CUTOUTS (Standard, Linkbreak & Loadbreak) and CUTOUT-ARRESTER COMBINATIONS

Warranty - Material

Chance warrants all products sold by it to be merchantable (as such term is defined in the Uniform Commercial Code) and to be free from defects in material and workmanship. Buyer must notify the Company promptly of any claim under this warranty. The Buyer's exclusive remedy for breach of this warranty shall be the repair or replacement, F.O.B. factory, at the Company's option, of any product defective under the warranty which is returned to the Company within one year from the date of shipment. NO OTHER WARRANTY, WHETHER EXPRESS OR ARISING BY OPERATION OF LAW, COURSE OF DEALING, USAGE OF TRADE OR OTHERWISE IMPLIED, SHALL EXIST IN CONNECTION WITH THE COMPANY'S PRODUCTS OR ANY SALE OR USE THEREOF. The Company shall in no event be liable for any loss of profits or any consequential or special damages incurred by Buyer. The Company's warranty shall run only to the first Buyer of a product from the Company, from the Company's distributor, or from an original equipment manufacturer reselling the Company's product, and is non-assignable and non-transferable and shall be of no force and effect if asserted by any person other than such first Buyer. This warranty applies only to the use of the product as intended by Seller and does not cover any misapplication or misuse of said product.

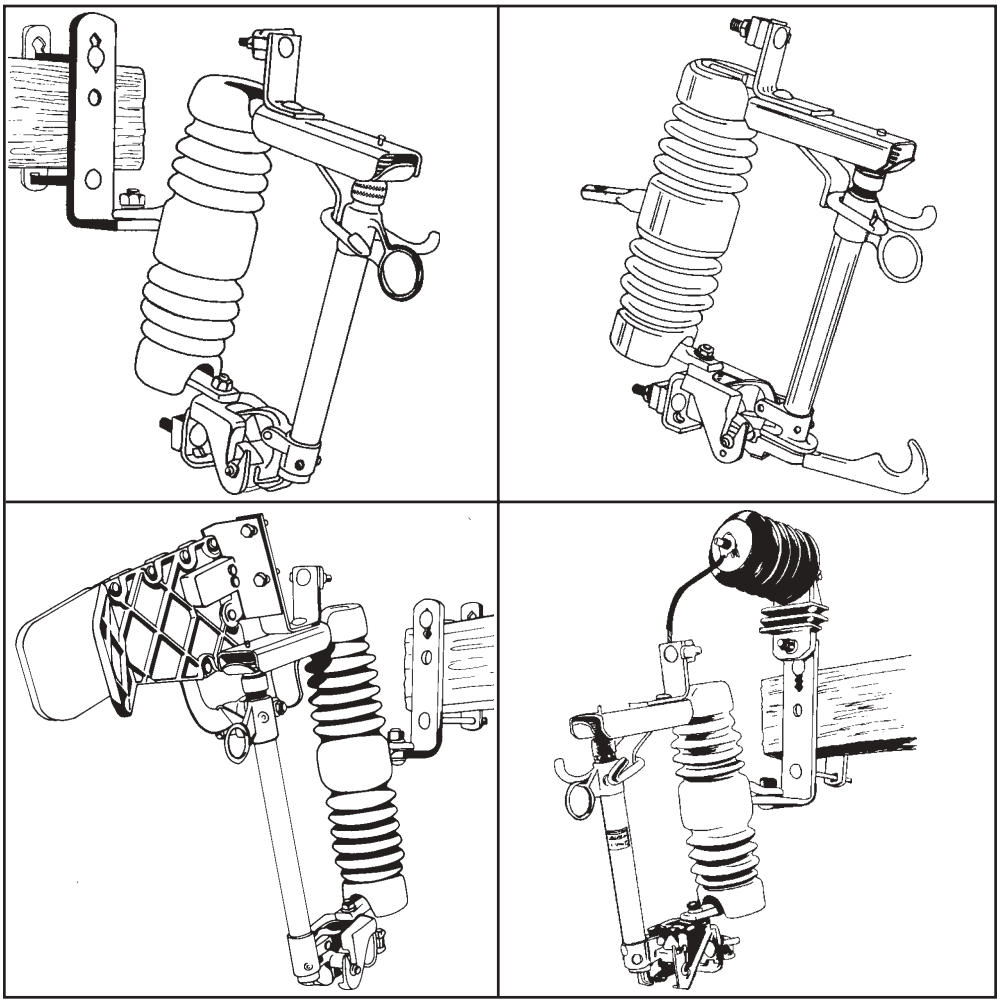
Warranty - Application

Chance does not warrant the accuracy of and results from product or system performance recommendations resulting from any engineering analysis or study. This applies regardless of whether a charge is made for the recommendation, or if it is provided free of charge.

Responsibility for selection of the proper product or application rests solely with the purchaser. In the event of errors or inaccuracies determined to be caused by Chance, its liability will be limited to the re-performance of any such analysis or study.

CAUTION: The equipment covered in this catalog section should be installed, used, and serviced only by competent personnel familiar with and following good work and safety practices. This equipment is for use by such personnel and is not intended as a substitute for adequate training and experience in safe procedures for this type of equipment.

This catalog information and any related instruction sheets do not cover all details or situations in equipment use nor do they provide for every possible contingency to be encountered in relation to installation, operation or maintenance. Should additional information and details be desired, or if specific situations arise that are not covered adequately for the user's purpose the specifics should be referred to the A.B. Chance Company.

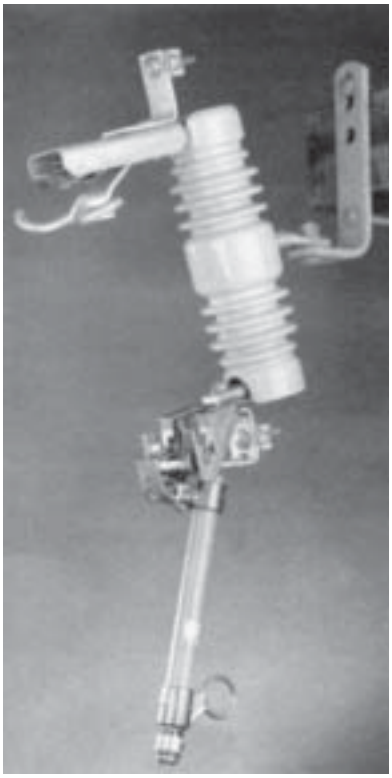


ISO 9001-1994
Cert. No. 001136

A. B. Chance Co.
Centralia, MO USA

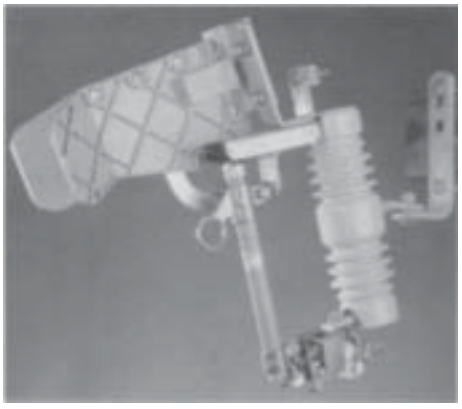
NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

Type C Cutouts

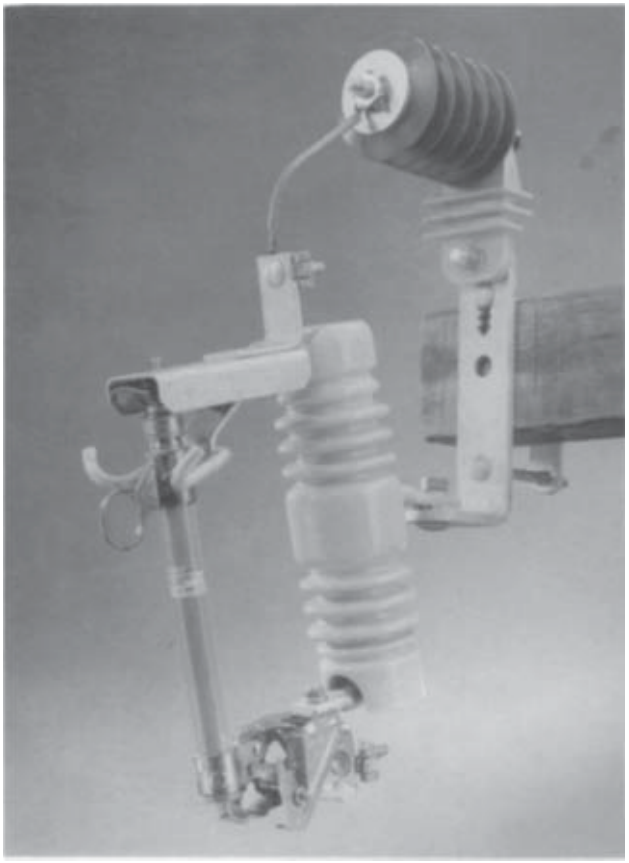


STANDARD cutout, pages 3-7

LINKBREAK cutout, pages 8-10



LOADBREAK cutout with Arc-Chute interrupter, pages 11-13



CUTOUT-ARRESTER Combinations, page 14

Application

The primary purpose of any cutout is to provide protection to the lines of your system and the various apparatus on those lines such as transformers and capacitor banks. Chance Type C cutouts provide reliable protection from low-level overloads that just melt the fuse link, intermediate faults, and very high faults, through maximum interrupt capacity.

In addition, Type C cutouts can also be used as a sectionalizing device. With the use of a portable loadbreak tool, Type C cutouts can function much like an overhead disconnect switch. There are 300 amp disconnect blade Type C cutouts available.

