

5A/2-10 A - AMT

Fuses

for indoor use
fuse links
7.2 to 36 kV
6.3 to 320 A
type FD

General characteristics

FD associated-type fuses comply with UTEC -64200, UTE C 64203 and VDE 670 Standards, as well with IEC recommendations No. 282/1 : the fuse links have the dimensions specified in DIN 43 625.

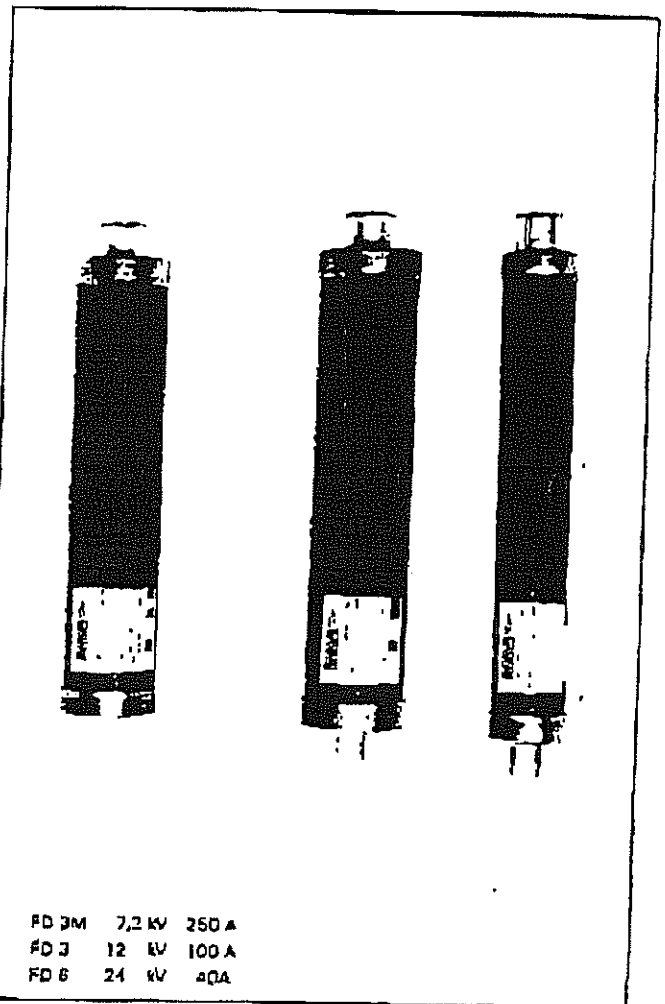
The fuses have a current limiting effect : In the event of a short circuit, the interrupting speed is such that the fault current cannot reach its maximum natural rating. Hence, installations not protected by these devices would be subject to high thermal and dynamic stresses, which are limited to very low levels by FD fuses (see page 3 the cut-off current characteristic curves).

FD fuses are specially designed to develop, upon melting, only relatively limited overvoltages as required by applicable Standards.

The fuse link, of enclosed-melting type, includes a laminated insulated tube containing a hollow refractory star core ; indented fuse elements are wound around the legs of the core ; the indented elements are embedded in inert extinguishing material which forcefully cools the arc and accordingly shortens its duration, thereby conducing to extra-high speed interruption.

The fuse is closed at both ends by metal caps of even size for all rated voltages and currents. The fuse has a melting indicator whose striker pin generates a minimum force of 0,5 joule for a minimum stroke of 20 mm.

Regardless of their application in other devices, FD fuses can be supplied with a base : see leaflet 5A/3-10 AMT.



ALSTHOM ATLANTIQUE

appareillage moyenne tension

DELLE - ALSTHOM

Application

Transformer protection


Selection of the fuse link according to the network voltage (in kV) and the transformer power (in kVA). Select the appropriate fuse rating by crossing the given service voltage column with the next higher kVA rating transformer line.

Example :

For a 375 kVA transformer at 13.8 kV the next higher rating is shown as 400 kVA, and the fuse current rating is 32 A.

kVA Power	Voltage kV	FD 3, FD 3M			FD 4			FD 5			FD 6			FD 7		
		3.2	6.6	6.3	10	11	12	13.2	13.8	15	20	22	24	30	33	34.5
25		16	10	6.3	6.3	6.3	6.3									
50		25	16	16	10	6.3	6.3	6.3	6.3	6.3						
63		25	16	16	10	10	10	6.3	6.3	6.3	6.3					
80		32	16	16	15	10	10	10	10	10	6.3	6.3				
100		32	25	16	16	16	16	16	10	10	6.3	6.3				
125		40	25	25	18	16	16	16	16	16	10	10	6.3	6.3	6.3	6.3
160		50	32	32	25	16	16	16	16	16	16	10	10	6.3	6.3	6.3
200		50	40	32	25	25	25	16	16	16	16	16	16	10	10	10
250		63	40	40	32	25	25	25	25	25	16	16	16	16	16	10
315		80	50	50	32	32	32	32	25	25	16	16	16	16	16	16
400		100	63	50	40	40	32	32	32	32	25	25	25	16	16	16
500		125	80	63	50	40	40	40	40	32	32	25	25	25	16	16
630		160	100	80	50	50	50	50	40	40	32	32	32	25	25	25
800		200	125	100	63	63	63	50	50	50	40	40	32	32	32	25
1000		250	160	125	80	80	80	63	63	63	50	40	40	32	32	25
1250		320	200	160	100	100	80	80	80	80	50	50	50	40	40	40
1600			250	200	125	125	100	100	100	100	63	63	63	50	50	50
2000			320	250	160	160	125	125	125	125	80	80	80		50	50
2500				320						125	100*					

* For 2500 kVA, 20 kV use FLRS - 100 A fuse link.

 FD 3M fuse links

Capacitor protection

Select a fuse with a current rating just greater than 1.6 times the capacitor rated current.

Voltage transformer protection

Use a 6.3 A current rating fuse

Motor protection

FD 3M fuse links are specially designed to withstand overloads caused by frequent startings. Indicate the characteristics of the applicable motor.

Important note

Whenever one (or two) elements of three phase unit has melted, it is mandatory to replace the elements in all phases, unless it can be ascertained that the over-current occurred only in one phase (or two phases).

Motor power protected by FD 3M								
According to IEC 644 (K = 1.8)								
Starting current : $I_d \leq 6 I_n$								
Starting time : $T_d \leq 30$ s								
Starting number : 6/hour (or 2 consecutives)								
Fuse rating I_n A	Starting current I_d A	Motor current I_m A	P_{HP}			P_{KW}		
			6 kv	5 kv	3 kv	6 kv	5 kv	3 kv
63	120	20	200	170	100	150	125	75
80	150	25	260	210	130	190	160	95
100	210	35	360	300	180	260	220	130
125	270	45	480	390	230	340	290	170
160	330	65	570	470	280	420	350	210
200	480	80	830	650	410	600	500	300
250	600	100	1000	860	500	760	630	380
320	900	150	1600	1300	800	1100	900	550

For other conditions : please consult us.