

27kV polymer Cutout

COOPER POWER
SERIES



EAT•N

Powering Business Worldwide



Eaton Cooper Power Systems, a global manufacturer, famous for its market leadership and technical innovation, provides most safe and reliable power transmission and distribution to worldwide power utilities, industries and enterprises, public institutions and homes. We provide a wide range of forward-looking products and solutions for Distributed Generation Installations, Power Quality, Outage Management, Distribution Automation, Environmental Protection.

Products include transformer, regulator, capacitor, MRPs, components, cutouts, disconnectors, overhead switchgear, RMU, VCB, and smart grid solutions, etc., which not only applied widely to substation, outdoor overhead, underground, and in-plant medium voltage distribution systems, but also to railway, solar and wind field.

We are committed to constantly improving electrical distribution for end-users to solve problems, to achieve a more reliable and safer power systems with better power quality. Your success drives us to move forward continuously and we listen to your sound for requirement.

Application

Eaton Cooper offers type L cutout, providing the reliable over current protection for primary distribution circuits. Over current protection safeguards an electric system from excessive currents produced by abnormal conditions such as faults, line or equipment failures. Eaton Cooper Cut- out are ruggedly constructed and will provide full range of overcurrent protection from minimum melt of a given fuse link to the maximum nameplate interrupting current rating of the Cutout.

Product Features

Arc shortening Rod

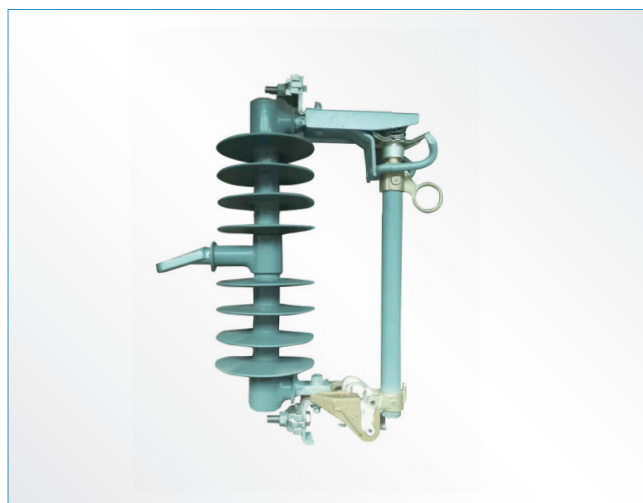
- Uses an arc shortening rod to guide the arc to the fuse center, thus reducing gas movement and improving arc interruption

660mm Creepage

- Meets level IV dirt and insulation requirements with a creepage distance of up to 660 mm for 27kV polymer Cutout. making it suitable for most locations

DEKRA Certificate

- Has a type test report of S9DAP1A by the third party DEKRA .Can be approved by most of the Utilities around the world.



Single vent

- With a limited fuse holder space, the single vent design will have higher pressure than double vent, that gives stronger ability to extinguishing the arc. Especially for those lower capacity areas with small overload, the stronger arc extinguishing ability is necessary.

Silver plated contacts

- Eaton Cooper L Cutout top and low contacts both made of casting copper parts with silver plated that will extend largely the working life of the Cutout.

Stainless steel springs and pins

- All the roll pin and springs are made of stainless steel, providing strong eroding proof ability. In those coast cities, the no stainless steel made pins and springs are very easy to erupted and make the lineman difficult to open and close the fuse holders. Even when the protection actions, the fuse holder can not drop out when it should be due to the poor pin or spring performance.

Interchangeability

- Eaton Cooper fuseholders with interchangeability not only between Polymer Cutout and Porcelain, but also with other Manufactures like AB Chance type C ,S&C Type XS, ABB tyoe ICX.

