375	12/120
2	FAZ6-B2/1	177376	12/120
2.5	FAZ6-B2,5/1	177377	12/120
3	FAZ6-B3/1	177378	12/120
3.5	FAZ6-B3,5/1	177379	12/120
4	FAZ6-B4/1	177380	12/120
5	FAZ6-B5/1	177381	12/120
6	FAZ6-B6/1	239001	12/120
8	FAZ6-B8/1	177382	12/120
10	FAZ6-B10/1	239006	12/120
12	FAZ6-B12/1	177395	12/120
13	FAZ6-B13/1	239011	12/120
15	FAZ6-B15/1	177396	12/120
16	FAZ6-B16/1	239016	12/120
20	FAZ6-B20/1	239023	12/120
25	FAZ6-B25/1	239024	12/120
32	FAZ6-B32/1	239025	12/120
40	FAZ6-B40/1	239026	12/120
50	FAZ6-B50/1	239027	12/120
63	FAZ6-B63/1	239028	12/120

SG06911



**1+N-poles**

1	FAZ6-B1/1N	177494	1/60
1.5	FAZ6-B1,5/1N	177495	1/60
1.6	FAZ6-B1,6/1N	177496	1/60
2	FAZ6-B2/1N	177497	1/60
2.5	FAZ6-B2,5/1N	177498	1/60
3	FAZ6-B3/1N	177499	1/60
3.5	FAZ6-B3,5/1N	177500	1/60
4	FAZ6-B4/1N	177501	1/60
5	FAZ6-B5/1N	177502	1/60
6	FAZ6-B6/1N	239044	1/60
8	FAZ6-B8/1N	177503	1/60
10	FAZ6-B10/1N	239045	1/60
12	FAZ6-B12/1N	177504	1/60
13	FAZ6-B13/1N	239046	1/60
15	FAZ6-B15/1N	177505	1/60
16	FAZ6-B16/1N	239047	1/60
20	FAZ6-B20/1N	239048	1/60
25	FAZ6-B25/1N	239049	1/60
32	FAZ6-B32/1N	239050	1/60
40	FAZ6-B40/1N	239051	1/60
50	FAZ6-B50/1N	239052	1/60
63	FAZ6-B63/1N	239053	1/60

# 2.260 Miniature Circuit Breakers

## FAZ - Technical Data

Rated  
current  
 $I_n$  (A)

Type  
Designation

Article No.

Units per  
package

SG08711



### 2-poles

1	FAZ6-B1/2	177540	1/60
1.5	FAZ6-B1,5/2	177541	1/60
1.6	FAZ6-B1,6/2	177542	1/60
2	FAZ6-B2/2	177543	1/60
2.5	FAZ6-B2,5/2	177544	1/60
3	FAZ6-B3/2	177545	1/60
3.5	FAZ6-B3,5/2	177546	1/60
4	FAZ6-B4/2	177547	1/60
5	FAZ6-B5/2	177548	1/60
6	FAZ6-B6/2	239085	1/60
8	FAZ6-B8/2	177549	1/60
10	FAZ6-B10/2	239086	1/60
12	FAZ6-B12/2	177550	1/60
13	FAZ6-B13/2	239087	1/60
15	FAZ6-B15/2	177551	1/60
16	FAZ6-B16/2	239088	1/60
20	FAZ6-B20/2	239089	1/60
25	FAZ6-B25/2	239090	1/60
32	FAZ6-B32/2	239091	1/60
40	FAZ6-B40/2	239092	1/60
50	FAZ6-B50/2	239093	1/60
63	FAZ6-B63/2	239094	1/60

SG08811



### 3-poles

1	FAZ6-B1/3	177577	1/40
1.5	FAZ6-B1,5/3	177578	1/40
1.6	FAZ6-B1,6/3	177579	1/40
2	FAZ6-B2/3	177580	1/40
2.5	FAZ6-B2,5/3	177581	1/40
3	FAZ6-B3/3	177582	1/40
3.5	FAZ6-B3,5/3	177583	1/40
4	FAZ6-B4/3	177584	1/40
5	FAZ6-B5/3	177585	1/40
6	FAZ6-B6/3	239110	1/40
8	FAZ6-B8/3	177586	1/40
10	FAZ6-B10/3	239111	1/40
12	FAZ6-B12/3	177587	1/40
13	FAZ6-B13/3	239112	1/40
15	FAZ6-B15/3	177588	1/40
16	FAZ6-B16/3	239113	1/40
20	FAZ6-B20/3	239114	1/40
25	FAZ6-B25/3	239115	1/40
32	FAZ6-B32/3	239116	1/40
40	FAZ6-B40/3	239117	1/40
50	FAZ6-B50/3	239118	1/40
63	FAZ6-B63/3	239119	1/40

Rated current  
 $I_n$  (A)

Type Designation

Article No.

Units per package

SG08911



**3+N-poles**

1	FAZ6-B1/3N	177446	1/30
1.5	FAZ6-B1,5/3N	177447	1/30
1.6	FAZ6-B1,6/3N	177448	1/30
2	FAZ6-B2/3N	177449	1/30
2.5	FAZ6-B2,5/3N	177450	1/30
3	FAZ6-B3/3N	177451	1/30
3.5	FAZ6-B3,5/3N	177452	1/30
4	FAZ6-B4/3N	177453	1/30
5	FAZ6-B5/3N	177454	1/30
6	FAZ6-B6/3N	239155	1/30
8	FAZ6-B8/3N	177455	1/30
10	FAZ6-B10/3N	239156	1/30
12	FAZ6-B12/3N	177456	1/30
13	FAZ6-B13/3N	239157	1/30
15	FAZ6-B15/3N	177457	1/30
16	FAZ6-B16/3N	239158	1/30
20	FAZ6-B20/3N	239159	1/30
25	FAZ6-B25/3N	239160	1/30
32	FAZ6-B32/3N	239161	1/30
40	FAZ6-B40/3N	239162	1/30
50	FAZ6-B50/3N	239163	1/30
63	FAZ6-B63/3N	239164	1/30

