BD2
Busbar Trunking System
160A to 1250A

SIVACON 8PS

SIEMENS

BD2 System – 160 ... 1250 A

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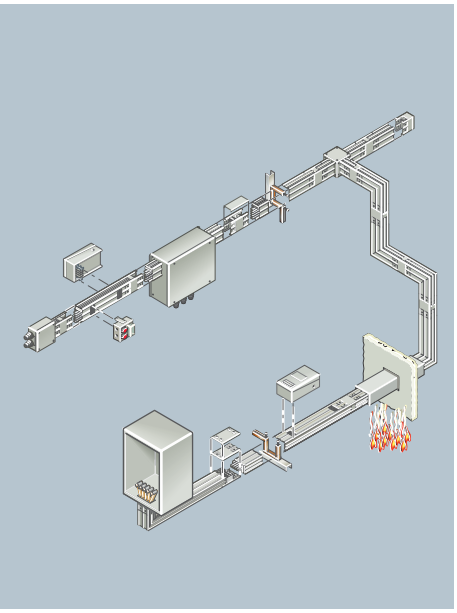
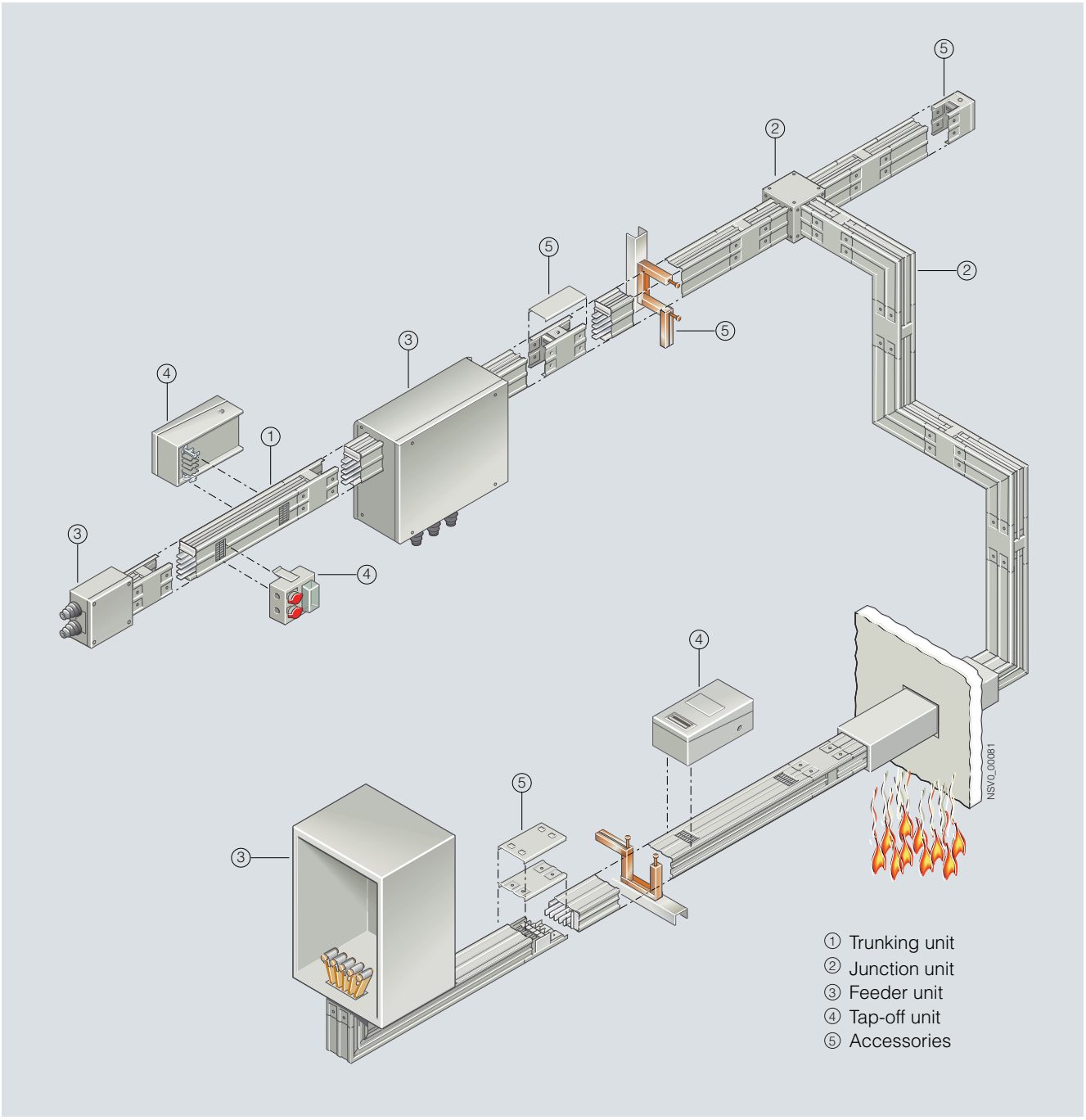


Introduction

Overview



Introduction

Version

Type-tested low-voltage switchgear and controlgear assembly (TTA) according to

- IEC/EN 60439-1
- IEC/EN 60439-2

Degree of protection

- Trunking units IP52 (standard), feeder units and tap-off units IP54
- Increased degree of protection to IP54 or IP55 with optional equipment for operation in harsh industrial environments

Components

Straight trunking units

- Without or with fire protection
- 5-wire system
- Busbars made of copper or aluminum
- Standard lengths of 3.25 m, 2.25 m and 1.25 m
- Selectable lengths from 0.5 m to 3.24 m
- Tap-off points
  - None
  - On two sides offset every 0.25 m or 0.5 m
- Fire protection: fire resistance class S90 and S120 according to DIN 4102, Sheet 2 to 4

Junction units

- Edgewise or flat
- With or without fire protection
- L-enclosure without or with configurable angle
- Z-enclosure
- T-enclosure
- K-enclosure
- Flexible junction units

Feeder units

- Entry/end feeder unit
- Feeder unit with switch disconnector
- Center feeder unit
- Bolt terminal
- Cable entry from 1, 2 or 3 sides
- Distribution board feeder unit

Tap-off units

- Up to 25 A
  - Molded-plastic enclosure
  - Double anti-rotation feature
- Up to 63 A
  - Sheet-steel enclosure, hot-galvanized, cover with powder-spray paint finish
  - Double anti-rotation feature
- Up to 125 A
  - Sheet-steel enclosure, hot-galvanized, cover with powder-spray paint finish
  - Compulsory order of operation
  - Double anti-rotation feature
- Up to 630 A
  - Sheet-steel enclosure, hot-galvanized, cover with powder-spray paint finish
  - Tap-off unit partitioned according to function
  - Enclosure for protective devices
  - Enclosure for power pick-up
  - Double anti-rotation feature

Ancillary equipment units

- For 8 modular widths (MW)
- With or without device installation unit, cover powder-coated

Accessories

- End flanges
- For degree of protection IP54 or IP55
  - Flange for edgewise mounting position
  - Flange for flat mounting position
  - Flange for vertical mounting position
  - Additional components for tap-off units
- For fixing
  - Universal fixing bracket for edgewise or flat mounting position
  - Fastening elements for vertical bars, for wall or ceiling mounting
- Joint blocks

Benefits

- Easy and quick planning
- Time-saving and economical mounting
- Reliable and safe operation
- Flexible modular system with simple solutions for every application
- Early planning of the power distribution system without exact knowledge of load locations
- Early readiness for operation thanks to fast and simple mounting
- Innovative design: No more compensation boxes to compensate elongation.
- Codable tap-off units and tap-off points
- Sealable throughout
- Optional equipment for increasing the degree of protection to IP55 for extreme ambient conditions.

Introduction

Design

Trunking units

Power is transferred through nickel-plated and tinned aluminum busbars as well as tinned copper busbars.

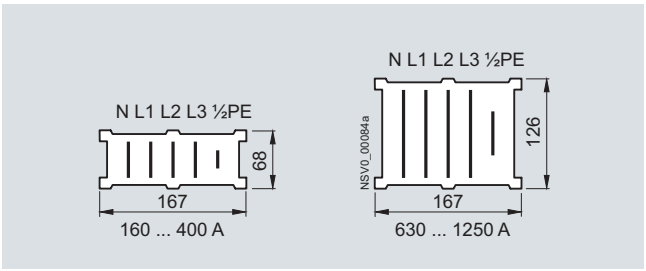
The low inherent impedance and large surface area of the busbars limit the heat build-up.

The result is a low transmission loss and a low voltage drop.

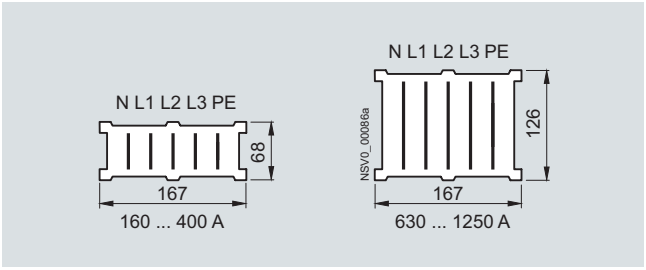
Enclosures

The enclosure is made of hot galvanized steel with a paint finish. Color: RAL 7035 (light gray).

Protected to IP52 degree of protection as standard. This can be increased to IP54 or IP55 with additional parts.



BD2A-2, BD2C-2 trunking units



BD2A-3, BD2C-3 trunking units,
junction units, BD2A-..., BD2C-... feeder units

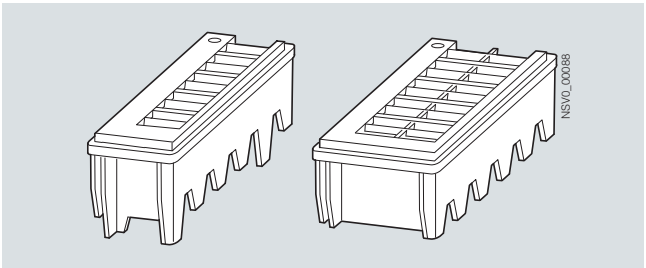
Tap-off points

The busbar support and tap-off point form a unit.

The leading/delayed PE contact at the tap-off unit provides positive opening or closing of the tap-off point.

The tap-off point can be coded at the factory on request, together with the tap-off unit. The tap-off point is sealable.

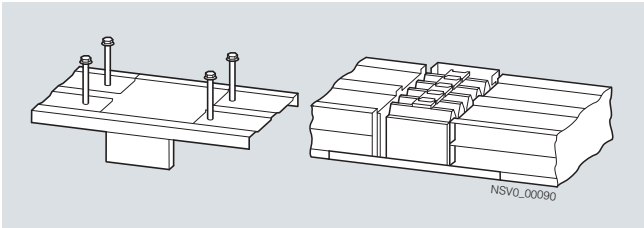
BD2-AK1, BD2-AK2(3), BD2-AK02(03) and BD2-AK04 tap-off units are plug-in types for all systems, BD2-AK05(06) tap-off units are only for systems from 630 A.



Left: Tap-off point for BD2.-160 to BD2.-400
Right: Tap-off point for BD2.-630 to BD2.-1250

Connections

Trunking units are connected quickly and securely via the joint block.

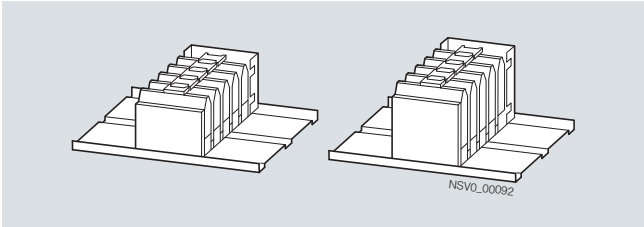


Left: flange cover
Right: joint blocks

Joint blocks

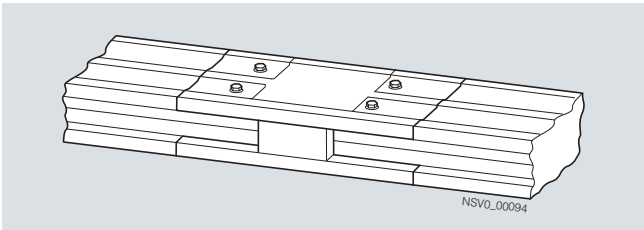
Features:

- Even holding pressure ensures completely secure connection of all five busbars. Quick mounting up to 400 A with plug-in terminal, from 630 A to 1250 A with bolt terminal.
- The built-in expansion compensation absorbs the heat expansion of the busbars.
- The terminal can be tightened using conventional tools.
- Two sizes are available for the whole system.
- The joint block is supplied as an integral part of the trunking units and junction units.



Left: BD2-400-SK for 160 to 400 A
Right: BD2-1250-EK for 630 to 1250 A

Four screws provide the mechanical connection to the enclosure.



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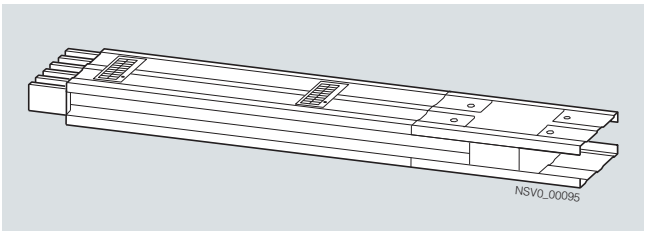
Straight trunking units



Equipment

The trunking units are available in the following versions:

- Without tap-off points
- With tap-off points on both sides at intervals of 0.5 m, offset by 0.25 m (BD2.-2, BD2.-3).

One joint block is included in scope of supply.

Fire barriers can be fitted (see "Fire barriers", page 5/6).

The following lengths are available:

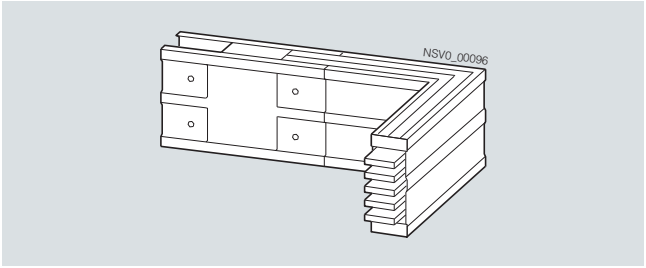
- 3.25 m
- 2.25 m
- 1.25 m
- Optional lengths

Number of tap-off points

Length m	Tap-off units on both sides
1.25 ... 2.25	4 ... 8
2.26 ... 3, 25	8 ... 12

On optional lengths, it may not be possible to fit tap-off units to all tap-off points.

Junction units



Equipment

Flexible copper conductors for the flexible junction units.

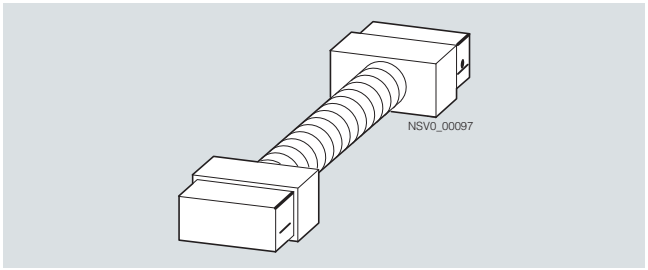
The L-units with configurable angle are available with a fixed angle of 90° or any angle in 5° increments from 85° to 175°.

All L- and Z-units are available with

- standard limb lengths of 0.36 m
- one or two limb lengths selectable from 0.36 m to 1.25 m.

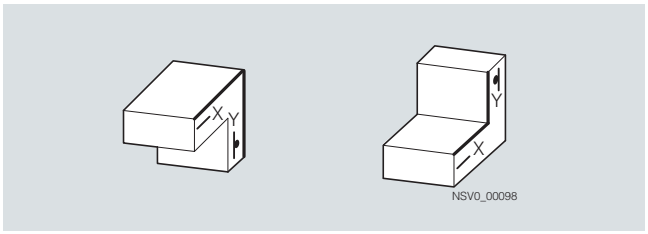
The junction units are supplied with one joint block.

Flexible junction units

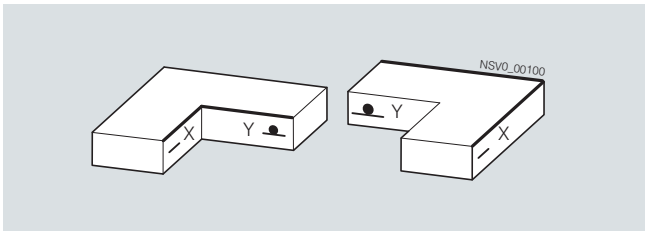


BD2-...-R

L-units

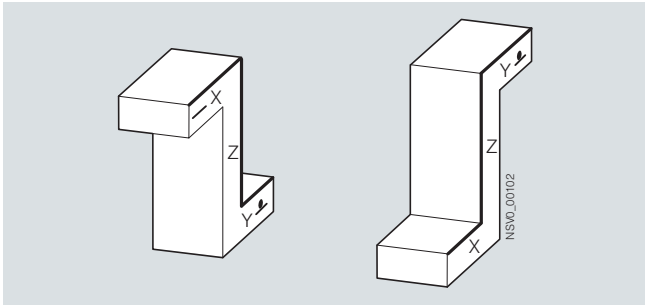


Left: Knee, rear;
BD2.-...-LH, BD2.-...-LH-X*, BD2.-...-LH-Y*, BD2.-...-LH-X*/Y*
Right: Knee, front;
BD2.-...-LV, BD2.-...-LV-X*, BD2.-...-LV-Y*, BD2.-...-LV-X*/Y*

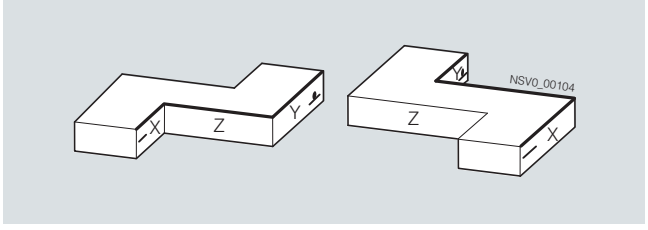


Left: Elbow, right;
BD2.-...-LR, BD2.-...-LR-X*, BD2.-...-LR-Y*, BD2.-...-LR-X*/Y*
Right: Elbow, left;
BD2.-...-LL, BD2.-...-LL-X*, BD2.-...-LL-Y*, BD2.-...-LL-X*/Y*

Z-units



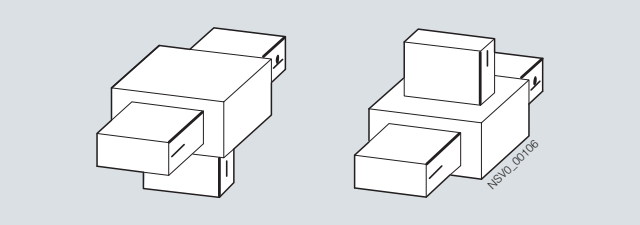
Left: BD2.-...-ZH-Z*, BD2.-...-ZH-X*/Y*/Z* (rear)
Right: BD2.-...-ZV-Z*, BD2.-...-ZV-X*/Y*/Z* (front)



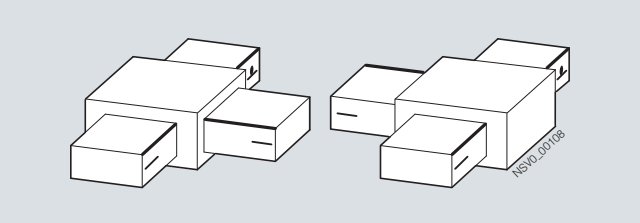
Left: BD2.-...-ZR-Z*, BD2.-...-ZR-X*/Y*/Z* (right)
Right: BD2.-...-ZL-Z*, BD2.-...-ZL-X*/Y*/Z* (left)

Introduction

T-units

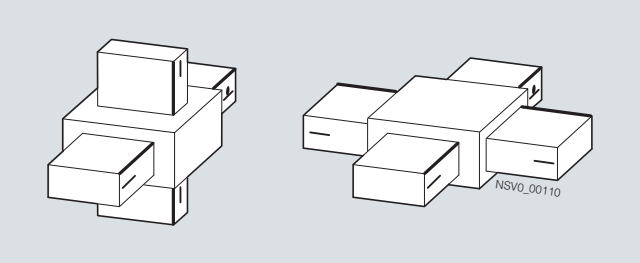


Left: BD2.-...-TH (rear)
Right: BD2.-...-TV (front)



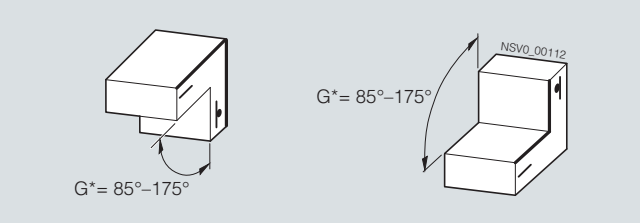
Left: BD2.-...-TR (right)
Right: BD2.-...-TL (left)

K-units

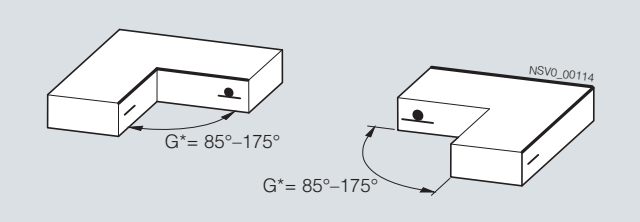


Left: BD2.-...-KVH (front + rear)
Right: BD2.-...-KRL (right + left)

L-units with engineered angle from 85° to 175°



Left: Knee, rear; BD2.-...-LH-G*, BD2.-...-LH-X*-G*, BD2.-...-LH-Y*-G*, BD2.-...-LH-X*/Y*-G*
Right: Knee, front; BD2.-...-LV-G*, BD2.-...-LV-X*-G*, BD2.-...-LV-Y*-G*, BD2.-...-LV-X*/Y*-G*



Left: Elbow, right; BD2.-...-LR-G*, BD2.-...-LR-X*-G*, BD2.-...-LR-Y*-G*, BD2.-...-LR-X*/Y*-G*
Right: Elbow, left; BD2.-...-LL-G*, BD2.-...-LL-X*-G*, BD2.-...-LL-Y*-G*, BD2.-...-LL-X*/Y*-G*

Fire barriers

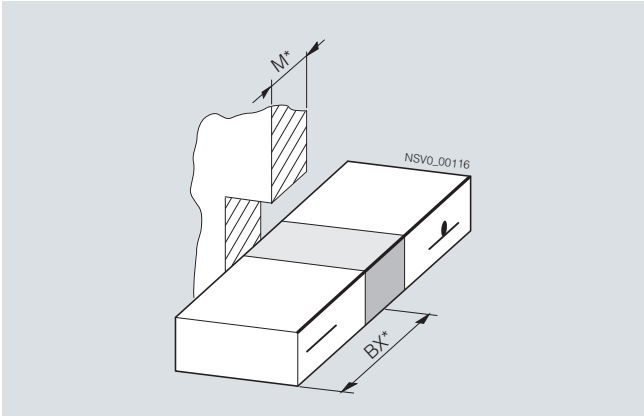
If the busbar trunking system is routed through a fire wall or ceiling, a fire barrier must be fitted. Depending on the customers requirements, Siemens offers fire barriers with a fire resistance rating of S90 and S120.

Standard lengths, optional lengths and junction units are supplied with fire protective equipment as specified in the ordering data (see "Fire barriers", page 5/94).

Factory-fitted equipment:

- Internal fire barriers
- External fire barriers, if required
- Documentation (certificate of approval, wall-mounted signs and declaration of conformity), for Germany as separate kit BD2-S90-ZUL-D or BD2-S120-ZUL-D

Mineral based mortar or ZZ fire protection sealant TS90 (see "Fire barriers", page 5/101) for sealing joints between the busbar trunking element and component must be supplied by the customer.

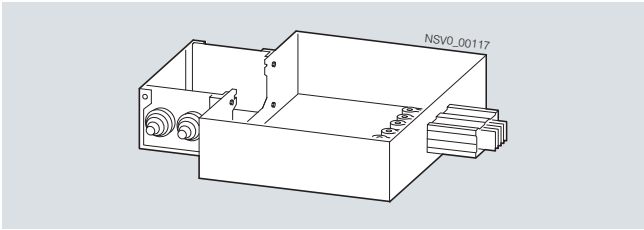


Fire barrier for trunking units and junction units

For S90: BD2A-...	For S120: BD2A-... or BD2C-...
+BD2-S90-BX*-M*	+BD2-S120-BX*-M*
+BD2-S90-BY*-M*	+BD2-S120-BY*-M*
+BD2-S90-BZ*-M*	+BD2-S120-BZ*-M*

Feeder units

For the incoming supply to BD2 runs, various feeder unit versions are available to meet different requirements.

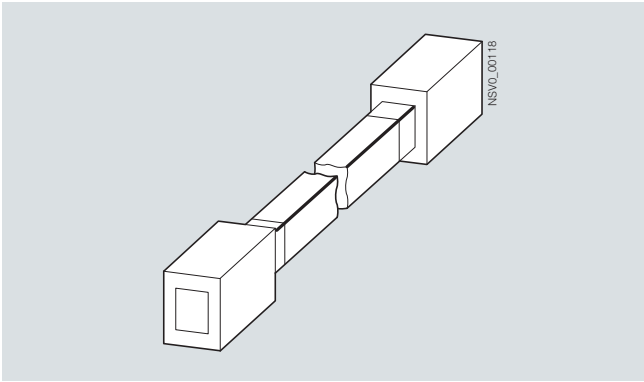


Example: end feeder unit with connected cabling box

Features:

- Cables are introduced from the front face.
- Cable entry plate (aluminum) for single-core cable entry.
- Cable connection is via bolts. The bolts are included in scope of supply.
- The factory-fitted jumper between PE and N can be removed for connection of five-core cables.
- Feeder units are supplied without joint block.

For double-ended infeed, an additional joint block is required.



BD2.-...-EE double-end feeder unit

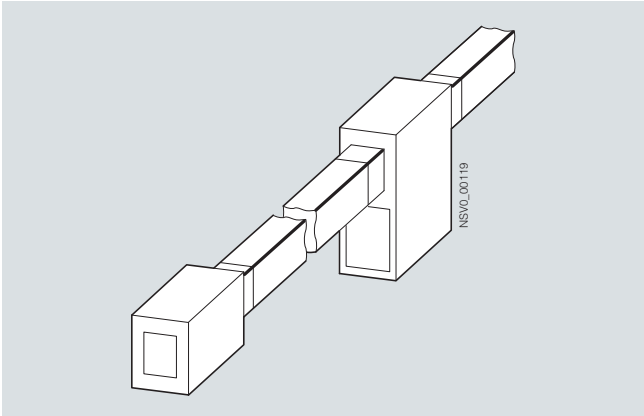
To distribute large amounts of power with small busbar cross-sections, it is sensible to use a center feeder unit in some cases. It is mounted in the middle of a busbar line between two trunking units. The left run and the right run are supplied simultaneously with one supply cable. It is thus possible to feed in 2000 A with one 1000 A center feeder unit. In this case, special consideration must be given to the overload and short-circuit protection of the busbar system.

If the short-circuit protection is not assured by the upstream protective device and/or the overload is not due to the type and number of loads, additional protective measures are required.

Two options are possible:

- Use of a center feeder unit with one coupling unit on the right and left respectively next to the feeder unit. The coupling unit must be equipped with a protective device (fuse or circuit breaker) that ensures the short-circuit and overload function.
- Use of two end feeder units that are arranged centrally in the busbar line. The two supply cables are separately fused in the distribution system.

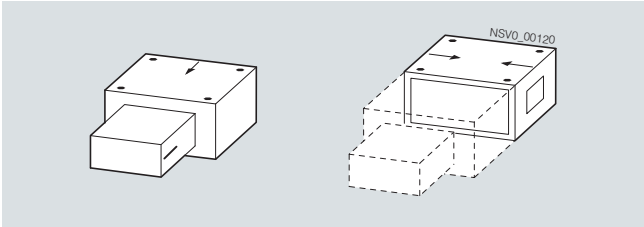
If end feeder units are used in addition to center feeder units, an additional joint block is required for each end feeder unit.



BD2.-...-EE end feeder unit and BD2.-...-ME center feeder unit

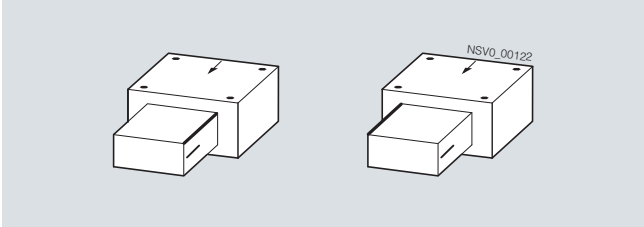
End feeder units

Cable entry is from the front; cable entry from the side is possible for the version with a BD2.-...-EE-KR cabling box.

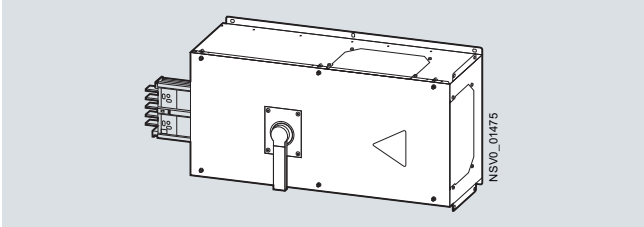


BD2.-...-EE and BD2.-...-EE-KR end feeder units

The phase sequence can be changed on site by rotating the busbar pack.