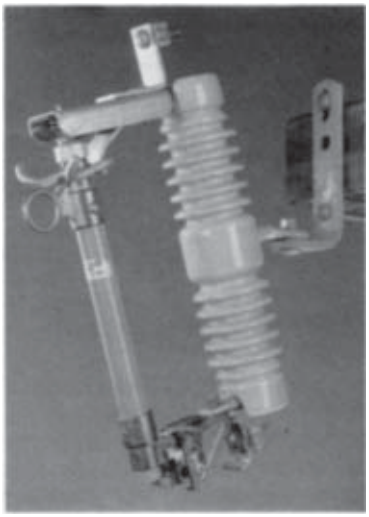
Ratings/Specifications

STANDARD Type C cutouts have maximum design voltage ratings to simplify the confusing ratings of cutouts. There are **no restrictions** on application to grounded wye, ungrounded wye, or delta systems having maximum operating voltages (line-to-line) equal to or less than the cutout maximum design voltage rating. (See the LINKBREAK and LOADBREAK cutouts for their specifications.) Interruption tests have been performed at full system line-to-line voltage. In each voltage class, there are continuous current ratings of 100 amps, 200 amps and 300 amps. See the table on page 6 for other specifications.

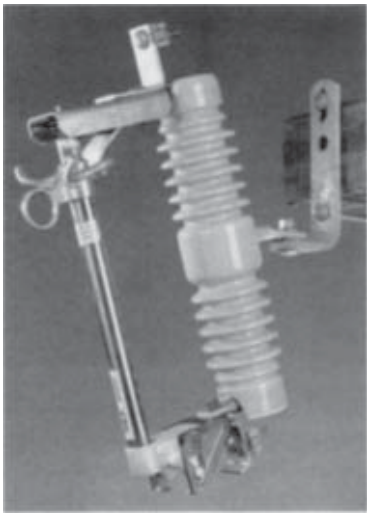
U.S. Patent 4,546,341; 6,392,526 and other Patents Pending

Type C STANDARD Cutout

100 Amp
Single Vent



200 Amp
Single Vent



300 Amp
Disconnect

Chance Type C fuseholders are also mutually interchangeable with the S & C Electric Company's Type XS cutout.

Quality Construction

Efficient Current Transfer

The Chance Type C cutout has an all copper current path. All contacts are silver-plated. Terminals are tin-plated bronze for use with copper or aluminum conductors.

Loadbreak Hooks

Galvanized steel hooks are standard on all Type C cutouts, except the arc chute version, for use with a portable loadbreak tool. These sturdy hooks are mounted on the top support and serve to guide the fuseholder into the latch socket when closing at an off-center angle.

Top Contact

The top contact is attached to the galvanized-steel hood by a stainless rivet to provide a smooth self-aligning action during closing even in severely corrosive environments. The top contact provides a socket-type cavity for latching the fuseholder and prevents any possible "over-travel" of the fuseholder. The top contact is made of a highly conductive copper strip with silver-plated embossments to resist corrosion. The contacts are held under constant pressure designed to maintain firm contact with the fuseholder contact surface until fault interruption is accomplished.

Hinge

The hinge on the Type C cutout employs large pivot areas for the fuseholder's trunnion and is cast of a copper alloy chosen for its strength and corrosion resistance. The hinge contacts are highly conductive copper alloy stampings and are plated to assure low resistance current transfer from the trunnion casting. The parallel current paths are backed up by high strength cantilever springs and are riveted to the hinge castings. Fuseholder can be dropped into place and easily lifted up and out. No tricky maneuvering.

Insulators

The insulators used on Type C cutouts are a sky-glaze gray. The metal to metal leakage distance on the 15 kV cutout insulator is 8.7 inches (220 mm), 12.6 inches (320 mm) on the 27 kV (125 kV BIL), 17.3 inches (440 mm) on the 27 kV (150 kV BIL), 26 inches (660 mm) on the 36 kV (170 kV BIL), and 28.4 inches (720 mm) on the 36 kV (170 kV BIL) .

Fuseholders

The solid cap on the single vent fuseholder is a copper alloy, silver-plated to provide efficient current transfer. An integral ring is provided in the top tube casting for opening and closing the fuseholder with conventional disconnect tools from the ground, from a bucket truck or from the pole.

The **toggle type trunnion casting** is a selective **silver-plated bronze** for efficient current transfer to the lower hinge contacts. A cam shaped projection on each side of the trunnion casting provides high pressure parallel current paths to the lower contacts. These projections, or pivot pins, are cast full round for smooth rotational operation in the hinge. The link ejector assists in arc interruption during low fault current or excessive overload conditions. A groove in the center of the link ejector allows the fuse link's pigtail to go directly from the fuse tube to the attachment nut. A curved ejector minimizes bending stresses in the pigtail to prevent broken strands. A stainless steel torsion spring on the link ejector helps to rapidly eject the link from the bore of the fuseholder during interruption. The 200 amp link ejector has a wider groove area and increased spring force to accommodate the larger links.

The **link ejector** is pinned to the trunnion casting with a stainless steel pin to provide resistance to corrosive elements and provide smooth pivotal action. An interlocking feature between the link ejector and tube casting prevents excessive tension on the fuse link during closure, thereby preventing link breakage.

The **link ejector** employs a hammer effect to enhance toggle action of the trunnion during low fault and overload interruptions, hence dropout action is enhanced. The link ejector provides sufficient surface area to facilitate re-fusing by linemen wearing gloves.

Type C STANDARD Cutout

PRODUCT FEATURES

Interchangeability

The Chance Company was the first to design a cutout that could interchange fuseholders and mounting assemblies with those of another manufacture. Standard Type C fuseholders and mounting assemblies are mutually interchangeable with the S&C Electric Company's Type XS cutout (within the same voltage class).

Fusetube

The ½-inch inside diameter of the Type C cutout's 100 ampere fusetube increases internal pressure giving superior and reliable expulsion action. During frequently encountered intermediate fault ranges this diameter also permits higher TRV (transient recovery voltage) values to be tolerated. This small bore design eliminates any concern related to high impedance phase-to-phase faults on ungrounded wye and delta systems.

The inside liner is constructed of a synthetic arc-quenching material. The tube is made of fiberglass which permits the smaller bore and provides a higher burst strength. It is protected from the weather and environment by a special ultra-violet resistant coating.

Also, the Chance fusetube operates with fuselinks from all major suppliers.

Brackets

C cutouts come packed one per carton including a NEMA Heavy Duty "B" bracket with captive 1½" bolt for crossarm mounting.

Type X brackets, also for crossarm mounting, provides 2⅝" additional clearance between the crossarm and the cutout.

"D" brackets are used to mount cutouts and/or arresters directly to the pole. Three brackets may be used for three-phase application. Type D brackets provide a clean, quick mounting without crossarm or special pole bands.

All the above brackets are galvanized steel for long lasting service. Cutouts can be ordered without any brackets.

Higher Interrupt Capacities

By using a copper arc shortening rod inside the top of the fusetube, higher interrupt ratings are obtainable. An arc shortening rod is attached to the cap of some fusetubes and lowers the fuse link within the fusetube. This permits a much shorter arc, resulting in less arc energy, and higher interrupting capacities.

For 200 A tubes, it allows for full voltage rating.

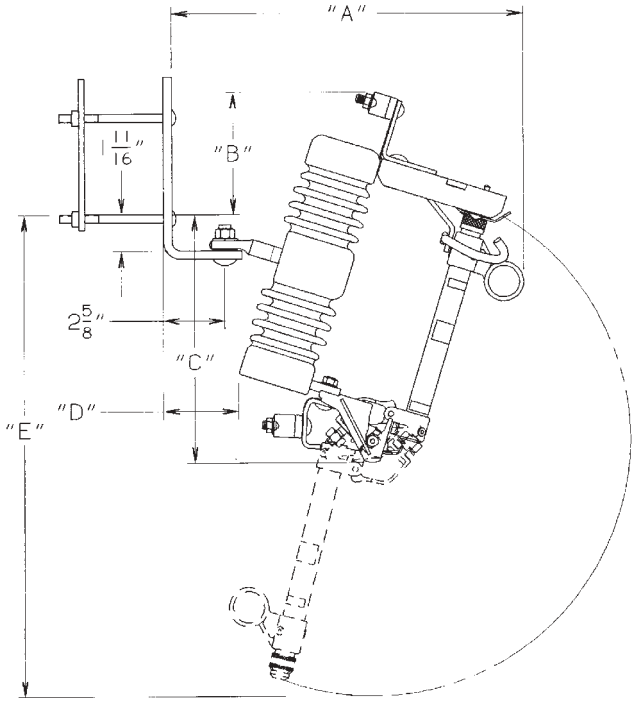
It is necessary to use fuse links with removable buttonheads when arc shortening rods are employed.

170 kV BIL

A 170 kV BIL Type C cutout is available for use in areas where the 28.4-inch minimum leakage distance to ground is required. See ordering data, page 6.

Extra Corrosion Protection (150 and 170 kV BIL only)

Type C cutouts are available with components of stainless steel inserts, hood and bolts, and copper alloy loadbreak hooks to offer greater corrosion resistance for environmental areas where corrosion can become a major factor. To order a stainless steel/copper alloy cutout add the suffix "S" to the end of the catalog number with the rating specifications desired. In additon, an optional spring assist may be provided to further enhance the toggle and drop out action in highly corrosive applications.