SG12011



**4-poles**

1	FAZ6-B1/4	177420	1/30
1.5	FAZ6-B1,5/4	177421	1/30
1.6	FAZ6-B1,6/4	177422	1/30
2	FAZ6-B2/4	177423	1/30
2.5	FAZ6-B2,5/4	177424	1/30
3	FAZ6-B3/4	177425	1/30
3.5	FAZ6-B3,5/4	177426	1/30
4	FAZ6-B4/4	177427	1/30
5	FAZ6-B5/4	177428	1/30
6	FAZ6-B6/4	239180	1/30
8	FAZ6-B8/4	177429	1/30
10	FAZ6-B10/4	239181	1/30
12	FAZ6-B12/4	177430	1/30
13	FAZ6-B13/4	239182	1/30
15	FAZ6-B15/4	177431	1/30
16	FAZ6-B16/4	239183	1/30
20	FAZ6-B20/4	239184	1/30
25	FAZ6-B25/4	239185	1/30
32	FAZ6-B32/4	239186	1/30
40	FAZ6-B40/4	239187	1/30
50	FAZ6-B50/4	239188	1/30
63	FAZ6-B63/4	239189	1/30

Rated  
current  
 $I_n$  (A)

Type  
Designation

Article No.

Units per  
package

SG11911



## Characteristic C

### 1-pole

0.16	FAZ6-C0,16/1	177397	12/120
0.25	FAZ6-C0,25/1	177398	12/120
0.5	FAZ6-C0,5/1	239029	12/120
0.75	FAZ6-C0,75/1	177383	12/120
1	FAZ6-C1/1	239030	12/120
1.5	FAZ6-C1,5/1	177384	12/120
1.6	FAZ6-C1,6/1	177385	12/120
2	FAZ6-C2/1	239031	12/120
2.5	FAZ6-C2,5/1	177386	12/120
3	FAZ6-C3/1	239032	12/120
3.5	FAZ6-C3,5/1	177387	12/120
4	FAZ6-C4/1	239033	12/120
5	FAZ6-C5/1	177388	12/120
6	FAZ6-C6/1	239034	12/120
8	FAZ6-C8/1	177389	12/120
10	FAZ6-C10/1	239035	12/120
12	FAZ6-C12/1	177390	12/120
13	FAZ6-C13/1	239036	12/120
15	FAZ6-C15/1	177391	12/120
16	FAZ6-C16/1	239037	12/120
20	FAZ6-C20/1	239038	12/120
25	FAZ6-C25/1	239039	12/120
32	FAZ6-C32/1	239040	12/120
40	FAZ6-C40/1	239041	12/120
50	FAZ6-C50/1	239042	12/120
63	FAZ6-C63/1	239043	12/120

SG06911



### 1+N-poles

0.16	FAZ6-C0,16/1N	177506	1/60
0.25	FAZ6-C0,25/1N	177507	1/60
0.5	FAZ6-C0,5/1N	239054	1/60
0.75	FAZ6-C0,75/1N	177508	1/60
1	FAZ6-C1/1N	239055	1/60
1.5	FAZ6-C1,5/1N	177509	1/60
1.6	FAZ6-C1,6/1N	177510	1/60
2	FAZ6-C2/1N	239056	1/60
2.5	FAZ6-C2,5/1N	177511	1/60
3	FAZ6-C3/1N	239057	1/60
3.5	FAZ6-C3,5/1N	177512	1/60
4	FAZ6-C4/1N	239058	1/60
5	FAZ6-C5/1N	177513	1/60
6	FAZ6-C6/1N	239059	1/60
8	FAZ6-C8/1N	177514	1/60
10	FAZ6-C10/1N	239060	1/60
12	FAZ6-C12/1N	177515	1/60
13	FAZ6-C13/1N	239061	1/60
15	FAZ6-C15/1N	177516	1/60
16	FAZ6-C16/1N	239066	1/60
20	FAZ6-C20/1N	239071	1/60
25	FAZ6-C25/1N	239076	1/60
32	FAZ6-C32/1N	239081	1/60
40	FAZ6-C40/1N	239082	1/60
50	FAZ6-C50/1N	239083	1/60
63	FAZ6-C63/1N	239084	1/60

Rated current  
 $I_n$  (A)

Type Designation

Article No.

Units per package

SG08711



**2-poles**

0.16	FAZ6-C0,16/2	177552	1/60
0.25	FAZ6-C0,25/2	177553	1/60
0.5	FAZ6-C0,5/2	239095	1/60
0.75	FAZ6-C0,75/2	177554	1/60
1	FAZ6-C1/2	239096	1/60
1.5	FAZ6-C1,5/2	177555	1/60
1.6	FAZ6-C1,6/2	177556	1/60
2	FAZ6-C2/2	239097	1/60
2.5	FAZ6-C2,5/2	177557	1/60
3	FAZ6-C3/2	239098	1/60
3.5	FAZ6-C3,5/2	177558	1/60
4	FAZ6-C4/2	239099	1/60
5	FAZ6-C5/2	177559	1/60
6	FAZ6-C6/2	239100	1/60
8	FAZ6-C8/2	177560	1/60
10	FAZ6-C10/2	239101	1/60
12	FAZ6-C12/2	177561	1/60
13	FAZ6-C13/2	239102	1/60
15	FAZ6-C15/2	177562	1/60
16	FAZ6-C16/2	239103	1/60
20	FAZ6-C20/2	239104	1/60
25	FAZ6-C25/2	239105	1/60
32	FAZ6-C32/2	239106	1/60
40	FAZ6-C40/2	239107	1/60
50	FAZ6-C50/2	239108	1/60
63	FAZ6-C63/2	239109	1/60

