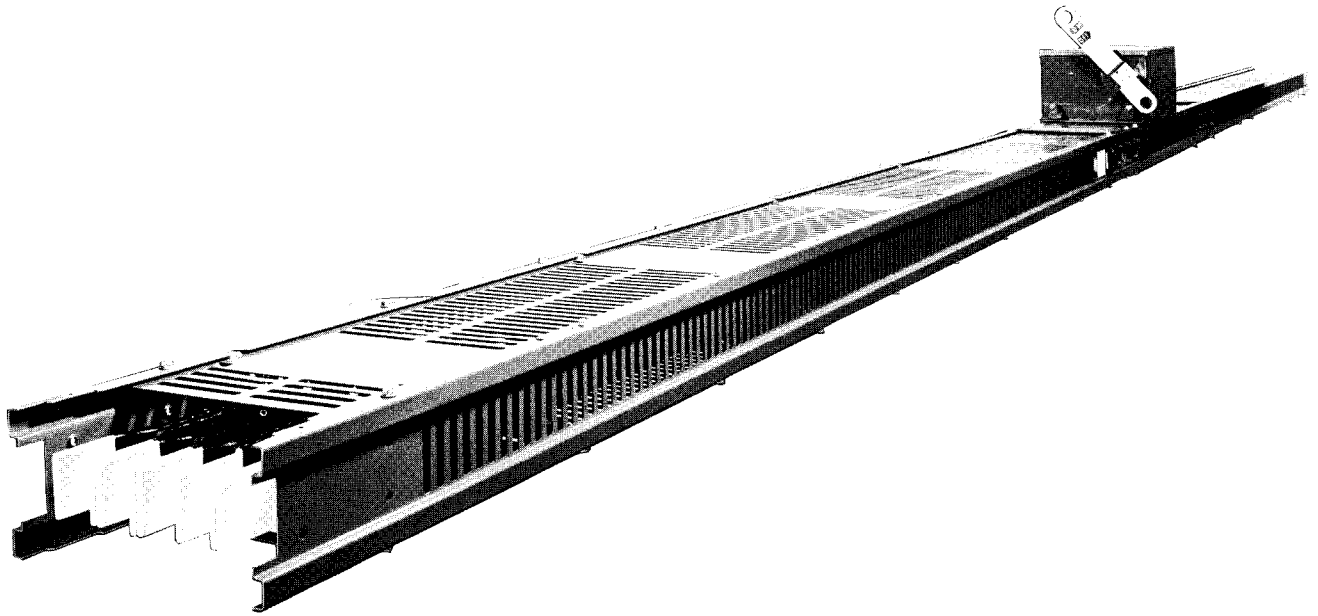




XL®-UNIVERSAL BUS DUCT

DUCT CONSTRUCTION



XL-Universal Bus Duct can be used for either feeder or plug-in applications or a combination of both. The feeder and plug-in sections are interchangeable in any given run of equal size and rating.

The duct ranges in rating from 225 amperes to 6500 amperes, three-pole or four-pole with one-half or full neutral. Its short-circuit ratings exceed the NEMA standards and range up to 200,000 symmetrical rms amperes depending on ampere rating of the duct.

The normal construction consists of a ventilated casing. But non-ventilated casings are optional for installations when required.

Plug-in sections have openings every 24 inches, even across joints, of 2-, 4-, 6-, 8- and 10-foot lengths. Openings are alternately located on each side of the duct and are staggered 3 inches providing 10 openings per 10-foot section. Safety-type doors are standard equipment and prevent unsafe plug insertion by automatically keying their action to that of the bus plugs.

To provide maximum electrical efficiency, paired-phase bus bar configuration is used in all XL-Universal bus systems. This design results in a low-impedance system with low and balanced losses in each phase.

Compactness, necessary in many installations, is a construction feature of XL-U. The 2000-ampere duct with copper bus bars measures 10" by 5½". The 6500-ampere size is 9½" by 20¾".

XL-Universal Bus Duct is available with either copper bus bars or aluminum bus bars. The bars are insulated to withstand a temperature of 105 C although operation does not produce temperature rises greater than 55 C over ambient. An optional internal-ground bus bar and grounding fingers on bus plugs provide low-impedance ground-return path.

XL-Universal Bus Duct can be mounted either edgewise or flatwise in a horizontal plane. It can also be mounted vertically for riser applications.

It is important to note that the mounting position affects the ampere rating of XL-U Bus Duct. When the duct is mounted edgewise (bus bar edges to the top and bottom in relation to the floor or when used as a vertical riser) the maximum rating applies. If the duct is mounted flatwise, or if non-ventilated casing is used, lower ampere ratings will apply. *All ratings in this product catalog section are based on edgewise or vertical riser mounting.*

**XL®-UNIVERSAL BUS DUCT****CATALOG NUMBERING SYSTEM**

You may prefer to order by catalog number. Our catalog numbering system is explained here primarily to acquaint you with our internal procedure in invoicing, etc.

CATALOG SYMBOL	INDICATION
U	XL-Universal Bus Duct
3	3 Pole
4	4 Pole with 1/2 Neutral
5	4 Pole with Full Neutral
02, 04, 06, 08, 10, 12, 13, 16, 20, 25, 30, 40, 50, 60	Ampere ratings in nearest hundreds of amperes
C	Copper Bus Bars
A	Aluminum Bus Bars
V	Ventilated
E	Non-ventilated
B	Non-ventilated without Bus Bar Insulation (only available thru 600 amperes)
F	Feeder
P	Plug-In
(OR)	

CATALOG SYMBOL**INDICATION**

If Plug or Fitting, use:

T	Tee
L	Elbow
X	Cross
J	Expansion Sections
B	End Tap Box
M	Center Tap Box
S	Switchboard Stub
K	Adjustable Section
W	Weatherproof (only applies to feeder duct)
G	Ground Bus (optional)
2 Digits	Short Sections in Inches

EXAMPLES:

U308CVF-G48

XL-Universal Bus-Duct, 3-Pole, 800-Ampere, Copper,
Ventilated, Feeder type—Internal Ground Bus, 48" Short
Section

U308CEL1

XL-Universal Bus-Duct, 3-Pole, 800-Ampere, Copper,
Non-ventilated Elbow (R.H. Flatwise)



XL®-UNIVERSAL BUS DUCT

ASSEMBLY AT SECTION ENDS

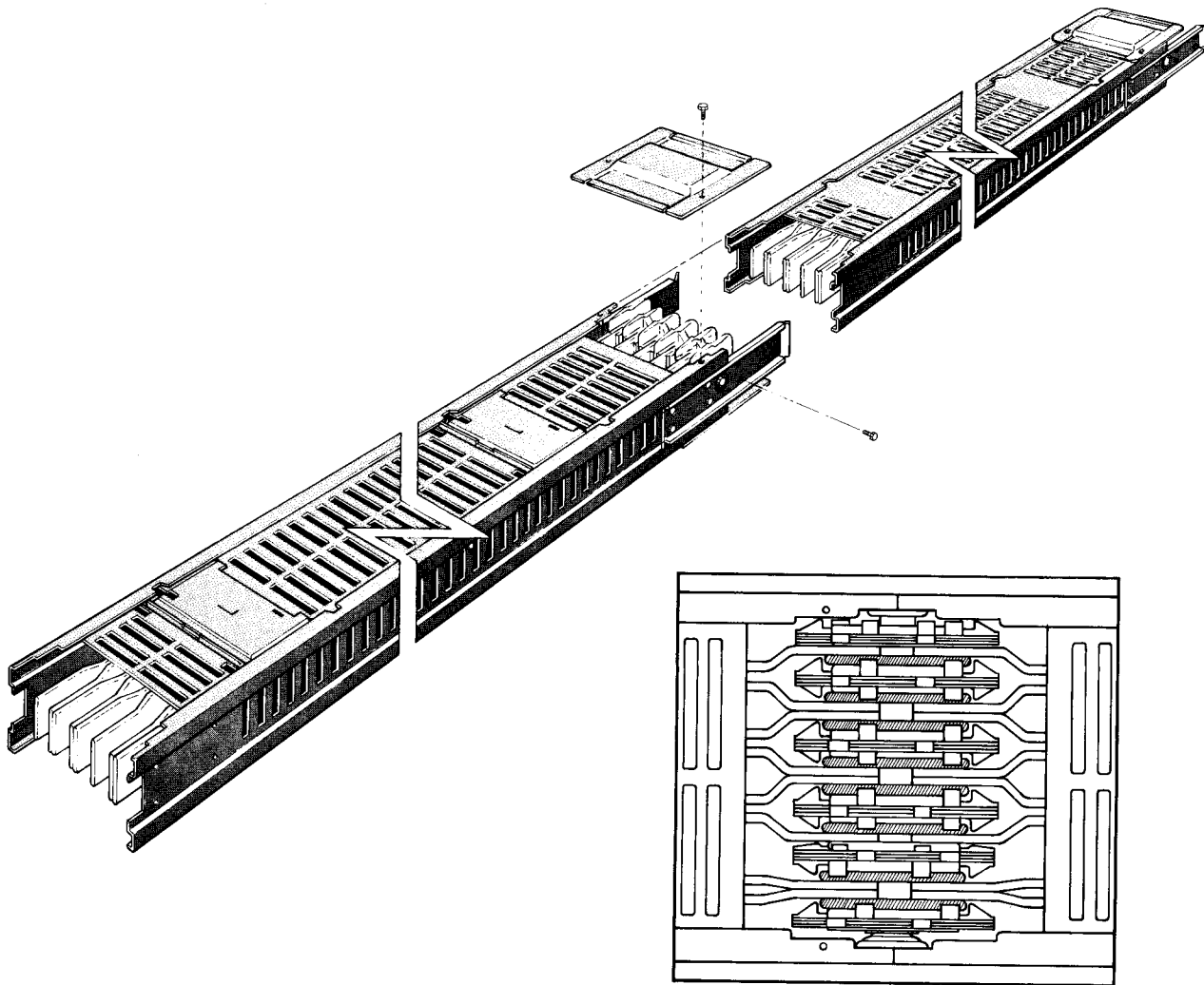
The ends of XL-U sections are identical. When shipped from the factory, however, one end is equipped with a joint stack, a pair of splice plates and a pair of joint cover plates. During installation, a joint stack end and a standard end may be connected by simply sliding them together with a telescoping motion. The splice plates are then bolted to the standard end and the through-bolt tightened to exert 2000 pounds force on the stack of insulators and bus bars. This force is achieved when the captive cup washers are flattened. It is not necessary to exceed a torque of 35 footpounds.

In locations which are so restricted that a 7" telescoping

motion is not possible, the splice plates and joint stack may be removed and reinstalled after the two sections are in their correct relative positions. This feature makes it possible to assemble the sections from the side, top or any angle or to remove and replace a section of duct from an existing run without disturbing adjacent duct sections.

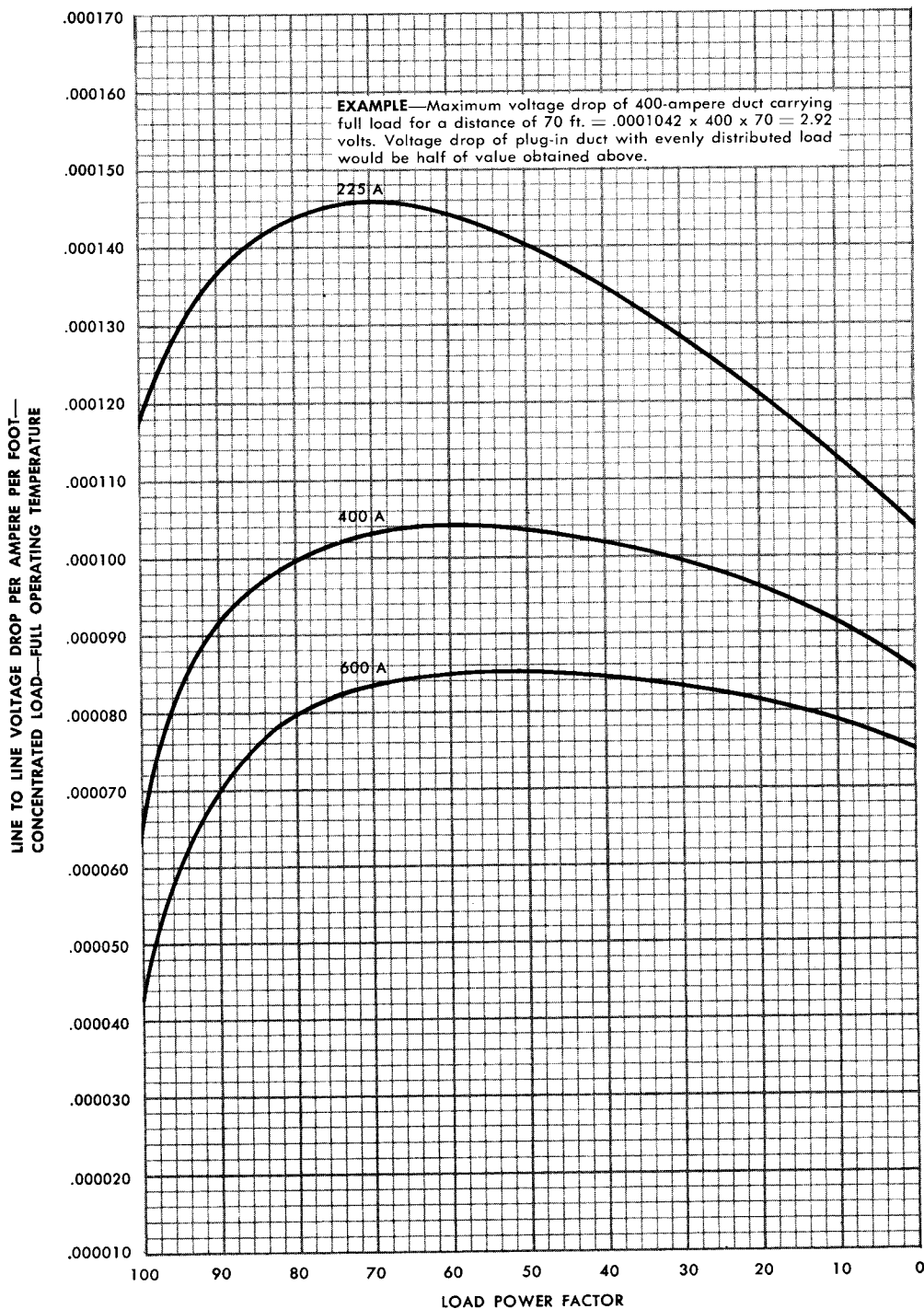
Joint cover plates may be removed at any time for joint inspection without affecting joint integrity.

It is possible to replace any standard joint stack with a special one which provides a method of adding tap boxes or protective cubicles at any joint.





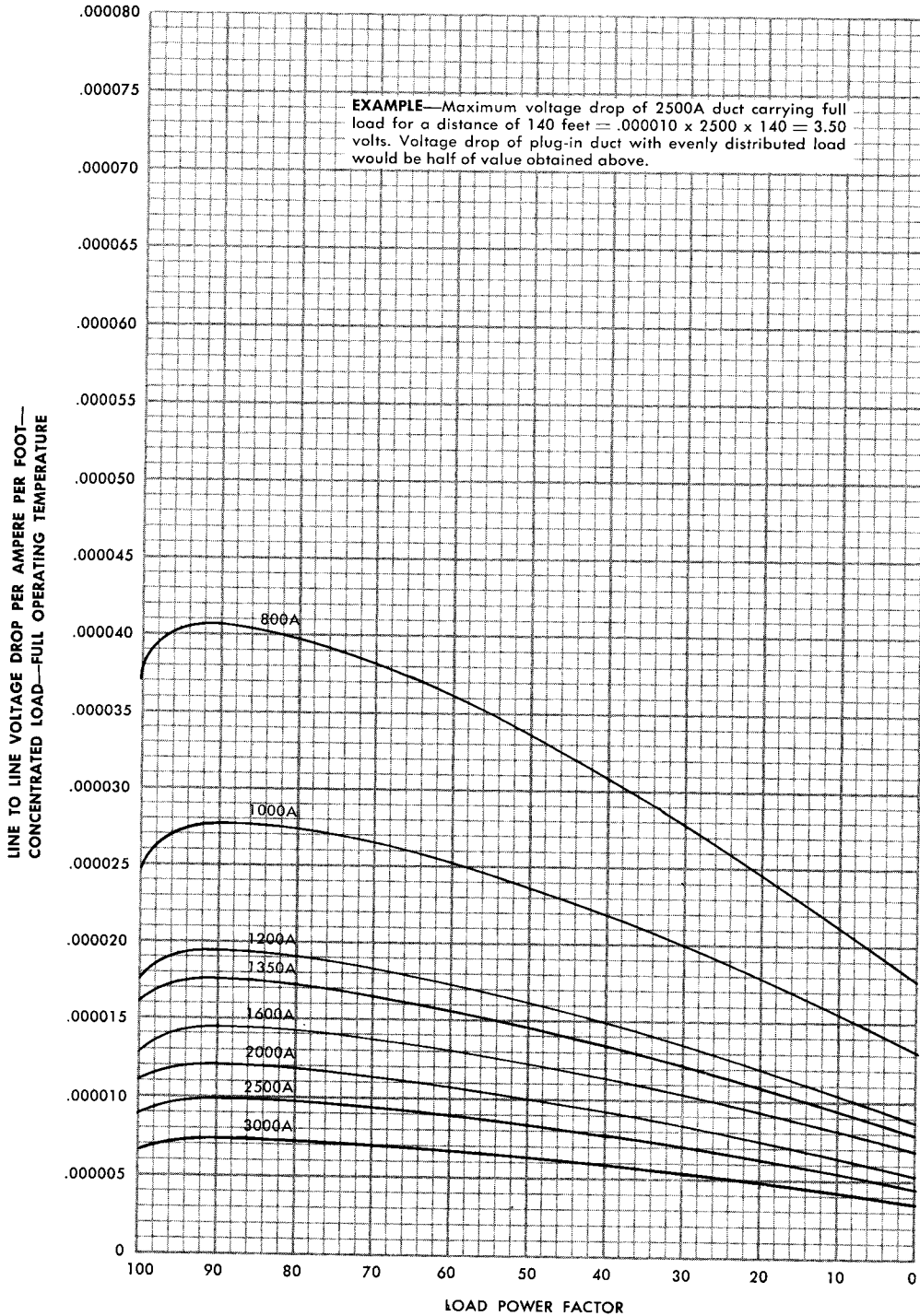
XL®-UNIVERSAL BUS DUCT
ALUMINUM BUS BARS—VOLTAGE DROP CURVES
NON-VENTILATED CASE, 225-600 AMPERES





