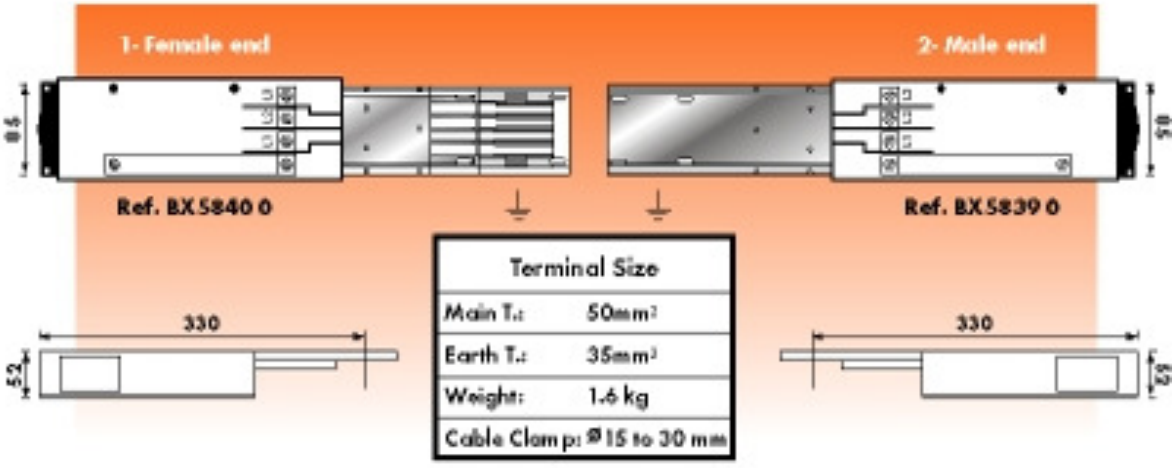
End Feed Unit

The end feed unit is available in 100 and 200 amps ratings with terminals for 3 phase, null and earth (3P+N+PE).



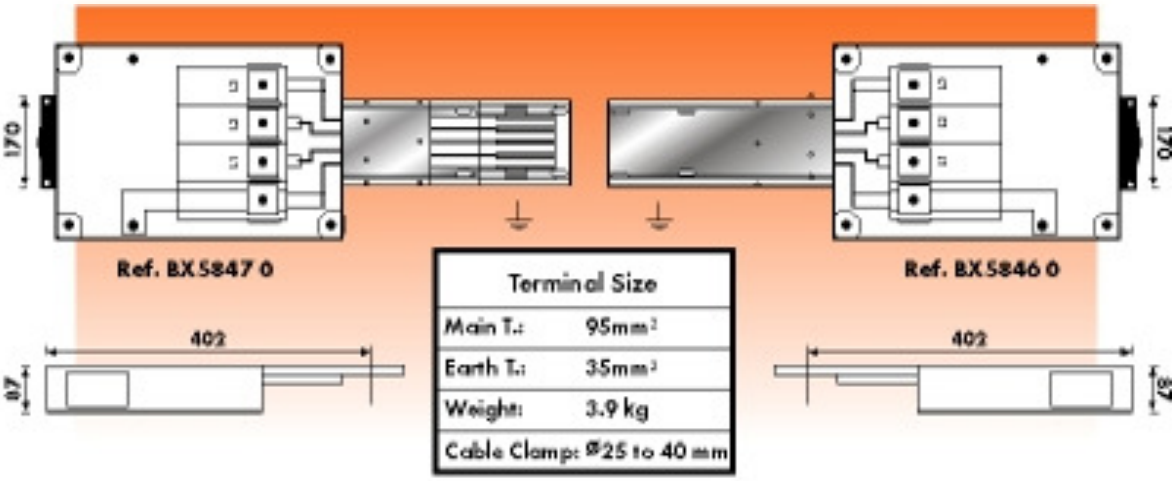
Terminal Size	
Main T.:	50mm²
Earth T.:	35mm²
Weight:	1.6 kg
Cable Clamp:	Ø15 to 30 mm

100 amps end feed box

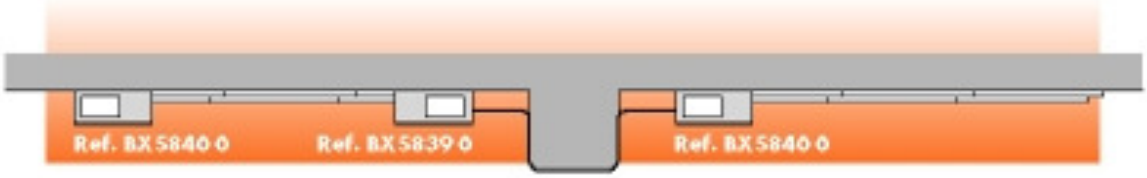
This box is used for feeding 40, 63 and 100 amps busducts and is available in left or right configuration.

200 amps end feed box

This box is used for feeding 160 and 200 amps busducts, available in left or right configuration.