SG08811



**3-poles**

0.16	FAZ6-C0,16/3	177589	1/40
0.25	FAZ6-C0,25/3	177590	1/40
0.5	FAZ6-C0,5/3	239120	1/40
0.75	FAZ6-C0,75/3	177399	1/40
1	FAZ6-C1/3	239121	1/40
1.5	FAZ6-C1,5/3	177400	1/40
1.6	FAZ6-C1,6/3	177401	1/40
2	FAZ6-C2/3	239122	1/40
2.5	FAZ6-C2,5/3	177402	1/40
3	FAZ6-C3/3	239127	1/40
3.5	FAZ6-C3,5/3	177403	1/40
4	FAZ6-C4/3	239132	1/40
5	FAZ6-C5/3	177404	1/40
6	FAZ6-C6/3	239139	1/40
8	FAZ6-C8/3	177405	1/40
10	FAZ6-C10/3	239144	1/40
12	FAZ6-C12/3	177406	1/40
13	FAZ6-C13/3	239147	1/40
15	FAZ6-C15/3	177407	1/40
16	FAZ6-C16/3	239148	1/40
20	FAZ6-C20/3	239149	1/40
25	FAZ6-C25/3	239150	1/40
32	FAZ6-C32/3	239151	1/40
40	FAZ6-C40/3	239152	1/40
50	FAZ6-C50/3	239153	1/40
63	FAZ6-C63/3	239154	1/40

Rated  
current  
 $I_n$  (A)

Type  
Designation

Article No.

Units per  
package

SG08911



### 3+N-poles

0.16	FAZ6-C0,16/3N	177458	1/30
0.25	FAZ6-C0,25/3N	177459	1/30
0.5	FAZ6-C0,5/3N	239165	1/30
0.75	FAZ6-C0,75/3N	177460	1/30
1	FAZ6-C1/3N	239166	1/30
1.5	FAZ6-C1,5/3N	177461	1/30
1.6	FAZ6-C1,6/3N	177462	1/30
2	FAZ6-C2/3N	239167	1/30
2.5	FAZ6-C2,5/3N	177463	1/30
3	FAZ6-C3/3N	239168	1/30
3.5	FAZ6-C3,5/3N	177464	1/30
4	FAZ6-C4/3N	239169	1/30
5	FAZ6-C5/3N	177465	1/30
6	FAZ6-C6/3N	239170	1/30
8	FAZ6-C8/3N	177466	1/30
10	FAZ6-C10/3N	239171	1/30
12	FAZ6-C12/3N	177467	1/30
13	FAZ6-C13/3N	239172	1/30
15	FAZ6-C15/3N	177468	1/30
16	FAZ6-C16/3N	239173	1/30
20	FAZ6-C20/3N	239174	1/30
25	FAZ6-C25/3N	239175	1/30
32	FAZ6-C32/3N	239176	1/30
40	FAZ6-C40/3N	239177	1/30
50	FAZ6-C50/3N	239178	1/30
63	FAZ6-C63/3N	239179	1/30

SG12011



### 4-poles

0.16	FAZ6-C0,16/4	177432	1/30
0.25	FAZ6-C0,25/4	177433	1/30
0.5	FAZ6-C0,5/4	239190	1/30
0.75	FAZ6-C0,75/4	177434	1/30
1	FAZ6-C1/4	239191	1/30
1.5	FAZ6-C1,5/4	177591	1/30
1.6	FAZ6-C1,6/4	177592	1/30
2	FAZ6-C2/4	239192	1/30
2.5	FAZ6-C2,5/4	177593	1/30
3	FAZ6-C3/4	239193	1/30
3.5	FAZ6-C3,5/4	177594	1/30
4	FAZ6-C4/4	239194	1/30
5	FAZ6-C5/4	177595	1/30
6	FAZ6-C6/4	239199	1/30
8	FAZ6-C8/4	177596	1/30
10	FAZ6-C10/4	239204	1/30
12	FAZ6-C12/4	177597	1/30
13	FAZ6-C13/4	239211	1/30
15	FAZ6-C15/4	177598	1/30
16	FAZ6-C16/4	239216	1/30
20	FAZ6-C20/4	239219	1/30
25	FAZ6-C25/4	239220	1/30
32	FAZ6-C32/4	239221	1/30
40	FAZ6-C40/4	239222	1/30
50	FAZ6-C50/4	239223	1/30
63	FAZ6-C63/4	239224	1/30

Rated current  
I<sub>n</sub> (A)

Type Designation

Article No.

Units per package

**Characteristic D**

SG11911



**1-pole**

0.5	FAZ6-D0,5/1	177392	1/120
1	FAZ6-D1/1	177393	1/120
1.5	FAZ6-D1,5/1	177394	1/120
1.6	FAZ6-D1,6/1	177483	1/120
2	FAZ6-D2/1	177484	1/120
2.5	FAZ6-D2,5/1	177485	1/120
3	FAZ6-D3/1	177486	1/120
3.5	FAZ6-D3,5/1	177487	1/120
4	FAZ6-D4/1	177488	1/120
5	FAZ6-D5/1	177489	1/120
6	FAZ6-D6/1	168061	1/120
8	FAZ6-D8/1	177490	1/120
10	FAZ6-D10/1	168062	1/120
12	FAZ6-D12/1	177491	1/120
13	FAZ6-D13/1	177492	1/120
15	FAZ6-D15/1	177493	1/120
16	FAZ6-D16/1	168063	1/120
20	FAZ6-D20/1	168064	1/120
25	FAZ6-D25/1	168065	1/120
32	FAZ6-D32/1	168066	1/120
40	FAZ6-D40/1	168067	1/120
50	FAZ6-D50/1	168068	1/120
63	FAZ6-D63/1	168069	1/120