End feeder units with switch disconnector

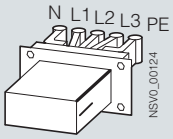


End feeder units with switch disconnector

Introduction

Distribution board feeder units

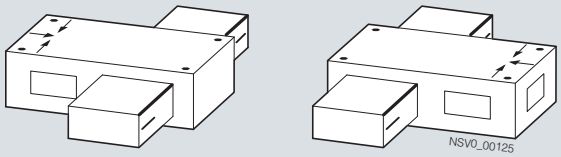
For BD2 connection to a distribution board.



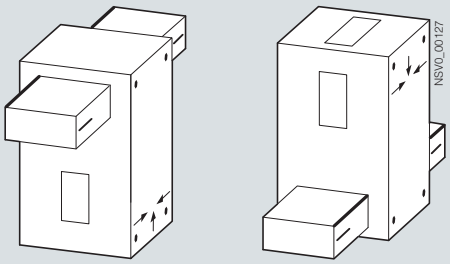
BD2.-...-VE distribution board feeder unit

Center feeder units

Cable entry is possible from 3 sides. The phase sequence can be changed on site by rotating the busbar pack.



BD2.-...-ME center feeder units (PE left and PE right)



BD2.-...-ME center feeder units (PE rear and PE front)

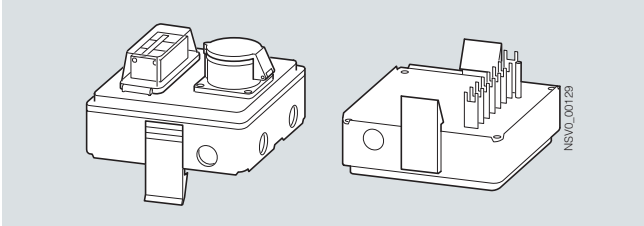
Tap-off units

Tap-off units are available in a number of versions for different applications.

BD2-AK1 molded plastic-enclosed tap-off units up to 25 A, freely assignable, with fuses, miniature circuit breakers and socket outlets

Features:

- Molded-plastic enclosure, color light gray, similar to RAL 7035
- Transparent cover for the protective devices
- During mounting and disassembly of the tap-off units, a load switching capacity of AC-22B up to 400 V is reached
- An anti-rotation feature prevents incorrect mounting
- Power pick-up through silver-plated lyre-shaped contacts
- Cables can be introduced from three sides
- The tap-off unit must be removed from the trunking before the unit can be opened and the cables connected
- Built-in strain relief
- The connecting cables should be supported separately if required



BD2-AK1/CEE165A163

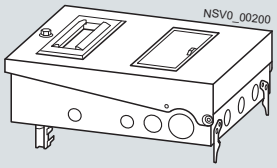
Sheet-steel enclosed tap-off units BD2-AK2 up to 63 A and BD2-AK3 up to 125 A with cover-integrated switch-disconnector

Features:

- Hot-galvanized sheet-steel enclosure and cover with powder-coated finish, color light gray, RAL 7035.
- The tap-off units can be mounted and removed only with their cover open.
- Switch-disconnector integrated into the cover, switching capacity at 63 A AC-22B up to 400 V or at 125 A AC-21B, which ensures that the unit is not live when the cover is open.
- An anti-rotation feature prevents incorrect mounting.
- Cables can be introduced from three sides; use plastic cable glands with strain relief (not in scope of supply).
- Power pick-up via silver-plated lyre-shaped contacts.
- If the PE conductor is used as a PEN conductor, note that the PE contact of the BD2-AK3... tap-off units have only half the cross-section and therefore cannot carry the full rated current.
- The connecting cable should be supported separately if necessary.

Device installation unit:

For installing devices (e.g. miniature circuit breakers) in conformance with DIN 43871, with 8 MW. 1 MW equals a space requirement of 18 mm. Hinged covers on all tap-off units allow device operation from outside.

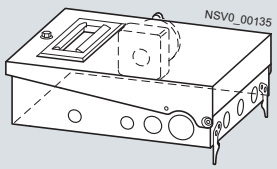


BD2-AK2M2/A323

BD2-AK2 tap-off units up to 63 A, freely assignable, with fuses, miniature circuit breakers and socket outlets

Features:

- Miniature circuit breakers can optionally be operated from the outside (device installation unit with 8 MW; 1 MW = 18 mm)

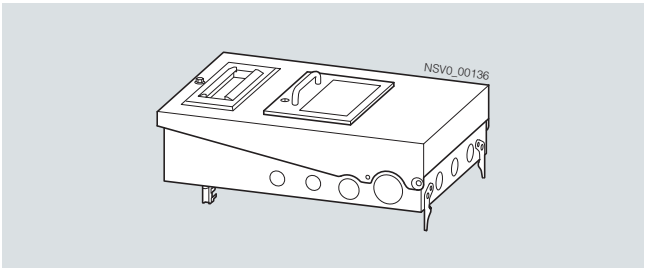


BD2-AK2X/CEE325S33

BD2-AK3 tap-off units up to 125 A
with fuse switch-disconnectors and fuse bases

Features:

- On versions with fuse switch-disconnectors or circuit breakers, the cover is interlocked with these switches and can therefore be opened only when they are switched off.
- On versions with fuse bases, the isolator built into the cover does not disconnect the load. It only removes the voltage from the installed fuse bases when the cover is opened.
- Terminal bolts for cables.

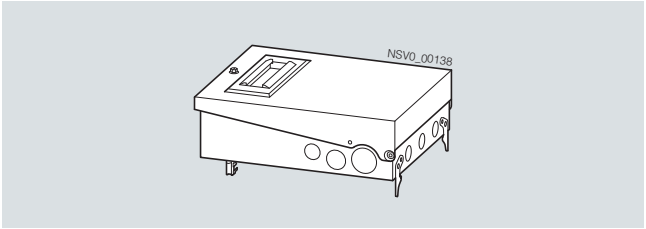


BD2-AK3X/GSTZ00

Tap-off units BD2-AK2 up to 63 A and BD2-AK3 up to 125 A equipped to customer specifications

Features:

- Device installation to customer specification in compliance with the requirements for type-tested low-voltage switchgear and controlgear assemblies (TTA). Configuration, quotations and delivery through your Siemens contacts in our branches.
- Devices mounted on pre-drilled mounting plates, module mounting rails or top-hat rails according to EN 60715.



BD2-AK2...

BD2-AK02 (AK03) sheet-steel enclosed tap-off units
without cover-integrated switch-disconnector

Features:

- Hot-galvanized, sheet-steel enclosure and cover with powder-coated finish, color light gray, RAL 7035.
- The tap-off units can be mounted and removed with their cover open and closed.
- With the cover open the voltage is still applied to the installed devices (test facility). Degree of protection IP20 (finger-safe) is assured.
- Do not mount or remove tap-off units under load.
- An anti-rotation feature prevents incorrect mounting.
- Cables can be introduced from three sides; use plastic cable glands with strain relief (not in scope of supply).
- Power pick-up via silver-plated lyre-shaped contacts.
- If the PE conductor is used as a PEN conductor, note that the PE contact of the BD2-AK03 tap-off units have only half the cross-section and therefore cannot carry the full rated current.
- The connecting cable should be supported separately if necessary.

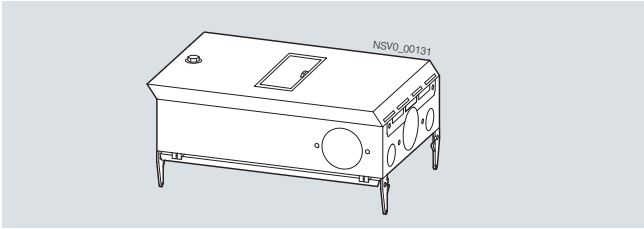
Device installation unit:

For installing devices (e.g. miniature circuit breakers) in conformance with DIN 43871, with 8 MW. 1 MW equals a space requirement of 18 mm. Hinged covers on all tap-off units allow device operation from outside.

BD2-AK02 tap-off units up to 63 A, freely assignable,
with fuses, miniature circuit breaker

Features:

- Miniature circuit breakers can optionally be operated from the outside (device installation unit with 8 MW; 1 MW = 18 mm)



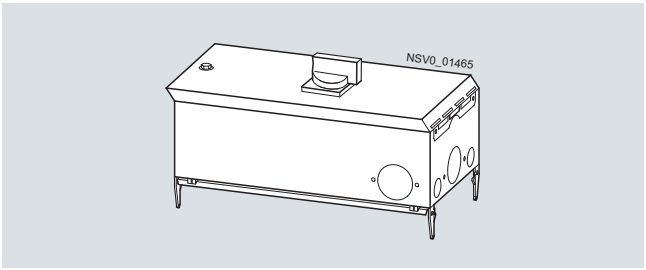
BD2-AK02M2/A323

Introduction

BD2-AK03 tap-off units up to 125 A
with circuit breakers, fuse switch-disconnectors, fuse bases, miniature circuit breakers and fuse-switches

Features:

- On versions with fuse switch-disconnectors or circuit breakers, the cover is interlocked with these switches and can therefore be opened only when they are switched off.
- Terminal bolts for cables
- Miniature circuit breakers can optionally be operated from the outside (device installation unit with 8 MW; 1 MW = 18 mm)

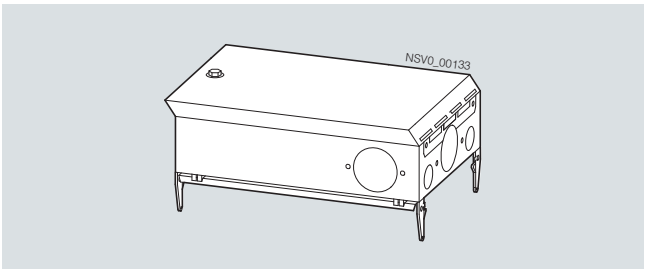


BD2-AK03X/L...

Tap-off units BD2-AK02 up to 63 A and BD2-AK03 up to 125 A equipped to customer specifications

Features:

- Device installation to customer specification in compliance with the requirements for type-tested low-voltage switchgear and controlgear assemblies (TTA). Engineering, quotations and delivery through your Siemens contacts in our branches.
- Devices mounted on pre-drilled mounting plates, module mounting rails or top-hat rails according to EN 60715



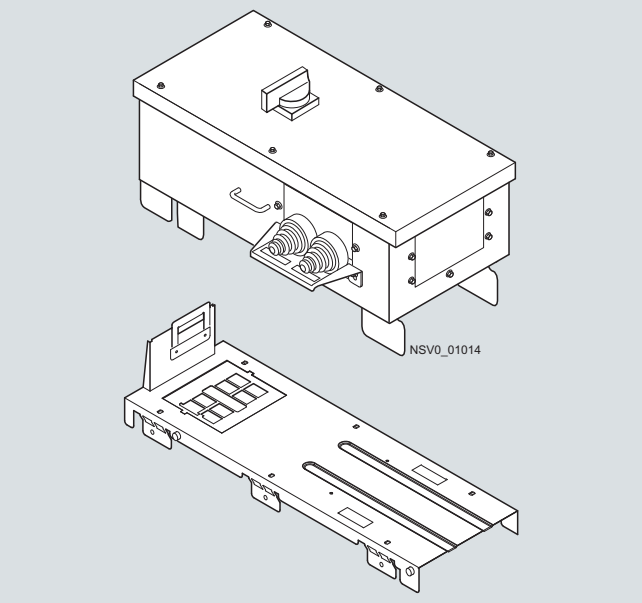
BD2-AK03...

Steel enclosed tap-off units BD2-AK04 up to 250 A and BD2-AK05 up to 400 A and BD2-AK06 up to 630 A without cover-integrated switch-disconnector

Tap-off units BD2-AK04 up to 250 A,
BD2-AK05 up to 400 A and AK06 up to 630 A
with circuit breakers, fuse switch-disconnectors and fuse bases

Features:

- Type BD2-AK05 and BD2-AK06 tap-off units > 250 A can be mounted only on 630 A to 1250 A trunking units.
- Hot-galvanized and powder-coated sheet-steel enclosure, color light gray, RAL 7035.
- The tap-off units can be mounted and removed only with their cover open.
- An anti-rotation feature prevents incorrect mounting.
- Cables can be introduced from three sides; use plastic cable glands with strain relief (not in scope of supply).
- Power pick-up through silver-plated lyre-shaped contacts
- If the PE conductor is used as a PEN conductor, note that the PE contact of the BD2-AK04, BD2-AK05 and BD2-AK06 tap-off units have only half the cross-section and therefore cannot carry the full rated current.
- The connecting cable should be supported separately if necessary.
- On versions with fuse switch-disconnectors or circuit breakers, the cover is interlocked with these switches and can therefore be opened only when they are switched off.
- On versions with fuse bases, the load must be disconnected before the enclosure cover is removed.
- Connections for multi-core or single-core cables are possible.

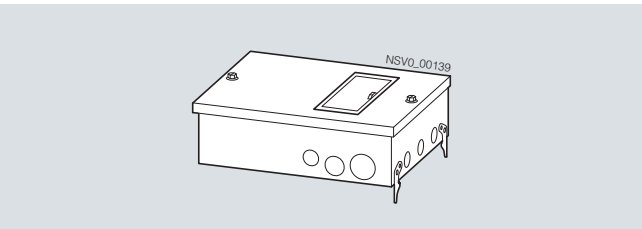


BD2-AK05/LS...

Ancillary equipment units

Features:

- The enclosure is made from hot-galvanized sheet steel.
- Cables can be introduced from 4 sides (use plastic cable glands with strain relief; not in scope of supply).
- Can be combined with tap-off units (BD2-AK02, AK2, AK03, AK3)
- A standard mounting rail is built-in for component mounting.
- 1 size with 8 MW (1 MW = 18 mm; MW = modular width).
- Without or with device installation unit for external operation (1 size with 8 MW).
- Installation of devices (e.g. miniature circuit breakers) in accordance with DIN 43871 possible up to and including 63 A.

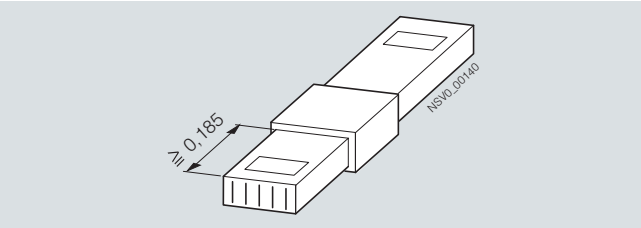


BD2-GKM2/F

Accessories

Protective sleeve

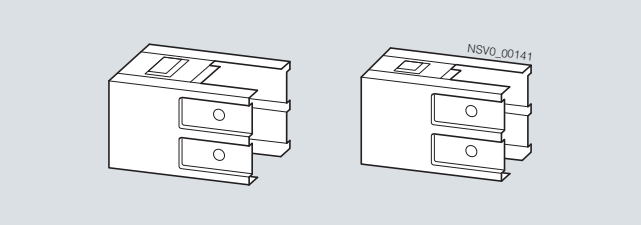
Provides purely mechanical protection for the busbar system when it is routed through walls and ceilings. The protective sleeve can be retrofitted.



BD2-400-D and BD2-1250-D protective sleeve
for currents up to 400 A or from 630 to 1250 A

End flanges

An end flange is required for terminating the busbar line. Two sizes are available.

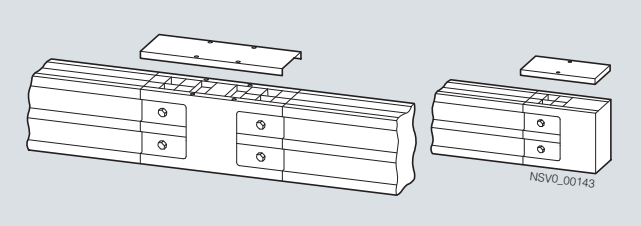


Left: BD2-400-FE end flange for currents up to 400 A
Right: BD2-1250-FE end flange for currents from 630 to 1250 A

Optional equipment for degree of protection IP54

Edgewise mounting position

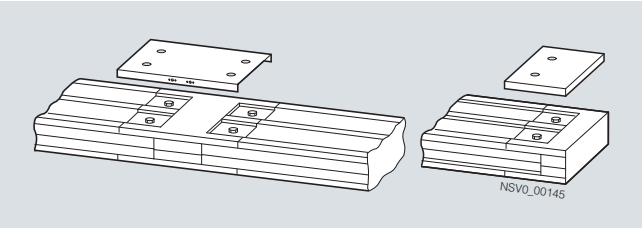
The higher degree of protection is achieved by fitting an additional flange at the connection points and at the end flange.



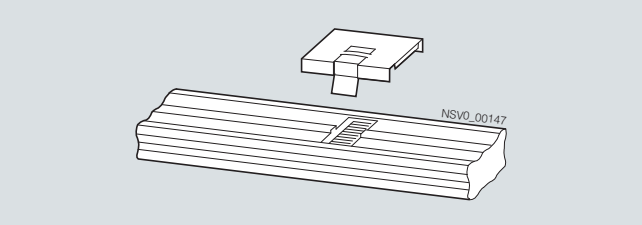
Left: Connection point between trunking units with BD2-...-HF
Right: Connection point between trunking unit and end flange with BD2-...-HFE

Flat mounting position

The higher degree of protection is achieved by fitting an additional flange at the connection points, at the end flange and at the tap-off points.



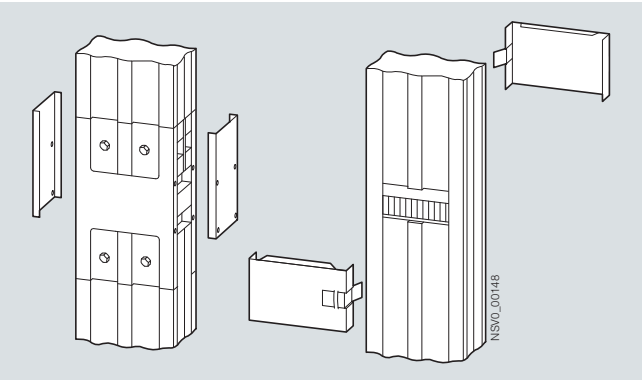
Left: Connection point between trunking units with BD2-FF
Right: Connection point between trunking unit and end flange with BD2-FFE



Tap-off openings with BD2-FAS

Vertical mounting position

The higher degree of protection is achieved by fitting additional flanges at all the connection points and at all tap-off points (front and rear).



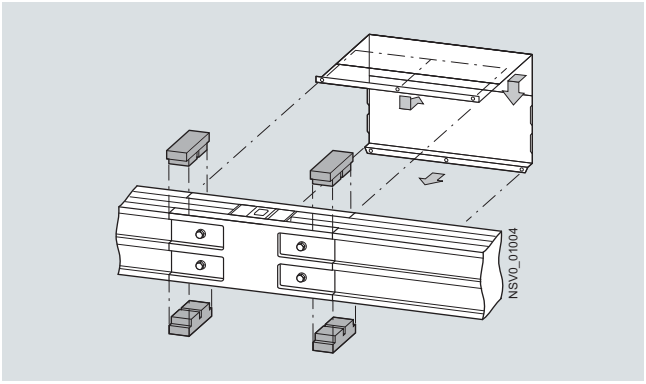
Left: Connection point between trunking units with BD2-...-VF
Right: Tap-off openings with BD2-FAS

Introduction

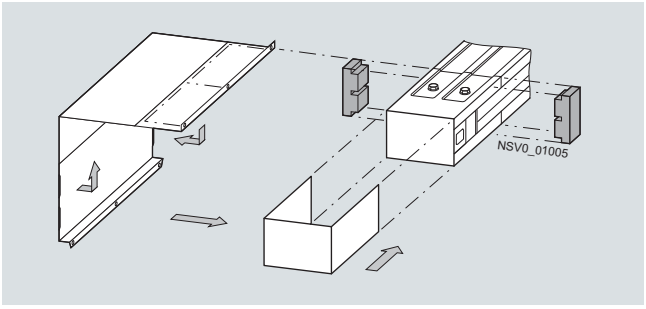
Optional equipment for degree of protection IP55

Trunking units

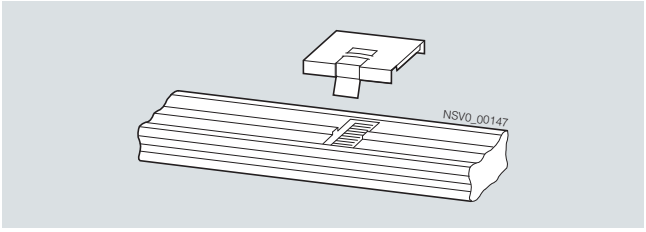
The higher degree of protection IP55 is achieved by fitting additional seals and a flange at the connection points and at the tap-off points.



Connection point between trunking units with BD2-...-FS



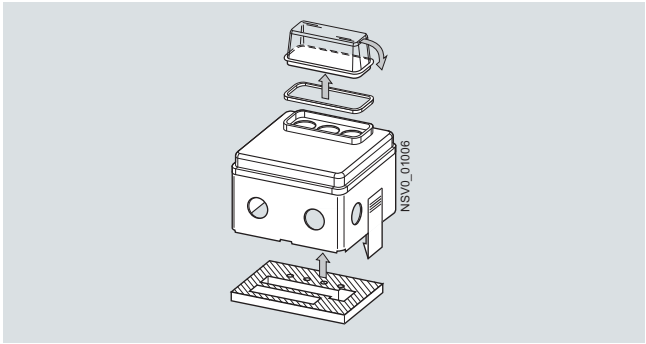
Connection point between trunking unit and end flange with BD2-...-FSE



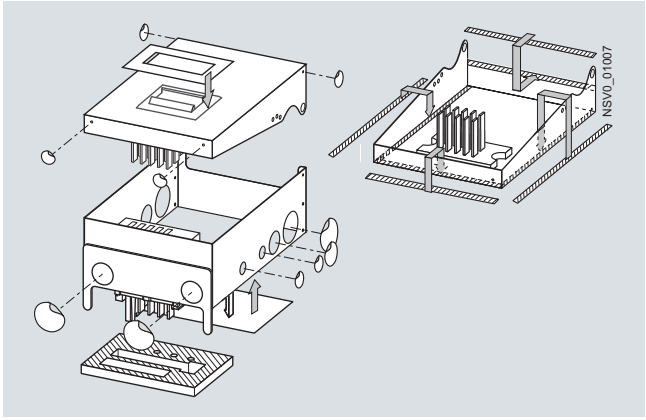
Tap-off openings with BD2-...-FAS

Tap-off units

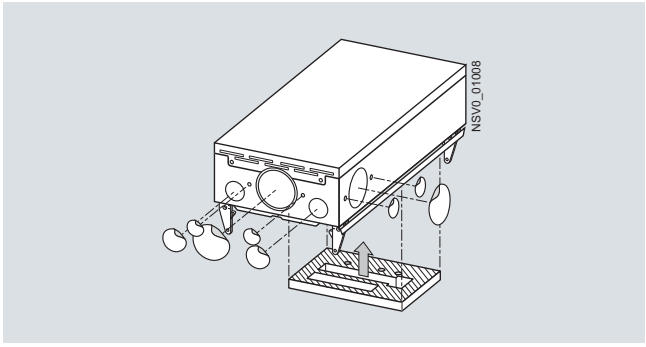
The higher degree of protection IP55 is achieved by fitting additional seals at the tap-off unit.



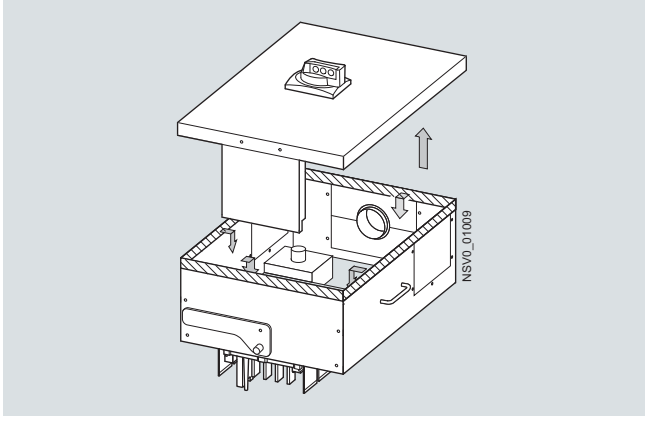
BD2-AK1-IP55



BD2-AK2X(3X)-IP55



BD2-AK02X(03X)-IP55

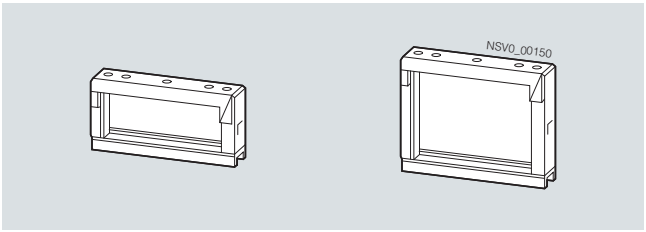


BD2-AK04(05, 06)-IP55

Accessories for fixing

Fixing brackets

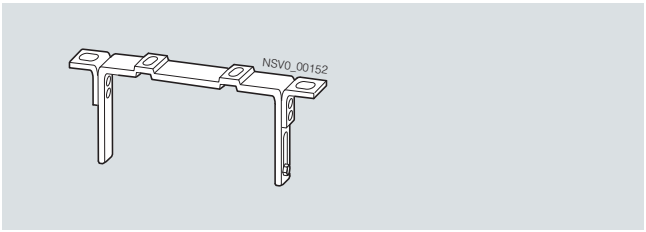
The universal fixing bracket can be used for edgewise and flat mounting of all trunking versions.



BD2-400-BB and BD2-1250-BB fixing bracket
for currents up to 400 A or from 630 to 1250 A

Spacer brackets

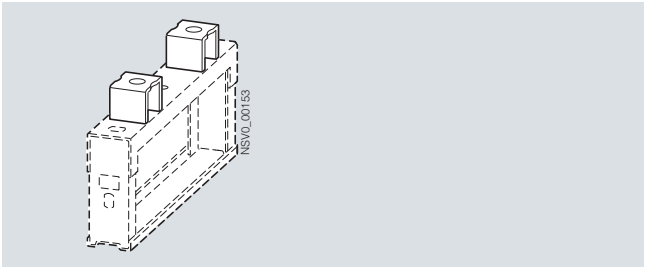
Spacer brackets for compensating building tolerances between trunking unit and wall or ceiling. The spacer bracket slides onto the BD2-...-BB fixing bracket and is secured with screws.
For vertically mounted BD2 runs, it can also be used as an intermediate mounting.



BD2-BD spacer brackets

Spacers

Spacers for compensating wall and ceiling discrepancies between feeder units and trunking units. The spacers clip onto the fixing bracket.



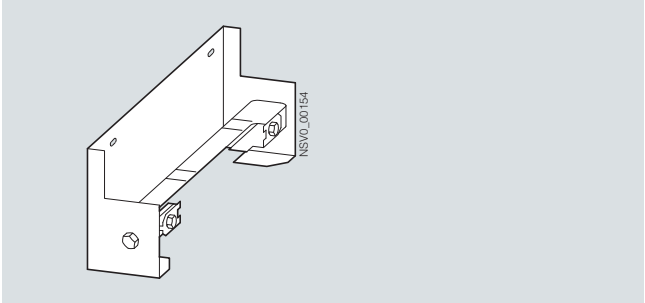
BD2-DSB spacers

Retaining elements for vertical busbar lines

These consist of a wall mounting element and accessories for fixing to to the ceiling.

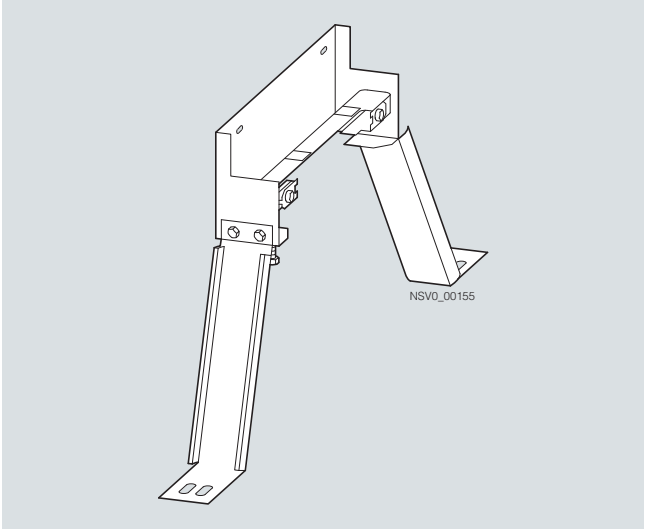
The retaining elements are adjustable to compensate for uneven walls.

Maximum load carrying capacity of retaining element, see "Configuration Information", page 5/82.

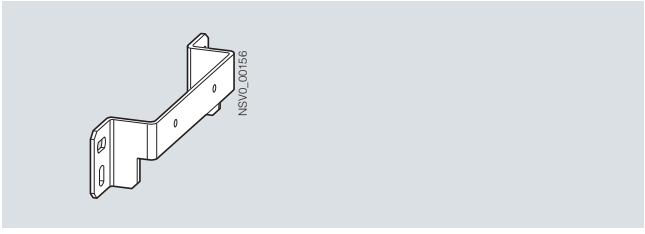


BD2-BWV wall mounting element for busbar line and end feeder unit

At the transition from the horizontal to the vertical busbar line, the ceiling mounting must be used as a support element.



