

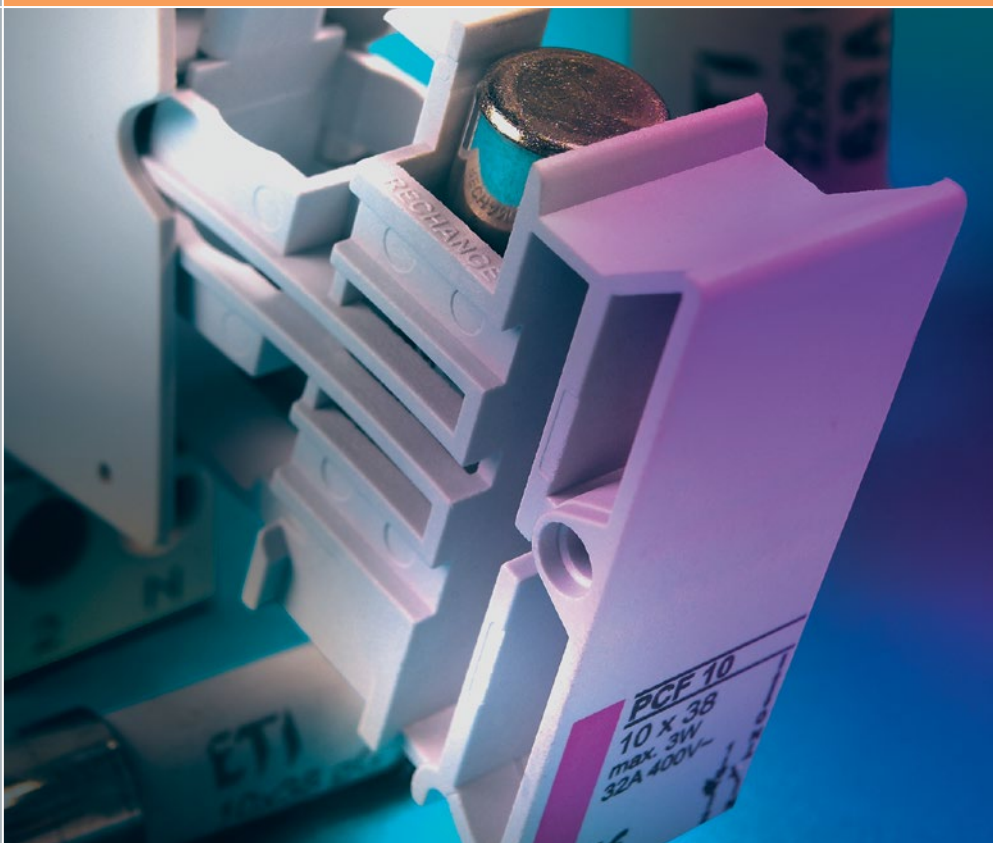
C

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*DC and PV fuses are in Special Purpose Fuses and Green Protect catalogues



LOW VOLTAGE CYLINDRICAL FUSES



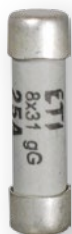
Cylindrical fuse-links

Cylindrical fuse-link CH

Rated current
1-100 A

Fusing characteristics
gG, aM

Application: Cylindrical fuse-links are used as the most secure protection of electrical installations, control, and signal circuits against overloads and short circuit currents. Their dimensions comply with IEC 60269-1 and IEC 60269-2. They are used mainly in industrial areas, since their dimensions allow voltages of up to 690 V. The most common sizes are the following four: 8x32, 10x38, 14x51 and 22x58.



CH8

Rated current/Rated voltage	Code No. gG	Code No. aM	Weight [g]	Packaging [pcs]
1A, 400V	002610000	002611000	4	10/1000
2A, 400V	002610001	002611001		
4A, 400V	002610003	002611003		
6A, 400V	002610005	002611005		
8A, 400V	002610006	002611006		
10A, 400V	002610007	002611007		
12A, 400V	002610008	002611008		
16A, 400V	002610009	002611009		
20A, 400V	002610011	002611011		
25A, 400V	002610013	002611013		



CH10

Rated current/Rated voltage	Code No. gG	Code No. aM	Weight [g]	Packaging [pcs]
0.5A, 500V	002620017	002621017	7,5	10/500
1A, 500V	002620000	002621000		
2A, 500V	002620001	002621001		
4A, 500V	002620003	002621003		
6A, 500V	002620005	002621005		
8A, 500V	002620006	002621006		
10A, 500V	002620007	002621007		
12A, 500V	002620008	002621008		
16A, 500V	002620009	002621009		
20A, 400V	002620011	002621011		
25A, 400V	002620013	002621013		
32A, 400V	002620015	002621015		

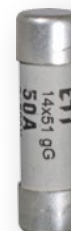
Cylindrical fuse-links

CH14

Rated current/Rated voltage	Code No. gG	Code No. gG with striker pin	Code No. aM	Code No. aM with striker pin	Weight [g]	Packaging [pcs]
2A, 690V	002630001	006711015*	002631001	006711029*	18,6	10/500
4A, 690V	002630003	006711005*	002631003	006711030*		
6A, 690V	002630005	006711016*	002631005	006711031*		
8A, 690V	002630006	006711017*	002631006	006711032*		
10A, 690V	002630007	006711018*	002631007	006711033*		
12A, 690V	002630008	006711006*	002631008	006711034*		
16A, 690V	002630009	006711001*	002631009	006711035*		
20A, 690V	002630011	006711002*	002631011	006711036*		
25A, 690V	002630013	006711003*	002631013	006711037*		
32A, 500V	002630015	006711019	002631015	006711038		
40A, 500V	002630017	006711004	002631017	006711039		
50A, 500V	002630019	006711020**	002631019	006711040**		

* 500V

** 400V



CH22

Rated current/Rated voltage	Code No. gG	Code No. gG with striker pin	Code No. aM	Code No. aM with striker pin	Weight [g]	Packaging [pcs]
4A, 690V		006711008			51	10/500
6A, 690V		006711009		006711041		
8A, 690V		006711021		006711042		
10A, 690V		006711010		006711043		
12A, 690V		006711022		006711044		
16A, 690V	002640009	006711023	002641009	006711045		
20A, 690V	002640011	006711024	002641011	006711046		
25A, 690V	002640013	006711025	002641013	006711047		
32A, 690V	002640015	006711011	002641015	006711048		
40A, 690V	002640017	006711026	002641017	006711049		
50A, 690V	002640019*	006711027	002641019	006711050		
63A, 690V	002640021*	006711012	002641021*	006711051		
80A, 500V	002640023	006711013	002641023	006711052		
100A, 500V	002640025	006711014	002641025	006711053		

* 500V



Fuse-switch disconnectors for cylindrical fuse-links

Advantages of fuse-switch disconnector PCF

→ 1-pole + N in one module



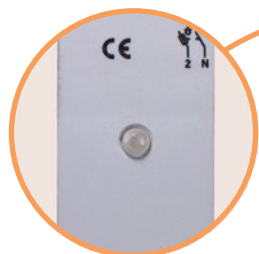
→ Double connection clamps



→ New method of mounting on the DIN rail and simple replacement



→ LED indicator version



→ Extraction of entire fuse-link when changing

→ Chamber for spare fuse-link



→ Sealing possibility

Fuse-switch disconnector PCF 8

Rated current
max. 20 ARated operational voltage
400 VUtilization category
AC 22B**1-pole**

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
400	20	002530001	-	58	12/108
		002530011	LED		
		*002531001	-	58	12/108
		*002531011	LED		

* Connection clamp on the right side "French version"

1-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
400	20	002530002	-	70	12/108
		002530012	LED		
		*002531002	-	70	12/108
		*002531012	LED		

* Connection clamp on the right side, N pole on the left "French version"

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
400	20	002530003	-	120	6/54
		002530013	LED		
		*002531003	-	120	6/54
		*002531013	LED		

* Connection clamp on the right side "French version"

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
400	20	002530004	-	180	4/36
		002530014	LED		
		*002531004	-	180	4/36
		*002531014	LED		

* Connection clamp on the right side "French version"

3-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
400	20	002530005	-	195	4/36
		002530015	LED		
		*002531005	-	195	4/36
		*002531015	LED		

* Connection clamp on the right side, N pole on the left "French version"



Fuse-switch disconnector PCF 10

Rated current
max. 32 A

Rated operational voltage
690 V a.c.