Specification and Order Information

Maximum design Rating (kV)	Insulator	Catalog product number	Impulse with-stand voltage (BIL)	Minimum 50/60Hz 1 min Dry with-stand value / Wet 10 second (kV,rms)	Current Rating (A)	Interrupting rating KA (rms)		Creepage distance Inches (mm)	Weight LBS(Kg)
						symmetrical	asymmetrical		
27kV	polymer	S9DAP1A	150	77/60	100	8	12	25.8(660)	11.5(5.2)
		S9D2P1A	150	77/60	200	8	12	25.8(660)	11.7(5.3)

Fuse Holders

100A Fuse Holder

- The Eaton Cooper Type L Cutout accommodates standard IEEE-NEMA universal type fuse links. This fuseholder can handle universal links up to 100A.

An arc shortening rod can be used to obtain the higher interrupting current ratings. The arc shortening rod is made of silver plated high conductivity copper and is attached to the fuse cap. Removal buttonhead fuse links must be used with arc shortening rod.

The 100A fuseholder features a spring assist which helps clear the fuseholder under low current operations. It also comes standard with a 9/16" bolt for easy leader installation.

Remark: PN# 27FH100A



200A fuse holder

- This fuse holder can handle universal links above 100A up to 200A and is fully rated for 27kV voltage ratings.

The 200A door standard with an arc shortening rod. The arc shortening rod is made of silver plated, high conductivity copper and is attached to the fuse cap. Removal buttonhead fuse links must be used with arc shortening rod.

The 200A fuseholder features a spring assist which helps clear the fuseholder under low current operations. It also comes standard with a 9/16" bolt for easy leader installation.

