

DISTRIBUTION SOLUTIONS

Fuse-links type CMF

Rated voltages: 3.6 kV – 12 kV

Rated currents: 63 A – 315 A



Special design of fuse-links resistant to cyclical load typical for motor applications



Robust design suitable for harsh conditions, proven by tests according to the latest IEC standards, secures continuous protection and reliable operation

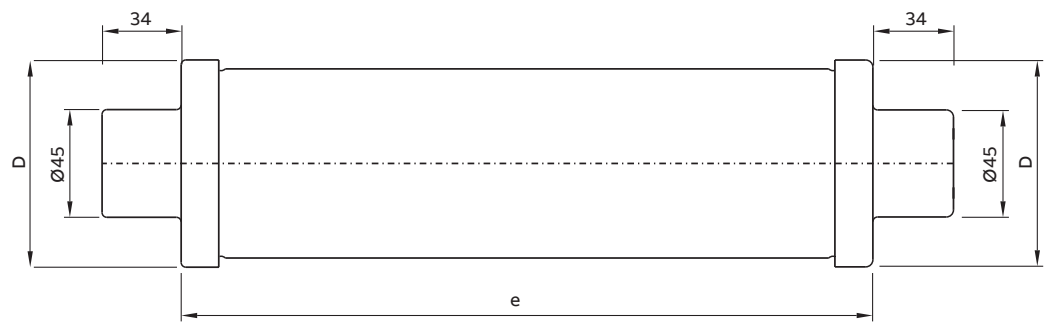


Compatibility with other ABB products provides fast and accurate product selection

Fuse-links type CMF are designed to protect motor circuits against thermal and dynamic effects of short-circuit currents.

Key features:

- Designed and type tested acc. to IEC 60282-1
- Special design allowing to withstand motor inrush starting currents
- Low power losses
- Top level fault current limitation and interruption-performance up to 63kA RMS
- Outdoor sealing included in standard version, designed and tested for harsh conditions
- Welded current path
- Contacts made from silver coated cooper
- Striker 80N (medium type)
- Standard types with Temperature Control Unit – additional protection against thermal stresses in small enclosures



CMF ordering and technical table

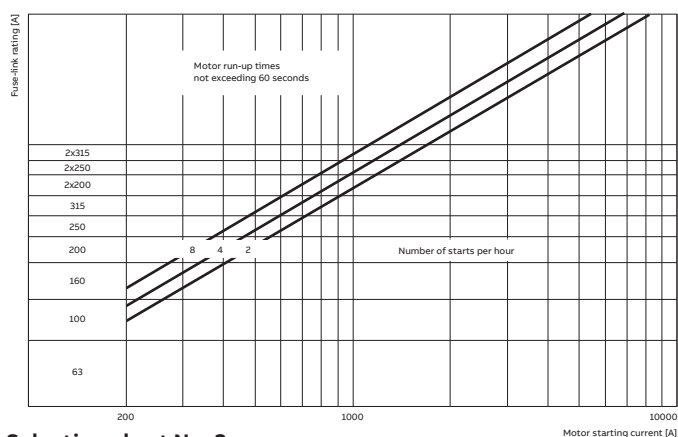
Catalog number	Rated voltage U_r [kV]	Rated current I_r [A]	Breaking capacity I_1 [kA]	Minimal breaking current I_3 [A]	K factor	Diameter D [mm]	Length e [mm]	Rated power P_w [W]	Cold resistance [mΩ]	Pre-arcing integral [A ² s]	Total interrupting integral [A ² s]	Weight [kg]	EAN 13 Code
1YMB760333M2611	3.6	100	63	275	0.75	65	292	41	3.2	14000	170000	2.3	5908270807884
1YMB760338M2611	3.6	160	63	400	0.7	65	292	70	1.9	38000	500000	2.3	5908270807891
1YMB760339M2811	3.6	200	63	500	0.7	87	292	78	1.4	76000	710000	3.6	5908270807907
1YMB760341M2811	3.6	250	63	760	0.6	87	292	90	1	140000	1150000	3.6	5908270807914
1YMB760342M2811	3.6	315	63	900	0.6	87	292	121	0.8	210000	1800000	3.6	5908270807921
1YMB760729M4611	7.2	63	63	195	0.75	65	442	43	8.5	4800	65000	3.3	5908270807938
1YMB760733M4611	7.2	100	63	275	0.75	65	442	64	4.9	14000	180000	3.3	5908270807945
1YMB760738M4611	7.2	160	63	400	0.7	65	442	109	2.9	38000	540000	3.3	5908270807952
1YMB760739M4811	7.2	200	63	500	0.7	87	442	122	2.1	76000	750000	5.3	5908270807969
1YMB760741M4811	7.2	250	63	800	0.6	87	442	133	1.5	140000	1200000	5.3	5908270807976
1YMB760742M4811	7.2	315	63	950	0.6	87	442	186	1.2	210000	2200000	5.3	5908270807983
1YMB761229M4611	12	63	63	210	0.75	65	442	71	13.5	4800	110000	3.3	5908270807990
1YMB761233M4811	12	100	63	275	0.75	87	442	88	6.6	14000	200000	5.3	5908270808003
1YMB761238M4811	12	160	63	480	0.7	87	442	139	3.9	38000	700000	5.3	5908270808010
1YMB761239M4811	12	200	63	700	0.7	87	442	166	2.7	93000	910000	5.3	5908270808027

