Type ICX
Outdoor open type cutout

Product features
- 7.8 kV, 15 kV, 15/27 kV, 27 kV, or 38 kV on 100 A
- 7.8 kV, 15 kV, and 15/27 kV only on 200 A
- 110, 125, 150, 170, or 180 kV BIL
  180 kV BIL available as V silicone only
- 100 A, 200 A continuous current fused and up to 16 kA
  interrupting current on 15 kV, 100 A only
- 300 A disconnect blade
- Porcelain, polymer concrete, or silicone insulators available
- Seacoast design
- Cutout/arrester combo
- Kick-out spring available for the 100 A and 200 A tubes.

Description
The ICX cutout is used on overhead distribution systems to provide overcurrent protection and visible indication of fuse operation. The ICX provides a visible break sectionalizing point for maintenance personnel and is equipped with hooks for use with a portable loadbreak tool. This allows the ICX to be used as a loadbreak switch to open the circuit with load current flowing.

Porcelain, polymer concrete, or silicone insulators, seacoast design, cutout/arrester combination, and kick-out spring options are available on certain models.

Ratings
The ICX is offered in several frame sizes to properly match each system BIL. Each fuse support has “universal” contacts that accommodate a 100 A fuseholder, a 200 A fuseholder, or a 300 A disconnect blade.

Design features
The ICX 100 A fuse is provided with a moisture-proof tube as a standard offering. Cutouts perform by expelling gases during interruption from the bottom of the fuse tube. For the highest interrupting rating, a link extender rod is attached to the fuse tube cap, improving the efficiency of gas expulsion and arc interruption. Fuse tubes are clearly labeled to indicate interrupting capability.

Interchangeability
The ICX cutout is designed to be electrically and mechanically interchangeable with the Hubbell (A.B. Chance) type “C” and Cooper type “L” cutouts. Testing has confirmed the performance of the ICX fuseholder and fuse support with S&C and Chance.

Standards and design testing
The ICX cutout meets or exceeds all applicable requirements of IEEE C37.41 and C37.42 standards.

Warranty
A ten-year warranty is offered on silicone and polymer concrete ICX cutouts and a five-year warranty is offered on porcelain ICX cutouts.
Options and construction details

Silicone rubber
Silicone rubber has been used for more than thirty years as an outdoor insulation material and is the fastest growing choice for polymeric material for medium and high voltage outdoor insulation. Silicone is used for its superior performance, durability, and insulation properties. It has the unique ability to maintain its hydrophobicity and offers greater stability against heat and ultraviolet radiation compared to other polymers. In addition, silicone cutouts are 30% - 50% lighter than porcelain units. Silicone insulators are available in all ratings up to 180 kV BIL.

Polymer concrete
ABB has been using polymer concrete for more than twenty years. Available in 110 and 125 kV BIL ratings, polymer concrete provides a safe, shatter-proof design with molded-in rods to prevent moisture penetration. Because it resists damage from freeze/thaw cycles, the material is an excellent alternative to porcelain in colder climates. Polymer concrete is a field-proven material that provides excellent electrical properties and dielectric strengths, as well as superior mechanical durability.

Kick-out spring
All ICX 100 A and 200 A fuse tubes are available with an optional kick-out spring. The spring assists the drop-out operation by increasing the kick-out force on the tube.

Arrester combinations
ABB offers a combination ICX cutout with an arrester option. This combination unit is pre-assembled at the factory and provides overall savings by reducing installation time and accumulated costs that result from independently purchased parts.

ICX combination units are available with various mounting brackets to fulfill industry requirements. The combo units are equipped with normal duty, heavy duty, or riser pole polymer metal oxide arresters.

Fuse tube construction
The ICX cutouts utilize two different types of fuse tubes: a moisture-proof fuse tube or a horn fiber fuse tube. The moisture proof fuse tube is standard on all 100 A designs and is notated by the letter “M” in the 8th digit of the style number (refer to Ordering Instructions on pages 4-5). The moisture-proof tube reduces swelling of the liner that can create problems with interruption.

The 200 A design utilizes a horn fiber fuse tube and is notated by the letter “A” in the 8th digit of the style number (refer to Ordering Instructions on pages 4-5). This fuse tube is composed of a horn fiber liner surrounded by a glass filament wound outer shell. Both designs have a durable tube that withstands the rigors of high fault current interruptions. In addition, the tube is applied with paint to provide protection against the effects of ultraviolet rays.