STANDARD Type C Cutout with NEMA Type B Bracket Dimensions

kV BIL	A	B	C	D	E
110	16"	5½"	10¾"	3½"	21½"
	406 mm	137 mm	273 mm	89 mm	559 mm
125	16⅜"	7⅛"	12½"	3⅛"	26¾"
	416 mm	181 mm	318 mm	79 mm	679 mm
150	16⅜"	7⅛"	12½"	3⅛"	26¾"
	416 mm	181 mm	318 mm	79 mm	679 mm
170	17¼"	8½"	15"	1¾"	32½"
	438 mm	216 mm	381 mm	44 mm	826 mm

Terminals

Tin-plated bronze parallel groove type terminals are standard on Type C cutouts. They can accommodate aluminum or copper conductor sizes ranging from No. 6 (13.3 mm^2) solid copper through 4/0 (160.6 mm^2) ACSR or 250 (167.5 mm^2) kcmil stranded copper. The parallel groove design is perfect for handling two different sizes of conductor as is the case when arresters are being used. Eyebolts are also available. See ordering data, page 10A-7.

Compare Chance® quality and technical expertise
Type C STANDARD Cutout

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

Manufacturing and/or use under U. S. Patent No. 4,546,341 and 6,392,526.

COPPER ARC-SHORTENING ROD (ON SOME RATINGS)

TWO-PLACE LOCKING TO PREVENT SIDE MOVEMENT OF HOOD, CONTACTS OR HOOKS

TIN-PLATED BRONZE TERMINALS FOR USE WITH COPPER OR ALUMINUM CONDUCTOR

COPPER CURRENT PATH

GALVANIZED-STEEL CHANNEL

BIRD-PROOFED ONE-PIECE SOLID-PORCELAIN INSULATOR

STAINLESS STEEL BACKUP SPRING TO MAINTAIN CONTACT PRESSURE

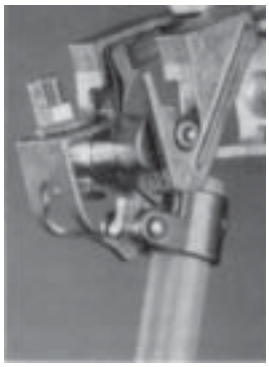
SILVER-TO-SILVER CONTACTS

GALVANIZED STEEL HOOKS FOR LOADBREAK TOOL

CAST BRONZE TOP TUBE CASTING AND PULL RING

HIGH-STRENGTH FIBERGLASS FUSETUBE COATED WITH ULTRA-VIOLET INHIBITOR

HOT STICK HOLE IN TRUNNION CASTING



LARGE NUT TO FASTEN FUSELINK WITHOUT BREAKING STRANDS

CAST BRONZE LOWER TUBE CASTING

COPPER CURRENT PATH

STAINLESS-STEEL SPRING ENSURES PROPER TOGGLE ACTION OF FUSELINK EJECTOR (CAST-BRONZE ON ALL 200 AND LINKBREAK FUSEHOLDERS; STAINLESS-STEEL ON ALL 100A)

SILVER-TO-SILVER CONTACTS WITH STAINLESS STEEL BACKUP SPRINGS

MECHANICAL ASSIST:

FUSEHOLDER IS AVAILABLE WITH A TORSIONAL SPRING ON TRUNNION TO AID DROP OUT OPERATION IN CORROSIVE ENVIRONMENTS.

FUSEHOLDER TOGGLE LATCH LIMITS TENSION OF FUSELINK

CAST BRONZE HINGE FOR CORROSION RESISTANCE

Type C STANDARD Cutout

Specifications and Ordering Information

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

See page 10A-17 for Catalog Number System.

15 kV (110 kV BIL) — RUS Listed

*Catalog Number	Maximum Design Voltage	Nominal System Voltage	Continuous Current (Amps)	Interrupt Capacity (Asym Amps)	Leakage to Ground Metal to Metal		Weight (lb./kg.)	Replacement Fusetube Cap	Arc Shortening Rod
C710-112PB	15 kV	Thru 14.4 kV	100	10,000	8.7"	220 mm	17.4 / 7.98	P700-1535P	No
C710-114PB	15 kV	Thru 14.4 kV	100	16,000	8.7"	220 mm	17.6 / 7.98	E700-1767P	Yes‡
C710-143PB	15 kV	Thru 14.4 kV	200	12,000	8.7"	220 mm	18.2 / 8.26	E700-2146P	Yes‡
C710-133PB	15 kV	Thru 14.4 kV	300	12,000**	8.7"	220 mm	17.7 / 8.03	P700-1535P	N/A

27 kV (125 kV BIL) — RUS Listed

C710-211PB	27 kV	Thru 24.9 kV	100	8,000	12.6"	320 mm	20.9 / 9.07	P700-1535P	No
C710-213PB	27 kV	Thru 24.9 kV	100	12,000	12.6"	320 mm	20.2 / 9.16	E700-1768P	Yes‡
C710-242PB	27 kV	Thru 24.9 kV	200	10,000	12.6"	320 mm	20.9 / 9.48	E700-2479P	Yes‡
C710-233PB	27 kV	Thru 24.9 kV	300	12,000**	12.6"	320 mm	20.4 / 9.25	P700-1535P	N/A

27 kV (150 kV BIL) — RUS Listed

C710-311PB	27 kV	No Restrictions thru 24.9 kV; †26.4 thru 34.5 kV	100	8,000	17.3"	440 mm	25.8 / 11.70	P700-1535P	No
C710-313PB	27 kV	No Restrictions thru 24.9 kV; †26.4 thru 34.5 kV	100	12,000	17.3"	440 mm	26.0 / 11.79	E700-1768P	Yes‡
C710-342PB	27 kV	No Restrictions thru 24.9 kV; †26.4 thru 34.5 kV	200	10,000	17.3"	440 mm	26.6 / 12.07	E700-2479P	Yes‡
C710-333PB	27 kV	No Restrictions thru 24.9 kV; †26.4 thru 34.5 kV	300	12,000**	17.3"	440 mm	26.2 / 11.88	P700-1535P	N/A

36 kV (170 kV BIL) — RUS Listed

C710-613PB	36 kV	Thru 34.5 kV	100	11,200	26"	660 mm	28.6 / 12.97	E700-1743P	Yes‡
C710-643PB	27 kV	No Restrictions thru 24.9 kV; †26.4 thru 34.5 kV	200	12,000	26"	660 mm	29 / 13.15	E700-2117P	Yes‡
C710-633PB	36 kV	Thru 34.5 kV	300	12,000**	26"	660 mm	28.6 / 12.97	P700-1535P	N/A

NOTE: 26" fuse links are recommended.

36 kV (170 kV BIL) — RUS Listed

C710-713PB	36 kV	Thru 34.5 kV	100	11,200	28.4"	720 mm	33.9 / 12.97	E700-1743P	Yes‡
C710-743PB	27 kV	No Restrictions thru 24.9 kV; †26.4 thru 34.5 kV	200	12,000	28.4"	720 mm	34.3 / 15.55	E700-2117P	Yes‡
C710-733PB	36 kV	Thru 34.5 kV	300	12,000**	28.4"	720 mm	33.9 / 15.37	P700-1535P	N/A

NOTE: 26" fuse links are recommended.

***Suffix:** **P** = Parallel-groove clamps [No. 6 solid through 4/0 ACSR (13.3mm^2 - 160.6mm^2) or 250 kcmil stranded (167.5mm^2)]
B = NEMA Heavy Duty "B" bracket with 1½" captive bolt

Terminal variations:

P = Parallel-groove clamps [No. 6 solid through 4/0 ACSR (13.3mm^2 - 160.6mm^2) or 250 kcmil stranded (167.5mm^2)]
E = Small eyebolt [No. 8 solid through 2/0 stranded (7.7 - 90mm^2)]
Change "P" to "E;" e.g., C710-112EB
L = Large eyebolt [No. 6 solid through 4/0 stranded (13.3 - 160.6mm^2) or 250 kcmil stranded (167.5mm^2)]
Change "P" to "L;" e.g., C710-112LB

Bracket variations:

B = NEMA Heavy Duty "B" bracket with 1½" captive bolt
X = Extended bracket (horizontal section 2⅝" longer than NEMA Type B bracket)
Change "B" to "X;" e.g., C710-112PX
D = Pole mounting bracket *Change "B" to "D;" e.g., C710-112PD*
(Blank) = Without crossarm bracket *Drop "B" from Catalog No.; e.g., C710-112P*

**Momentary rating — Solid blade

†For application on single-phase to neutral or three-phase solidly-grounded wye-connected circuits where recovery voltage does not exceed the maximum-design voltage of the device.

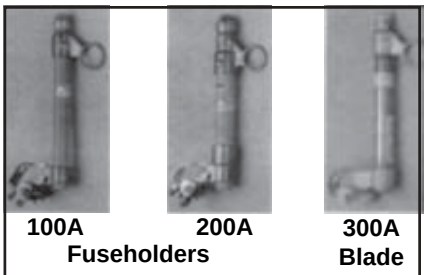
‡Must use removable buttonhead fuse links.

Fuseholders and Mounting Assemblies

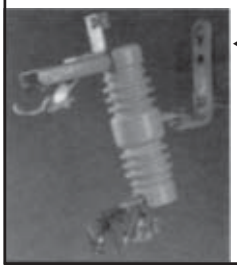
Ordering Information

15 kV (110 kV BIL)

*Cutout Catalog Number	Fuseholder or Blade only Catalog No.	Weight		Mounting Assembly only *Catalog No.	Weight	
C710-112PB	T710-112T	1.8 lb.	0.82 kg.	T710-1MMPB	12.9 lb.	5.85 kg.
C710-114PB	T710-114T	2.0 lb.	0.91 kg.			
C710-143PB	T710-143T	2.6 lb.	1.18 kg.			
C710-133PB	T710-133T	2.1 lb.	0.95 kg.			