BD2-BDV ceiling mounting element for busbar line



BD2-BVF wall mounting element for busbar line at each joint block

General data

Technical specifications

General system data

Type		BD2-...
Standards and specifications		IEC/EN 60439-1 and -2
Rated insulation voltage U_i	V AC/DC	690/800
Overvoltage category/degree of pollution		III/3
Rated operational voltage U_e	V AC	690
Frequency	Hz	50 ... 60
Rated operational current I_e		
• Aluminum busbars	A	160 ... 1000
• Copper busbars	A	160 ... 1250
Climatic proofing		Damp heat, constant, according to IEC 60068-2-78 Damp heat, cyclic, according to IEC 60068-2-30
Ambient temperature	°C	-5 ... +40
Degree of protection according to IEC/EN 60529 (installation type 2)		
• Trunking units		IP52
• Trunking units with optional equipment on the busbar line		IP54, IP55
• Feeder units, tap-off units		IP54
• Feeder units and tap-off units with accessories		IP55
Material		
• Trunking units, feeder units, tap-off units		Hot-galvanized, painted sheet steel, light gray (RAL 7035)
• Exception: BD2-AK1/... tap-off units		Molded-plastic enclosure, light gray (RAL 7035)
• Busbars		
- Aluminum		Nickel-plated and tinned aluminum busbars
- Copper		Tinned copper busbars
Mounting position		Edgewise, flat, tap-off points on side
Weights		See "Selection and Ordering Data"

Tap-off units

Type	BD2-AK...					
Rated current I_e	**25 A**	**63 A**	**125 A**	**250 A**	**400 A**	**630 A**
Switching capacity of contact system	AC-22B	--	--	--	--	--
Switching capacity of the built-in switch-disconnector according to IEC/EN 60947-3 at 400 V	--	AC-22B	AC-21B	--	--	--
Max. admissible rated prospective short-circuit withstand current when tap-off units with miniature circuit breakers are used:	10 kAeff: For higher rated prospective short-circuit currents, refer to "Back-up protection" for miniature circuit breakers. 25 kAeff: For higher rated prospective short-circuit currents, the upstream protective device must limit to: – Max. let-through energy $I^2t = 12 \times 10^4$ A^2s; – Max. let-through current $I_D = 9.5$ kA					

Important configuring notes

Not all tap-off units have a rated voltage of 690 V and a short-circuit strength that corresponds to the system as a whole.

The short-circuit strength and rated voltage of the tap-off units used in a system must be appropriate for it.

If the rated voltage of a tap-off unit does not match, choose one equipped with the appropriate components. Larger prospective short-circuit currents must be limited by fitting protection equipment (such as circuit breakers) upstream.

Trunking units with aluminum conductor

Type				BD2A-.-160	BD2A-.-250	BD2A-.-400
Conducting paths						
Rated insulation voltage U_i			V AC/DC	690/800	690/800	690/800
Overvoltage category/degree of pollution				III/3	III/3	III/3
Rated operational voltage U_e			V AC	690	690	690
Frequency			Hz	50 ... 60	50 ... 60	50 ... 60
Rated current I_e = thermal rated current at max. 40 °C and 35 °C on 24 h average			A	160	250	400
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (cold bars)						
• Equivalent resistance		R_{20}	mΩ/m	0.484	0.302	0.167
• Positive reactance		X_{20}	mΩ/m	0.162	0.131	0.123
• Impedance		Z_{20}	mΩ/m	0.511	0.330	0.207
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (bar under warm operating conditions)						
• Equivalent resistance		R_1	mΩ/m	0.588	0.375	0.215
• Positive reactance		X_1	mΩ/m	0.160	0.128	0.122
• Impedance		Z_1	mΩ/m	0.610	0.397	0.247
Impedance of conducting paths in the event of a fault						
• AC resistance per unit length		R_F	mΩ/m	0.959	0.673	0.548
• Positive reactance per unit length		X_F	mΩ/m	0.681	0.487	0.456
• Impedance per unit length		Z_F	mΩ/m	1.159	0.831	0.713
Zero sequence impedance according to IEC/EN 60909 (VDE 0102)	Phase to N	R_0	mΩ/m	2.050	1.340	1.217
		X_0	mΩ/m	0.884	0.750	0.640
		Z_0	mΩ/m	2.232	1.535	1.375
	Phase to PE	R_0	mΩ/m	2.018	1.071	1.059
		X_0	mΩ/m	0.416	0.567	0.518
		Z_0	mΩ/m	2.061	1.212	1.179
Short-circuit strength						
• Rated impulse withstand current I_{pk}			kA	17	32	40
• Rated short-time withstand current I_{cw}		t = 1 s	kA	5.5	10	16
		t = 0.1 s	kA	10	16	20
Number of conductors				5	5	5
Conductor cross-section		L1, L2, L3	mm^2	63	93	205
		N	mm^2	63	93	205
		PE	mm^2	63	93	205
		$^1/_2$ PE	mm^2	63	93	205
Conductor material				Al	Al	Al
Max. interval between trunking unit supports at normal mechanical loading						
• Edgewise			m	4	4	4
• Edgewise with BD2-BD[1)]			m	4	4	4
• Flat			m	3.5	3.5	3.5
Fire load[2)]			kWh/m	1.32	1.32	1.32

1) When using BD2-BD spacer bracket.

2) Values for trunking units with tap-off points.
For more values, see page 5/21.

General data

Trunking units with aluminum conductor

Type				BD2A-.-630	BD2A-.-800	BD2A-.-1000
Conducting paths						
Rated insulation voltage U_i			V AC/DC	690/800	690/800	690/800
Overvoltage category/degree of pollution				III/3	III/3	III/3
Rated operational voltage U_e			V AC	690	690	690
Frequency			Hz	50 ... 60	50 ... 60	50 ... 60
Rated current I_e = thermal rated current at max. 40 °C and 35 °C on 24 h average			A	630	800	1000
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (cold bars)						
• Equivalent resistance		R_{20}	mΩ/m	0.113	0.073	0.051
• Positive reactance		X_{20}	mΩ/m	0.057	0.058	0.058
• Impedance		Z_{20}	mΩ/m	0.127	0.094	0.077
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (bar under warm operating conditions)						
• Equivalent resistance		R_1	mΩ/m	0.149	0.098	0.066
• Positive reactance		X_1	mΩ/m	0.057	0.057	0.057
• Impedance		Z_1	mΩ/m	0.159	0.114	0.088
Impedance of conducting paths in the event of a fault						
• AC resistance per unit length		R_F	mΩ/m	0.264	0.225	0.157
• Positive reactance per unit length		X_F	mΩ/m	0.238	0.239	0.240
• Impedance per unit length		Z_F	mΩ/m	0.355	0.328	0.287
Zero sequence impedance according to IEC/EN 60909 (VDE 0102)	Phase to N	R_0	mΩ/m	0.538	0.494	0.340
		X_0	mΩ/m	0.331	0.312	0.301
		Z_0	mΩ/m	0.632	0.584	0.454
	Phase to PE	R_0	mΩ/m	0.492	0.438	0.408
		X_0	mΩ/m	0.303	0.280	0.273
		Z_0	mΩ/m	0.578	0.520	0.491
Short-circuit strength						
• Rated impulse withstand current I_{pk}			kA	64	84	90
• Rated short-time withstand current I_{cw}		t = 1 s	kA	26	32	34
		t = 0.1 s	kA	32	40	43
Number of conductors				5	5	5
Conductor cross-section		L1, L2, L3	mm^2	277	486	699
		N	mm^2	277	486	699
		PE	mm^2	277	486	699
		$^1/_2$ PE	mm^2	277	277	486
Conductor material				Al	Al	Al
Max. interval between trunking unit supports at normal mechanical loading						
• Edgewise			m	4	3.5	3
• Edgewise with BD2-BD[1)]			m	2	1.75	1.5
• Flat			m	3.5	3	2.5
Fire load[2)]			kWh/m	2	2	2

1) When using BD2-BD spacer bracket.

2) Values for trunking units with tap-off points.
For more values, see page 5/21.

Trunking units with copper conductor

Type				BD2C-.-160	BD2C-.-250	BD2C-.-400
Conducting paths						
Rated insulation voltage U_i			V AC/DC	690/800	690/800	690/800
Overvoltage category/degree of pollution				III/3	III/3	III/3
Rated operational voltage U_e			V AC	690	690	690
Frequency			Hz	50 ... 60	50 ... 60	50 ... 60
Rated current I_e = thermal rated current at max. 40 °C and 35 °C on 24 h average			A	160	250	400
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (cold bars)						
• Equivalent resistance		R_{20}	mΩ/m	0.303	0.295	0.144
• Positive reactance		X_{20}	mΩ/m	0.157	0.158	0.119
• Impedance		Z_{20}	mΩ/m	0.341	0.335	0.187
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (bar under warm operating conditions)						
• Equivalent resistance		R_1	mΩ/m	0.333	0.383	0.181
• Positive reactance		X_1	mΩ/m	0.157	0.159	0.120
• Impedance		Z_1	mΩ/m	0.368	0.419	0.217
Impedance of conducting paths in the event of a fault						
• AC resistance per unit length		R_F	mΩ/m	0.666	0.674	0.364
• Positive reactance per unit length		X_F	mΩ/m	0.511	0.530	0.461
• Impedance per unit length		Z_F	mΩ/m	0.839	0.858	0.587
Zero sequence impedance according to IEC/EN 60909 (VDE 0102)	Phase to N	R_0	mΩ/m	1.419	1.429	0.718
		X_0	mΩ/m	0.691	0.703	0.658
		Z_0	mΩ/m	1.579	1.593	0.974
	Phase to PE	R_0	mΩ/m	1.027	1.139	0.672
		X_0	mΩ/m	0.641	0.530	0.503
		Z_0	mΩ/m	1.211	1.256	0.839
Short-circuit strength						
• Rated impulse withstand current I_{pk}			kA	17	32	40
• Rated short-time withstand current I_{cw}		t = 1 s	kA	5.5	10	16
		t = 0.1 s	kA	10	16	20
Number of conductors				5	5	5
Conductor cross-section		L1, L2, L3	mm^2	63	63	147
		N	mm^2	63	63	147
		PE	mm^2	63	63	147
		$^1/_2$ PE	mm^2	63	63	147
Conductor material				Cu	Cu	Cu
Max. interval between trunking unit supports at normal mechanical loading						
• Edgewise			m	4	4	4
• Edgewise with BD2-BD[1)]			m	4	4	4
• Flat			m	3.5	3.5	3.5
Fire load[2)]			kWh/m	1.32	1.32	1.32

1) When using BD2-BD spacer bracket.

2) Values for trunking units with tap-off points.
For more values, see page 5/21.

General data

Trunking units with copper conductor

Type				BD2C-.-630	BD2C-.-800	BD2C-.-1000	BD2C-.-1250
Conducting paths							
Rated insulation voltage U_i			V AC/DC	690/800	690/800	690/800	690/800
Overvoltage category/degree of pollution				III/3	III/3	III/3	III/3
Rated operational voltage U_e			V AC	690	690	690	690
Frequency			Hz	50 ... 60	50 ... 60	50 ... 60	50 ... 60
Rated current I_e = thermal rated current at max. 40 °C and 35 °C on 24 h average			A	630	800	1000	1250
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (cold bars)							
• Equivalent resistance		R_{20}	mΩ/m	0.069	0.069	0.043	0.032
• Positive reactance		X_{20}	mΩ/m	0.054	0.054	0.056	0.054
• Impedance		Z_{20}	mΩ/m	0.088	0.088	0.071	0.063
Impedance per unit length of conducting paths with 50 Hz and 20 °C ambient temperature (bar under warm operating conditions)							
• Equivalent resistance		R_1	mΩ/m	0.087	0.091	0.056	0.041
• Positive reactance		X_1	mΩ/m	0.054	0.054	0.056	0.054
• Impedance		Z_1	mΩ/m	0.102	0.106	0.079	0.068
Impedance of conducting paths in the event of a fault							
• AC resistance per unit length		R_F	mΩ/m	0.173	0.172	0.118	0.094
• Positive reactance per unit length		X_F	mΩ/m	0.226	0.229	0.234	0.229
• Impedance per unit length		Z_F	mΩ/m	0.285	0.286	0.262	0.248
Zero sequence impedance according to IEC/EN 60909 (VDE 0102)	Phase to N	R_0	mΩ/m	0.357	0.373	0.234	0.186
		X_0	mΩ/m	0.296	0.266	0.286	0.275
		Z_0	mΩ/m	0.464	0.458	0.370	0.332
	Phase to PE	R_0	mΩ/m	0.342	0.334	0.230	0.174
		X_0	mΩ/m	0.283	0.284	0.278	0.265
		Z_0	mΩ/m	0.444	0.438	0.361	0.317
Short-circuit strength							
• Rated impulse withstand current I_{pk}			kA	64	84	90	90
• Rated short-time withstand current I_{cw}		t = 1 s	kA	26	32	34	34
		t = 0.1 s	kA	32	40	43	43
Number of conductors				5	5	5	5
Conductor cross-section		L1, L2, L3	mm^2	280	280	468	699
		N	mm^2	280	280	468	699
		PE	mm^2	280	280	468	699
		$^1/_2$ PE	mm^2	280	280	280	468
Conductor material				Cu	Cu	Cu	Cu
Max. interval between trunking unit supports at normal mechanical loading							
• Edgewise			m	4	3.5	3	2
• Edgewise with BD2-BD[1)]			m	2	1.75	1.5	1
• Flat			m	3.5	3	2.5	1.5
Fire load[2)]			kWh/m	2	2	2	2

1) When using BD2-BD spacer bracket.

2) Values for trunking units with tap-off points.
For more values, see page 5/21.

Feeder units

Conductor cross-sections

Version	Type	L1, L2, L3		N		PE		Size of terminal screws, bolts L1, L2, L3, N, PE
		min. mm^2	max. mm^2	min. mm^2	max. mm^2	min. mm^2	max. mm^2	
Feeder units with bolt terminal	BD2.-250-EE	(1–3) × 6	1 × 150, 2 × 70	(1–3) × 6	1 × 150, 2 × 70	(1–3) × 6	1 × 150, 2 × 70	M10
	BD2.-400-EE	(1–3) × 10[1)]	1 × 240, 2 × 120	(1–3) × 10[1)]	1 × 240, 2 × 120	(1–3) × 10[1)]	1 × 240, 2 × 120	M12
	BD2.-1000-EE	(1–3) × 10[1)]	2 × 240, 3 × 185	(1–3) × 10[1)]	2 × 240, 3 × 185	(1–3) × 10[1)]	2 × 240, 3 × 185	M12
	BD2.-1250-EE	(1–4) × 10[1)]	3 × 300, 4 × 240	(1–4) × 10[1)]	3 × 300, 4 × 240	(1–4) × 10[1)]	3 × 300, 4 × 240	M12
Feeder units with switch disconnector	BD2C-250 (315, 400)-EESC	1 × 10[1)]	1 × 240	1 × 10[1)]	1 × 240	Armoring		M12
	BD2C-630 (800 -EESC	1 × 10[1)]	2 × 240	1 × 10[1)]	2 × 240	Armoring		M12
Center feeder units with bolt terminal	BD2.-400-ME	(1–3) × 10[1)]	2 × 240, 3 × 185	(1–3) × 10[1)]	2 × 240, 3 × 185	(1–3) × 10[1)]	2 × 240, 3 × 185	M12
	BD2.-1000-ME	(1–5) × 10[1)]	(1–5) × 300	(1–5) × 10[1)]	(1–5) × 300	(1–5) × 10[1)]	(1–5) × 300	M12

1) Minimum possible cable cross-section for cable lugs.

Cable and wiring entries

Type		BD2.-250-EE	BD2.-400-EE	BD2.-1000-EE, BD2.-400-ME	BD2.-1000-ME	BD2.-1250-EE
Cable grommets		1 × KT3[1)]	2 × KT4[1)]	3 × KT4[1)]	6 × KT4[1)]	4 × KT4[1)]
For cable diameter	mm	14 ... 54	14 ... 68	14 ... 68	14 ... 68	14 ... 68

1) With strain relief.

Cable entry plate for single core cable (undrilled cable entry plates)

Type	BD2.-250-EE	BD2.-400-EE	BD2.-1000-EE	BD2.-1250-EE
Cable entry plate	BD2-250-EBAL	BD2-400-EBAL	BD2-1000-EBAL	BD2-1250-EBAL
Number of cable entries (maximum)	10 × M32, 5 × M40	10 × M40	15 × M40, 6 × M50 and 4 × M40	36 × M50

Use plastic cable glands with strain relief (not included in scope of supply).

Cable entry plate for single core cable with center feeder units (undrilled cable entry plates)

Type	BD2.-400-ME...	BD2.-1000-ME
Cable entry plate	BD2-400-MBAL	BD2-1000-MBAL
Number of cable entries (maximum)	12 × M40 and 3 × M32, 6 × M50 and 4 × M40	31 × M40, 16 × M50 and 4 × M40

Use plastic cable glands with strain relief (not included in scope of supply).

General data

Tap-off units

Conductor cross-sections

Designation	Type	L1, L2, L3		N		PE		Size of terminal screws, bolts L1, L2, L3
		min. mm^2	max. mm^2	min. mm^2	max. mm^2	min. mm^2	max. mm^2	
Up to 25 A	BD2-AK1/S14	0.5 (f, st)	4 (so)	1 (so, f, st)	6 (so, st)	1 (so, f, st)	6 (so, st)	–
	BD2-AK1/S18	0.5 (f, st)	16 (so, f, st)	1 (so, f, st)	6 (so, st)	1 (so, f, st)	6 (so, st)	–
	BD2-AK1/A...	0.75 (so, st)	16 (so)	1 (so, f, st)	6 (so, st)	1 (so, f, st)	6 (so, st)	–
	BD2-AK1/A...N	0.75 (so, st)	16 (so)	0.75 (so, st)	16 (so)	1 (so, f, st)	6 (so, st)	–
	BD2-AK1/F...	0.75 (so, st)	16 (so)	1 (so, st)	6 (so)	1 (so, f, st)	6 (so, st)	–
	BD2-AK1/F...N	0.75 (so, st)	16 (so)	0.75 (so, st)	16 (so)	1 (so, f, st)	6 (so, st)	–
Up to 63 A	BD2-AK.2X/S18	0.5 (f, st)	25 (f, st)	1 (so, f, st)	6 (so, st)	1 (so, f, st)	6 (so, st)	–
	BD2-AK.2X/S27	0.75 (f, st)	10 (so, f, st)	1 (so, f, st)	6 (so, st)	1 (so, f, st)	6 (so, st)	–
	BD2-AK.2X/S33	1.5 (f, st)	25 (f, st)	2.5 (so, f, st)	16 (so, st)	2.5 (so, f, st)	16 (so, st)	–
	BD2-AK.2M2/A...	0.75 (so, st)	25 (st)	2.5 (so, f, st)	25 (st)	2.5 (so, f, st)	25 (st)	–
	BD2-AK.2M2/A...N	0.75 (so, st)	25 (st)	0.75 (so, f, st)	25 (st)	2.5 (so, f, st)	25 (st)	–
	BD2-AK.2X/F...	0.75 (so, st)	25 (st)	2.5 (so, f, st)	25 (st)	2.5 (so, f, st)	25 (st)	–
	BD2-AK.2X/GB32...	0.75 (so, st)	16 (so, st)	0.75 (so, st)	16 (so, st)	Armoring		–
	BD2-AK.2X/GB63...	0.75 (so, st)	50 (st)	0.75 (so, st)	50 (st)	Armoring		–
Up to 125 A	BD2-AK03X/LSD40-LSD125	2.5 (so, st)	50 (st)	2.5 (so, st)	50 (st)	2.5 (so, st)	50 (st)	–
	BD2-AK3X/GS00	16	70	16	70	10	70	M8
	BD2-AK.3X/GSTZ(A)00	16	70	16	70	10	70	M8
	BD2-AK.3X/GB100...	6 (so, st)	70 (st)	6 (so, st)	70 (st)	Armoring		–
	BD2-AK03X/T(S)PNR100...	6 (so, st)	50 (st)	6 (so, st)	50 (st)	Armoring		–
Up to 250 A	BD2-AK04/SNH1	6	150	6	150	6	150	M10
	BD2-AK04/FS...	6	150	6	150	6	150	M10
	BD2-AK04/LS...	6	120 (st)	6 (so, st)	150	6	150	M8
Up to 400 A	BD2-AK05/SNH2	10	2 × 120	10	2 × 120	10	2 × 120	M10
	BD2-AK05/FS...	10	2 × 120	10	2 × 120	10	2 × 120	M10
	BD2-AK05/LS...	10	2 × 120	10	2 × 120	10	2 × 120	M8
Up to 630 A	BD2-AK06/SNH3	10	2 × 240	10	2 × 240	10	2 × 240	M12
	BD2-AK06/LS...	10	2 × 240	10	2 × 240	10	2 × 240	M10

so = solid, st = stranded, f = finely stranded with end sleeve

Cable and wiring entries

Type		BD2-AK1/...	BD2-AK.2...	BD2-AK.3...	BD2-AK04	BD2-AK05	BD2-AK06
Cable grommets		M25[2]	–	–	KT 3[3]	2 × KT 4[3]	2 × KT 4[3]
Cable glands[1]		–	M25, M32, M40	M25, M40, M63	–	–	–
For cable diameter	mm	11 ... 16	11 ... 27	11 ... 42	14 ... 54	14 ... 68	14 ... 68
Min./max. cable entry capacity for multi-core cables							
• NYY...	mm^2	5 × 1.5 to 5 × 4	5 × 1.5 to 5 × 16	5 × 1.5 to 5 × 25	–	–	–
• NYCWY... [4]	mm^2	4 × 1.5 to 4 × 2.5	4 × 1.5 to 4 × 16	4 × 1.5 to 4 × 70	5 × 1.5 to 4 × 150	2 × 5 × 1.5 to 2 × 4 × 150	2 × 5 × 10 to 2 × 4 × 240
Cable entry plate for singe-core cable (plates fitted, undrilled)							
• Max. number of cable entries		–	–	–	10 × M40	10 × M32, 5 × M40	10 × M40

1) For cable glands: Use plastic cable glands with strain relief (not included in scope of supply).
2) Strain relief in BD2-AK1/...
3) With strain relief.
4) Fifth conductor: concentric conductor.

Fire loads

Type (without single-bolt terminal block)	Fire load kWh/m
Trunking units	
BD2.-.-160-SB-.	1.32
BD2.-.-160-WB-.	1.32
BD2.-.-250-SB-.	1.32
BD2.-.-250-WB-.	1.32
BD2.-.-400-SB-.	1.32
BD2.-.-400-WB-.	1.32
BD2.-.-400-SO-.	0.60
BD2.-.-400-WO-.	0.60
BD2.-.-630-SB-.	2.00
BD2.-.-630-WB-.	2.00
BD2.-.-630-SO-.	0.67
BD2.-.-630-WO-.	0.67
BD2.-.-800-SB-.	2.00
BD2.-.-800-WB-.	2.00
BD2.-.-800-SO-.	0.67
BD2.-.-800-WO-.	0.67
BD2.-.-1000-SB-.	2.00
BD2.-.-1000-WB-.	2.00
BD2.-.-1000-SO-.	0.67
BD2.-.-1000-WO-.	0.67
BD2.-.-1250-SB-.	2.00
BD2.-.-1250-WB-.	2.00
BD2.-.-1250-SO-.	0.67
BD2.-.-1250-WO-.	0.67
Junction units	
BD2.-400-L..	1.27
BD2.-400-Z..	1.88
BD2.-1000-L..	1.27
BD2.-1000-Z..	1.88
BD2.-1250-L..	1.27
BD2.-1250-Z..	1.88
BD2.-400-T..	2.00
BD2.-400-K..	2.67
BD2.-1000-T..	2.00
BD2.-1000-K..	2.67
BD2.-1250-T..	2.00
BD2.-1250-K..	2.67
Feeder units	kWh
BD2.-250-EE	3.20
BD2.-250-VE	3.00
BD2.-400-EE	3.50
BD2.-400-ME	3.90
BD2.-400-VE	3.20
BD2.-1000-EE	3.80
BD2.-1250-EE	4.10
BD2.-1000-VE	3.60
BD2.-1250-VE	4.00
BD2-1000-ME	8.10
Ancillary equipment units	
BD2-GKX/F	0.4
BD2-GKM2/F	1.5

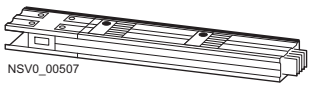
Type	Fire load kWh
Tap-off units	
BD2-AK1/S14	6.9
BD2-AK1/S18	6.9
BD2-AK1/A163	5.83
BD2-AK1/CEE165S14	8.5
BD2-AK1/CEE165A163	8.7
BD2-AK1/2CEE163S14	9.5
BD2-AK1/2CEE163A161	7.5
BD2-AK1/3SD163S14	8
BD2-AK1/3SD163A161	8.3
BD2-AK1/A161/1	5.5
BD2-AK1/A162	5.5
BD2-AK1/A163N	6.1
BD2-AK1/2CEE163A162	7.5
BD2-AK1/A201	5.2
BD2-AK1/A202	5.5
BD2-AK1/A203	5.8
BD2-AK1/A203N	6.1
BD2-AK1/2PC163A162	5.8
BD2-AK1/3DKS103S14	7.2
BD2-AK1/3DKS103A131	5.9
BD2-AK1/F1038-3	5.9
BD2-AK1/F1038-3-N	6.1
BD2-AK1/FI40-162	5.5
BD2-AK1/A133	5.2
BD2-AK1/T25-A163	4.5
BD2-AK1/3T23-3A161	5.7
BD2-AK.2X/S18	4.8
BD2-AK.2X/S27(/FORMP)	2.94
BD2-AK.2X/S33(/FORMP)	2.94
BD2-AK2X/CEE325S33(/FORMP)	4.57
BD2-AK.2M2/A323	5.1
BD2-AK2M2/CEE325A323	6.7
BD2-AK2X/CEE635S33(/FORMP)	5.8
BD2-AK2X/2CEE165S14	7.9
BD2-AK2X/2CEE165S27(/FORMP)	6.1
BD2-AK2M2/2SD163CEE165A163	6.9
BD2-AK2M2/2CEE165A163	9.4
BD2-AK.2M2/A323N	5.1
BD2-AK.2M2/A633	5
BD2-AK.2M2/A633N	5.3
BD2-AK2X/3BS133GB131	7.9
BD2-AK2X/3BS133A131	5.9
BD2-AK.2X/GB323	7.6
BD2-AK.2X/GB633	7.9
BD2-AK.2X/F1451-3(N)	5.9
BD2-AK.2X/F2258-3(N)	6.1
BD2-AK.3X/LSD40-3	9.79
BD2-AK.3X/LSD63-3	9.79
BD2-AK.3X/LSD80-3	9.79
BD2-AK.3X/LSD100-3	9.79
BD2-AK.3X/LSD125-3	9.79

Type	Fire load kWh
BD2-AK.3X/LSD40-4	12.8
BD2-AK.3X/LSD63-4	12.8
BD2-AK.3X/LSD80-4	12.8
BD2-AK.3X/LSD100-4	12.8
BD2-AK.3X/LSD125-4	12.8
BD2-AK.3X/GS00	8.07
BD2-AK.3X/GST.00	9.07
BD2-AK.3X/GB1003	14
BD2-AK03X/FS125...-3	10.0
BD2-AK03X/FS125...-4	13.0
BD2-AK03X/F2258...-3(N)	6.1
BD2-AK03M2/A1253(N)	5.7
BD2-AK04/SNH1	10.12
BD2-AK04/FS...-3	16.65
BD2-AK04/FS...-4	20.0
BD2-AK05/SNH2	12.16
BD2-AK05/FS...-3	18.6
BD2-AK05/FS...-4	22.0
BD2-AK06/SNH3	14.2
BD2-AK04/LS.-DC	17.0
BD2-AK04/LS.-EC	20.0
BD2-AK05/LS.-DC	19.0
BD2-AK05/LS.-EC	23.0
BD2-AK06/LS.-DC	22.0
BD2-AK06/LS.-EC	26.0
Accessories	
BD2-400-SK	1.64
BD2-400-FE	–
BD2-400-BB	–
BD2-400-HF	–
BD2-400-HFE	–
BD2-400-VF	–
BD2-1250-EK	2.46
BD2-1250-FE	–
BD2-1250-BB	–
BD2-1250-HF	–
BD2-1250-HFE	–
BD2-1250-VF	–
BD2-FFE	–
BD2-FF	–
BD2-FAS	–
BD2-AK...-IP55	–
BD2-400-FS.	–
BD2-1250-FS.	–
BD2-SD163	0.1
BD2-CEE163	0.2
BD2-CEE165	0.2
BD2-CEE325	0.3
BD2-AG	–
BD2-APO	–
BD2-APM	–

Trunking units

Selection and ordering data

With aluminum busbars

Version	Rated current I_e	Length	Tap-off points		DT	Tap-off point distance 0.5 m L1, L2, L3, N, $^1/_2$ PE		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Standard lengths, with tap-off points on both sides									
With joint block	160	3.25	12	0.5	X	**BD2A-2-160-SB-3**	**BVP:261410**	1 unit	20.000
 NSV0_00507		2.25	8	0.5	X	**BD2A-2-160-SB-2**	**BVP:260958**	1 unit	14.000
		1.25	4	0.5	X	**BD2A-2-160-SB-1**	**BVP:260957**	1 unit	8.400
	250	3.25	12	0.5	X	**BD2A-2-250-SB-3**	**BVP:261413**	1 unit	22.200
		2.25	8	0.5	X	**BD2A-2-250-SB-2**	**BVP:261412**	1 unit	16.500
		1.25	4	0.5	X	**BD2A-2-250-SB-1**	**BVP:261411**	1 unit	8.600
	400	3.25	12	0.5	X	**BD2A-2-400-SB-3**	**BVP:261419**	1 unit	26.800
		2.25	8	0.5	X	**BD2A-2-400-SB-2**	**BVP:261418**	1 unit	19.600
		1.25	4	0.5	X	**BD2A-2-400-SB-1**	**BVP:261417**	1 unit	12.300
	630	3.25	12	0.5	X	**BD2A-2-630-SB-3**	**BVP:261431**	1 unit	36.600
		2.25	8	0.5	X	**BD2A-2-630-SB-2**	**BVP:261430**	1 unit	27.900
		1.25	4	0.5	X	**BD2A-2-630-SB-1**	**BVP:261429**	1 unit	15.900
	800	3.25	12	0.5	X	**BD2A-2-800-SB-3**	**BVP:261437**	1 unit	38.400
		2.25	8	0.5	X	**BD2A-2-800-SB-2**	**BVP:261436**	1 unit	26.500
		1.25	4	0.5	X	**BD2A-2-800-SB-1**	**BVP:261435**	1 unit	18.500
	1000	3.25	12	0.5	X	**BD2A-2-1000-SB-3**	**BVP:261443**	1 unit	48.800
		2.25	8	0.5	X	**BD2A-2-1000-SB-2**	**BVP:261442**	1 unit	33.500
		1.25	4	0.5	X	**BD2A-2-1000-SB-1**	**BVP:261441**	1 unit	22.400
Standard lengths, without tap-off points									
With joint block	400	3.25	--	--	X	**BD2A-2-400-SO-3**	**BVP:261422**	1 unit	26.100
 NSV0_00508		2.25	--	--	X	**BD2A-2-400-SO-2**	**BVP:261421**	1 unit	19.600
		1.25	--	--	X	**BD2A-2-400-SO-1**	**BVP:261420**	1 unit	12.300
	630	3.25	--	--	X	**BD2A-2-630-SO-3**	**BVP:261434**	1 unit	37.600
		2.25	--	--	X	**BD2A-2-630-SO-2**	**BVP:261433**	1 unit	28.900
		1.25	--	--	X	**BD2A-2-630-SO-1**	**BVP:261432**	1 unit	17.200
	800	3.25	--	--	X	**BD2A-2-800-SO-3**	**BVP:261440**	1 unit	39.400
		2.25	--	--	X	**BD2A-2-800-SO-2**	**BVP:261439**	1 unit	27.500
		1.25	--	--	X	**BD2A-2-800-SO-1**	**BVP:261438**	1 unit	19.000
	1000	3.25	--	--	X	**BD2A-2-1000-SO-3**	**BVP:261446**	1 unit	49.800
		2.25	--	--	X	**BD2A-2-1000-SO-2**	**BVP:261445**	1 unit	34.500
		1.25	--	--	X	**BD2A-2-1000-SO-1**	**BVP:261444**	1 unit	22.900

Special colors available on request.

