Polymer Fuse Cutout

JAKER ELECTRIC series offers new standard distribution cutouts in polymer and porcelain designs, providing reliable overcurrent protection for primary distribution circuits. Our premium polymer-insulated cutout incorporates an industry-recognized silicone rubber insulation material with superior hydrophobic qualities. The primary purpose of any cutout is to provide overcurrent protection safeguards for protecting an electric system from excessive currents produced by abnormal conditions such as faults, line or equipment overloads, or equipment failures. Polymer cutouts are ruggedly constructed and will provide full-range overcurrent protection from the minimum melt of a given fuse link to the maximum nameplate interrupting current rating of the cutout.

Construction

The fuseholder is constructed from an epoxy impregnated glass filament wound tube over an arc-quenching inner liner material. A large bronze-cast pull ring is utilized for ease of installation and re-fusing. The bronze trunnion, with the lifting ring having both front and side accessibility, is silver plated for minimum contact resistance. The grooved flipper assembly controls the link tension, ensures low fault current interruption, and prevents link breakage on "close-in." The frame is overmolded with an industry leading, track resistant, silicone rubber polymer-housing. Independent laboratory tests have verified the superiority of silicone rubber in terms of resistance to UV degradation, surface tracking/performance in contaminated environments, and other important insulating properties.



Ratings/specifications

The 7.8/15 and 15/27 kV polymer cutouts have maximum design slant voltage ratings. These cutouts are to be used on systems that have phase-to-ground voltages no greater than the value listed to the left of the slant (/) and that have phase-to-phase voltages no greater than the value listed to the right of the slant. Polymer cutouts are available in 15.5 and 27 kV voltage ratings. Both polymer- and porcelain-type cutouts are available with a 100 or 200 A fuse holder.

Synthetic Arc-Quenching Fuse Tube

The inner liner is a synthetic arc-quenching formulation with the main part consisting of aluminum trihydrate. The liner is chemically bonded to the tube's glass-reinforced shell. This combi nation provides a moisture source to extinguish the arc during interrupt operations without the absorption of moisture, and provides a high bursting strength. It is also protected from the weather and environment by a special ultraviolet resistant coating.

Brackets

The polymer cutouts come packed with one per carton and includes a NEMA bracket for crossarm mounting. All the above brackets are made from galvanized steel for long-lasting service. Cutouts can be ordered without brackets.

Terminals

Tin-plated bronze parallel groove type terminals are standard. They can accommodate aluminum or copper conductor sizes. The parallel groove design is perfect for handling two different conductor sizes as is the case when arresters are used.

Extra Corrosion Protection

The cutouts are available with stainless steel inserts, hood and bolts, and copper alloy loadbreak hooks for greater corrosion resistance in environmental areas where corrosion can be a major factor. Loadbreak hooks, for use with a loadbreak tool, are standard and serve as a "close-in" guide to ensure positive-make. A lubricant is applied to all separable connector interchanges. All hardware is designed to interlock during assembly to ensure correct alignment. The rugged design ensures smooth operation and a long operational lifetime.

Specifications

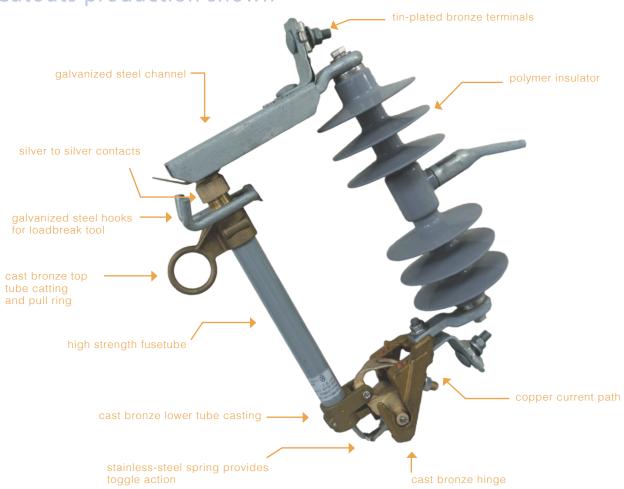
Type NO.	JK-51	JK-43
Maximum Design Rating (kV)	7.8/15	15.5/27
Impulse Withstand Voltage (BIL) 1.2x50 µs (kV)	95	125
Minimum 60 Hz 1 min. Dry (kV)	35	42
Minimum 60 Hz 10 sec Wet (kV)	30	36
Leakage (mm)	333	445

Application

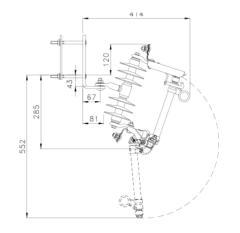
The polymer cutout provides short-circuit protection to utility lines with the added feature of mechanical capability in a loadbreaking function. Cutouts provide reliable protection from overloads that melt the fuse link through the maximum interrupt capacity of the fuseholder and also provide inductive and capacitive loadbreaking capability.

Each cutout includes standard loadbreak hooks for use with portable loadbreaking tools. This method is particularly useful for the switching of a 200 A fuse-holder and a 300 A disconnect blade.

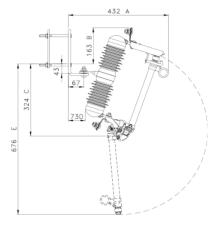
Cutouts production shown



Dimensions



Dimension of 7.8/15 kV fuse cutout



Dimension of 15.5/27 kV fuse cutout

Rating voltage	Α	В	С	D	Е
7.8/15 kV	414 mm	120 mm	285 mm	81 mm	552 mm
15.5/27 kV	432 mm	163 mm	324 mm	73 mm	676 mm

Mounting bracket dimensions