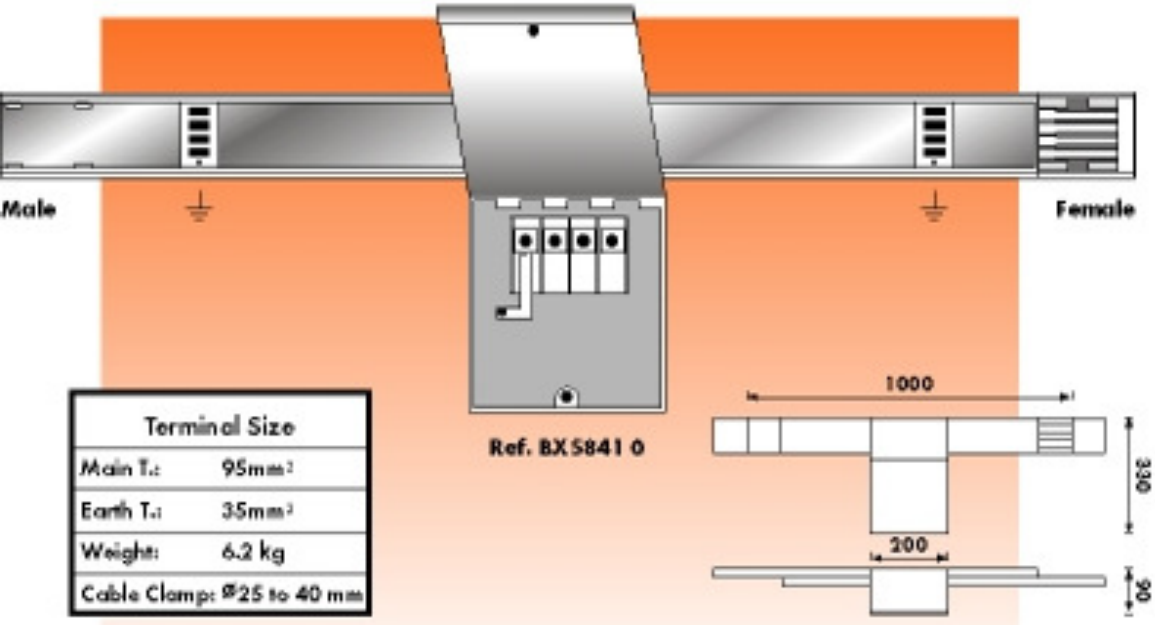


Terminal Size	
Main T.:	95mm²
Earth T.:	35mm²
Weight:	3.9 kg
Cable Clamp:	Ø25 to 40 mm



Center Feed Unit

Center feed units are supplied in dimensions shown below.

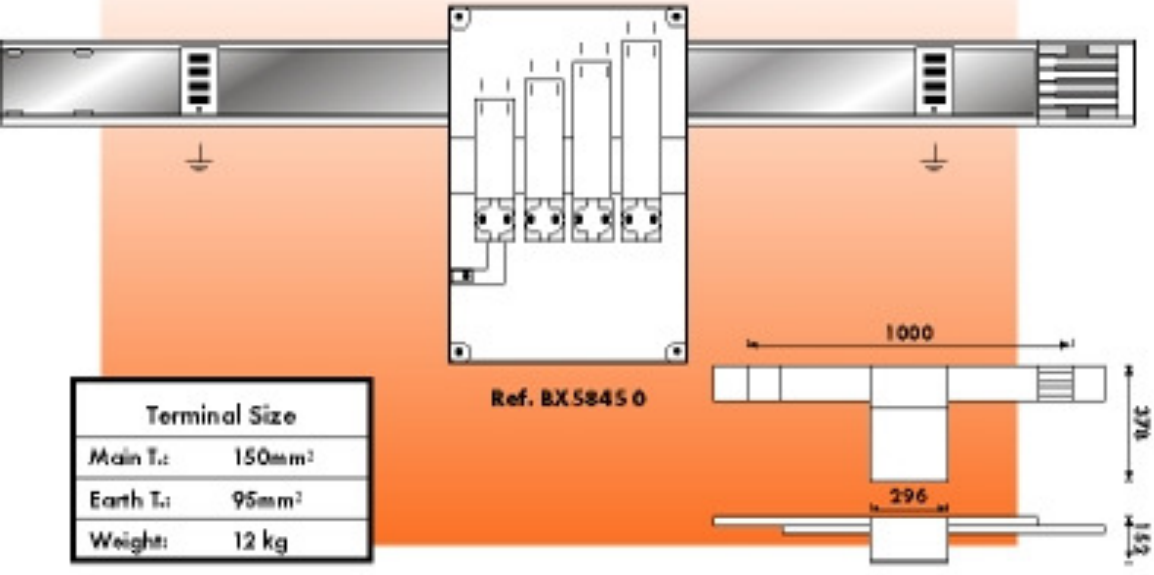


Terminal Size	
Main T.:	95mm²
Earth T.:	35mm²
Weight:	6.2 kg
Cable Clamp:	Ø25 to 40 mm

Ref. BXS841 0

100 amps center feed box

200 amps center feed box



Terminal Size	
Main T.:	150mm²
Earth T.:	95mm²
Weight:	12 kg

Ref. BXS845 0

■ Protection device installed on order.