SG06911



**1+N Pole**

0.5	FAZ6-D0,5/1N	177517	1/60
1	FAZ6-D1/1N	177518	1/60
1.5	FAZ6-D1,5/1N	177519	1/60
1.6	FAZ6-D1,6/1N	177520	1/60
2	FAZ6-D2/1N	177521	1/60
2.5	FAZ6-D2,5/1N	177522	1/60
3	FAZ6-D3/1N	177523	1/60
3.5	FAZ6-D3,5/1N	177524	1/60
4	FAZ6-D4/1N	177525	1/60
5	FAZ6-D5/1N	177526	1/60
6	FAZ6-D6/1N	177527	1/60
8	FAZ6-D8/1N	177528	1/60
10	FAZ6-D10/1N	177529	1/60
12	FAZ6-D12/1N	177530	1/60
13	FAZ6-D13/1N	177531	1/60
15	FAZ6-D15/1N	177532	1/60
16	FAZ6-D16/1N	177533	1/60
20	FAZ6-D20/1N	177534	1/60
25	FAZ6-D25/1N	177535	1/60
32	FAZ6-D32/1N	177536	1/60
40	FAZ6-D40/1N	177537	1/60
50	FAZ6-D50/1N	177538	1/60
63	FAZ6-D63/1N	177539	1/60



Rated current  
 $I_n$  (A)

Type Designation

Article No.

Units per package

SG08711



### 2-poles

0.5	FAZ6-D0,5/2	177563	1/60
1	FAZ6-D1/2	177564	1/60
1.5	FAZ6-D1,5/2	177565	1/60
1.6	FAZ6-D1,6/2	177566	1/60
2	FAZ6-D2/2	177567	1/60
2.5	FAZ6-D2,5/2	177568	1/60
3	FAZ6-D3/2	177569	1/60
3.5	FAZ6-D3,5/2	177570	1/60
4	FAZ6-D4/2	177571	1/60
5	FAZ6-D5/2	177572	1/60
6	FAZ6-D6/2	168070	1/60
8	FAZ6-D8/2	177573	1/60
10	FAZ6-D10/2	168071	1/60
12	FAZ6-D12/2	177574	1/60
13	FAZ6-D13/2	177575	1/60
15	FAZ6-D15/2	177576	1/60
16	FAZ6-D16/2	168072	1/60
20	FAZ6-D20/2	168073	1/60
25	FAZ6-D25/2	168074	1/60
32	FAZ6-D32/2	168075	1/60
40	FAZ6-D40/2	168076	1/60
50	FAZ6-D50/2	168077	1/60
63	FAZ6-D63/2	168078	1/60

SG08811



### 3-poles

0.5	FAZ6-D0,5/3	177408	1/40
1	FAZ6-D1/3	177409	1/40
1.5	FAZ6-D1,5/3	177410	1/40
1.6	FAZ6-D1,6/3	177435	1/40
2	FAZ6-D2/3	177436	1/40
2.5	FAZ6-D2,5/3	177437	1/40
3	FAZ6-D3/3	177438	1/40
3.5	FAZ6-D3,5/3	177439	1/40
4	FAZ6-D4/3	177440	1/40
5	FAZ6-D5/3	177441	1/40
6	FAZ6-D6/3	168079	1/40
8	FAZ6-D8/3	177442	1/40
10	FAZ6-D10/3	168080	1/40
12	FAZ6-D12/3	177443	1/40
13	FAZ6-D13/3	177444	1/40
15	FAZ6-D15/3	177445	1/40
16	FAZ6-D16/3	168081	1/40
20	FAZ6-D20/3	168082	1/40
25	FAZ6-D25/3	168083	1/40
32	FAZ6-D32/3	168084	1/40
40	FAZ6-D40/3	168085	1/40
50	FAZ6-D50/3	168086	1/40
63	FAZ6-D63/3	168087	1/40

Rated  
current  
 $I_n$  (A)

Type  
Designation

Article No.

Units per  
package

SG08911



**3+N Pole**

0.5	FAZ6-D0,5/3N	177469	1/30
1	FAZ6-D1/3N	177470	1/30
1.5	FAZ6-D1,5/3N	177471	1/30
1.6	FAZ6-D1,6/3N	177472	1/30
2	FAZ6-D2/3N	177473	1/30
2.5	FAZ6-D2,5/3N	177474	1/30
3	FAZ6-D3/3N	177475	1/30
3.5	FAZ6-D3,5/3N	177476	1/30
4	FAZ6-D4/3N	177477	1/30
5	FAZ6-D5/3N	177478	1/30
6	FAZ6-D6/3N	177479	1/30
8	FAZ6-D8/3N	177480	1/30
10	FAZ6-D10/3N	177481	1/30
12	FAZ6-D12/3N	177482	1/30
13	FAZ6-D13/3N	177411	1/30
15	FAZ6-D15/3N	177412	1/30
16	FAZ6-D16/3N	177413	1/30
20	FAZ6-D20/3N	177414	1/30
25	FAZ6-D25/3N	177415	1/30
32	FAZ6-D32/3N	177416	1/30
40	FAZ6-D40/3N	177417	1/30
50	FAZ6-D50/3N	177418	1/30
63	FAZ6-D63/3N	177419	1/30

SG12011



**4-poles**

0.5	FAZ6-D0,5/4	177599	1/30
1	FAZ6-D1/4	177600	1/30
1.5	FAZ6-D1,5/4	177601	1/30
1.6	FAZ6-D1,6/4	177602	1/30
2	FAZ6-D2/4	177603	1/30
2.5	FAZ6-D2,5/4	177604	1/30
3	FAZ6-D3/4	177605	1/30
3.5	FAZ6-D3,5/4	177606	1/30
4	FAZ6-D4/4	177607	1/30
5	FAZ6-D5/4	177608	1/30
6	FAZ6-D6/4	168088	1/30
8	FAZ6-D8/4	177609	1/30
10	FAZ6-D10/4	168089	1/30
12	FAZ6-D12/4	177610	1/30
13	FAZ6-D13/4	177611	1/30
15	FAZ6-D15/4	177612	1/30
16	FAZ6-D16/4	168090	1/30
20	FAZ6-D20/4	168091	1/30
25	FAZ6-D25/4	168092	1/30
32	FAZ6-D32/4	168093	1/30
40	FAZ6-D40/4	168094	1/30
50	FAZ6-D50/4	168095	1/30
63	FAZ6-D63/4	168096	1/30