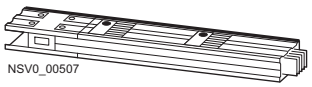
Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers (optional)				
Fire barrier S90	X **+BD2-S90-BX*-M***	**BVP:931956**	1 unit	1.000
Fire barrier S120	X **+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500

For BX* specify the required dimension in meters from the center of the joint block (end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany:
BD2-S90(S120)-ZUL-D fire protection kit
see page 5/69.

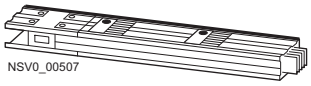
* You can order this quantity or a multiple thereof.

Version	Rated current I_e	Length	Tap-off points		DT	Tap-off point distance 0.5 m L1, L2, L3, N, PE		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Standard lengths, with tap-off points on both sides									
With joint block	160	3.25	12	0.5	X	**BD2A-3-160-SB-3**	**BVP:261480**	1 unit	20.000
 NSV0_00507		2.25	8	0.5	X	**BD2A-3-160-SB-2**	**BVP:261479**	1 unit	14.000
		1.25	4	0.5	X	**BD2A-3-160-SB-1**	**BVP:261478**	1 unit	8.400
	250	3.25	12	0.5	X	**BD2A-3-250-SB-3**	**BVP:261483**	1 unit	22.200
		2.25	8	0.5	X	**BD2A-3-250-SB-2**	**BVP:261482**	1 unit	16.500
		1.25	4	0.5	X	**BD2A-3-250-SB-1**	**BVP:261481**	1 unit	8.600
	400	3.25	12	0.5	X	**BD2A-3-400-SB-3**	**BVP:261489**	1 unit	26.000
		2.25	8	0.5	X	**BD2A-3-400-SB-2**	**BVP:261488**	1 unit	19.000
		1.25	4	0.5	X	**BD2A-3-400-SB-1**	**BVP:261487**	1 unit	12.000
	630	3.25	12	0.5	X	**BD2A-3-630-SB-3**	**BVP:261501**	1 unit	36.600
		2.25	8	0.5	X	**BD2A-3-630-SB-2**	**BVP:261500**	1 unit	27.900
		1.25	4	0.5	X	**BD2A-3-630-SB-1**	**BVP:261499**	1 unit	15.900
	800	3.25	12	0.5	X	**BD2A-3-800-SB-3**	**BVP:261507**	1 unit	39.900
		2.25	8	0.5	X	**BD2A-3-800-SB-2**	**BVP:261506**	1 unit	27.500
		1.25	4	0.5	X	**BD2A-3-800-SB-1**	**BVP:261505**	1 unit	19.100
	1000	3.25	12	0.5	X	**BD2A-3-1000-SB-3**	**BVP:261513**	1 unit	51.000
		2.25	8	0.5	X	**BD2A-3-1000-SB-2**	**BVP:261512**	1 unit	35.000
		1.25	4	0.5	X	**BD2A-3-1000-SB-1**	**BVP:261511**	1 unit	23.200
Standard lengths, without tap-off points									
With joint block	400	3.25	--	--	X	**BD2A-3-400-SO-3**	**BVP:261492**	1 unit	25.300
 NSV0_00508		2.25	--	--	X	**BD2A-3-400-SO-2**	**BVP:261491**	1 unit	19.000
		1.25	--	--	X	**BD2A-3-400-SO-1**	**BVP:261490**	1 unit	12.000
	630	3.25	--	--	X	**BD2A-3-630-SO-3**	**BVP:261504**	1 unit	37.600
		2.25	--	--	X	**BD2A-3-630-SO-2**	**BVP:261503**	1 unit	28.900
		1.25	--	--	X	**BD2A-3-630-SO-1**	**BVP:261502**	1 unit	17.200
	800	3.25	--	--	X	**BD2A-3-800-SO-3**	**BVP:261510**	1 unit	40.900
		2.25	--	--	X	**BD2A-3-800-SO-2**	**BVP:261509**	1 unit	28.500
		1.25	--	--	X	**BD2A-3-800-SO-1**	**BVP:261508**	1 unit	19.600
	1000	3.25	--	--	X	**BD2A-3-1000-SO-3**	**BVP:261516**	1 unit	52.000
		2.25	--	--	X	**BD2A-3-1000-SO-2**	**BVP:261515**	1 unit	36.000
		1.25	--	--	X	**BD2A-3-1000-SO-1**	**BVP:261514**	1 unit	23.700

* You can order this quantity or a multiple thereof.

Trunking units

With aluminum busbars

Version	Rated current I_e	Length	Tap-off points		DT	Tap-off point distance 0.5 m L1, L2, L3, N, $^1/_2$ PE		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Optional lengths, with tap-off points on both sides									
With joint block	160	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-2-160-WB-3W***	**BVP:261447**	1 unit	20.000
 NSV0_00507		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-2-160-WB-2W***	**BVP:261448**	1 unit	15.000
	250	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-2-250-WB-3W***	**BVP:261449**	1 unit	21.900
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-2-250-WB-2W***	**BVP:261450**	1 unit	16.300
	400	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-2-400-WB-3W***	**BVP:261453**	1 unit	26.100
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-2-400-WB-2W***	**BVP:261454**	1 unit	19.100
	630	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-2-630-WB-3W***	**BVP:261457**	1 unit	45.600
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-2-630-WB-2W***	**BVP:261458**	1 unit	30.900
	800	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-2-800-WB-3W***	**BVP:261459**	1 unit	44.400
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-2-800-WB-2W***	**BVP:261460**	1 unit	30.500
	1000	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-2-1000-WB-3W***	**BVP:261461**	1 unit	54.800
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-2-1000-WB-2W***	**BVP:261462**	1 unit	37.500
Optional lengths, without tap-off points									
With joint block	400	2.26 ... 3.24	--	--	X	**BD2A-2-400-WO-3W***	**BVP:261463**	1 unit	26.100
 NSV0_00508		1.26 ... 2.24	--	--	X	**BD2A-2-400-WO-2W***	**BVP:261464**	1 unit	19.100
		0.50 ... 1.24	--	--	X	**BD2A-2-400-WO-1W***	**BVP:261465**	1 unit	11.900
	630	2.26 ... 3.24	--	--	X	**BD2A-2-630-WO-3W***	**BVP:261469**	1 unit	45.600
		1.26 ... 2.24	--	--	X	**BD2A-2-630-WO-2W***	**BVP:261470**	1 unit	30.900
		0.50 ... 1.24	--	--	X	**BD2A-2-630-WO-1W***	**BVP:261471**	1 unit	18.200
	800	2.26 ... 3.24	--	--	X	**BD2A-2-800-WO-3W***	**BVP:261472**	1 unit	44.400
		1.26 ... 2.24	--	--	X	**BD2A-2-800-WO-2W***	**BVP:261473**	1 unit	30.500
		0.50 ... 1.24	--	--	X	**BD2A-2-800-WO-1W***	**BVP:261474**	1 unit	19.300
	1000	2.26 ... 3.24	--	--	X	**BD2A-2-1000-WO-3W***	**BVP:261475**	1 unit	54.800
		1.26 ... 2.24	--	--	X	**BD2A-2-1000-WO-2W***	**BVP:261476**	1 unit	37.500
		0.50 ... 1.24	--	--	X	**BD2A-2-1000-WO-1W***	**BVP:261477**	1 unit	23.200

For W*, you must specify the required dimension in meters between the center of one joint block to the center of the next, e.g. -3W2.50.

For optional lengths, see page 5/81.

Special colors available on request.

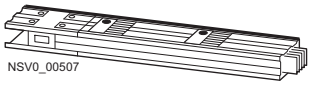
Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers (optional)				
Fire barrier S90	X	**+BD2-S90-BX*-M***	**BVP:931956**	1 unit	1.000
Fire barrier S120	X	**+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500

For BX* specify the required dimension in meters from the center of the joint block (end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany:
BD2-S90(S120)-ZUL-D fire protection kit
see page 5/69.

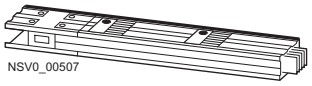
*** You can order this quantity or a multiple thereof.**

Version	Rated current I_e	Length	Tap-off points		DT	**Tap-off point distance 0.5 m L1, L2, L3, N, PE**		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Optional lengths, with tap-off points on both sides									
With joint block	160	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-3-160-WB-3W***	**BVP:261517**	1 unit	20.000
 NSV0_00507		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-3-160-WB-2W***	**BVP:261518**	1 unit	15.000
	250	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-3-250-WB-3W***	**BVP:261519**	1 unit	21.900
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-3-250-WB-2W***	**BVP:261520**	1 unit	16.300
	400	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-3-400-WB-3W***	**BVP:261523**	1 unit	25.300
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-3-400-WB-2W***	**BVP:261524**	1 unit	18.500
	630	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-3-630-WB-3W***	**BVP:261527**	1 unit	45.600
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-3-630-WB-2W***	**BVP:261528**	1 unit	30.900
	800	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-3-800-WB-3W***	**BVP:261529**	1 unit	45.900
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-3-800-WB-2W***	**BVP:261530**	1 unit	31.500
	1000	2.26 ... 3.24	8 ... 12	0.5	X	**BD2A-3-1000-WB-3W***	**BVP:261531**	1 unit	57.000
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2A-3-1000-WB-2W***	**BVP:261532**	1 unit	39.000
Optional lengths, without tap-off points									
With joint block	400	2.26 ... 3.24	--	--	X	**BD2A-3-400-WO-3W***	**BVP:261533**	1 unit	25.300
 NSV0_00508		1.26 ... 2.24	--	--	X	**BD2A-3-400-WO-2W***	**BVP:261534**	1 unit	18.500
		0.50 ... 1.24	--	--	X	**BD2A-3-400-WO-1W***	**BVP:261535**	1 unit	11.600
	630	2.26 ... 3.24	--	--	X	**BD2A-3-630-WO-3W***	**BVP:261539**	1 unit	45.600
		1.26 ... 2.24	--	--	X	**BD2A-3-630-WO-2W***	**BVP:261540**	1 unit	30.900
		0.50 ... 1.24	--	--	X	**BD2A-3-630-WO-1W***	**BVP:261541**	1 unit	18.200
	800	2.26 ... 3.24	--	--	X	**BD2A-3-800-WO-3W***	**BVP:261542**	1 unit	45.900
		1.26 ... 2.24	--	--	X	**BD2A-3-800-WO-2W***	**BVP:261543**	1 unit	31.500
		0.50 ... 1.24	--	--	X	**BD2A-3-800-WO-1W***	**BVP:261544**	1 unit	19.900
	1000	2.26 ... 3.24	--	--	X	**BD2A-3-1000-WO-3W***	**BVP:261545**	1 unit	57.000
		1.26 ... 2.24	--	--	X	**BD2A-3-1000-WO-2W***	**BVP:261546**	1 unit	39.000
		0.50 ... 1.24	--	--	X	**BD2A-3-1000-WO-1W***	**BVP:261547**	1 unit	24.000

*** You can order this quantity or a multiple thereof.**

Trunking units

With copper busbars

Version	Rated current I_e	Length	Tap-off points		DT	Tap-off point distance 0.5 m L1, L2, L3, N, $^1/_2$ PE		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Standard lengths, with tap-off points on both sides									
With joint block	160	3.25	12	0.5	X	**BD2C-2-160-SB-3**	**BVP:261631**	1 unit	26.400
 NSV0_00507		2.25	8	0.5	X	**BD2C-2-160-SB-2**	**BVP:261630**	1 unit	18.400
		1.25	4	0.5	X	**BD2C-2-160-SB-1**	**BVP:261629**	1 unit	10.800
	250	3.25	12	0.5	X	**BD2C-2-250-SB-3**	**BVP:261634**	1 unit	27.500
		2.25	8	0.5	X	**BD2C-2-250-SB-2**	**BVP:261633**	1 unit	20.100
		1.25	4	0.5	X	**BD2C-2-250-SB-1**	**BVP:261632**	1 unit	10.600
	400	3.25	12	0.5	X	**BD2C-2-400-SB-3**	**BVP:261640**	1 unit	33.200
		2.25	8	0.5	X	**BD2C-2-400-SB-2**	**BVP:261639**	1 unit	23.900
		1.25	4	0.5	X	**BD2C-2-400-SB-1**	**BVP:261638**	1 unit	14.700
	630	3.25	12	0.5	X	**BD2C-2-630-SB-3**	**BVP:261652**	1 unit	47.300
		2.25	8	0.5	X	**BD2C-2-630-SB-2**	**BVP:261651**	1 unit	35.300
		1.25	4	0.5	X	**BD2C-2-630-SB-1**	**BVP:261650**	1 unit	19.900
	800	3.25	12	0.5	X	**BD2C-2-800-SB-3**	**BVP:261658**	1 unit	57.400
		2.25	8	0.5	X	**BD2C-2-800-SB-2**	**BVP:261657**	1 unit	39.500
		1.25	4	0.5	X	**BD2C-2-800-SB-1**	**BVP:261656**	1 unit	25.600
	1000	3.25	12	0.5	X	**BD2C-2-1000-SB-3**	**BVP:261664**	1 unit	76.800
		2.25	8	0.5	X	**BD2C-2-1000-SB-2**	**BVP:261663**	1 unit	52.800
		1.25	4	0.5	X	**BD2C-2-1000-SB-1**	**BVP:261662**	1 unit	32.900
	1250	3.25	12	0.5	X	**BD2C-2-1250-SB-3**	**BVP:261670**	1 unit	112.900
		2.25	8	0.5	X	**BD2C-2-1250-SB-2**	**BVP:261669**	1 unit	77.600
		1.25	4	0.5	X	**BD2C-2-1250-SB-1**	**BVP:261668**	1 unit	46.400
Standard lengths, without tap-off points									
With joint block	400	3.25	--	--	X	**BD2C-2-400-SO-3**	**BVP:261643**	1 unit	32.500
 NSV0_00508		2.25	--	--	X	**BD2C-2-400-SO-2**	**BVP:261642**	1 unit	23.900
		1.25	--	--	X	**BD2C-2-400-SO-1**	**BVP:261641**	1 unit	14.700
	630	3.25	--	--	X	**BD2C-2-630-SO-3**	**BVP:261655**	1 unit	48.300
		2.25	--	--	X	**BD2C-2-630-SO-2**	**BVP:261654**	1 unit	36.300
		1.25	--	--	X	**BD2C-2-630-SO-1**	**BVP:261653**	1 unit	21.200
	800	3.25	--	--	X	**BD2C-2-800-SO-3**	**BVP:261661**	1 unit	58.400
		2.25	--	--	X	**BD2C-2-800-SO-2**	**BVP:261660**	1 unit	40.500
		1.25	--	--	X	**BD2C-2-800-SO-1**	**BVP:261659**	1 unit	26.100
	1000	3.25	--	--	X	**BD2C-2-1000-SO-3**	**BVP:261667**	1 unit	77.800
		2.25	--	--	X	**BD2C-2-1000-SO-2**	**BVP:261666**	1 unit	53.800
		1.25	--	--	X	**BD2C-2-1000-SO-1**	**BVP:261665**	1 unit	33.400
	1250	3.25	--	--	X	**BD2C-2-1250-SO-3**	**BVP:261673**	1 unit	113.900
		2.25	--	--	X	**BD2C-2-1250-SO-2**	**BVP:261672**	1 unit	78.600
		1.25	--	--	X	**BD2C-2-1250-SO-1**	**BVP:261671**	1 unit	46.900

Special colors available on request.

Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers (optional)				
Fire barrier S120	X **+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500

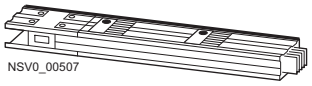
For BX* specify the required dimension in meters from the center of the joint block (end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany:
BD2-S90(S120)-ZUL-D fire protection kit
see page 5/69.

*** You can order this quantity or a multiple thereof.**

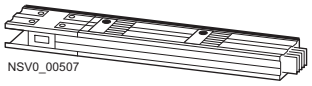
With copper busbars

Version	Rated current I_e	Length	Tap-off points		DT	**Tap-off point distance 0.5 m L1, L2, L3, N, PE**		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Standard lengths, with tap-off points on both sides									
With joint block	160	3.25	12	0.5	X	**BD2C-3-160-SB-3**	**BVP:261712**	1 unit	26.400
 NSV0_00507		2.25	8	0.5	X	**BD2C-3-160-SB-2**	**BVP:261711**	1 unit	18.400
		1.25	4	0.5	X	**BD2C-3-160-SB-1**	**BVP:261710**	1 unit	10.800
	250	3.25	12	0.5	X	**BD2C-3-250-SB-3**	**BVP:261715**	1 unit	27.500
		2.25	8	0.5	X	**BD2C-3-250-SB-2**	**BVP:261714**	1 unit	20.100
		1.25	4	0.5	X	**BD2C-3-250-SB-1**	**BVP:261713**	1 unit	10.600
	400	3.25	12	0.5	X	**BD2C-3-400-SB-3**	**BVP:261721**	1 unit	34.400
		2.25	8	0.5	X	**BD2C-3-400-SB-2**	**BVP:261720**	1 unit	24.700
		1.25	4	0.5	X	**BD2C-3-400-SB-1**	**BVP:261719**	1 unit	15.100
	630	3.25	12	0.5	X	**BD2C-3-630-SB-3**	**BVP:261733**	1 unit	47.300
		2.25	8	0.5	X	**BD2C-3-630-SB-2**	**BVP:261732**	1 unit	35.300
		1.25	4	0.5	X	**BD2C-3-630-SB-1**	**BVP:261731**	1 unit	19.900
	800	3.25	12	0.5	X	**BD2C-3-800-SB-3**	**BVP:261739**	1 unit	60.800
		2.25	8	0.5	X	**BD2C-3-800-SB-2**	**BVP:261738**	1 unit	41.900
		1.25	4	0.5	X	**BD2C-3-800-SB-1**	**BVP:261737**	1 unit	26.900
	1000	3.25	12	0.5	X	**BD2C-3-1000-SB-3**	**BVP:261745**	1 unit	80.700
		2.25	8	0.5	X	**BD2C-3-1000-SB-2**	**BVP:261744**	1 unit	55.500
		1.25	4	0.5	X	**BD2C-3-1000-SB-1**	**BVP:261743**	1 unit	34.400
	1250	3.25	12	0.5	X	**BD2C-3-1250-SB-3**	**BVP:261751**	1 unit	120.900
		2.25	8	0.5	X	**BD2C-3-1250-SB-2**	**BVP:261750**	1 unit	83.100
		1.25	4	0.5	X	**BD2C-3-1250-SB-1**	**BVP:261749**	1 unit	49.400
Standard lengths, without tap-off points									
With joint block	400	3.25	--	--	X	**BD2C-3-400-SO-3**	**BVP:261724**	1 unit	33.700
 NSV0_00508		2.25	--	--	X	**BD2C-3-400-SO-2**	**BVP:261723**	1 unit	24.700
		1.25	--	--	X	**BD2C-3-400-SO-1**	**BVP:261722**	1 unit	15.100
	630	3.25	--	--	X	**BD2C-3-630-SO-3**	**BVP:261736**	1 unit	48.300
		2.25	--	--	X	**BD2C-3-630-SO-2**	**BVP:261735**	1 unit	36.300
		1.25	--	--	X	**BD2C-3-630-SO-1**	**BVP:261734**	1 unit	21.200
	800	3.25	--	--	X	**BD2C-3-800-SO-3**	**BVP:261742**	1 unit	61.800
		2.25	--	--	X	**BD2C-3-800-SO-2**	**BVP:261741**	1 unit	42.900
		1.25	--	--	X	**BD2C-3-800-SO-1**	**BVP:261740**	1 unit	27.400
	1000	3.25	--	--	X	**BD2C-3-1000-SO-3**	**BVP:261748**	1 unit	81.700
		2.25	--	--	X	**BD2C-3-1000-SO-2**	**BVP:261747**	1 unit	56.500
		1.25	--	--	X	**BD2C-3-1000-SO-1**	**BVP:261746**	1 unit	34.900
	1250	3.25	--	--	X	**BD2C-3-1250-SO-3**	**BVP:261754**	1 unit	121.900
		2.25	--	--	X	**BD2C-3-1250-SO-2**	**BVP:261753**	1 unit	84.100
		1.25	--	--	X	**BD2C-3-1250-SO-1**	**BVP:261752**	1 unit	49.900

* You can order this quantity or a multiple thereof.

Trunking units

With copper busbars

Version	Rated current I_e	Length	Tap-off points		DT	**Tap-off point distance 0.5 m L1, L2, L3, N, $^1/_2$ PE**		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Optional lengths, with tap-off points on both sides									
With joint block	160	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-160-WB-3W***	**BVP:261674**	1 unit	26.400
 NSV0_00507		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-160-WB-2W***	**BVP:261675**	1 unit	19.400
	250	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-250-WB-3W***	**BVP:261676**	1 unit	27.200
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-250-WB-2W***	**BVP:261677**	1 unit	19.900
	400	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-400-WB-3W***	**BVP:261680**	1 unit	32.500
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-400-WB-2W***	**BVP:261681**	1 unit	23.400
	630	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-630-WB-3W***	**BVP:261684**	1 unit	56.300
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-630-WB-2W***	**BVP:261685**	1 unit	38.300
	800	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-800-WB-3W***	**BVP:261686**	1 unit	63.400
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-800-WB-2W***	**BVP:261687**	1 unit	43.500
	1000	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-1000-WB-3W***	**BVP:261688**	1 unit	82.800
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-1000-WB-2W***	**BVP:261689**	1 unit	56.800
	1250	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-2-1250-WB-3W***	**BVP:261690**	1 unit	118.900
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-2-1250-WB-2W***	**BVP:261691**	1 unit	81.600
Optional lengths, without tap-off points									
With joint block	400	2.26 ... 3.24	--	--	X	**BD2C-2-400-WO-3W***	**BVP:261692**	1 unit	32.500
 NSV0_00508		1.26 ... 2.24	--	--	X	**BD2C-2-400-WO-2W***	**BVP:261693**	1 unit	23.400
		0.50 ... 1.24	--	--	X	**BD2C-2-400-WO-1W***	**BVP:261694**	1 unit	14.300
	630	2.26 ... 3.24	--	--	X	**BD2C-2-630-WO-3W***	**BVP:261698**	1 unit	56.300
		1.26 ... 2.24	--	--	X	**BD2C-2-630-WO-2W***	**BVP:261699**	1 unit	38.300
		0.50 ... 1.24	--	--	X	**BD2C-2-630-WO-1W***	**BVP:261700**	1 unit	22.200
	800	2.26 ... 3.24	--	--	X	**BD2C-2-800-WO-3W***	**BVP:261701**	1 unit	63.400
		1.26 ... 2.24	--	--	X	**BD2C-2-800-WO-2W***	**BVP:261702**	1 unit	43.500
		0.50 ... 1.24	--	--	X	**BD2C-2-800-WO-1W***	**BVP:261703**	1 unit	26.400
	1000	2.26 ... 3.24	--	--	X	**BD2C-2-1000-WO-3W***	**BVP:261704**	1 unit	82.800
		1.26 ... 2.24	--	--	X	**BD2C-2-1000-WO-2W***	**BVP:261705**	1 unit	56.800
		0.50 ... 1.24	--	--	X	**BD2C-2-1000-WO-1W***	**BVP:261706**	1 unit	33.700
	1250	2.26 ... 3.24	--	--	X	**BD2C-2-1250-WO-3W***	**BVP:261707**	1 unit	118.900
		1.26 ... 2.24	--	--	X	**BD2C-2-1250-WO-2W***	**BVP:261708**	1 unit	81.600
		0.50 ... 1.24	--	--	X	**BD2C-2-1250-WO-1W***	**BVP:261709**	1 unit	47.200

For W*, you must specify the required dimension in meters between the center of one joint block to the center of the next, e.g. -3W2.50.

For optional lengths, see page 5/81.

Special colors available on request.

Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers (optional)				
Fire barrier S120	X **+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500

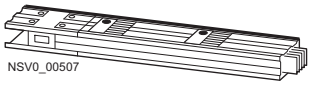
For BX* specify the required dimension in meters from the center of the joint block (end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany:
BD2-S90(S120)-ZUL-D fire protection kit
see page 5/69.

* You can order this quantity or a multiple thereof.

With copper busbars

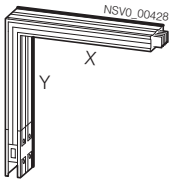
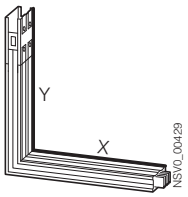
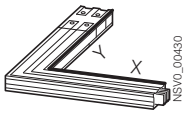
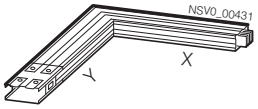
Version	Rated current I_e	Length	Tap-off points		DT	Tap-off point distance 0.5 m L1, L2, L3, N, PE		PS*	Weight per unit approx.
			Number	Distance					
	A	m		m		Type	Order No.		kg
Optional lengths, with tap-off points on both sides									
With joint block	160	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-160-WB-3W***	**BVP:261755**	1 unit	26.400
 NSV0_00507		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-160-WB-2W***	**BVP:261756**	1 unit	19.400
	250	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-250-WB-3W***	**BVP:261757**	1 unit	27.200
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-250-WB-2W***	**BVP:261758**	1 unit	19.900
	400	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-400-WB-3W***	**BVP:261761**	1 unit	33.700
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-400-WB-2W***	**BVP:261762**	1 unit	24.200
	630	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-630-WB-3W***	**BVP:261765**	1 unit	56.300
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-630-WB-2W***	**BVP:261766**	1 unit	38.300
	800	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-800-WB-3W***	**BVP:261767**	1 unit	66.800
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-800-WB-2W***	**BVP:261768**	1 unit	45.900
	1000	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-1000-WB-3W***	**BVP:261769**	1 unit	86.700
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-1000-WB-2W***	**BVP:261770**	1 unit	59.500
	1250	2.26 ... 3.24	8 ... 12	0.5	X	**BD2C-3-1250-WB-3W***	**BVP:261771**	1 unit	126.900
		1.26 ... 2.24	4 ... 8	0.5	X	**BD2C-3-1250-WB-2W***	**BVP:261772**	1 unit	87.100
Optional lengths, without tap-off points									
With joint block	400	2.26 ... 3.24	--	--	X	**BD2C-3-400-WO-3W***	**BVP:261773**	1 unit	33.700
 NSV0_00508		1.26 ... 2.24	--	--	X	**BD2C-3-400-WO-2W***	**BVP:261774**	1 unit	24.200
		0.50 ... 1.24	--	--	X	**BD2C-3-400-WO-1W***	**BVP:261775**	1 unit	14.700
	630	2.26 ... 3.24	--	--	X	**BD2C-3-630-WO-3W***	**BVP:261779**	1 unit	56.300
		1.26 ... 2.24	--	--	X	**BD2C-3-630-WO-2W***	**BVP:261780**	1 unit	38.300
		0.50 ... 1.24	--	--	X	**BD2C-3-630-WO-1W***	**BVP:261781**	1 unit	22.200
	800	2.26 ... 3.24	--	--	X	**BD2C-3-800-WO-3W***	**BVP:261782**	1 unit	66.800
		1.26 ... 2.24	--	--	X	**BD2C-3-800-WO-2W***	**BVP:261783**	1 unit	45.900
		0.50 ... 1.24	--	--	X	**BD2C-3-800-WO-1W***	**BVP:261784**	1 unit	27.700
	1000	2.26 ... 3.24	--	--	X	**BD2C-3-1000-WO-3W***	**BVP:261785**	1 unit	86.700
		1.26 ... 2.24	--	--	X	**BD2C-3-1000-WO-2W***	**BVP:261786**	1 unit	59.500
		0.50 ... 1.24	--	--	X	**BD2C-3-1000-WO-1W***	**BVP:261787**	1 unit	34.900
	1250	2.26 ... 3.24	--	--	X	**BD2C-3-1250-WO-3W***	**BVP:261788**	1 unit	126.900
		1.26 ... 2.24	--	--	X	**BD2C-3-1250-WO-2W***	**BVP:261789**	1 unit	87.100
		0.50 ... 1.24	--	--	X	**BD2C-3-1250-WO-1W***	**BVP:261790**	1 unit	50.200

*** You can order this quantity or a multiple thereof.**

Junction units

Selection and ordering data

With aluminum busbars

Version	Length/ Optional length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
L-units (with joint block)						
(fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2A-400-LH**	**BVP:261793**	1 unit	8.500
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LH-X***	**BVP:261846**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LH-Y***	**BVP:261847**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LH-X*/Y***	**BVP:261848**	1 unit	28.000
Knee, front 	X0.36/ Y0.36	X	**BD2A-400-LV**	**BVP:261796**	1 unit	8.500
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LV-X***	**BVP:261849**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LV-Y***	**BVP:261850**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LV-X*/Y***	**BVP:261851**	1 unit	28.000
Elbow, right 	X0.36/ Y0.36	X	**BD2A-400-LR**	**BVP:261795**	1 unit	8.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LR-X***	**BVP:261852**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LR-Y***	**BVP:261853**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LR-X*/Y***	**BVP:261854**	1 unit	28.000
Elbow, left 	X0.36/ Y0.36	X	**BD2A-400-LL**	**BVP:261794**	1 unit	8.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LL-X***	**BVP:261855**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LL-Y***	**BVP:261856**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LL-X*/Y***	**BVP:261857**	1 unit	28.000

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

Special colors available on request.

Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers for L-units (optional)				
Fire barrier S90 in limb X	X	**+BD2-S90-BX*-M***	**BVP:931956**	1 unit	1.000
Fire barrier S90 in limb Y	X	**+BD2-S90-BY*-M***	**BVP:931957**	1 unit	1.000
Fire barrier S120 in limb X	X	**+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500
Fire barrier S120 in limb Y	X	**+BD2-S120-BY*-M***	**BVP:931960**	1 unit	1.500

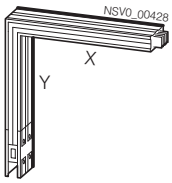
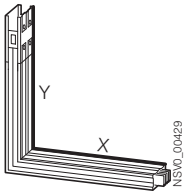
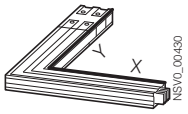
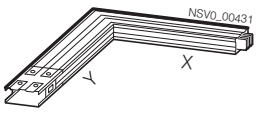
For BX* or BY you must specify the required dimension in meters from the center of the joint block (for BX*: end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany: BD2-S90(S120)-ZUL-D fire protection kit see page 5/69.

* You can order this quantity or a multiple thereof.

With aluminum busbars

Version	Length/ Optional length	DT	Rated current I_e 630 A, 800 A, 1000 A		PS*	Weight per unit approx.
			Type	Order		kg
L-units (with joint block)						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2A-1000-LH**	**BVP:261803**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LH-X***	**BVP:261874**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LH-Y***	**BVP:261875**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LH-X*/Y***	**BVP:261876**	1 unit	59.000
Knee, front 	X0.36/ Y0.36	X	**BD2A-1000-LV**	**BVP:261806**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LV-X***	**BVP:261877**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LV-Y***	**BVP:261878**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LV-X*/Y***	**BVP:261879**	1 unit	59.000
Elbow, right 	X0.36/ Y0.36	X	**BD2A-1000-LR**	**BVP:261805**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LR-X***	**BVP:261880**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LR-Y***	**BVP:261881**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LR-X*/Y***	**BVP:261882**	1 unit	59.000
Elbow, left 	X0.36/ Y0.36	X	**BD2A-1000-LL**	**BVP:261804**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LL-X***	**BVP:261827**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LL-Y***	**BVP:261828**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LL-X*/Y***	**BVP:261829**	1 unit	59.000

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

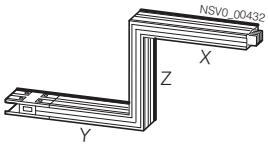
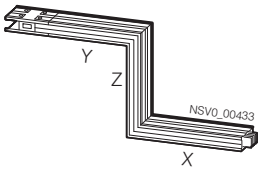
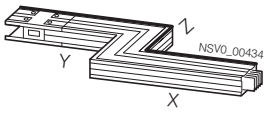
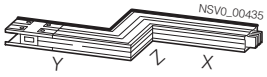
Special colors available on request.

5

* You can order this quantity or a multiple thereof.

Junction units

With aluminum busbars

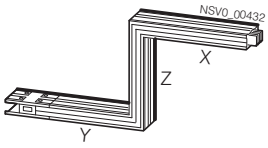
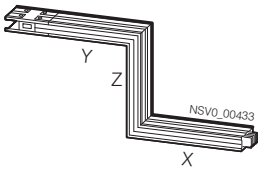
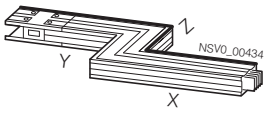
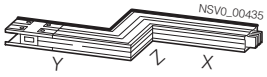
Version	Length/ Optional length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
Z-units (with joint block)						
(Fitted to Y as standard)						
Rear 	X0.36/ Y0.36/ Z0.14 ... 1.25	X	**BD2A-400-ZH-Z***	**BVP:261814**	1 unit	13.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.14 ... 1.25	X	**BD2A-400-ZH-X*/Y*/Z***	**BVP:261822**	1 unit	16.000
Front 	X0.36/ Y0.36/ Z0.14 ... 1.25	X	**BD2A-400-ZV-Z***	**BVP:261813**	1 unit	13.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.14 ... 1.25	X	**BD2A-400-ZV-X*/Y*/Z***	**BVP:261821**	1 unit	16.000
Right 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2A-400-ZR-Z***	**BVP:261811**	1 unit	13.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2A-400-ZR-X*/Y*/Z***	**BVP:261819**	1 unit	16.000
Left 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2A-400-ZL-Z***	**BVP:261812**	1 unit	13.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2A-400-ZL-X*/Y*/Z***	**BVP:261820**	1 unit	16.000

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit, for Z* from the outer edge to the outer edge of the trunking unit (see also page 5/81).

Special colors available on request.

* You can order this quantity or a multiple thereof.

With aluminum busbars

Version	Length/ Optional length	DT	Rated current I_e 630 A, 800 A, 1000 A		PS*	Weight per unit approx.
			Type	Order No.		kg
Z-units (with joint block)						
(Fitted to Y as standard)						
Rear 	X0.36/ Y0.36/ Z0.26 ... 1.25	X	**BD2A-1000-ZH-Z***	**BVP:261818**	1 unit	26.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.26 ... 1.25	X	**BD2A-1000-ZH-X*/Y*/Z***	**BVP:261826**	1 unit	32.000
Front 	X0.36/ Y0.36/ Z0.26 ... 1.25	X	**BD2A-1000-ZV-Z***	**BVP:261817**	1 unit	26.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.26 ... 1.25	X	**BD2A-1000-ZV-X*/Y*/Z***	**BVP:261825**	1 unit	32.000
Right 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2A-1000-ZR-Z***	**BVP:261815**	1 unit	26.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2A-1000-ZR-X*/Y*/Z***	**BVP:261823**	1 unit	32.000
Left 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2A-1000-ZL-Z***	**BVP:261816**	1 unit	26.000
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2A-1000-ZL-X*/Y*/Z***	**BVP:261824**	1 unit	32.000

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit, for Z* from the outer edge to the outer edge of the trunking unit (see also page 5/81).

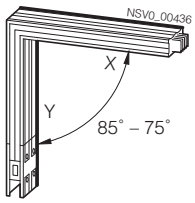
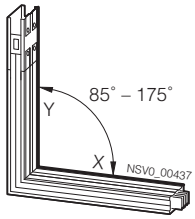
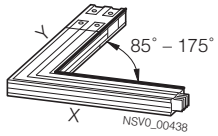
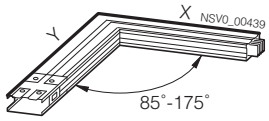
Special colors available on request.

5

*** You can order this quantity or a multiple thereof.**

Junction units

With aluminum busbars

Version	Length/ Optional length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
L-units (with joint block), with engineered angle 85° ... 175°						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2A-400-LH-G***	**BVP:261858**	1 unit	8.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LH-X*-G***	**BVP:261859**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LH-Y*-G***	**BVP:261860**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LH-X*/Y*-G***	**BVP:261861**	1 unit	28.000
Knee, front 	X0.36/ Y0.36	X	**BD2A-400-LV-G***	**BVP:261862**	1 unit	8.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LV-X*-G***	**BVP:261863**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LV-Y*-G***	**BVP:261864**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LV-X*/Y*-G***	**BVP:261865**	1 unit	28.000
Elbow, right 	X0.36/ Y0.36	X	**BD2A-400-LR-G***	**BVP:261866**	1 unit	8.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LR-X*-G***	**BVP:261867**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LR-Y*-G***	**BVP:261868**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LR-X*/Y*-G***	**BVP:261869**	1 unit	28.000
Elbow, left 	X0.36/ Y0.36	X	**BD2A-400-LL-G***	**BVP:261870**	1 unit	8.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-400-LL-X*-G***	**BVP:261871**	1 unit	18.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-400-LL-Y*-G***	**BVP:261872**	1 unit	18.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-400-LL-X*/Y*-G***	**BVP:261873**	1 unit	28.000

Elbow: For G* you must specify the required number of degrees in 5° increments.

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

Special colors available on request.

Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers for L-units (optional)				
Fire barrier S90 in limb X	X	**+BD2-S90-BX*-M***	**BVP:931956**	1 unit	1.000
Fire barrier S90 in limb Y	X	**+BD2-S90-BY*-M***	**BVP:931957**	1 unit	1.000
Fire barrier S120 in limb X	X	**+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500
Fire barrier S120 in limb Y	X	**+BD2-S120-BY*-M***	**BVP:931960**	1 unit	1.500

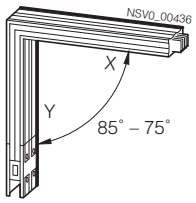
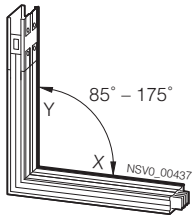
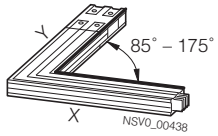
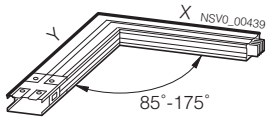
For BX* or BY you must specify the required dimension in meters from the center of the joint block (for BX*: end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany: BD2-S90(S120)-ZUL-D fire protection kit see page 5/69.

*** You can order this quantity or a multiple thereof.**

With aluminum busbars

Version	Length/ Optional length	DT	Rated current I_e 630 A, 800 A, 1000 A		PS*	Weight per unit approx.
			Type	Order No.		kg
L-units (with joint block), with engineered angle 85° ... 175°						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2A-1000-LH-G***	**BVP:261830**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LH-X*-G***	**BVP:261831**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LH-Y*-G***	**BVP:261832**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LH-X*/Y*-G***	**BVP:261833**	1 unit	59.000
Knee, front 	X0.36/ Y0.36	X	**BD2A-1000-LV-G***	**BVP:261834**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LV-X*-G***	**BVP:261835**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LV-Y*-G***	**BVP:261836**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LV-X*/Y*-G***	**BVP:261837**	1 unit	59.000
Elbow, right 	X0.36/ Y0.36	X	**BD2A-1000-LR-G***	**BVP:261838**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LR-X*-G***	**BVP:261839**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LR-Y*-G***	**BVP:261840**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LR-X*/Y*-G***	**BVP:261841**	1 unit	59.000
Elbow, left 	X0.36/ Y0.36	X	**BD2A-1000-LL-G***	**BVP:261842**	1 unit	17.000
	X0.36 ... 1.25/ Y0.36	X	**BD2A-1000-LL-X*-G***	**BVP:261843**	1 unit	38.000
	X0.36/ Y0.36 ... 1.25	X	**BD2A-1000-LL-Y*-G***	**BVP:261844**	1 unit	38.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2A-1000-LL-X*/Y*-G***	**BVP:261845**	1 unit	59.000

Elbow: For G* you must specify the required number of degrees in 5° increments.

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

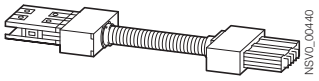
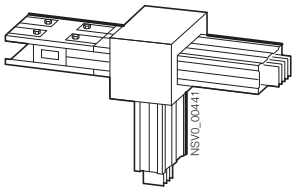
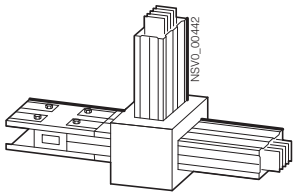
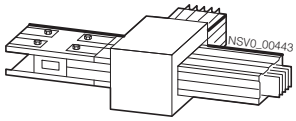
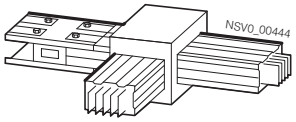
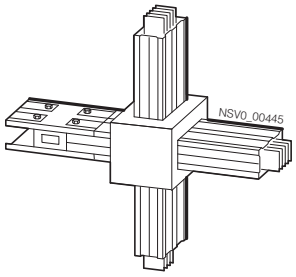
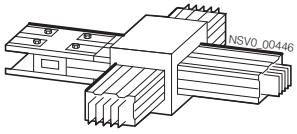
Special colors available on request.

5

*** You can order this quantity or a multiple thereof.**

Junction units

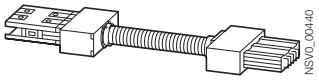
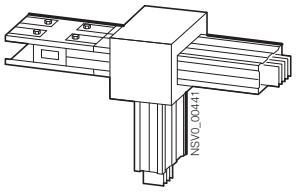
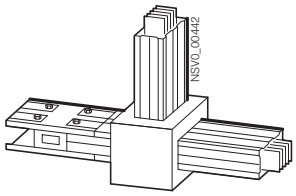
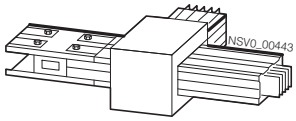
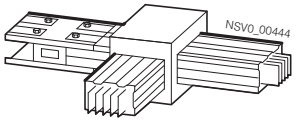
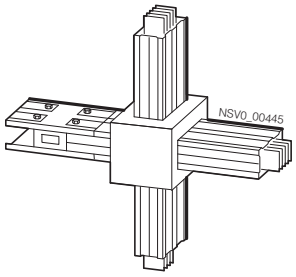
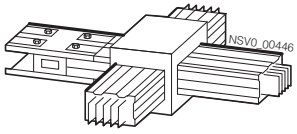
With aluminum busbars

Version	Length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
Flexible junction units (with joint block)						
(Fitted to Y as standard)						
	1.25	X	**BD2-400-R**	**BVP:045889**	1 unit	11.000
T-units (with joint block)						
Rear	0.36	X	**BD2A-400-TH**	**BVP:261797**	1 unit	12.800
						
Front	0.36	X	**BD2A-400-TV**	**BVP:261800**	1 unit	12.800
						
Right	0.36	X	**BD2A-400-TR**	**BVP:261799**	1 unit	12.800
						
Left	0.36	X	**BD2A-400-TL**	**BVP:261798**	1 unit	12.800
						
K-units (with joint block)						
Front/rear	0.36	X	**BD2A-400-KVH**	**BVP:261792**	1 unit	15.300
						
Right/left	0.36	X	**BD2A-400-KRL**	**BVP:261791**	1 unit	15.300
						

Special colors available on request.

* You can order this quantity or a multiple thereof.

With aluminum busbars

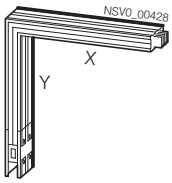
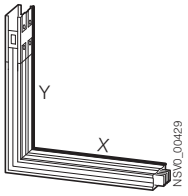
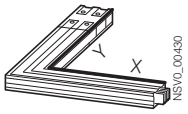
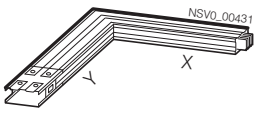
Version	Length	DT	Rated current I_e 630 A, 800 A, 1000 A[1]		PS*	Weight per unit approx.
			Type	Order No.		kg
Flexible junction units (with joint block)						
(Fitted to Y as standard)						
	1.75[1]	X	**BD2-800-R**	**BVP:045890**	1 unit	22.000
T-units (with joint block)						
Rear	0.36	X	**BD2A-1000-TH**	**BVP:261807**	1 unit	25.000
						
Front	0.36	X	**BD2A-1000-TV**	**BVP:261810**	1 unit	25.000
						
Right	0.36	X	**BD2A-1000-TR**	**BVP:261809**	1 unit	25.000
						
Left	0.36	X	**BD2A-1000-TL**	**BVP:261808**	1 unit	25.000
						
K-units (with joint block)						
Front/rear	0.36	X	**BD2A-1000-KVH**	**BVP:261802**	1 unit	32.000
						
Right/left	0.36	X	**BD2A-1000-KRL**	**BVP:261801**	1 unit	32.000
						

Special colors available on request.

1) BD2-800-R for use up to 800 A.

Junction units

With copper busbars

Version	Length/ Optional length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
L-units (with joint block)						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2C-400-LH**	**BVP:261885**	1 unit	15.200
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LH-X***	**BVP:261938**	1 unit	31.500
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LH-Y***	**BVP:261939**	1 unit	31.500
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LH-X*/Y***	**BVP:261940**	1 unit	48.200
Knee, front 	X0.36/ Y0.36	X	**BD2C-400-LV**	**BVP:261888**	1 unit	15.200
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LV-X***	**BVP:261941**	1 unit	31.500
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LV-Y***	**BVP:261942**	1 unit	31.500
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LV-X*/Y***	**BVP:261943**	1 unit	48.200
Elbow, right 	X0.36/ Y0.36	X	**BD2C-400-LR**	**BVP:261887**	1 unit	13.300
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LR-X***	**BVP:261944**	1 unit	30.100
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LR-Y***	**BVP:261945**	1 unit	30.100
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LR-X*/Y***	**BVP:261946**	1 unit	46.600
Elbow, left 	X0.36/ Y0.36	X	**BD2C-400-LL**	**BVP:261886**	1 unit	13.300
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LL-X***	**BVP:261947**	1 unit	30.100
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LL-Y***	**BVP:261948**	1 unit	30.100
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LL-X*/Y***	**BVP:261949**	1 unit	46.600

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

Special colors available on request.

Version	Type suffix	Order No.	PS*	Weight per unit approx.
				kg
Fire barriers for L-units (optional)				
Fire barrier S120 in limb X	X	**+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500
Fire barrier S120 in limb Y	X	**+BD2-S120-BY*-M***	**BVP:931960**	1 unit	1.500

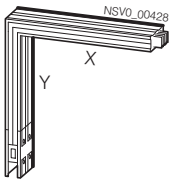
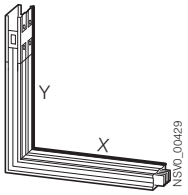
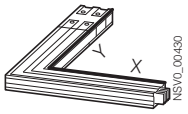
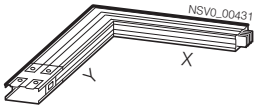
For BX* or BY you must specify the required dimension in meters from the center of the joint block (for BX*: end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany: BD2-S90(S120)-ZUL-D fire protection kit see page 5/69.

* You can order this quantity or a multiple thereof.

With copper busbars

Version	Length/ Optional length	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
			Type	Order No.		kg
L-units (with joint block)						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2C-1250-LH**	**BVP:261895**	1 unit	31.900
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LH-X***	**BVP:261966**	1 unit	72.300
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LH-Y***	**BVP:261967**	1 unit	72.300
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LH-X*/Y***	**BVP:261968**	1 unit	112.800
Knee, front 	X0.36/ Y0.36	X	**BD2C-1250-LV**	**BVP:261898**	1 unit	31.900
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LV-X***	**BVP:261969**	1 unit	72.300
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LV-Y***	**BVP:261970**	1 unit	72.300
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LV-X*/Y***	**BVP:261971**	1 unit	112.800
Elbow, right 	X0.36/ Y0.36	X	**BD2C-1250-LR**	**BVP:261897**	1 unit	29.500
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LR-X***	**BVP:261972**	1 unit	70.000
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LR-Y***	**BVP:261973**	1 unit	70.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LR-X*/Y***	**BVP:261974**	1 unit	110.500
Elbow, left 	X0.36/ Y0.36	X	**BD2C-1250-LL**	**BVP:261896**	1 unit	29.500
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LL-X***	**BVP:261919**	1 unit	70.000
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LL-Y***	**BVP:261920**	1 unit	70.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LL-X*/Y***	**BVP:261921**	1 unit	110.500

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

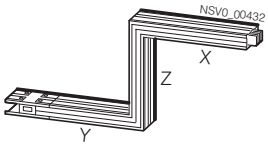
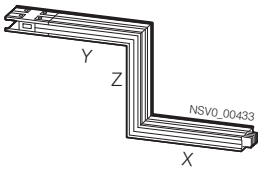
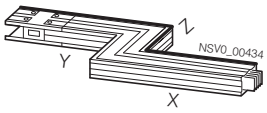
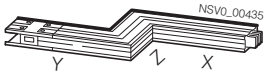
Special colors available on request.

5

*** You can order this quantity or a multiple thereof.**

Junction units

With copper busbars

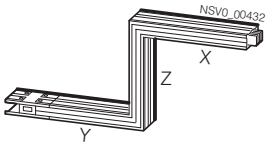
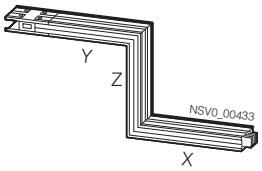
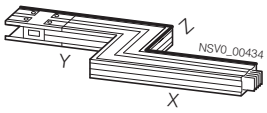
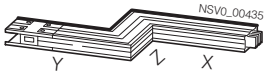
Version	Length/ Optional length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
Z-units (with joint block)						
(Fitted to Y as standard)						
Rear 	X0.36/ Y0.36/ Z0.14 ... 1.25	X	**BD2C-400-ZH-Z***	**BVP:261906**	1 unit	29.700
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.14 ... 1.25	X	**BD2C-400-ZH-X*/Y*/Z***	**BVP:261914**	1 unit	37.100
Front 	X0.36/ Y0.36/ Z0.14 ... 1.25	X	**BD2C-400-ZV-Z***	**BVP:261905**	1 unit	29.700
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.14 ... 1.25	X	**BD2C-400-ZV-X*/Y*/Z***	**BVP:261913**	1 unit	37.100
Right 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2C-400-ZR-Z***	**BVP:261903**	1 unit	27.600
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2C-400-ZR-X*/Y*/Z***	**BVP:261911**	1 unit	34.100
Left 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2C-400-ZL-Z***	**BVP:261904**	1 unit	27.600
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2C-400-ZL-X*/Y*/Z***	**BVP:261912**	1 unit	34.100

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit, for Z* from the outer edge to the outer edge of the trunking unit (see also page 5/81).

Special colors available on request.

* You can order this quantity or a multiple thereof.

With copper busbars

Version	Length/ Optional length	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
			Type	Order No.		kg
Z-units (with joint block)						
(Fitted to Y as standard)						
Rear 	X0.36/ Y0.36/ Z0.26 ... 1.25	X	**BD2C-1250-ZH-Z***	**BVP:261910**	1 unit	67.800
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.26 ... 1.25	X	**BD2C-1250-ZH-X*/Y*/Z***	**BVP:261918**	1 unit	83.500
Front 	X0.36/ Y0.36/ Z0.26 ... 1.25	X	**BD2C-1250-ZV-Z***	**BVP:261909**	1 unit	67.800
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.26 ... 1.25	X	**BD2C-1250-ZV-X*/Y*/Z***	**BVP:261917**	1 unit	83.500
Right 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2C-1250-ZR-Z***	**BVP:261907**	1 unit	64.300
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2C-1250-ZR-X*/Y*/Z***	**BVP:261915**	1 unit	78.600
Left 	X0.36/ Y0.36/ Z0.34 ... 1.25	X	**BD2C-1250-ZL-Z***	**BVP:261908**	1 unit	64.300
	X0.36 ... 0.60/ Y0.36 ... 0.60/ Z0.34 ... 1.25	X	**BD2C-1250-ZL-X*/Y*/Z***	**BVP:261916**	1 unit	78.600

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit, for Z* from the outer edge to the outer edge of the trunking unit (see also page 5/81).

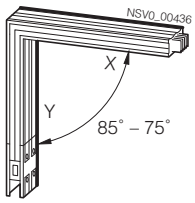
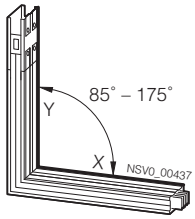
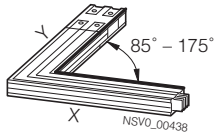
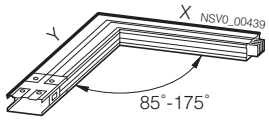
Special colors available on request.

5

*** You can order this quantity or a multiple thereof.**

Junction units

With copper busbars

Version	Length/ Optional length	DT	Rated current I_e 160 A, 250 A, 400 A Type	Order No.	PS*	Weight per unit approx. kg
L-units (with joint block), with engineered angle 85° ... 175°						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2C-400-LH-G***	**BVP:261950**	1 unit	14.700
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LH-X*-G***	**BVP:261951**	1 unit	31.500
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LH-Y*-G***	**BVP:261952**	1 unit	31.500
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LH-X*/Y*-G***	**BVP:261953**	1 unit	48.200
Knee, front 	X0.36/ Y0.36	X	**BD2C-400-LV-G***	**BVP:261954**	1 unit	14.700
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LV-X*-G***	**BVP:261955**	1 unit	31.500
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LV-Y*-G***	**BVP:261956**	1 unit	31.500
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LV-X*/Y*-G***	**BVP:261957**	1 unit	48.200
Elbow, right 	X0.36/ Y0.36	X	**BD2C-400-LR-G***	**BVP:261958**	1 unit	13.300
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LR-X*-G***	**BVP:261959**	1 unit	30.100
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LR-Y*-G***	**BVP:261960**	1 unit	30.100
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LR-X*/Y*-G***	**BVP:261961**	1 unit	46.600
Elbow, left 	X0.36/ Y0.36	X	**BD2C-400-LL-G***	**BVP:261962**	1 unit	13.300
	X0.36 ... 1.25/ Y0.36	X	**BD2C-400-LL-X*-G***	**BVP:261963**	1 unit	30.100
	X0.36/ Y0.36 ... 1.25	X	**BD2C-400-LL-Y*-G***	**BVP:261964**	1 unit	30.100
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-400-LL-X*/Y*-G***	**BVP:261965**	1 unit	46.600

Elbow: For G* you must specify the required number of degrees in 5° increments.

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

Special colors available on request.

Version	Type suffix	Order No.	PS*	Weight per unit approx. kg
Fire barriers for L-units (optional)				
Fire barrier S120 in limb X	X	**+BD2-S120-BX*-M***	**BVP:931959**	1 unit	1.500
Fire barrier S120 in limb Y	X	**+BD2-S120-BY*-M***	**BVP:931960**	1 unit	1.500

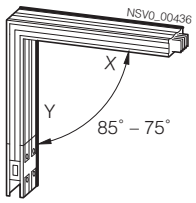
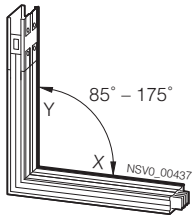
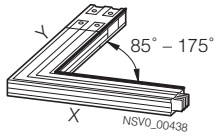
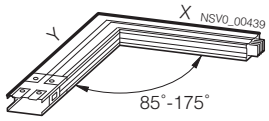
For BX* or BY you must specify the required dimension in meters from the center of the joint block (for BX*: end without joint block) to the center of the fire wall or fire ceiling, for -M* specify the wall or ceiling thickness.

For the configuration of the fire barriers, see page 5/94.

For approval in Germany: BD2-S90(S120)-ZUL-D fire protection kit see page 5/69.