XL®-UNIVERSAL BUS DUCT

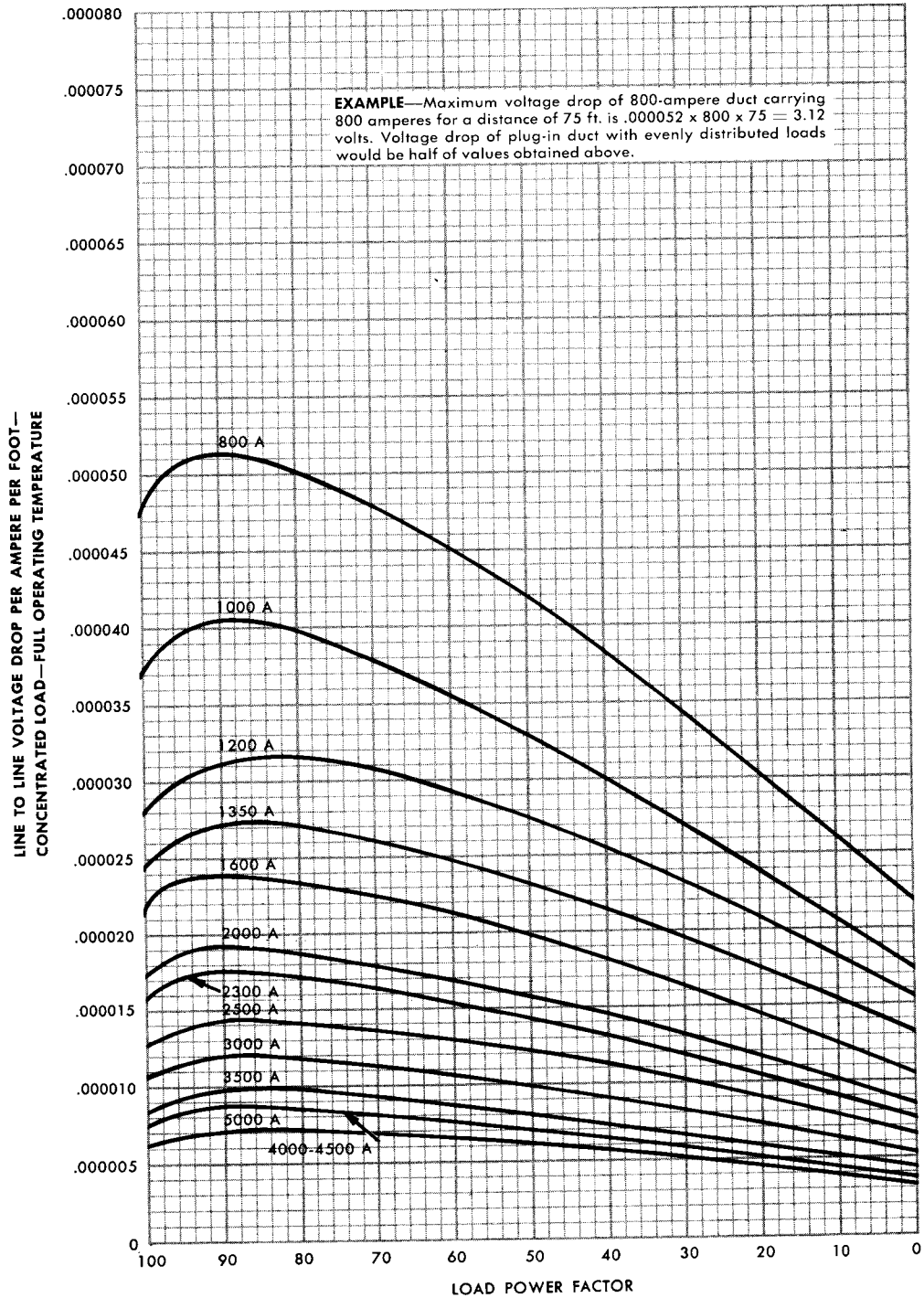
ALUMINUM BUS BARS—VOLTAGE DROP CURVES NON-VENTILATED CASE, 800-3000 AMPERES





XL®-UNIVERSAL BUS DUCT

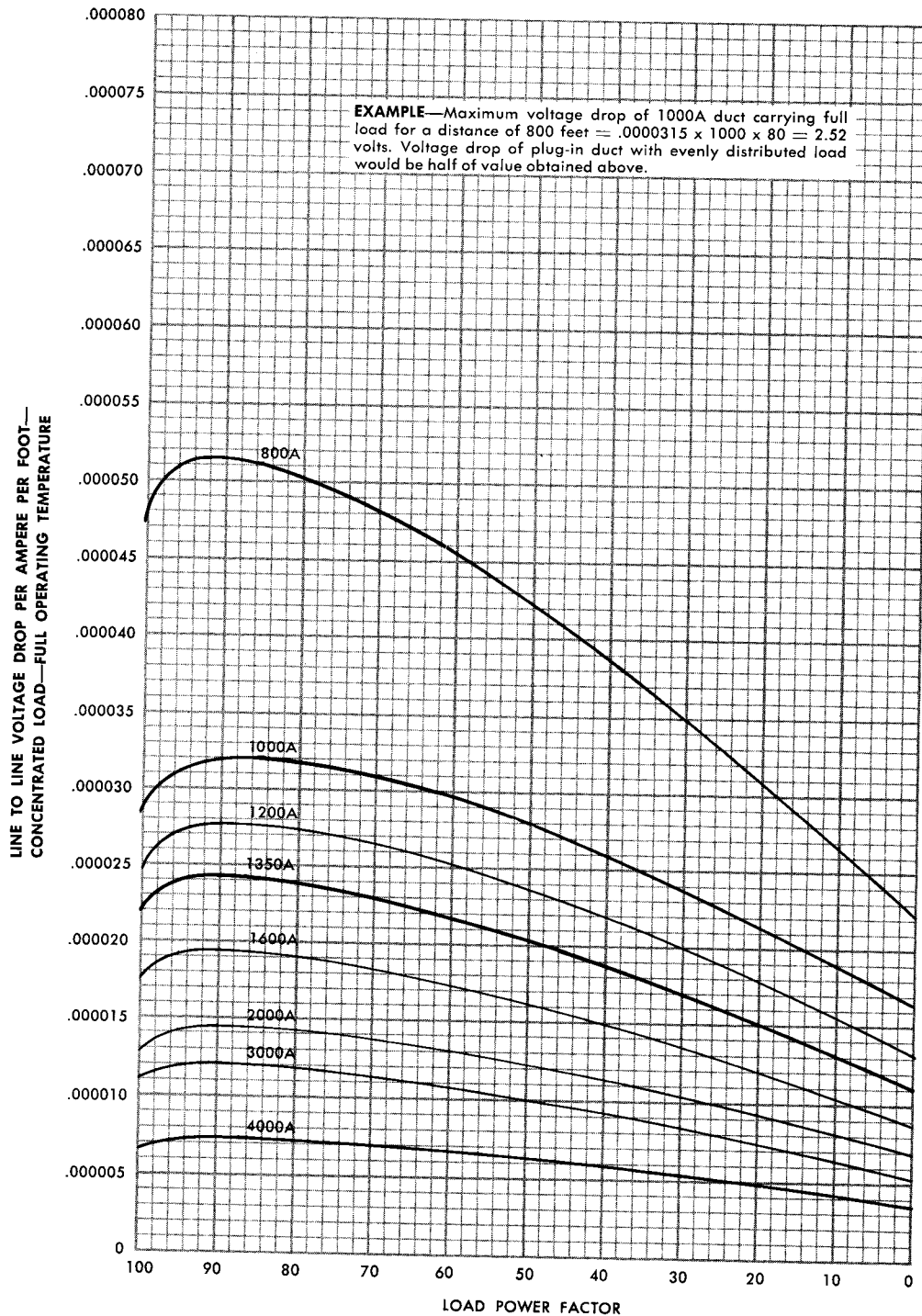
ALUMINUM BUS BARS—VOLTAGE DROP CURVES VENTILATED CASE, BARS MOUNTED EDGEWISE





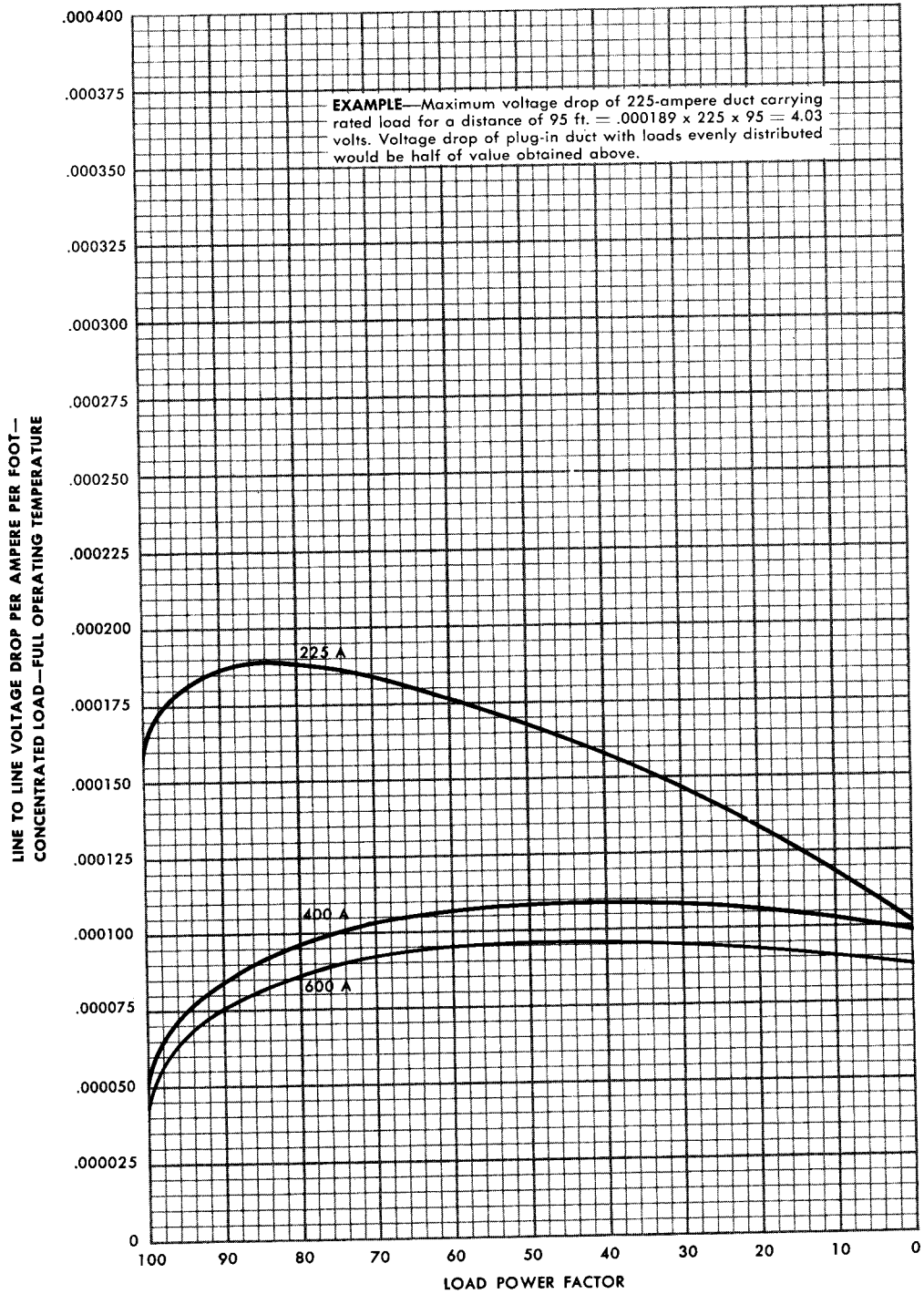
XL®-UNIVERSAL BUS DUCT

**ALUMINUM BUS BARS—VOLTAGE DROP CURVES
VENTILATED CASE, BARS MOUNTED FLATWISE**





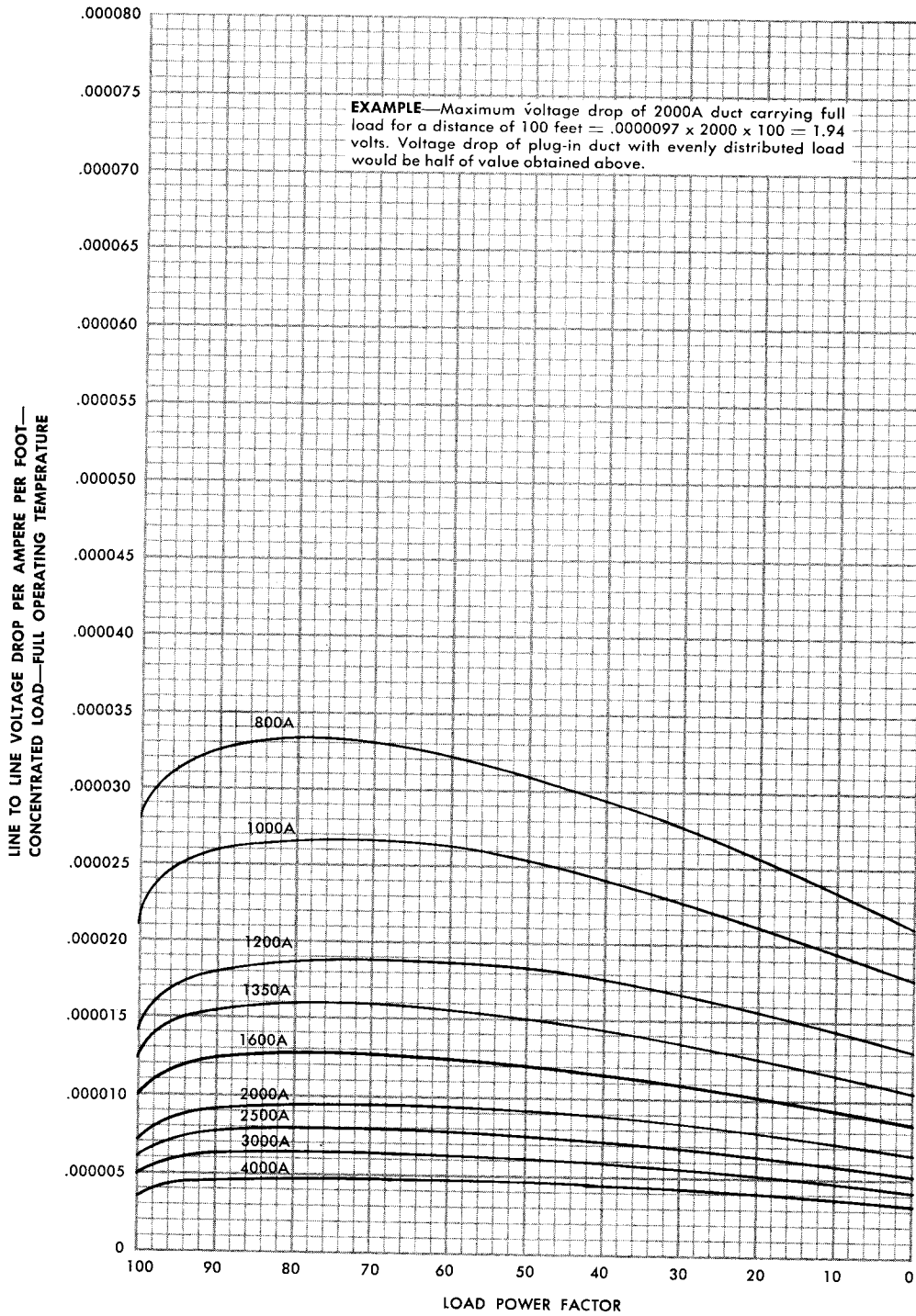
XL®-UNIVERSAL BUS DUCT
COPPER BUS BARS—VOLTAGE DROP CURVES
NON-VENTILATED CASE, 225-600 AMPERES