Remark: PN# 27FH200A



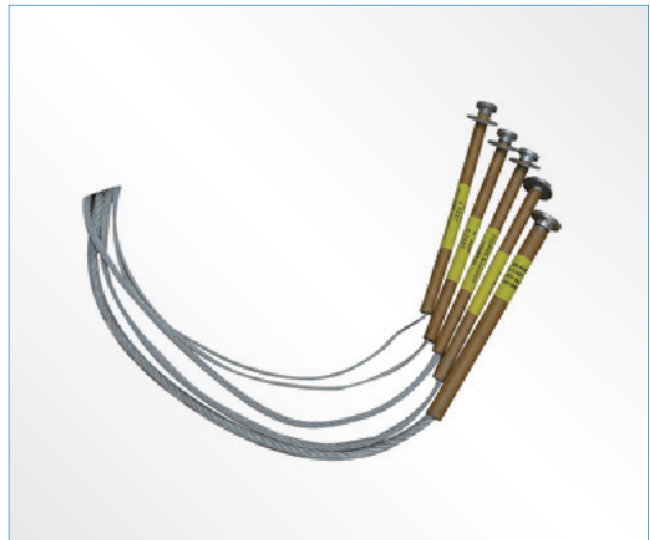
Fuse Link

Fuse Link

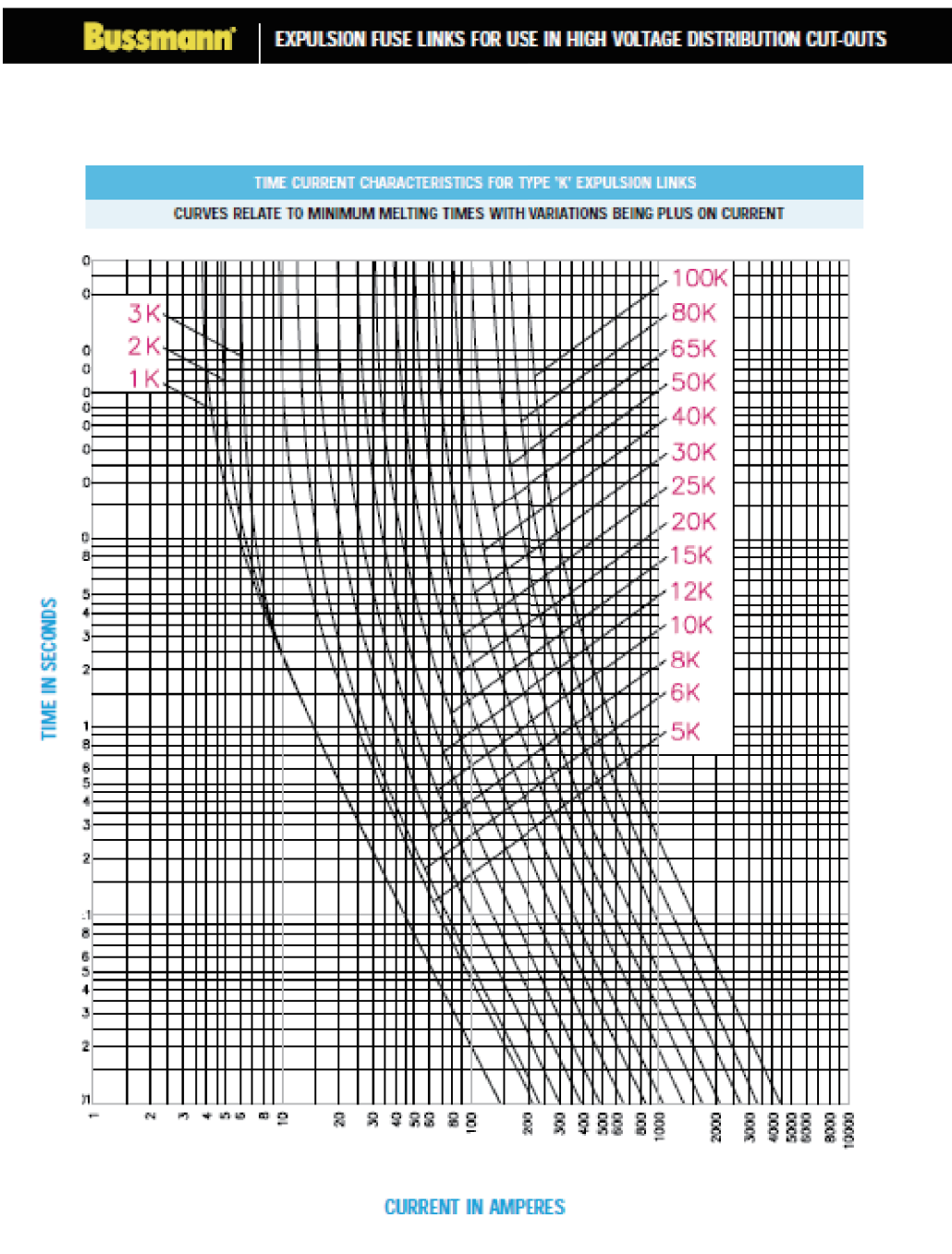
- Eaton Cooper also offers the Bussmann ©Fuse links from 1A to 100A K type.

Eaton Cooper Fuse links with a removable button which can connect with the arc shortening rod inside the fuse holders. The critical element is made of silver alloy providing timely melting point, a strengthen steel line help to sustain the forces of installation is also helpful for lineman.

Accurate time current curve is featured by Bussmann fuse link for the engineers to chose a correct suitable rate to protect the devices on the line.



Curve



TYPE TEST CERTIFICATE

Of Full Test Program

Issued to:

Client:

Cooper Electronic Technologies (Shanghai) Co., Ltd
No.955 Shengli Road, East Area of ZJ High-Tech
Park, Pudong, Shanghai, China

Manufacturer:

Cooper Electronic Technologies (Shanghai) Co., Ltd
No.955 Shengli Road, East Area of ZJ High-Tech
Park, Pudong, Shanghai, China

Object : 27kV 100A Drop-out fuse
Trade name : EATON
Type(s) : S9DAP1A
Ratings : Rated Voltage : 27 kV
Rated Current : 100 A
Rated Breaking Capacity : 8 kA
Frequency : 50 / 60 Hz
Classification : Class A