*** You can order this quantity or a multiple thereof.**

With copper busbars

Version	Length/ Optional length	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
			Type	Order No.		kg
L-units (with joint block), with engineered angle 85° ... 175°						
(Fitted to Y as standard)						
Knee, rear 	X0.36/ Y0.36	X	**BD2C-1250-LH-G***	**BVP:261922**	1 unit	31.900
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LH-X*-G***	**BVP:261923**	1 unit	72.300
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LH-Y*-G***	**BVP:261924**	1 unit	72.300
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LH-X*/Y*-G***	**BVP:261925**	1 unit	112.800
Knee, front 	X0.36/ Y0.36	X	**BD2C-1250-LV-G***	**BVP:261926**	1 unit	31.900
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LV-X*-G***	**BVP:261927**	1 unit	72.300
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LV-Y*-G***	**BVP:261928**	1 unit	72.300
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LV-X*/Y*-G***	**BVP:261929**	1 unit	112.800
Elbow, right 	X0.36/ Y0.36	X	**BD2C-1250-LR-G***	**BVP:261930**	1 unit	29.500
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LR-X*-G***	**BVP:261931**	1 unit	70.000
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LR-Y*-G***	**BVP:261932**	1 unit	70.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LR-X*/Y*-G***	**BVP:261933**	1 unit	110.500
Elbow, left 	X0.36/ Y0.36	X	**BD2C-1250-LL-G***	**BVP:261934**	1 unit	29.500
	X0.36 ... 1.25/ Y0.36	X	**BD2C-1250-LL-X*-G***	**BVP:261935**	1 unit	70.000
	X0.36/ Y0.36 ... 1.25	X	**BD2C-1250-LL-Y*-G***	**BVP:261936**	1 unit	70.000
	X0.36 ... 1.25/ Y0.36 ... 1.25	X	**BD2C-1250-LL-X*/Y*-G***	**BVP:261937**	1 unit	110.500

Elbow: For G* you must specify the required number of degrees in 5° increments.

Optional lengths: For X* and Y* you must specify the required dimension in meters from the center of the joint block to the outside edge of the trunking unit (see also page 5/81).

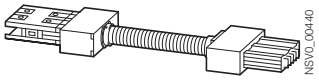
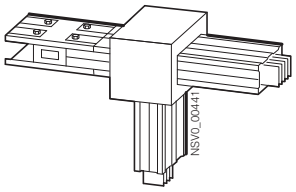
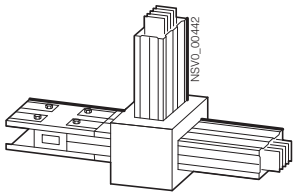
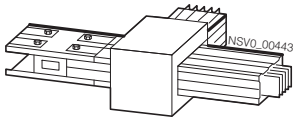
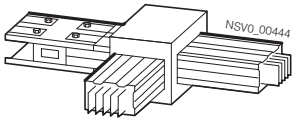
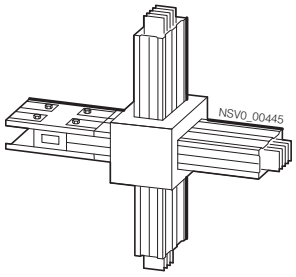
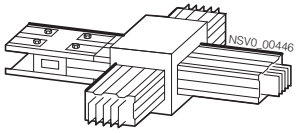
Special colors available on request.

5

*** You can order this quantity or a multiple thereof.**

Junction units

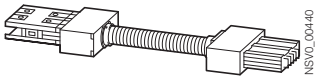
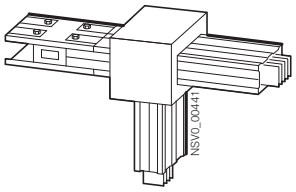
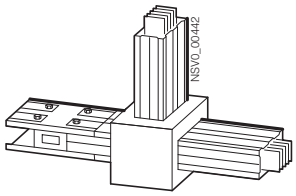
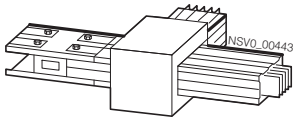
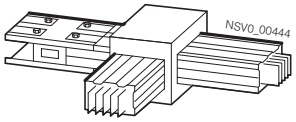
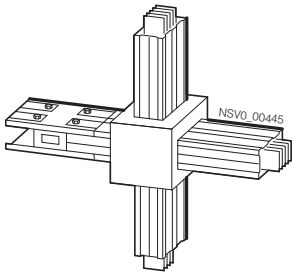
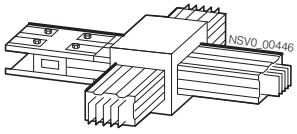
With copper busbars

Version	Length	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
			Type	Order No.		kg
Flexible junction units (with joint block)						
(Fitted to Y as standard)						
	1.25	X	**BD2-400-R**	**BVP:045889**	1 unit	11.000
T-units (with joint block)						
Rear	0.36	X	**BD2C-400-TH**	**BVP:261889**	1 unit	21.900
						
Front	0.36	X	**BD2C-400-TV**	**BVP:261892**	1 unit	21.900
						
Right	0.36	X	**BD2C-400-TR**	**BVP:261891**	1 unit	16.700
						
Left	0.36	X	**BD2C-400-TL**	**BVP:261890**	1 unit	16.700
						
K-units (with joint block)						
Front/rear	0.36	X	**BD2C-400-KVH**	**BVP:261884**	1 unit	27.100
						
Right/left	0.36	X	**BD2C-400-KRL**	**BVP:261883**	1 unit	20.300
						

Special colors available on request.

* You can order this quantity or a multiple thereof.

With copper busbars

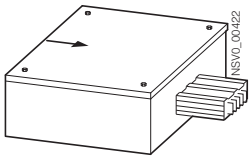
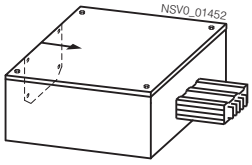
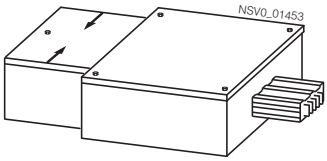
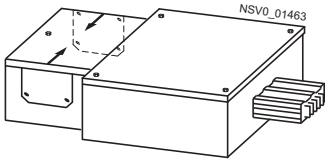
Version	Length	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A[1]		PS*	Weight per unit approx.
			Type	Order No.		kg
Flexible junction units (with joint block)						
(Fitted to Y as standard)						
	1.75[1]	X	**BD2-800-R**	**BVP:045890**	1 unit	22.000
T-units (with joint block)						
Rear	0.36	X	**BD2C-1250-TH**	**BVP:261899**	1 unit	49.300
						
Front	0.36	X	**BD2C-1250-TV**	**BVP:261902**	1 unit	49.300
						
Right	0.36	X	**BD2C-1250-TR**	**BVP:261901**	1 unit	37.700
						
Left	0.36	X	**BD2C-1250-TL**	**BVP:261900**	1 unit	37.700
						
K-units (with joint block)						
Front/rear	0.36	X	**BD2C-1250-KVH**	**BVP:261894**	1 unit	63.100
						
Right/left	0.36	X	**BD2C-1250-KRL**	**BVP:261893**	1 unit	47.900
						

Special colors available on request.

1) BD2-800-R for use up to 800 A.

Feeder units

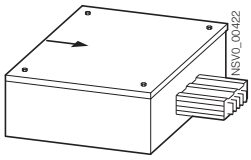
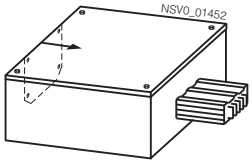
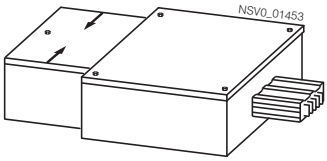
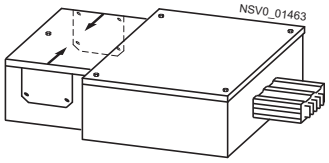
Selection and ordering data

Version	DT	Rated current I_e 160 A, 250 A		PS*	Weight per unit approx.	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Feeder units										
End feeder units without joint block										
Bolt terminal (bolt included in scope of supply); PE position can be changed										
Cable entry for multi-core cables from the front										
										
• Aluminum	X	**BD2A-250-EE**	**BVP:261993**	1 unit	6.600	X	**BD2A-400-EE**	**BVP:261995**	1 unit	13.300
• Copper	X	**BD2C-250-EE**	**BVP:262001**	1 unit	8.900	X	**BD2C-400-EE**	**BVP:262003**	1 unit	16.300
With cable entry plate[1]										
Cable entry for single-core cables from the front										
										
• Aluminum	X	**BD2A-250-EE-EBAL**	**BVP:611093**	1 unit	6.600	X	**BD2A-400-EE-EBAL**	**BVP:611097**	1 unit	13.300
• Copper	X	**BD2C-250-EE-EBAL**	**BVP:611094**	1 unit	8.900	X	**BD2C-400-EE-EBAL**	**BVP:611098**	1 unit	16.300
With cabling box										
Cable entry for multi-core cables from 2 sides										
										
• Aluminum		--				X	**BD2A-400-EE-KR**	**BVP:611095**	1 unit	16.500
• Copper		--				X	**BD2C-400-EE-KR**	**BVP:611096**	1 unit	19.500
With cabling box and cable entry plate[1]										
Cable entry for single -core cables from 2 sides										
										
• Aluminum		--				X	**BD2A-400-EE-KR-EBAL**	**BVP:611099**	1 unit	16.500
• Copper		--				X	**BD2C-400-EE-KR-EBAL**	**BVP:611100**	1 unit	19.500

Accessories for cable entry, see page 5/69.

1) Single-core cable entry plate, undrilled.

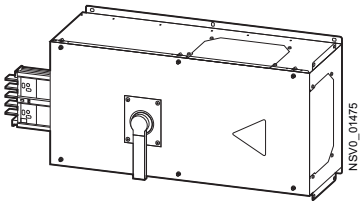
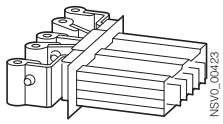
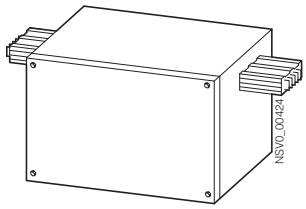
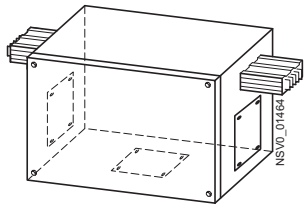
* You can order this quantity or a multiple thereof.

Version	DT	Rated current I_e 630 A, 800 A, 1000 A		PS*	Weight per unit approx.	DT	Rated current I_e 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Feeder units										
End feeder units without joint block										
Bolt terminal (bolt included in scope of supply); PE position can be changed										
Cable entry for multi-core cables from the front										
										
• Aluminum	X	**BD2A-1000-EE**	**BVP:261998**	1 unit	14.900		**–**			
• Copper	X	**BD2C-1000-EE**	**BVP:262006**	1 unit	22.100	X	**BD2C-1250-EE**	**BVP:262009**	1 unit	27.100
With cable entry plate[1]										
Cable entry for single-core cables from the front										
										
• Aluminum	X	**BD2A-1000-EE-EBAL**	**BVP:611103**	1 unit	14.900		**–**			
• Copper	X	**BD2C-1000-EE-EBAL**	**BVP:611104**	1 unit	22.100	X	**BD2C-1250-EE-EBAL**	**BVP:611108**	1 unit	27.100
With cabling box										
Cable entry for multi-core cables from 2 sides										
										
• Aluminum	X	**BD2A-1000-EE-KR**	**BVP:611101**	1 unit	19.900		**–**			
• Copper	X	**BD2C-1000-EE-KR**	**BVP:611102**	1 unit	27.100	X	**BD2C-1250-EE-KR**	**BVP:611107**	1 unit	32.100
With cabling box and cable entry plate[1]										
Cable entry for single -core cables from 2 sides										
										
• Aluminum	X	**BD2A-1000-EE-KR-EBAL**	**BVP:611105**	1 unit	19.900		**–**			
• Copper	X	**BD2C-1000-EE-KR-EBAL**	**BVP:611106**	1 unit	27.100	X	**BD2C-1250-EE-KR-EBAL**	**BVP:611109**	1 unit	32.100

Accessories for cable entry, see page 5/69.

1) Single-core cable entry plate, undrilled.

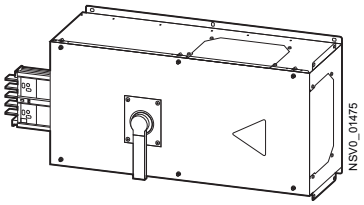
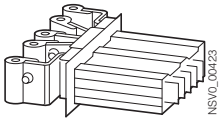
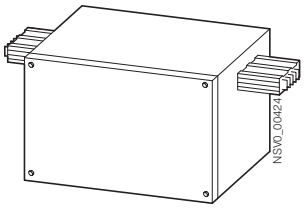
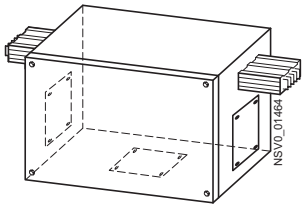
Feeder units

Version	DT	Rated current I_e 160 A, 250 A Type	Order No.	PS*	Weight per unit approx. kg	DT	Rated current I_e 160 A, 250 A, 400 A Type	Order No.	PS*	Weight per unit approx. kg
Feeder units										
End feeder units with 3-pole switch disconnector and with cable entry plate[1]										
Cable entry for single-core cables from 3 sides										
										
• Copper	X	**BD2C-250-EESC**	**BVP:611343**	1 unit	28.000	X	**BD2C-315-EESC**	**BVP:611344**	1 unit	28.000
• Copper						X	**BD2C-400-EESC**	**BVP:611345**	1 unit	33.000
Distribution board feeder units without joint block										
Bolt terminal (bolt included in scope of supply); PE position can be changed										
										
• Aluminum	X	**BD2A-250-VE**	**BVP:261994**	1 unit	2.100	X	**BD2A-400-VE**	**BVP:261996**	1 unit	3.500
• Copper	X	**BD2C-250-VE**	**BVP:262002**	1 unit	4.400	X	**BD2C-400-VE**	**BVP:262004**	1 unit	6.500
Center feeder units without joint block										
Bolt terminal (bolt included in scope of supply); edgewise, flat and PE positions can be changed (by rotating the whole busbar section)										
Cable entry for multi-core cables from 3 sides										
										
• Aluminum		–				X	**BD2A-400-ME**	**BVP:261997**	1 unit	28.000
• Copper		–				X	**BD2C-400-ME**	**BVP:262005**	1 unit	36.600
With cable entry plate[1]										
Cable entry for single-core cables from 3 sides										
										
• Aluminum		–				X	**BD2A-400-ME-MBAL**	**BVP:611110**	1 unit	28.000
• Copper		–				X	**BD2C-400-ME-MBAL**	**BVP:611111**	1 unit	36.600

Accessories for cable entry, see page 5/69.

1) Single-core cable entry plate, undrilled.

* You can order this quantity or a multiple thereof.

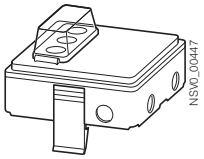
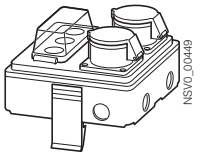
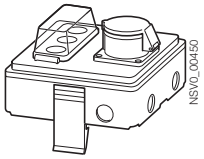
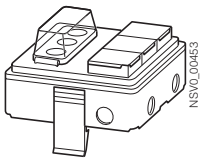
Version	DT	Rated current I_e 630 A, 800 A, 1000 A		PS*	Weight per unit approx.	DT	Rated current I_e 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Feeder units										
End feeder units with 3-pole switch disconnector and with cable entry plate[1]										
Cable entry for single -core cables from 3 sides										
										
• Copper	X	**BD2C-630-EESC**	**BVP:611346**	1 unit	39.000		–			
• Copper	X	**BD2C-800-EESC**	**BVP:611347**	1 unit	39.000					
Distribution board feeder units without joint block										
Bolt terminal (bolt included in scope of supply); PE position can be changed										
										
• Aluminum	X	**BD2A-1000-VE**	**BVP:261999**	1 unit	4.700		–			
• Copper	X	**BD2C-1000-VE**	**BVP:262007**	1 unit	11.800	X	**BD2C-1250-VE**	**BVP:262010**	1 unit	16.300
Center feeder units without joint block										
Bolt terminal (bolt included in scope of supply); edgewise, flat and PE positions can be changed (by rotating the whole busbar section)										
Cable entry for multi-core cables from 3 sides										
										
• Aluminum	X	**BD2A-1000-ME**	**BVP:262000**	1 unit	47.000		–			
• Copper	X	**BD2C-1000-ME**	**BVP:262008**	1 unit	75.500		–			
With cable entry plate[1]										
Cable entry for single -core cables from 3 sides										
										
• Aluminum	X	**BD2A-1000-ME-MBAL**	**BVP:611112**	1 unit	47.000		–			
• Copper	X	**BD2C-1000-ME-MBAL**	**BVP:611113**	1 unit	75.500		–			

Accessories for cable entry, see page 5/69.

1) Single-core cable entry plate, undrilled.

Tap-off units for international use

Selection and ordering data

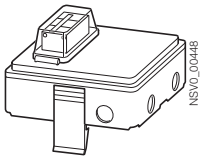
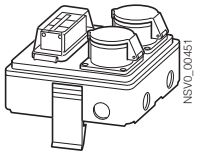
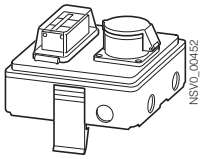
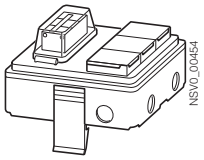
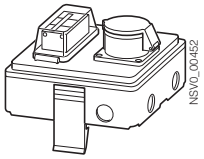
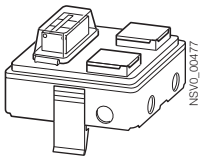
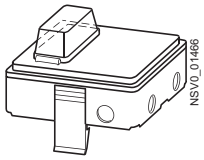
Version	Fuse bases	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 1, up to 25 A								
With fuse base								
• Without socket outlet	3 × D02	25	400	X	**BD2-AK1/S18**	**BVP:047112**	1 unit	1.150
	3 × D01	16	400	X	**BD2-AK1/S14**	**BVP:047113**	1 unit	1.100
• With 2 CEE socket outlets, 3-pole, 16 A	2 × D01	16	230	X	**BD2-AK1/2CEE163S14**	**BVP:047167**	1 unit	1.200
								
• With 1 CEE socket outlet, 5-pole, 16 A	3 × D01	16	400	X	**BD2-AK1/CEE165S14**	**BVP:047230**	1 unit	1.200
								
• With 3 Schuko socket outlets 16 A	3 × D01	16	230	X	**BD2-AK1/3SD163S14**	**BVP:047284**	1 unit	1.400
								

M25 cable grommet included in scope of supply.

Screw adapters, fuse links and screw caps are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

* You can order this quantity or a multiple thereof.

Version	Miniature circuit breakers (MCBs)	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 1, up to 25 A								
With miniature circuit breaker								
• Without socket outlet 	3-pole, 16 A, characteristic C	16	400	X	**BD2-AK1/A163**	**BVP:047146**	1 unit	1.400
• With 2 CEE socket outlets, 3-pole, 16 A 	2 × 1-pole, 16 A, characteristic B	16	230	X	**BD2-AK1/2CEE163A161**	**BVP:047231**	1 unit	1.400
• With 1 CEE socket outlet, 5-pole, 16 A 	3-pole, 16 A, characteristic C	16	400	X	**BD2-AK1/CEE165A163**	**BVP:047283**	1 unit	1.500
• With 3 Schuko socket outlets 16 A 	3 × 1-pole, 16 A, characteristic B	16	230	X	**BD2-AK1/3SD163A161**	**BVP:047335**	1 unit	1.300
• With 1 CEE socket outlet, 3-pole, 16 A 	1-pole, 16 A, characteristic C RCCBs 2-pole, 25 A/30 mA	16	230	X	**BD2-AK1/CEE163FIA161**	**BVP:660869**	1 unit	1.500
• With 2 Schuko socket outlets 16 A 	1-pole, 16 A, characteristic B RCCBs 2-pole, 25 A/30 mA	16	230	X	**BD2-AK1/2SD163FIA161**	**BVP:660870**	1 unit	1.300
Freely assignable (P_V max 13 W)								
• Without socket outlet, with integrated standard mounting rail 	Mounting space for 4 modular widths (MW)	25	400	X	**BD2-AK1/F**	**BVP:203247**	1 unit	0.700

M25 cable grommet included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

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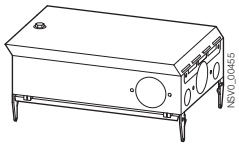
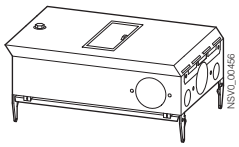
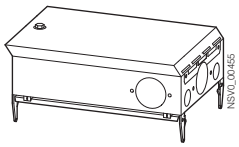
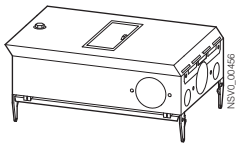
Tap-off units for international use

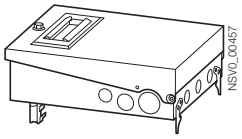
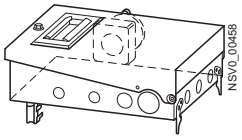
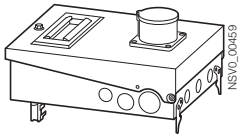
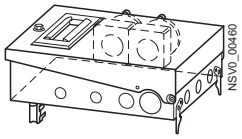
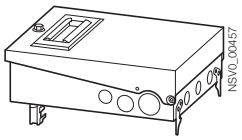
Version	Fuse base/miniature circuit breaker	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 02, up to 63 A								
With fuse base								
	3-pole fuse base D02	63	400	X	**BD2-AK02X/S18**	**BVP:262438**	1 unit	4.140
	3-pole fuse base S27, with gauge screw system	25	500	X	**BD2-AK02X/S27**	**BVP:262439**	1 unit	3.940
	3-pole fuse base S33, with gauge screw system	63	500	X	**BD2-AK02X/S33**	**BVP:262450**	1 unit	4.200
	3-pole fuse base SP38 for cylinder fuses 10 mm × 38 mm	25	400	X	**BD2-AK02X/ F1038-3**	**BVP:262469**	1 unit	5.500
	4-pole fuse base SP38 for cylinder fuses 10 mm × 38 mm	25	400	X	**BD2-AK02X/ F1038-3N**	**BVP:262470**	1 unit	5.500
	3-pole fuse base SP51 for cylinder fuses 14 mm × 51 mm	32	400	X	**BD2-AK02X/ F1451-3**	**BVP:262471**	1 unit	5.500
	4-pole fuse base SP51 for cylinder fuses 14 mm × 51 mm	32	400	X	**BD2-AK02X/ F1451-3N**	**BVP:262472**	1 unit	5.500
	3-pole fuse base SP58 for cylinder fuses 22 mm × 58 mm	63	400	X	**BD2-AK02X/ F2258-3**	**BVP:262473**	1 unit	5.700
	4-pole fuse base SP58 for cylinder fuses 22 mm × 58 mm	63	400	X	**BD2-AK02X/ F2258-3N**	**BVP:262474**	1 unit	5.700
With miniature circuit breaker								
	3-pole, 32 A, characteristic C	32	400	X	**BD2-AK02M2/A323**	**BVP:262451**	1 unit	4.380
	3-pole + N, 32 A, characteristic C	32	400	X	**BD2-AK02M2/A323N**	**BVP:262452**	1 unit	4.800
	3-pole, 63 A, characteristic C	63	400	X	**BD2-AK02M2/A633**	**BVP:262453**	1 unit	5.100
	3-pole + N, 63 A, characteristic C	63	400	X	**BD2-AK02M2/A633N**	**BVP:262454**	1 unit	5.200
Freely assignable (P_V max 22.5 W)								
• With integrated standard mounting rail	Mounting space for 8 modular widths (MW)	63	690	X	**BD2-AK02X/F**	**BVP:262457**	1 unit	3.800
								
• With device installation unit, 8 MW	Mounting space for 8 modular widths (MW)	63	690	X	**BD2-AK02M2/F**	**BVP:262458**	1 unit	3.900
								

Special colors available on request.

Screw adapters, fuse links and screw caps are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

*** You can order this quantity or a multiple thereof.**

Version	Fuse bases	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 2, up to 63 A								
With fuse base								
• Without socket outlet 	3-pole fuse base D02	63	400	X	**BD2-AK2X/S18**	**BVP:203135**	1 unit	4.140
	3-pole fuse base S27, with gauge screw system	25	500	X	**BD2-AK2X/S27**	**BVP:203136**	1 unit	3.940
	3-pole fuse base S33, with gauge screw system	63	500	X	**BD2-AK2X/S33**	**BVP:203138**	1 unit	4.200
• With 1 CEE socket outlet, 5-pole, 32 A 	3-pole fuse base S33, with gauge screw system	32	400	X	**BD2-AK2X/CEE325S33**	**BVP:203142**	1 unit	5.100
• With 1 CEE socket outlet, 5-pole, 63 A 	3-pole fuse base S33, with gauge screw system	63	400	X	**BD2-AK2X/CEE635S33**	**BVP:203146**	1 unit	5.680
With 2 CEE socket outlets, 5-pole, 16 A 	2 × 3-pole fuse base D01	16	400	X	**BD2-AK2X/2CEE165S14**	**BVP:203148**	1 unit	4.800
	2 × 3-pole fuse base S27, with gauge screw system	16	400	X	**BD2-AK2X/2CEE165S27/FORMP**	**BVP:203149**	1 unit	4.900
Freely assignable (P_V max 22.5 W)								
• Without socket outlet, with integrated standard mounting rail 	Mounting space for 8 modular widths (MW)	63	690	X	**BD2-AK2X/F**	**BVP:203251**	1 unit	3.800

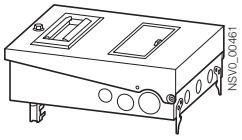
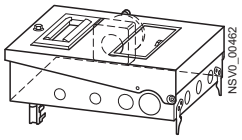
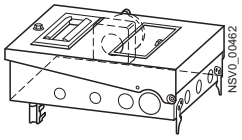
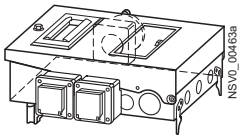
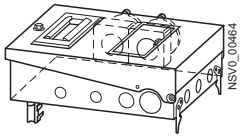
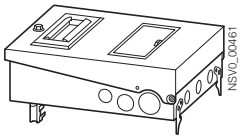
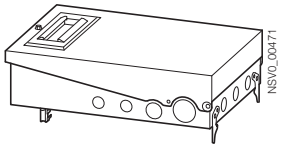
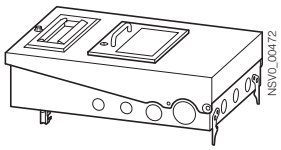
Special colors available on request.

Screw adapters, fuse links and screw caps are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

* You can order this quantity or a multiple thereof.

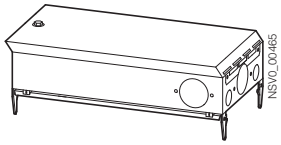
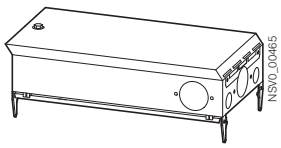
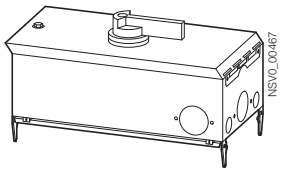
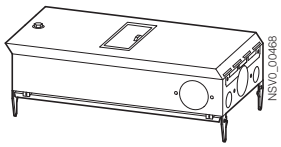
Tap-off units for international use

Version	Miniature circuit breaker/ fuse base/switch disconnector	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 2, up to 63 A								
With miniature circuit breaker								
• Without socket outlet 	3-pole, 32 A, characteristic C	32	400	X	**BD2-AK2M2/A323**	**BVP:203144**	1 unit	4.380
• With 1 CEE socket outlet, 5-pole, 16 A 	3-pole, 16 A, characteristic C RCCBs 4-pole, 25 A/30 mA	16	400	X	**BD2-AK2M2/ CEE165FIA163**	**BVP:660868**	1 unit	6.100
• With 1 CEE socket outlet, 5-pole, 32 A 	3-pole, 32 A, characteristic C	32	400	X	**BD2-AK2M2/ CEE325A323**	**BVP:207986**	1 unit	4.900
• With 1 CEE socket outlet, 5-pole, 16 A and 2 Schuko socket outlets 16 A 	3-pole, 16 A, characteristic B and 2 × 1-pole, 16 A, characteristic B	16	230	X	**BD2-AK2M2/ 2SD163CEE165A163**	**BVP:203150**	1 unit	5.600
• With 2 CEE socket outlets, 5-pole, 16 A 	2 × 3-pole, 16 A, characteristic C	16	400	X	**BD2-AK2M2/ 2CEE165A163**	**BVP:203151**	1 unit	5.400
Freely assignable (P_V max 22.5 W)								
• Without socket outlet, with device installation unit 	Mounting space for 8 modular widths (MW)	63	690	X	**BD2-AK2M2/F**	**BVP:203252**	1 unit	3.900
Sheet-steel enclosures, size 3, up to 125 A								
With fuse base 	LV HRC fuse base, size 00; bolt terminal	125	690	X	**BD2-AK3X/GS00**	**BVP:203162**	1 unit	5.400
With fuse switch-disconnector 	LV HRC fuse switch-disconnector, size 00; bolt terminal	125	690	X	**BD2-AK3X/GSTZ00**	**BVP:203163**	1 unit	6.960

Special colors available on request.

Use plastic cable glands with strain relief (not included in scope of supply).

* You can order this quantity or a multiple thereof.

