X100" PLUG-IN BUS DUCT

TYPICAL SPECIFICATIONS

The electrical contractor shall furnish and install a complete system of interconnected bus-duct runs as shown on the plans and diagrams and in accordance with local and national code regulations. The bus-duct system shall consist of pre-fabricated sections, so formed that the complete assembly shall be rigid in construction and neat and symmetrical in appearance. Interconnected bus-duct runs shall be comprised of sections that are listed by the Underwriters' Laboratory and are so labeled.

Bus-duct casing shall be formed of two steel halves. Splice plates with captive bolts shall be furnished with the duct to secure the casing. Casing ends and bus bars of adjacent sections shall overlap to form a scarf-lap joint for sturdy and rigid connection at that point. Duct shall be designed for mounting on 10' centers edgewise. Bus bars shall be connected by means of a pressure joint. The bus duct shall be provided with the manufacturer's standard clamp hanger.

Bus bars shall be fabricated from aluminum. The entire surface of the aluminum bar shall be zinc-copper plated to prevent formation of highly resistive aluminum oxides. In addition, the aluminum bar with the zinc-copper plating shall be silver finished to assure good contact and low-

temperature operation at all joints and plug-in tap off points. The aluminum-bus-bar plating shall be applied in a manner that will permit repeated use of all plug-in openings. Thermo-setting, non-tracking insulators shall be used within the casing on 10" centers to support the bus bars and to brace the duct against short-circuit-current surges of 15,000 asymmetrical amperes.

Current take-off plug-in openings shall be spaced at convenient intervals along and equally and alternately divided on both sides of the duct. Six dead-front receptacle openings shall be provided for tap-off devices on each side of the duct. All openings shall be usable simultaneously.

All current take-off devices or plugs shall be equipped with spring-reinforced contact fingers. Plugs shall also be designed to ground against duct casing before fingers make contact with bus bars to provide additional safety during plug insertion. Plugs shall be of the type and capacity required to perform circuit applications as indicated on plans and drawings.

The duct runs and associated fittings shall be of the X100 Plug-in Duct as manufactured by the I-T-E Circuit Breaker Company.

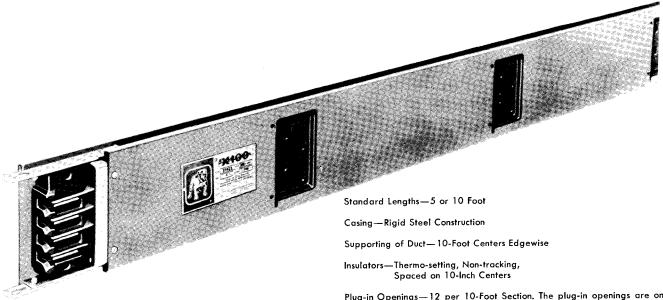
section **5.3.1.1**

- JULY 15, 1967

PAGE 1

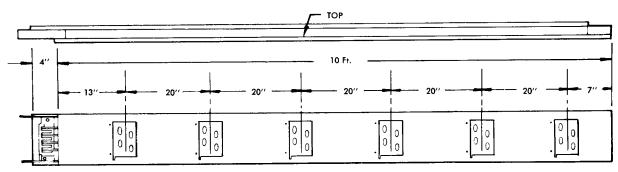
X100® PLUG-IN BUS DUCT

STRAIGHT SECTIONS



Plug-in Openings—12 per 10-Foot Section. The plug-in openings are on alternate sides and are all usable simultaneously.

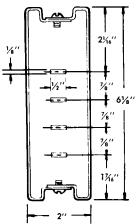
Paint-Baked Gray Enamel



Insulator End (with pressure springs) is indicated with directional arrows on installation drawings.

"TOP" marking on each duct section indicates proper installation position.

Ampere	Duct	3-1	Pole	4-1			
Rating	Length	Cat. No.	Weight, Lb.	Cat. No.	Weight, Lb.	Bar Size	
100	10'	X100-3	36	X100-4	38	/ ₈ " x ½"	
100	5′	X100-35	18	X100-45	19	78 X 72	



- JULY 15, 1967

X100® PLUG-IN BUS DUCT

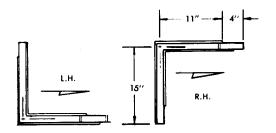
ELBOWS



X100 elbows are available Edgewise or Flatwise—Right Hand or Left Hand construction. When specifying, be sure to use the proper catalog-number suffix to identify the required fitting.

Elbows can be identified in the following manner: when facing an Edgewise duct run (with insulator end of duct to

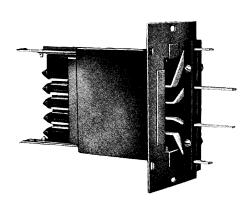
TEES available on special order from factory



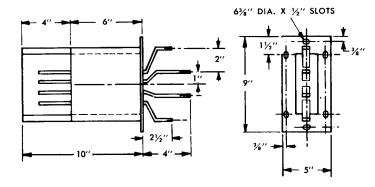
your right) a Right-Hand Edgewise Elbow (—2) will turn toward you, and a Left-Hand Edgewise Elbow (—4) will turn away from you; a Right-Hand Flatwise Elbow (—1) will turn downward, and a Left-Hand Flatwise Elbow (—3) will turn upward.

