



**BUS PLUGS**

**APPLICATION DATA**

**FUSIBLE PLUGS WITH FORM 600 TYPE 4 FUSES**

In order to more readily accommodate these fuses, the fuse clips, in all fusible plugs that have the blade-type fuse holders, have now been modified by providing a hole through the fuse clip and pressure spring.

When required, the addition of a bolt and nut through the fuse-clip assembly provides a "Rejection" feature. These bolts and nuts are not included in the plugs and must be ordered separately. (See Fig. 1 and table below.) They will be supplied, on order, at no charge.

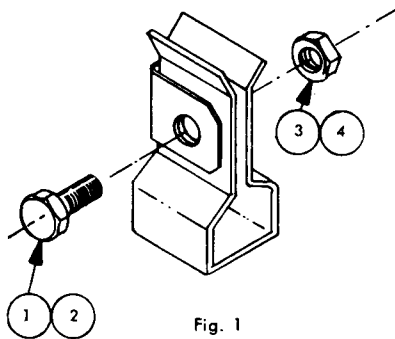


Fig. 1

Description	Item No. Fig. 1	Cat. No.	Number Required Per Pole			
			100A	200A	400A	600A
10—24 x 1 Bolt	1	49645	2	2	—	—
5/16—18 x 1 1/2 Bolt	2	49646	—	—	2	2
10—24 Self-Locking Nut	3	49647	2	2	—	—
5/16—18 Self-Locking Nut	4	49648	—	—	2	2

**FUSIBLE VACU-BREAK® SWITCH PLUGS WITH CURRENT-LIMITING FUSES**

Fusible Vacu-Break Switch Plugs may be used with current-limiting fuses to provide additional protection against high fault currents. An adapter kit is provided which

converts the standard bus plug for the use of current-limiting fuses. When required, order Bus Plug and Adapter Kit by catalog number as indicated in the table below.

Rating		Poles	Cat. No.			
Amperes	Volts AC		For XL-U Plug-In		For BD and LO-X Plug-In	
			Bus Plug	Adapter Kit*	Bus Plug	Adapter Kit*
30	250 and 600	3	UV361	W49832	BOS14351	W49832
		4	UV461		BOS16451	
60	250 and 600	3	UV362	W49830	BOS14352	W49830
		4	UV462		BOS16452	
100	250	3	UV323	W49827	BOS14323	W49827
		4	UV423		BOS16423	
	600	3	UV363	W49828	BOS14353	W49828
		4	UV463		BOS16453	
200	250	3	UV324	No Kit Required. Relocate Load Base	BOS14324	W49819
		4	UV424		BOS16424	
	600	3	UV364	W100218	BOS14354	W49818
		4	UV464		BOS16454	
400	250	3	UV325	No Kit Required. Relocate Load Base.	BOS14325	W49814
		4	UV425		BOS16425	
	600	3	UV365	No Kit Required. Relocate Load Base.	BOS14355	W49816
		4	UV465		BOS16455	
600	250	3	UV326	W49813	BOS14326	W49813
		4	UV426		BOS16426	
	600	3	UV366	W49815	BOS14356	W49815
		4	UV466		BOS16456	

\*List Price for Cat. Nos. W49813 and 49815 is \$48.00; all other, \$16.00.



**BUS PLUGS**

**APPLICATION DATA**

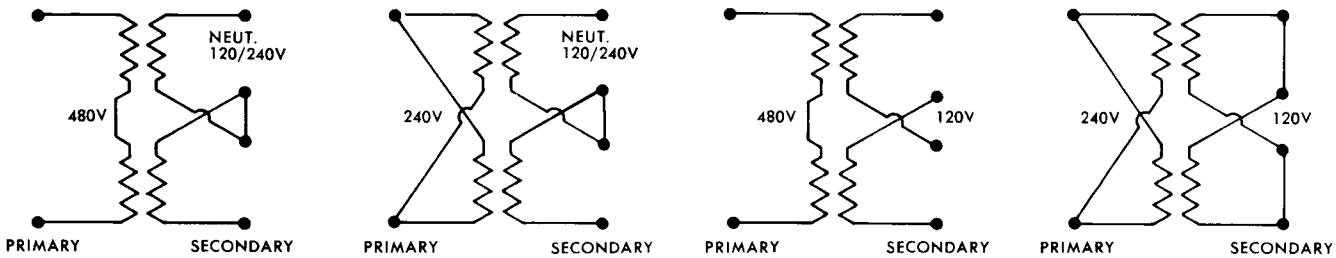
**TRANSFORMER PLUGS**

Transformer Plugs are balanced on three-phase bus duct by making contact with the various bars—selecting different combinations (AB, BC, CA) as shown below.



**TRANSFORMER CONNECTIONS**

Transformer-Plug connections (additive type) are readily accessible for easy field alteration of voltages.



**POLY-PLATE ON-OFF STICKERS**

Where visual ON-OFF identification is desirable from a distance, BullDog supplies an easily read ON and OFF pressure-sensitive adhesive sticker as an accessory item for all bus plugs (see illustration). The stickers—W47185—are laminated poly-plate with white lettering on a colorful background—green for OFF and red for ON.



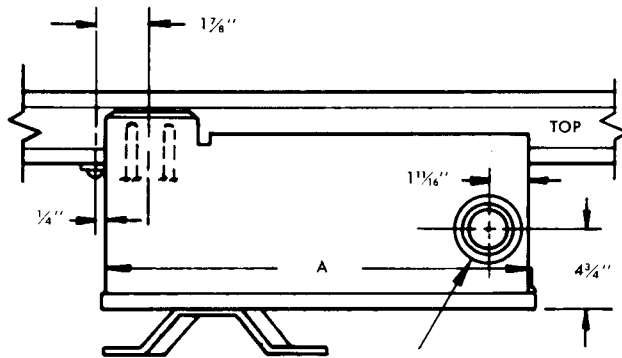


**BUS PLUGS**

**FOR X100® PLUG-IN BUS DUCT**

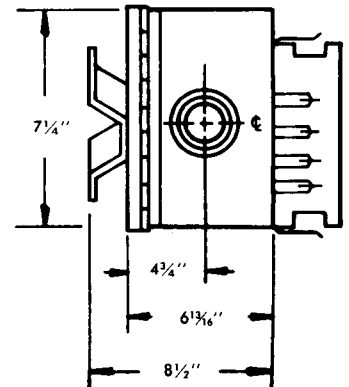
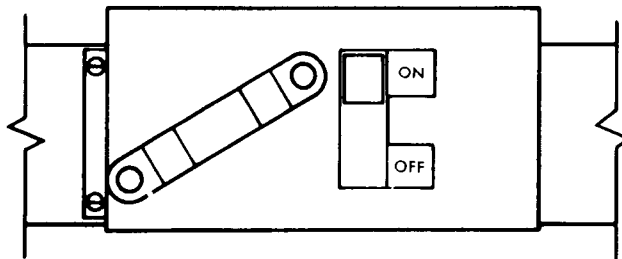
**FUSIBLE VACU-BREAK® SWITCH PLUGS—FLOOR-OPERATED**

Fusible Vacu-Break Bus Plugs are heavy-duty operating-type plugs. The Vacu-Break switching principle minimizes arcing, prevents pitting and beading of line and load contacts, and reduces maintenance costs. The Vacu-Break Bus Plugs are quick-make and quick-break, cover interlocked, horsepower rated and may be operated from the floor with a pull chain or hook stick. Laminated "ON" and "OFF" stickers are optional accessories.



1/2", 3/4", 1", 1 1/4", 1 1/2", 2" CONDUIT KO'S IN BOTH SIDES AND ENDS

Switch Rating		Dimension A-Inches
Amperes	Volts	
30, 60	250 DC	11 3/4
30, 60	600 AC	15
100	600 AC	15





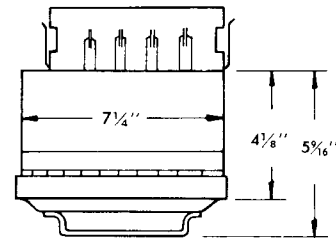
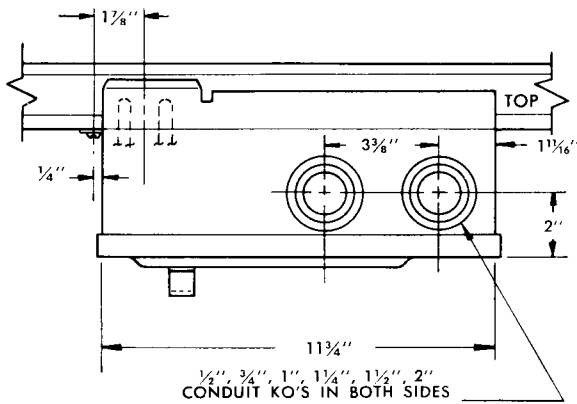
**BUS PLUGS**

**FOR X100® PLUG-IN BUS DUCT**

**FUSIBLE SWITCH PLUGS—DOOR-OPERATED**

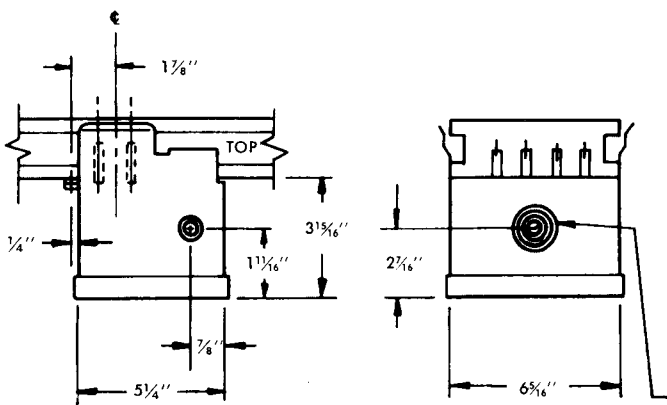


XLP Fusible Door-Operated Bus Plugs provide economical protection. Circuit is made or broken from the front of the plug by closing or opening the hinged cover. Plugs are horsepower rated.