## Miniature Circuit Breakers FAZ6

### 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

### Technical Data

Electrical	B Characteristic	C Characteristic	D Characteristic
Approvals	UR (UL 1077), CSA (CSA 22.2 No. 235), CE, ÖVE, EAC		
Standards	IEC/EN 60947-2, IEC/EN 60898-1		
Short-circuit trip response	3–5 I <sub>n</sub>	5–10 I <sub>n</sub>	10–20 I <sub>n</sub>

### 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 <sub>n</sub> @ 40°C	< 1 hour @ 1.35 x I <sub>n</sub> @ 40°C	< 1 hour @ 1.35 x I <sub>n</sub> @ 40°C
Multi-pole	< 1 hour @ 1.45 x I <sub>n</sub> @ 40°C	< 1 hour @ 1.45 x I <sub>n</sub> @ 40°C	< 1 hour @ 1.45 x I <sub>n</sub> @ 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	1–63 A	0.16–63 A	0.5–63 A
Maximum voltage ratings - IEC 60947-2			
Single-pole, single-pole + neutral	230 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	400 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
Two-, three-, four-pole and three-pole + neutral	415 V AC	415 V AC	415 V AC
Thermal tripping characteristics - IEC 60947-2			
	> 1 hour @ 1.05 x I <sub>n</sub> @ 40°C < 1 hour @ 1.3 x I <sub>n</sub> @ 40°C	> 1 hour @ 1.05 x I <sub>n</sub> @ 40°C < 1 hour @ 1.3 x I <sub>n</sub> @ 40°C	> 1 hour @ 1.05 x I <sub>n</sub> @ 40°C < 1 hour @ 1.3 x I <sub>n</sub> @ 40°C
Interrupt ratings (at max. voltage)			
IEC 60947-2	10 kA	10 kA	10 kA (Type D50 and D63: 10 kA)
IEC 60898	6 kA	6 kA	6 kA (Type D50 und D63: not tested)
Operational switching capacity	7.5 kA	7.5 kA	7.5 kA (Type D50 und D63: 6 kA)
Max. back-up fuse [gL/gG]	100 A	100 A	100 A
Rated impulse withstand voltage - U <sub>imp</sub>	4000 V AC	4000 V AC	4000 V AC
Rated insulation voltage - U <sub>i</sub>	440 V AC	440 V AC	440 V AC

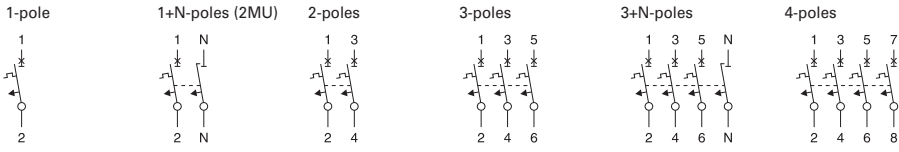
### Environmental / General

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)	15 g / 20 ms	15 g / 20 ms	15 g / 20 ms
Operating temperature range	-40 up to +75°C	-40 up to +75°C	-40 up to +75°C

### Mechanical

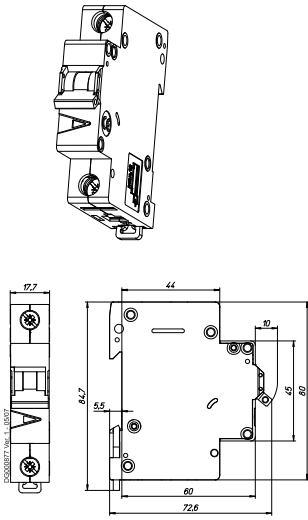
Device height	80 mm	80 mm	80 mm
Terminal protection	Finger and back-of-hand proof	Finger and back-of-hand proof	Finger and back-of-hand proof
Mounting width per pole	17.5 mm	17.5 mm	17.5 mm
Mounting	IEC/EN 60715 top-hat rail	IEC/EN 60715 top-hat rail	IEC/EN 60715 top-hat rail
Degree of protection	IP20	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 <sup>2</sup> ]	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

