

DISTRIBUTION SOLUTIONS

## **ABB polymer concrete cutouts** Reliable, safe, and cold weather friendly

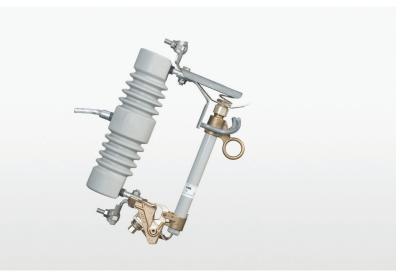


ABB polymer concrete cutouts offer a safe, shatter-proof design that resists damage from freeze/thaw cycles, resulting in outstanding performance in extreme cold weather environments.

## **Product features**

- · Improved reliability and durability
- Enhanced safety with shatter-proof design
- Resists damage from freeze/thaw cycles
- · Cast-in hot rods prevent moisture penetration
- Excellent electrical properties and dielectric strengths
- Less brittle
- Not susceptible to UV degradation
- Field proven material
- Superior mechanical toughness

## Description

ABB's polymer concrete cutouts are offered as an alternative to potted porcelain cutouts, which have a tendency to crack or shatter in extreme cold weather climates. The polymer concrete insulator cutout is the only one of its kind in the industry. Proprietary manufacturing materials make the polymer concrete cutout cold weather resistant. A unique casting process makes it more resistant to moisture ingress, and therefore resistant to damage from freeze/thaw cycles. Safety is also enhanced by the shatter-proof design, which eliminates any possibility of shattered porcelain falling on a utility worker.

Polymer concrete provides excellent electrical properties and dielectric strengths, as well as superior mechanical toughness. One utility, with over 100,000 units installed for more than twenty-five years, has not had a single cracked polymer concrete cutout.

Most of ABB's cutout and switch designs are available with a polymer concrete insulator. Contact the factory for more information.

Common ICX cutout ratings					
Nominal voltage (kV)	Voltage (kV BIL)	Continuous current (A)	Interrupting current (RSM Asym)	Cap type on fuseholder	Style numbers with NEMA bracket
15	110	100	10,000 <sup>1</sup>	Solid	X1ZCANAM11
15	110	100	16,000	Link ext. <sup>2</sup>	X1ZCBNLM11
7.8 <sup>3</sup>	110	200	12,000 <sup>4</sup>	Link ext. <sup>2</sup>	X1ZCBNPA21
275	125	100	8,000	Solid	X2ZCBNAM12
275	125	100	12,000 <sup>6</sup>	Link ext. <sup>2</sup>	X2ZCBNMM12
15 <sup>3</sup>	125	200	10,000	Solid	X2ZCBNBA22

Note: other ICX, LBU (loadbreak), and NCX (non-loadbreak) designs are available

<sup>1</sup> Passed 15 kV single shot rating of 12000 A RMS Asym.

<sup>2</sup> Required removable button head type fuse links

<sup>3</sup> For application on systems where phase-to-phase voltage does not exceed design

voltage or on grounded systems where phase-to-neutral voltage does not exceed design voltage

 $^{\rm 4}$  Passed 7.8 kV single shot rating of 16000 A RMS Asym.

 $^{\rm 5}$  May also be applied on 38 kV grounded systems at the same ratings

<sup>6</sup> Passed 27 kV single shot rating of 16000 A RMS Asym. and 7.8 kV five shot rating of 20000 A RMS Asym.

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