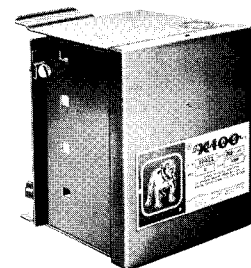


**FUSIBLE BUS PLUGS—NON-SWITCHING**

XP Fusible Bus Plugs (non-operating) have no switching mechanism and should be used with loads that have a self-contained switch.



1/2", 3/4", 1", 1 1/4" CONDUIT KO'S IN BOTTOM SIDE AND ONE END





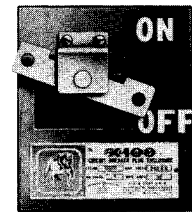
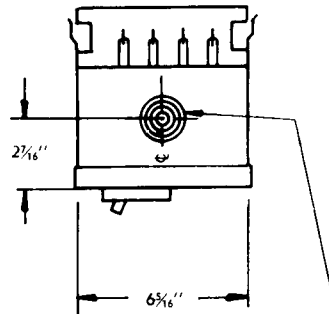
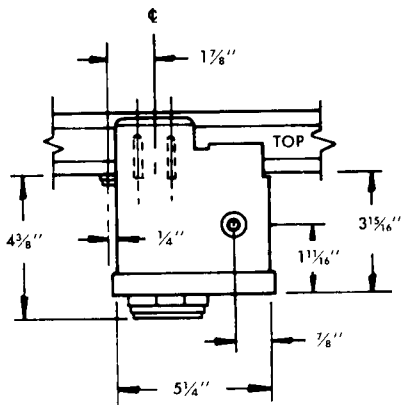
**BUS PLUGS**

FOR X100® PLUG-IN BUS DUCT

**XEQ CIRCUIT-BREAKER ENCLOSURES—DOOR-OPERATED**

**50A MAX.—240V MAX.**

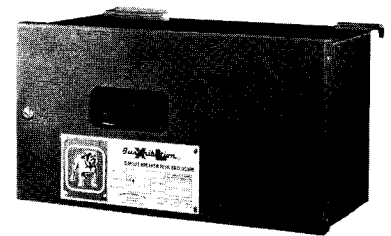
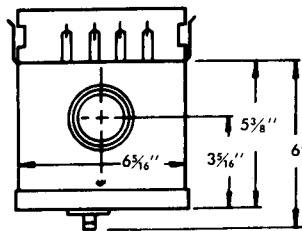
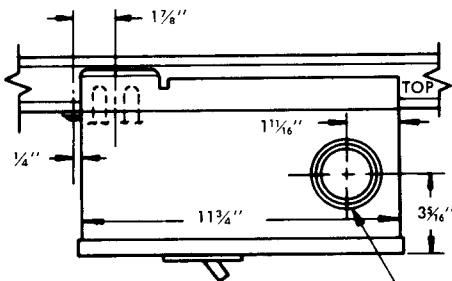
Door-operated XEQ circuit-breaker enclosures are designed to accept EQ-P plug-in or EQ-B bolted normal-duty circuit breakers. The enclosure shown is equipped with an accessory floor-operating mechanism.



1/2", 3/4", 1", 1 1/4" CONDUIT KO'S IN BOTTOM SIDE AND ONE END

**CIRCUIT-BREAKER PLUGS—DOOR-OPERATED**

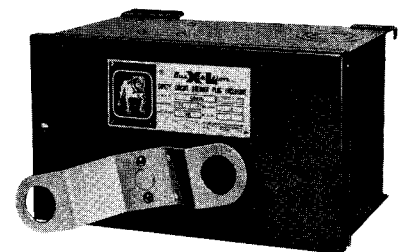
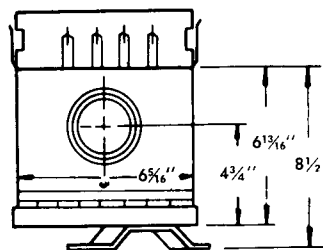
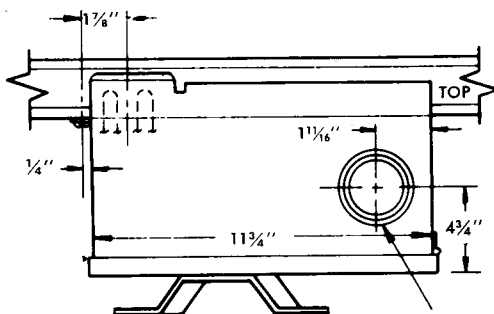
Door-operated circuit-breaker plugs are available with E- or EH-frame circuit breakers for 240- or 480-volt a-c service.



1", 1 1/4", 1 1/2", 2" CONDUIT KO'S IN BOTH SIDES AND ENDS

**CIRCUIT-BREAKER PLUGS—FLOOR-OPERATED**

Floor-operated circuit-breaker plugs are available with E-, EH- or EF-frame circuit breakers for 240-, 480- or 600-volt service.



1", 1 1/4", 1 1/2", 2" CONDUIT KO'S IN BOTH SIDES

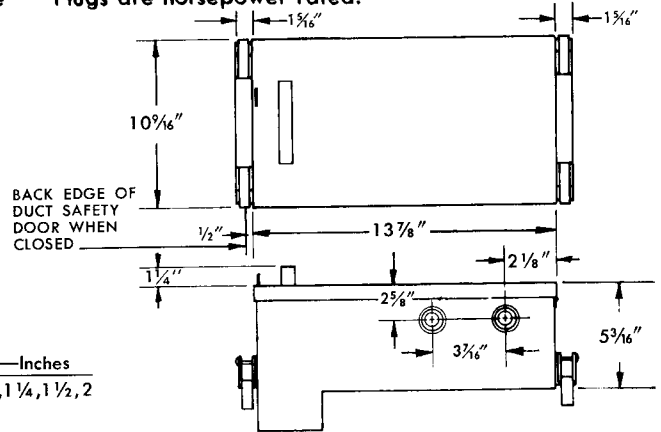
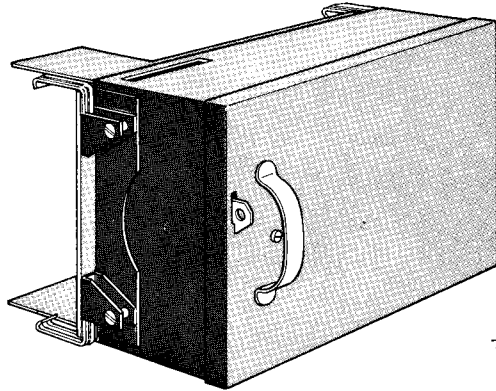




**BUS PLUGS**  
**FOR XL®-UNIVERSAL BUS DUCT**  
**FUSIBLE SWITCH PLUGS—DOOR-OPERATED**  
**30, 60 AND 100A—600V MAX.**

Door-operated fusible switch plugs provide economic fusible protection. The circuit is made or broken from the

front of the plug by closing or opening the hinged cover. Plugs are horsepower rated.

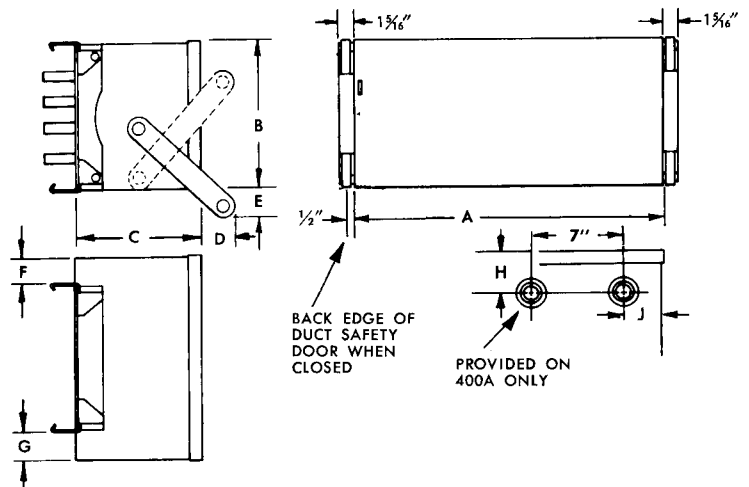
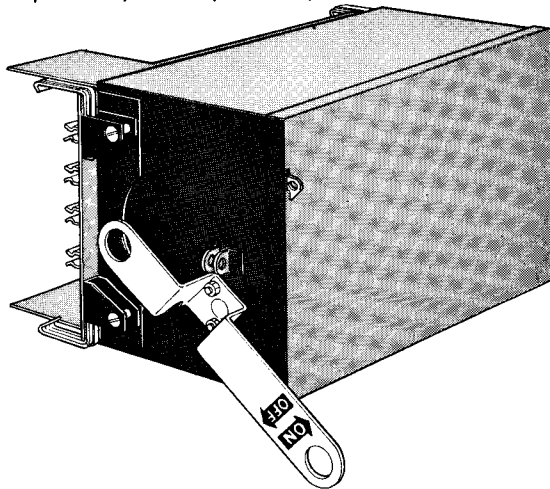


KO's—Inches  
 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

**FUSIBLE VACU-BREAK® SWITCH PLUGS—FLOOR-OPERATED**

Floor-operated fusible Vacu-Break switch plugs can be operated with a rope or chain. They include a safety interlock which prevents plug installation or removal when the plug is ON. The plugs are quick-make, quick-break type and are horsepower rated. Red and green flags appear in the inspection port to provide positive identification from the

floor. The handle is located at the end of the plug so that it retains control of the switch mechanism regardless of whether the cover is open or shut. The cover contains an interlock to prevent it from being opened with the switch ON. The interlock may be voided by trained personnel.



