

## ABB silicone rubber cutouts

Lightweight material for reliable outdoor performance



ABB silicone cutouts are durable, lightweight, and perform well in extreme environmental conditions. Combined with the longest creepage distance and widest insulation range in the industry, you can trust ABB silicone cutouts for reliable outdoor performance.

### Product features

- Available in 15 to 38 kV, up to 180 kV BIL
- Silicone insulators available on interchangeable (ICX), non-interchangeable (NCX), and loadbreak (LBU-II) cutouts
- 30-50% lighter than porcelain counterparts
- Greatest creepage distance in the industry
- Perfect for highly contaminated environments due to high creepage distance and hydrophobic properties, which allow better tracking resistance
- Ideal for use in stressful weather climates such as extreme cold and coastal environments due to high creepage and hydrophobicity, which help shed snow, ice, water, salt, and other environmental contaminants
- Resistance to UV degradation
- Durable and non-brittle qualities greatly reduce potential breakage during shipping, storage, installation, cold temperatures, etc.

### Excellent material choice for outdoor applications

Utilized for more than 30 years as an outdoor insulation material, silicone rubber is the most commonly used polymeric material for medium and high voltage outdoor insulation.

### Wide range of voltage and insulation levels available

ABB offers silicone cutouts in 15 to 38 kV insulation classes, up to 180 kV BIL.

### Lighter weight provides easier handling

ABB silicone cutouts weigh 30-50% less than their porcelain counterparts. The insulators are injection molded into one piece, eliminating moisture ingress and preventing breakage from freeze/thaw cycles.

### A more durable product

From the time it leaves the factory to the time it is installed, a cutout goes through a great deal of handling. Typical consequences of such handling include nicks, cracks, and broken units that have to be scrapped. ABB silicone cutouts are non-brittle and can withstand condensed storage space and the rough handling that is often associated with this type of equipment.

### Standards and design testing

ICX, NCX, and LBU-II silicone rubber cutouts meet or exceed all applicable requirements of IEEE C37.41 and C37.42 standards.

### **Hydrophobic properties enhance performance**

Hydrophobic properties allow silicone to outperform other materials because of better tracking resistance. As a result, silicone is an excellent choice for use in seacoast applications and other areas of high contamination. In addition, ABB's silicone cutouts offer the greatest creepage distance of any standard cutout available today, thus making them a better alternative for high contamination environments.

### **Longer life expectancy**

Silicone has the unique ability to maintain its hydrophobicity during the lifetime of the insulation. Other polymeric materials may also be hydrophobic, but lose this property after a relatively short time in service. Furthermore, silicone offers greater stability against heat and UV-radiation compared to other polymers.

### **Ordering instructions**

Ordering instructions for ICX, NCX, and LBU-II silicone rubber cutouts can be found in their respective product bulletins at [www.abb.com/mediumvoltage](http://www.abb.com/mediumvoltage).



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