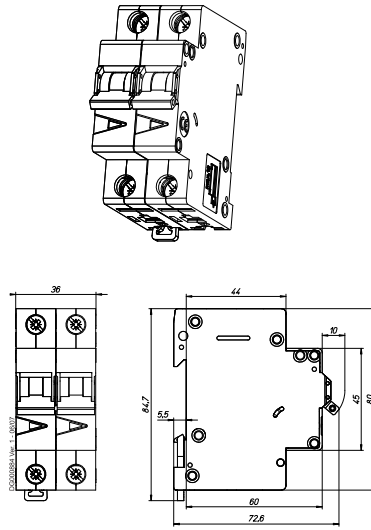


Dimensions (mm) FAZ6

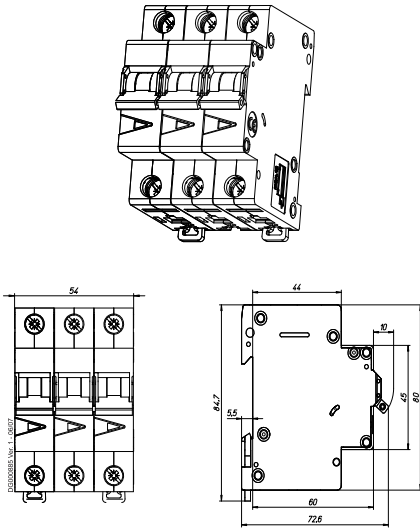
1-pole



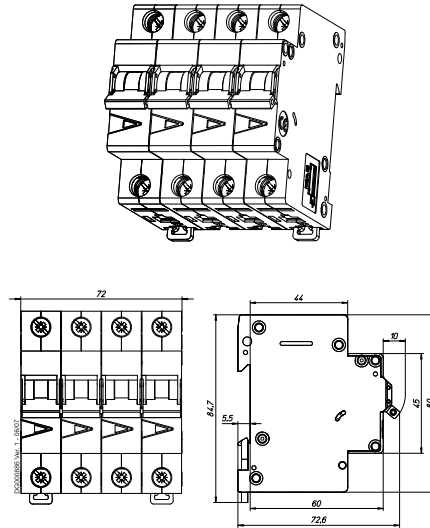
1+N-poles, 2-poles



3-poles

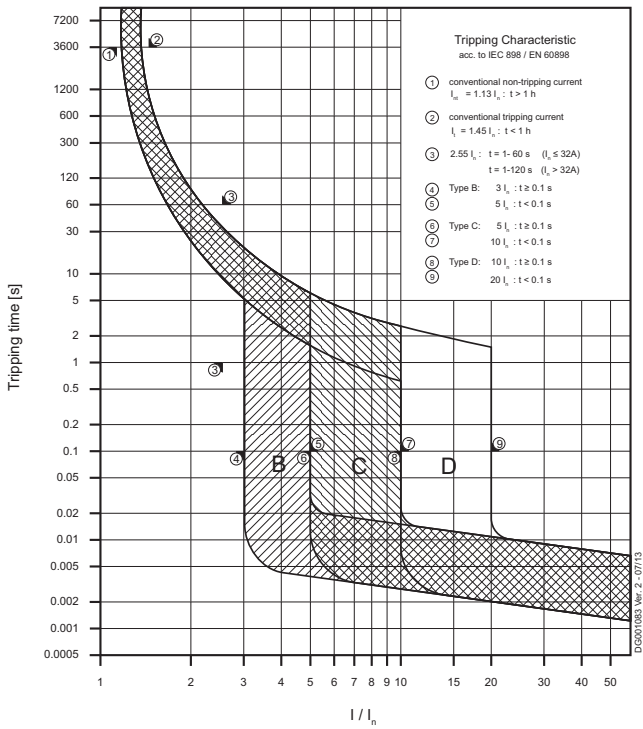


3+N-poles, 4-poles

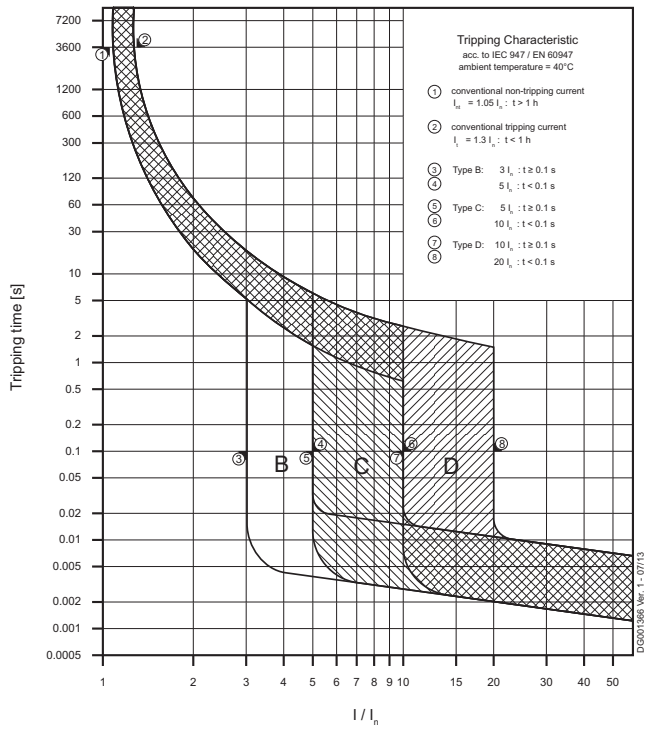


## Tripping Characteristics FAZ6

Characteristics B, C and D - IEC 898, EN 60898



Characteristics B, C and D - IEC 947, EN 60947



**Internal ResistanceFAZ6**

**Type B**

At room temperature (single pole)

$I_n$ [A]	$R^*$ [mΩ]
6	46.8
10	17.5
13	13.4
16	8.0
20	7.2
25	5.0
32	3.7
40	2.6
50	2.1
63	2.0
* 50 Hz	

**Type C**

At room temperature (single pole)

0.5	4680
1	1120
2	335
3	131
4	87.7
6	39.3
10	14.1
13	13.4
16	8.0
20	7.2
25	5.0
32	3.7
40	2.6
50	2.1
63	2.0
* 50 Hz	

**Type B**

At room temperature (single pole)

$I_n$ [A]	$R^*$ [mΩ]
6	39.3
10	14.1
16	8.0
20	4.9
25	3.9
32	3.5
40	2.7
50	1.9
63	1.5
* 50 Hz	

## Power Loss at $I_n$ FAZ6

<b>Type B</b>					
$I_n$ [A]	1p P* [W]	1pN P* [W]	2p P* [W]	3p P* [W]	3pN P* [W]
6	1.8	2	3.6	5.5	5.6
10	1.9	2.1	3.9	5.9	6.1
13	2.5	2.9	5.3	7.8	8.1
16	2.2	2.6	4.7	6.9	7.2
20	3.2	3.6	6.6	9.8	10.1
25	3	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