XL[®]-UNIVERSAL BUS DUCT

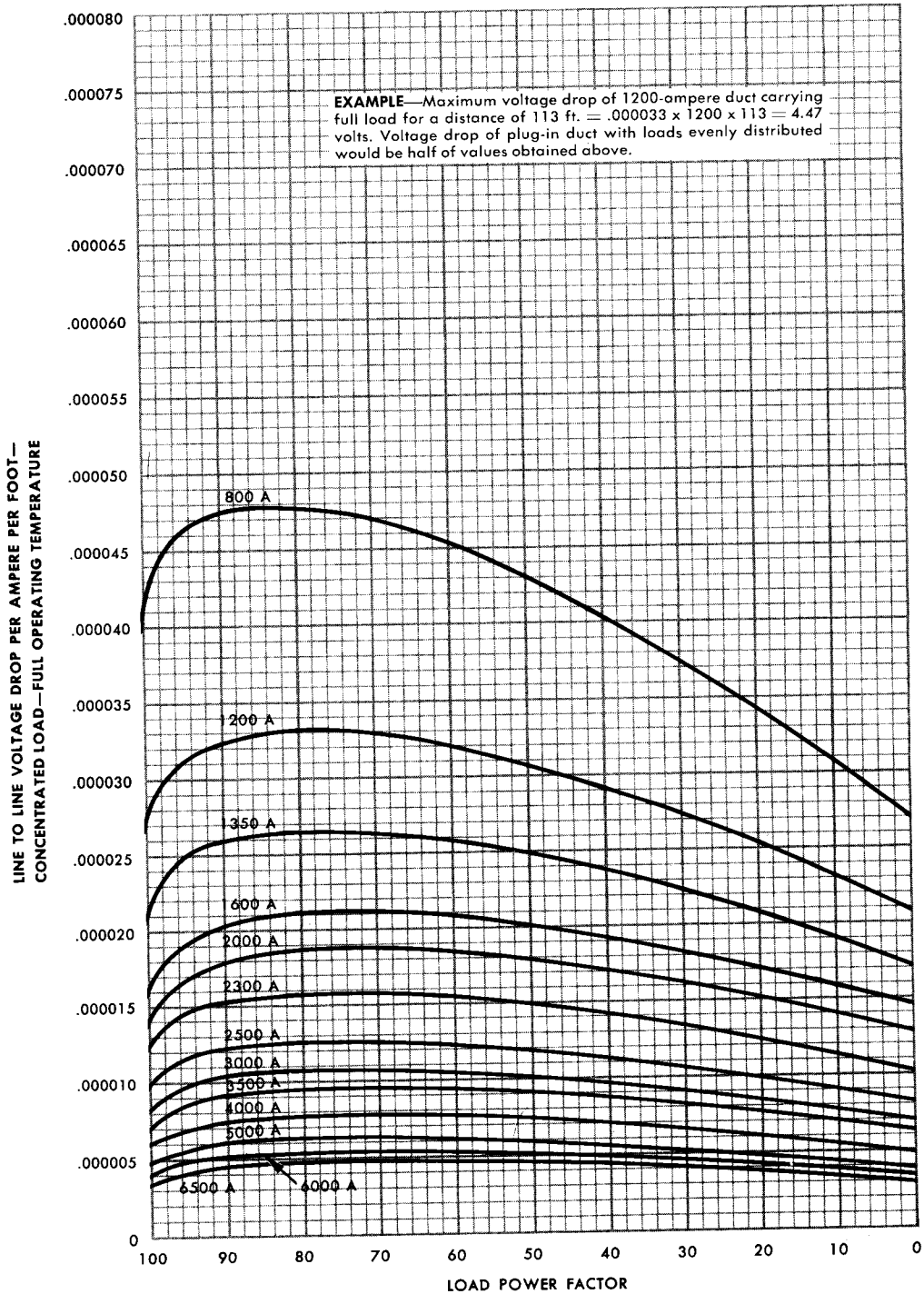
COPPER BUS BARS—VOLTAGE DROP CURVES NON-VENTILATED CASE, 800-4000 AMPERES





XL®-UNIVERSAL BUS DUCT

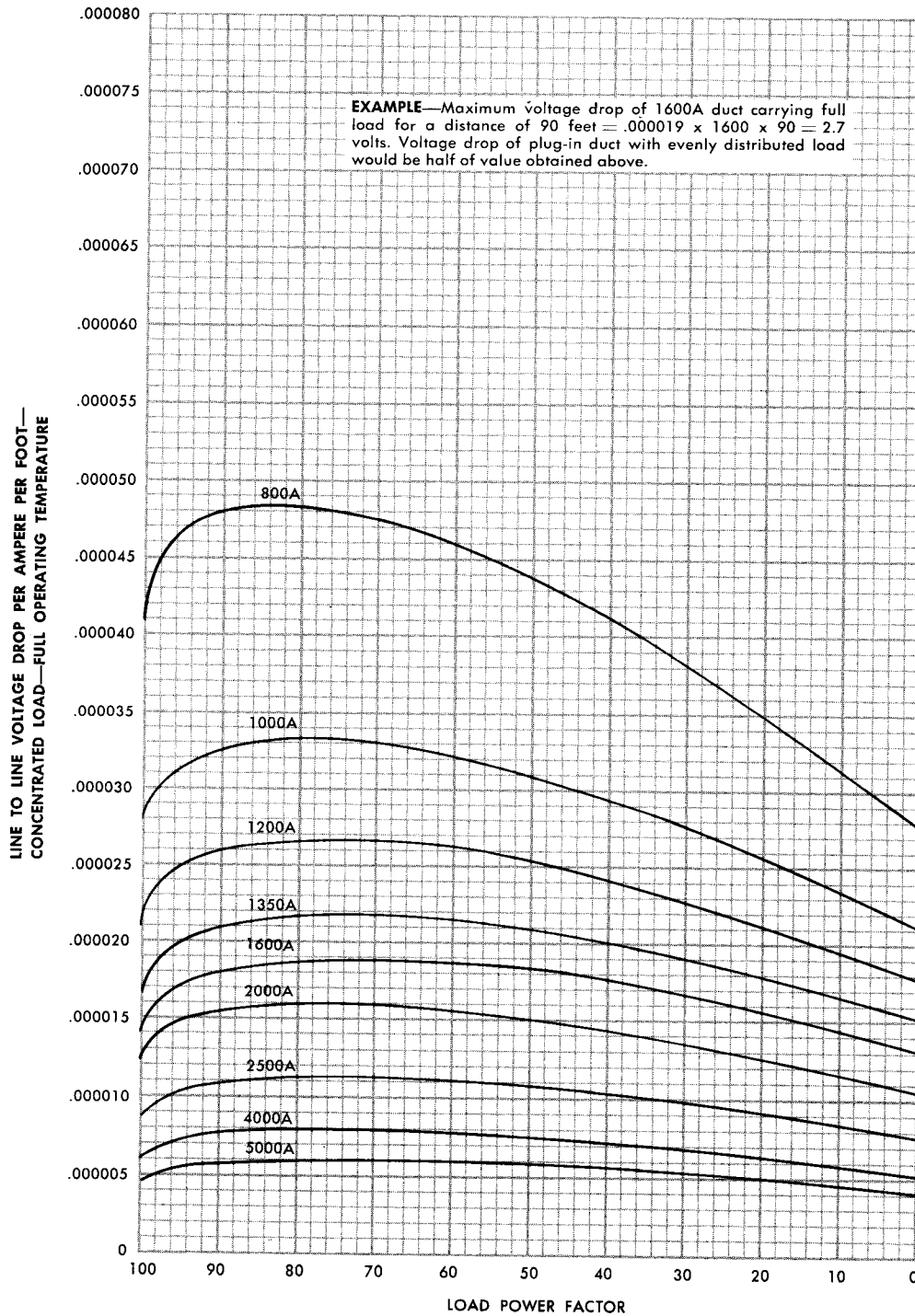
**COPPER BUS BARS—VOLTAGE DROP CURVES
VENTILATED CASE, BARS MOUNTED EDGEWISE**





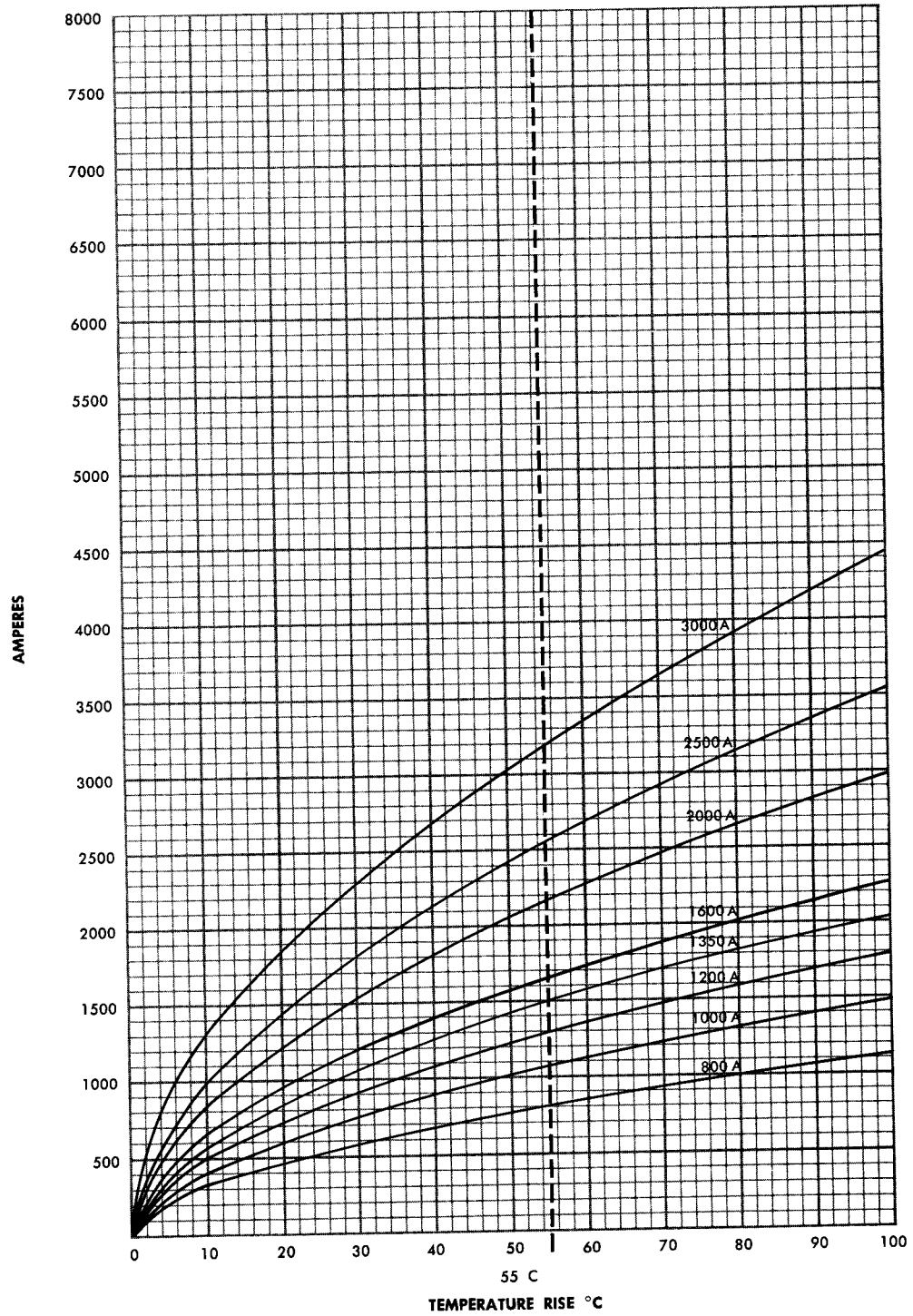
XL®-UNIVERSAL BUS DUCT

**COPPER BUS BARS—VOLTAGE DROP CURVES
VENTILATED CASE, BARS MOUNTED FLATWISE**





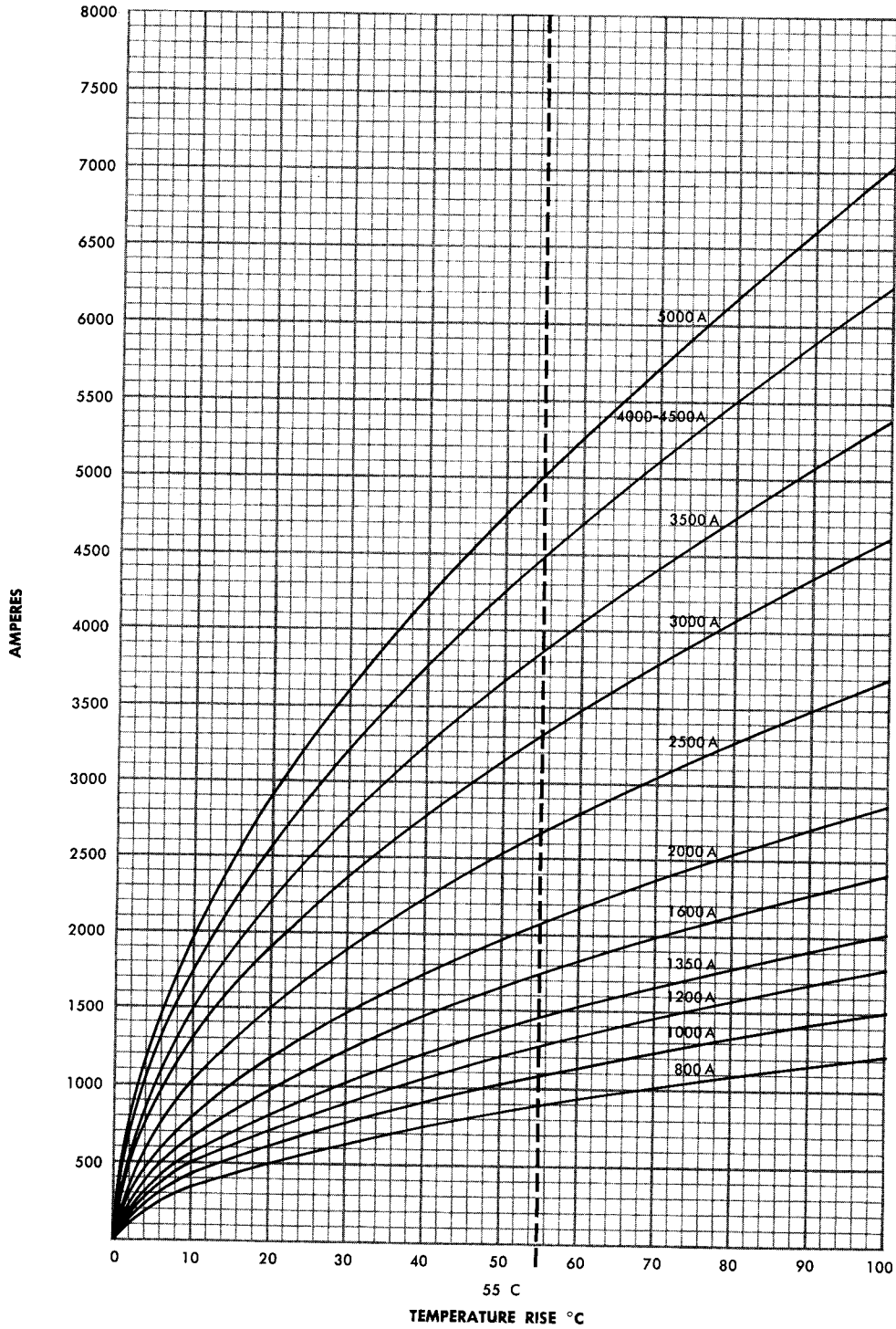
XL®-UNIVERSAL BUS DUCT
ALUMINUM BUS BARS—TEMPERATURE RISE CURVES
NON-VENTILATED CASE