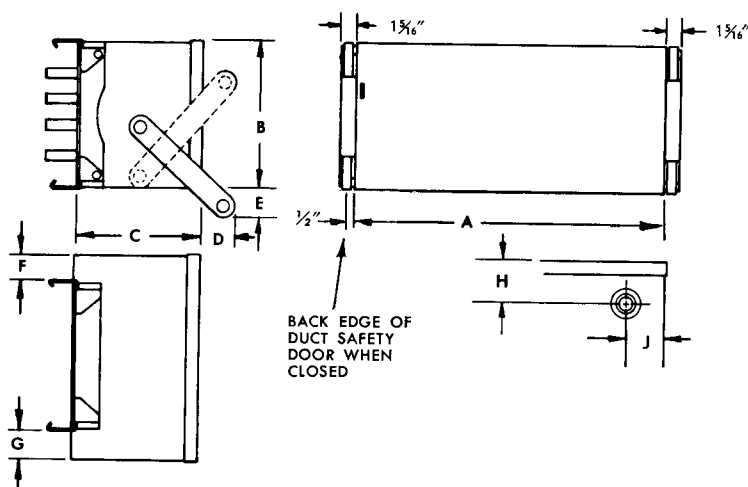
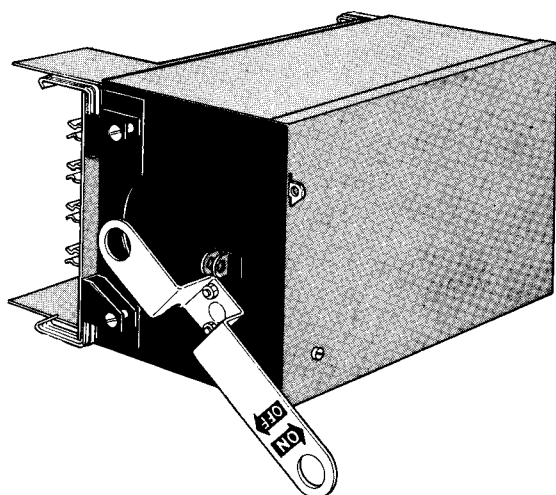
Rating Amperes	DIMENSIONS—Inches									Conduit Size (KO's)
	A	B	C	D	E	F	G	H	J	
30	12 7/8	10 5/16	7 1/2	4 3/8	4	0	3/8	3 1/8	3	1/2, 3/4, 1, 1 1/4, 1 1/2, 2
60									3	
100	16 1/2								3	
200	20 1/8	10 5/16	7 1/2	4 1/2	4	0	3/8	3 1/8	3	3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2
400	20 3/16	16 1 5/16	10 5/8	9	0	2 1 3/16	3 1 5/16	6 3/8	3 3/4	3, 3 1/2, 4
600	33 3/8	14 3/8	12 3/8	9	0	2 1/16	1 5/8	—	—	No KO's Provided



**BUS PLUGS**  
**FOR XL®-UNIVERSAL DUCT**  
**CIRCUIT-BREAKER PLUGS—FLOOR-OPERATED**

Floor-operated circuit-breaker plugs can be operated with a rope or chain. They include a safety interlock which prevents plug installation or removal when the plug is ON. Red and green flags appear in the inspection port to

provide positive identification from the floor. The handle is located at the end of the plug so that it retains control of the switch mechanism regardless of whether the cover is open or shut.



Frame	Rating Amperes	DIMENSIONS—Inches									
		A	B	C	D	E	F	G	H	J	Conduit Size (KO)
E, EH, EF	100	12 <sup>7</sup> / <sub>8</sub>	10 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>8</sub>	0	<sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	1/2, 3/4, 1, 1 1/4, 1 1/2, 2
FJ	225	20 <sup>1</sup> / <sub>8</sub>	10 <sup>5</sup> / <sub>16</sub>	7 <sup>1</sup> / <sub>2</sub>	5 <sup>5</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>	0	<sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	3	3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2
JL, JJ	400	20 <sup>13</sup> / <sub>16</sub>	16 <sup>15</sup> / <sub>16</sub>	10 <sup>5</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>	0	2 <sup>13</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	—	—	No KO's Provided
KM	800	33 <sup>3</sup> / <sub>8</sub>	14 <sup>5</sup> / <sub>8</sub>	12 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	2 <sup>2</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	—	—	No KO's Provided



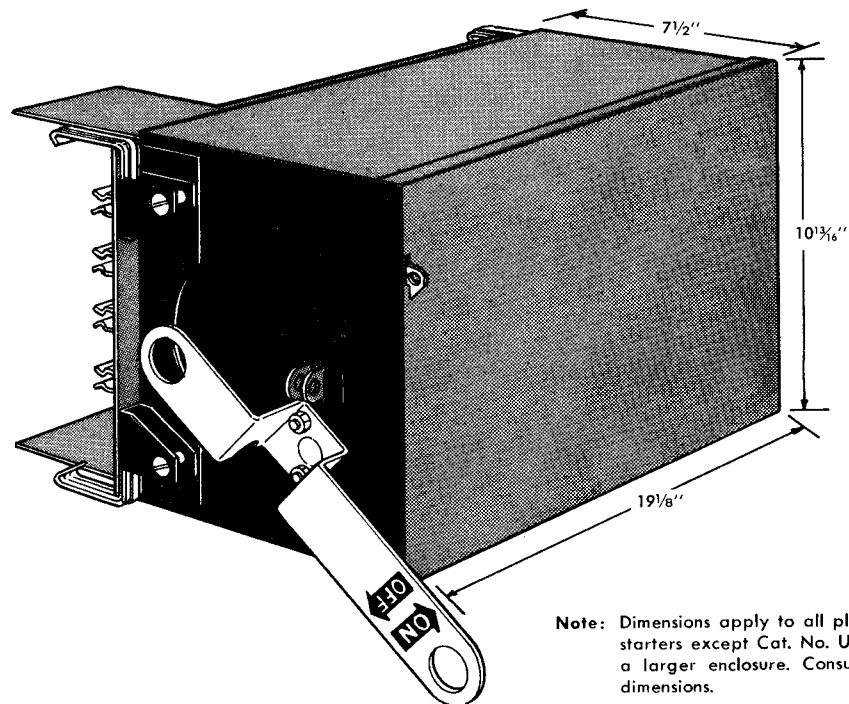


**BUS PLUGS**  
**FOR XL®-UNIVERSAL DUCT**  
**COMBINATION MOTOR-STARTER PLUGS—CIRCUIT BREAKER, FUSIBLE**

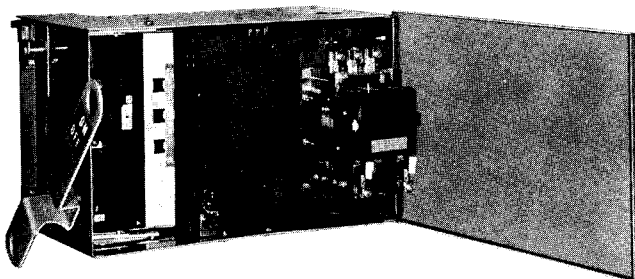
Combination motor-starter plugs provide a motor starter and protective device close to the load. They are operated from the floor with a rope or chain and include a safety interlock which prevents installation or removal of the plug in the ON position. The cover also has a safety interlock. Interlocks may be voided by trained personnel. The handle is located at the

end of the plug so that it retains control of the switching mechanism regardless of whether the cover is open or shut.

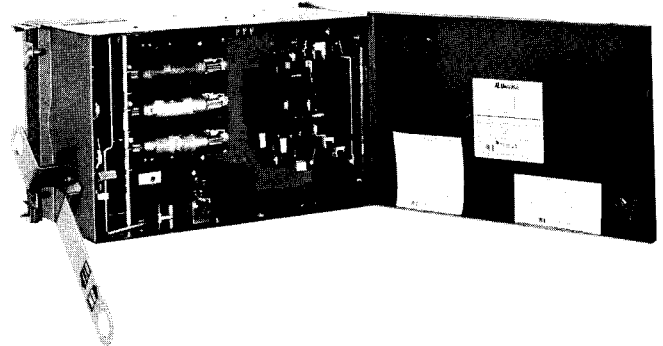
Both fusible and breaker plugs are designed for I-T-E non-reversing starters. Breaker units have ETI instantaneous trip breakers. Fusible units have quick-make, quick-break switches.