Utilization category
AC22B



1-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	32	002550001	-	58	12/108
		002550011	LED		
		*002551001	-	58	12/108
		*002551011	LED		

* Connection clamp on the right side "French version"

1-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
400/690	32	002550002	-	70	12/108
		002550012	LED		
		*002551002	-	70	12/108
		*002551012	LED		

* Connection clamp on the right side, N pole on the left "French version"

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	32	002550003	-	120	6/54
		002550013	LED		
		*002551003	-	120	6/54
		*002551013	LED		

* Connection clamp on the right side "French version"

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	32	002550004	-	180	4/36
		002550014	LED		
		*002551004	-	180	4/36
		*002551014	LED		

* Connection clamp on the right side "French version"

3-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	32	002550005	-	195	4/36
		002550015	LED		
		*002551005	-	195	4/36
		*002551015	LED		

* Connection clamp on the right side, N pole on the left "French version"

Accessories

Auxiliary switch PS PCF

U_n [V]	I_n [A]	Code No. PCF8	Code No. PCF10	Weight [g]	Packaging [pcs]	Contact
230	6	002559001	002559001	35	1/10	1 x b 1 x a/b



NEW Fuse-switch disconnecter

Fuse-switch disconnectors for cylindrical fuse-links

Advantages of cylindrical fuse-switch disconnecter EFD

→ Compliance with IEC 60947-1, IEC 60947-3, UL 4248-1, UL 4248-4, UL 4248-8 and UL 486E



→ More space for finger to open fuse carrier



→ Mounting on standard DIN 35 mm rail (DIN EN60715). The sizes 22x58 can be also fixed with screws on a flat base

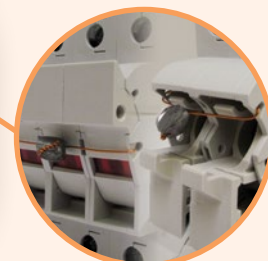


→ All contact surfaces are silver plated

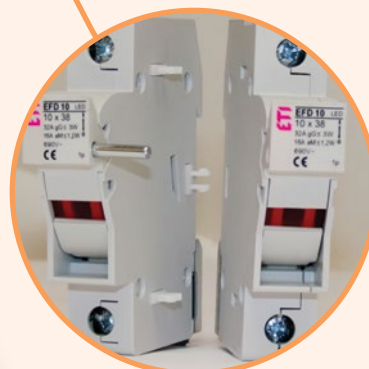


→ Complete protection against touch according to IP20

→ Changing of a fuse-link without danger of direct touch of parts under voltage



→ Possibility of sealing in ON or OFF positions



→ All plastic parts are made of material resistant to extremely high temperatures. Fuse carrier assures that a fuse link is not in touch with a housing

→ For all sizes a **version with electronic indicator** is available. **L (LED)** with built-in LED diode which blinks after the fuse-link operates. The indicator is capable of operating in conditions of open circuit with minimum capacitance between connection cables. Operating voltage range from 50V to 690V.



→ Modular design – it is possible to assemble multi-pole versions at the building site for EFD 8, EFD 10, EFD 14 and EFD 22

Fuse-switch disconnectors for cylindrical fuse-links

Fuse-switch disconnecter EFD 8

Rated current
max. 20 ARated operational voltage
400 VUtilization category
AC22BFor fuse-links size
8x32**1-pole**

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
400	20	002520001	-		63	12/108
		002520011	L-LED		64	
		002520301	-	✓	68	
		002520311	L-LED	✓	69	

1-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
400	20	002520002	-		128	6/54
		002520012	L-LED		129	
		002520302	-	✓	138	
		002520312	L-LED	✓	139	
		*002520007	-		128	
		*002520017	L-LED		129	
		*002520307	-	✓	138	
		*002520317	L-LED	✓	139	

*N pole on left "French version"

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
400	20	002520003	-		123	6/54
		002520013	L-LED		125	
		002520303	-	✓	134	
		002520313	L-LED	✓	135	

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
400	20	002520004	-		184	4/36
		002520014	L-LED		186	
		002520304	-	✓	200	
		002520314	L-LED	✓	201	





3-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
400	20	002520005	-		252	3/27
		002520015	L-LED		254	
		002520305	-	✓	273	
		002520315	L-LED	✓	274	
		*002520008	-		252	
		*002520018	L-LED		254	
		*002520308	-	✓	273	
		*002520318	L-LED	✓	274	

*N pole on left "French version"

Fuse-switch disconnector EFD 10

Rated current
max. 32 A

Rated operational voltage
690 V

Utilization category
AC 22B

For fuse-links size
10x38



1-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
690	32	002540001	-		63	12/108
		002540011	L-LED		64	
		002540301	-	✓	68	
		002540311	L-LED	✓	69	

1-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
400/690	32	002540002	-		128	6/54
		002540012	L-LED		129	
		002540302	-	✓	138	
		002540312	L-LED	✓	139	
		*002540007	-		128	
		*002540017	L-LED		129	
		*002540307	-	✓	138	
		*002540317	L-LED	✓	139	

*N pole on left "French version"



2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
690	32	002540003	-		123	6/54
		002540013	L-LED		125	
		002540303	-	✓	134	
		002540313	L-LED	✓	135	

Fuse-switch disconnectors for cylindrical fuse-links

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
690	32	002540004	-		184	4/36
		002540014	L-LED		186	
		002540304	-	✓	200	
		002540314	L-LED	✓	201	

3-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
690	32	002540005	-		252	3/27
		002540015	L-LED		254	
		002540305	-	✓	273	
		002540315	L-LED	✓	274	
		*002540008	-		252	
		*002540018	L-LED		254	
		*002540308	-	✓	273	
		*002540318	L-LED	✓	274	

*N pole on left "French version"



Fuse-switch disconnector EFD CC

Rated current
max. 30 ARated operational voltage
600 VFor fuse-links
Class CC acc to UL4248-4

1-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
600	30	002540101	-		63	12/108
		002540111	L-LED		64	
		002540401	-	✓	68	
		002540411	L-LED	✓	69	

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
600	30	002540103	-		123	6/54
		002540113	L-LED		125	
		002540403	-	✓	134	
		002540413	L-LED	✓	135	

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indica- tor	Adapter	Weight [g]	Packaging [pcs]
600	30	002540104	-		184	4/36
		002540114	L-LED		186	
		002540404	-	✓	199	
		002540414	L-LED	✓	201	



Fuse-switch disconnecter EFD 14

Rated current
max. 50 A

Rated operational voltage
690 V

Utilization category
AC22B

For fuse-links size
14x51



1-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	50	002560001	-	102	12/96
		002560011	L-LED	103	

1-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	50	002560002	-	226	6/48
		002560012	L-LED	227	
		*002560007	-	226	
		*002560017	L-LED	227	

*N pole on left "French version"

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	50	002560003	-	206	6/48
		002560013	L-LED	208	

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	50	002560004	-	310	4/32
		002560014	L-LED	313	

3-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	50	002560005	-	434	3/24
		002560015	L-LED	437	
		*002560008	-	434	
		*002560018	L-LED	437	

*N pole on left "French version"

Fuse-switch disconnecter EFD 22

Rated current
max. 100 A

Rated operational voltage
690 V

Utilization category
AC21B

For fuse-links size
22x58

1-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	100	002570001	-	156	3/105
		002570011	L-LED	158	

Fuse-switch disconnectors for cylindrical fuse-links

1-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	100	002570002	-	351	2/48
		002570012	L-LED	353	
		*002570007	-	351	
		*002570017	L-LED	353	

* N pole on left "French version"

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	100	002570003	-	317	2/48
		002570013	L-LED	321	

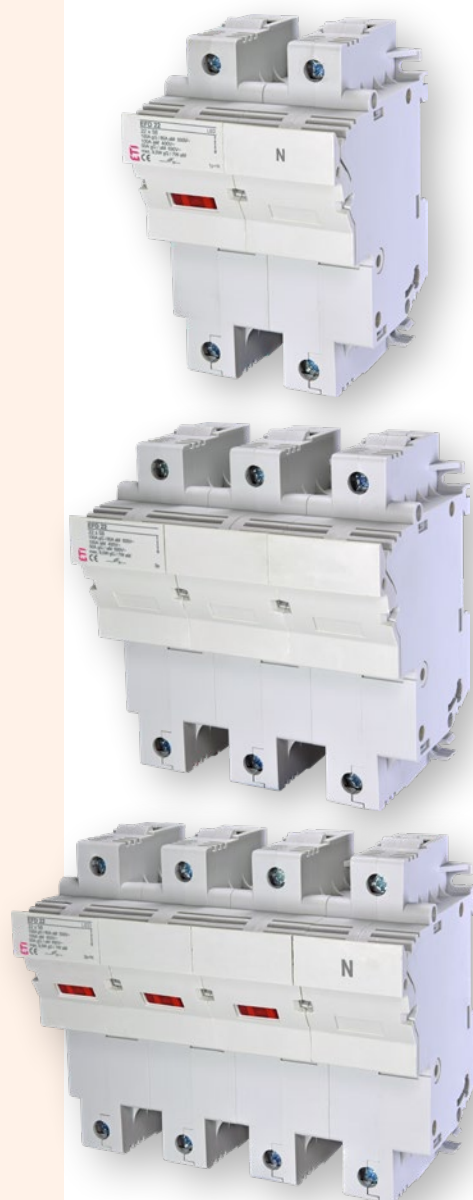
3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	100	002570004	-	476	1/35
		002570014	L-LED	485	