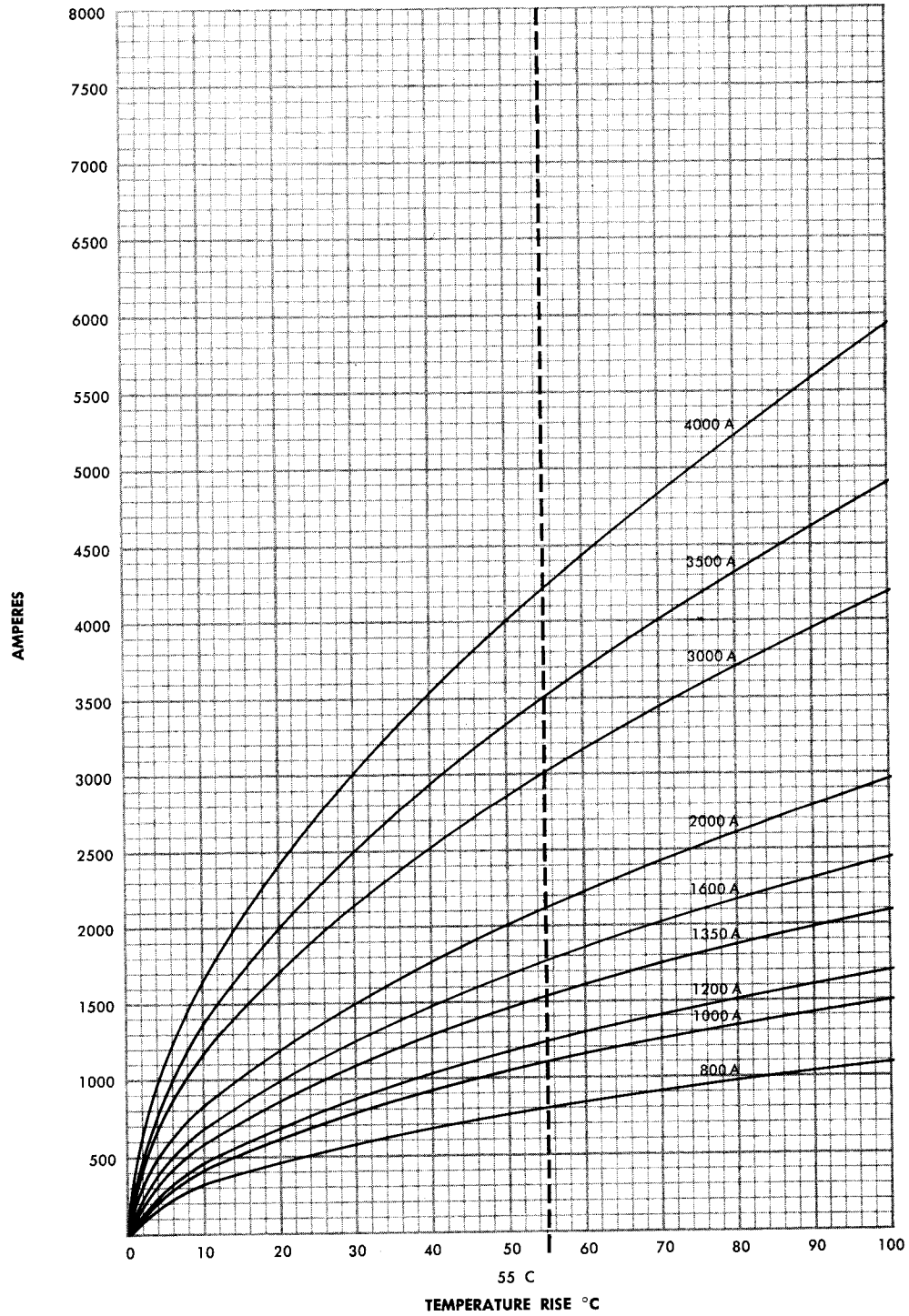
XL®-UNIVERSAL BUS DUCT

ALUMINUM BUS BARS—TEMPERATURE RISE CURVES VENTILATED CASE, BARS MOUNTED EDGEWISE



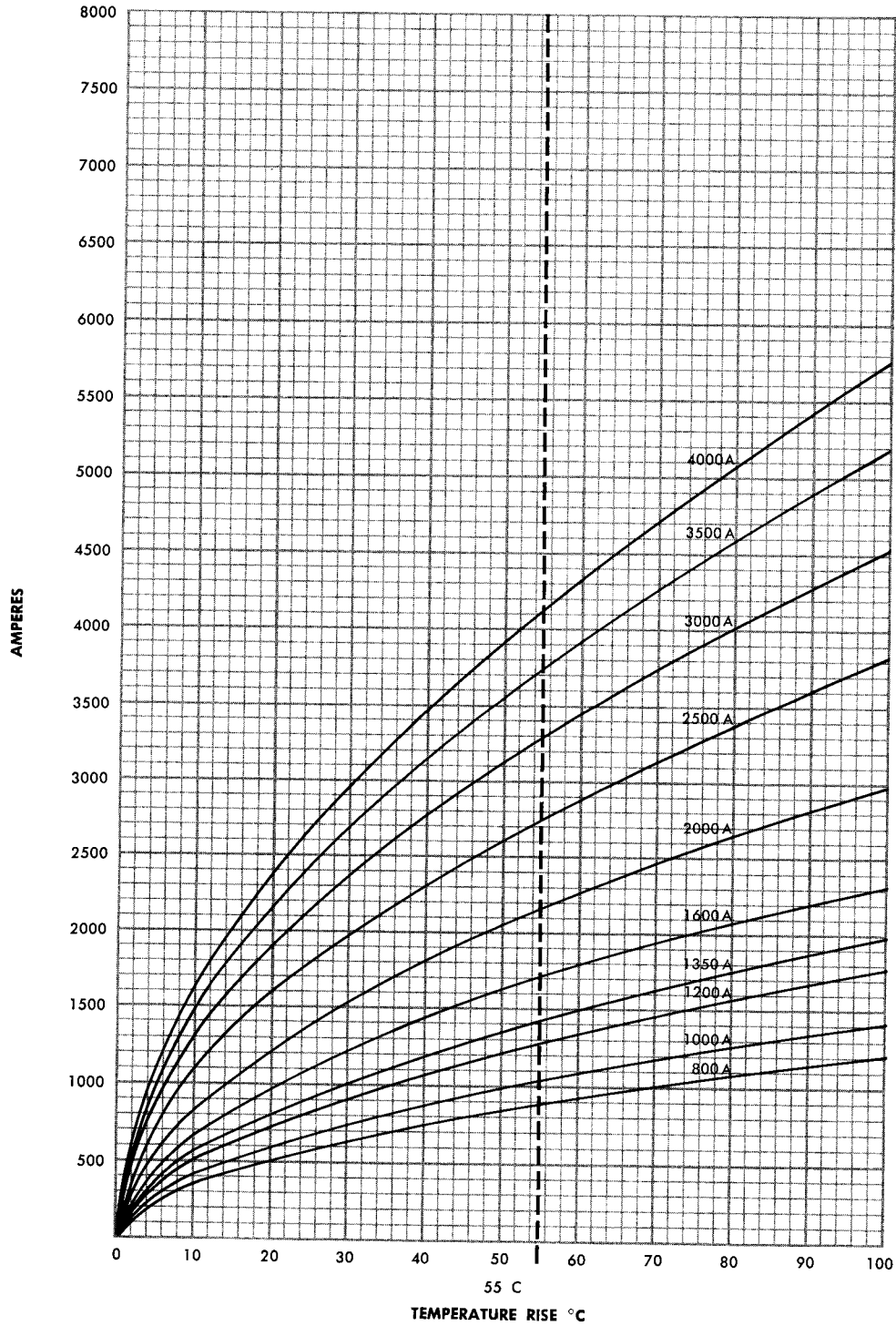


XL[®]-UNIVERSAL BUS DUCT
ALUMINUM BUS BARS—TEMPERATURE RISE CURVES
VENTILATED CASE, BARS MOUNTED FLATWISE



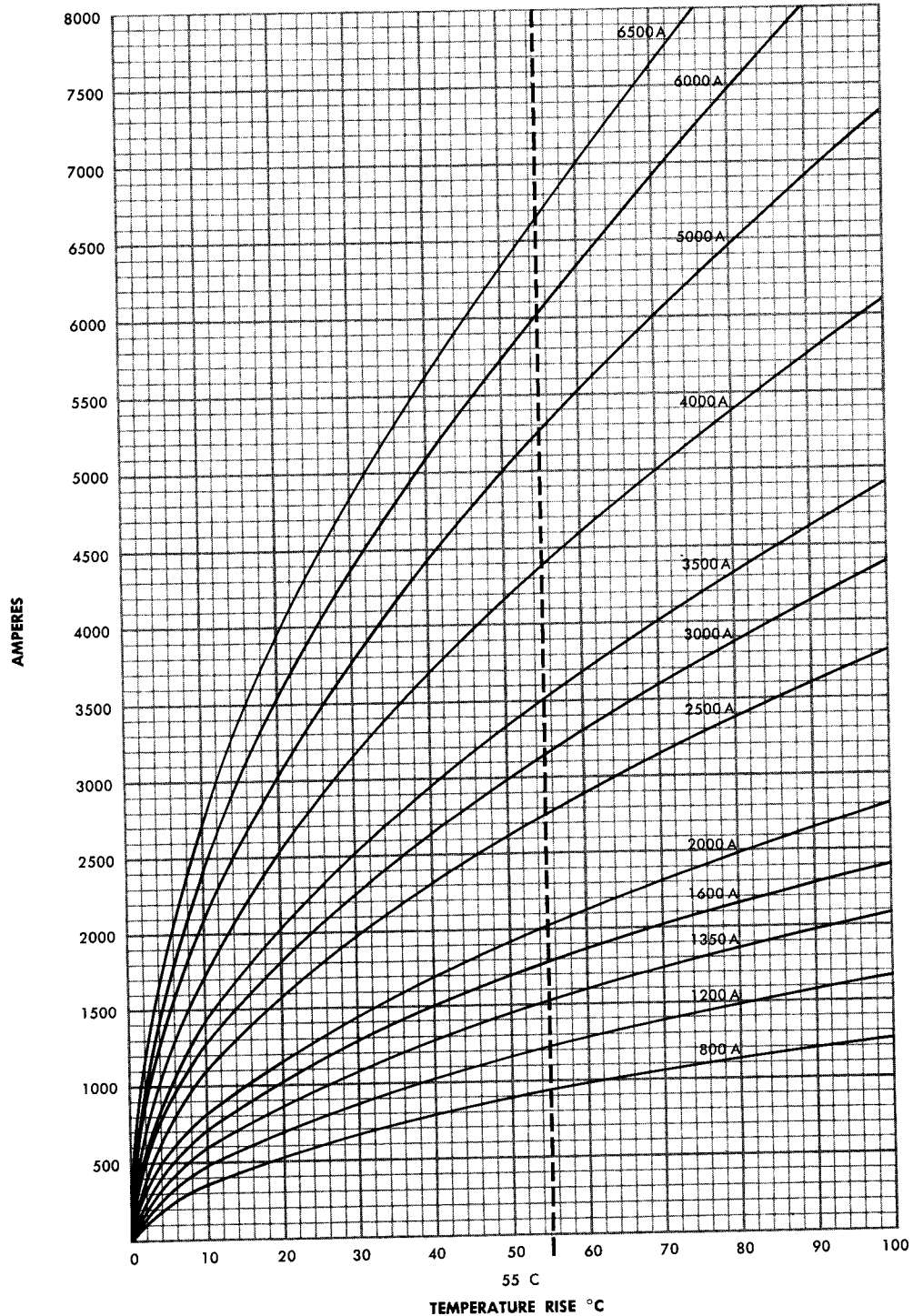


XL®-UNIVERSAL BUS DUCT
COPPER BUS BARS—TEMPERATURE RISE CURVES
NON-VENTILATED CASE





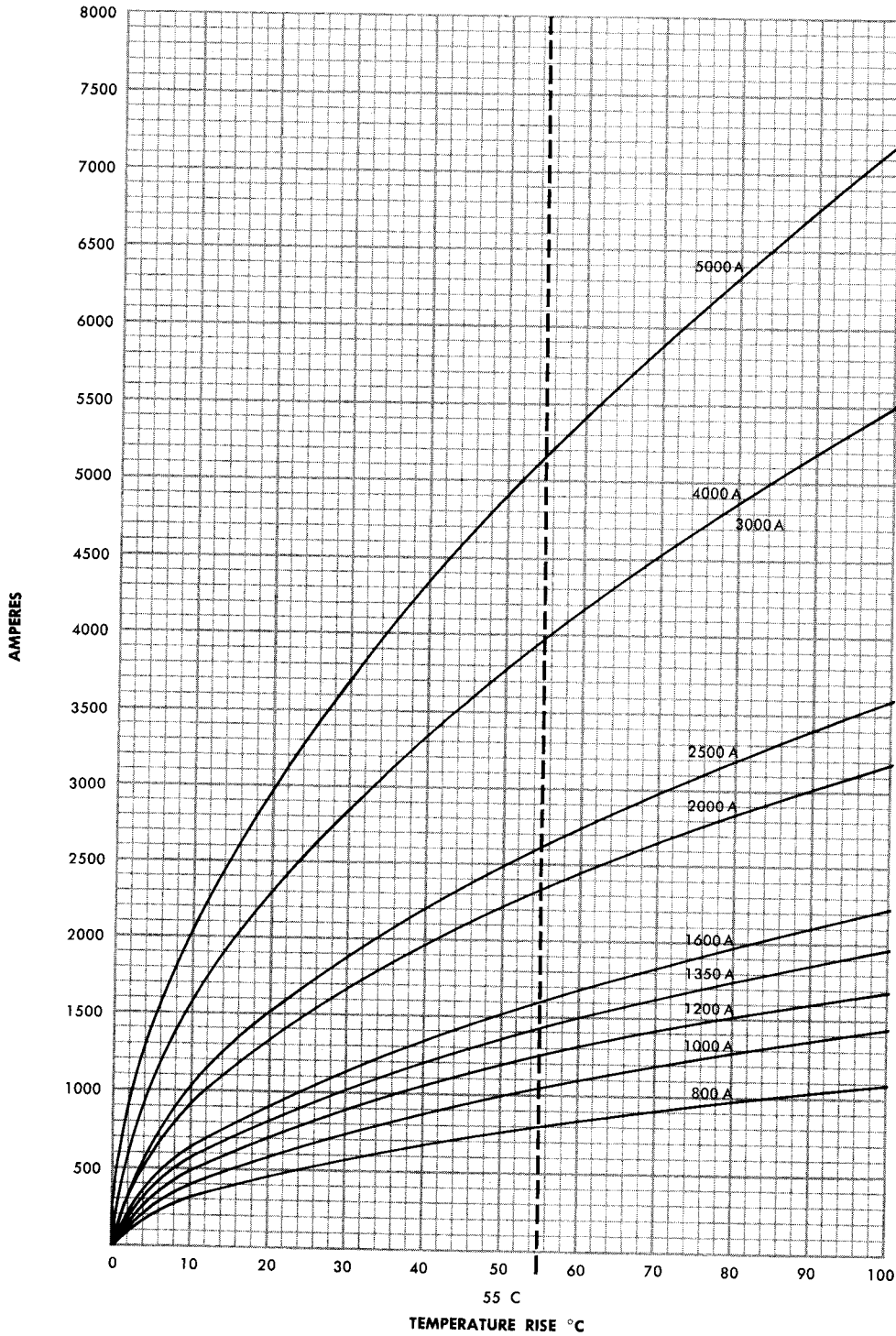
XL®-UNIVERSAL BUS DUCT
COPPER BUS BARS—TEMPERATURE RISE CURVES
VENTILATED CASE, BARS MOUNTED EDGEWISE





XL[®]-UNIVERSAL BUS DUCT

**COPPER BUS BARS—TEMPERATURE RISE CURVES
VENTILATED CASE, BARS MOUNTED FLATWISE**



**XL®-UNIVERSAL BUS DUCT****TYPICAL SPECIFICATIONS**

Electrical contractor shall furnish and install a complete system of interconnected bus-duct runs as shown on the plans and in accordance with local and national code regulations. Bus duct sections shall consist of assembled sections which are rigid in construction and symmetrical in appearance. Bus duct sections shall bear the Underwriters' Laboratories, Inc. label.

The casing ends shall be identical to minimize the number of fittings required and to simplify installation. A splice plate shall be furnished at each joint to mechanically join the casings. Splice plates and casing assemblies shall be rigid enough to permit supporting on ten-foot centers. Hangers shall be provided by duct manufacturer.

Joints shall be accomplished by means of an insulated bolt passing through the conductors. Joint integrity shall not be affected by deforming the casing. Inspection covers shall be provided on each side of the joint and shall be usable without disturbing the joint pressure. The joint design shall permit removal of sections in the middle of a run without disturbing adjacent sections. It shall be possible to add tap boxes or cubicles at any joint.

Bus bars shall be fabricated from electrical-grade

(copper) (aluminum) and shall be supported in such a manner that the assembly is capable of withstanding established NEMA short-circuit currents. All joint surfaces and plug-in locations shall be silver finished. Safety plug-in and feeder sections shall be interchangeable.

Bus bars with ratings above 600 amperes shall be insulated for their entire length, except at plug-in location, with a continuous coating of 105°C insulation.

Plug-in openings shall be of the safety type and, in conjunction with the bus plugs, shall have interlocks provided which prevent addition or removal of the bus plug as long as its switching mechanism is in the "ON" position. Plug-in openings shall be spaced on 24-inch centers along both sides of the duct and across the joints. Metal parts of the plug shall be designed to contact the steel casing before the plug fingers contact the bus bars. (OPTIONAL—A ground conductor shall be provided inside the duct casing to offer a low-impedance ground path. Bus plugs shall be provided with a grounding finger to contact the grounding conductor.)

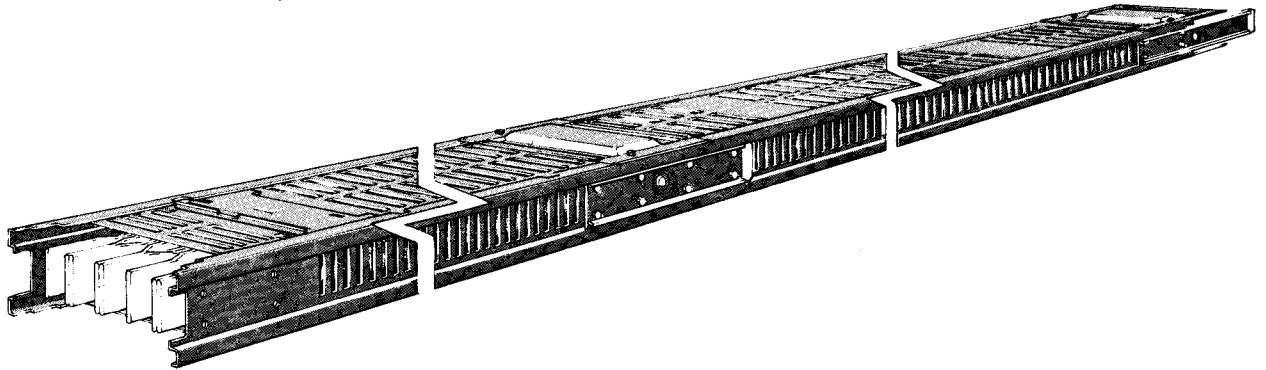
Duct runs and fittings shall be of the XL®-Universal Bus Duct type as manufactured by I-T-E Circuit Breaker Company.



XL®-UNIVERSAL BUS DUCT

STRAIGHT SECTIONS

3 PHASE; 3 PHASE 4 WIRE ½ NEUTRAL; 3 PHASE 4 WIRE FULL NEUTRAL



XL-Universal standard sections are available ventilated or non-ventilated in ratings of from 225 to 6500 amperes, 600 volts. They may be ordered with plug-in openings spaced at 24-inch intervals for use as a plug-in, or without openings for feeder use. They are available with copper bus bars or with aluminum bus bars.

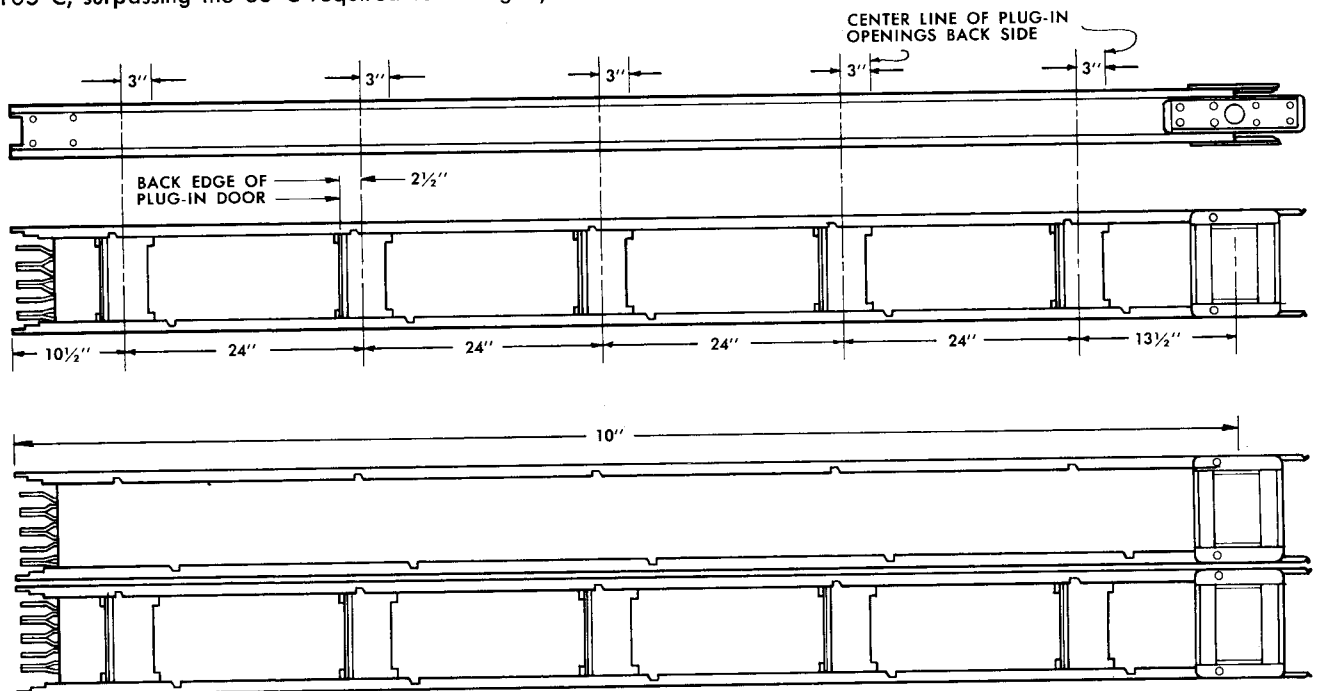
Casing size (shown on the reverse side of this page) varies with the ampere capacity and type of conductor. Ducts using copper conductors are smaller in size. However, ducts using aluminum are lighter.

The bus bars are insulated to withstand temperatures of 105 C, surpassing the 85 C required for listing by Under-

writers' Laboratories, Inc.

Section lengths may be installed edgewise or flatwise, horizontally or vertically. They are painted with a baked-on gray enamel and are sufficiently rigid to permit mounting at 10-foot intervals. An internal-ground bus-bar arrangement is optional and will provide a low-impedance ground-return path. Bus bars are arranged in a paired-phase configuration to increase current-carrying efficiency.

All plug-in openings are of the safety type with doors which prevent unsafe plug-in insertion or removal and insure that the doors are closed after plug removal.



Note: Additional drawings and dimensional data pertinent to Straight Sections shown on reverse side of this page.