**Note:** Dimensions apply to all plugs with size 0, 1 and 2 starters except Cat. No. UA30D481 which requires a larger enclosure. Consult sales office for these dimensions.



Motor Control with Breaker



Motor Control with Fusible Switch

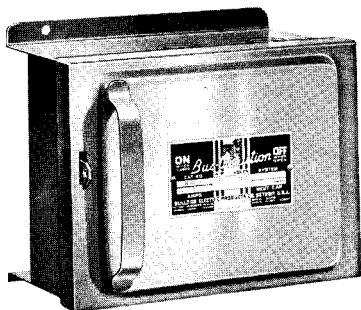




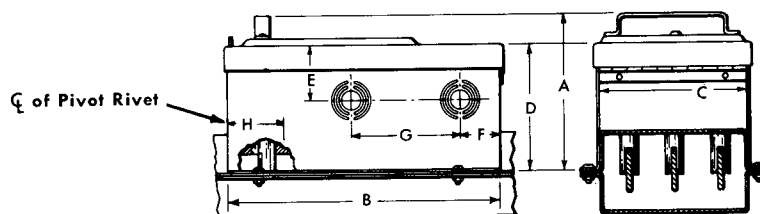
**BUS PLUGS**

FOR BD<sup>®</sup> AND LO-X<sup>®</sup> PLUG-IN DUCT

**BP FUSIBLE SWITCH PLUGS—DOOR-OPERATED**

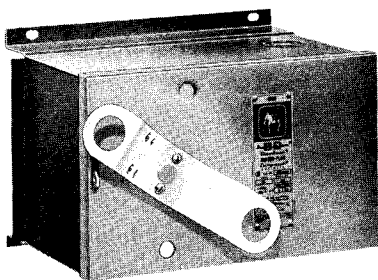


Fusible and non-fusible BP Bus Plugs are available in sizes 30, 60 and 100 amperes, 2 or 3 pole, 600 volts or less, or 4 pole solid neutral 240 or 480 volts ac. They are for disconnecting purposes only. Contact fingers on the back of the plug engage the bus bars for electrical contact. The circuit is made or broken from the front of the plug by closing or opening the hinged cover, but the plug contact fingers always remain attached to the bus bars. The plugs are horsepower-rated.

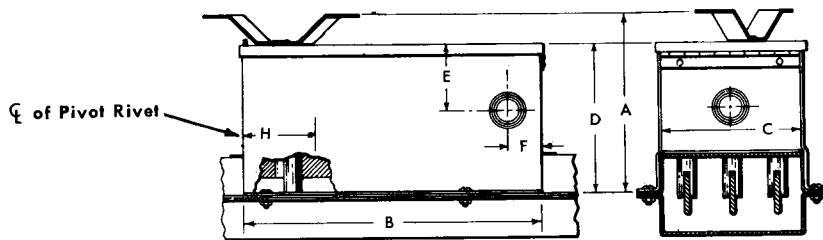


Capacity Amperes	DIMENSIONS—Inches								Conduit Sizes—Inches
	A	B	C	D	E	F	G	H	
30-60	7 <sup>3</sup> / <sub>4</sub>	10	7 <sup>5</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	1/2, 3/4, 1
100	7 <sup>3</sup> / <sub>4</sub>	13 <sup>3</sup> / <sub>4</sub>	7 <sup>5</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	1 <sup>7</sup> / <sub>8</sub>	5 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	1/2, 3/4, 1, 1 <sup>1</sup> / <sub>4</sub> , 1 <sup>1</sup> / <sub>2</sub>

**FUSIBLE VACU-BREAK<sup>®</sup> SWITCH PLUGS—FLOOR-OPERATED**



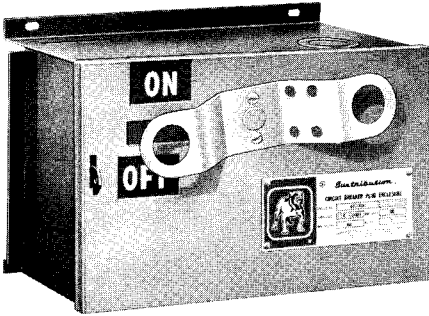
Fusible and non-fusible Vacu-Break Switch Plugs are available in sizes of 30 to 600 amperes, 3 pole, 600 volts or less, or 4 pole solid neutral, 240 or 480 volts ac. They are operating-type plugs. The Vacu-Break principle minimizes arcing, prevents pitting and beading of line and load contacts and reduces maintenance costs. The plug is quick-make and quick-break and is horsepower-rated.



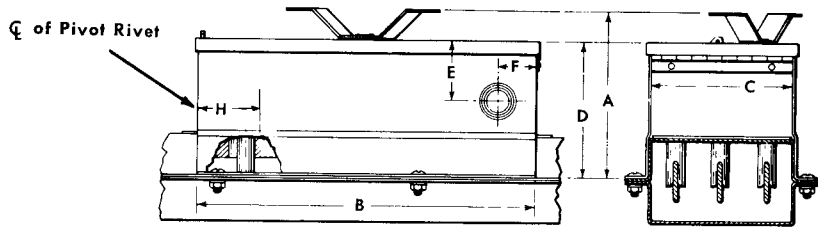
Capacity Amperes	DIMENSIONS—Inches							Conduit Sizes—Inches
	A	B	C	D	E	F	H	
30-60	10 <sup>3</sup> / <sub>4</sub>	12	7 <sup>1</sup> / <sub>8</sub>	9	4 <sup>11</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	1/2, 3/4, 1, 1 <sup>1</sup> / <sub>4</sub>
100	10 <sup>3</sup> / <sub>4</sub>	15	7 <sup>1</sup> / <sub>8</sub>	9	4 <sup>11</sup> / <sub>16</sub>	1 <sup>11</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	1/2, 3/4, 1, 1 <sup>1</sup> / <sub>4</sub>
200	11	19 <sup>1</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	1/2, 3/4, 1, 1 <sup>1</sup> / <sub>4</sub> , 1 <sup>1</sup> / <sub>2</sub> , 2, 2 <sup>1</sup> / <sub>2</sub>
400-600	14 <sup>5</sup> / <sub>8</sub>	30 <sup>5</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>2</sub>	12 <sup>5</sup> / <sub>8</sub>	5 <sup>13</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	9 <sup>1</sup> / <sub>8</sub>	3, 3 <sup>1</sup> / <sub>2</sub> , 4



**BUS PLUGS**  
**FOR BD® AND LO-X® PLUG-IN DUCT**  
**CIRCUIT-BREAKER PLUGS—FLOOR-OPERATED**

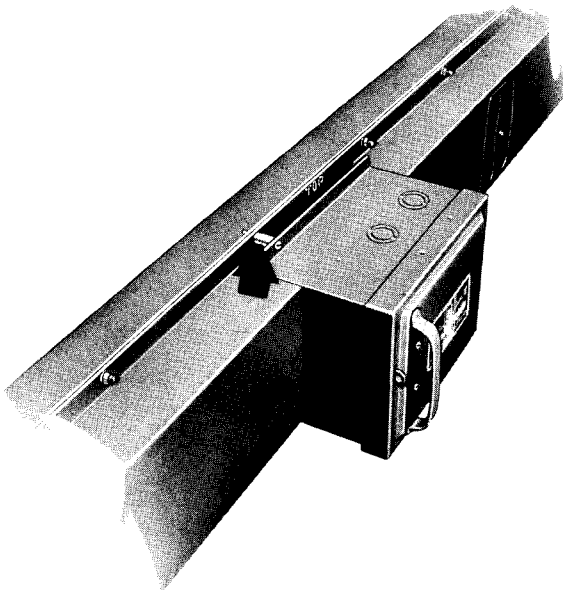


Circuit-Breaker Plugs are available in sizes up to 800 amperes, 600 volts or less. They are used where an automatic protective device is desired. The plug consists of a steel housing which encloses an industrial circuit breaker which has an inverse-time-element feature. It can be used with either rigid or flexible conduit.

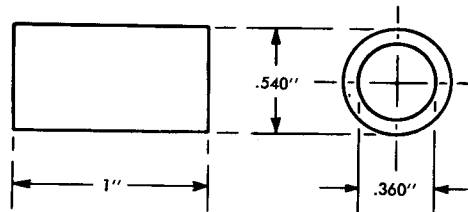


Frame Size	DIMENSIONS—Inches							CONDUIT SIZES—Inches	
	A	B	C	D	E	F	H	Side	End
E, EH, EF	9 <sup>1</sup> / <sub>16</sub>	12 <sup>3</sup> / <sub>8</sub>	7 <sup>5</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>16</sub>	1/2, 3/4, 1, 1 1/4, 1 1/2, 2	1/2, 3/4, 1, 1 1/4, 1 1/2, 2
FJ	10 <sup>5</sup> / <sub>16</sub>	22	10	8 <sup>5</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	1, 1 1/4, 1 1/2, 2, 2 1/2	1, 1 1/4, 1 1/2, 2, 2 1/2
JJ, JKL	11 1/4	24 1/2	11 3/8	9 <sup>9</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>2</sub>	3 1/4	4 1/8	2 1/2, 3, 3 1/2	2 1/2, 3, 3 1/2
KM	12 <sup>11</sup> / <sub>16</sub>	33 <sup>3</sup> / <sub>16</sub>	14 1/4	10 <sup>13</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	3 3/4	3 3/8	3, 3 1/2, 4	1 1/2, 2, 2 1/2, 3

**PIPE SPACERS**



The flanges on plug-in duct plugs were designed to fit the 4<sup>1</sup>/<sub>16</sub>" wide duct sections. When the plugs are to be attached to the larger duct sections, pipe spacers must be used. These spacers are also furnished with Plug-In Branch-Run Adaptors. When required, the Pipe Spacers must be specified when ordering the plugs or fittings.