3-pole + N

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
690	100	002570005	-	671	1/24
		002570015	L-LED	677	
		*002570008	-	671	
		*002570018	L-LED	677	

* N pole on left "French version"



Fuse-switch disconnector EFD J30

Rated current
max. 30 ARated operational voltage
600 VFor fuse-links
Class J acc to UL4248-8

1-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
600	30	002570101	-	156	3/105
		002570111	L-LED	158	

2-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
600	30	002570103	-	317	2/48
		002570113	L-LED	321	

3-pole

U_e/U_i [V]	I_{max} [A]	Code No.	Indicator	Weight [g]	Packaging [pcs]
600	30	002570104	-	476	1/35
		002570114	L-LED	485	



Accessories



Auxiliary switch PS EFD

U_n [V]	I_n [A]	Code No. EFD14	Code No. EFD22	Weight [g]	Packaging [pcs]	Contact
250	5	002569001	002579001	50	1/10	1 x make 1 x break

* Can be used with VLC 14 and VLC 22 Fuse-switch disconnectors

Auxiliary switch PS EFD is intended to be mounted with disconnectors EFD 14 and EFD 22 for all versions (1 p, 2p, 1 p+N, 3p, 3p+N). The width of apparatus is 9 mm, other dimensions comply with EFD 14 and EFD 22 series switches. Auxiliary switch PS EFD signals the operation of CH 14 or CH 22 fuse-links only in the case a fuse-link is fitted with striking pin - see IEC 60 269-2 Figure 1a (III).



Connection kit

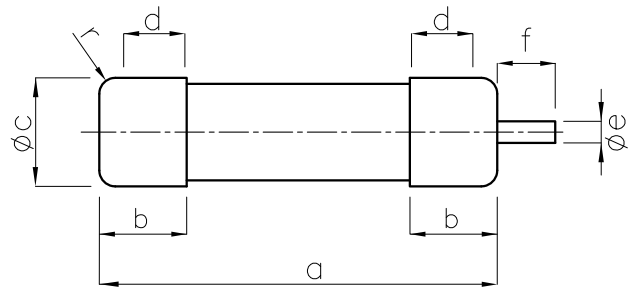
Description	Code No.	For use with	Weight [g]	Packaging [pcs]
Connection kit 2p	002540948	EFD 8, EFD 10, EFH 10, PCF 8, PCF 10	96	1*/20
Connection kit 3p	002540949	EFD 8, EFD 10, PCF 8, PCF 10	162	1*/20
Connection kit 2p	002560948	EFD 14, EFH 14	144	1*/20
Connection kit 3p	002560949	EFD 14	217	1*/20
Connection kit 2p	002570948	EFD 22, EFD J30	191	1*/20
Connection kit 3p	002570949	EFD 22, EFD J30	300	1*/20

* Note: 1 kit suffices for the assembly of 50 sets

Technical data

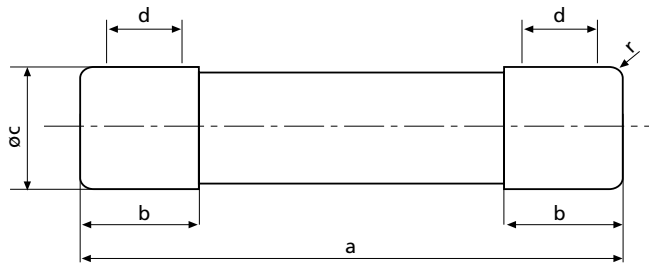
Cylindrical fuse-link

Technical data		
Rated voltage	400 V AC, 500 V AC, 690 V AC	
Rated current	CH 8	1-25 A/400 V
	CH 10	0,5-16 A/500 V, 20-32 A/400 V
	CH 14	2-25 A/690 V, 32-50 A/500 V
	CH 22	16-40 A/690 V (50 A/690 V aM), 50-100 A/500 V
Rated frequency	50 Hz	
Rated breaking capacity	CH 8	50 kA
	CH 10	100 kA
	CH 14	2-25 A/80 kA, 32-50 A/120 kA
	CH 22	16-40 A/80 kA (50 A/80 kA aM), 50-100 A/120 kA
Characteristics	gG, aM	
Body material	ceramic	
Material of contact parts	CuZn28, gal.Ag	