Tap-Off Boxes

Tap-off boxes with insulated thermoplastic material or hot dip galvanized steel housing are available as follows:

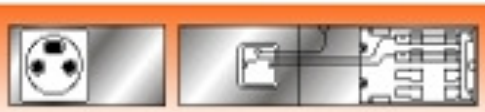
A- Plug-in tap-off units without switch (thermoplastic housing)

Type: 20A
Terminals: 6 mm^2
Weight: 150 gr
Dimensions: 110 x80x45 mm

Ref. BX5911 0

B- Plug-in tap-off unit with outlet socket (metal housing)

Type: 16 A 2P+PE-one socket
fuse: 10x38 16aM
Weight: 800 gr
Dimensions: 110x80x45 mm

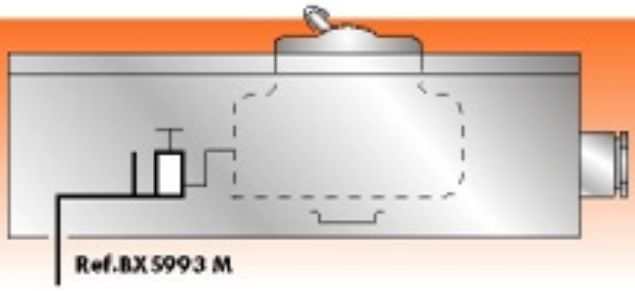


Ref. BX5923 0

Type:20 A 3P+N+PE-one socket
3fuses: 10x38 20aM
Weight: 900 gr.
Dimensions: 165x85x60 mm

Ref. BX5935 0

C- Plug-in tap-off unit with protection (metal box)

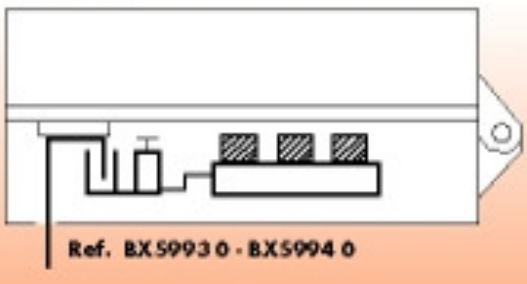


Ref.BX5993 M

Type: 25 A
Fuses E. 27
Terminal size 10 mm^2
Weight 1100-1450 gr.
Dimensions: 195x930x70 mm
IP.51

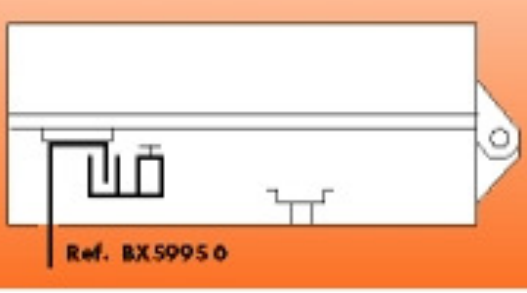
D- Plug-in tap-off unit with protection (thermoplastic housing - metal box)

Diazed fuse



Ref. BX5993 0 - BX5994 0

Type: 25, 50 A
Fuses E. 27, E. 33
Terminal size 10, 16 mm^2
Weight 1150, 1200 gr.
Dimensions: 260x110x110 mm
IP. 51