No. Poles	Cat. No.	Catalog Nur	nber Suffixes
3	X100-3L	R.H. Flatwise (—1)	L.H. Flatwise (—3)
4	X100-4L	R.H. Edgewise (—2)	L.H. Edgewise (—4)

FLANGED ENDS



Used to connect X100 Duct to switchboards or panel-boards. Complete with short length of bus bar to facilitate this electrical connection.

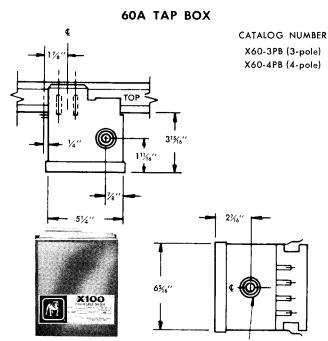


No. Poles	Cat. No.					
3	X100-3FE					
4	X100-4FE					

X100® PLUG-IN BUS DUCT

PLUG-IN CABLE TAP BOXES

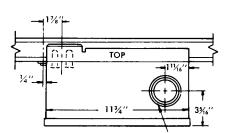
Plug-in Cable Tap Boxes are non-fusible devices used for end or center feed-in or tap-off. The 60- and 100ampere Tap Boxes can be attached at any plug-in opening. The 200-ampere Tap Box requires two adjacent openings.



 $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ " Conduit Ko's in one end and bottom $\frac{1}{2}$ ", $\frac{3}{4}$ " Conduit Ko's in top

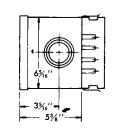
100A TAP BOX

CATALOG NUMBER X100-3PB (3-pole) X100-4PB (4-pole)



 $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ", 2" CONDUIT KO'\$ IN BOTH SIDES AND ENDS



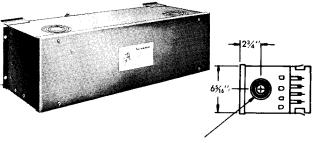


200A TAP BOX

CATALOG NUMBER
X200-3PB (3-pole)
X200-4PB (4-pole)

11/6"

10P
11/6"
21/4"
21/4"
21/4"
21/4"
21/4"
21/4"
21/4"



1", 11/4", 11/2", 2", 21/2" CONDUIT KO'S IN FOUR SIDES

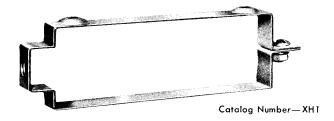
PAGE 3

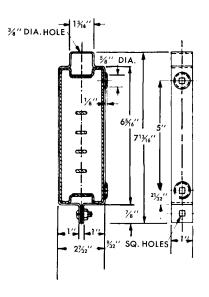
JULY 15, 1967

X100® PLUG-IN BUS DUCT

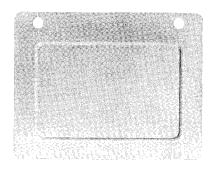
DUCT HANGERS

X100 BUStribution Duct can be easily supported through the use of BullDog Clamp Hangers which eliminate the necessity for drilling, bending and cutting generally associated with job-fabricated hangers. Hangers are simply slipped over the duct casing and bolted. Two hangers are supplied per section or fitting.





OUTLET COVERS

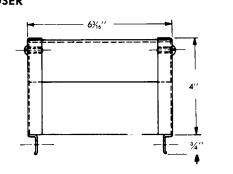


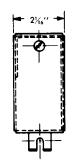
Catalog Number—X100-OC

Accessory Outlet Covers are optional equipment for closing off the plug-in openings where required.



Used to terminate X100 Duct runs. May be removed to extend run.





X100® PLUG-IN BUS DUCT

PRICES—DUCT, ACCESSORIES

100-AMPERE DUCT-ALUMINUM

600 VOLTS OR LESS

	OUCT SE	CTION	-COMPLE	TE						DUCT ACCESSORIES—COMPLETE DEVICES								
										Switchbo			Plug	-In Tap Boxe	s or Fe	ed-Ins		
1	0-Foot		5	-Foot		90° Elb	ows	End Cl	osers	Pane!boar		60 Am	pere	100 Am	pere	200 Am	реге	
Cat. No.	List Price	Wgt. Lb	Cat. No.	List Price	Wgt. Lb	Cat. No.	List Price	Cat. No.	List Price	Cat. No.	List Price	Cat. No.	List Price	Cat. No.	List Price	Cat. No.	List Price	
3 POLE						•	•		•				!			<u> </u>	L	
X100-3	\$48.	36	X100-35	\$31.	18	X100-3L	\$25.	XE100	\$5.	X100-3FE	\$15.	X60-3PB	\$13.	X100-3PB	\$25.	X200-3PB	\$51.	
3 PHAS	E, 4 WI	RE—FU	LL CAPAC	ITY NEU	ITRAL				-, -						•			
X100-4	50.	38	X100-45	32.	19	X100-4L	25.	XE100	5.	X100-4FE	15.	X60-4PB	18.	X100-4PB	35.	X200-4PB	70.	

Tees and Crosses—Available on special order.

Hangers—Two Hangers, Cat. No. XH1, are furnished Free of Charge with each X100 standard 5-foot or 10-foot Duct Section. Additional Hangers may be ordered at \$1.00 List Price each.

Fuses—Not included in any Fusible Device.

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.	X100-OC	.60	25	
ON-OFF Bus-Plug Stickers—Pressure-Sensitive. Per Pair	W47185	.30	_	