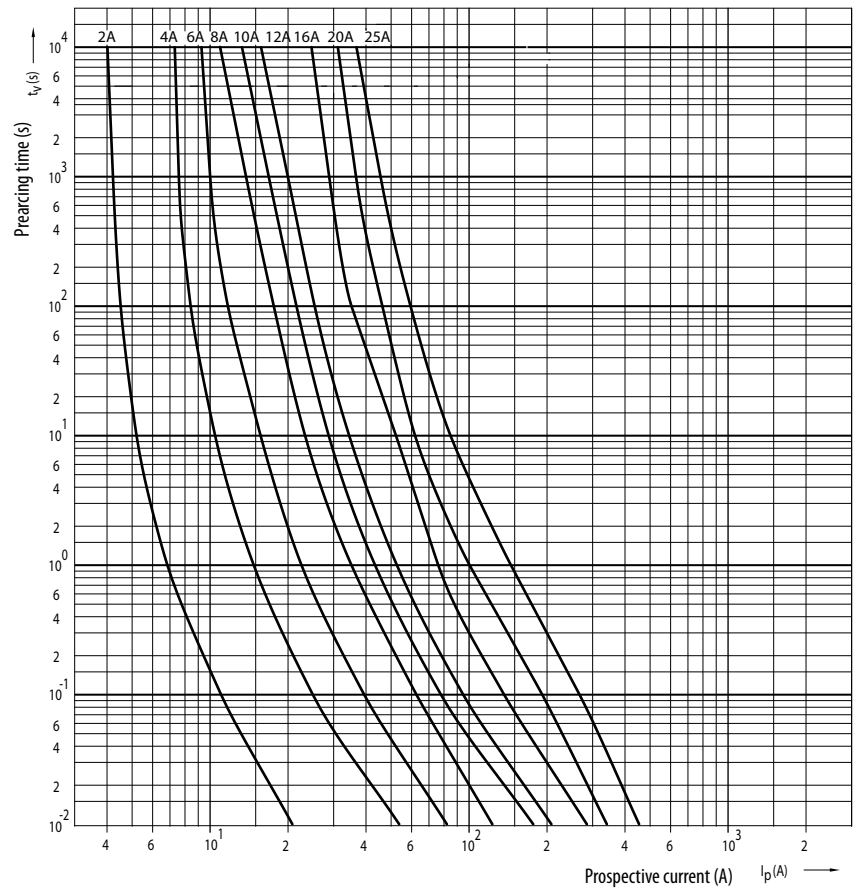
With striker pin

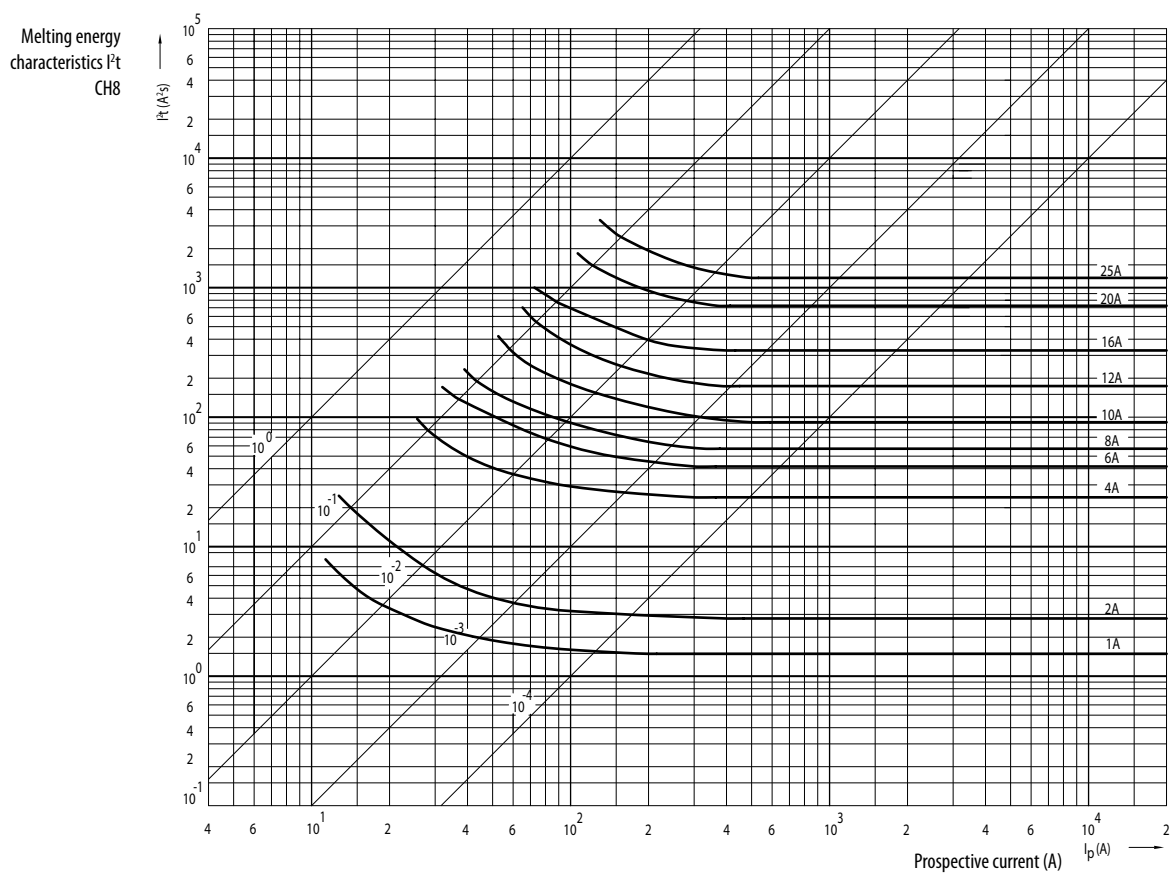
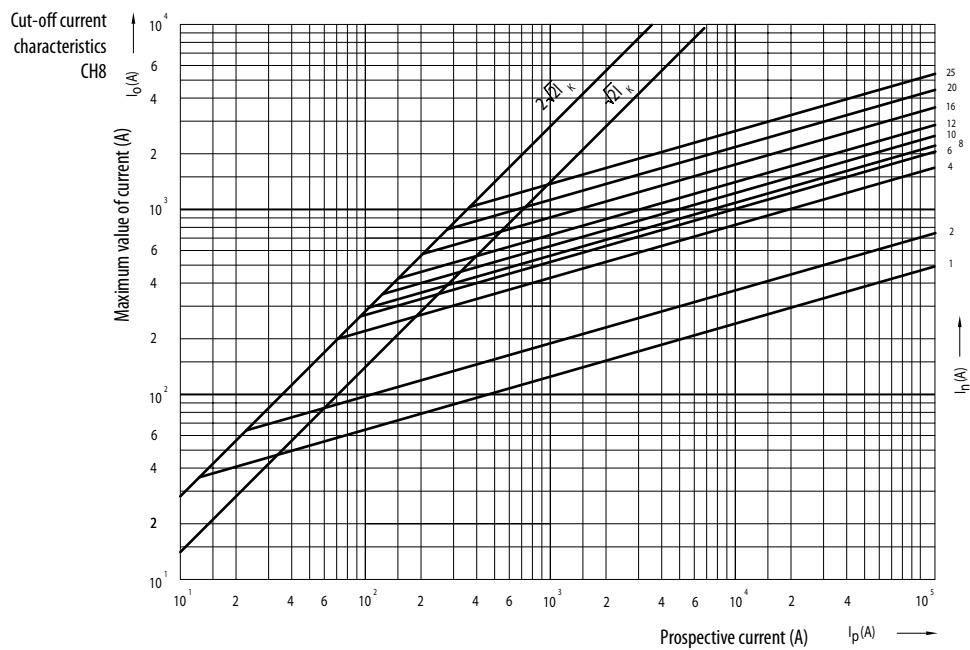
size	e	f
14 x 51	3,8	7,5
22 x 58	3,8	7,5



size	a	b _{max}	c	d _{min}	r
8 x 32	31,5±0,5	6,7	8,5±0,1	4	1±0,5
10 x 38	38,0±0,6	10,5	10,3±0,1	6	1,5±0,5
14 x 51	51,0±0,6/-1	13,8	14,3±0,1	7,5	±1
22 x 58	58,0±0,1	16,2	22,2±0,1	11	±1

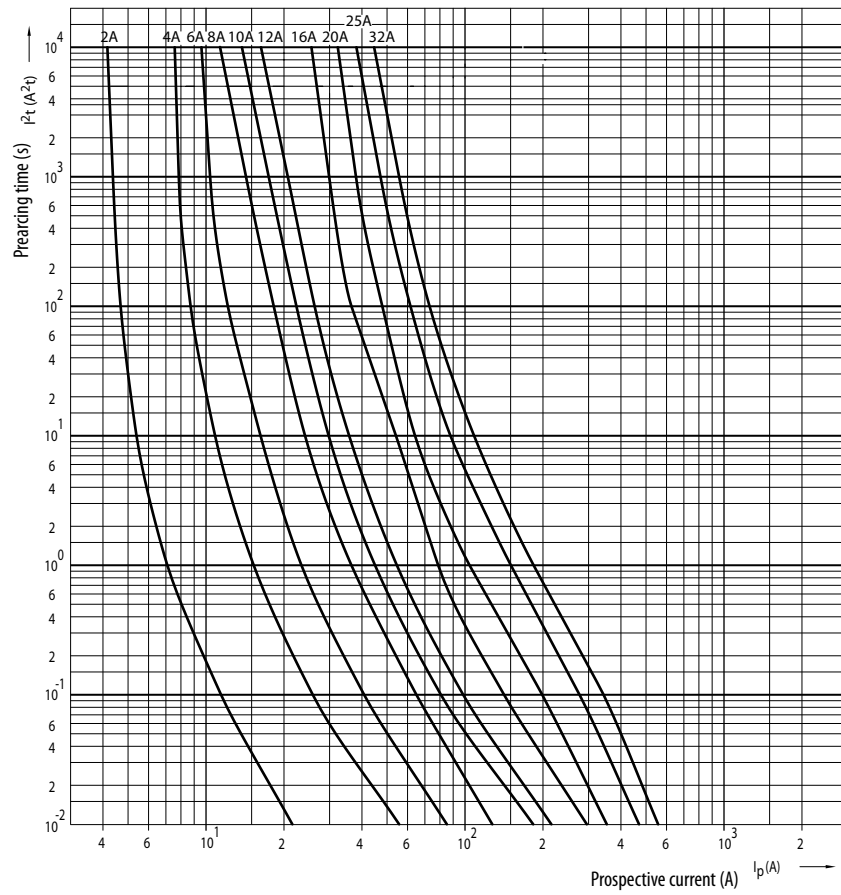
Time current characteristics
I/t, gG
CH8