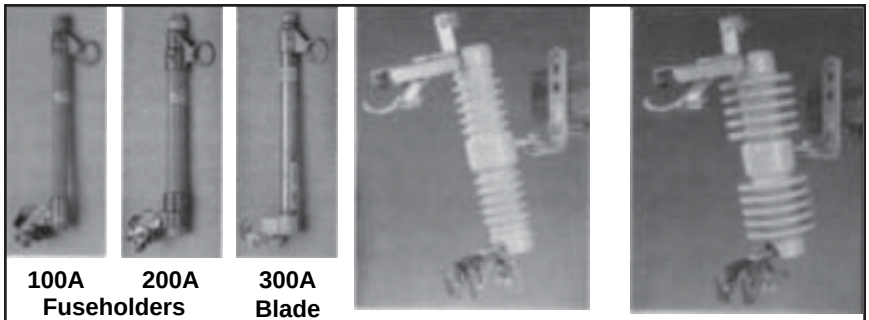
100A Fuseholders 200A 300A Blade



◀15 kV 8.7" leakage

Catalog No. T710-1MMPB

Mounting Assembly only



100A Fuseholders 200A 300A Blade

27 kV - 12.6" leakage T710-2MMPB

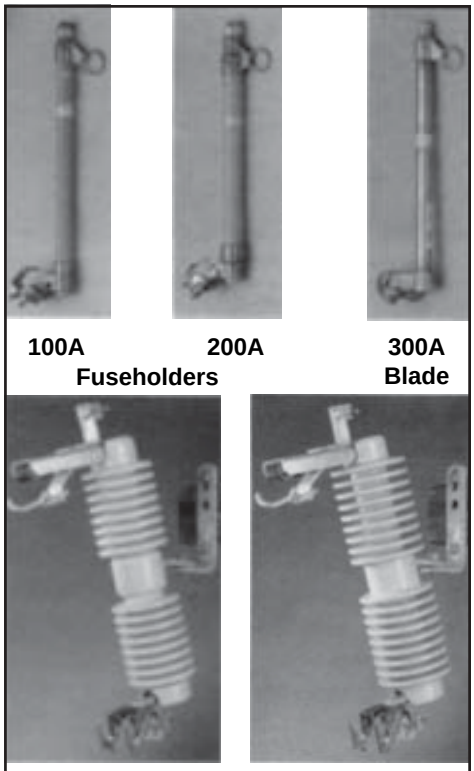
27 kV - 17.3" leakage T710-3MMPB

27 kV (125 kV BIL)

C710-211PB	T710-211T	2.1 lb.	0.95 kg.	T710-2MMPB	15.6 lb.	7.08 kg.
C710-213PB	T710-213T	2.3 lb.	1.14 kg.			
C710-242PB	T710-242T	2.7 lb.	1.22 kg.			
C710-233PB	T710-233T	2.5 lb.	1.13 kg.			

27 kV (150 kV BIL)

C710-311PB	T710-311T	2.1 lb.	0.95 kg.	T710-3MMPB	21.3 lb.	9.66 kg.
C710-313PB	T710-313T	2.3 lb.	1.14 kg.			
C710-342PB	T710-342T	2.7 lb.	1.22 kg.			
C710-333PB	T710-333T	2.5 lb.	1.13 kg.			



100A Fuseholders 200A 300A Blade

36 kV - 26" leakage T710-6MMPB

36 kV - 28.4" leakage T710-7MMPB

36 kV (170 kV BIL)

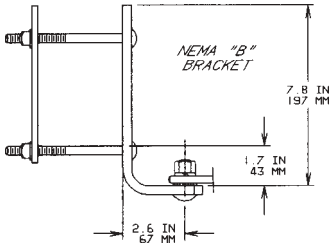
C710-613PB	T710-613T	2.8lb.	1.27 kg.	T710-6MMPB	23.4 lb.	10.61 kg.
C710-643PB	T710-643T	3.2 lb.	1.45 kg.			
C710-633PB	T710-633T	2.8 lb.	1.27 kg.			

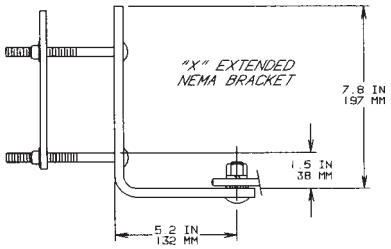
NOTE: 26" fuse links are recommended.

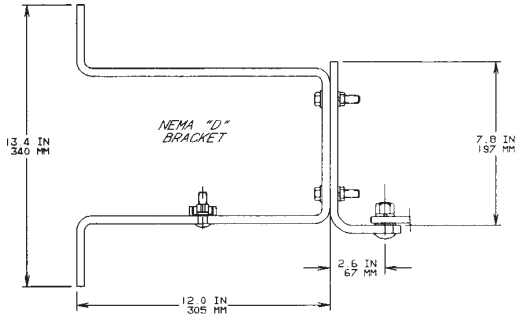
36 kV (170 kV BIL)

C710-713PB	T710-713T	2.8lb.	1.27 kg.	T710-7MMPB	28.7 lb.	13.02 kg.
C710-743PB	T710-743T	3.2 lb.	1.45 kg.			
C710-733PB	T710-733T	2.8 lb.	1.27 kg.			

NOTE: 26" fuse links are recommended.

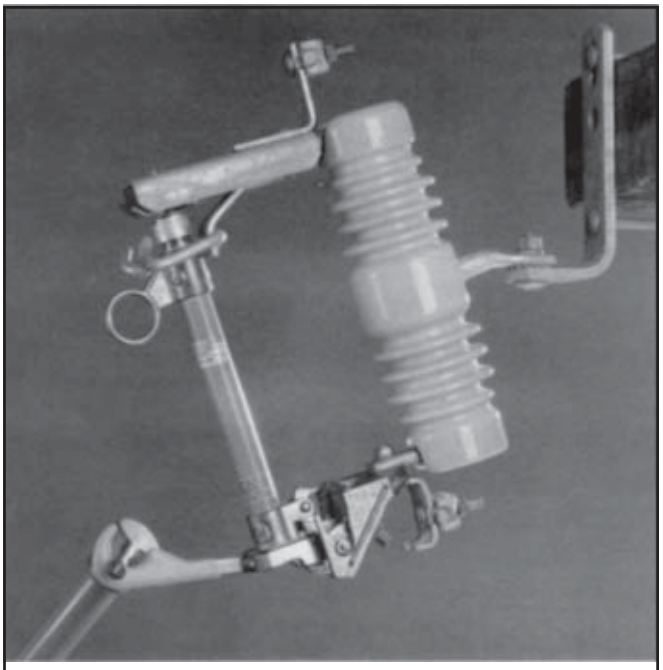






Type C 100-Amp LINKBREAK Cutout

15 kv - 110 kV BIL
15/27 kV - 125 kV BIL
22/36.4 kV - 150 kV BIL
22/36.4 kV - 170 kV BIL



A sharp downward pull on the lever with a hookstick breaks the fuselink.

15 kV - 110 kV BIL unit

Application

The Chance Type C 100 amp LINKBREAK cutout provides short circuit protection to utility lines with the added feature of mechanical linkbreak capability in a loadbreaking function. Linkbreak cutouts provide reliable protection from overloads that just melt the fuselink through the maximum interrupt capacity of the fuseholder and also provide inductive and capacitive loadbreak capability. For loadbreak ratings see chart, next page.

The unit will also accept the Type C 200 amp non-loadbreak fuseholder or a 300 amp disconnect blade. Each LINKBREAK cutout includes standard loadbreak hooks to use with portable loadbreak tools. This method is particularly useful for switching of the 200 amp fuseholder and 300 amp disconnect blade.

Design / Product Features

Construction and product details shown on page 10A-3 apply to the LINKBREAK cutout except that the link-ejector on the linkbreak fuseholder is a copper-alloy casting instead of a stainless-steel stamping.

The unit utilizes a stainless-steel linkbreak lever to mechanically break fuselink elements thereby obtaining load interruption within the fuseholder. The long lever is positioned directly in-line with the cutout, rather than on one side or in back of the cutout for convenient pull-down operation. The Type C LINKBREAK fuseholder is not designed to be interchangeable with any other manufacturer's cutout.

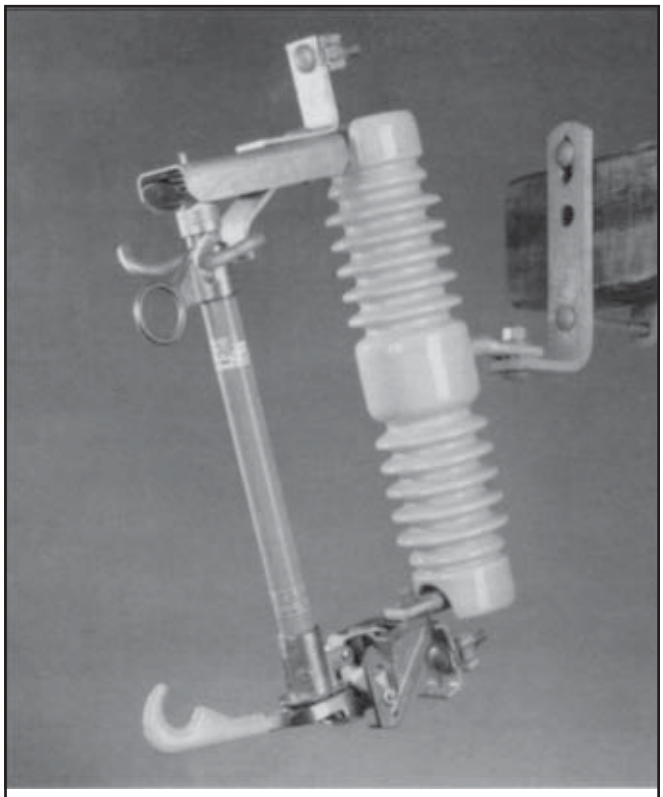
All standard non-loadbreak fuseholders and the linkbreak fuseholders are interchangeable and fit into both the non-loadbreak and Type C LINKBREAK cutout mounting assemblies produced after January 1985. Mounting assemblies are same as Type C STANDARD cutouts, shown on page 10A-7.