Version	Protection equipment	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 03, up to 125 A								
With fuse base	Bolt terminal							
	3-pole fuse base SP58 for cylindrical fuses 22 mm × 58 mm	125	690	X	**BD2-AK03X/ F2258-3**	**BVP:262497**	1 unit	7.500
	4-pole fuse base SP58 for cylindrical fuses 22 mm × 58 mm	125	690	X	**BD2-AK03X/ F2258-3N**	**BVP:262498**	1 unit	7.500
With fuse switch-disconnector	LV HRC fuse switch-disconnector, size 00; bolt terminal	125	690	X	**BD2-AK03X/ GSTA00**	**BVP:262496**	1 unit	6.960
								
With fuse switch-disconnector	Bolt terminal							
	3-pole, IEC	125	400	X	**BD2-AK03X/ FS125IEC-3**	**BVP:262499**	1 unit	7.940
	3-pole, BS	125	400	X	**BD2-AK03X/ FS125BS-3**	**BVP:262500**	1 unit	7.940
	4-pole, IEC	125	400	X	**BD2-AK03X/ FS125IEC-4**	**BVP:262501**	1 unit	8.280
	4-pole, BS	125	400	X	**BD2-AK03X/ FS125BS-4**	**BVP:262502**	1 unit	8.280
With miniature circuit breaker	3-pole, 125 A, characteristic C	125	400	X	**BD2-AK03M2/ A1253**	**BVP:262485**	1 unit	5.800
	3-pole + N, 125 A, characteristic C	125	400	X	**BD2-AK03M2/ A1253N**	**BVP:262486**	1 unit	6.000

Special colors available on request.

Fuse links are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

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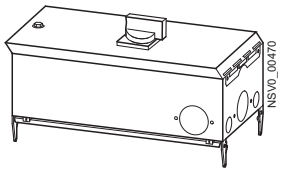
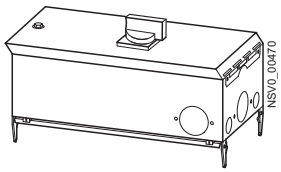
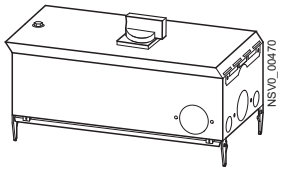
* You can order this quantity or a multiple thereof.

Tap-off units for international use

Version	Circuit breaker/ setting range	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
	A	A	V					kg
Sheet-steel enclosures, size 03, up to 125 A								
With circuit breaker, normal switching capacity, with rotary operating mechanism, terminal connection								
• With thermal-magnetic trip unit	3-pole							
	3VL27 05 40 ... 50	40	400	X	**BD2-AK03X/ LSD-DC40-N**	**BVP:610402**	1 unit	8.500
	3VL27 06 50 ... 63	63	400	X	**BD2-AK03X/ LSD-DC63-N**	**BVP:610403**	1 unit	8.500
	3VL27 08 63 ... 80	80	400	X	**BD2-AK03X/ LSD-DC80-N**	**BVP:610404**	1 unit	8.500
	3VL27 10 80 ... 100	100	400	X	**BD2-AK03X/ LSD-DC100-N**	**BVP:610405**	1 unit	8.500
	3VL27 12 100 ... 125	125	400	X	**BD2-AK03X/ LSD-DC125-N**	**BVP:610406**	1 unit	8.500
• With solid-state trip unit, selective	3-pole							
	3VL27 06 50 ... 63	63	400	X	**BD2-AK03X/ LSD-AE63-N**	**BVP:610407**	1 unit	8.500
	3VL27 10 80 ... 100	100	400	X	**BD2-AK03X/ LSD-AE100-N**	**BVP:610408**	1 unit	8.500
• With thermal-magnetic trip unit, selective (N release 100 %)	4-pole							
	3VL27 05 40 ... 50	40	400	X	**BD2-AK03X/ LSD-EM40-N**	**BVP:610397**	1 unit	9.000
	3VL27 06 50 ... 63	63	400	X	**BD2-AK03X/ LSD-EM63-N**	**BVP:610398**	1 unit	9.000
	3VL27 08 63 ... 80	80	400	X	**BD2-AK03X/ LSD-EM80-N**	**BVP:610399**	1 unit	9.000
	3VL27 10 80 ... 100	100	400	X	**BD2-AK03X/ LSD-EM100-N**	**BVP:610400**	1 unit	9.000
	3VL27 12 100 ... 125	125	400	X	**BD2-AK03X/ LSD-EM125-N**	**BVP:610401**	1 unit	9.000

Special colors available on request.

Use plastic cable glands with strain relief (not included in scope of supply).

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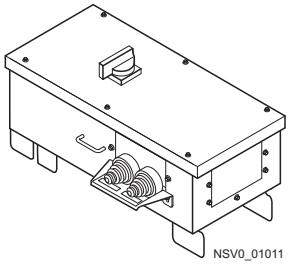
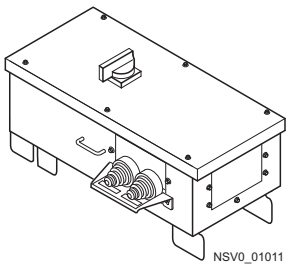
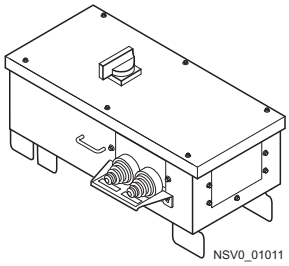
* You can order this quantity or a multiple thereof.

Version	Circuit breaker/ setting range	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
	A	A	V					kg
Sheet-steel enclosures, size 04, 05 and 06, up to 530 A								
With circuit breaker, normal switching capacity, with rotary operating mechanism, bolt terminals								
• With thermal-magnetic trip unit	3-pole							
 NSV0_01011	3VL27 16 125 ... 160	160	400	X	**BD2-AK04/ LSD-DC160-N**	**BVP:610424**	1 unit	30.000
	3VL37 20 160 ... 200	200	400	X	**BD2-AK04/ LSD-DC200-N**	**BVP:610430**	1 unit	30.000
	3VL37 25 200 ... 250	250	400	X	**BD2-AK04/ LSD-DC250-N**	**BVP:610436**	1 unit	30.000
	3VL47 40 320 ... 400	400	400	X	**BD2-AK05/ LSD-DC400-N**	**BVP:610442**	1 unit	35.000
	3VL57 63 500 ... 530	530	400	X	**BD2-AK06/ LSD-DC630-N**	**BVP:610448**	1 unit	40.000
• With solid-state trip unit, selective	3-pole							
 NSV0_01011	3VL27 16 125 ... 160	160	400	X	**BD2-AK04/ LSD-AE160-N**	**BVP:610428**	1 unit	30.000
	3VL37 20 160 ... 200	200	400	X	**BD2-AK04/ LSD-AE200-N**	**BVP:610434**	1 unit	30.000
	3VL37 25 200 ... 250	250	400	X	**BD2-AK04/ LSD-AE250-N**	**BVP:610440**	1 unit	30.000
	3VL47 40 320 ... 400	400	400	X	**BD2-AK05/ LSD-AE400-N**	**BVP:610446**	1 unit	35.000
	3VL57 63 500 ... 530	530	400	X	**BD2-AK06/ LSD-AE630-N**	**BVP:610452**	1 unit	40.000
• With thermal-magnetic trip unit, selective (N release 60 %)	4-pole							
 NSV0_01011	3VL27 16 125 ... 160	160	400	X	**BD2-AK04/ LSD-EC160-N**	**BVP:610426**	1 unit	30.000
	3VL37 20 160 ... 200	200	400	X	**BD2-AK04/ LSD-EC200-N**	**BVP:610432**	1 unit	30.000
	3VL37 25 200 ... 250	250	400	X	**BD2-AK04/ LSD-EC250-N**	**BVP:610438**	1 unit	30.000
	3VL47 40 320 ... 400	400	400	X	**BD2-AK05/ LSD-EC400-N**	**BVP:610444**	1 unit	35.000
	3VL57 63 500 ... 530	530	400	X	**BD2-AK06/ LSD-EC630-N**	**BVP:610450**	1 unit	40.000

Special colors available on request.

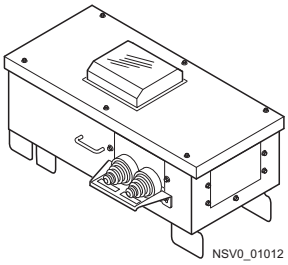
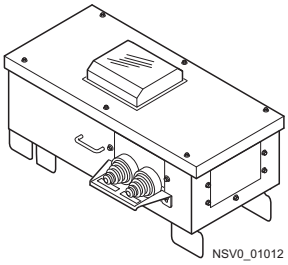
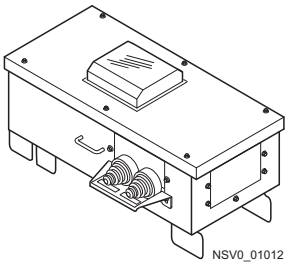
Use plastic cable glands with strain relief (not included in scope of supply).

For BD2-AK04, -AK05 and -AK06, the KT3 or KT4 cable grommet is included in scope of supply.

The tap-off units, size 05 and 06, are suitable only for systems 630 A to 1250 A.

* You can order this quantity or a multiple thereof.

Tap-off units for international use

Version	Circuit breaker/ setting range	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
	A	A	V					kg
Sheet-steel enclosures, size 04, 05 and 06, up to 530 A								
With circuit breaker, normal switching capacity, with motorized operating mechanism, bolt terminals								
• With thermal-magnetic trip unit	3-pole							
 NSV0_01012	3VL27 16 125 ... 160	160	400	X	**BD2-AK04/ LSM-DC160-N**	**BVP:610425**	1 unit	30.000
	3VL37 20 160 ... 200	200	400	X	**BD2-AK04/ LSM-DC200-N**	**BVP:610431**	1 unit	30.000
	3VL37 25 200 ... 250	250	400	X	**BD2-AK04/ LSM-DC250-N**	**BVP:610437**	1 unit	30.000
	3VL47 40 320 ... 400	400	400	X	**BD2-AK05/ LSM-DC400-N**	**BVP:610443**	1 unit	35.000
	3VL57 63 500 ... 530	530	400	X	**BD2-AK06/ LSM-DC630-N**	**BVP:610449**	1 unit	40.000
• With solid-state trip unit, selective	3-pole							
 NSV0_01012	3VL27 16 125 ... 160	160	400	X	**BD2-AK04/ LSM-AE160-N**	**BVP:610429**	1 unit	30.000
	3VL37 20 160 ... 200	200	400	X	**BD2-AK04/ LSM-AE200-N**	**BVP:610435**	1 unit	30.000
	3VL37 25 200 ... 250	250	400	X	**BD2-AK04/ LSM-AE250-N**	**BVP:610441**	1 unit	30.000
	3VL47 40 320 ... 400	400	400	X	**BD2-AK05/ LSM-AE400-N**	**BVP:610447**	1 unit	35.000
	3VL57 63 500 ... 530	530	400	X	**BD2-AK06/ LSM-AE630-N**	**BVP:610453**	1 unit	40.000
• With thermal-magnetic trip unit, selective (N release 60 %)	4-pole							
 NSV0_01012	3VL27 16 125 ... 160	160	400	X	**BD2-AK04/ LSM-EC160-N**	**BVP:610427**	1 unit	30.000
	3VL37 20 160 ... 200	200	400	X	**BD2-AK04/ LSM-EC200-N**	**BVP:610433**	1 unit	30.000
	3VL37 25 200 ... 250	250	400	X	**BD2-AK04/ LSM-EC250-N**	**BVP:610439**	1 unit	30.000
	3VL47 40 320 ... 400	400	400	X	**BD2-AK05/ LSM-EC400-N**	**BVP:610445**	1 unit	35.000
	3VL57 63 500 ... 530	530	400	X	**BD2-AK06/ LSM-EC630-N**	**BVP:610451**	1 unit	40.000

Special colors available on request.

Use plastic cable glands with strain relief (not included in scope of supply).

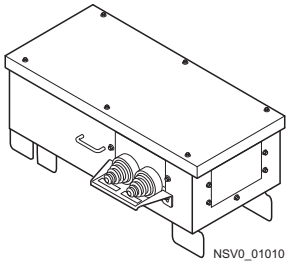
For BD2-AK04, -AK05 and -AK06, the KT3 or KT4 cable grommet is included in scope of supply.

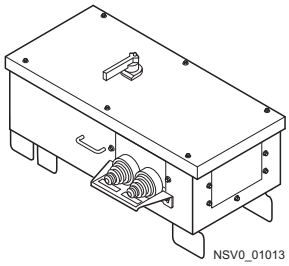
The tap-off units, size 05 and 06, are suitable only for systems 630 A to 1250 A.

* You can order this quantity or a multiple thereof.

Tap-off units for international use

Version	Fuse base/fuse switch-disconnector	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 04, 05 and 06, up to 530 A								
With fuse base, 3-pole, bolt terminal	NH1	250	690	X	**BD2-AK04/SNH1**	**BVP:610421**	1 unit	30.000
	NH2	400	690	X	**BD2-AK05/SNH2**	**BVP:610422**	1 unit	35.000
	NH3	530	690	X	**BD2-AK06/SNH3**	**BVP:610423**	1 unit	40.000
Sheet-steel enclosures, size 04 and 05, up to 320 A								
With fuse switch-disconnector, bolt terminal								
• 3-pole	NH1, IEC	225	400	X	**BD2-AK04/ FS250IEC-3**	**BVP:610409**	1 unit	30.000
	NH1, BS	225	400	X	**BD2-AK04/ FS250BS-3**	**BVP:610411**	1 unit	30.000
	NH2, IEC	320	400	X	**BD2-AK05/ FS400IEC-3**	**BVP:610413**	1 unit	35.000
	NH2, BS	320	400	X	**BD2-AK05/ FS400BS-3**	**BVP:610415**	1 unit	35.000
• 4-pole	NH1, IEC	225	400	X	**BD2-AK04/ FS250IEC-4**	**BVP:610410**	1 unit	30.000
	NH1, BS	225	400	X	**BD2-AK04/ FS250BS-4**	**BVP:610412**	1 unit	30.000
	NH2, IEC	320	400	X	**BD2-AK05/ FS400IEC-4**	**BVP:610414**	1 unit	35.000
	NH2, BS	320	400	X	**BD2-AK05/ FS400BS-4**	**BVP:610416**	1 unit	35.000


NSV0_01010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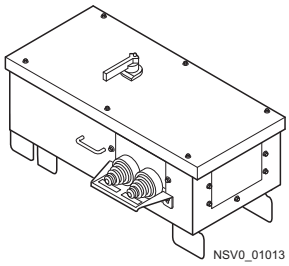
NSV0_01013

Special colors available on request.

Fuse links are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

For BD2-AK04, -AK05 and -AK06, the KT3 or KT4 cable grommet is included in scope of supply.

The tap-off units, size 05 and 06, are suitable only for systems 630 A to 1250 A.

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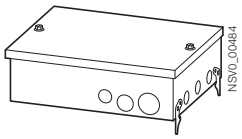
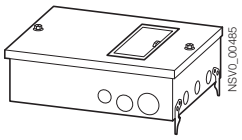
* You can order this quantity or a multiple thereof.

Ancillary equipment units for international use

Selection and ordering data

Version	Can be used for	Max. power loss P_v	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		W	V					kg
Sheet-steel enclosures								
Ancillary equipment units, freely assignable								
Built-in standard mounting rail for 8 MW (MW = modular width) 	• Overvoltage protection • Remote control/remote switching • Intelligence • Electronic control equipment • Fuse bases • Miniature circuit breakers	30	400	X	**BD2-GKX/F**	**BVP:203165**	1 unit	2.800
Sheet-steel enclosures with device installation unit								
Ancillary equipment units, freely assignable								
Built-in standard mounting rail for 8 MW (MW = modular width) 	• Remote control/remote switching • Intelligence • Electronic control equipment • Miniature circuit breakers	30	400	X	**BD2-GKM2/F**	**BVP:203166**	1 unit	2.500

Special colors available on request.

Including sundries for connecting the enclosures

Use plastic cable glands with strain relief (not included in scope of supply).

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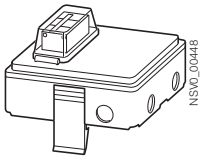
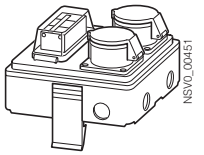
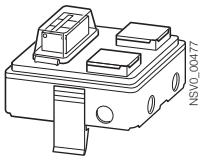
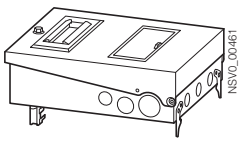
* You can order this quantity or a multiple thereof.

Selection and ordering data

Version	Miniature circuit breakers (MCBs)	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 1, up to 20 A								
With miniature circuit breaker	Characteristic C							
• Without socket outlet	1-pole, 16 A	16	230	X	**BD2-AK1/A161/1**	**BVP:203195**	1 unit	1.100
	2-pole, 16 A	16	230	X	**BD2-AK1/A162**	**BVP:203170**	1 unit	1.200
	3-pole + N, 16 A	16	400	X	**BD2-AK1/A163N**	**BVP:203171**	1 unit	1.400
	1-pole, 20 A	20	230	X	**BD2-AK1/A201**	**BVP:203173**	1 unit	1.100
	2-pole, 20 A	20	230	X	**BD2-AK1/A202**	**BVP:203174**	1 unit	1.200
	3-pole, 20 A	20	400	X	**BD2-AK1/A203**	**BVP:203175**	1 unit	1.300
	3-pole + N, 20 A	20	400	X	**BD2-AK1/A203N**	**BVP:203176**	1 unit	1.400
• With 2 CEE socket outlets, 3-pole, 16 A	2 × 2-pole, 16 A	16	230	X	**BD2-AK1/2CEE163A162**	**BVP:203172**	1 unit	1.500
								
• With 2 socket outlets, 3-pole, 16 A	2 × 2-pole, 16 A	16	230	X	**BD2-AK1/2PC163A162**	**BVP:203177**	1 unit	1.500
								
Sheet-steel enclosures, size 2, up to 63 A								
With miniature circuit breaker	Characteristic C							
• Without socket outlet	3-pole + N, 32 A	32	400	X	**BD2-AK2M2/A323N**	**BVP:203178**	1 unit	4.800
	3-pole, 63 A	63	400	X	**BD2-AK2M2/A633**	**BVP:203179**	1 unit	5.100
	3-pole + N, 63 A	63	400	X	**BD2-AK2M2/A633N**	**BVP:203180**	1 unit	5.200

For BD2-AK1/..., the M25 cable grommet is included in scope of supply.

For BD2-AK2M2/... Special colors available on request.

Use plastic cable glands with strain relief (not included in scope of supply).

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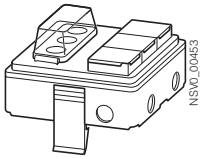
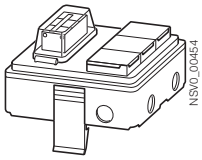
* You can order this quantity or a multiple thereof.

Tap-off units for Denmark

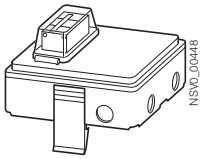
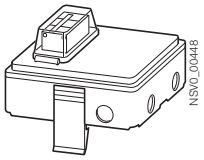
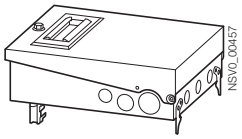
Selection and ordering data

Version	Fuse base/miniature circuit breaker	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 1, up to 10 A								
With fuse base								
• With 3 socket outlets 10 A 	3 × D01	13	230	X	**BD2-AK1/3DKS103S14**	**BVP:203167**	1 unit	1.200
With miniature circuit breaker								
• With 3 socket outlets 10 A 	3 × 1-pole, 13 A, characteristic C	13	230	X	**BD2-AK1/3DKS103A131**	**BVP:203168**	1 unit	1.200

Fuse links and screw caps are not included in scope of supply.

* You can order this quantity or a multiple thereof.

Selection and ordering data

Version	Fuse base/miniature circuit breaker	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 1, up to 25 A								
With fuse base								
• Without socket outlet	3-pole fuse base SP38 for cylinder fuses 10 mm × 38 mm	25	400	X	**BD2-AK1/F1038-3**	**BVP:203189**	1 unit	1.100
	4-pole fuse base SP38 for cylinder fuses 10 mm × 38 mm	25	400	X	**BD2-AK1/F1038-3-N**	**BVP:203190**	1 unit	1.200
With miniature circuit breaker								
• Without socket outlet	2-pole, 16 A, characteristic B + 2-pole residual-current protective module 40 A/30 mA	16	230	X	**BD2-AK1/FI40-162**	**BVP:214822**	1 unit	1.600
								
Sheet-steel enclosures, size 2, up to 63 A								
With fuse base								
• Without socket outlet	3-pole fuse base SP51 for cylinder fuses 14 mm × 51 mm	32	400	X	**BD2-AK2X/F1451-3**	**BVP:203192**	1 unit	5.500
	3-pole fuse base SP58 for cylinder fuses 22 mm × 58 mm	63	400	X	**BD2-AK2X/F2258-3**	**BVP:203193**	1 unit	5.700

For BD2-AK1/..., the M25 cable grommet is included in scope of supply.

For BD2-AK2X/... Special colors available on request.

Fuse links are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

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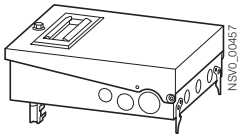
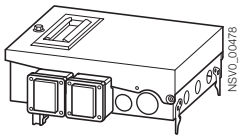
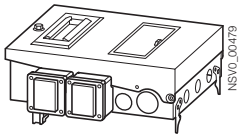
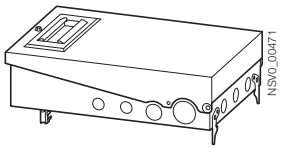
* You can order this quantity or a multiple thereof.

Tap-off units for the United Kingdom

Selection and ordering data

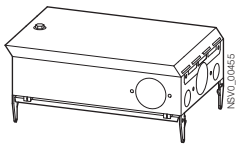
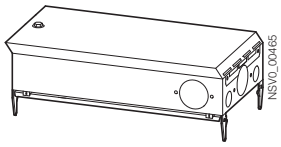
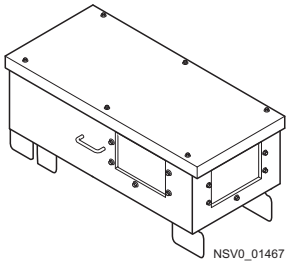
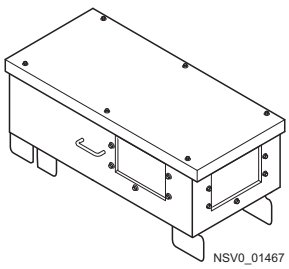
Version	Fuse base/miniature circuit breaker	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 2, up to 63 A								
With fuse base								
• Without socket outlet 	3 × CM32F	32	400	X	**BD2-AK2X/GB323**	**BVP:203236**	1 unit	5.500
	1 × CM32F, L1	32	230	X	**BD2-AK2X/GB321L1**	**BVP:611128**	1 unit	4.600
	1 × CM32F, L2	32	230	X	**BD2-AK2X/GB321L2**	**BVP:611129**	1 unit	4.600
	1 × CM32F, L3	32	230	X	**BD2-AK2X/GB321L3**	**BVP:611130**	1 unit	4.600
	3 × CM63F	63	400	X	**BD2-AK2X/GB633**	**BVP:203237**	1 unit	5.600
	1 × CM63F, L1	63	230	X	**BD2-AK2X/GB631L1**	**BVP:611131**	1 unit	4.700
	1 × CM63F, L2	63	230	X	**BD2-AK2X/GB631L2**	**BVP:611132**	1 unit	4.700
	1 × CM63F, L3	63	230	X	**BD2-AK2X/GB631L3**	**BVP:611133**	1 unit	4.700
• With 3 socket outlets BS1363, 13 A 	3 × CM32F	13	230	X	**BD2-AK2X/3BS133GB131**	**BVP:203181**	1 unit	5.400
With miniature circuit breaker								
• With 3 socket outlets BS1363, 13 A 	3 × 1-pole, 13 A, characteristic B	13	230	X	**BD2-AK2M2/3BS133A131**	**BVP:203182**	1 unit	5.600
Sheet-steel enclosures, size 3, 100 A								
With fuse base								
	3 × CM100F	100	400	X	**BD2-AK3X/GB1003**	**BVP:203238**	1 unit	7.800
	1 × CM100F, L1	100	230	X	**BD2-AK3X/GB1001L1**	**BVP:611134**	1 unit	6.200
	1 × CM100F, L2	100	230	X	**BD2-AK3X/GB1001L2**	**BVP:611135**	1 unit	6.200
	1 × CM100F, L3	100	230	X	**BD2-AK3X/GB1001L3**	**BVP:611136**	1 unit	6.200

Special colors available on request.

Fuse links are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

* You can order this quantity or a multiple thereof.

Version	Fuse base	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Sheet-steel enclosures, size 02, up to 63 A								
With fuse base								
	3 × CM32F	32	400	X	**BD2-AK02X/GB323**	**BVP:262435**	1 unit	5.500
	1 × CM32F, L1	32	230	X	**BD2-AK02X/GB321L1**	**BVP:611115**	1 unit	4.600
	1 × CM32F, L2	32	230	X	**BD2-AK02X/GB321L2**	**BVP:611116**	1 unit	4.600
	1 × CM32F, L3	32	230	X	**BD2-AK02X/GB321L3**	**BVP:611117**	1 unit	4.600
	3 × CM63F	63	400	X	**BD2-AK02X/GB633**	**BVP:262436**	1 unit	5.600
	1 × CM63F, L1	63	230	X	**BD2-AK02X/GB631L1**	**BVP:611118**	1 unit	4.700
	1 × CM63F, L2	63	230	X	**BD2-AK02X/GB631L2**	**BVP:611119**	1 unit	4.700
	1 × CM63F, L3	63	230	X	**BD2-AK02X/GB631L3**	**BVP:611120**	1 unit	4.700
Sheet-steel enclosures, size 03, 100 A								
With fuse base								
	3 × CM100F	100	400	X	**BD2-AK03X/GB1003**	**BVP:262484**	1 unit	7.800
	1 × CM100F, L1	100	230	X	**BD2-AK03X/GB1001L1**	**BVP:611121**	1 unit	6.200
	1 × CM100F, L2	100	230	X	**BD2-AK03X/GB1001L2**	**BVP:611122**	1 unit	6.200
	1 × CM100F, L3	100	230	X	**BD2-AK03X/GB1001L3**	**BVP:611123**	1 unit	6.200
	3 × R100	100	400	X	**BD2-AK03X/TPNR1003**	**BVP:611124**	1 unit	7.800
	1 × R100, L1	100	230	X	**BD2-AK03X/ SPNR1001L1**	**BVP:611125**	1 unit	6.200
	1 × R100, L2	100	230	X	**BD2-AK03X/ SPNR1001L2**	**BVP:611126**	1 unit	6.200
	1 × R100, L3	100	230	X	**BD2-AK03X/ SPNR1001L3**	**BVP:611127**	1 unit	6.200
Sheet-steel enclosures, size 04, up to 250 A								
With fuse base	3 × J250	250	400	A	**BD2-AK04/GB250J-3**	**BVP:611358**	1 unit	32.000
	1 × J250, L1	250	230	A	**BD2-AK04/GB250J-L1**	**BVP:611359**	1 unit	29.000
	1 × J250, L2	250	230	A	**BD2-AK04/GB250J-L2**	**BVP:611360**	1 unit	29.000
	1 × J250, L3	250	230	A	**BD2-AK04/GB250J-L3**	**BVP:611361**	1 unit	29.000
Sheet-steel enclosures, size 05, up to 100 A								
With fuse base	3 × 3 × R100	100	400	A	**BD2-AK05/GB9R1003**	**BVP:611362**	1 unit	36.500
	4 × 3 × R100	100	400	A	**BD2-AK05/GB12R1003**	**BVP:611363**	1 unit	39.000

Special colors available on request.

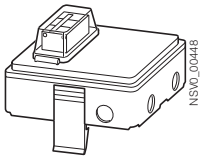
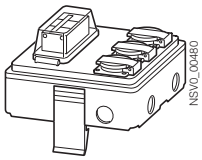
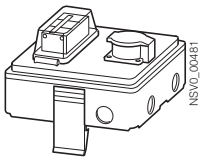
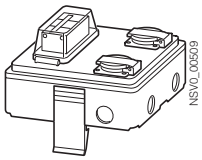
Fuse links are not included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

* You can order this quantity or a multiple thereof.

Tap-off units for Switzerland

Selection and ordering data

Version	Miniature circuit breakers	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 1, up to 16 A								
With miniature circuit breaker	Characteristic C							
• Without socket outlet 	3-pole, 13 A	13	400	X	**BD2-AK1/A133**	**BVP:611330**	1 unit	1.100
• With 3 socket outlets type 23, 16 A 	3 × 1-pole, 16 A	16	230	X	**BD2-AK1/ 3T23-3A161**	**BVP:611322**	1 unit	1.600
• With 1 socket outlet type 25, 16 A 	3-pole, 16 A	16	400	X	**BD2-AK1/T25-A163**	**BVP:611324**	1 unit	1.400
With miniature circuit breaker and RCCB	Characteristic C							
• With 2 socket outlets type 23, 16 A 	1 × 1-pole, 16 A 2-pole residual-current circuit breaker 16 A/30 mA	16	230	X	**BD2-AK1/ 2T23-FI162-A161**	**BVP:611323**	1 unit	1.800

M25 cable grommet included in scope of supply.

Use plastic cable glands with strain relief (not included in scope of supply).

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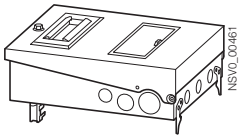
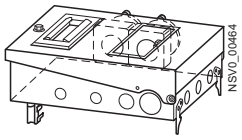
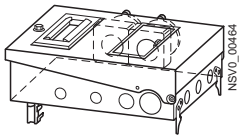
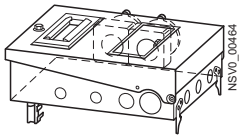
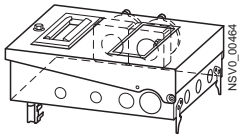
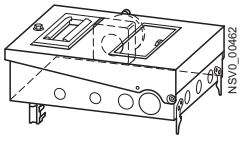
* You can order this quantity or a multiple thereof.