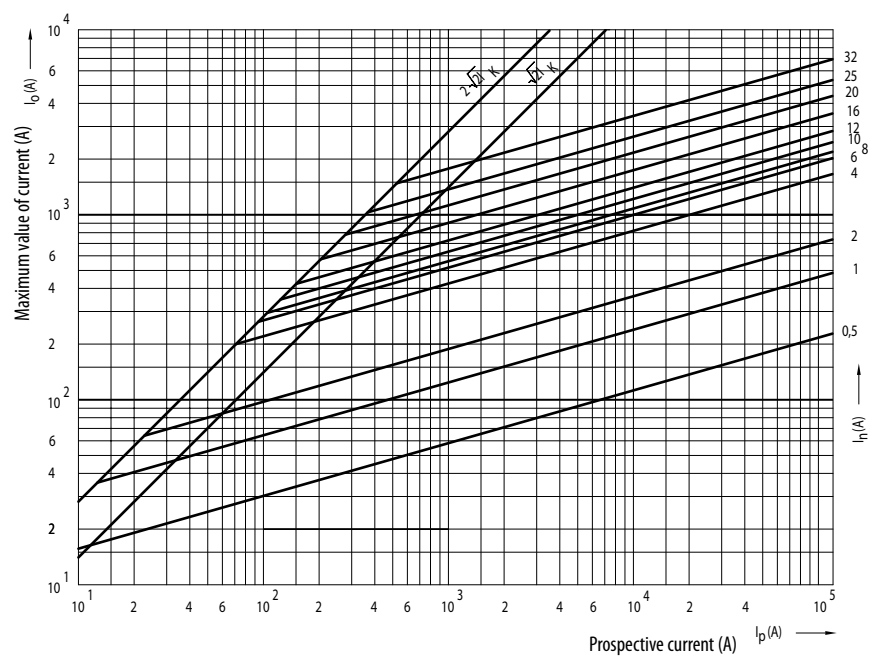


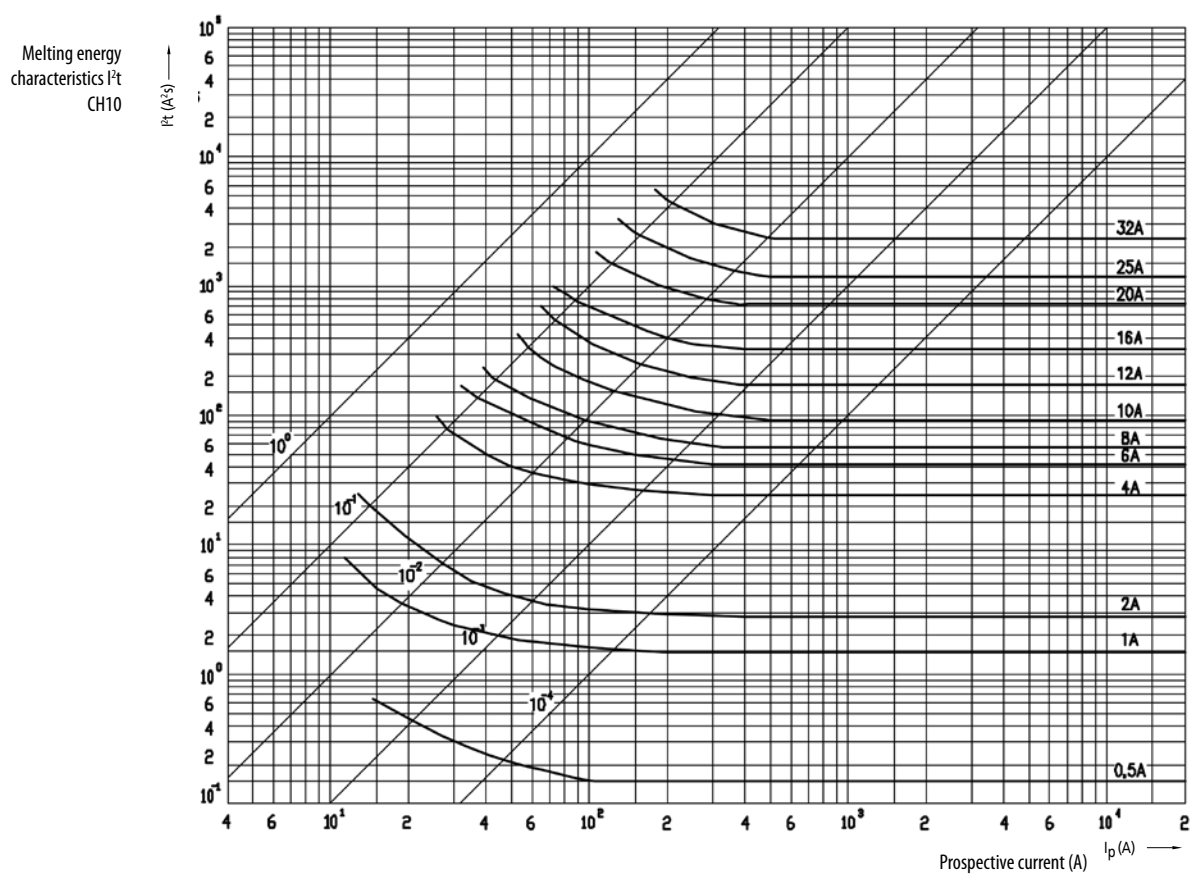
Technical data

Time current characteristics
I/t, gG
CH10

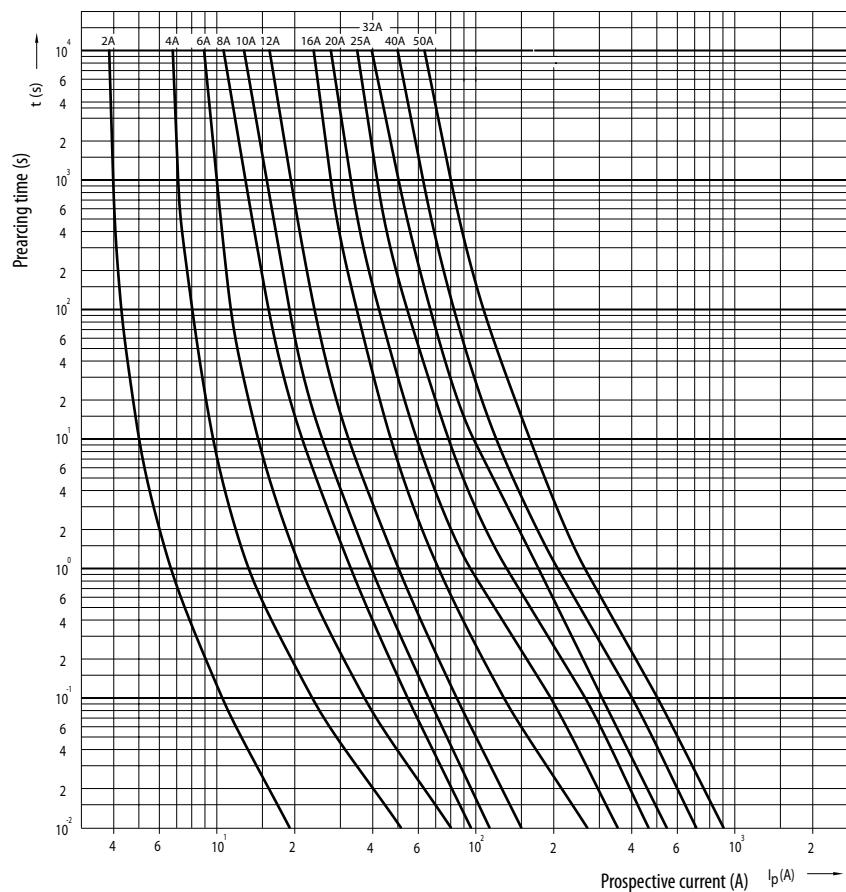


Cut-off current
characteristics
CH10



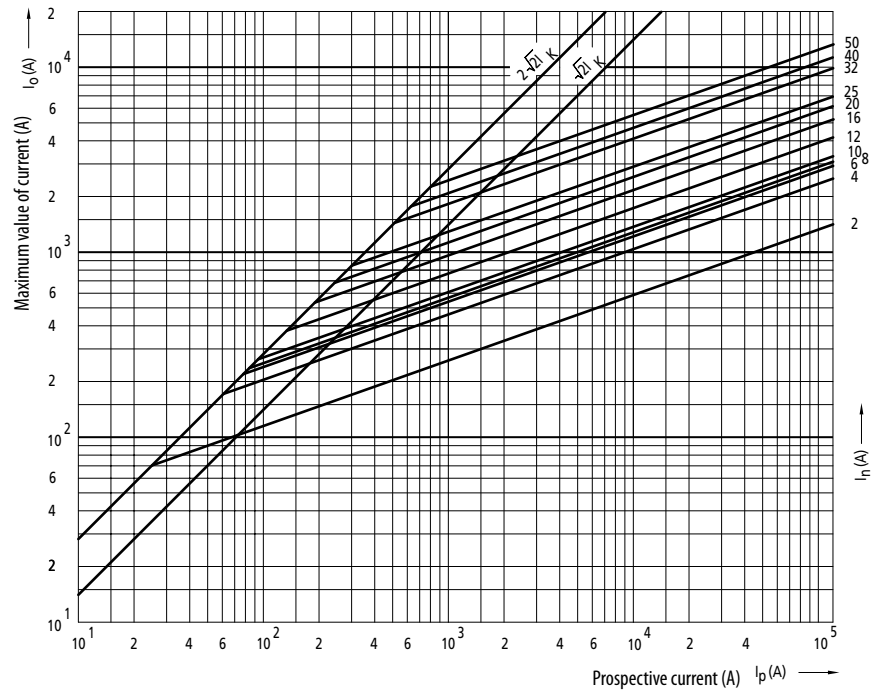


Time current characteristics
 I/t , gG
CH14