Special fuse-links without TCU	Rated voltage U_r [kV]	Rated current I_r [A]	Breaking capacity I_1 [kA]	Minimal breaking current I_3 [A]	K factor	Diameter D [mm]	Length e [mm]	Rated power P_w [W]	Cold resistance [mΩ]	Pre-arcing integral [A ² s]	Total interrupting integral [A ² s]	Weight [kg]	EAN 13 Code
1YMB760333M2613	3.6	100	63	275	0.75	65	292	41	3.2	14000	170000	2.3	5908270809703
1YMB760338M2613	3.6	160	63	400	0.7	65	292	70	1.9	38000	500000	2.3	5908270809710
1YMB760339M2813	3.6	200	63	500	0.7	87	292	78	1.4	76000	710000	3.6	5908270809727
1YMB760341M2813	3.6	250	63	760	0.6	87	292	90	1	140000	1150000	3.6	5908270809734
1YMB760342M2813	3.6	315	63	900	0.6	87	292	121	0.8	210000	1800000	3.6	5908270809741
1YMB760729M4613	7.2	63	63	195	0.75	65	442	43	8.5	4800	65000	3.3	5908270809758
1YMB760733M4613	7.2	100	63	275	0.75	65	442	64	4.9	14000	180000	3.3	5908270809765
1YMB760738M4613	7.2	160	63	400	0.7	65	442	109	2.9	38000	540000	3.3	5908270809772
1YMB760739M4813	7.2	200	63	500	0.7	87	442	122	2.1	76000	750000	5.3	5908270809789
1YMB760741M4813	7.2	250	63	800	0.6	87	442	133	1.5	140000	1200000	5.3	5908270809796
1YMB760742M4813	7.2	315	63	950	0.6	87	442	186	1.2	210000	2200000	5.3	5908270809802
1YMB761229M4613	12	63	63	210	0.75	65	442	71	13.5	4800	110000	3.3	5908270809819
1YMB761233M4813	12	100	63	275	0.75	87	442	88	6.6	14000	200000	5.3	5908270809826
1YMB761238M4813	12	160	63	480	0.7	87	442	139	3.9	38000	700000	5.3	5908270809833
1YMB761239M4813	12	200	63	700	0.7	87	442	166	2.7	93000	910000	5.3	5908270809840