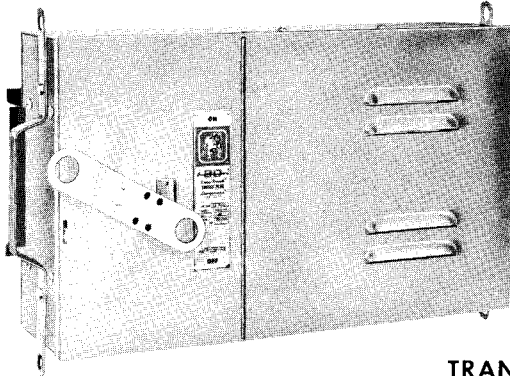




## BUS PLUGS

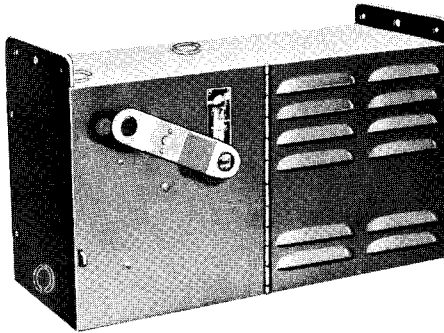
### FOR BD<sup>(R)</sup> AND LO-X<sup>(L)</sup> PLUG-IN DUCT

#### CAPACITOR PLUGS



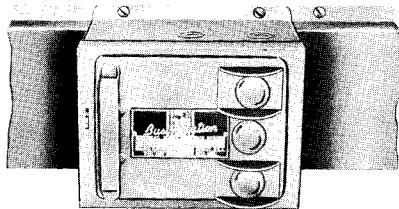
Capacitor Plugs range in size from 5 to 15 kVA, 240 volts or 480 volts, 60 cycle ac. They offer a convenient means for improving the power factor on plug-in duct systems. The thermal protective device and the capacitor unit are mounted in a single plug housing designed for plugging into the duct.

#### TRANSFORMER PLUGS



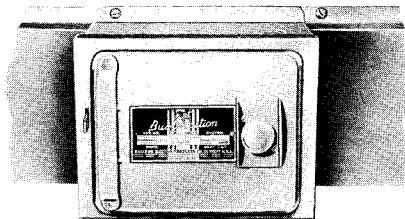
Transformer Plugs rated at 10 kVA furnish single-phase current at reduced voltage (240V or 120V) for lighting circuits, small motors, portable tools, etc. Transformer Plugs, designed with or without 2-pole a-c magnetic contactors, are used for plugging-in on 240- or 480-volt, 3-phase or single-phase BD Duct. A-c magnetic contactors are of two sizes—22 amperes and 45 amperes.

#### GROUND-DETECTOR PLUGS



Ground-Detector Plugs provide an easy means for quickly indicating grounds in the system, and in addition they establish a potential to ground between the bus bars and casing. The plug, with resistances between each of the phase bus bars and the plug case, which is grounded, is assembled so that the cover may be opened and the resistors replaced without removing the plug from the duct. 7½-watt lamps are mounted outside of the casing for visual indication. Dimensions are same as 30-ampere BP Plug.

#### TEMPERATURE-INDICATING PLUGS



Temperature-Indicating Plugs provide a visual indication, by means of lamps, when operating temperatures along plug-in duct runs may be exceeding effective operating temperatures. The plug is calibrated so that the lamp will light to indicate that the temperature of the bus bar to which the plug is connected exceeds 100 C (212 F) (30 C ambient plus 70 C rise). Dimensions are same as 30-ampere BP Plug.





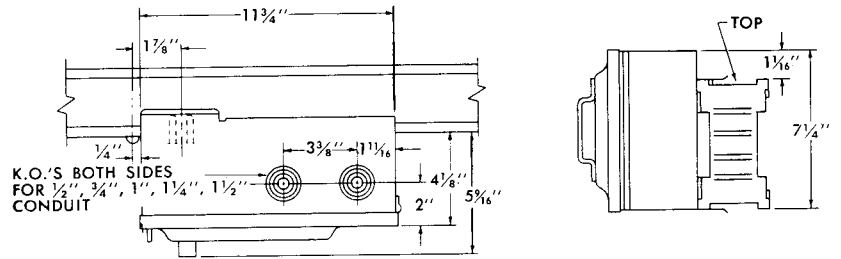
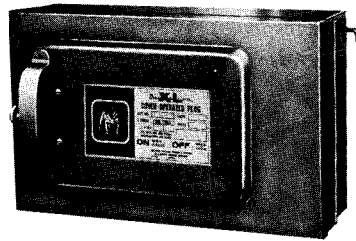
**BUS PLUGS**

**FOR XL® PLUG-IN BUS DUCT**

**FUSIBLE SWITCH PLUGS—DOOR-OPERATED**

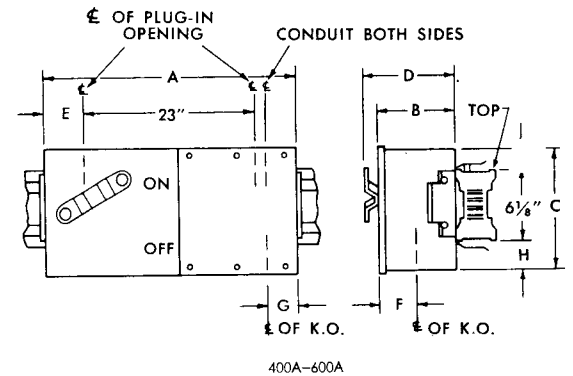
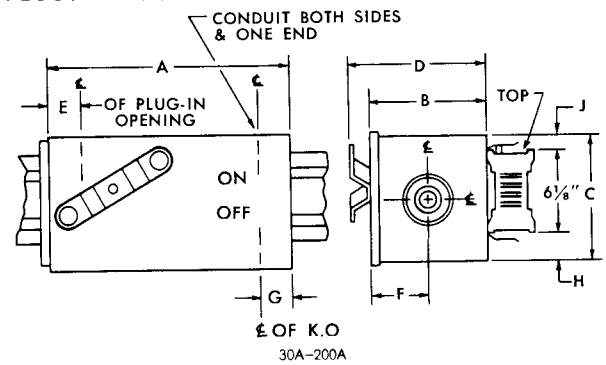
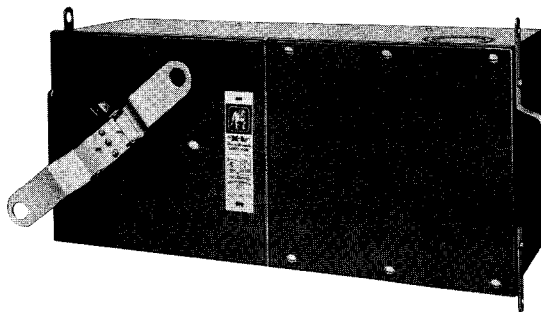
**30, 60 AND 100A—600V MAX.**

Door-operated fusible switch plugs provide economic fusible protection. The circuit is made or broken from the front of the plug by closing or opening the hinged cover. Plugs are horsepower rated.



**FUSIBLE VACU-BREAK® SWITCH PLUGS—FLOOR-OPERATED**

Fusible Vacu-Break switch plugs are heavy-duty, operating-type plugs. They include a safety interlock which prevents plug installation or removal when in an ON position. The Vacu-Break switching principle minimizes arcing, prevents pitting and beading of line and load contacts and reduces maintenance costs. The plugs are quick-make, quick-break type and are horsepower rated. The cover contains an interlock to prevent it from being opened with the switch ON. The plugs can be operated from the floor with a pull chain or hook stick. Where visible ON-OFF identification is required, an easily read ON and OFF pressure-sensitive adhesive sticker is available. See Section 5.3.4.0, page 2.