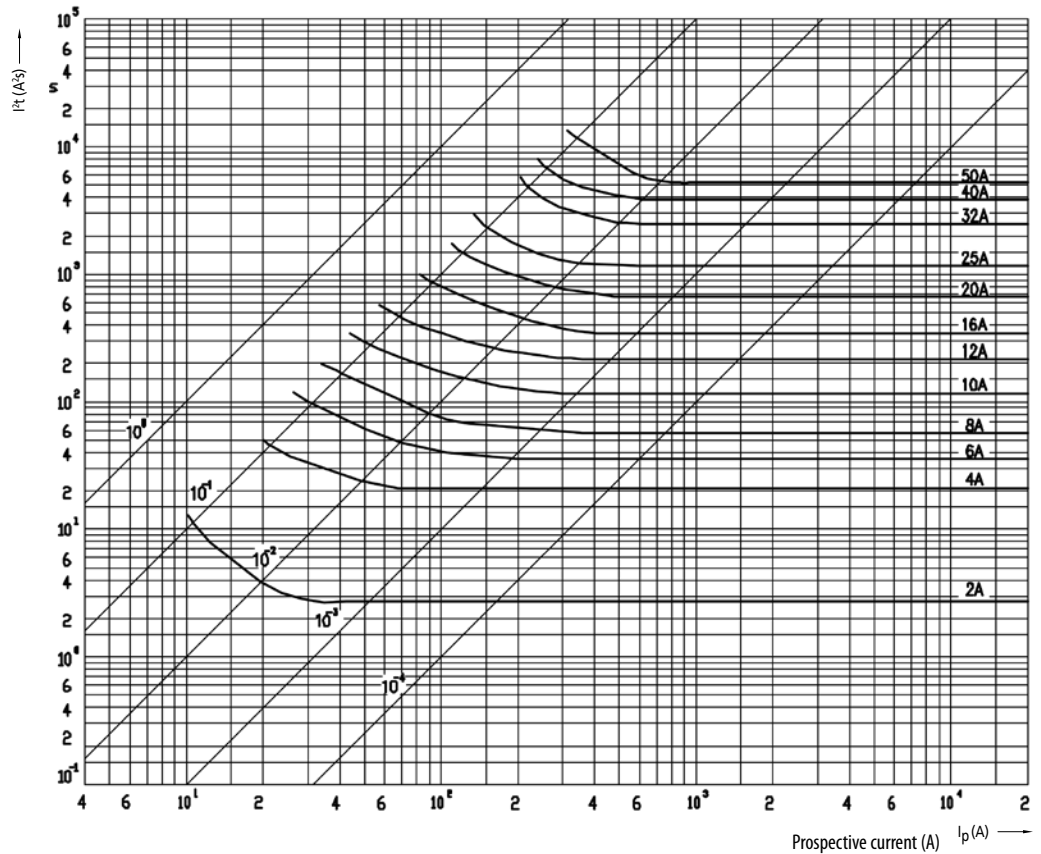


Technical data

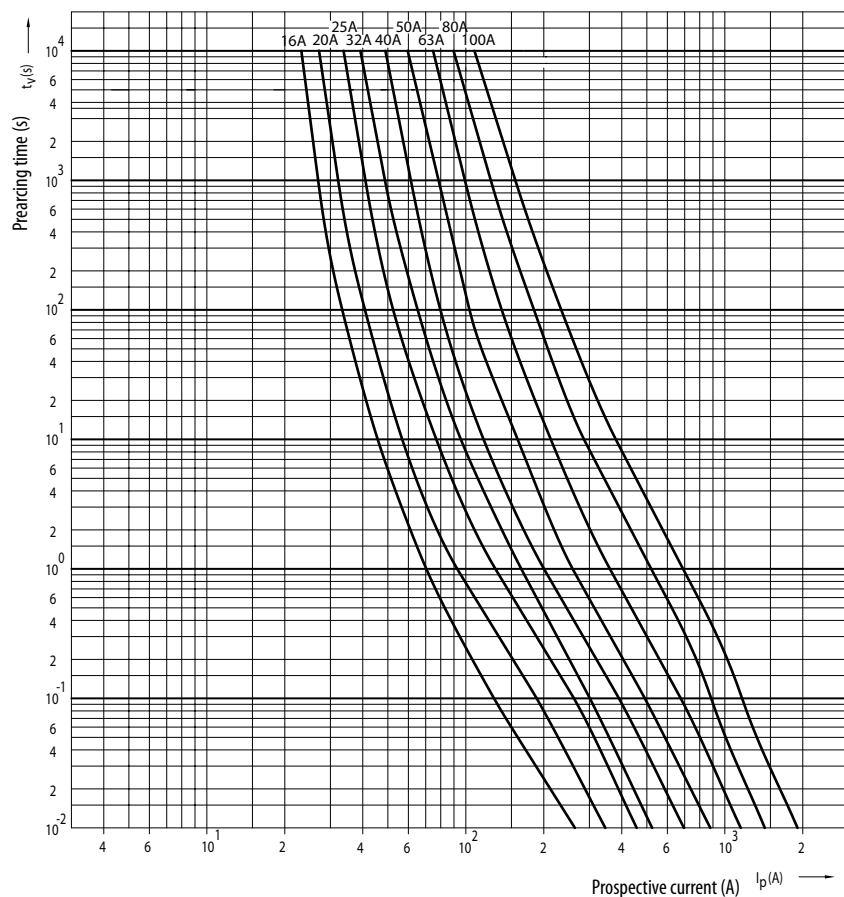
Cut-off current characteristics
CH14



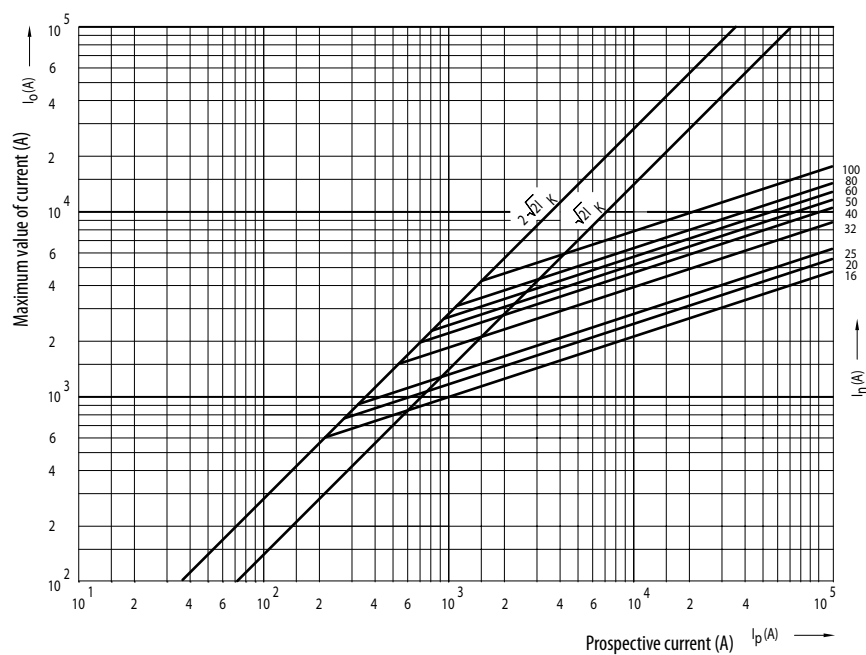
Melting energy characteristics I^2t
CH14



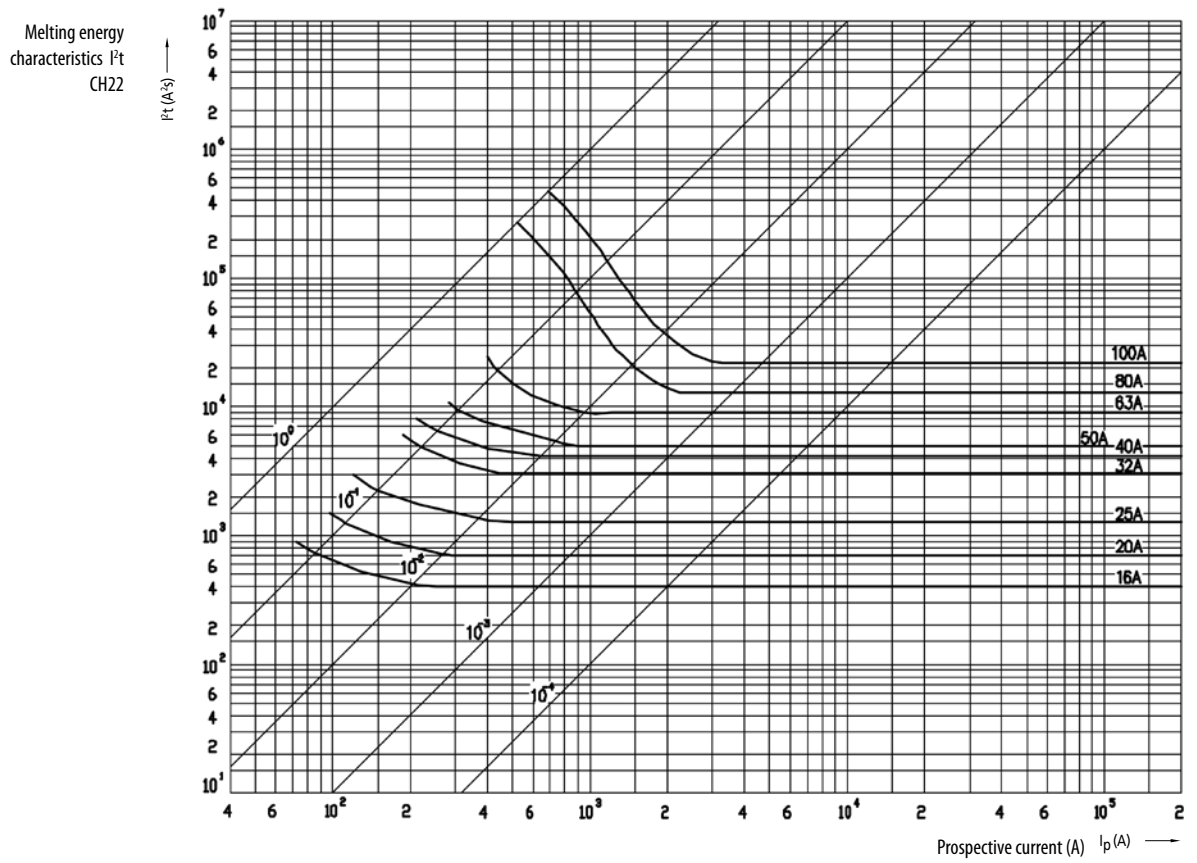
Time current characteristics
I/t, gG
CH22