Ratings / Specifications

The 15 kV Type C LINKBREAK cutout has a maximum design voltage rating of 15 kV. There are no voltage restrictions on application to grounded wye, ungrounded wye, or delta systems having maximum operating voltages (line to line) equal to or less than the cutout maximum design voltage rating.

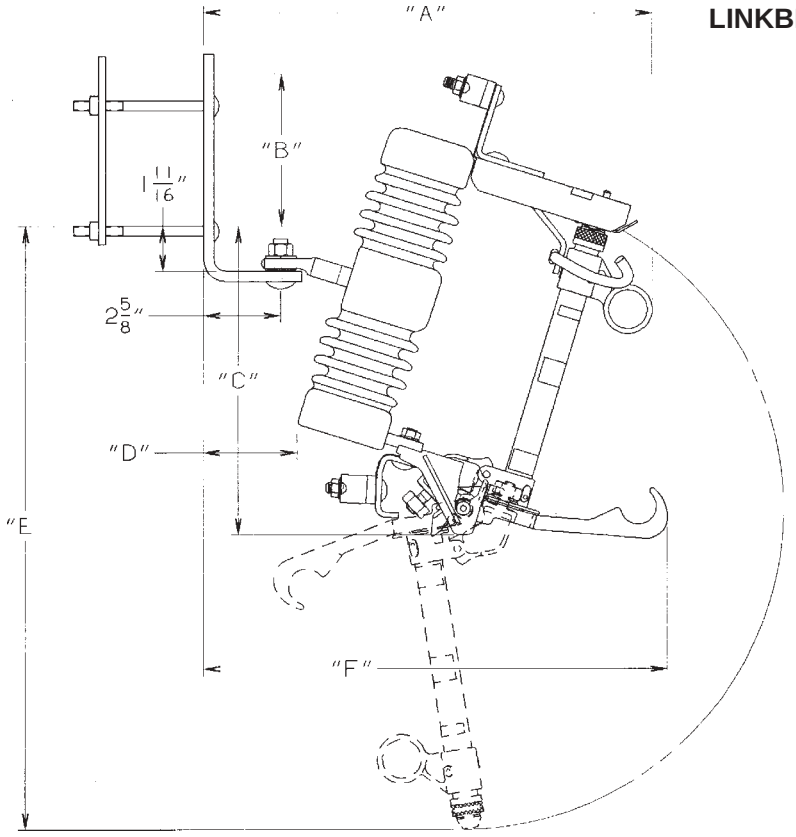
The 15/27 and 22/36.4 kV Type C LINKBREAK cutouts have maximum design slant voltage ratings. These cutouts are to be used on systems which have phase-to-ground voltages no greater than the value listed to the left of the slant (/) and which have phase-to-phase voltages no greater than the value listed to the right of the slant.

The Type C LINKBREAK cutout is to be used with only Chance, McGraw-Edison and Kearney fuselinks. S&C Electric fuselinks and other fuselinks which require more than 1 inch elongation before breaking must not be used with the Type C LINKBREAK cutout.



15/27 kV - 125 kV BIL unit

Type C 100-Amp LINKBREAK Cutout



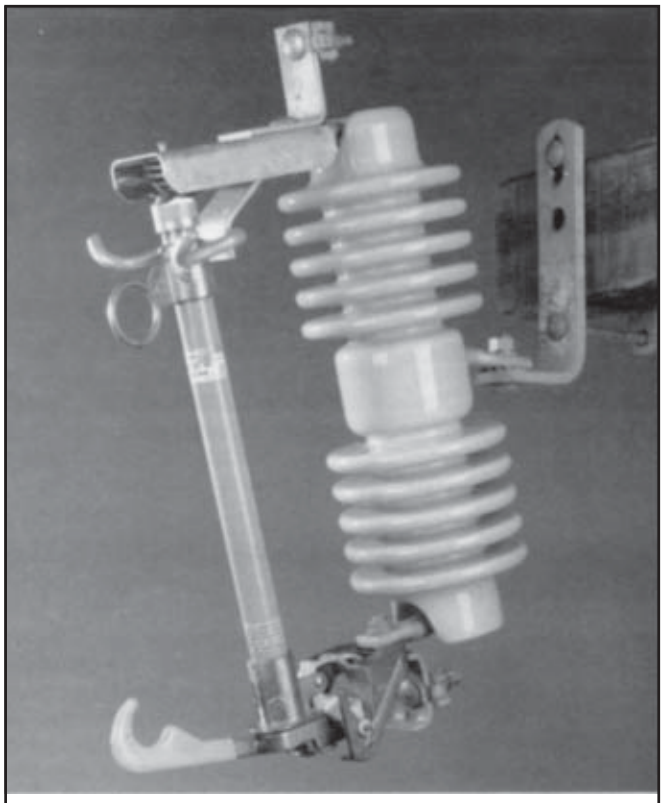
LINKBREAK Cutout with NEMA Type B Bracket Dimensions

BIL kV	A	B	C	D	E	F
110	16" 406 mm	5⅜" 137 mm	10¾" 273 mm	3½" 89 mm	22" 559 mm	16⅝" 422 mm
125	16⅜" 416 mm	7⅛" 181 mm	12½" 318 mm	3⅛" 79 mm	26¾" 679 mm	16" 406 mm
150	16⅜" 416 mm	7⅛" 181 mm	12½" 318 mm	3⅛" 79 mm	26¾" 679 mm	16" 406 mm
170	17¼" 438 mm	8½" 216 mm	15" 381 mm	1¾" 416 mm	32½" 826 mm	14½" 368 mm

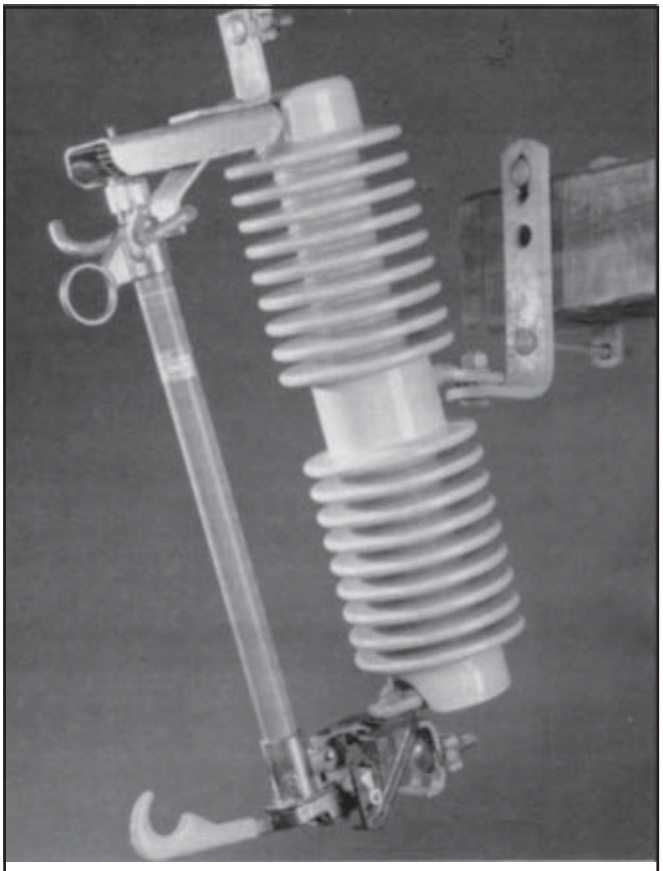
Loadbreak Ratings

*Cutout Catalog Number	kV, Nominal System Voltage	Inductive Amperes	Capacitive Amperes
C720-112PB	14.4	100	100
C720-114PB	14.4	100	100
C720-211PB†	24.9	100	100
C720-213PB†	24.9	100	100
C720-311PB†	34.5	100	50
C720-313PB†	34.5	100	50
C720-613PB†	34.5	100	50

*Specifications and ordering information on next page.
†Limited to grounded-wye systems with grounded-wye loads.



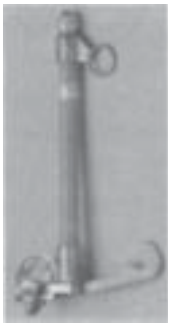
22/36.4 kV - 150 kV BIL unit



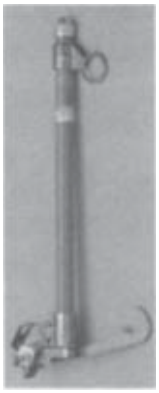
22/36.4 kV - 170 kV BIL unit

Type C 100-Amp LINKBREAK Cutout

110 kV BIL



125 & 150 kV BIL



170 kV BIL

*Fuseholders (100 Amp only)

kV & BIL	Cutout Catalog Number	Fuseholder Catalog No.	Weight lb.	Weight kg.
15 kV	C720-112PB	T720-112T	2.5	1.13
110 kV BIL	C720-114PB	T720-114T	2.7	1.22
15/27 kV	C720-211PB	T720-211T	2.7	1.22
125 kV BIL	C720-213PB	T720-213T	2.9	1.32
22/36.4 kV	C720-311PB	T720-311T	2.7	1.22
150 kV BIL	C720-313PB	T720-313T	2.9	1.32
22/36.4 kV 170 kV BIL	C720-613PB	T720-613T	3.5	1.59

*Mounting assemblies are same as Type C STANDARD cutouts, shown on page 10A-7.