DEKRA hereby declares that the above-mentioned object has been tested on the basis of:

- constructed in accordance with the description, drawings, photographs and tests as laid down in Type Test Report no. 2600410.01-MHV
- The type tests were conducted under consideration of:
 - IEC 60282-2 (2008), clause 8.4, 8.5, 8.6, 8.7.2.2, 8.8, and 8.9;
 - STL guide to the interpretation of IEC 60282 Issue 2.0, 18th February 2021
 - Eaton Specification S105000016, 1st Sep 2021

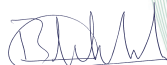
Project documentation has been reviewed and approved by **VEIKI-VNL**, a **DEKRA company**, which is a Member of the Short-Circuit Testing Liaison (STL).

This Certificate applies only to the object(s) tested. The responsibility for conformity of any object having the same designations with the object(s) tested rests with the manufacturer.

This certificate is issued on: 12 December 2021 consists of 1 page(s) in total.

Certificate number: 2600410.100-MHV

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



H.L. Schendstok
Certification Manager

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Installation

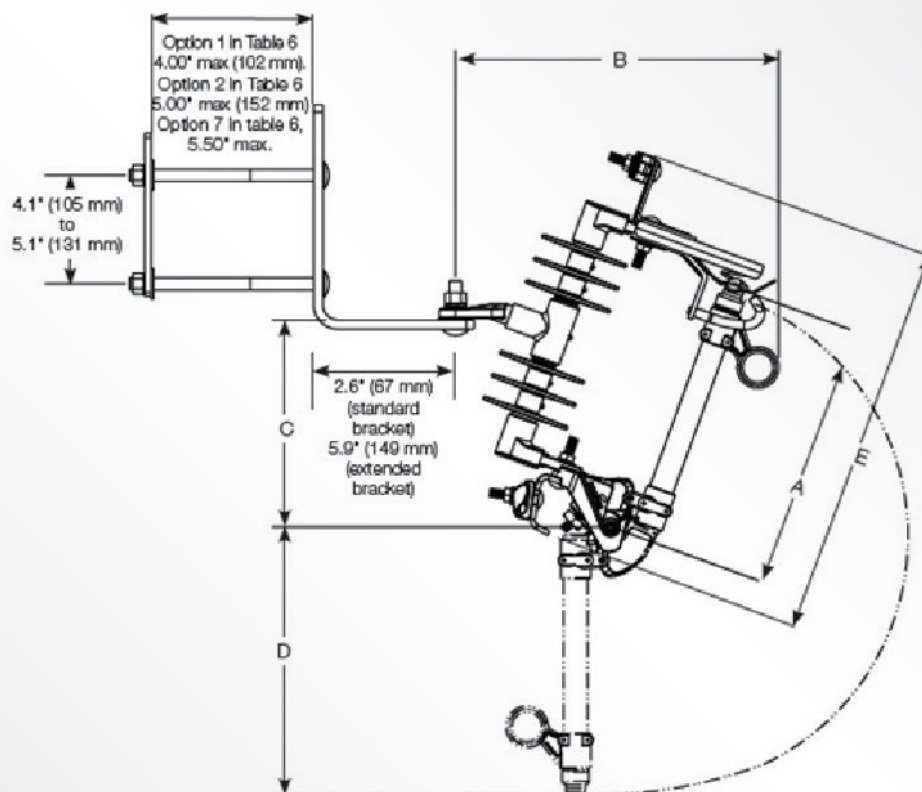
Connector/Brackets

- Eaton Cooper Type L Cutout includes a brass parallel groove connector.

Eaton Cooper Type L Cutout crossarm mounting includes a heavy-duty NEMA Type B crossarm mounting bracket to withstand the mechanical forces generated during fault current interruptions when using an expulsion fuse link. An extended crossarm mounting bracket option is also available.



