

xEffect - Industrial Switchgear Range Miniature Circuit Breakers FAZ-DC



Catalog

SG53312



Description

FAZ-DC

- High-quality miniature circuit breakers for DC-applications
- Contact position indicator red - green
- Guide for secure terminal connection (not for FAZ-NA)
- 3-position DIN rail clip, permits removal from existing busbar system
- Comprehensive range of accessories suitable for subsequent installation
- Rated currents up to 50 A
- Tripping characteristic C
- Rated breaking capacity 10 kA according to IEC/EN 60947-2
- Up to 250 V DC per pole
- Classified for the use in rail rolling stock

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

SG54512



1-pole

2	220	10	FAZ-B2/1-DC	176063	12/120
3	250	10	FAZ-B3/1-DC	176064	12/120
4	250	10	FAZ-B4/1-DC	176065	12/120
6	250	10	FAZ-B6/1-DC	176066	12/120
8	250	10	FAZ-B8/1-DC	305864	12/120
10	250	10	FAZ-B10/1-DC	176067	12/120
13	250	10	FAZ-B13/1-DC	176068	12/120
16	250	10	FAZ-B16/1-DC	176069	12/120
20	250	10	FAZ-B20/1-DC	176070	12/120
25	250	10	FAZ-B25/1-DC	176071	12/120
32	250	10	FAZ-B32/1-DC	176072	12/120
40	250	10	FAZ-B40/1-DC	176073	12/120
50	250	10	FAZ-B50/1-DC	176074	12/120

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2-poles

2	440	10	FAZ-B2/2-DC	176075	1/60
3	500	10	FAZ-B3/2-DC	176076	1/60
4	500	10	FAZ-B4/2-DC	176077	1/60
6	500	10	FAZ-B6/2-DC	176078	1/60
8	250	10	FAZ-B8/2-DC	305867	1/60
10	500	10	FAZ-B10/2-DC	176079	1/60
13	500	10	FAZ-B13/2-DC	176080	1/60
16	500	10	FAZ-B16/2-DC	176081	1/60
20	500	10	FAZ-B20/2-DC	176082	1/60
25	500	10	FAZ-B25/2-DC	176083	1/60
32	500	10	FAZ-B32/2-DC	176084	1/60
40	500	10	FAZ-B40/2-DC	176085	1/60
50	500	10	FAZ-B50/2-DC	176086	1/60

FAZ-...-DC Miniature Circuit Breakers

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

SG54612



1-pole

2	220	10	FAZ-C2/1-DC	279122	12/120
3	250	10	FAZ-C3/1-DC	279123	12/120
4	250	10	FAZ-C4/1-DC	279124	12/120
6	250	10	FAZ-C6/1-DC	279125	12/120
8	250	10	FAZ-C8/1-DC	305865	12/120
10	250	10	FAZ-C10/1-DC	279126	12/120
13	250	10	FAZ-C13/1-DC	279127	12/120
16	250	10	FAZ-C16/1-DC	279128	12/120
20	250	10	FAZ-C20/1-DC	279129	12/120
25	250	10	FAZ-C25/1-DC	279130	12/120
32	250	10	FAZ-C32/1-DC	279131	12/120
40	250	10	FAZ-C40/1-DC	279132	12/120
50	250	10	FAZ-C50/1-DC	279133	12/120

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2-poles

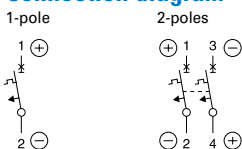
2	440	10	FAZ-C2/2-DC	279134	1/60
3	500	10	FAZ-C3/2-DC	279135	1/60
4	500	10	FAZ-C4/2-DC	279136	1/60
6	500	10	FAZ-C6/2-DC	279137	1/60
8	250	10	FAZ-C8/2-DC	305868	12/120
10	500	10	FAZ-C10/2-DC	279138	1/60
13	500	10	FAZ-C13/2-DC	279139	1/60
16	500	10	FAZ-C16/2-DC	279140	1/60
20	500	10	FAZ-C20/2-DC	279141	1/60
25	500	10	FAZ-C25/2-DC	279142	1/60
32	500	10	FAZ-C32/2-DC	279143	1/60
40	500	10	FAZ-C40/2-DC	279144	1/60
50	500	10	FAZ-C50/2-DC	279145	1/60