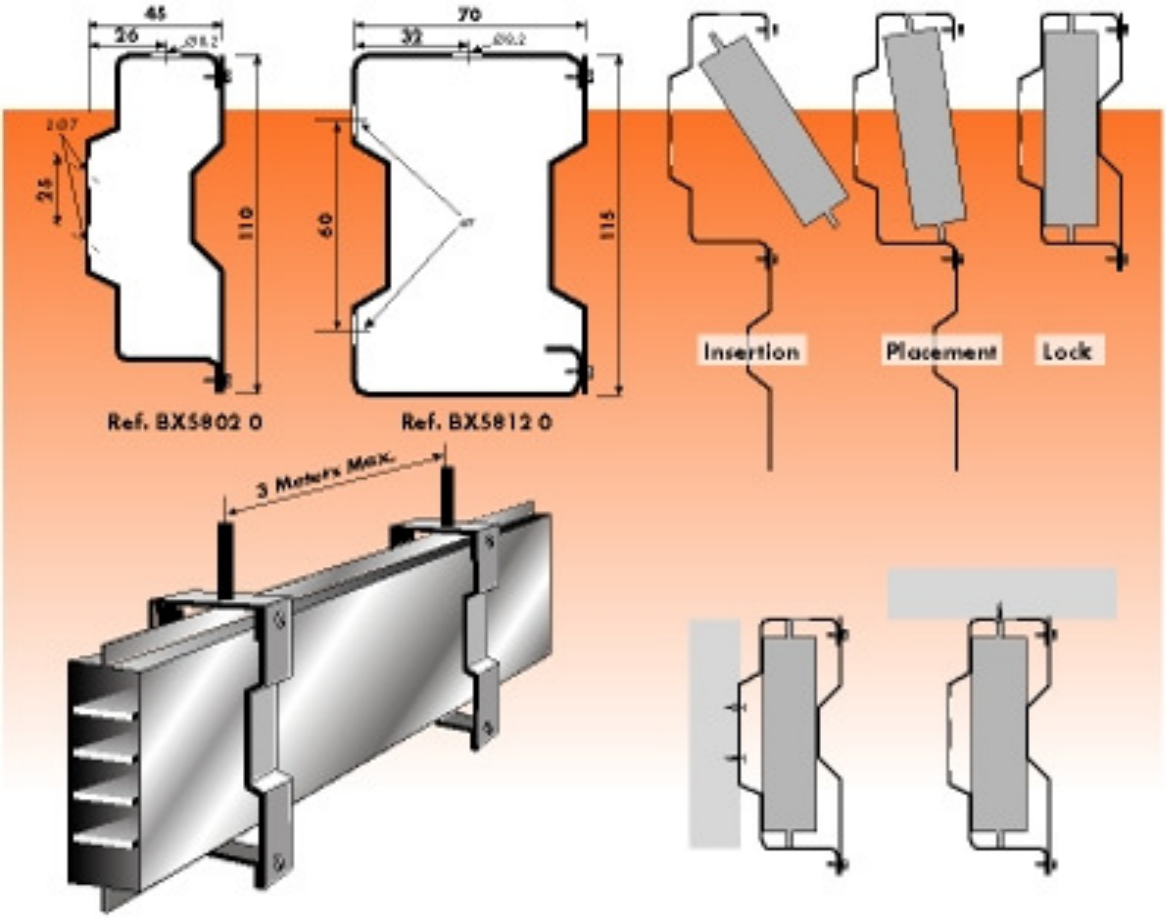


Ref. BX5995 0

Type: 50 A max.
Sym DIN rail for
E 33 fuses
Weight 800 gr.
Dimensions: 260x110x110 mm
IP. 51

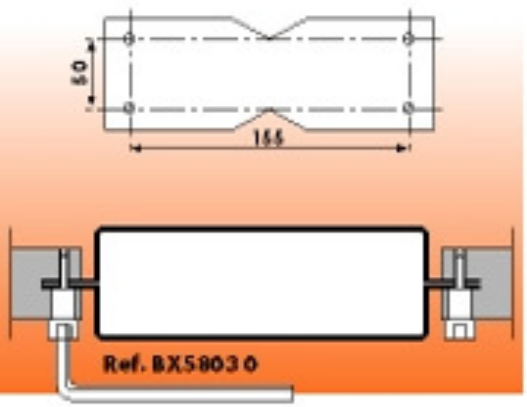
Horizontal installation stirrup

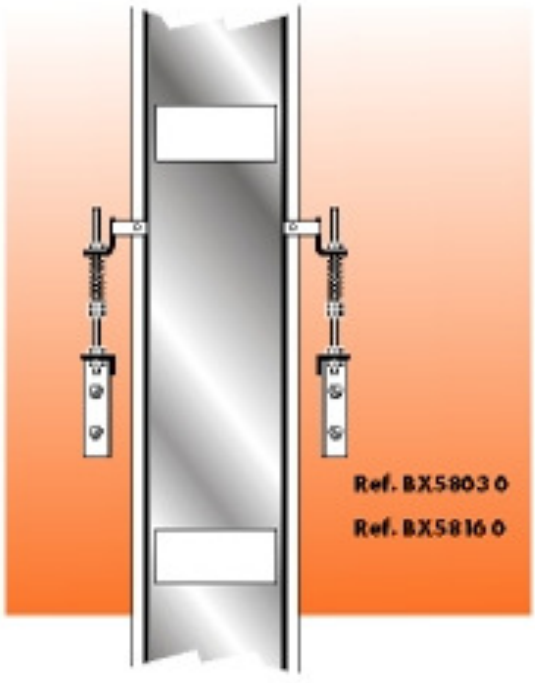
These stirrups are designed in such a way that busduct can be hanged from the ceiling or fixed on the wall.

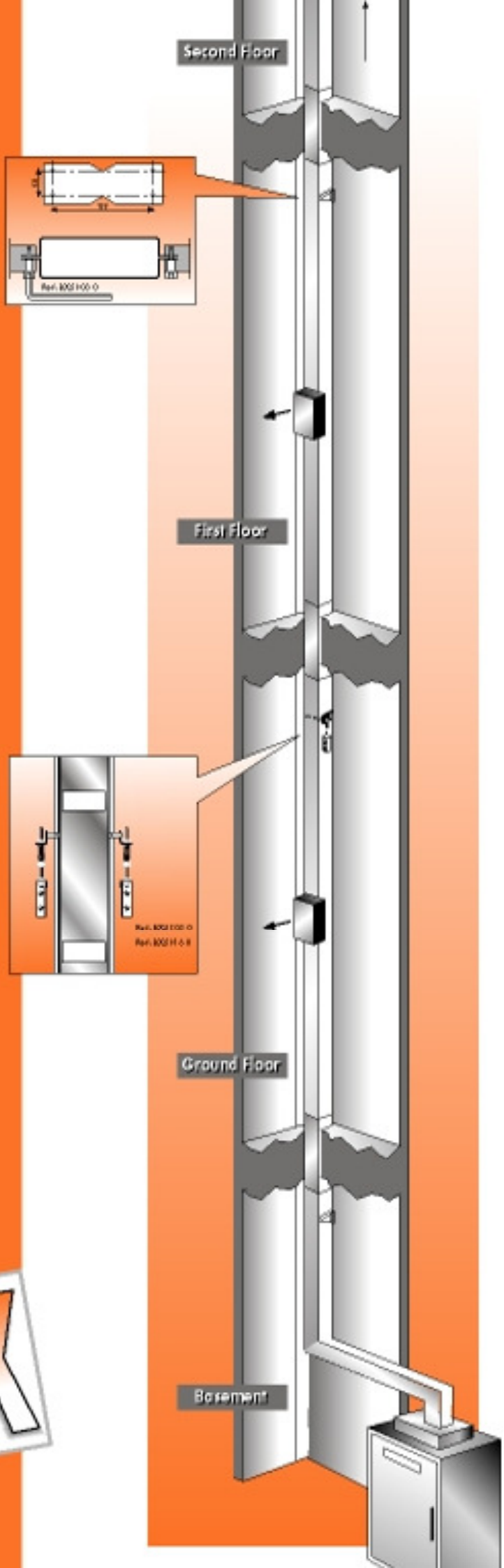


Vertical installation stirrups:

Vertical stirrups are designed in two types, fixed type for vertical installation and spring type for busduct riser installation in multistory buildings.







