

CEF-OT High Voltage Fuse-Links

CEF-OT short-circuit current limiting fuse-links are designed and tested according to IEC 60282-1:2005. Dimensions of fuse-links are in accordance with IEC 60282-1:2005, Type II. Features of CEF-OT High Voltage

Fuse-links are as follows:

- Low minimum breaking current,
- Low power losses,
- Low electric arc voltage,
- High breaking capacity,
- High short-circuit current limiting capacity,
- Adopted for using in combination with switch disconnector (equipped with a striker),
- Can work inside a transformer tank, immersed in transformer oil,
- Welded current path.



Application

CEF-OT fuse-links protect transformers, capacitors banks, cable feeders and overhead lines against short-circuit consequences. Fuse-links were designed specially to be used in combination with TPC bushing and TPC II switch-disconnector, which are used in ABB's TPC distribution transformers. The design of fuse-links provides resistance to high temperatures and vacuum during transformers manufacturing process.

Ambient operating environment

CEF-OT fuse-links can be operated under the following conditions:

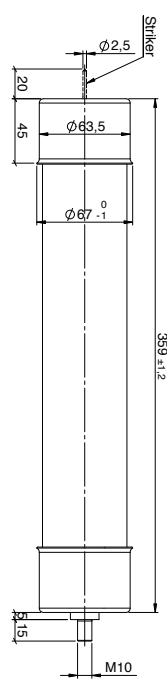
- Immersed in transformer oil, at temperatures from -40°C to +80°C,
- In outdoor and indoor installations, at temperatures from -40°C to +40°C,
- Inside a TPC bushing.

Technical data and ordering numbers of CEF-OT fuse-links

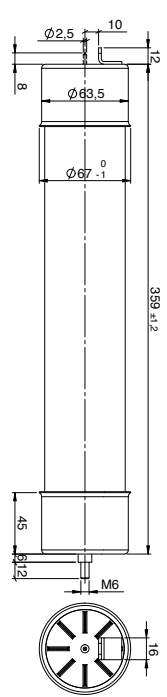
Fuse-link type	Catalogue number	Rated voltage [kV]	Rated current [A]	Minimum breaking current I_b [A]	Maximum tested short-circuit current I_s [kA]	Rated fuse-link resistance at 20°C [mΩ]	Rated power losses in air [W]	Striker force at a distance of 4 mm from end cap [N]
CEF-OT TPC1	1YMB531041M0004	12/24	20	80	31.5 (at 12 kV) 16 (at 24 kV)	115.5	70	130
CEF-OT TPC1	1YMB531041M0006	12/24	31.5	80	31.5 (at 12 kV) 16 (at 24 kV)	69.2	105	130
CEF-OT TPC2	1YMB531041M0014	12/24	20	80	31.5 (at 12 kV) 16 (at 24 kV)	115.5	70	130
CEF-OT TPC2	1YMB531041M0016	12/24	31.5	80	31.5 (at 12 kV) 16 (at 24 kV)	69.2	105	130

Dimensional drawings of CEF-OT fuse-links

CEF-OT TPC1 fuse-link

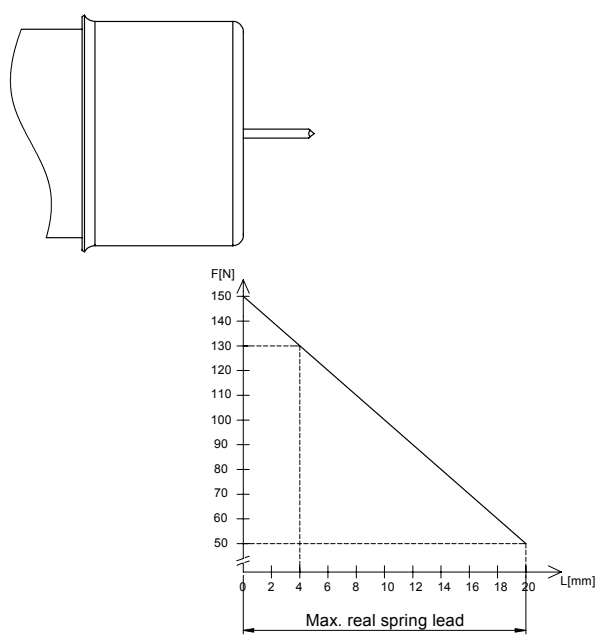


CEF-OT TPC2 fuse-link



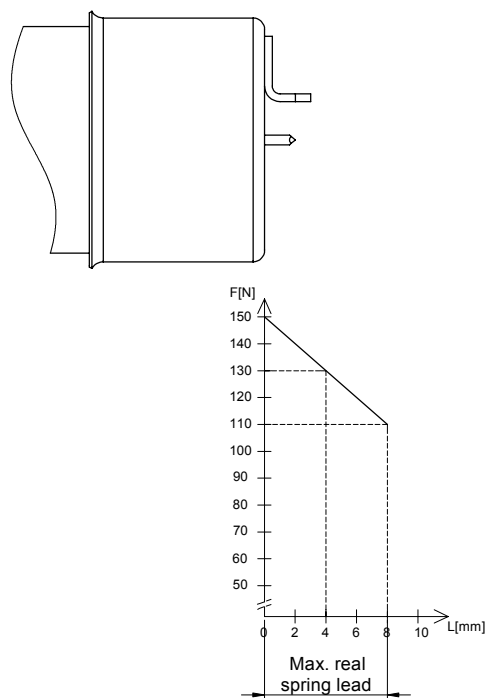
Operating characteristics of CEF-OT fuse-link striker

CEF-OT TPC1 fuse-link



- Remarks:
1. L [mm] - length from end face of fuse end-cap.
 2. F [N] - striker force.
 3. Striker energy - 2J (from 0 mm to 20 mm of travel).