Technical Data

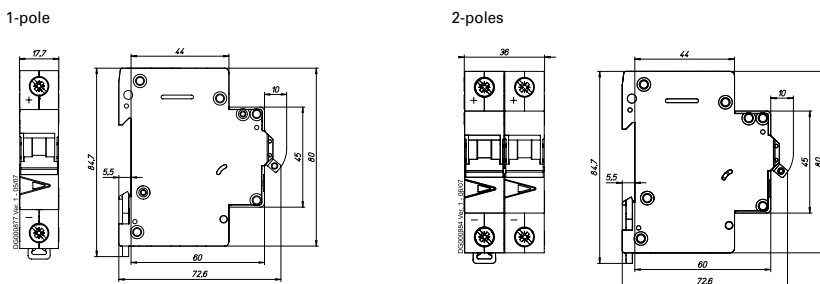
	FAZ-DC *)	
Productstandard	IEC/EN 60947-2	
Classified according to	IEC 61373, EN 45545-2	
Current test marks as printed onto the device		
Number of poles	1, 2	
Mechanical		
Device width	17.7 mm (1p), 36 mm (2p)	
Frame size	45 mm	
Device height	80 mm	
Device depth	60 mm	
Terminals	lift terminal	
Terminal capacity rigid solid/stranded wire	1-25 mm ²	
Terminal screw	M5 (with slotted screw acc. to EN ISO 4757-Z2, PZ2)	
Fastening torque of terminal screws	max. 2.4 Nm	
Snap on fixing	tristable (on DIN rail acc. to EN 50022)	
Finger proof	acc. to VBG4, ÖVE EN-6	
Degree of protection (DIN VDE 0470)		
Surface mounted	IP20	
Built-in behind panel	IP40	
Contact position indicator	red / green	
Electrical		
Rated voltage DC	U_n	2 A Type: 220V (per pole) 3-50 A Typen: 250V (per pole)
Rated current	I_n	Type C: 2, 3, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50 A
Rated insulation voltage	U_i	440 V AC
Rated impulse withstand voltage	U_{imp}	4 kV (1.2/50) µsec
Tripping characteristic		
Conventional non-tripping current	$I_{nt} = 1,13 I_n$	
Conventional tripping current	$I_t = 1.45 I_n$	
Reference temperature	30 °C	
Temperature factor	0.4%/K	
Instantaneous tripping current	I_{mt}	Type B: $4 I_n < I_{mt} = 7 I_n$; $t(I_{mt}) < 0.1 \text{ sec}$ Type C: $7 I_n < I_{mt} = 15 I_n$; $t(I_{mt}) < 0.1 \text{ sec}$
Rated short-circuit breaking capacity	I_{cn}	10 kA
Selectivity class	3	
Number of electrical operations	> 4.000	
Number of mechanical operations	> 20.000	
Climatic conditions	acc. to IEC 68-2 (25..55°C / 90..95% RH)	
Operating temperature range	-40°C up to +75°C	

*) not for PV string protection!

Connection diagram

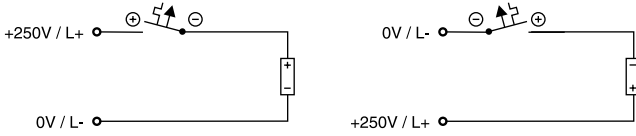


Dimensions (mm) FAZ-...-DC

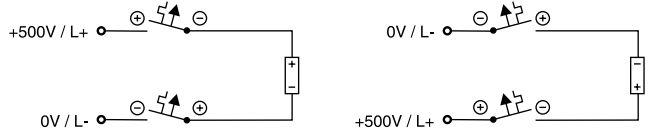


Connection examples FAZ-...-DC

Connection example at 250V=, 1-pole

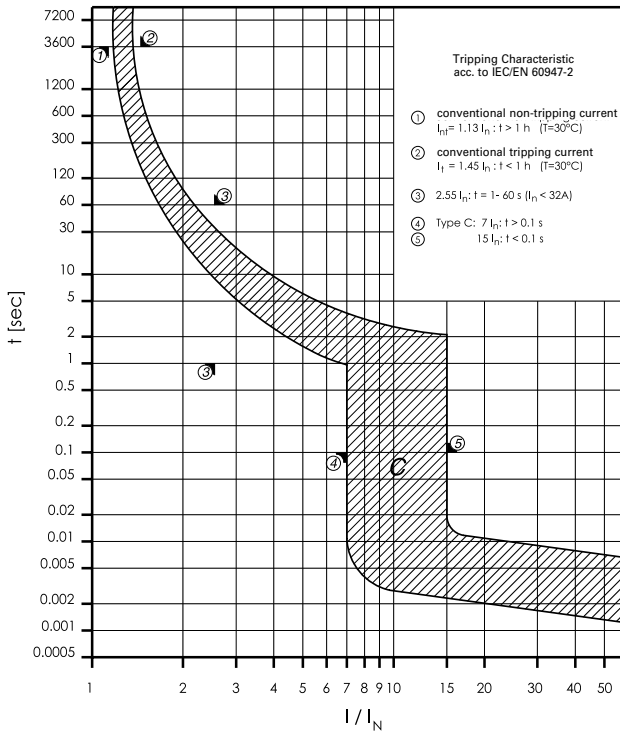


Connection example at 500V=, 2-poles



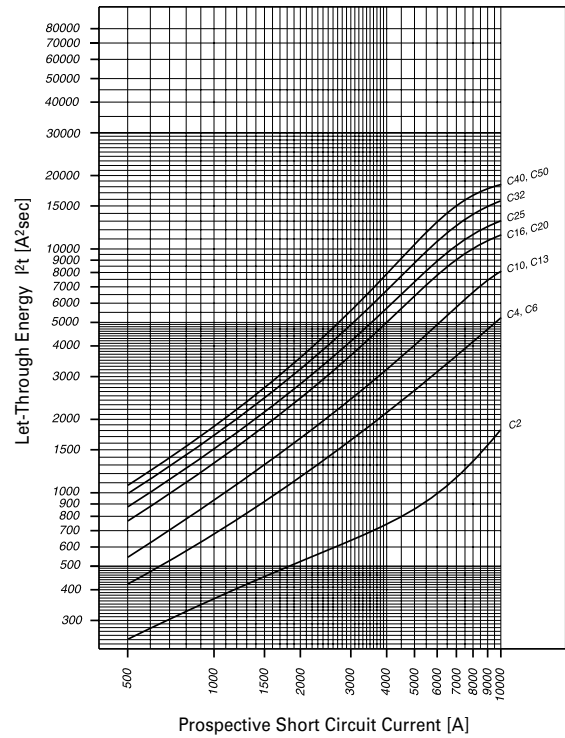
Tripping Characteristics FAZ-...-DC

Characteristics C - IEC/EN 60947-2



Maximum Let-Through Energy FAZ-...-DC

Type C



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