Rating			DIMENSIONS—Inches									Conduit Size(KO's) Inches	
Amperes	Volts AC	Volts DC	A	B	C	D	E	F	G	H	J		
30	240	250	11 3/4	6 13/16	7 1/4	8 1/2	1 5/8	4 3/4	1 11/16	3/32	1 1/32	1/2, 3/4, 1, 1 1/4, 1 1/2, 2	
	600	—	15										
60	240	250	11 3/4	6 13/16	7 1/4	8 1/2	1 5/8	4 3/4	1 11/16	3/32	1 1/32		
	600	—	15										
100	240 or 600	250	15	6 3/8	9 25/32	8 3/16	1 5/8	3 1/2	1 11/16	2 1/64	1 25/64		1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 3 1/2, 4
			33 1/8										



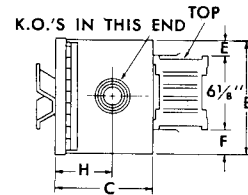
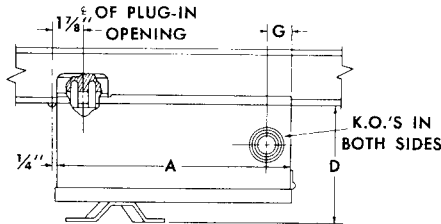
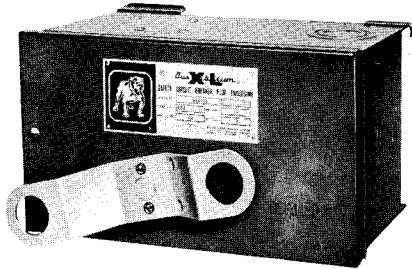
**BUS PLUGS**

**FOR XL® PLUG-IN BUS DUCT**

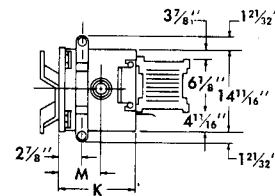
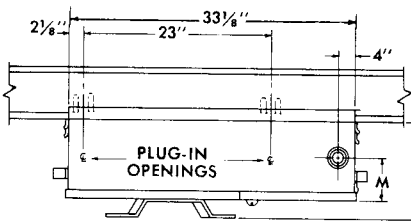
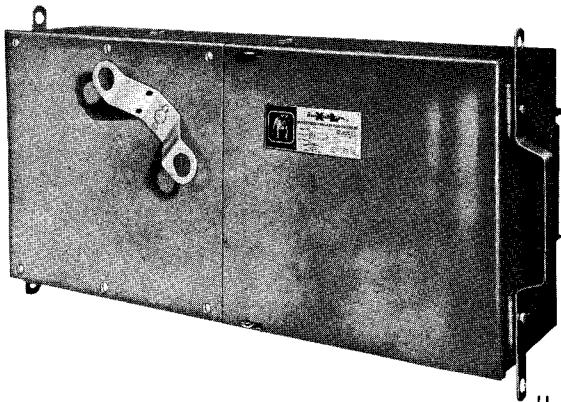
**CIRCUIT-BREAKER PLUGS—FLOOR-OPERATED**

Circuit-breaker plugs are available in sizes up to 800 amperes, 600 volts or less. They include a safety interlock which prevents plug installation or removal when the plug

is ON. The plugs can be operated from the floor with a pull chain or hook stick.



E, EH, EF AND FJ FRAME



JJ, JKL AND KM FRAME

Frame	Rating Amperes	DIMENSIONS—Inches								Conduit Size(KO's) Inches	
		A	B	C	D	E	F	G	H		
E, EH, EF	100	11 3/4	6 5/16	6 13/16	8 1/2	3/2	3/32	1 11/16	4 3/4	1/2, 3/4, 1, 1 1/4, 1 1/2, 2	
FJ	225	19 1/2	9 11/16	7 3/8	9 9/16	1 3/8	2 1/4	1 15/16	4 3/4		
JJ, JKL	400	33 3/8	14 11/16	8 3/8	10 1/4	3 3/8	4 11/16	4	4 7/16		3, 3 1/2, 4
KM	800	33 3/8	14 11/16	12 3/8	14 13/16	3 7/8	4 11/16	4	4 1/8		



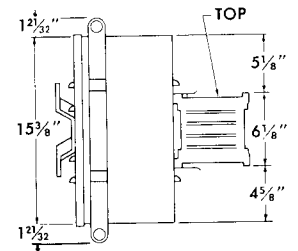
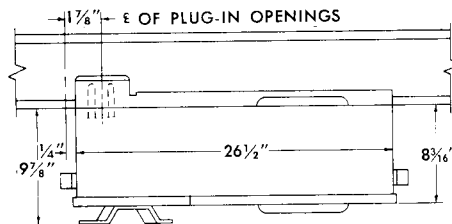
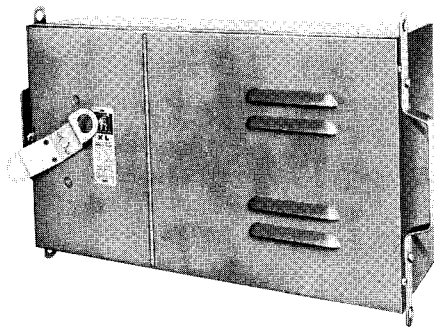


**BUS PLUGS**  
FOR XL® PLUG-IN BUS DUCT

**CAPACITOR PLUGS**

Capacitor plugs range in size from 5 to 15 kVA, 240 or 480 volts, 60 cycle ac. They offer a convenient means for improving the power factor on plug-in duct systems.

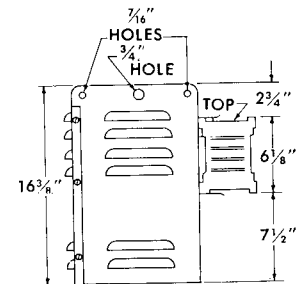
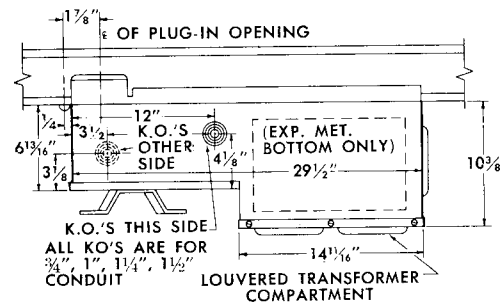
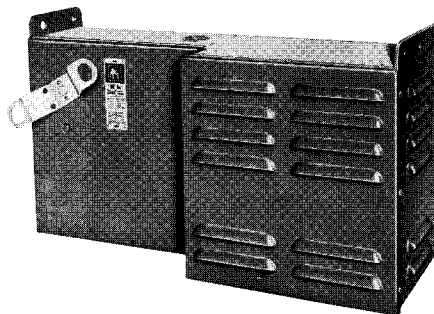
The thermal protective device and the capacitor unit are mounted in a single plug housing designed for plugging into the duct.



**TRANSFORMER PLUGS**

Transformer plugs, rated at 10 kVA, furnish single-phase power at a reduced voltage (120 or 240 V) for lighting receptacles, small motors, portable tools, etc. Transformer plugs, designed with or without 2-pole a-c magnetic con-

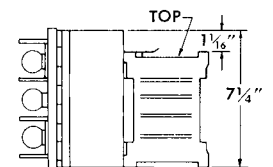
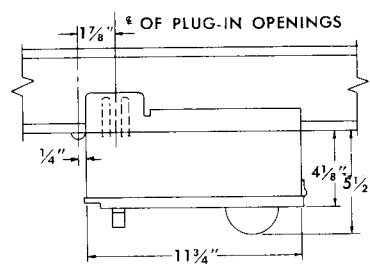
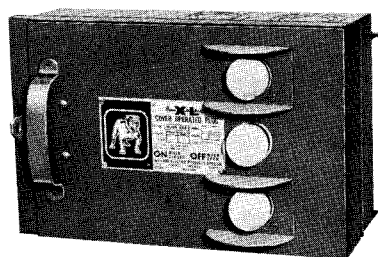
factors, are used for plugging-in on 240- or 480-volt, 3-phase XL duct. A-c magnetic contactors are of two sizes—22 amperes and 45 amperes.



**GROUND-DETECTOR PLUGS**

Ground-detector plugs provide an easy means for quickly indicating grounds in an ungrounded system, and in addition they establish a potential to ground between the bus bars and casing. The plug, with resistances between each of the phase bus bars and the plug case, which is

grounded, is assembled so that the cover may be opened and the resistors replaced without removing the plug from the duct. 7 1/2-watt lamps are mounted outside of the casing for visual indication.







**BUS PLUGS**  
**FOR X100® PLUG-IN BUS DUCT**  
**PRICES**

**XEQ CIRCUIT-BREAKER ENCLOSURES—Door-Operated (Less Breakers)**

Breaker Rating Amperes	3 POLE			3 PHASE, 4 WIRE		
	Cat. No.	List Price	Ship. Wgt., Lb	Cat. No.	List Price	Ship. Wgt., Lb
15-50	XEQ350	\$11.	4	XEQ450	\$13.	4

For Circuit Breakers—See EQ-P and EQ-B data and prices in Section 2.1.

**CIRCUIT-BREAKER PLUGS†—Floor-Operated**

Breaker Frame	AC Volts	Rating Amperes	List Price With Breaker	3 POLE		3 PHASE, 4 WIRE		
				Enclosure Only	List Price	Enclosure Only	List Price	
E	240	15-50 70-100	\$105. 126.	XLEH3100	\$59.	\$119. 140.	XLEH4100	\$73.
EH	480	15-50 70-100	133. 147.			147. 161.		
EF	600	15-50 70-100	145. 164.			159. 178.		

**CIRCUIT-BREAKER PLUGS†—Cover-Operated**

Breaker Frame Size	AC Volts	Breaker Rating Amperes	List Price With Breaker	3 POLE		3 PHASE, 4 WIRE		
				Enclosure Only	List Price	Enclosure Only	List Price	
E	240	15-50 70-100	\$84. 105.	XEH3100	\$38.	\$94. 115.	XEH4100	\$48.
EH	480	15-50 70-100	112. 126.			122. 136.		