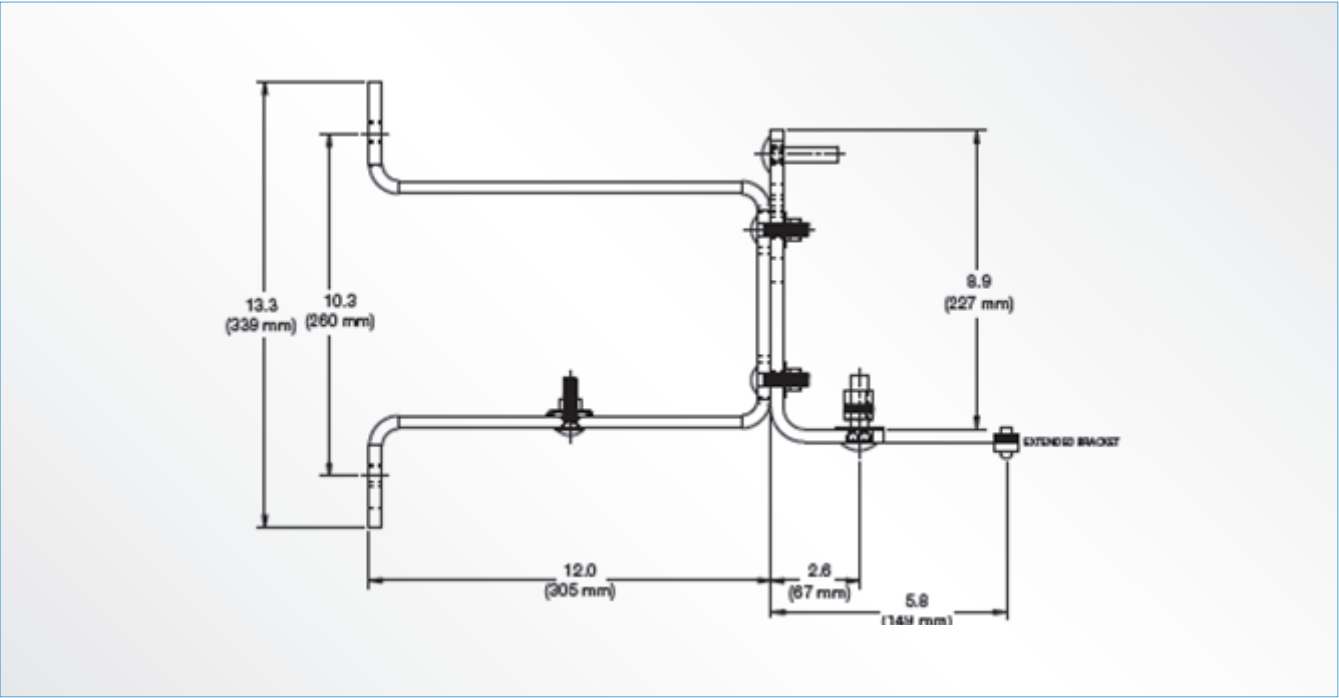
Cooper Type L Cutout Dimension Data



Installation

Cooper Type L Cutout Dimension Data

Voltage rating	BIL kV	Dimensions inches (mm)					Creepage Distance inches (mm)
		A	B	C	D	E	Polymer
27	150	14.7(374)	14.2(363)	10.1(257)	14.9(379)	19.6(498)	25.8(660)



Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to help our customers manage power — today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy, helping to solve the world's most urgent power management challenges, and doing what's best for our stakeholders and all of society. Founded in 1911, Eaton has been listed on the NYSE for nearly a century. We reported revenues of \$19.6 billion in 2021 and serve customers in more than 170 countries.

Eaton entered the Chinese market in 1993, and has grown significantly since then. In 2004, Eaton moved its Asia-Pacific headquarters from Hong Kong to Shanghai. Today, Eaton has nearly 8,000 employees and 19 manufacturing facilities in China.

For more information about Eaton China, visit www.eaton.com.cn

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