Riser Type

BX busducts are widely utilized as main as well as emergency power distribution in multistory residential, commercial and office buildings.

Technical details

A- Nominal current

Nominal current based on different loads are chosen from the following table:

Housing Dimensions (mm)	22x80			44x80	
Rated current/distributed load	45	70	100	160	200
Rated current/concentrated load	40	63	90	145	180
Conductors cross section	10	13	24	34	60

B- Straight units

- Due to the light weight of busbars and limited current flow, busbar expansion occurs at junctions. No separate expansion unit is required.
- Number of tap-off outlets is determined by application specification. Generally, at least one outlet point is provided for every three meter unit.
- An indicator marks the direction of busduct installation. All tap-off box covers open downwards.
- Fire barrier elements may be installed at any desired location.

C- Vertical stirrups

For vertical holding of riser busducts, a string type vertical stirrup is used to separate busduct's movements from that of the building's.

D- Tap-off boxes

All types of standard BX tap-off boxes can be used with riser busduct without the need for extra parts.

In cases where the tap-off box is feeding the power meter unit on each floor, all necessary precautions will be taken to attach the tap-off box to the busduct, according to the regional electricity company recommendations.

GITAL

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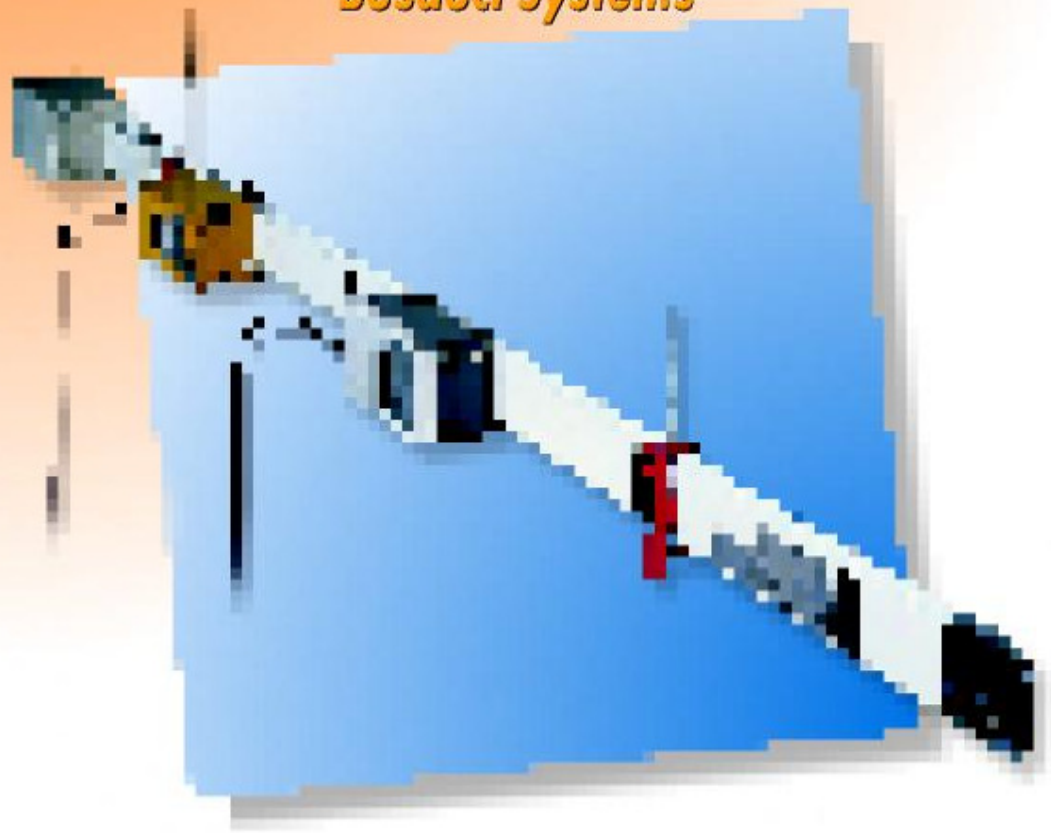
Electrical Prefabricated Busduct Systems