XL®-UNIVERSAL BUS DUCT

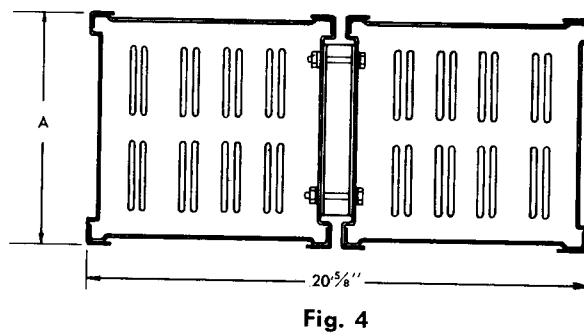
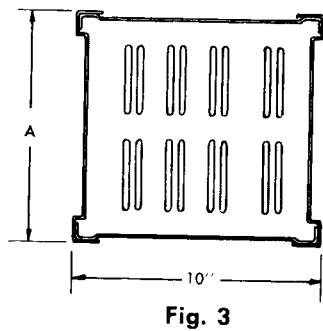
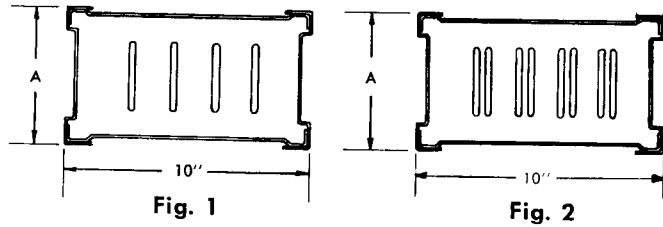
STRAIGHT SECTIONS

FEEDER OR PLUG-IN CASING SIZES

Figure	Dimension A—Inches	Aluminum Bus Bars—Amperes			Copper Bus Bars—Amperes		
		Ventilated		Non-Vent.	Ventilated		Non-Vent.
		Edge-wise	Flat-wise		Edge-wise	Flat-wise	
1	4½	225 400	225 400	225 400	225 400 600	225 400 600	225 400 600
	5½	600	600	600	—	—	—
2	4½	800 1000	800	800	800 1000 1200 1350	800 1000 1200	800 1000
	5½	1200 1350	1000 1200	1000	1600 2000	1350 1600	1200
3	7½	1600 2000	1350 1600	1200	2500	2000	1350 1600
	9½	2500	2000	1350 1600	3000	2500	2000
4	7½	3000 5000	3000	2000	4000 5000	4000	2500 3000
	9½	4000 5000	4000	3000	6000 6500	5000	4000

FLATWISE OR EDGEWISE

MOUNTING POSITION IMPORTANT: all references to ampere ratings in this product-catalog section are based on the assumption that the duct is mounted in the edgewise position so that the bars are edgewise (|||) in horizontal runs, or when the duct is mounted in the vertical position. When horizontal busways are mounted so that the bus bars are flatwise (≡) lower ratings will apply.





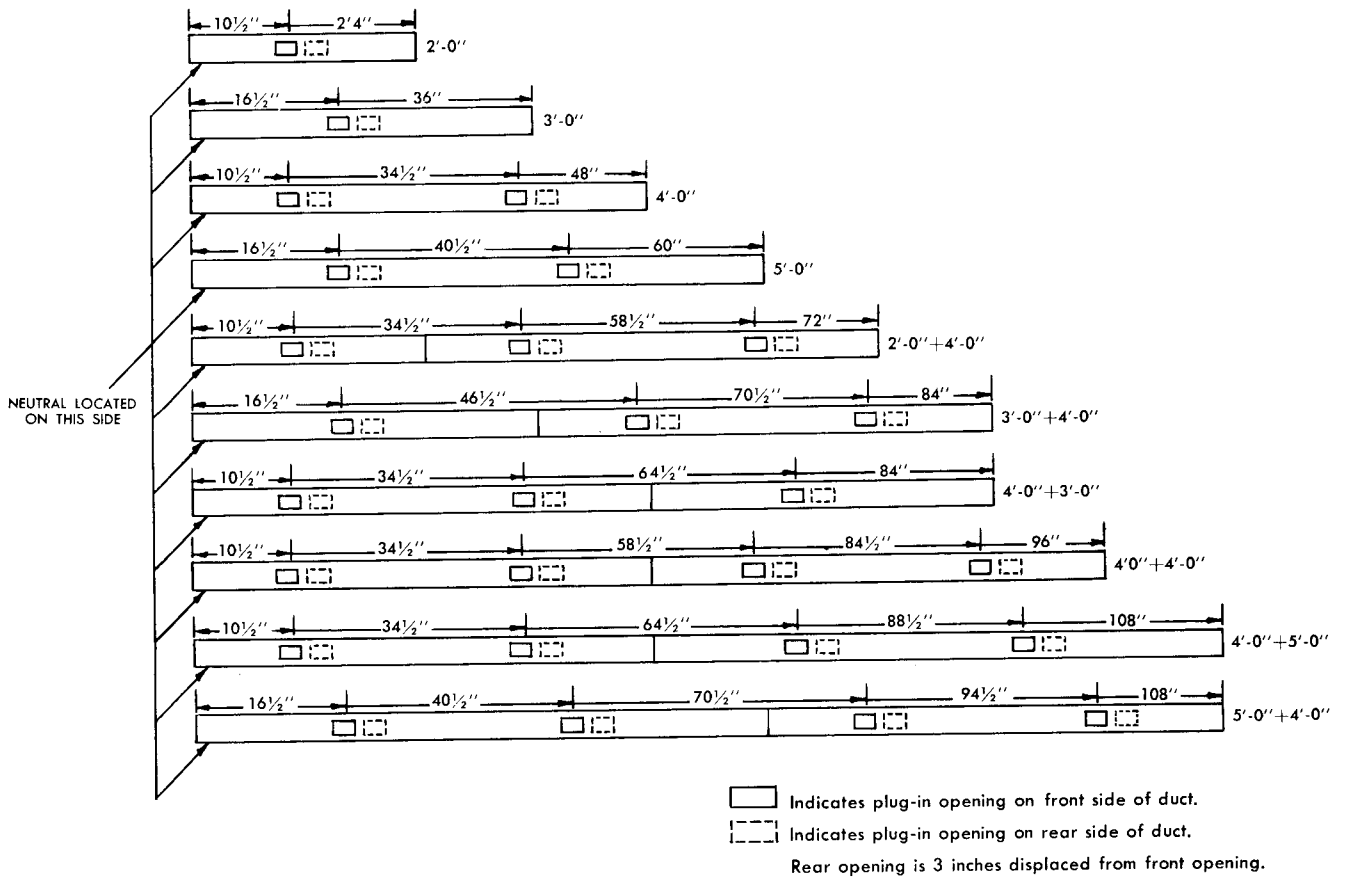
XL®-UNIVERSAL BUS DUCT

SHORT SECTIONS

Short sections are manufactured in several types to suit job requirements. Standard lengths are 2, 3, 4 and 5 feet long. 6-, 7-, 8- and 9-foot sections are made up of two shorter pieces. By careful selection of which pieces are used, plug-in locations may be manipulated as desired.

Custom odd lengths are made to match exact layout dimensions ranging from 1'-2" to 4'-11 3/4". They do not contain plug-in openings.

The chart below indicates dimensions and plug-in openings in standard short-section lengths.





XL®-UNIVERSAL BUS DUCT

ELBOWS

XL-U elbows are designed to facilitate direction changes —to the right, left, up or down. Elbows are furnished with a joint stack assembly for connection to another section length.

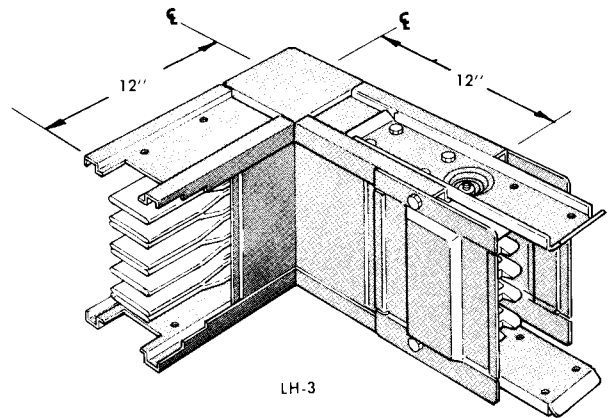
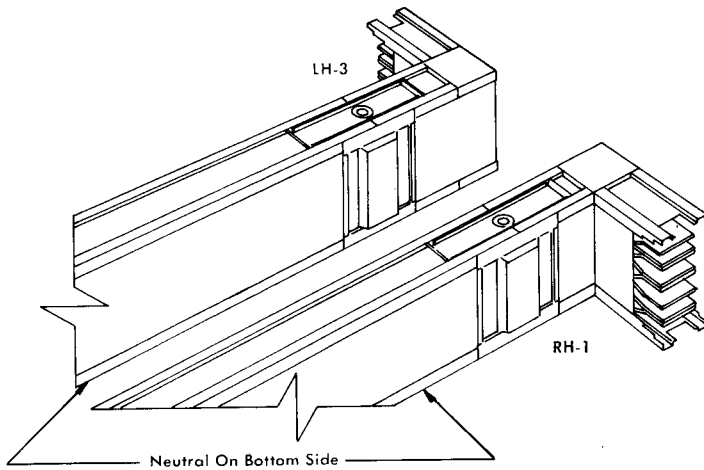
It is important to note that the dimensions shown on this page refer to elbows with 1, 2 or 4 bars per phase, flatwise or edgewise, and 8 bars per phase flatwise. The 12"

dimension becomes 18" for 8 bars per phase edgewise.

The catalog number of an elbow is the same as that of the duct it is to fit with these changes: the 7th digit of the duct catalog number changes to "L" to indicate elbow; a suffix 1, 2, 3 or 4 is to be added at the end to indicate direction. Standard elbows do not contain plug-in openings.

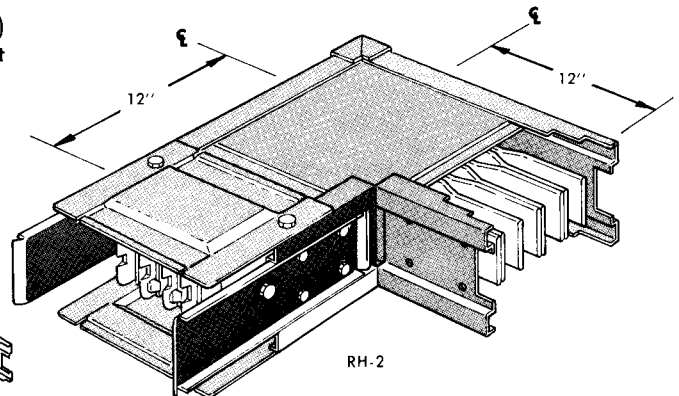
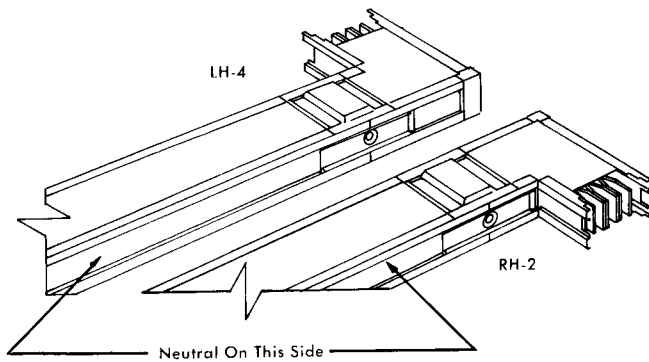
FLATWISE ELBOWS

The flatwise LH(-3) elbow and RH(-1) elbow are identical except that the joint stack assembly is located on opposite ends. The assembly is interchangeable and can be relocated on the job to serve either direction.



EDGEWISE ELBOWS

Edgewise elbows are also furnished in RH(-2) or LH(-4) construction to meet job requirements. The joint stack is not interchangeable as in flatwise construction.





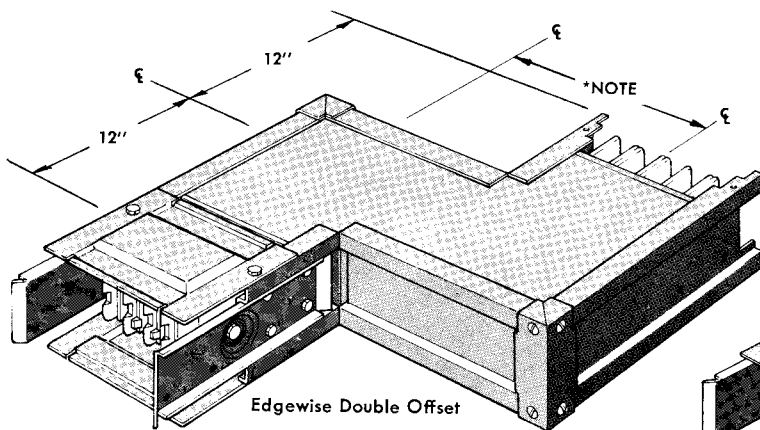
XL®-UNIVERSAL BUS DUCT

OFFSET ELBOWS

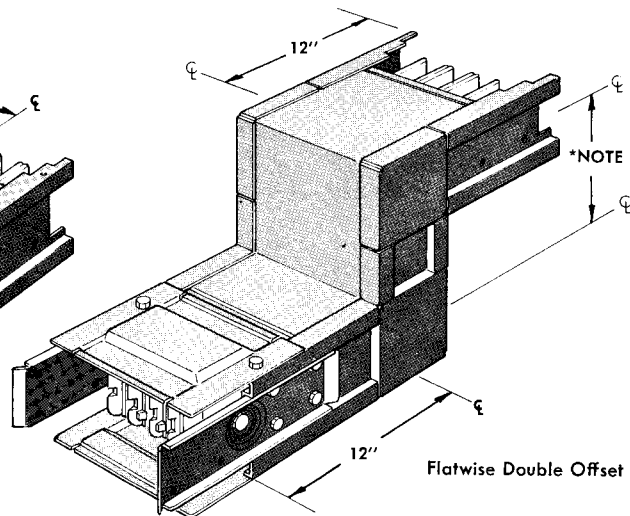
Offsets can often be used to advantage to save space and to solve difficult contour problems when encountered. A single offset may be used, for example, to replace two or more elbows and provide a more attractive, space-saving way to bypass obstructions. Offsets may also be used to convert an edgewise run to flatwise, or vice versa.

XL-U offsets are manufactured in an infinite variety of shapes, each designed to perform a necessary function and occupy less space than would a pair of standard elbows. Because of this variety, care should be taken on all dimensional drawings submitted for bid or order. Positioning of the joint stack, one furnished with each offset elbow, is especially important. Its position should be indicated on all drawings.

DOUBLE OFFSET ELBOWS



Edgewise Double Offset

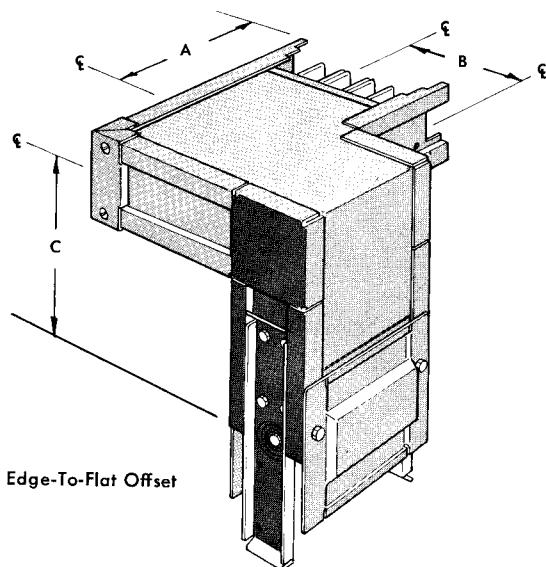


Flatwise Double Offset

*NOTE The center leg of a double elbow can be any length under 2 feet. Two elbows are used for lengths 2 feet and over.

*NOTE 12" dimension becomes 18" where 8-bar edgewise offsets are required.

EDGE-TO-FLAT OFFSET ELBOWS



Edge-To-Flat Offset

STANDARD DIMENSIONS—Inches			
Casing Size	A	B	C
4½ x 10	12	12	12
5½ x 10			
7½ x 10			
9½ x 10	18	18	12
7½ x 20⅜			
9½ x 20⅜			



XL®-UNIVERSAL BUS DUCT

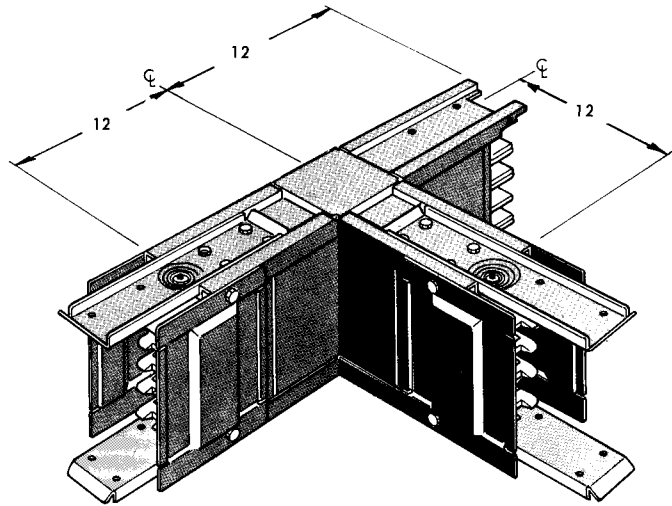
TEES

XL-Universal tees simplify branch runs of duct from the parent feeder run or feeding branch run. They are available edgewise or flatwise, RH or LH. Two joint stack assemblies are provided with each tee. The edgewise tee is housed inside a special box enclosure to provide rigidity and shield

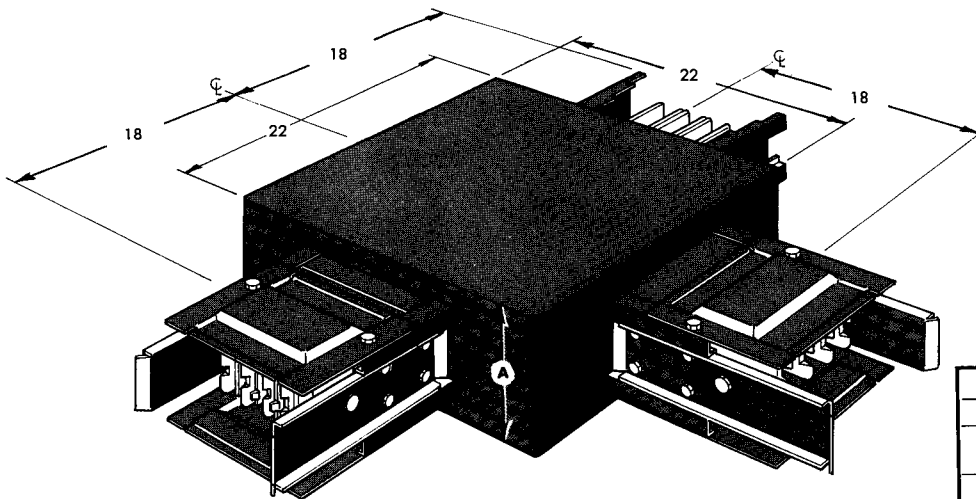
against dirt and dust. Standard tees do not contain plug-in openings.

It is important to note carefully the size of the box enclosure when laying out an edgewise duct run. The chart below clarifies dimensions.

FLATWISE TEES



EDGEWISE TEES



DIMENSIONS—Inches	
Casing Size	Dimension A
4½	8
5½	8
7½	12
9½	12

Note (edgewise tee only): Where 8 bars-per-phase are required, consult sales office.