\* 50 Hz

<b>Type C</b>					
$I_n$ [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	1.6	1.7	3.1	4.7	4.8
2	1.4	1.5	2.8	4.1	4.3
3	1.2	1.3	2.4	3.6	3.7
4	1.4	1.6	2.9	4.4	4.5
6	1.5	1.6	2.9	4.4	4.6
10	1.5	1.7	3	4.6	4.7
13	2.5	2.9	5.3	7.8	8.1
16	2.2	2.6	4.7	6.9	7.2
20	3.2	3.6	6.6	9.8	10.1
25	3	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

\* 50 Hz

<b>Type D</b>					
$I_n$ [A]	1p P* [W]	1pN P* [W]	2p P* [W]	3p P* [W]	3pN P* [W]
6	1.5	1.6	2.9	4.4	4.6
10	1.5	1.7	3	4.6	4.7
16	2.2	2.6	4.7	6.9	7.2
20	2	2.2	4.1	6.8	6.2
25	2.5	2.9	5.2	7.7	7.9
32	3.4	4	7.4	11.1	11.4
40	3.2	3.8	7	10.4	10.7
50	4.9	7.5	9.8	14.6	17.3
63	6.8	11.9	13.6	20.4	25.5

\* 50 Hz

**Influence of Ambient Temperature on Load Carrying Capacity (temperature derating) at I<sub>n</sub> IEC 898, FAZ6**

Values in the table display the nominal current I<sub>n</sub> in ampere depending on the ambient temperature

I <sub>n</sub> [A]	Ambient Temperature T [°C]																
	-40	-30	-20	-10	0	10	20	30	35	40	45	50	55	60	65	70	75
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
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
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
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
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
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
10	10	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9	8.9	8.7	8.5	8.3
13	17	16	16	15	15	14	14	13	13	13	12	12	12	12	11	11	11
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

**Influence of Ambient Temperature on Load Carrying Capacity (temperature derating) at I<sub>n</sub> IEC 947, FAZ6**

Values in the table display the nominal current I<sub>n</sub> in ampere depending on the ambient temperature

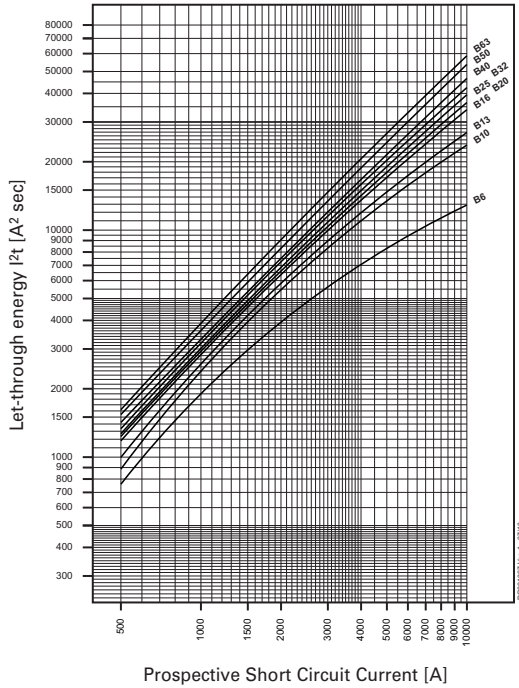
I <sub>n</sub> [A]	Ambient Temperature T [°C]																
	-40	-30	-20	-10	0	10	20	30	35	40	45	50	55	60	65	70	75
0.5	0.68	0.66	0.64	0.62	0.6	0.58	0.56	0.54	0.52	0.5	0.49	0.48	0.47	0.46	0.45	0.44	0.43
1	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1	1	0.99	0.97	0.95	0.93	0.9	0.89	0.87
2	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.2	2.1	2	2	1.9	1.9	1.9	1.8	1.8	1.7
3	4	3.9	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
4	5.4	5.3	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
6	8.2	8	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
10	12	11	10	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9	8.9	8.7
13	18	17	17	16	16	15	15	14	14	13	13	13	12	12	12	12	11
16	21	21	20	20	19	19	18	17	17	16	16	15	15	15	14	14	14
20	28	27	26	25	24	23	22	22	21	20	20	19	19	19	18	18	17
25	34	33	32	31	30	29	28	27	26	25	25	24	24	23	23	22	22
32	44	42	41	40	38	37	36	35	33	32	32	31	30	30	29	28	28
40	54	53	51	50	48	47	45	43	42	40	39	39	38	37	36	35	35
50	68	66	64	62	60	58	56	54	52	50	49	48	47	46	45	44	43
63	86	83	81	78	76	73	71	68	66	63	62	61	60	58	57	56	55



## Maximum Let-Through Energy IEC 947, FAZ6

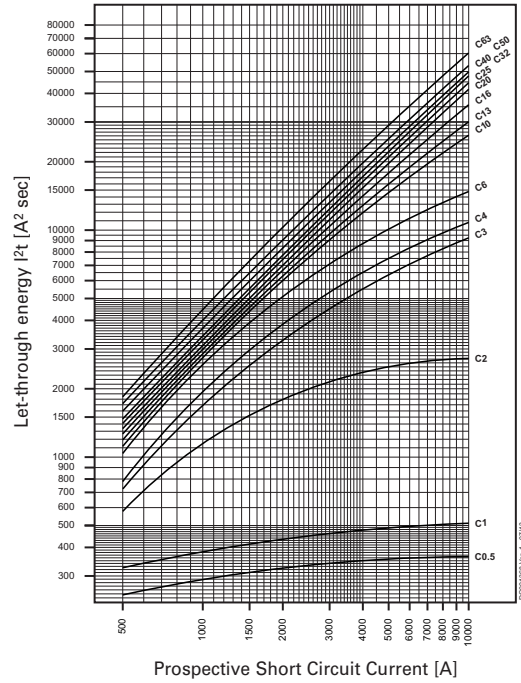
Let-through energy FAZ6, Characteristic B, 1-pole