**FUSIBLE BUS PLUGS (Non-Switching)**

Volts	Rating Amperes	3 POLE			3 PHASE, 4 WIRE		
		Cat. No.	List Price	Ship. Wgt., Lb	Cat. No.	List Price	Ship. Wgt., Lb
240 AC or 250 DC	30 60	XP321 XP322	\$19. 30.	5 5	XP421 XP422	\$21. 33.	5 5

**FUSIBLE VACU-BREAK® SWITCH PLUGS—Floor-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC 250 DC	30	3	7½	XLVB321 XLVB322 XLVB323	\$66. 70. 103.	3	10	XLVB421N XLVB422N XLVB423N	\$76. 81. 114.
	60	7½	15			7½	20		
	100	15	30			15	30		
600 AC	30	7½	20	XLVB351 XLVB352 XLVB353	70. 74. 106.	5**	15**	XLVB451N XLVB452N XLVB453N	81. 85. 124.
	60	15	50			15**	30**		
	100	30	75			25**	60**		

**FUSIBLE SWITCH PLUGS—Door-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC 250 DC	30	3	7½	XLP321 XLP322 XLP323	\$49. 53. 69.	3	7½	XLP421N XLP422N XLP423N	\$60. 66. 79.
	60	7½	15			7½	15		
	100	15	30			15	15		
600 AC	30	7½	—	XLP351 XLP352 XLP353	52. 55. 77.	5**	—	XLP451N XLP452N XLP453N	64. 68. 89.
	60	15	—			15**	—		
	100	30	—			25**	—		

\*\* 480-volt ratings.

† Enclosures available from stock. When ordering circuit-breaker bus plugs complete with breaker, factory-installed, allow time for assembly and SPECIFY Enclosure, Frame Size, Poles and Ampere Rating. Example: One XEH3100—EH—3P—70A—Factory-Assembled.

CLASS J FUSES—Adaptor kits available for converting switches to Class J fuses. See Section 5.3.4.0, page 1.

**ACCESSORIES**

Description	Cat. No.	List Price	Std. Pkg.
Floor-Operating Handle—For XEQ Bus Plugs, Each.....	XEQH	\$4.50	10
Screw-On Outlet Cover—For Plug-in Openings, Each.....	X100-OC	.60	25
ON-OFF Bus-Plug Stickers—Pressure-Sensitive, Per Pair.....	W47185	.30	—





**BUS PLUGS**

FOR XL®-UNIVERSAL BUS DUCT\*

**PRICES**

**STARTER OR CONTACTOR BUS PLUGS**

**CIRCUIT-BREAKER DISCONNECT**

NEMA Size	Voltage	Max. H.P.	Cat. No.	List Price	Control Trans. List Price
0	240	2	UA31B24C	\$271.	\$48.
		3	UA31B24D		
		5	UA31B48C		
1	240	5	UA31C24D	281.	48.
		7½	UA31C24E		
	480	7½	UA31C48D		
		10	UA31C48D		
2	240	10	UA31D24E	379.	67.
		15	UA31D24F		
	480	15	UA31D48E		
		25	UA31D48F		

**CIRCUIT-BREAKER PLUGS†—Floor-Operated**

Breaker Frame	AC Volts	Rating Amperes	3 POLE		3 PHASE, 4 WIRE			
			List Price With Breaker	Enclosure Only		List Price With Breaker	Enclosure Only	
				Cat. No.†	List Price		Cat. No.†	List Price
E	240	15-50 70-100	\$105. 126.			\$119. 140.		
EH	480	15-50 70-100	133. 147.	U1C3100	\$56.	147. 161.	U1C4100	\$69.
EF		15-50 70-100	145. 164.			159. 178.		
FJ		70-225	364.	U4C3225	121.	390.	U4C4225	145.
JJ	600	250-400	753.			792.		
JKL		70-225 250-400	634. 792.	U6C3400	324.	673. 831.	U6C4400	360.
KM		500-600 700-800	1075. 1305.	U8C3800	340.	1128. 1358.	U8C4800	390.

**VACU-BREAK® FUSIBLE-SWITCH DISCONNECT**

NEMA Size	Switch Size	Voltage	Max. H.P. AC	Cat. No.	List Price	Control Trans. List Price
0	30A	240	3	UA30B243	\$244.	\$45.
		480	5	UA30B483		
1	30A	240	7½	UA30C243	271.	45.
				UA30C246		
	480	30A	UA30C483			
		60A	UA30C486			
2	60A	240	15	UA30D246	328.	63.
				UA30D241		
	480	100A	UA30D486			
		100A	UA30D481			

**FUSIBLE VACU-BREAK SWITCH PLUGS—Floor-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC	30	3	7½	UV321	\$66.	3	10	UV421	\$76.
	60	7½	15	UV322	70.	7½	20	UV422	81.
	100	15	30	UV323	103.	15	30	UV423	114.
250 DC	200	25	60	UV324	180.	25	60	UV424	202.
	400	50	100	UV325	445.	50	100	UV425	480.
	600	75	100	UV326	618.	75	100	UV426	677.
600 AC	30	7½	20	UV361	70.	5**	15**	UV461	81.
	60	15	50	UV362	74.	15**	30**	UV462	85.
	100	30	75	UV363	106.	25**	60**	UV463	124.
	200	60	100	UV364	188.	50**	100**	UV464	212.
	400	100	—	UV365	445.	100**	—	UV465	480.
	600	—	—	UV366	618.	—	—	UV466	677.

**CAPACITOR PLUGS**

Capacitor KVA	Rating—Amperes		240V AC, 60 Cycle		480V AC, 60 Cycle		
	240 Volt	480 Volt	Cat. No.	List Price	Cat. No.	List Price	
<b>CIRCUIT-BREAKER DISCONNECT</b>							
5.0	35	15	UBC3205	\$851.	UBC3405	\$746.	
7.5	50	—	UBC3207	1029.	—	—	
10.0	—	35	—	—	UBC3410	918.	
15.0	—	50	—	—	UBC3415	1007.	
<b>VACU-BREAK FUSIBLE-SWITCH DISCONNECT</b>							
5.0	60	—	UVC3205	\$780.	UVC3405	\$567.	
7.5		—	UVC3207	959.	—	—	
10.0		—	—	—	—	UVC3410	746.
15.0		—	—	—	—	UVC3415	827.

**FUSIBLE SWITCH PLUGS—Door-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC	30	3	7½	UP321	\$49.	3	7½	UP421	\$60.
	60	7½	15	UP322	53.	7½	15	UP422	66.
250 DC	100	15	30	UP323	69.	15	15	UP423	79.
	30	7½	—	UP361	52.	5**	—	UP461	64.
600 AC	60	15	—	UP362	55.	15**	—	UP462	68.
	100	30	—	UP363	77.	25**	—	UP463	89.

**SPECIAL BUS PLUGS**

Description	Cat. No.	List Price
Ground Detector and Potentializer—For 2- or 3-pole 240- and 480-volt a-c service	UPGR314	\$88.
Transformer—For 10 kVA rating. Furnish 1-phase current at reduced voltage	†	1138.

† Order by description.

\* Grounding Finger—When required for any XL-U plug, must be specified by adding Suffix G to plug Cat. No. Add \$10.00 List to price.

\*\* 480-volt ratings.

† Enclosures available from stock. When ordering circuit-breaker bus plugs complete with breaker, factory-installed, allow time for assembly and SPECIFY Enclosure, Frame Size, Poles and Ampere Rating. Example: One U1C3100—EH—3P—70A—Factory-Assembled.

CLASS J FUSES—Adaptor kits available for converting switches to Class J fuses. See Section 5.3.4.0, page 1.





**BUS PLUGS**

FOR BD® AND LO-X® PLUG-IN DUCT

PRICES

**STARTER OR CONTACTOR BUS PLUGS**

**CIRCUIT-BREAKER DISCONNECT**

NEMA Size	Voltage	Max. H.P.	Cat. No.	List Price	Control Trans. List Price
0	240	2	BCD31001450	\$271.	\$48.
		3			
		5			
1	240	5	BCD31001451	281.	48.
		7½			
		10			
2	240	10	BCD31001452	379.	67.
		15			
		25			

**CIRCUIT-BREAKER PLUGS†—Floor-Operated**

Breaker Frame	AC Volts	Rating Amperes	List Price With Breaker	3 POLE		3 PHASE, 4 WIRE		
				Enclosure Only		Enclosure Only		
				Cat. No.†	List Price	Cat. No.	List Price	
E	240	15-50 70-100	\$105. 126.	BDEH3100	\$59.	\$119. 140.	BDEH4100	\$73.
EH	480	15-50 70-100	133. 147.			147. 161.		
EF	600	15-50 70-100	145. 164.	BDFJ3225	128.	159. 178.	BDFJ4225	154.
FJ		70-225	364.			390.		
JJ		250-400	753.			792.		
JKL	600	70-225 250-400	634. 792.	BDJK3400	343.	673. 831.	BDJK4400*	382.
KM		500-600 700-800	1075. 1305.			1128. 1358.		