Specifications and Ordering Information

All Type C Cutouts meet or exceed ANSI/NEMA specifications.

See page 10A-17 for Catalog Number System.

15 kV (110 kV BIL) — RUS Listed

*Catalog Number	Maximum Design Voltage	Nominal System Voltage	Continuous Current (Amps)	Interrupt Capacity (Asym Amps)	Leakage to Ground Metal to Metal		Weight (lb./kg.)	Replacement Fusetube Cap	Arc Shortening Rod
C720-112PB	15 kV	Thru 14.4 kV	100	10,000	8.7"	220 mm	17.7 / 8.03	P700-1469P	No
C720-114PB	15 kV	Thru 14.4 kV	100	16,000	8.7"	220 mm	17.9 / 8.12	E700-1784P	Yes‡

15/27 kV (125 kV BIL) — RUS Listed

C720-211PB	15/27 kV	No Restrictions thru 14.9 kV; †20.8 thru 24.9 kV	100	8,000	12.6"	320 mm	20.4 / 9.25	P700-1469P	No
C720-213PB	15/27 kV		100	12,000	12.6"	320 mm	20.6 / 9.34	E700-1785P	Yes‡

22/36.4 kV (150 kV BIL) — RUS Listed

C720-311PB	22/36.4 kV	No Restrictions thru 20.8 kV; †22.8 thru 34.5 kV	100	8,000	17.3"	440 mm	26.2 / 11.79	P700-1469P	No
C720-313PB	22/36.4 kV		100	12,000	17.3"	440 mm	26.4 / 11.88	E700-1785P	Yes‡

22/36.4 kV (170 kV BIL) — RUS Listed

C720-613PB	22/36.4 kV	No Restrictions thru 20.8 kV; †22.8 thru 34.5 kV		100	11,200	26.0"	660 mm	29.3 / 13.29	PE700-1787P	Yes‡

NOTE: 26" fuse links are recommended.

***Suffix:** **P** = Parallel-groove clamps [No. 6 solid through 4/0 ACSR (13.3mm² - 160.6mm²) or 250 kcmil stranded (167.5mm²)]
B = **B** = NEMA Heavy Duty "B" bracket with 1½" captive bolt

Terminal variations:

P = Parallel-groove clamps [No. 6 solid through 4/0 ACSR (13.3mm² - 160.6mm²) or 250 kcmil stranded (167.5mm²)]
E = Small eyebolt [No. 8 solid through 2/0 stranded (7.7 - 90mm²)]
Change "P" to "E;" e.g., C720-112EB
L = Large eyebolt [No. 6 solid through 4/0 stranded (13.3 - 160.6mm²) or 250 kcmil stranded (167.5mm²)]
Change "P" to "L;" e.g., C720-112LB

Bracket variations:

B = **B** = NEMA Heavy Duty "B" bracket with 1½" captive bolt
X = Extended bracket (horizontal section 2⅝" longer than NEMA Type B bracket)
Change "B" to "X;" e.g., C720-112PX
D = Pole mounting bracket *Change "B" to "D;" e.g., C720-112PD*
(Blank) = Without crossarm bracket *Drop "B" from Catalog No.; e.g., C720-112P*

Extra corrosion resistance:

S = Available on only 150 kV and 170 kV BIL, *e.g., C720-311PBS*

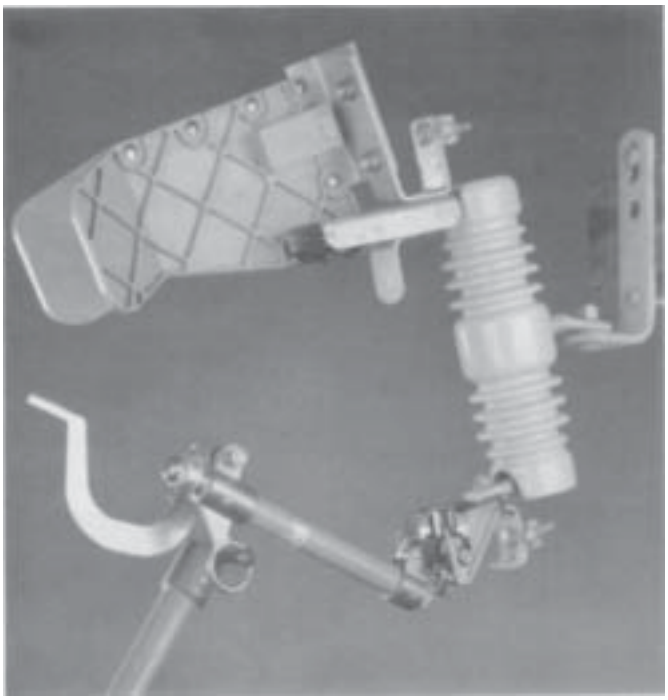
†For application on single-phase to neutral circuits with phase-to-ground voltages not exceeding the value to the *left* of the slant; and for application on three-phase solidly-grounded-wye systems with solidly-grounded loads with line-to-line voltages not exceeding the value to the *right* of the slant.

‡Must use removable buttonhead fuse links.

Type C LOADBREAK Cutout

with Arc Chute type interrupter

• 15 kv • 15/27 kV • 20/34.5 kV



Application

The Type C Loadbreak Cutout is available for application on 15, 25 and 35 kV distribution systems. The addition of the arc chute expands the flexibility of the Chance protective devices family by providing loadbreak capability for cutouts and disconnect solid blade units. The loadbreak cutout provides short circuit protection to utility lines with the added feature of a loadbreaking function.

The loadbreak cutout is applicable for transformer and capacitor bank switching or line sectionalizing. Loadbreak cutouts provide protection from overloads that just melt the fuselink through the maximum interrupt capacity of the fuseholder. They also provide loadbreak capability through 300 amperes.

Design

All design features and most components of the loadbreak unit are identical to those incorporated in the Type C standard cutout. The loadbreak portion of the Type C Loadbreak cutout is a heavy duty, reliable load interrupter that provides a positive visible loadbreak. A common loadbreak mounting assembly will accept the Chance Type C 100 amp and 200 amp loadbreak fuseholders or a 300 amp loadbreak disconnect blade.

Ratings/Specifications

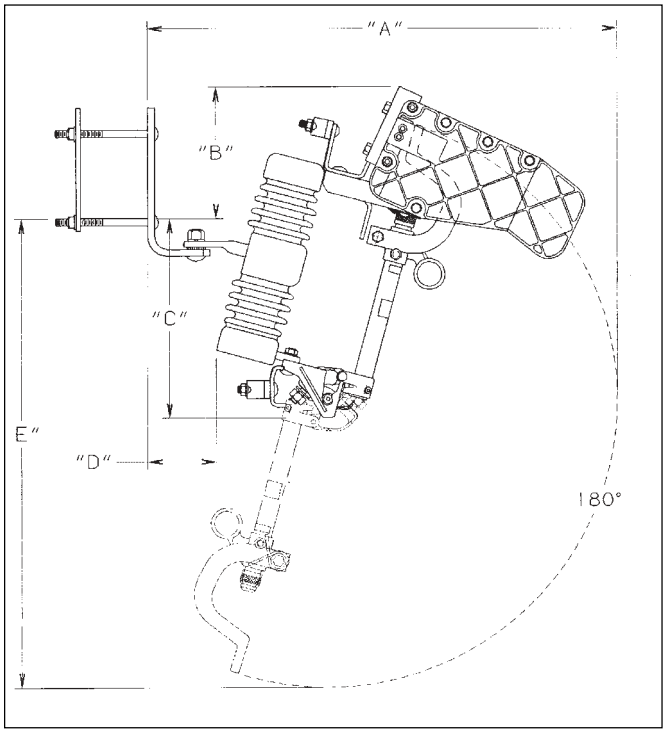
The 15kV Type C loadbreak cutout has a maximum design voltage rating of 15kV. There are no voltage restrictions on applicaton to grounded wye, ungrounded wye, or delta systems having maximum operating voltages (line to line) equal to or less than the cutout maximum design voltage rating.

The 15/27 and 20/34.5 kV Type C loadbreak cutouts have maximum design slant voltage ratings. These cutouts are to be used on systems which have phase-to-ground voltages no greater than the value listed to the left of the slant (/) and which have phase-to-phase voltages no greater than the value listed to the right of the slant.

Fuseholders and mounting assemblies from other manufacturers' loadbreak cutouts are not interchangeable with Chance loadbreak cutouts. Likewise, Chance fuseholders and mountings are not interchangeable with other manufacturers' loadbreak cutouts.

Operation

The self-contained loadbreak device enables the lineman to interrupt load current by means of a simple hookstick operation. To break the current, the lineman inserts a hookstick into the operating ring and rapidly opens the device. Upon opening, a spring-loaded stainless steel blade mechanism snaps out through a gray arc chute and elongates, cools and extinguishes the confined arc. The loadbreaking operation is independent of the operating speed of the lineman. The fuse remains undamaged. No special or portable tools are required to operate the unit. In the open position, the fuseholder or blade hangs in an approximate vertical position for the visible-break.