XL®-UNIVERSAL BUS DUCT

CROSSES

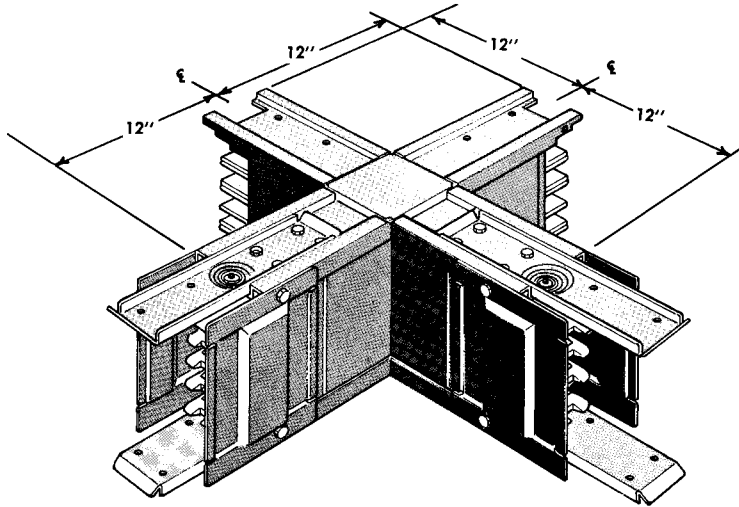
Crosses provide two branch extensions from a feeder run, tapping each from a single point.

Two joint-stack assemblies are provided with each XL-U cross. And, as with all XL-U fittings, the required casing plates are also furnished. Standard crosses do not contain

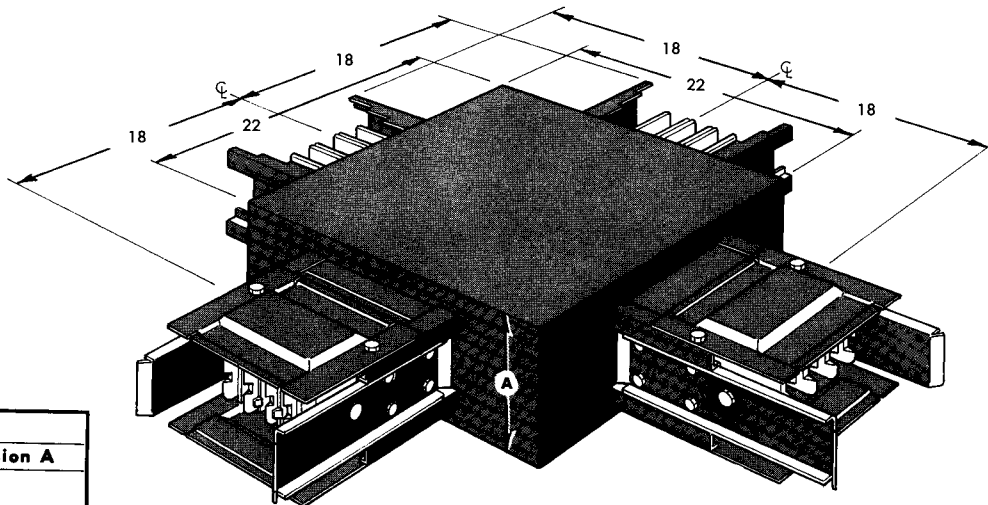
plug-in openings.

Flatwise or edgewise crosses are available in the sizes shown below. When specifying, add the following suffixes to catalog numbers: flatwise (-1), edgewise (-2).

FLATWISE CROSSES



EDGEWISE CROSSES



DIMENSIONS—Inches	
Casing Size	Dimension A
4 1/2	8
5 1/2	
7 1/2	12
9 1/2	

Note (edgewise cross only): For 8-bar-per-phase installations, consult Factory.

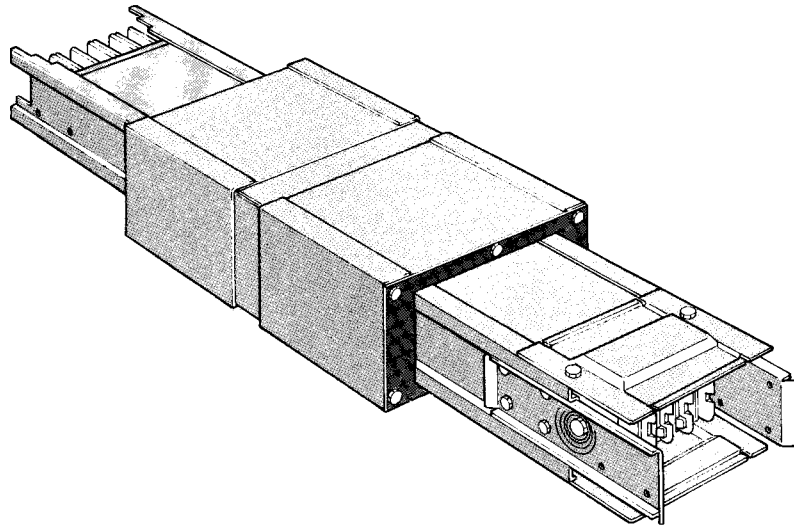


XL®-UNIVERSAL BUS DUCT

EXPANSION SECTIONS

Expansion sections for XL-U contain a sliding section with flexible connectors which provide for a 2" plus or minus adjustment. These sections are usually required whenever expansion joints in a building might affect an XL-U run. They

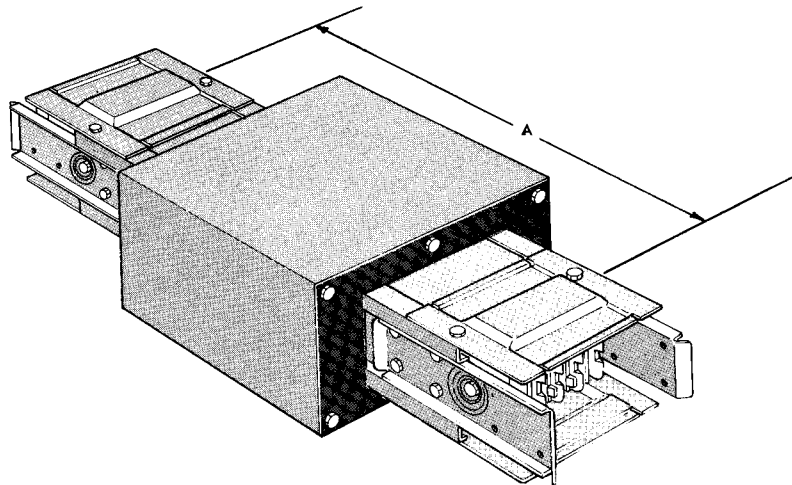
are not required to compensate for differential expansion between bus bar and casing which is provided for in design of XL-U.



REDUCERS—NON-FUSIBLE

Reducers are used for changing from one casing size to a smaller size. XL-U reducers are non-fusible, although

fusible reducers can be provided. A joint stack assembly and necessary connecting plates are supplied.



DIMENSIONS—Inches	
Largest Casing Size	Dimension A
4½ x 10	3'-4"
5½ x 10	
7½ x 10	
9½ x 10	
7½ x 20¾	4'-0"
9½ x 20¾	

Important: Check article 364 of the National Electrical Code before specifying.

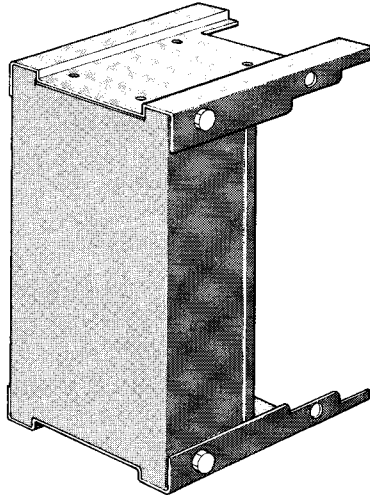


XL®-UNIVERSAL BUS DUCT

END CLOSERS

End closers are used to terminate bus duct runs. They can be removed later to extend the run if required. Closers

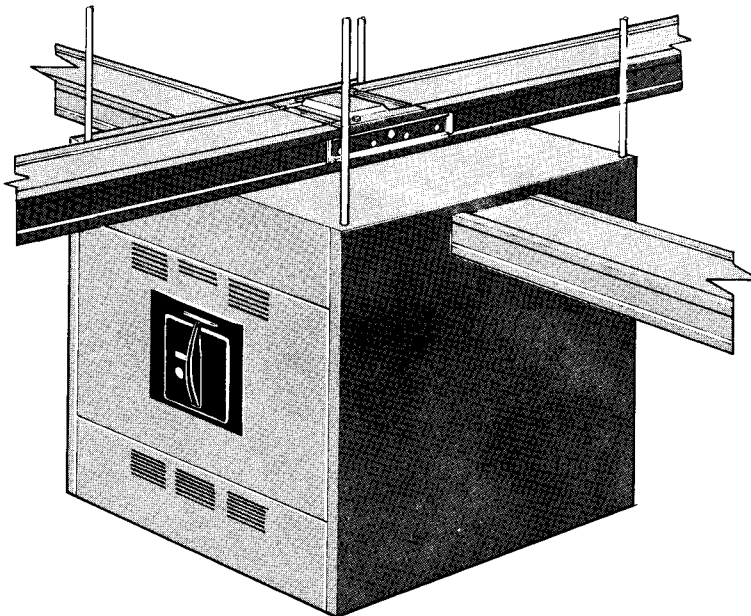
will be provided by the factory to meet installation needs as indicated by layout drawings.



CUBICLES

The most common application for cubicles is for protection of branch circuits. They also can be used for main service protection.

A wide variety of fusible and circuit breaker devices is available to fill all job requirements. There are provisions for suspending the cubicles from supporting rods.



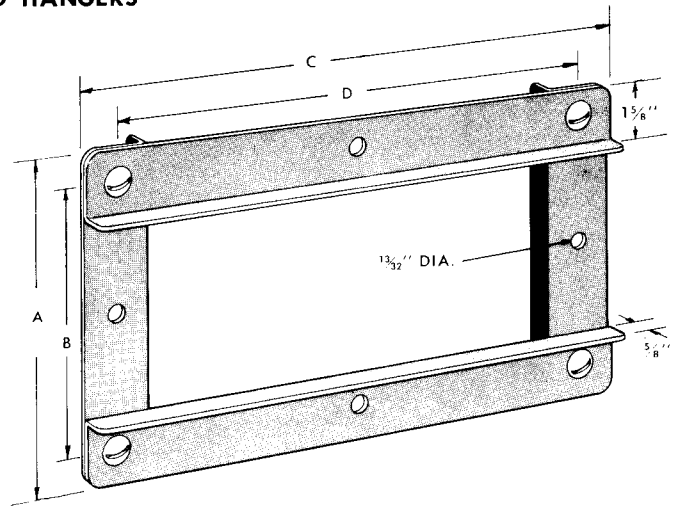


**XL®-UNIVERSAL BUS DUCT
STANDARD HANGERS**

Standard clamp-type hangers are used for horizontal duct suspension. One hanger assembly is provided with each straight section and two with each fitting. The pre-drilled hangers bolt together at the corners and can be slid over section lengths. It is not necessary to bolt or screw the hangers to casings.

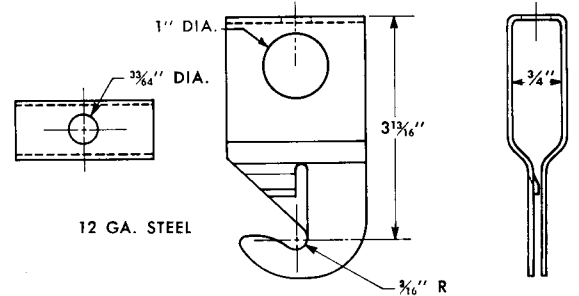
To speed installation, Hangfast® Adaptors are recommended for use with the hangers. When duct is hung flat-wise from rods or straps, one Hangfast Adaptor per hanger is sufficient. Edgewise mounting, particularly in the higher ampere duct, may require two-point suspension from each hanger to provide increased rigidity. Occasional sway-bracing is also recommended.

XL-U runs can be mounted on 10-foot centers. Consult the sales office if special hanging or suspension is required.

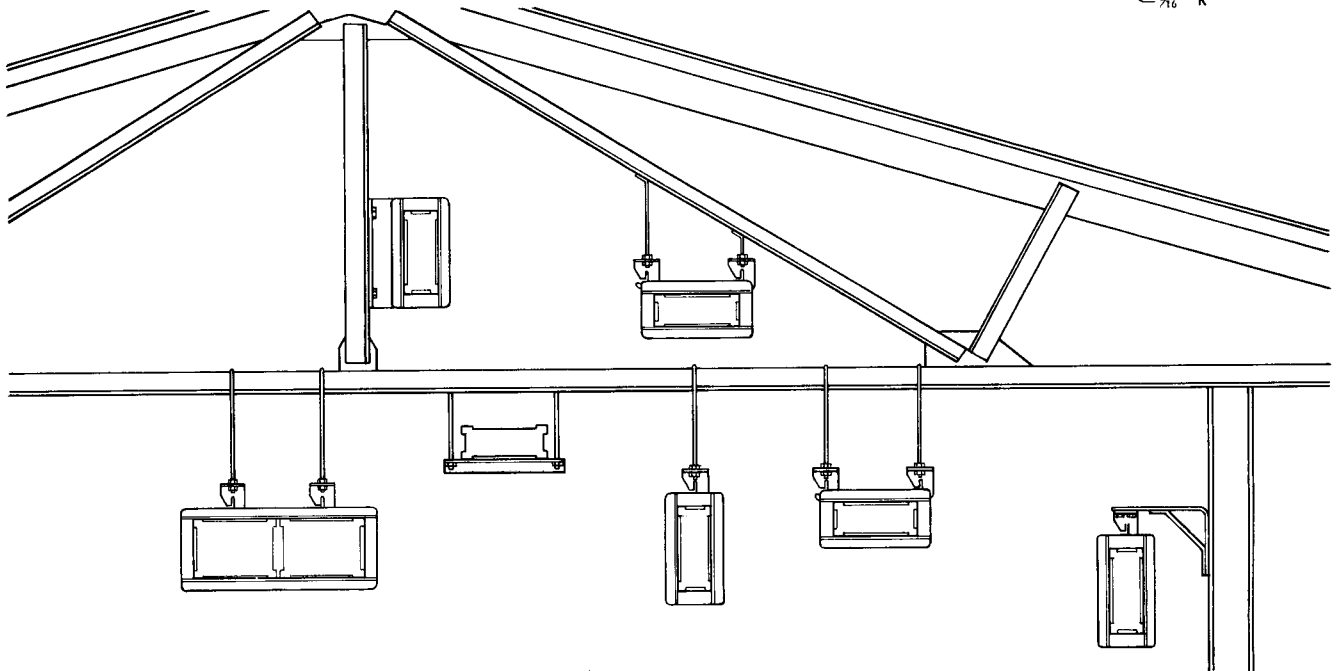


Hanger Cat. No.	DIMENSIONS—Inches				
	Casing Size	A	B	C	D
UH145	4½ x 10	7¾	6⅝	13¼	11⅓
UH155	5½ x 10	8¾	7⅝	13¼	11⅓
UH175	7½ x 10	10¾	9⅝	13¼	11⅓
UH195	9½ x 10	12¾	11⅝	13¼	11⅓
UH275	7½ x 21	10¾	9⅝	24	22½
UH295	9½ x 21	12¾	11⅝	24	22½

Hangfast Adaptors
Cat. No. UJ-100



TYPICAL HANGING METHODS

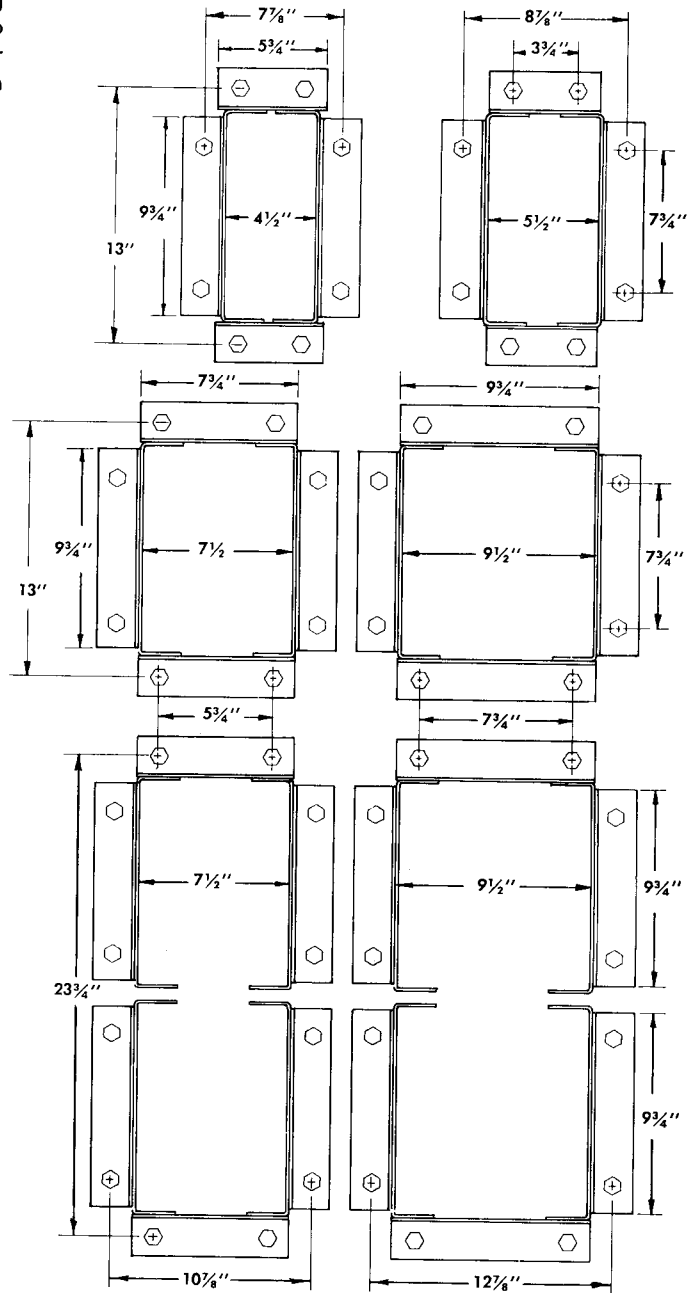
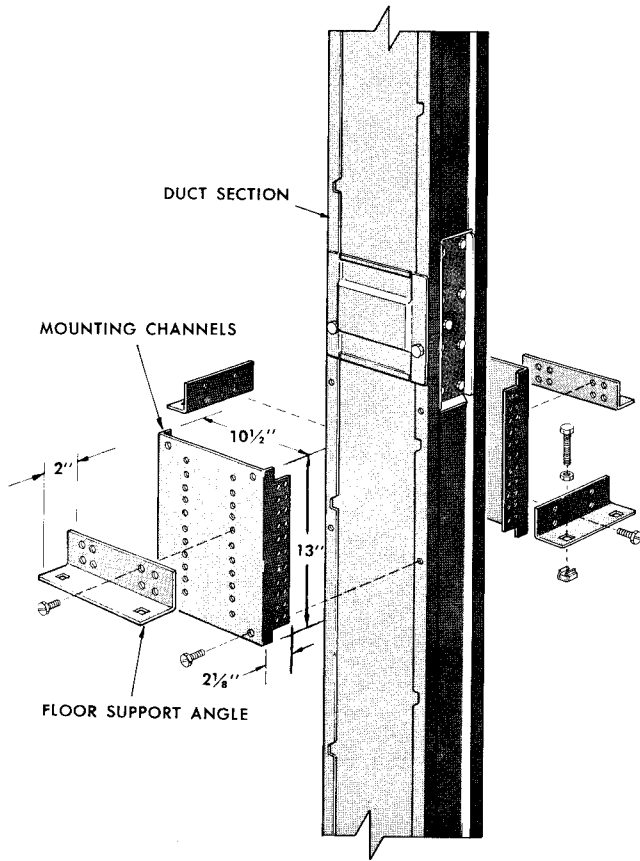




XL®-UNIVERSAL BUS DUCT

FLOOR-SUPPORT ASSEMBLY

Vertical runs of XL-U are supported at floor levels by a floor-support assembly consisting of 2 mounting channels and 4 floor-support angles. The channels bolt to the casing sides anywhere along a section length; the angles bolt to the channels. On-the-job drilling is not required. A plus or minus adjustment of 6" handles floor-to-floor variation problems.