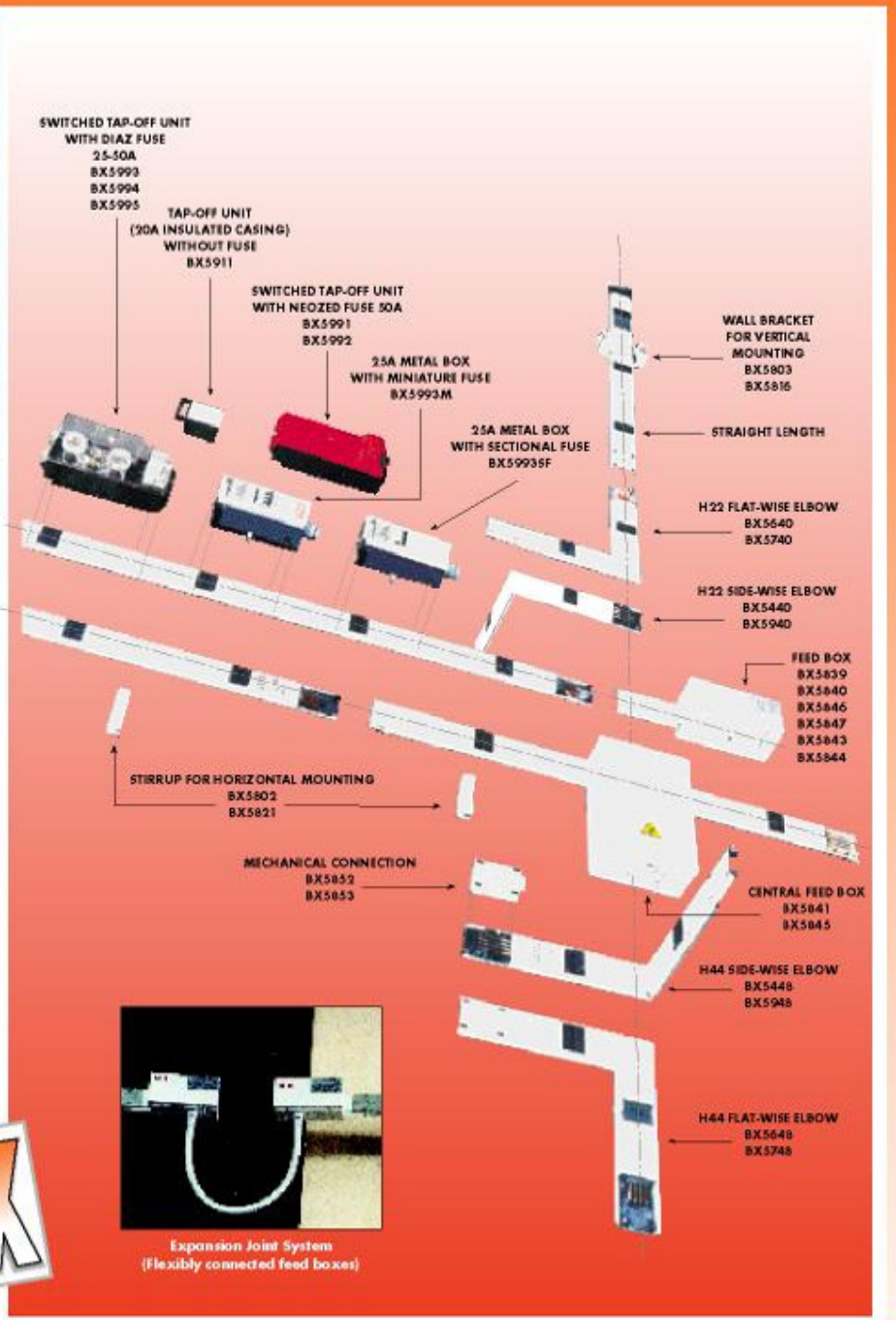


Low Power Distribution Busduct

BX

40 to 200 A

Busduct Elements



Expansion Joint System
(Flexibly connected feed boxes)

BX

General Applications

Industrial

Industrial

Risers (for multi-story buildings)

Risers

Laboratories

Workshops

BX

Parts

DESCRIPTION	REF.	REF.	REF.	REF.	REF.
Straight Length	h 22 x 80			h 44 x 80	
	40 A	63 A	100 A	160 A	200 A
3P+PE 3m	*5364	*5366	*5360	5337	● BX 5338
3P+N+PE 3m	*5354	*5356	*5350	–	–
3m	5344	5346	5340	5347	5348
2m	5244	5246	5240	5247	5248
1m	5144	5146	5140	5147	5148
0.33m	●►	●►	5040	●►	5048
* Space between windows expanded from 33cm to 66cm					
Feeding Unit 3P+N+PE	Box 1 (Terminals 50mm)		5839		
	Box 2 (Terminals 50mm)		5840		
	Box 1 (Terminals 95mm)		5846	Box 1	5843
	Box 1 (Terminals 95mm)		5847	Box 2	5844
	Central Box		5841	Central Box	5845
Elbow - Tee 3P+N+PE	Elbow Sidewise 1		5440	Elbow Sidewise 1	5448
	Elbow Sidewise 2		5940	Elbow Sidewise 2	5948
	Elbow Flatwise 1		5640	Elbow Flatwise 1	5648
	Elbow Flatwise 2		5740	Elbow Flatwise 2	5748
	Tee Flatwise		5540 F	Tee Flatwise	5548 F
	Tee Sidewise		5540	Tee Sidewise	5548
Accessories	End Cover		5801	End Cover	5811
	Fixing Stirrup		5802	Fixing Stirrup	5821
	Fixing Stirrup for Vertical Mounting		5803	Fixing Stirrup for Vertical Mounting	5816
	Supplementary Fire Barrier		... A	Supple. Fire Barrier	... A
	Mechanical Connection		5852	Mechanical Connect.	5853
	Window Shutter		5804	IP20 ⟶ IP51	–
	Supplementary Earth		... B	●►	... B
Tap-Off Unit 3P+N+PE	20A Insulating Casing		Without Fuse		5911
			With Fuse		5912
	Switched Tap-Off Insulating Casing		With Neozed Fuse Holder 16A		5991
			With Cylinder Fuse Holder 50A		5992
			With Diazed Fuse Holder 25A		5993
			With Diazed Fuse Holder 50A		5994
	20A Metal Casing		3 PC 16A (2+PE)		5984
			2 Sockets 20A (3P+N+PE)		5985
	25A Metal Casing		With Diazed Fuse Holder 25A		5993 S
			With Cylinder Fuse Holder 25A		5993 SF
	40A Metal Casing		With Cylinder Fuse Holder 40A		5992 SF
			With Diazed Fuse Holder 40A		5994 S
			1 Socket 32A (3P+N+PE)		5972 N

● When ordering add "BX" in front of reference number.