**VACU-BREAK® FUSIBLE-SWITCH DISCONNECT**

NEMA Size	Switch Size	Voltage	Max. H.P. AC	Cat. No.	List Price	Control Trans. List Price
0	30A	240	3	BOS1432150	\$258.	\$48.
		480	5	BOS1435150		
1	30A	240	7½	BOS1432151	271.	48.
				BOS1432251		
	60A	480	10	BOS1435151		
				BOS1435251		
2	60A	240	15	BOS1432252	348.	67.
				BOS1432352		
				BOS1435252		
2	100A	480	25	BOS1435352	348.	67.
				BOS1435352		

**FUSIBLE VACU-BREAK SWITCH PLUGS—Floor-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE				
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price	
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)			
240 AC	30	3	7½	BOS14321	\$66.	3	10	BOS16421	\$76.	
	60	7½	15	BOS14322	70.	7½	20	BOS16422	81.	
	100	15	30	BOS14323	103.	15	30	BOS16423	114.	
	250 DC	200	25	60	BOS14324	180.	25	60	BOS16424	202.
600 AC	400	50	100	BOS14325	445.	50	100	BOS16425*	480.	
	600	75	100	BOS14326	618.	75	100	BOS16426*	677.	
	240 AC	30	7½	20	BOS14351	70.	5**	15**	BOS16451	81.
		60	15	50	BOS14352	74.	15**	30**	BOS16452	85.
250 DC	100	30	75	BOS14353	106.	25**	60**	BOS16453	124.	
	200	60	100	BOS14354	188.	50**	100**	BOS16454	212.	
600 AC	400	100	—	BOS14355	445.	100**	—	BOS16455*	480.	
	600	—	—	BOS14356	618.	—	—	BOS16456*	677.	

**CAPACITOR PLUGS**

Capacitor KVA	Rating—Amperes		240 V AC, 60 Cycle		480 V AC, 60 Cycle		
	240 Volt	480 Volt	Cat. No.	List Price	Cat. No.	List Price	
<b>CIRCUIT-BREAKER DISCONNECT</b>							
5.0	35	15	CBC33524	\$851.	CBC31544	\$746.	
7.5	50	—	CBC35025	1029.	—	—	
10.0	—	35	—	—	CBC33546	918.	
15.0	—	50	—	—	CBC35047	1007.	
<b>VACU-BREAK FUSIBLE-SWITCH DISCONNECT</b>							
5.0	60	—	COS3124	780.	COS3144	567.	
7.5			COS3225	959.	—	—	
10.0			—	—	—	COS3146	746.
15.0			—	—	—	COS3247	827.
—			—	—	—	—	—

**FUSIBLE SWITCH PLUGS—Door-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC	30	3	7½	BP321	\$49.	3	7½	BP421	\$60.
	60	7½	15	BP322	53.	7½	15	BP422	76.
	100	15	30	BP323	69.	15	15	BP423	77.
250 DC	200	25	60	BP351	52.	5**	—	BP451	64.
	400	50	100	BP352	55.	15**	—	BP452	68.
	600	75	100	BP353	77.	25**	—	BP453	89.

**SPECIAL BUS PLUGS**

Description	Cat. No.	List Price
Ground Detector and Potentializer—For 2- or 3-pole 240- and 480-volt a-c service	PGR6314	\$88.
Transformer—For 10 kVA rating. Furnish 1-phase current at reduced voltage	†	1138.

† Order by description.

\* When BD duct capacity exceeds 400A for aluminum or 600A for copper, capacity must be specified to obtain proper number and arrangement of neutral fingers.

\*\* 480-volt ratings.

† Enclosures available from stock. When ordering circuit-breaker bus plugs complete with breaker, factory-installed, allow time for assembly and SPECIFY Enclosure, Frame Size, Poles and Ampere Rating. Example: One BDEH3100—EH—3P—70A—Factory-Assembled.

CLASS J FUSES—Adaptor kits available for converting switches to Class J fuses. See Section 5.3.4.0, page 1.

CHANNEL SPACERS—Must be used with Bus Plugs or Plug-In Branch-Run Adapters mounted on 600-, 800- or 1000-ampere aluminum ABD or on 800- or 1000-ampere copper BDP duct. Order by Cat. No. W-37940 at no charge.







**BUS PLUGS**  
**FOR XL® PLUG-IN BUS DUCT**

**PRICES**

**STARTER OR CONTACTOR BUS PLUGS**  
**CIRCUIT-BREAKER DISCONNECT**

NEMA Size	Voltage	Max. H.P.	Cat. No.	List Price	Control Trans. List Price
0	240	2	XLEH3100S0	\$271.	\$48.
		3			
		5			
1	240	5	XLEH3100S1	281.	48.
		7½			
		10			
2	240	10	XLEH3100S2	379.	67.
		15			
		25			

**CIRCUIT-BREAKER PLUGS†—Floor-Operated**

Breaker Frame	AC Volts	Rating Amperes	3 POLE		3 PHASE, 4 WIRE			
			Enclosure Only		Enclosure Only			
			List Price With Breaker	Cat. No.†	List Price	Cat. No.†	List Price	
E	240	15-50 70-100	\$105. 126.	XLEH3100	\$56.	\$119. 140.	XLEH4100	\$69.
EH	480	15-50 70-100	133. 147.			147. 161.		
EF	600	15-50 70-100	145. 164.			159. 178.		
FJ	600	70-225	364.	XLFJ3225	121.	390.	XLFJ4225	145.
JJ		250-400	753.	XLJK3400	324.	792.	XLJK4400	360.
JKL		70-225 250-400	634. 792.			673. 831.		
KM	600	500-600 700-800	1075. 1305.	XLKM3800	340.	1128. 1358.	XLKM4800	390.

**VACU-BREAK® FUSIBLE-SWITCH DISCONNECT**

NEMA Size	Switch Size	Voltage	Max. H.P. AC	Cat. No.	List Price	Control Trans. List Price
0	30A	240	3	XLVB32150	\$258.	\$48.
		480	5	XLVB35150		
1	30A	240	7½	XLVB32151	271.	48.
	60A			XLVB32251		
	30A	480	10	XLVB35151		
	60A			XLVB35251		
2	60A	240	15	XLVB32252	348.	67.
	100A			XLVB32352		
	60A			480		
100A	XLVB35352					

**FUSIBLE VACU-BREAK SWITCH PLUGS—Floor-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC	30	3	7½	XLVB321	\$66.	3	10	XLVB421N	\$76.
	60	7½	15	XLVB322	70.	7½	20	XLVB422N	81.
	100	15	30	XLVB323	103.	15	30	XLVB423N	114.
250 DC	200	25	60	XLVB324	180.	25	60	XLVB424N	202.
	400	50	100	XLVB325	445.	50	100	XLVB425N	480.
	600	75	100	XLVB326	618.	75	100	XLVB426N	677.
600 AC	30	7½	20	XLVB351	70.	5**	15**	XLVB451N	81.
	60	15	50	XLVB352	74.	15**	30**	XLVB452N	85.
	100	30	75	XLVB353	106.	25**	60**	XLVB453N	124.
600 AC	200	60	100	XLVB354	188.	50**	100**	XLVB454N	212.
	400	100	—	XLVB355	445.	100**	—	XLVB455N	480.
	600	—	—	XLVB356	618.	—	—	XLVB456N	677.

**CAPACITOR PLUGS**

Capacitor KVA	Rating—Amperes		240 V AC, 60 Cycle		480 V AC, 60 Cycle		
	240 Volt	480 Volt	Cat. No.	List Price	Cat. No.	List Price	
<b>CIRCUIT-BREAKER DISCONNECT</b>							
5.0	35	15	XLBC3205	\$851.	XLBC3405	\$746.	
7.5	50	—	XLBC3207	1029.	—	—	
10.0	—	35	—	—	XLBC3410	918.	
15.0	—	50	—	—	XLBC3415	1007.	
<b>VACU-BREAK FUSIBLE-SWITCH DISCONNECT</b>							
5.0	60	—	XLVC3205	780.	XLVC3405	567.	
7.5		—	XLVC3207	959.	—	—	
10.0		—	—	—	—	XLVC3410	746.
15.0		—	—	—	—	XLVC3415	827.

**FUSIBLE SWITCH PLUGS—Door-Operated**

Volts	Rating Amperes	3 POLE				3 PHASE, 4 WIRE			
		Horsepower Ratings, AC		Cat. No.	List Price	Horsepower Ratings, AC		Cat. No.	List Price
		Std. (NEC)	Max. (Time Delay)			Std. (NEC)	Max. (Time Delay)		
240 AC	30	3	7½	XLP321	\$49.	3	7½	XLP421N	\$60.
	60	7½	15	XLP322	53.	7½	15	XLP422N	66.
	100	15	30	XLP323	69.	15	15	XLP423N	79.
600 AC	30	7½	—	XLP351	52.	5**	—	XLP451N	64.
	60	15	—	XLP352	55.	15**	—	XLP452N	68.
	100	30	—	XLP353	77.	25**	—	XLP453N	89.

**SPECIAL BUS PLUGS**

Description	Cat. No.	List Price
Ground Detector and Potentializer—For 2- or 3-pole 240- and 480-volt a-c service	XLGR314	\$88.
Transformer—For 10 kVA rating. Furnish 1-phase current at reduced voltage	†	1138.

† Order by description.

\*\* 480-volt ratings.

† Enclosures available from stock. When ordering circuit-breaker bus plugs complete with breaker, factory-installed, allow time for assembly and SPECIFY Enclosure, Frame Size, Poles and Ampere Rating. Example: One XLEH3100—EH—3P—70A—Factory-Assembled.

‡ Consult I-T-E sales office for availability.

CLASS J FUSES—Adaptor kits available for converting switches to Class J fuses. See Section 5.3.4.0, page 1.