Voltage levels
Single voltage rated cutouts can be applied on any single or three-phase system where the line-to-line voltage does not exceed the cutout rating. Dual voltage rated cutouts are suitable on single-phase circuits where maximum line-to-ground voltage does not exceed the value shown to the left of the slash (for example, does not exceed 15 kV in 15/27 kV).

ICX cutouts may be used on three-phase circuits that are solidly grounded and where the maximum line-to-line voltage does not exceed the value shown to the right of the slash (for example, does not exceed 27 kV in 15/27 kV).
## Dimensions

<table>
<thead>
<tr>
<th>kV Class</th>
<th>BIL (kV)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F^n</th>
<th>Creep (in)</th>
<th>Polymer concrete</th>
<th>Weight (lb)</th>
<th>Polymer concrete</th>
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Note: Metric dimensions are displayed in [mm].

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<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F^n</th>
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<th>Polymer concrete</th>
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## Bracket dimensions

- **NEMA A bracket**
- **NEMA B bracket**
- **Extended bracket**
Ordering instructions

ICX cutout arrester combination

Digit 2
Voltage level
1 = 15 kV
2 = 27 kV
3 = 38 kV (see 150 kV BIL insulator)

Digit 3
Insulator BIL
1 = 110 kV BIL
2 = 125 kV BIL
S = 150 kV BIL

Digit 4
Cutout cap
C = Polymer normal duty
L = Polymer heavy duty
T = Polymer riser pole

Digit 5
Bracket
U = Standard combo
Contact factory for other options

Digit 6
Arrester type
C = Clamshell
E = Eyebolt

Digits 7-8
Arrester voltage
03 = 3 kV
05 = 5 kV
10 = 10 kV
12 = 12 kV
15 = 15 kV
18 = 18 kV
21 = 21 kV
24 = 24 kV
27 = 27 kV

Digit 9
Cutout terminals
1 = Clamshell
2 = Eyebolt

Digit 10
Special options
1 = None
8 = 12” lead
B = Arrester bird guard
S = Seacoast cutout
X = No arrester but in combo box

Digit 11
Cutout insulator material
(Blank) = Porcelain
J = Silicone
Z = Polymer concrete

ICX Cutouts

15 kV, 110 kV BIL

Digit 2
Insulator BIL
1 = 110 kV BIL

Digit 3
Fuse supports
N = Porcelain
J = Silicone
Z = Polymer concrete
S = Seacoast design porcelain

Digit 4
Terminal connectors
C = Clamshell
E = Eyebolt
R = Rotatable (bottom terminal)

Digit 5
Bracket
N = No bracket
A = NEMA A
B = NEMA B
F = NEMA B with 6” carriage bolts
L = Extended

Digits 7-10
Fuseholder
AM11 = 100A, 10 kA asym, solid cap
LM11 = 100A, 16 kA asym, link extender
KA21 = 200A, 10 kA asym, link extender
PA21 = 200A, 12 kA asym, link extender
CA31 = 300A, solid blade
0000 = Fuse support only (no tube)

27 kV, 125 kV BIL

Digit 2
Insulator BIL
2 = 125 kV BIL

Digit 3
Fuse supports
N = Porcelain
J = Silicone
Z = Polymer concrete
S = Seacoast design porcelain

Digit 4
Terminal connectors
C = Clamshell
E = Eyebolt
R = Rotatable (bottom terminal)

Digit 5
Bracket
N = No bracket
A = NEMA A
B = NEMA B
F = NEMA B with 6” carriage bolts
L = Extended

Digits 7-10
Fuseholder
AM12 = 100A, 8 kA asym, solid cap
MM12 = 100A, 12 kA asym, link extender
BA22 = 200A, 10 kA asym, link extender
DA22 = 300A, solid blade
CA22 = 300A, 12 kA asym, link extender
0000 = Fuse support only (no tube)
## Optional parts and accessories

### Replacement fuseholders

<table>
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<tr>
<th>Style number</th>
<th>Voltage rating (kV)</th>
<th>BIL (kV)</th>
<th>Current rating (A)</th>
<th>Interrupting rating (kAIC)</th>
<th>Cap type</th>
<th>Corresponding cutout*</th>
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* Used with ICX cutouts having the following characters in digit positions 7-10 of the ABB cutout style number.

### Replacement fuseholder caps

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<th>Interrupting rating (kAIC)</th>
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* Used with ICX cutouts having the following characters in digit positions 7-10 of the ABB cutout style number.

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