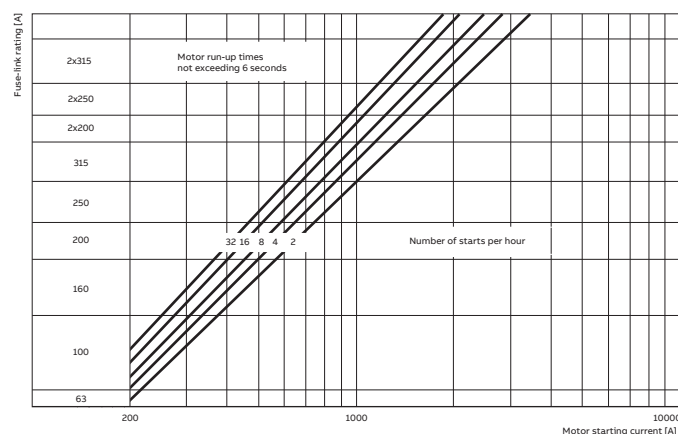
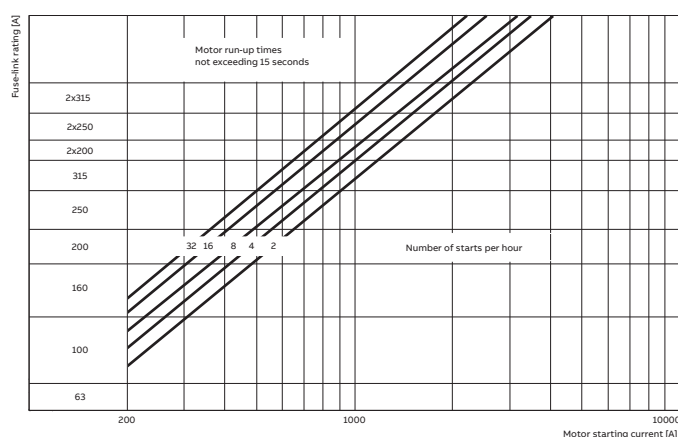
Choice of fuse-links for motor protection:

The minimum permissible current rating of the fuse-links for motor protection may be determined from the selection charts. These three charts are for run-up times of 6, 15 and 60 seconds respectively. Each chart contains different characteristics, depending on the number of starts per hour. With reference to the number of starts per hour, the first two are in immediate succession while the rest are evenly spaced at intervals of one hour. The number of starts per hour indicates the time interval between separated starts. For example, four starts in 15 minutes are represented by 16 starts per hour. The horizontal axis of the selection chart indicates the motor starting current, while the current rating of the fuse-link is found along the vertical axis.

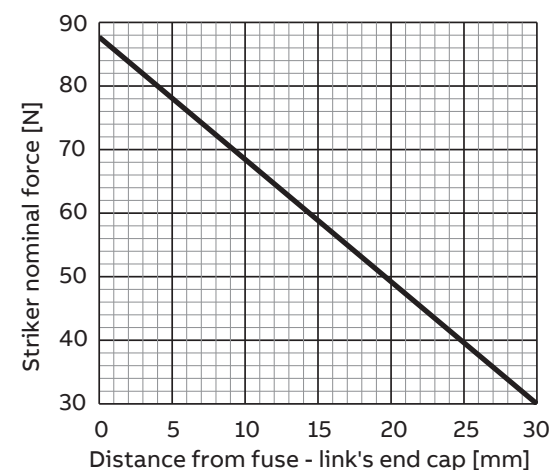
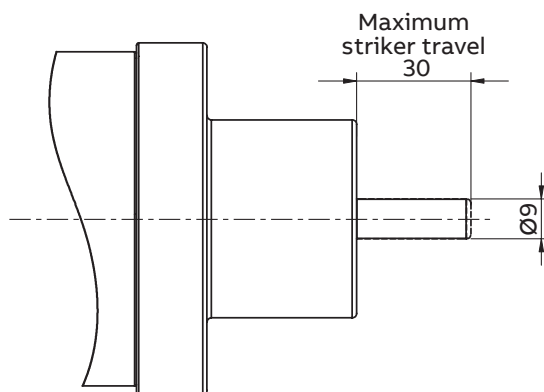
Selection chart No. 1:



Selection chart No. 2:



Fuse-link striker force and dimensions:



Selection procedure:

- Select the chart which is appropriate for the run-up time of the motor
- Select the starting current along the horizontal axis
- Depending on the number of starts per hour, select the correct characteristic (2, 4, 8, 16, 32)
- Read the correct fuse-link rating on the vertical axis.

Example	A	B
Starting current of the motor	850 A	250 A
Run-up time	6 seconds	15 seconds
Number of starts per hour	2	16
Chart number	3	2
Rated current of fuse link	250 A	160 A

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