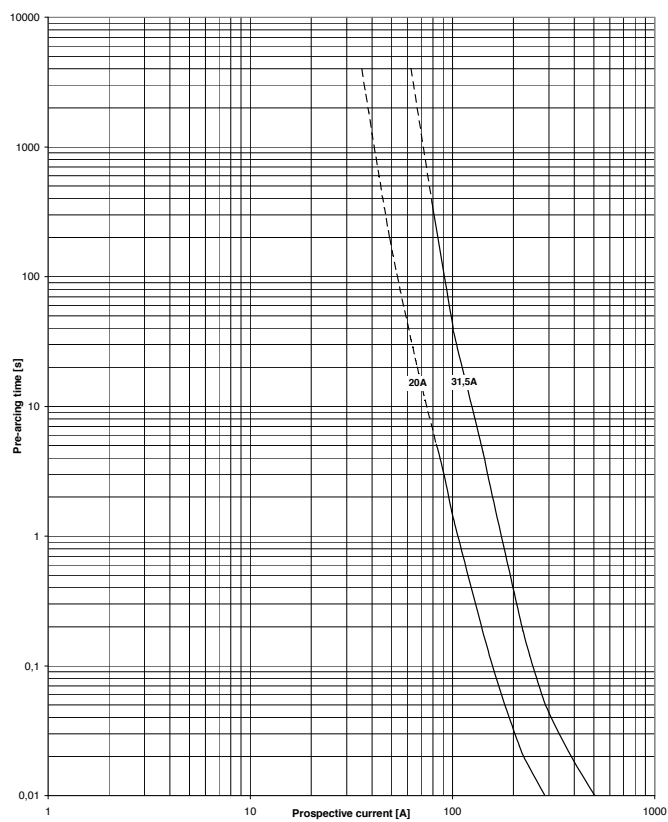
CEF-OT TPC2 fuse-link



- Remarks:
1. L [mm] - length from the end face of fuse end-cap.
 2. F [N] - striker force.
 3. Striker energy - 1J (from 0 mm to 8 mm of travel).

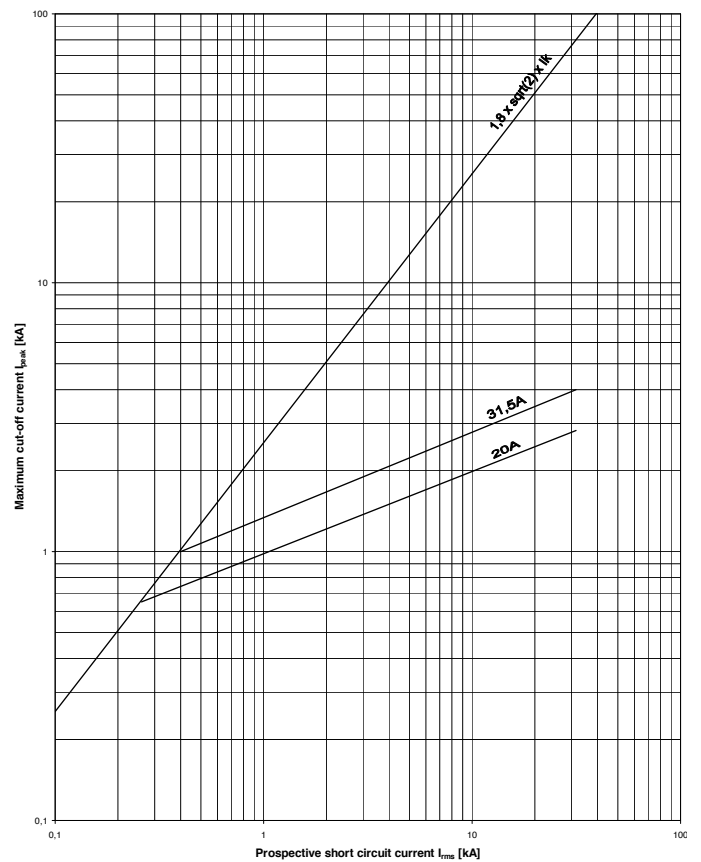
Time-current characteristics of CEF-OT fuse-links

The characteristics are valid for CEF-OT TPC1 and CEF-OT TPC2 fuse-links, they are the same for all voltages and are determined for test from cold condition of a fuse-link. In the uncertain area of breaking currents, curves are marked by dashed lines. Curve tolerance is $\pm 10\%$ with reference to the prospective current.



Cut-off current characteristics of CEF-OT fuse-links

Characteristics are valid for CEF-OT TPC1 and CEF-OT TPC2 fuse-links, they are the same for all voltages and are valid for frequency 50 Hz.



For more information please contact:

ABB Sp. z o.o.

Branch office in Przasnysz

59 Leszno Str.

06-300 Przasnysz, Poland

Phone: +48 29 75 33 200

Fax: +48 29 75 33 327

e-mail: marketingmv.plabb@pl.abb.com

www.abb.com

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB Sp. z o.o. does not accept any responsibility whatsoever for potential errors or possible lack of information in this document. We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB Sp. z o.o.

© Copyright 2012 ABB

All rights reserved