General

One of the best solutions for electrical power distribution to indoor machineries is prefabricated, pre-cabled electrical systems called Busduct, Busway or Busbar Trunking. This replaces conventional system of cable trays, cables, and distribution panels.

Low power distribution busduct, BX, with nominal currents of 40 to 200 amps, 3 phase, 500 volts, complies with IEC 439-2 standard and are suitable for requirements of industrial sites, workshops, laboratories, commercial buildings and as riser for multistory buildings.

Each piece consists of 4 conductors suitably insulated copper busbars, housed in galvanized steel with a continuous earth link system.

The busduct is manufactured in standard lengths with evenly spaced tap-off points. Different types of stirrups, fixing elements and special units make installation and adjustments of the busducts possible. Tap-off boxes with suitable protection alternatives for feeding electrical machineries are available in few sizes.

In general, busduct advantages compared with conventional distribution systems can be summarized as:

1- Metal casing, suitable insulation, tap-off outlets, plugs and earth connection system (PE), form a reliable, safe and secure product.

2- Quality controls are based on IEC standards.

3- Busduct parts are interconnected easily and electrical conductivity is ensured at all connecting points.

4- Large number of tap-off points ensure electrical supply at any required location.

5- Installation is much simpler compared to conventional methods, resulting in very low installation costs.

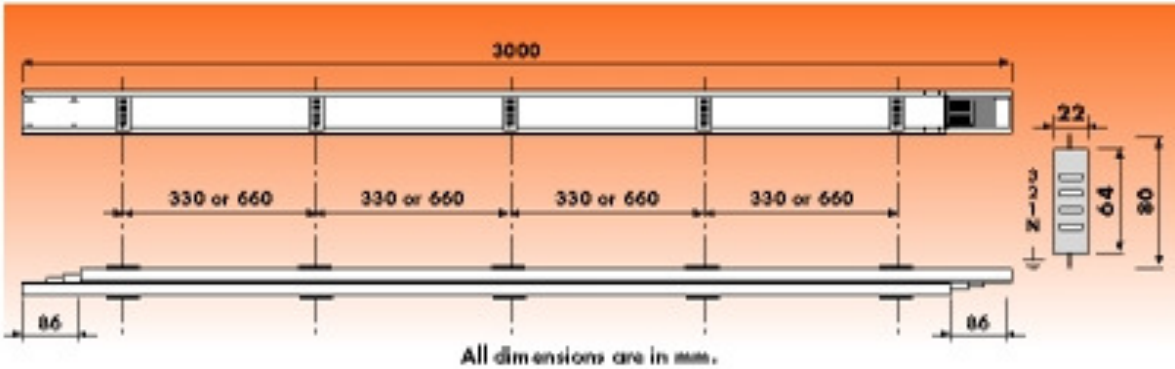
6- Combination of busduct parts is regarded as an investment that can easily be reused at other locations.

7- The installed system is easily modified or expanded.

Electrical Characteristics

Housing		22 x 80 (mm)			44 x 80 (mm)	
Rated current (Iz) in amps		40	63	100	160	200
Rated insulation voltage (V)		500			500	
Number of live conductors		3 or 4			3 or 4	
Live conductors cross section in mm^2		10	16	24	54	68
R per phase in mΩ/m (I th)		2.14	1.36	0.91	0.40	0.31
L per phase in mΩ/m		0.132	0.097	0.064	0.051	0.047
Z per phase hot under thermal in mΩ/m		2.14	1.36	0.91	0.40	0.32
Short circuit current capacity in ka	Peak	6.8	11	14	22	25
	RMS	1.5	2	2.5	5	6.5
Average weight	3 cond.	1.8	2	2.2	3.7	4
	4 cond.	1.9	2.2	2.5	4.2	4.5
Degrees of protection IP	without shutter	20			20	
	with shutter	51			30	51

BX



All dimensions are in mm.

Straight Units

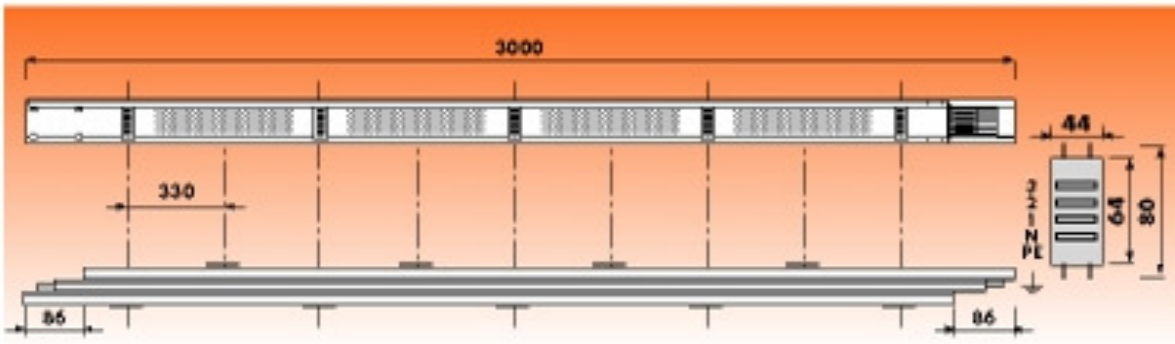
■ The main element for power transfer and distribution in BX busducts, the straight units, are available in standard lengths of 0.33, 1, 2 and 3 meters.