230 V / 400 V



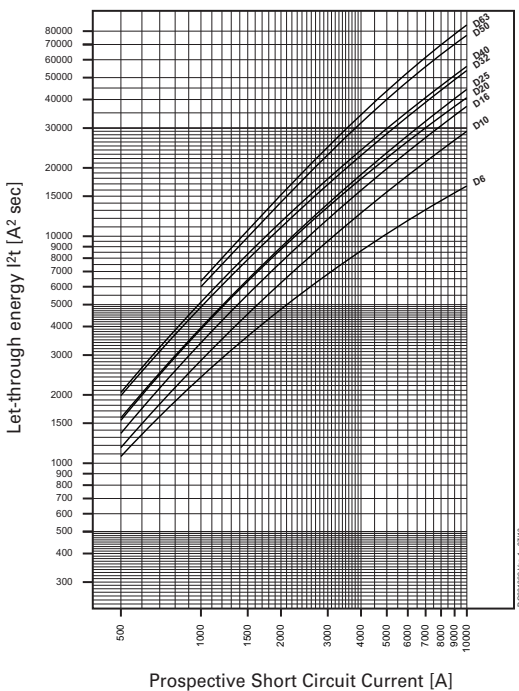
Let-through energy FAZ6, Characteristic C, 1-pole

230 V / 400 V



Let-through energy FAZ6, Characteristic D, 1-pole

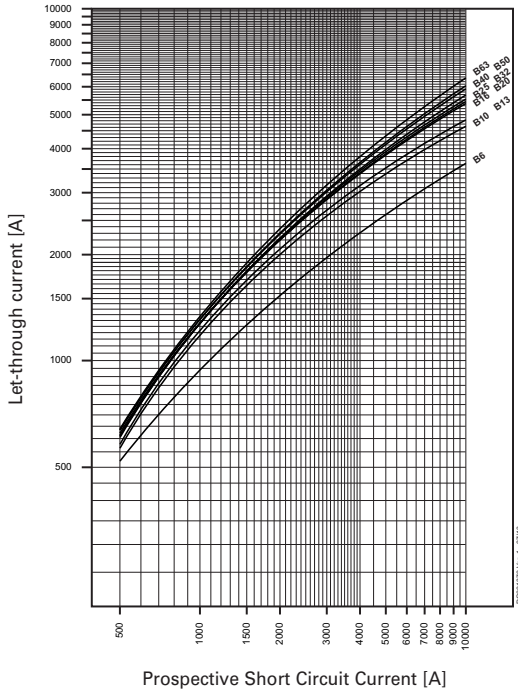
230 V / 400 V



**Maximum Let-Through Current IEC 947, FAZ6**

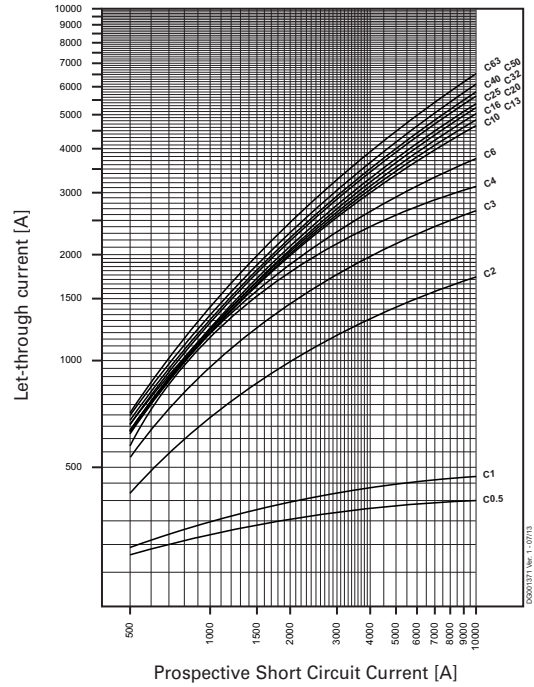
Let-through current FAZ6, Characteristic B, 1-pole

230 V / 400 V



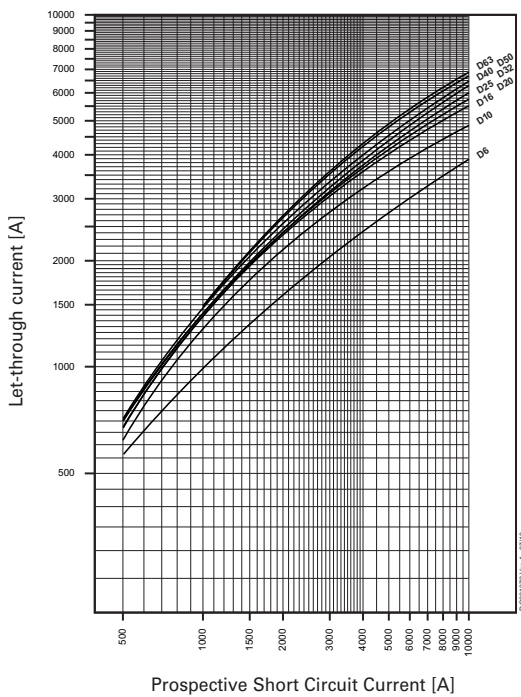
Let-through current FAZ6, Characteristic C, 1-pole

230 V / 400 V



Let-through current FAZ6, Characteristic D, 1-pole

230 V / 400 V



## Influence of the Line Frequency FAZ

On the Instantaneous Tripping Current  $I_{MA}$

	Line Frequency f [Hz]						
	<b>16<sup>2</sup>/<sub>3</sub></b>	<b>50</b>	<b>60</b>	<b>100</b>	<b>200</b>	<b>300</b>	<b>400</b>
$I_{MA}(f)/I_{MA}(50\text{ Hz})$ [%]	91	100	101	106	115	134	141

## Load Capacity of Series Connected Miniature Circuit Breakers