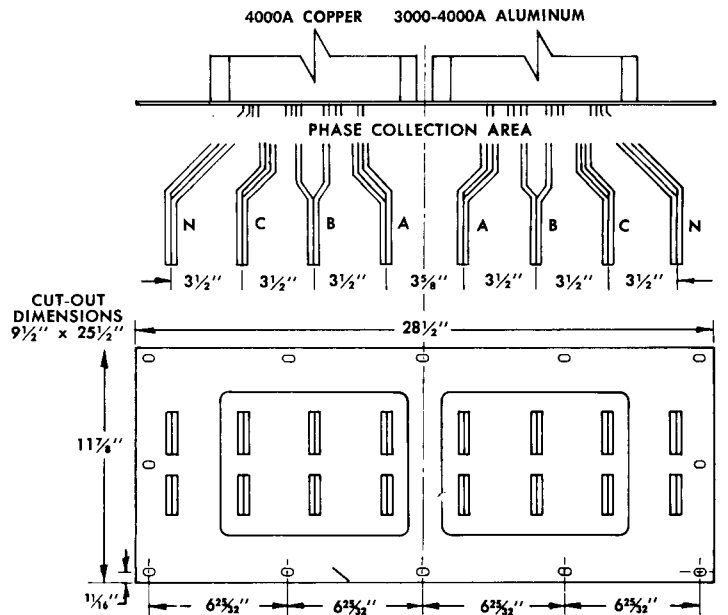
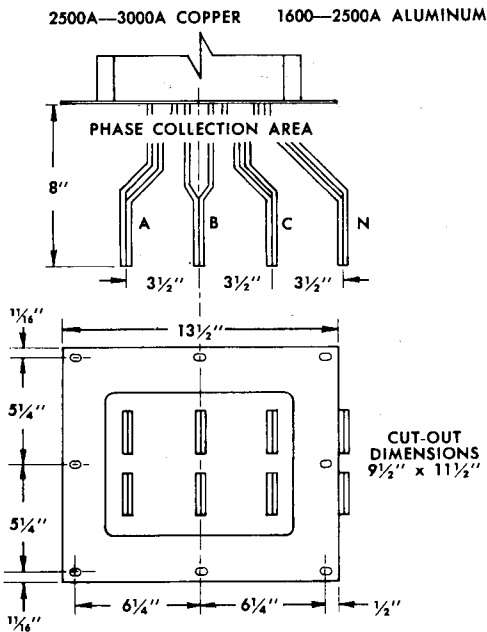
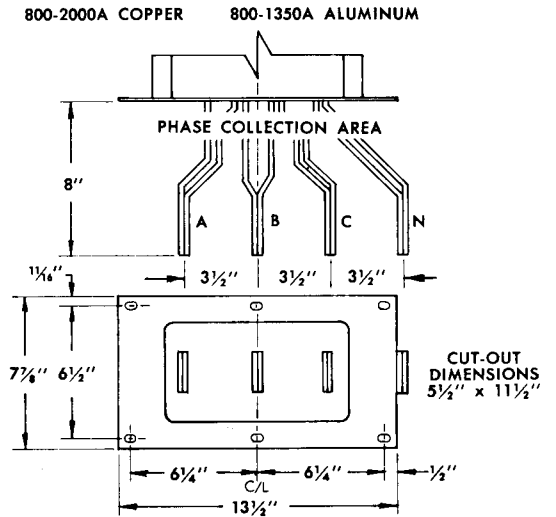
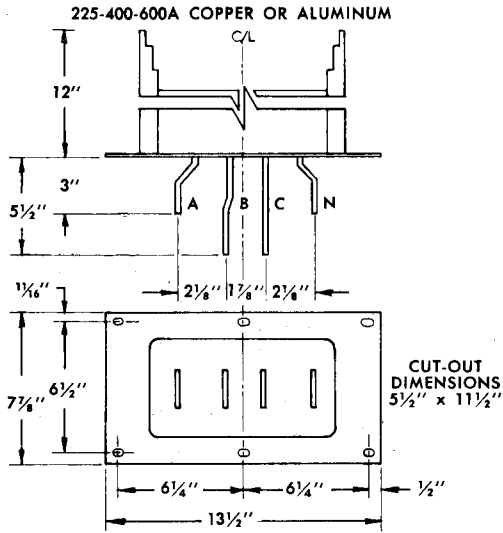


XL®-UNIVERSAL BUS DUCT

FLANGED-END CONNECTIONS

Flanged-end connections are encased bus-bar extensions used to connect XL-U duct to switchboards or panelboards. Standard stubs extend 12" above top of switchboard. The

unit includes an end flange plate for attaching the casing to the panelboard or switchboard and a joint stack assembly for connecting to bus bars in the XL-U run.



Note: All slots 7/16" x 7/8".

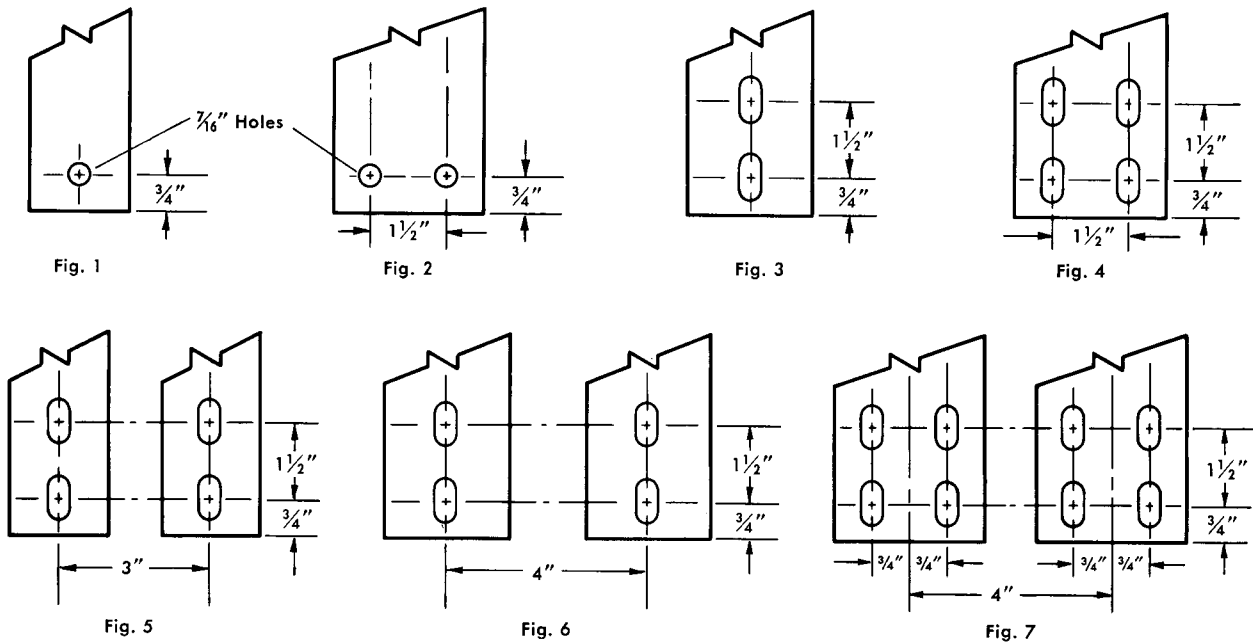
Note: Drilling details are shown on Section 5.3.2.2, page 10. Ground bus locations available on request.



XL® - UNIVERSAL BUS DUCT

FLANGED-END CONNECTIONS

DRILLING DETAILS



Note: All slots $\frac{7}{16}$ " x $\frac{7}{8}$ "

The table to the right indicates, by reference to the above drawings, drilling details for both copper and aluminum bus in flanged-end connections of different ampere ratings.

Duct Rating Amperes	For Drilling Details, See Fig. No.	
	Copper	Aluminum
225		1
400	1	1
600		2
800		
1000	3	3
1200		
1350	3	4
1600	3	5
2000	4	5
2500	5	7
3000	6	5
4000	5	7



XL®-UNIVERSAL BUS DUCT
CENTER-CABLE TAP BOXES—NON-FUSIBLE

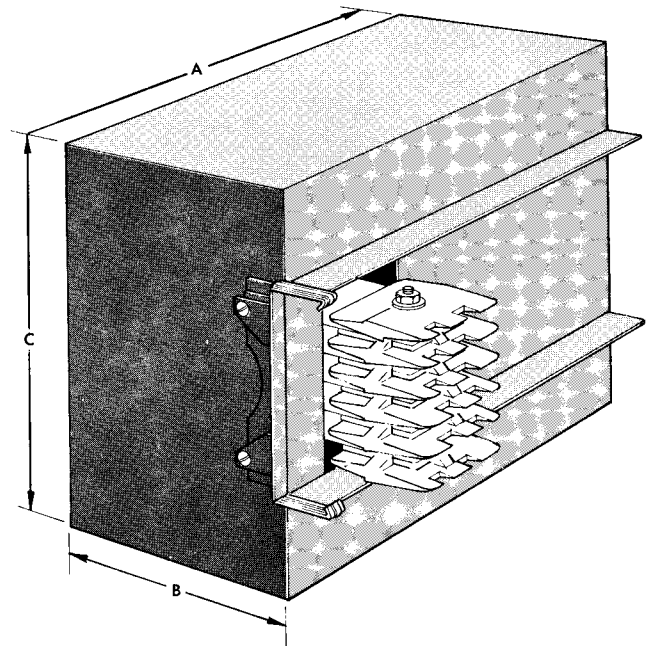
Center-cable tap boxes are non-fusible devices for cable or conduit tap off or feed in. They consist of a joint stack mounted in an enclosure and may be installed at any XL-U joint. To install, the joint splice plates must be removed and the existing joint stack slid out of the duct. When the tap box is attached in position, its joint stack replaces the

one removed.

The box may be reversed to provide wiring space on the left-hand side of the box instead of the right side. Lugs suitable for copper or aluminum conductors are provided as shown in table.

Tap Box Rating Amperes	DIMENSIONS—Inches			Duct Rating—Amperes	
	A	B	C	Copper Bus Bars	Aluminum Bus Bars
225-600	24	13	18	225-600	225-400
225-600				—	600
225-600				800-1350	800-1000
225-600				1600-2000	1200-1350
800-2000	30	17	18	800-1350	800-1000
800-2000				1600-2000	1200-1350
800-2000				2500	1600-2000
800-2000				3000	2500

Rating Amperes	Lugs	
	No.	Cable Range
225	2	#4-600 MCM
400	2	#4-600 MCM
600	2	#4-600 MCM
800	4	#4-600 MCM
1000	4	#4-600 MCM
1200	4	#4-600 MCM
1350	4	#4-600 MCM
1600	6	#4-600 MCM
2000	6	#4-600 MCM



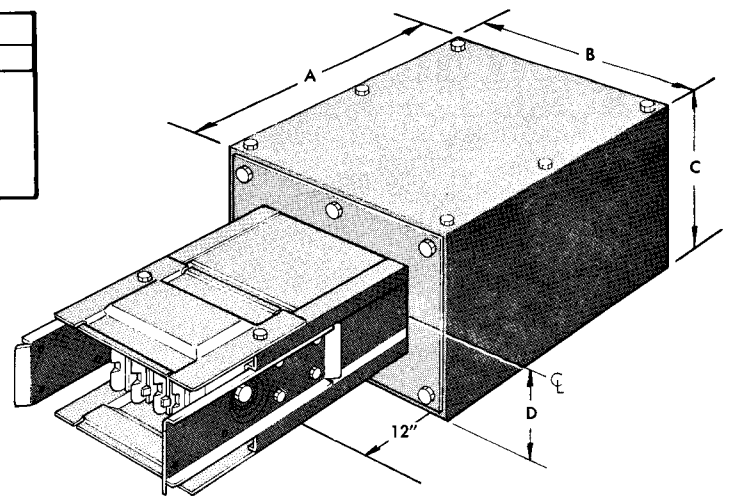
END-CABLE TAP BOXES—NON-FUSIBLE

End-cable tap boxes are non-fusible devices that attach to the end of an XL-U run. Each box includes a joint stack assembly; is suitable for flatwise or endwise mounting at

either end of the run. Lugs suitable for copper or aluminum conductors are provided as shown in the table.

Duct Rating—Amperes		DIMENSIONS—Inches			
Copper	Aluminum	A	B	C	D
225	225	18	14	8	4
400-600	400-600	24	18	12	4
800-1350	800-1350	30	18	16	4
1600-2000	—	30	18	16	4
—	1600-2000	30	18	16	6

Rating Amperes	Lugs	
	No.	Cable Range
225	1	250 MCM
400	2	#4-600 MCM
600	2	#4-600 MCM
800	4	#4-600 MCM
1000	4	#4-600 MCM
1200	4	#4-600 MCM
1350	6	#4-600 MCM
1600	6	#4-600 MCM
2000	8	#4-600 MCM





XL®-UNIVERSAL BUS DUCT
PRICES—DUCT FOOTAGE, ACCESSORIES

ALUMINUM NON-VENTILATED—225-600 AMPERES

600 VOLTS OR LESS

Capacity Amperes	Basic Cat. No.†	DUCT FOOTAGE					DUCT ACCESSORIES								
		Feeder* **	Plug-in **	Ground Bus	Case Dimen- sions Inches*	Ship. Wgt. Lb./Ft.*	90° Elbow		Tee		Cross		Swbd. Termin- nation‡	Bus Bar Exten- sion	
		Cat. No. Suffix-BF	Cat. No. Suffix-BP	Cat. No. Suffix-G			Cat. No. Suffix-BL		Cat. No. Suffix-BT		Cat. No. Suffix-BX		Cat. No. Suffix-BS	List Price	List Price
		List Price Per Ft	List Price Per Ft	List Price Adder Per Ft			Labor Only List Price	Com- plete Device List Price	Labor Only List Price	Com- plete Device List Price	Labor Only List Price	Com- plete Device List Price	List Price		
3 POLE															
225	U302A	\$14.	\$14.	\$3.	4½ x 10	8	\$170.	\$198.	\$205.	\$247.	\$250.	\$306.	\$149.	\$22.	
400	U304A	18.	18.	4.	4½ x 10	9									
600	U306A	24.	24.	6.	5½ x 10	10									
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL															
225	U502A	17.	17.	3.	4½ x 10	8	205.	239.	250.	301.	290.	358.	193.	34.	
400	U504A	27.	27.	4.	4½ x 10	10									
600	U506A	35.	35.	6.	5½ x 10	11									

ALUMINUM VENTILATED—800-5000 AMPERES

600 VOLTS OR LESS

Capacity Amperes	Basic Cat. No.†	DUCT FOOTAGE					DUCT ACCESSORIES								
		Feeder* **	Plug-in **	Ground Bus	Case Dimen- sions Inches*	Ship. Wgt. Lb./Ft.*	90° Elbow		Tee		Cross		Swbd. Termin- nation‡	Bus Bar Exten- sion	
		Cat. No. Suffix-VF	Cat. No. Suffix-VP	Cat. No. Suffix-G			Cat. No. Suffix-VL		Cat. No. Suffix-VT		Cat. No. Suffix-VX		Cat. No. Suffix-VS	List Price	List Price
		List Price Per Ft	List Price Per Ft	List Price Adder Per Ft			Labor Only List Price	Com- plete Device List Price	Labor Only List Price	Com- plete Device List Price	Labor Only List Price	Com- plete Device List Price	List Price		
3 POLE															
800	U308A	\$33.	\$33.	\$4.	4½ x 10	9	\$170.	\$236.	\$205.	\$304.	\$250.	\$382.	\$290.	\$48.	
1000	U310A	39.	39.	4.	4½ x 10	10									
1200	U312A	50.	50.	5.	5½ x 10	11									
1350	U313A	57.	57.	6.	5½ x 10	12									
1600	U316A	69.	69.	7.	7½ x 10	15	205.	435.	250.	595.	290.	750.	695.	247.	
2000	U320A	81.	81.	8.	7½ x 10	17									
2500	U325A	99.	99.	14.	9½ x 10	21									
3000	U330A	115.	115.	7.	7½ x 20½	31	205.	523.	250.	727.	290.	926.	880.	352.	
4000	U340A	159.	159.	12.	9½ x 20½	49									
5000	U350A	205.	205.	14.	9½ x 20½	43									
3 PHASE, 4 WIRE—HALF-CAPACITY NEUTRAL															
800	U408A	38.	38.	4.	4½ x 10	9	205.	281.	250.	364.	290.	442.	320.	52.	
1000	U410A	49.	49.	4.	4½ x 10	10									
1200	U412A	59.	59.	5.	5½ x 10	12									
1350	U413A	69.	69.	6.	5½ x 10	13									
1600	U416A	77.	77.	7.	7½ x 10	15	250.	538.	290.	722.	320.	896.	750.	265.	
2000	U420A	99.	99.	8.	7½ x 10	18									
2500	U425A	120.	120.	14.	9½ x 10	23									
3000	U430A	144.	144.	7.	7½ x 20½	33	250.	640.	290.	875.	320.	1100.	950.	387.	
4000	U440A	195.	195.	12.	9½ x 20½	42									
5000	U450A	241.	241.	14.	9½ x 20½	46									
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL															
800	U508A	47.	47.	4.	4½ x 10	10	205.	299.	250.	391.	290.	478.	350.	54.	
1000	U510A	54.	54.	4.	4½ x 10	11									
1200	U512A	69.	69.	5.	5½ x 10	13									
1350	U513A	77.	77.	6.	5½ x 10	14									
1600	U516A	90.	90.	7.	7½ x 10	17	290.	582.	290.	788.	320.	984.	805.	284.	
2000	U520A	110.	110.	8.	7½ x 10	19									
2500	U525A	138.	138.	14.	9½ x 10	24									
3000	U530A	166.	166.	7.	7½ x 20½	34	290.	692.	290.	953.	320.	1214.	1020.	401.	
4000	U540A	221.	221.	12.	9½ x 20½	45									
5000	U550A	274.	274.	14.	9½ x 20½	50									

* For weatherproof feeder duct, add 20% to list price of duct.
 ** Also available with insulated conductors in ventilated or non-ventilated construction.
 To order, change first letter of Cat. No. Suffix from "B" to "V" for ventilated, or
 "E" for non-ventilated.
 † **TO ORDER**—Use Basic Cat. No. and add Cat. No. Suffixes as required for specific
 item. Example: Duct—U420AVF-G; Accessory—U420AVL-G.