■ Busduct conductors are 4 copper bars, 3 phase plus null (3P+N), suitably insulated.

■ Housing is made from 0.8 hot dip galvanized steel which is also used as suitable conductor for earth system according to NFC 15100 standard.

■ Housing cover ensures high impact level as well as electrical continuity at tap-off points and other locations of element connections.

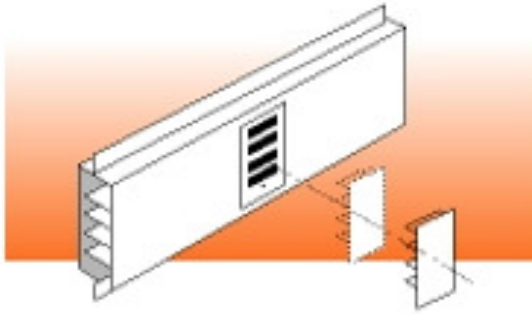
■ Tap-off points for 40 to 100 amps busducts are provided on both sides at 66cm spacings (33cm spacings available on request). For 160 to 200 amps busducts, tap-off spacings are provided at 33cm.



Openings are provided in the 200 amp busduct to ensure good ventilation

Tap-Off Point Shutter

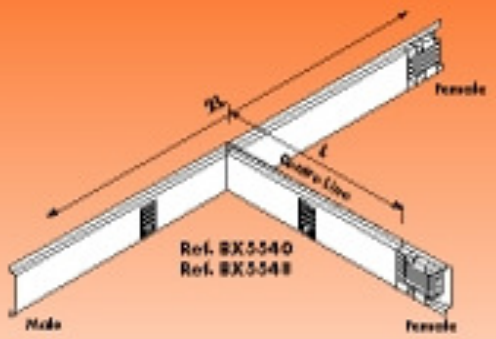
■ Protection degree is IP 20 in general but if tap-off shutter is used to cover the tap-off window, it will rise the protection degree to IP 51.

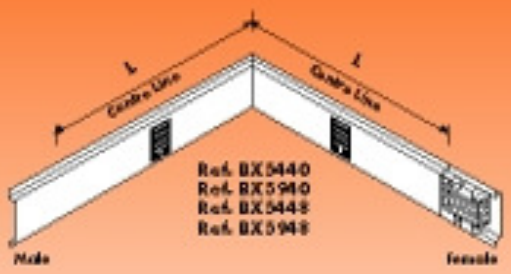


Special Units

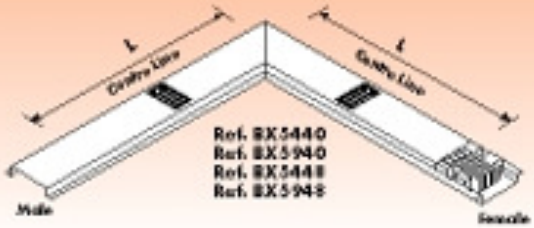
Sidewise and flatwise elbows as well as "T" units are supplied in dimensions shown below.

Other special units are supplied on order.



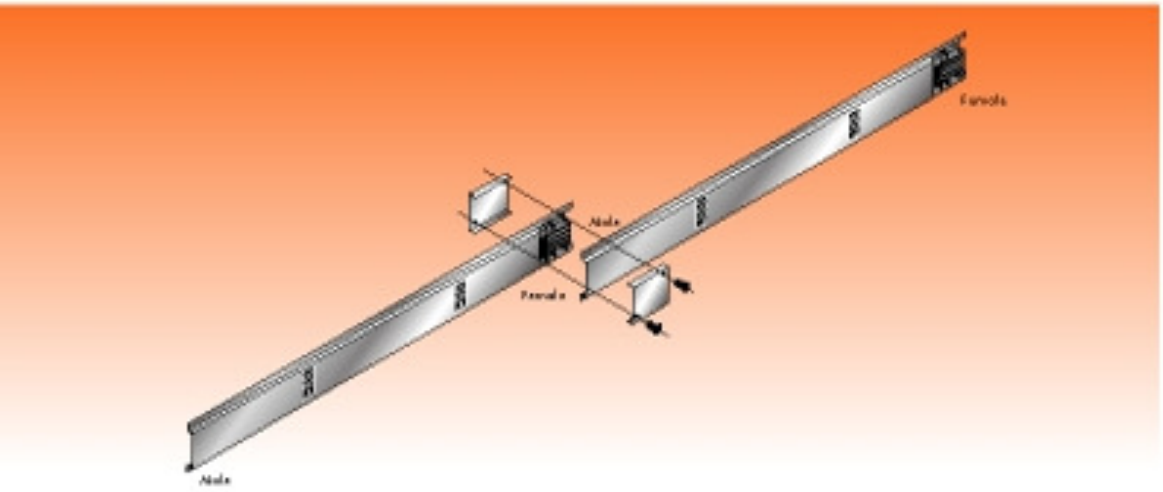


L=32.2 cm same for 100 A and 200 A



Mechanical connections

Two busduct units are mechanically connected by means of two galvanized steel sleeves of 2mm thickness with nuts and screws.



End Piece

End pieces are used to close the busduct's line.