Dimensions

kV BIL	A	B	C	D	E
110	25¼" 642 mm	6⅞" 175 mm	10¾" 273 mm	3½" 89 mm	25⅝" 651 mm
125	28¼" 719 mm	8⅝" 219 mm	12½" 318 mm	3⅛" 79 mm	30⅞" 784 mm
150	28¼" 719 mm	8⅝" 219 mm	12½" 318 mm	3⅛" 79 mm	30⅞" 784 mm

Type C LOADBREAK Cutout with Arc Chute Interrrupers

Specifications and Ordering Information

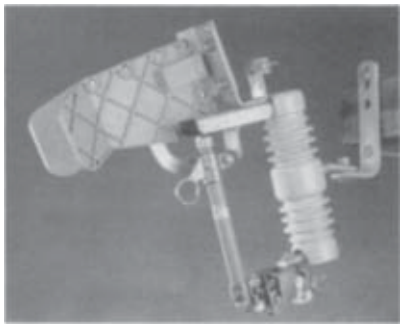
All Type C Cutouts meet or exceed ANSI/NEMA specifications.

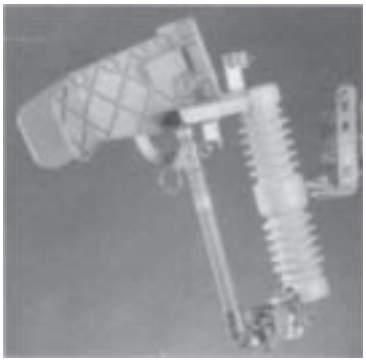
See page 10A-17 for Catalog Number System.

15 kV (110 kV BIL) — RUS Listed

*Catalog Number	Maximum Design Voltage	Nominal System Voltage	Continuous & Loadbreak Current (Amps)	Number of Operations	Interrupt Capacity (Asym Amps)	Leakage to Ground, Metal to Metal		Weight (lb./kg.)	Replacement Fusetube Cap	Arc Shortening Rod
C730-112PB	15 kV	Thru 14.4 kV	100	200	10,000	8.7"	220 mm	22.5 / 10.2	P700-1535P	No
C730-114PB	15 kV	Thru 14.4 kV	100	200	16,000	8.7"	220 mm	22.7 / 10.3	E700-1767P	Yes‡
C730-143PB	15 kV	Thru 14.4 kV	200	200	12,000	8.7"	220 mm	23.3 / 10.6	E700-2146P	Yes‡
C730-133PB	15 kV	Thru 14.4 kV	300	50	12,000**	8.7"	220 mm	22.8 / 10.4	P700-1535P	N/A

▼ **15 kV, 110 kV BIL**





◀ **15/27 kV, 125 kV BIL**

20/34.5 kV, 150 kV BIL ▶

15/27 kV (125 kV BIL) — RUS Listed

C730-211PB	15/27 kV	No Restrictions thru 14.4 kV; †20.8 thru 24.9 kV	100	200	8,000	12.6"	320 mm	25.1 / 11.4	P700-1535P	No
C730-213PB	15/27 kV		100	200	12,000	12.6"	320 mm	25.3 / 11.5	E700-1768P	Yes‡
C730-242PB	15/27 kV		200	200	10,000	12.6"	320 mm	26.0 / 11.8	E700-2479P	Yes‡
C730-233PB	15/27 kV		300	50	12,000**	12.6"	320 mm	25.5 / 11.6	P700-1535P	N/A

20/34.5 kV (150 kV BIL) — RUS Listed

C730-311PB	20/34.5 kV	No Restrictions thru 14.4 kV; †20.8 thru 34.5 kV	100	100	8,000	17.3"	440 mm	30.9 / 14.0	P700-1535P	No
C730-313PB	20/34.5 kV		100	100	12,000	17.3"	440 mm	31.1 / 14.1	E700-1768P	Yes‡

***Suffix:** **P** = Parallel-groove clamps [No. 6 solid through 4/0 ACSR (13.3mm² - 160.6mm²) or 250 kcmil stranded (167.5mm²)]
B = NEMA Heavy Duty "B" bracket with 1½" captive bolt

Terminal variations:

P = Parallel-groove clamps [No. 6 solid through 4/0 ACSR (13.3mm² - 160.6mm²) or 250 kcmil stranded (167.5mm²)]
E = Small eyebolt [No. 8 solid through 2/0 stranded (7.7 - 90mm²)]
Change "P" to "E;" e.g., C730-112EB
L = Large eyebolt [No. 6 solid through 4/0 stranded (13.3 - 160.6mm²) or 250 kcmil stranded (167.5mm²)]
Change "P" to "L;" e.g., C730-112LB

Bracket variations:

B = NEMA Heavy Duty "B" bracket with 1½" captive bolt
X = Extended bracket (horizontal section 2⅝" longer than NEMA Type B bracket)
Change "B" to "X;" e.g., C730-112PX
D = Pole mounting bracket *Change "B" to "D;" e.g., C730-112PD*
(Blank) = Without crossarm bracket *Drop "B" from Catalog No.; e.g., C730-112P*

Extra corrosion resistance:

Not Available

**Momentary rating — Solid blade

†For application on single-phase to neutral circuits with phase-to-ground voltages not exceeding the value to the *left* of the slant; and for application on three-phase solidly-grounded-wye systems with solidly-grounded loads with line-to-line voltages not exceeding the value to the *right* of the slant.

‡Must use removable buttonhead fuse links.

Type C
LOADBREAK Cutout
Fuseholders and Mounting Assemblies
Ordering Information

15 kV (110 kV BIL)

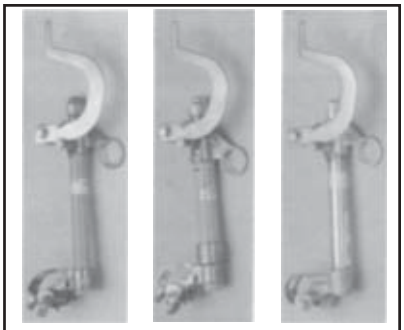
Cutout Catalog Number	Fuseholder or Blade only Catalog No.	Weight		Mounting Assembly only *Catalog No.	Weight	
C730-112PB	T730-112T	3.3 lb.	1.5 kg.	T730-1MMPB	18.6 lb.	8.4 kg.
C730-114PB	T730-114T	3.5 lb.	1.6 kg.			
C730-143PB	T730-143T	4.1 lb.	1.9 kg.			
C730-133PB	T730-133T	3.6 lb.	1.6 kg.			

15/27 kV (125 kV BIL)

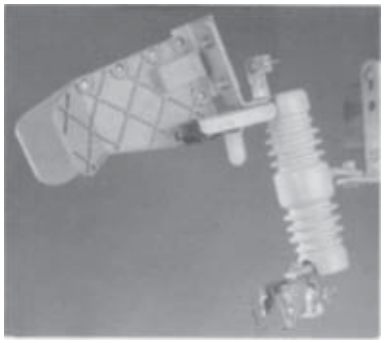
C730-211PB	T730-211T	3.6 lb.	1.6 kg.	T730-2MMPB	20.8 lb.	9.4 kg.
C730-213PB	T730-213T	3.8 lb.	1.7 kg.			
C730-242PB	T730-242T	4.4 lb.	2.0 kg.			
C730-233PB	T730-233T	4.0 lb.	1.8 kg.			

20/34.5 kV (150 kV BIL)

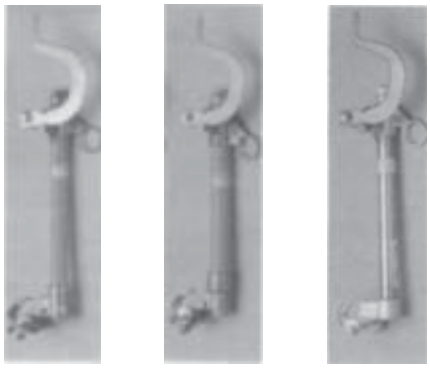
C730-311PB	T730-311T	3.6 lb.	1.6 kg.	T730-3MMPB	26.6 lb.	12.1 kg.
C730-313PB	T730-313T	3.8 lb.	1.7 kg.			