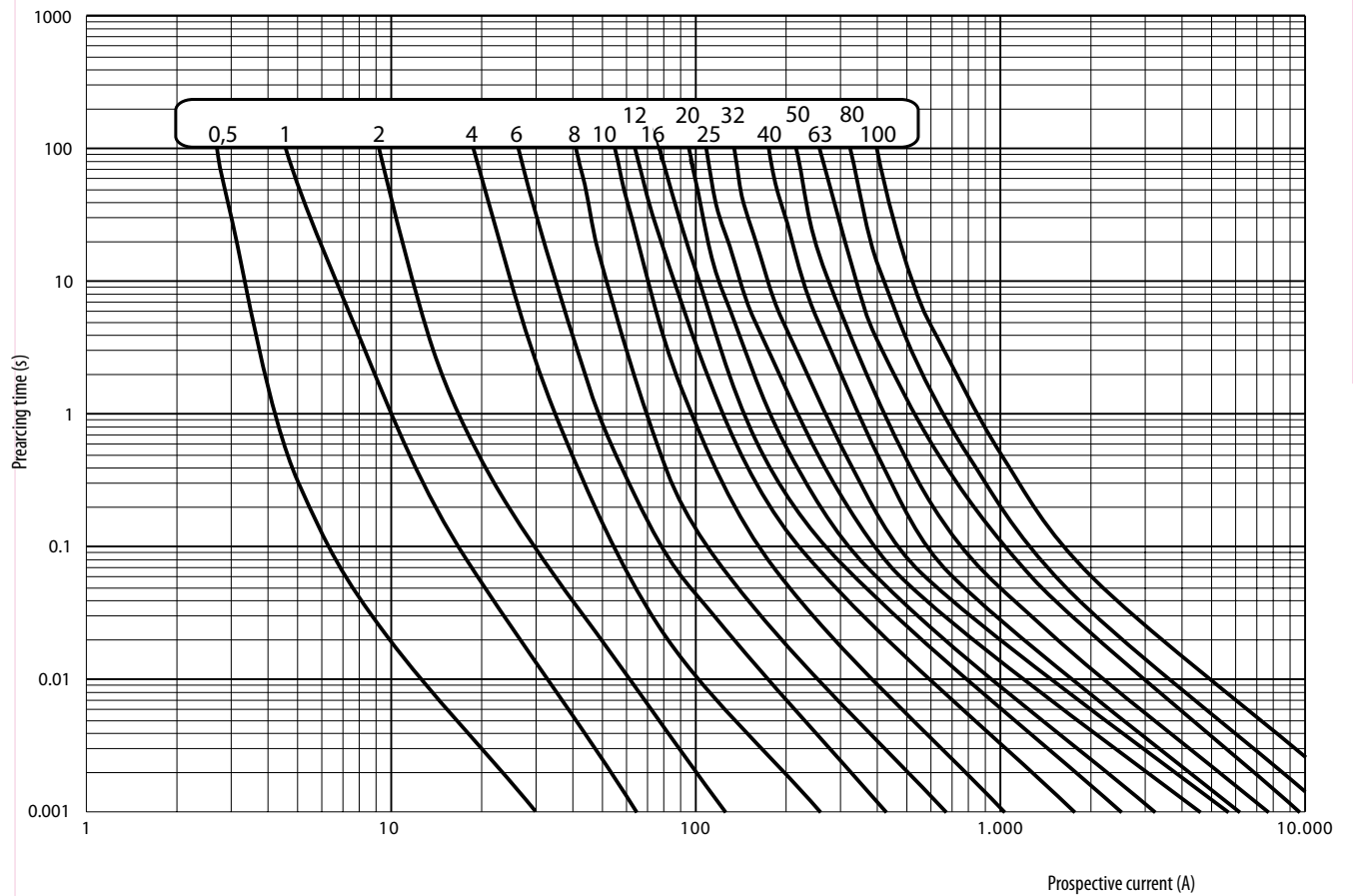
Cut-off current
characteristics
CH22



Technical data



Time current characteristics
 I/t , aM
CH10, 14, 22



Fuse-switch disconnectors for cylindrical fuse-links EFD

Technical data EFD

	EFD 8		EFD 10		EFD CC		EFD 14		EFD 22		EFD J30		
Fuse type	CH 8x32		CH 10x38		Class CC		CH 14x51		CH 22x58		Class J, size J30		
	IEC		IEC	UL	UL		IEC	UL	IEC	UL	UL		
Versions	Without indicator/LED indicator			Without indicator / LED indicator									
Number of poles	1p, 1p+N, 2p, 3p, 3p+N			1p, 2p, 3p		1p, 1p+N, 2p, 3p, 3p+N		1p, 2p, 3p	1p, 1p+N, 2p, 3p, 3p+N		1p, 2p, 3p		
Rated operational voltage U _e	400V a.c.		690V a.c.		600V a.c./d.c.	600V a.c./d.c.	690V a.c.		600V a.c./d.c.	690V a.c.		600V a.c./d.c.	600V a.c./d.c.
Rated operational current I _e	20A		32A		30A	30A	50A		50A	100A		100A	30A
Maximum rated current of fuselinks	690V		10A gG				25A gG 25A aM			50A gG 50A aM			
	500V		25A gG 16A aM				50A gG			100A gG			
	400V	20A gG 10A aM	32A gG				50A aM			100A aM			
Rated frequency	50Hz		50Hz		60Hz	60Hz	50Hz		60Hz	50Hz		60Hz	60Hz
Rated short-time withstand current I _{cw}	240A		300A/1s				600A/1s			1200A/1s			
Conventional free air thermal current I _{th}							50A			100A			
Rated conditional short-circuit current	50kA		100kA/400V		100kA	200kA	gG: 120kA/500V (50A gG) aM: 50kA/400V (50A aM)		100kA	gG: 120kA/500V (100A gG) aM: 50kA/400V (100A aM)		100kA	200kA
Rated insulation voltage U _i	400V		690V				690V			690V			
Rated imp. withstand voltage U _{imp}	8kV		8kV				8kV			8kV			
Overvoltage category (according to Table H.1 in IEC 60947-1 and according to IEC 60099-1)	III		III				III			III			
Max power dissipation of the fuse-link (W)	gG: 2,5W aM: 0,9W		gG: 3W aM: 1,2W			3W	gG: 5W aM: 3W			gG: 9,5W aM: 7W			6W
LED indicator operating range	50V-690V a.c.			50V - 600V a.c. 80V - 600V d.c.		50V-690V a.c.		50V - 600V a.c. 80V - 600V d.c.	50V-690V a.c.		50V - 600V a.c. 80V - 600V d.c.		
NEON indicator operating range	100V-750V a.c.	100V-750V a.c.											
Utilization category	AC-22B	AC-22B	Do not operate under load			AC-22B at 690V/50A	Do not operate under load	AC-21B at 690V/100A	Do not operate under load				
Operational performance (cycles with current)	300	300				300		300					
Operational performance (cycles without current)	1700	1700				1700		1700					
Humidity													
Operating ambient temperature	-5°C ... +40°C					-5°C ... +40°C			-5°C ... +40°C				
Store ambient temperature	-25°C ... +55°C					-25°C ... +55°C			-25°C ... +55°C				
Degree of protection (IEC 60529)	IP 20	IP 20				IP 20		IP 20					
Terminal capacity	1-25mm ²	1-25mm ²	AWG 18-8 solid&stranded Cu only			1,5-35mm ² rigid or flexible	AWG 16-6 solid&stranded Cu only	4-50mm ² rigid or flexible	AWG 12-2 solid&stranded Cu only				
Screw	PZ M5	PZ M5	PZ M5	PZ M5			PZ M5	PZ M5	PZ M6		PZ M6	PZ M6	
Torque	2Nm	2Nm	2Nm; 17,7 lb-in			2,5-3Nm	2Nm; 17,7 lb-in	3Nm	3Nm; 26,6 lb-in				
Mounting on EN 60715 rail	35mm rail												
Sealing possibility	ON and OFF												
Standards - fuse links	IEC/EN 60269-2	IEC/EN 60269-2	IEC/EN 60269-2	UL 248-4 IEC/EN 60269-2	IEC/EN 60269-2	IEC/EN 60269-2	IEC/EN 60269-2	IEC/EN 60269-2	IEC/EN 60269-2	IEC/EN 60269-2	UL 248-8 IEC/EN 60269-2		
Standards - Fuse-switch disconnectors/fuse holders	IEC 60947-1 IEC 60947-3		UL 4248-1 UL 4248-4 UL 486E			IEC 60947-1 IEC 60947-3	UL 4248-1 UL 486E	IEC 60947-1 IEC 60947-3	UL 4248-1 UL 486E				
Test reports	CCA/CB	CCA/CB	UL	UL	CCA/CB	UL	CCA/CB	UL	CCA/CB	UL	UL	UL	
Certificates			UL _{US}	UL _{US}			UL _{US}		UL _{US}		UL _{US}	UL _{US}	