* Dimensions and weights apply for edgewise or vertical-riser mounting. For sizes
 and weights on flatwise-mounted duct, refer to I-T-E sales office.
 ‡ Includes flange to cover cutout in top of switchboard and 8" of fabricated bus bar
 extension inside switchboard. Add for footage outside of switchboard.



XL®-UNIVERSAL BUS DUCT
PRICES—DUCT ACCESSORIES

ALUMINUM NON-VENTILATED—225-600 AMPERES

600 VOLTS OR LESS

Capacity Amperes		DUCT ACCESSORIES														
		Transformer Tap ^o		End Closer		Center Tap Box	End Tap Box		Expansion Section		Reducer or Adaptor	Wall or Floor Flange	Roof Flange	Fire Barrier	Std. Floor Support	Weather-Stop
		Complete Device List Price		Complete Device		Cat. No. Suffix-BM	Cat. No. Suffix-BB		Cat. No. Suffix-BJ		Labor Only List Price	Complete Device List Price	Labor Only List Price	Labor Only List Price	Complete Device List Price	Labor Only List Price
		3 Phase	3-1 Phase	Cat. No.	List Price	Complete Device List Price	Box Only List Price	Complete Device List Price	Labor Only List Price	Complete Device List Price						
3 POLE																
225	\$70.	\$170.	UE145	\$20.	\$125.	\$125.	\$139.	\$190.	\$246.	—	—	—	—	—	—	
400			UE145	20.			143.	213.	285.	\$160.	\$50.	\$280.	\$50.	\$25.	\$100.	
600			UE155	25.			149.	235.	331.	184.						
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL																
225	80.	200.	UE145	20.	135.	135.	152.	223.	291.	—	—	—	—	—	—	
400			UE145	20.			162.	242.	350.	199.	50.	280.	50.	25.	100.	
600			UE155	25.			170.	274.	414.	229.						

ALUMINUM VENTILATED—800-5000 AMPERES

600 VOLTS OR LESS

Capacity Amperes		DUCT ACCESSORIES														
		Transformer Tap ^o		End Closer		Center Tap Box	End Tap Box		Expansion Section		Reducer or Adaptor	Wall or Floor Flange	Roof Flange	Fire Barrier	Std. Floor Support	Weather-Stop
		Complete Device List Price		Complete Device		Cat. No. Suffix-VM	Cat. No. Suffix-VB		Cat. No. Suffix-VJ		Labor Only List Price	Complete Device List Price	Labor Only List Price	Labor Only List Price	Complete Device List Price	Labor Only List Price
		3 Phase	3-1 Phase	Cat. No.	List Price	Complete Device List Price	Box Only List Price	Complete Device List Price	Labor Only List Price	Complete Device List Price						
3 POLE																
800	\$160.	\$420.	UE145	\$20.	\$170.	\$170.	\$203.	\$303.	\$435.	\$217.	\$50.	\$290.	\$50.	\$25.	\$100.	
1000			UE145	20.			209.	323.	479.	242.						
1200			UE155	25.			220.	365.	565.	263.						
1350			UE155	25.			227.	390.	618.	283.						
1600	265.	590.	UE175	30.	290.	290.	359.	454.	730.	316.						
2000			UE175	30.			371.	492.	816.	398.						
2500			UE195	40.			389.	485.	980.	477.						
3000	400.	950.	UE275	50.	450	450.	565.	666.	1126.	562.	95.					
4000			UE295	60.			609.	848.	1484.	763.						
5000			UE295	60.			655.	1018.	1838.	794.						
3 PHASE, 4 WIRE—HALF-CAPACITY NEUTRAL																
800	170.	435.	UE145	20.	175.	175.	213.	362.	514.	246.	50	290.	50.	25.	100.	
1000			UE145	20.			224.	406.	602.	288.						
1200			UE155	25.			234.	436.	672.	312.						
1350			UE155	25.			244.	457.	733.	334.						
1600	275.	625.	UE175	30.	300.	300.	377.	514.	822.	368.						
2000			UE175	30.			399.	588.	984.	468.						
2500			UE195	40.			420.	696.	1176.	552.						
3000	425.	1050.	UE275	50.	480.	480.	624.	801.	1377.	658.	95.	290.	50.	50.	100.	
4000			UE295	60.			675.	998.	1788.	875.						
5000			UE295	60.			721.	1194.	2158.	1092.						
3 PHASE, 4-WIRE—FULL-CAPACITY NEUTRAL																
800	180.	450.	UE145	20.	180.	180.	227.	418.	606.	270.	50.	290.	50.	25.	100.	
1000			UE145	20.			234.	454.	670.	303.						
1200			UE155	25.			249.	504.	780.	343.						
1350			UE155	25.			257.	524.	833.	382.						
1600	285.	660.	UE175	30.	310.	310.	400.	593.	953.	423.						
2000			UE175	30.			420.	676.	1116.	508.						
2500			UE195	40.			448.	763.	1315.	628.						
3000	440.	1100.	UE275	50.	510.	510.	676.	888.	1552.	754.	95.	290.	50.	50.	100.	
4000			UE295	60.			731.	1113.	1997.	994.						
5000			UE295	60.			784.	1335.	2431.	1258.						

^o Includes 8" bus-bar extension.

Hangers—1 Hanger is included free of charge with each duct section and accessory.

Additional Hangers are available at \$1.00 List each. To order, use same Cat. No. as shown above for End Closer, except change second letter from "E" to "H". Example: UH 145.



XL®-UNIVERSAL BUS DUCT
PRICES—DUCT FOOTAGE, ACCESSORIES

COPPER NON-VENTILATED—225-600 AMPERES

600 VOLTS OR LESS

Capacity Amperes	Basic Cat. No.	DUCT FOOTAGE					DUCT ACCESSORIES													
		Feeder [▲] **	Plug-In **	Ground Bus	Case Dimen- sions Inches	Ship. Wgt. Lb/Ft	90° Elbow		Tee		Cross		Swbd Termi- nation†	Bus Bar Exten- sion						
		Cat. No. Suffix-BF	Cat. No. Suffix-BP	Cat. No. Suffix-G			Cat. No. Suffix-BL	Cat. No. Suffix-BT	Cat. No. Suffix-BX	Cat. No. Suffix-BS	List Price	List Price								
		List Price Per Ft	List Price Per Ft	List Price Adder Per Ft			Labor Only List Price	Com- plete Device List Price	Labor Only List Price	Com- plete Device List Price			Labor Only List Price	Com- plete Device List Price						
3 POLE																				
225	U302C	\$18.	\$18.	\$4.	4½ x 10	8	\$170.	\$206.	\$205.	\$259.	\$250.	\$322.	\$173.	\$31.						
400	U304C	27.	27.	6.											12	224.	286.	358.	188.	37.
600	U306C	34.	34.	8.											13	238.	307.	386.	207.	51.
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL																				
225	U502C	29.	29.	4.	4½ x 10	9	205.	263.	250.	337.	290.	406.	218.	43.						
400	U504C	38.	38.	6.											13	281.	364.	442.	231.	52.
600	U506C	51.	51.	8.											15	307.	403.	494.	252.	68.

COPPER VENTILATED—800-6500 AMPERES

600 VOLTS OR LESS

Capacity Amperes	Basic Cat. No.†	DUCT FOOTAGE					DUCT ACCESSORIES													
		Feeder [▲]	Plug-In	Ground Bus	Case Dimen- sions Inches*	Ship. Wgt. Lb/Ft*	90° Elbow		Tee		Cross		Swbd Termi- nation†	Bus Bar Exten- sion						
		Cat. No. Suffix-VF	Cat. No. Suffix-VP	Cat. No. Suffix-VG			Cat. No. Suffix-VL	Cat. No. Suffix-VT	Cat. No. Suffix-VX	Cat. No. Suffix-V5	List Price	List Price								
		List Price Per Ft	List Price Per Ft	List Price Adder Per Ft			Labor Only List Price	Com- plete Device List Price	Labor Only List Price	Com- plete Device List Price			Labor Only List Price	Com- plete Device List Price						
3 POLE																				
800	U308C	\$43.	\$43.	\$4.	4½ x 10	12	\$170.	\$266.	\$205.	\$334.	\$250.	\$422.	\$300.	\$69.						
1000	U310C	54.	54.	6.											14	278.	367.	466.	350.	87.
1200	U312C	68.	68.	8.											15	306.	409.	522.	385.	99.
1350	U313C	78.	78.	8.	4½ x 10	18	\$170.	326.	\$205.	439.	\$250.	562.	425.	110.						
1600	U316C	92.	92.	8.	5½ x 10	22									354.	481.	618.	480.	129.	
2000	U320C	115.	115.	12.	5½ x 10	25									400.	550.	710.	560.	161.	
2500	U325C	144.	144.	14.	7½ x 10	32	205.	458.	250.	637.	290.	826.	960.	325.						
3000	U330C	174.	174.	18.	9½ x 10	39									518.	727.	946.	765.	270.	
4000	U340C	228.	228.	14.	7½ x 20½	54									661.	934.	1202.	960.	325.	
5000	U350C	267.	267.	18.	7½ x 20½	66	739.	1051.	1358.	1125.	370.									
6000	U360C	342.	342.	22.	9½ x 20½	80	889.	1276.	1658.	1235.	400.									
6500	U365C	371.	371.	26.	9½ x 20½	92	947.	1363.	1774.	1370.	410.									
3 PHASE, 4 WIRE—HALF-CAPACITY NEUTRAL																				
800	U408C	55.	55.	4.	4½ x 10	13	205.	315.	250.	415.	290.	510.	340.	72.						
1000	U410C	66.	66.	6.											16	337.	448.	554.	390.	98.
1200	U412C	81.	81.	8.											17	367.	493.	614.	440.	110.
1350	U413C	92.	92.	8.	4½ x 10	20	205.	389.	250.	526.	290.	658.	480.	118.						
1600	U416C	107.	107.	12.	5½ x 10	24									419.	571.	718.	540.	147.	
2000	U420C	135.	135.	14.	5½ x 10	28									475.	655.	830.	650.	173.	
2500	U425C	166.	166.	18.	7½ x 10	37	250.	537.	290.	748.	320.	954.	770.	233.						
3000	U430C	201.	201.	22.	9½ x 10	44									607.	853.	1094.	890.	302.	
4000	U440C	266.	266.	14.	7½ x 20½	61									782.	1088.	1384.	1115.	348.	
5000	U450C	329.	329.	18.	7½ x 20½	75	908.	1277.	1636.	1350.	395.									
6000	U460C	412.	412.	22.	9½ x 20½	90	1074.	1526.	1968.	1460.	422.									
6500	U465C	428.	428.	26.	9½ x 20½	103	1106.	1574.	2032.	1595.	438.									
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL																				
800	U508C	67.	67.	4.	4½ x 10	14	205.	339.	250.	451.	290.	558.	370.	77.						
1000	U510C	79.	79.	6.											17	363.	487.	606.	440.	107.
1200	U512C	93.	93.	8.											18	391.	529.	662.	485.	119.
1350	U513C	107.	107.	8.	4½ x 10	22	205.	419.	250.	571.	290.	718.	540.	128.						
1600	U516C	125.	125.	12.	5½ x 10	27									455.	625.	790.	605.	161.	
2000	U520C	154.	154.	14.	5½ x 10	29									513.	712.	906.	730.	187.	
2500	U525C	191.	191.	18.	7½ x 10	41	250.	587.	290.	823.	320.	1054.	880.	252.						
3000	U530C	233.	233.	22.	9½ x 10	49									671.	949.	1222.	1010.	317.	
4000	U540C	309.	309.	14.	7½ x 20½	67									868.	1217.	1556.	1290.	358.	
5000	U550C	376.	376.	18.	7½ x 20½	82	1002.	1418.	1824.	1575.	407.									
6000	U560C	468.	468.	22.	9½ x 20½	100	1186.	1964.	2192.	1685.	437.									
6500	U565C	504.	504.	26.	9½ x 20½	116	1258.	1802.	2336.	1820.	452.									

▲ For weatherproof feeder duct, add 20% to list price duct.

** Also available with insulated conductors in ventilated or non-ventilated construction. To order, change first letter of Cat. No. Suffix from "B" to "V" for ventilated, or "E" for non-ventilated.

† TO ORDER—Use Basic Cat. No. and add Cat. No. Suffixes as required for specific item. Example: Duct—U420CVF-W, Accessory—U420CVL-G.

* Dimensions and weights apply for edgewise or vertical-riser mounting. For sizes and weights on flatwise-mounted duct, refer to I-T-E sales office.

‡ Includes flange to cover cut out in top of switchboard and 8" of fabricated bus bar extension inside switchboard. Add for footage outside of switchboard.



XL®-UNIVERSAL BUS DUCT

PRICES—DUCT ACCESSORIES

COPPER NON-VENTILATED—225-600 AMPERES

600 VOLTS OR LESS

Capacity Amperes	DUCT ACCESSORIES														
	Transformer Tap ^o		End Closer		Center Tap Box	End Tap Box		Expansion Section		Reducer or Adaptor	Wall or Floor Flange	Roof Flange	Fire Barrier	Std. Floor Support	Weather-Stop
	Complete Device List Price		Complete Device		Cat. No. Suffix-BM	Cat. No. Suffix-BB		Cat. No. Suffix-BJ		Labor Only List Price	Complete Device List Price	Labor Only List Price	Labor Only List Price	Complete Device List Price	Labor Only List Price
	3 Phase	3-1 Phase	Cat. No.	List Price	Complete Device List Price	Box Only List Price	Complete Device List Price	Labor Only List Price	Complete Device List Price						
3 POLE															
225															
400	\$80.	\$200.	UE145	\$20.	\$145.	\$145.	\$163.	\$190.	\$262.	—	\$50.	\$280.	\$50.	\$25.	\$100.
600							172.	213.	321.	\$160.					
							189.	235.	371.	184.					
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL															
225															
400	90.	230.	UE145	20.	155.	155.	184.	222.	338.	—	50.	280.	50.	25.	100.
600							193.	242.	394.	199.					
							206.	274.	478.	229.					

COPPER VENTILATED—800-6500 AMPERES

600 VOLTS OR LESS

Capacity Amperes	DUCT ACCESSORIES														
	Transformer Tap ^o		End Closer		Center Tap Box	End Tap Box		Expansion Section		Reducer or Adaptor	Wall or Floor Flange	Roof Flange	Fire Barrier	Std. Floor Support	Weather-Stop
	Complete Device List Price		Complete Device		Cat. No. Suffix-VM	Cat. No. Suffix-VB		Cat. No. Suffix-VJ		Labor Only List Price	Complete Device List Price	Labor Only List Price	Labor Only List Price	Complete Device List Price	Labor Only List Price
	3 Phase	3-1 Phase	Cat. No.	List Price	Complete Device List Price	Box Only List Price	Complete Device List Price	Labor Only List Price	Complete Device List Price						
3 POLE															
800			UE145	\$20.			\$233.	\$303.	\$475.	\$217.					
1000			UE145	20.			244.	323.	539.	242.					
1200			UE145	20.			258.	364.	636.	263.					
1350	\$250.	\$530.	UE145	20.	\$190.	\$190.	268.	390.	702.	283.	\$50.	\$280.	\$50.	\$25.	\$100.
1600			UE155	25.			282.	454.	822.	316.					
2000			UE155	25.			305.	492.	952.	398.					
2500			UE175	30.			464.	585.	1161.	477.	\$280.	\$50.			
3000	310.	720.	UE195	40.	320.	320.	494.	666.	1362.	562.					
4000			UE275	50.			758.	848.	1760.	763.	95.				
5000			UE275	50.			797.	1008.	2076.	964.					
6000	465.	1160.	UE295	60.	530.	530.	872.	1182.	2550.	1166.					
6500			UE295	60.			901.	1262.	2746.	1363.					
3 PHASE, 4 WIRE—HALF-CAPACITY NEUTRAL															
800			UE145	20.			250.	362.	582.	246.					
1000			UE145	20.			261.	406.	670.	288.					
1200			UE145	20.			276.	436.	760.	312.					
1350	255.	545.	UE145	20.	195.	195.	287.	457.	825.	334.	50.	280.	50.	25.	100.
1600			UE155	25.			302.	515.	943.	368.					
2000			UE155	25.			330.	589.	1129.	468.					
2500			UE175	30.			506.	696.	1360.	552.	280.	50.			
3000	325.	750.	UE195	40.	340.	340.	541.	801.	1605.	658.					
4000			UE275	50.			816.	998.	2062.	875.	95.				
5000			UE275	50.			879.	1194.	2510.	1092.					
6000	495.	1215.	UE295	60.	550.	550.	962.	1398.	3046.	1315.					
6500			UE295	60.			978.	1495.	3207.	1530.					
3 PHASE, 4 WIRE—FULL-CAPACITY NEUTRAL															
800			UE145	20.			267.	418.	686.	270.					
1000			UE145	20.			279.	454.	770.	303.					
1200			UE145	20.			293.	504.	876.	343.					
1350	260.	560.	UE145	20.	200.	200.	307.	525.	953.	382.	50.	280.	50.	25.	100.
1600			UE155	25.			325.	593.	1093.	423.					
2000			UE155	25.			354.	676.	1292.	508.					
2500			UE175	30.			551.	763.	1527.	628.	280.	50.			
3000	335.	780.	UE195	40.	360.	360.	593.	888.	1820.	754.					
4000			UE275	50.			889.	1112.	2348.	994.	95.				
5000			UE275	50.			956.	1335.	2389.	1258.					
6000	525.	1270.	UE295	60.	580.	580.	1048.	1560.	3432.	1498.					
6500			UE295	60.			1084.	1662.	3678.	1739.					

^o Includes 8" bus-bar extension.

Hangers—1 Hanger is included free of charge with each duct section and accessory.

Additional Hangers are available at \$1.00 List each. To order, use same Cat. No. as shown above for End Closer, except change second letter from "E" to "H". Example: UH 145.