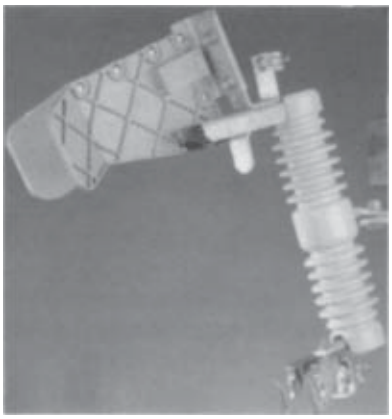
100A 200A 300A



15 kV — T730-1MMPB



100A 200A Fuseholders — 300A Blade

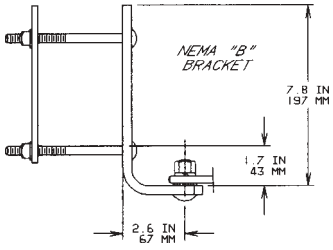


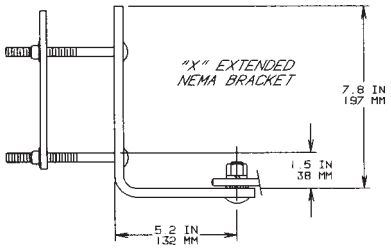
15/27 kV — T730-2MMPB

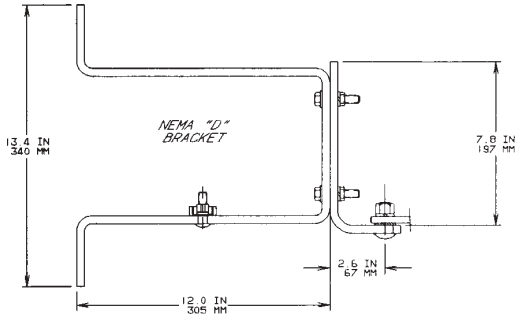
20/34.5 kV — T730-3MMPB

110 kV, 125 kV & 150 kV BIL

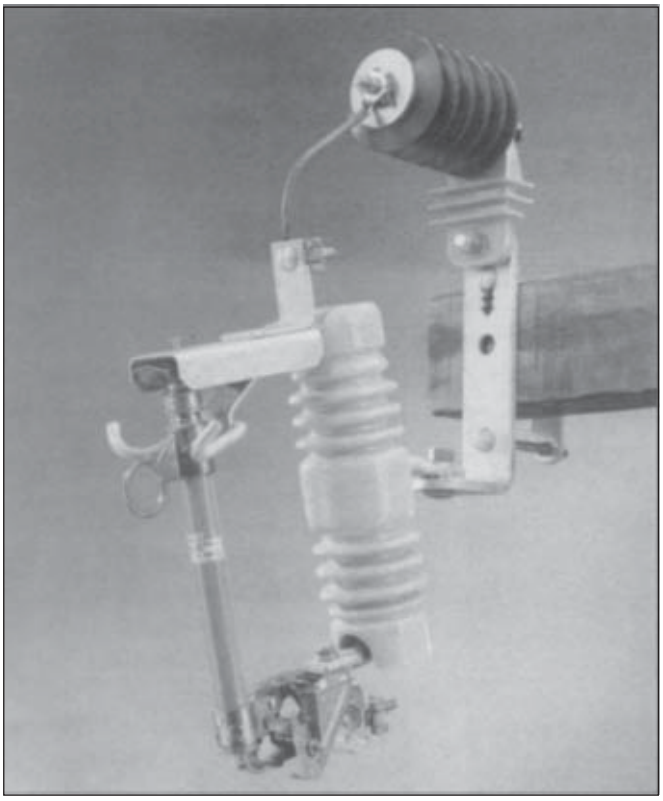
T730-0080	Replacement Arc Chute Interrupter Assembly	1.2 lb.	0.54 kg.



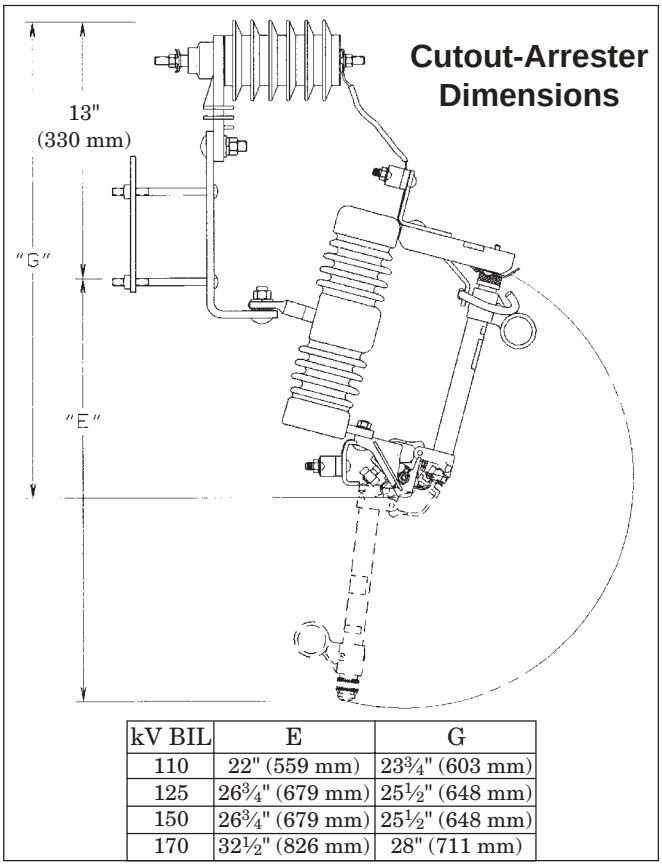




Type C
CUTOUT-ARRESTER COMBINATIONS
Over-the-Arm Type only



15 kV cutout with direct-connected Ohio Brass large-block, MOV, polymer 9 kV lightning arrester



kV BIL	E	G
110	22" (559 mm)	23¾" (603 mm)
125	26¾" (679 mm)	25½" (648 mm)
150	26¾" (679 mm)	25½" (648 mm)
170	32½" (826 mm)	28" (711 mm)

Advantages of combination

Chance cutout-arrester combinations cost less than the total cost of separately purchased components. The combination units install faster, more economically and take up less space in storage, transit and service. Each combined unit takes up a minimum of space on the crossarm and has a favorable weight distribution for minimal off-center loading. The field-proven quality of both cutout and arrester assure consistent high performance for the combinations.

These units include Chance cutouts fitted with **only** Ohio Brass® MOV arresters, superseding previous silicon-carbide units. For easy conversion to the new arrester designation system, refer to the Cutout Cross-Reference Guide, Bulletin 10-0203.

Arrester Selection Guide for Cutout-Arrester Combinations

Note:
Arresters can be combined with any Type C Cutout: Standard, Linkbreak, Loadbreak, Electronic Sectionalizer or Loadbreak Sectionalizer (see Catalog Section 10 D for Sectionalizers).

How to determine entries for positions 4 and 5 in Catalog Number, on page 10A-17 —

Selection considerations:

Refer to the matrix at right and insert the letters of the desired combination in place of the "0" and "dash" in the Type C Cutout Catalog Number.

Example: C71**0**-112PB cutout
with large-block 10 kV arrester would be
C71**EM**112PB cutout-arrester combination.

Arrester Manufacturer	MCOV Duty Cycle kV Rating	Arrester Connection Method	Metal Oxide Varister (MOV)				Operating Design
			Polymer				Housing
			110		125 & 150	150	kV BIL for Cutout
			9	10	18	27	kV Rating
Ohio Brass	Small Block Normal Duty 5 kA	Direct	DL	DM	DN	DP	
	Large Block Heavy Duty 10 kA	Direct	EL	EM	EN	EP	
	Riser Pole	Direct	FL	FM	FN	FP	

Type C Cutouts

CATALOG NUMBER SYSTEM

Basic format:	C	7	X	X	X	X	X	X	X	X	X
Positions:	1	2	3	4	5	6	7	8	9	10	11

*Position 6:
Type C Cutout — kV Rating

No.	BIL, kV	STANDARD			LINKBREAK	LOADBREAK		
		100 amp	200 amp	300 amp	100 amp	100 amp	200 amp	300 amp
1	110	15	15	15	15	15	15	15
2	125	27	27	27	15/27	15/27	15	15/27
3	150	27	27	27	22/36.4	20/34.5		
6	170	36	27	36	22/36.4			
7	170	36	27	36				

Position 11:

Blank = No option (may not be used with Z in position 10)

M = ‡Mechanical Assist Fuseholder

S = ‡Extra Corrosion Resistance for 150 and 170 BIL only; 3 or 6 must be in position 6. *Not available on Loadbreak cutouts.*

‡May not be used with Blank in position 10.

Position 3:
Kind

1 = Standard
2 = Linkbreak
3 = Loadbreak

4 = †Electronic Sectionalizer
5 = †Loadbreak Sectionalizer
†See Section 10D for positions 7 & 8.

Position 10:
Bracket Variations

B = NEMA Heavy Duty "B" bracket for crossarm (1½" bolt)
X = Extended type bracket for crossarm (Horizontal section is 2⅝" longer than Type B bracket)
D = D-shape bracket (pole)
Z = No bracket (must be used with M or S in position 11)
Blank = No bracket (cannot use with M or S in position 11)

C	7										

Positions 4 & 5:

O — No arrester

For cutout-arrester combinations, see table below for two-letter arrester codes.

*Position 7:
Continuous Current

1 = **100 Amps** (Accepts 1–100 Amp links)

3 = **300 Amps** solid blade

4 = **200 Amps** (Accepts 140–200 Amp links)

M = Mounting ass'y. only

*Position 8:
Interrupting or Momentary Current (Amps)

1 = **8,000**
2 = **10,000** (27kV must use removable buttonhead links)
3 = **12,000** (All must use removable buttonhead links)
4 = **16,000** (All must use removable buttonhead links)
M = Mounting ass'y. only

Position 9:
Terminal Variations **(tin plated)**

P = Parallel-groove clamps
E = Small eyebolts
L = Large eyebolts

T = Fuseholder only (enter T in position 1 and leave Blank positions 10 & 11)

Arrester Manufacturer	MCOV Duty Cycle kV Rating	Arrester Connection Method	Metal Oxide Varister (MOV)			
			Polymer			
			110		125 & 150	150
			9	10	18	27
Ohio Brass	Small Block Normal Duty 5 kA	Direct	DL	DM	DN	DP
	Large Block Heavy Duty 10 kA	Direct	EL	EM	EN	EP
	Riser Pole	Direct	FL	FM	FN	FP

Operating Design
Housing
kV BIL for Cutout
kV Rating

*Not all combinations of kV Rating, Continuous Current Rating and Interrupting Rating (Positions 6, 7 & 8) are available. See preceding pages for combinations offered in each kind of cutout (Standard, Linkbreak, Loadbreak).

Accessories

Terminal Connectors

Catalog No.	Description	Minimum Order Quantity
T700-1325	Parallel-Groove Clamp, tin-plated bronze forNo. 6 solid thru 4/0 ACSR or 250 kcmil stranded	10
T700-1326	Small Eyebolt for No. 8 solid thru 2/0 stranded	10
T700-1327	Large Eyebolt for No. 6 solid thru 4/0 ACSR or 250 kcmil stranded	10

Mounting Brackets

C206-0283	NEMA Heavy Duty "B" Bracket with 2" captive bolt for crossarm mounting	—
C206-0280	Extended Crossarm Bracket (Horizontal section is 2⅝" longer than NEMA "B" bracket)	—
C206-0299	"D" Pole Mounting Bracket	—
C206-0632	Cutout/Arrester Bracket complete with carriage bolts and backstrap	—

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