Technical data

Technical data EFD

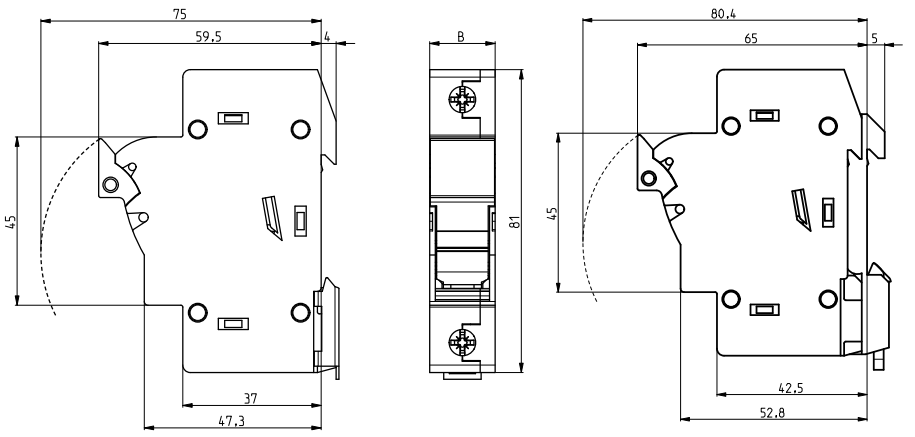
	EFD 8	EFD 10		EFD CC	EFD 14		EFD 22		EFD J30
Fuse type	CH 8x32	CH 10x38		Class CC	CH 14x51		CH 22x58		Class J, size J30
	IEC	IEC	UL	UL	IEC	UL	IEC	UL	UL
Derating factor of current I_n for different ambient temperatures	20°	1							
	30°	0,95							
	40°	0,9							
	50°	0,8							
	60°	0,7							
	70°	0,5							
Derating factor of current I_n for side by side mounting fuse holders (nr. of poles)	1-4	1							
	5-6	0,8							
	7-9	0,7							
	≥10	0,6							

Fuse-switch disconnecter EFD 8, EFD 10

type	dimension B
EFD 8, 10 1p	17,5
EFD 8, 10 1p+N	35
EFD 8, 10 2p	35
EFD 8, 10 3p	52,5
EFD 8, 10 3p+N	70

Fuse-switch disconnecter EFD CC

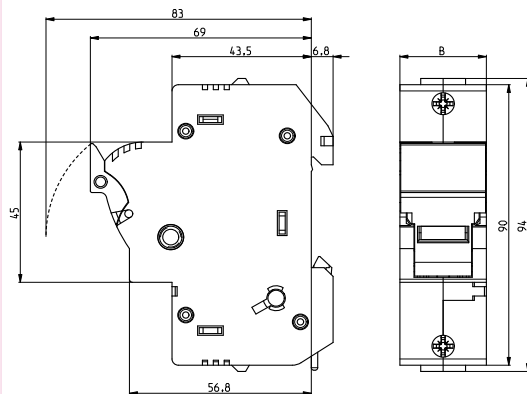
type	dimension B
EFD CC 1p	17,5
EFD CC 2p	35
EFD CC 3p	52,5



Version with adapter

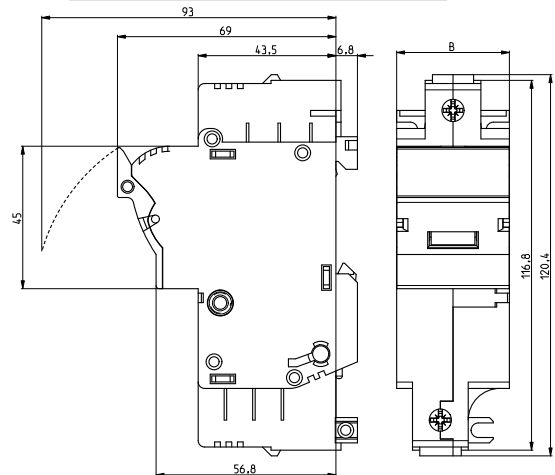
Fuse-switch disconnecter EFD 14

type	dimension B
EFD 14 1p	27
EFD 14 1p+N	54
EFD 14 2p	54
EFD 14 3p	81
EFD 14 3p+N	108

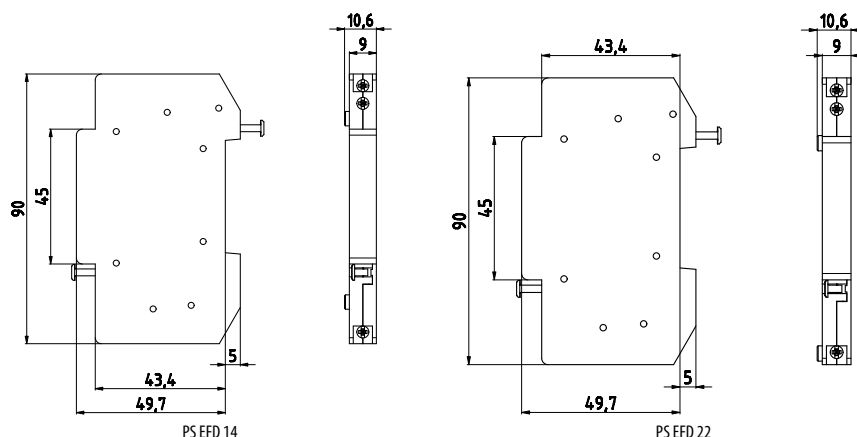


Fuse-switch disconnecter EFD 22 & EFD J30

type	dimension B
EFD 22, J30 1p	35,6
EFD 22 1p+N	71,2
EFD 22, J30 2p	71,2
EFD 22, J30 3p	106,8
EFD 22 3p+N	142,4



Auxiliary switch EFD



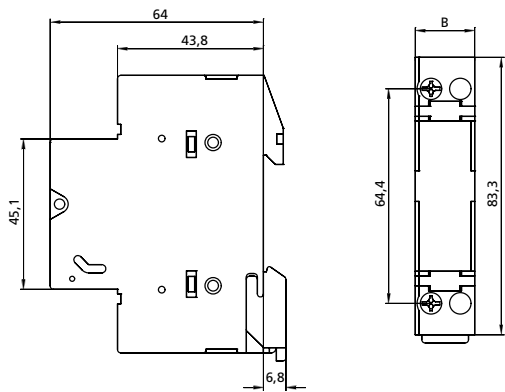
Fuse-switch disconnectors for cylindrical fuse-links PCF

Technical data PCF

	PCF 8	PCF 10
Fuse type	CH 8x32	CH 10x38
	IEC	IEC
Versions	Without indicator / LED indicator	
Number of poles	1p, 1p+N, 2p, 3p, 3p+N	1p, 2p, 3p
Rated operational voltage Ue	400V a.c.	690V a.c.
Rated operational current Ie	20A	32A
Maximum rated current of fuselinks	690V	10A gG
	500V	25A gG, 16A aM
	400V	20A gG, 10A aM
Rated frequency	50Hz	50Hz
Rated short-time withstand current Icw	240A	300A
Rated conditional short-circuit current	50kA	100kA
Rated insulation voltage Ui	400V	690V
Rated imp. withstand voltage Uimp	4kV	4kV
Overvoltage category	III	III
Max power dissipation of the fuse-link (W)	gG: 2,5W / aM: 0,9W	gG: 3W / aM: 1,2W
LED indicator operating range	50V-690V a.c.	
Utilization category	AC-22B	AC-22B
Operational performance (cycles with current)	300	300
Operational performance (cycles without current)	1700	1700
Humidity	90% at 20°C	
Operating ambient temperature	-5°C ... +40°C	
Store ambient temperature	-25°C ... +55°C	
Degree of protection (IEC 60529)	IP 20	IP 20
Terminal capacity	0,5-10mm ² , Double connection	20-10 stranded, Cu only
Screw	PZ M4	PZ M4
Torque	1,2Nm	1,2Nm
Mounting on EN 60715 rail	35mm rail	
Sealing possibility	ON and OFF	
Standards - fuse links	IEC/EN 60269-2	
Standards - Fuse-switch disconnectors/fuse holders	IEC 60947-1, IEC 60947-3	
Test reports	Int.	CCA/CB
Certificates		UL

Technical data

Technical data PCF			
		PCF 8	PCF 10
Fuse type		CH 8x32	CH 10x38
		IEC	IEC UL
Derating factor of current I_n for different ambient temperatures	20°	1	
	30°	0,95	
	40°	0,9	
	50°	0,8	
	60°	0,7	
	70°	0,5	
Derating factor of current I_n for side by side mounting fuse holders (nr. of poles)	1-4	1	
	5-6	0,8	
	7-9	0,7	
	≥10	0,6	



Fuse-switch disconnecter PCF 8, PCF 10

type	dimension B
PCF 8, 10 1p	17,8
PCF 8, 10 1p+N	17,8
PCF 8, 10 2p	35,6
PCF 8, 10 3p	53,4
PCF 8, 10 3p+N	53,4

Auxiliary switch PS PCF