Version	Miniature circuit breakers	Rated current I_e	Rated operational voltage U_e	DT	Type	Order No.	PS*	Weight per unit approx.
		A	V					kg
Molded-plastic enclosures, size 2, up to 63 A								
With miniature circuit breaker	Characteristic C							
• Without socket outlet 	3-pole, 25 A	25	400	X	**BD2-AK2M2/A253**	**BVP:611331**	1 unit	4.600
	3-pole, 40 A	40	400	X	**BD2-AK2M2/A403**	**BVP:611332**	1 unit	4.600
	3-pole, 63 A	63	400	X	**BD2-AK2M2/A633**	**BVP:611333**	1 unit	4.900
• With 1 socket outlet type 23, 16 A and 1 CEE socket outlet, 5-pole, 16 A 	1-pole, 16 A; 3-pole, 16 A	16	230, 400	X	**BD2-AK2M2/ T23-A161/ CEE165-A163**	**BVP:611326**	1 unit	5.400
• With 1 socket outlet type 25, 16 A and 1 CEE socket outlet, 5-pole, 16 A 	2 × 3-pole, 16 A	16	400	X	**BD2-AK2M2/ T25-CEE165-2A163**	**BVP:611327**	1 unit	5.700
• With 1 socket outlet type 23, 16 A and 1 CEE socket outlet, 5-pole, 32 A 	1-pole, 16 A; 3-pole, 32 A	16, 32	230, 400	X	**BD2-AK2M2/ T23-A161/ CEE325-A323**	**BVP:611328**	1 unit	5.500
• With 1 socket outlet type 25, 16 A and 1 CEE socket outlet, 5-pole, 32 A 	3-pole, 16 A; 3-pole, 32 A	16, 32	400	X	**BD2-AK2M2/ T25-A163/ CEE325-A323**	**BVP:611329**	1 unit	5.700
With miniature circuit breaker and RCCB	Characteristic C							
• With 1 socket outlet type 25, 16 A 	3-pole, 16 A 4-pole residual-current circuit breaker 25 A/30 mA	16	400	X	**BD2-AK2M2/ T25-FI254-A163**	**BVP:611325**	1 unit	4.900

Special colors available on request.

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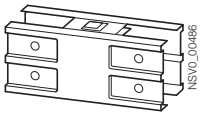
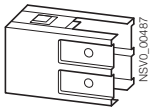
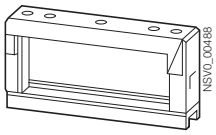
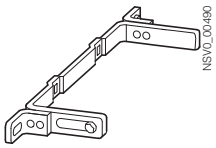
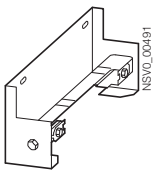
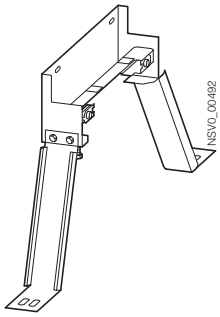
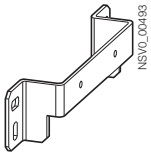
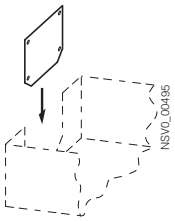
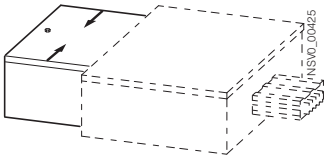
Accessories

Selection and ordering data

Version	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Fixing										
Joint blocks 	X	**BD2-400-SK**	**BVP:203516**	1 unit	3.500	X	**BD2-1250-EK**	**BVP:261989**	1 unit	6.480
End flanges 	X	**BD2-400-FE**	**BVP:043977**	1 unit	0.980	X	**BD2-1250-FE**	**BVP:261990**	1 unit	1.280
Fixing brackets for flat and edgewise installation 	X	**BD2-400-BB**	**BVP:045154**	1 unit	0.440	X	**BD2-1250-BB**	**BVP:261987**	1 unit	0.540
Spacers for 40 mm spacing, for use with fixing bracket 	X	**BD2-DSB**	**BVP:203532**	10 units	0.030	X	**BD2-DSB**	**BVP:203532**	10 units	0.030
Spacer brackets for wall and ceiling mounting, for use with fixing bracket 	X	**BD2-BD**	**BVP:034228**	1 unit	0.440	X	**BD2-BD**	**BVP:034228**	1 unit	0.440
Retaining elements for vertical busbar lines										
• Wall mounting, distance from wall adjustable 	X	**BD2-BWV**	**BVP:045503**	1 unit	1.560	X	**BD2-BWV**	**BVP:045503**	1 unit	1.560
• Ceiling mounting 	X	**BD2-BDV**	**BVP:045504**	1 unit	4.500	X	**BD2-BDV**	**BVP:045504**	1 unit	4.500

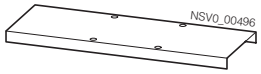
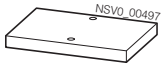
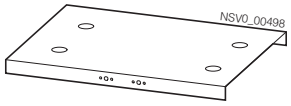
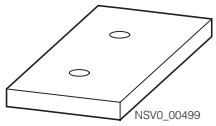
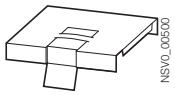
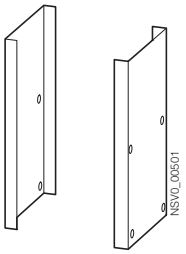
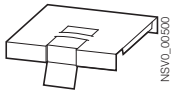
* You can order this quantity or a multiple thereof.

Version	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Fixing										
Fixing brackets for vertical wall mounting at each connecting flange 	X	**BD2-BVF**	**BVP:203531**	1 unit	0.500	X	**BD2-BVF**	**BVP:203531**	1 unit	0.500
Protective sleeves 	X	**BD2-400-D**	**BVP:045505**	1 unit	4.000	X	**BD2-1250-D**	**BVP:261988**	1 unit	4.000
Cable entry										
Cable entry plates for single-core cable entry, undrilled (drilling template included in scope of supply) 										
• For use with 250 A end feeder units	X	**BD2-250-EBAL**	**BVP:203530**	1 unit	0.300		**--**			
• For use with end feeder units or cabling boxes										
- Up to 400 A or 1000 A	X	**BD2-400-EBAL**	**BVP:045507**	1 unit	0.500	X	**BD2-1000-EBAL**	**BVP:261976**	1 unit	1.000
- For 1250 A		**--**				X	**BD2-1250-EBAL**	**BVP:261982**	1 unit	2.660
• For use with center feeder units										
- Up to 400 A or 1000 A	X	**BD2-400-MBAL**	**BVP:045509**	1 unit	0.500	X	**BD2-1000-MBAL**	**BVP:261980**	1 unit	1.000
Cabling boxes, cable entry for multi-core cables from 2 sides, for use with feeder units 										
• Up to 400 A or 1000 A	**X**	**BD2-400-KR**	**BVP:045511**	1 unit	3.100	X	**BD2-1000-KR**	**BVP:261978**	1 unit	5.000
• For 1250 A		**--**				X	**BD2-1250-KR**	**BVP:261984**	1 unit	5.000

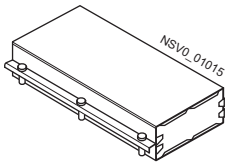
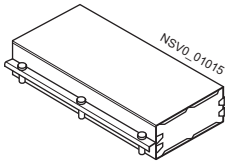
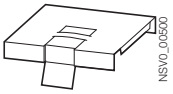
Version	DT	Rated current I_e 160 ... 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg
Fire barriers					
Fire protection approval kits (required only for Germany)					
• S90	X	**BD2-S90-ZUL-D**	**BVP:611397**	1 unit	0.200
• S120	X	**BD2-S120-ZUL-D**	**BVP:611398**	1 unit	0.200

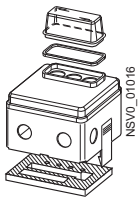
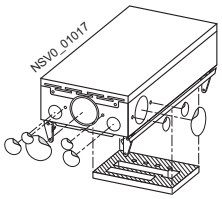
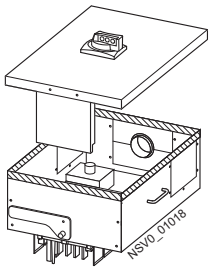
* You can order this quantity or a multiple thereof.

Accessories

Version	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Flanges for degree of protection IP54										
Edgewise mounting position										
• At all connection points	X	**BD2-400-HF**	**BVP:045513**	1 unit	0.300	X	**BD2-1250-HF**	**BVP:261991**	1 unit	0.520
										
• At end flanges	X	**BD2-400-HFE**	**BVP:045515**	1 unit	0.180	X	**BD2-1250-HFE**	**BVP:261992**	1 unit	0.260
										
Flat mounting position										
• At all connection points	X	**BD2-FF**	**BVP:045517**	1 unit	0.600	X	**BD2-FF**	**BVP:045517**	1 unit	0.600
										
• At end flanges	X	**BD2-FFE**	**BVP:045518**	1 unit	0.320	X	**BD2-FFE**	**BVP:045518**	1 unit	0.320
										
• At top tap-off points	X	**BD2-FAS**	**BVP:045519**	1 unit	0.220	X	**BD2-FAS**	**BVP:045519**	1 unit	0.220
										
Vertical mounting position										
• At all connection points	X	**BD2-400-VF**	**BVP:045520**	1 unit	0.200	X	**BD2-1250-VF**	**BVP:262125**	1 unit	0.500
										
• At all tap-off points	X	**BD2-FAS**	**BVP:045519**	1 unit	0.220	X	**BD2-FAS**	**BVP:045519**	1 unit	0.220
										

* You can order this quantity or a multiple thereof.

Version	DT	Rated current I_e 160 A, 250 A, 400 A		PS*	Weight per unit approx.	DT	Rated current I_e 630 A, 800 A, 1000 A, 1250 A		PS*	Weight per unit approx.
		Type	Order No.		kg		Type	Order No.		kg
Flanges for degree of protection IP55										
Flanges for IP55										
• At all connection points	X	**BD2-400-FS**	**BVP:610369**	1 unit	1.700	X	**BD2-1250-FS**	**BVP:610370**	1 unit	2.100
										
• At end flanges	X	**BD2-400-FSE**	**BVP:610371**	1 unit	1.900	X	**BD2-1250-FSE**	**BVP:610372**	1 unit	2.600
										
• At tap-off points	X	**BD2-FAS**	**BVP:045519**	1 unit	0.220	X	**BD2-FAS**	**BVP:045519**	1 unit	0.220
										

Version	For tap-off unit	DT	Type	Order No.	PS*	Weight per unit approx.
	Type					kg
Accessories for degree of protection IP55						
Seals for tap-off units						
	BD2-AK1/...	X	**BD2-AK1-IP55**	**BVP:610373**	1 unit	0.030
	BD2-AK02X/...	X	**BD2-AK02X-IP55**	**BVP:610374**	1 unit	0.040
	BD2-AK03X/...	X	**BD2-AK03X-IP55**	**BVP:610375**	1 unit	0.040
	BD2-AK2X/...	X	**BD2-AK2X-IP55**	**BVP:611061**	1 unit	0.070
	BD2-AK3X/...	X	**BD2-AK3X-IP55**	**BVP:611062**	1 unit	0.070
	BD2-AK04/...	X	**BD2-AK04-IP55**	**BVP:611063**	1 unit	0.050
	BD2-AK05/...	X	**BD2-AK05-IP55**	**BVP:611064**	1 unit	0.070
	BD2-AK06/...	X	**BD2-AK06-IP55**	**BVP:611065**	1 unit	0.070

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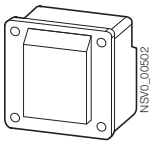
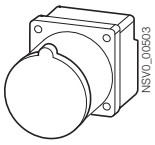
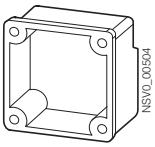
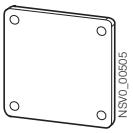
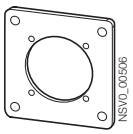
* You can order this quantity or a multiple thereof.

Accessories

Version	Socket outlets	DT	Type	Order No.	PS*	Weight per unit approx.
						kg
Socket outlets for tap-off units and ancillary equipment units						
Socket outlets with adapter enclosure, with wiring, with fixing kit						
• Schuko socket outlet	16 A, 3-pole	X	**BD2-SD163**	**BVP:203253**	1 unit	0.280
						
• CEE socket outlet	16 A, 3-pole	X	**BD2-CEE163**	**BVP:203254**	1 unit	0.260
	16 A, 5-pole	X	**BD2-CEE165**	**BVP:203255**	1 unit	0.310
	32 A, 5-pole	X	**BD2-CEE325**	**BVP:203256**	1 unit	0.350
Adapter enclosures for socket outlets with fixing kit						
		X	**BD2-AG**	**BVP:203257**	1 unit	0.150
						
Adapter plates for use with adapter enclosure						
• For customized socket outlet cut-outs		X	**BD2-APO**	**BVP:203258**	1 unit	0.090
						
• With socket outlet cut-out, 44 mm diameter		X	**BD2-APM**	**BVP:203259**	1 unit	0.060
						

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* You can order this quantity or a multiple thereof.

Overview

Specimen text for tenders

Item	Quantity	Description	Unit price		Amount	
	... m	Busbar trunking system (see Appendix for diagram) • As type-tested low-voltage switchgear and controlgear assembly (TTA) according to IEC/EN 60439-1 and -2 • Rated current, corresponds to thermal rated current at max. +40 °C and +35 °C on a 24 h average for indoor installation • Rated insulation voltage U_i = 690 V AC, 800 V DC; overvoltage category/degree of pollution III/3 • Operational voltage ... V, ... Hz • Rated peak withstand current of busbar trunking system, ... kA tested according to IEC/EN 60439-1 • Degree of protection IP52, increase to IP54 or IP55 with optional equipment • 5-conductor system: L1, L2, L3, N, PE • Busbars: nickel-plated and tinned aluminum or tinned copper; supported by insulated busbar supports • Tested for sprinkler systems (with optional equipment) • Halogen free system • Functional endurance E30, E90 (with additional parts) • Trunking units steel-enclosed, galvanized and with paint finish; light gray RAL 7035 • Busbar connection via joint block with built-in expansion compensation • Tap-off points: on two sides every 0.5 m; offset by 0.25 m • Supplied ready for connection with all assembly parts • Made by Siemens • Type BD2-... Comprising:				

BD2 System – 160 ... 1250 A

Configuration information

Key to type references for BD2 for various conductor versions

BD2 . - . - ... - ... - ...

(Details of length)

(Type length)

Current strength [A]

Aluminum	Copper
160	160
250	250
400	400
630	630
800	800
1000	1000
	1250

2: L1, L2, L3, 1/1 N, 1/2 PE; 12 tap-off points
3: L1, L2, L3, 1/1 N, 1/1 PE; 12 tap-off points
(N conductor with 150 or 200 percent cross-section on request)

A: Aluminum
C: Copper

BD2 . - ... - ... - ...

(Length details with junction unit)

(Type junction unit, feeder unit)

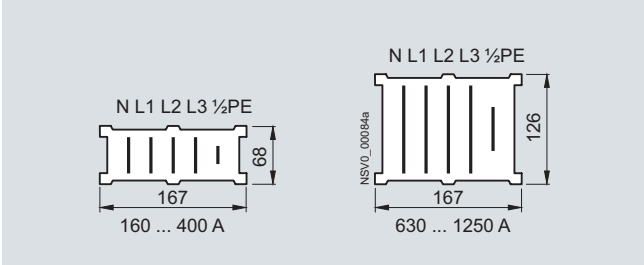
Current strength [A]

Aluminum	Copper
250[1)]	250[1)]
400	400
1000	1000[1)]
	1250

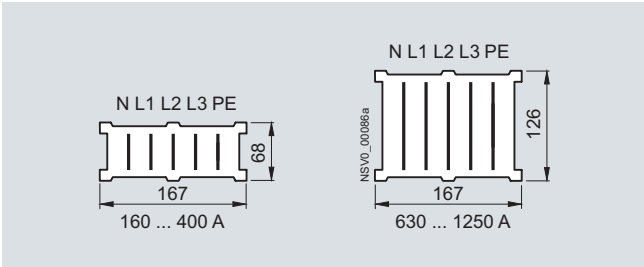
A: Aluminum
C: Copper

Sizes of the trunking units (cross-sections)

System size 1 System size 2



BD2A-2, BD2C-2 trunking units



BD2A-3, BD2C-3 trunking units,
junction units, BD2A-..., BD2C-... feeder units

Busbars	System size 1	System size 2
System accessories	Junction units	Junction units
	Feeder units	Feeder units
	Coupling units (on request)	Coupling units (on request)
	Optional equipment	Optional equipment
Tap-off units	Molded-plastic enclosure up to 25 A	Molded-plastic enclosure up to 25 A
	With circuit breaker up to 250 A	With circuit breaker up to 250 A
	With fuse up to 250 A	With fuse up to 250 A
		With circuit breaker up to 630 A
		With fuse up to 630 A

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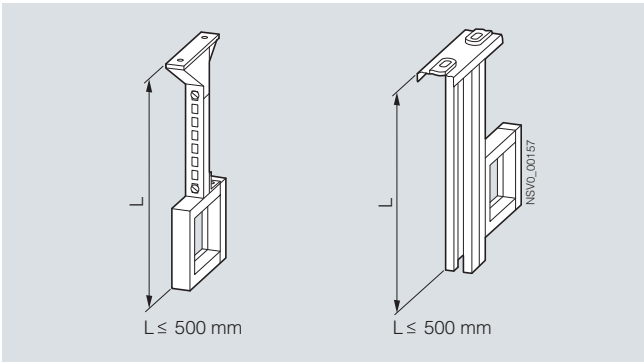
Design

Notes on supporting structures

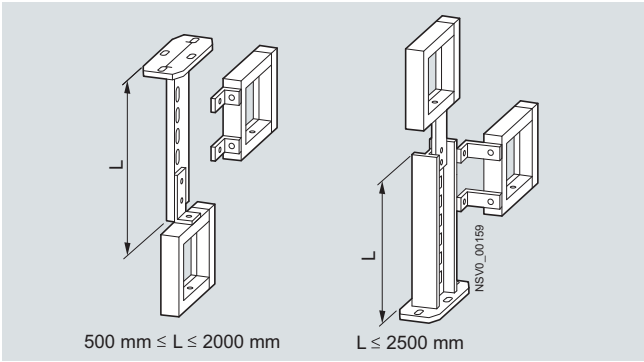
Structures made from standard materials.
Manufacturer: Rieth & Co, Kirchheim-Teck, Tel. +49 (0) 7021 977-0.

All struts and beams are designed for mounting without a BD2-...-BB fixing bracket.

Examples for mounting edgewise runs

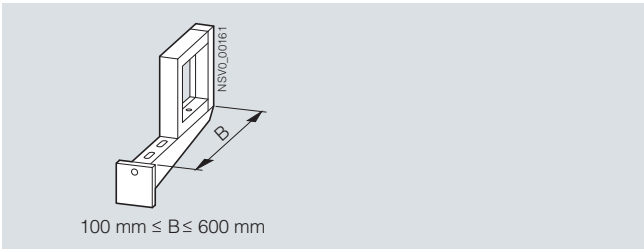


C strut with accessories (left) and double-C strut (right)
Length L in 100 mm increments



Z strut (left) and H strut (right)

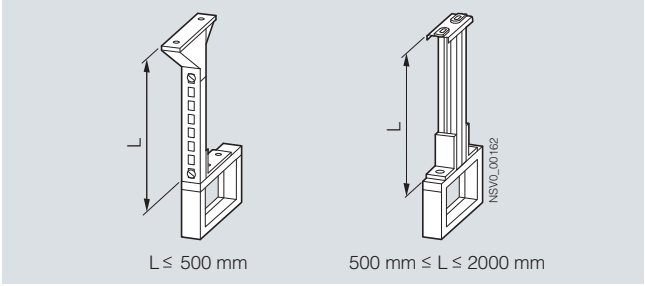
Length L in 100 mm increments.
Trunking units can be secured at the side and at the center of the strut.



Wall beam

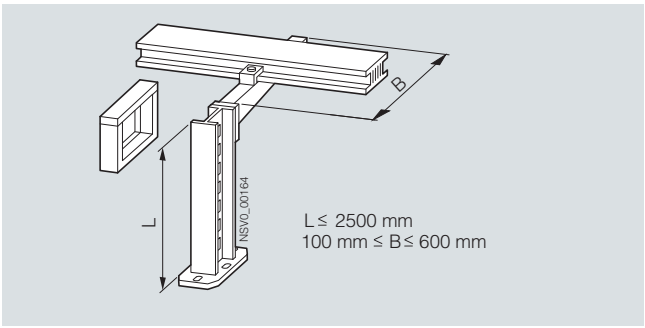
Width B in 50 mm increments

Examples for mounting flat runs



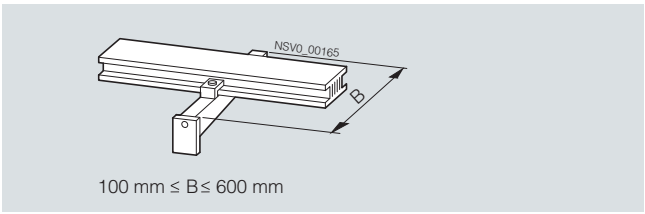
C strut with accessories (left) and double-C strut (right)

Length L in 100 mm increments



H strut with beam (without BD2-...-BB fixing bracket)

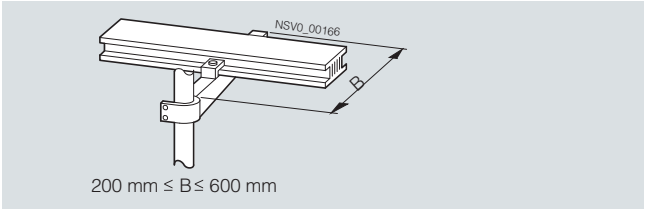
Length L in 100 mm increments,
width B in 50 mm increments.



Wall beam (without BD2-...-BB fixing bracket)

Width B in 50 mm increments.

Example for securing busbar lines between floors

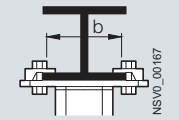


Tubular beam

Width B in 50 mm increments.
For securing runs without BD2-...-BB bracket

Configuration information

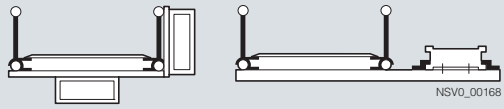
Suspension support on flange mount with terminal



90 mm ≤ b ≤ 150 mm

For Z and H struts only

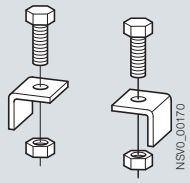
Securing trunk units on the cable trays



Can be fitted to standard cable trays using BD2-...-BB fixing bracket or angle clamp. Sundries required

Clamp terminals

For securing trunking units to the illustrated supporting structures.



Clamp terminals

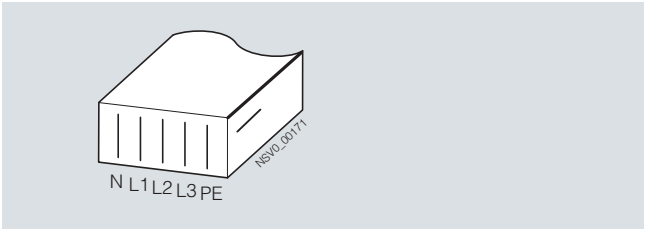
Basic configuration information

To simplify the configuration of BD2 systems, engineering symbols have been introduced. On the configuration drawings, these symbols clearly indicate the component mounting position, the phase sequence, the open busbar end, the end with the terminal, the position of the flange cover and the side from which the terminal can be accessed.

The following conventions apply to all components of the busbar line (feeder units, straight trunking units, branch units and junction units):

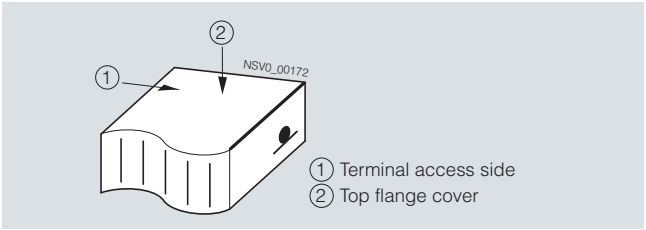
Open busbar end

The PE side is marked with a bold black line.

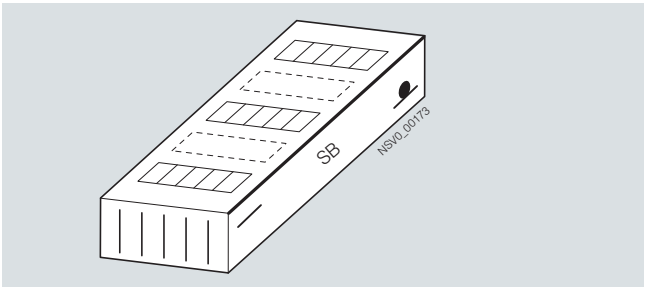


Phase sequence, PE on the right

Terminal end of the trunking unit



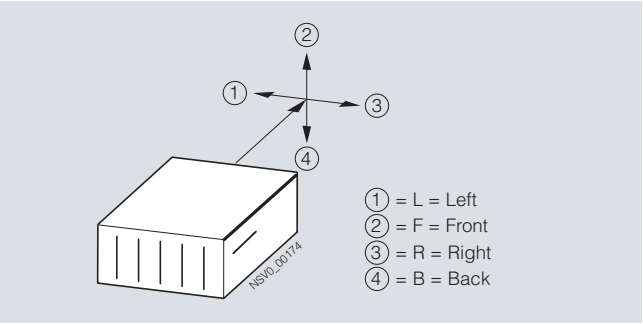
Example:



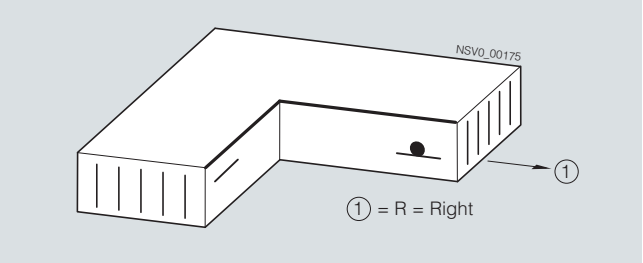
Straight trunking unit with tap-off points on both sides;
Type: BD2.-...-SB-.

The configuration symbols are used on the selection data pages.

Determining the orientation of L-units



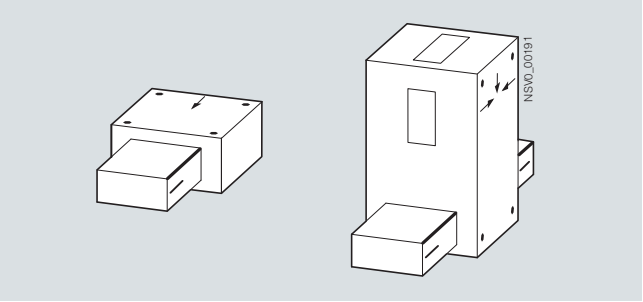
Example:



Elbow, right, Type: BD2.-...-LR

Determining the orientation of feeder units

On feeder units, the position of the cabling box relative to the trunking unit is not critical for type selection, since the busbar connection flange can be turned on site to provide the required phase sequence.



End feeder unit (left) and center feeder unit (right)

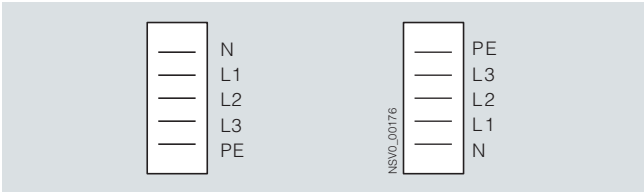
5

Configuration information

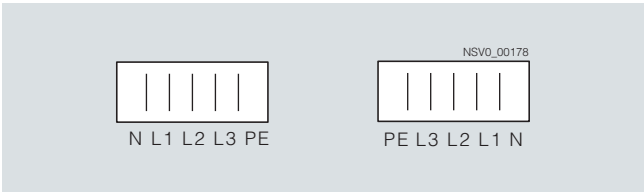
Route planning: Horizontal installation

Mounting positions

With the BD2 system, the mounting position can be chosen as required, allowing a horizontal busbar line to be laid out in two ways:



Horizontal, edgewise

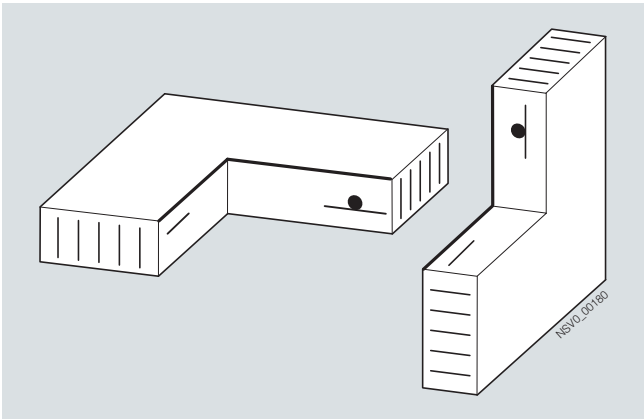


Horizontal, flat

As can be seen from the illustration, any phase sequence is possible. A derating factor in horizontal edgewise mounting position (× 0.9) is necessary with power conveyance.

This applies for straight trunking units and branch/junction units. The configuration symbol identifying the type shown on the selection page only needs to be turned to the desired mounting position in the engineering drawing.

Example:



Elbow, right, Type: BD2.-...-LR-, flat and edgewise mounting

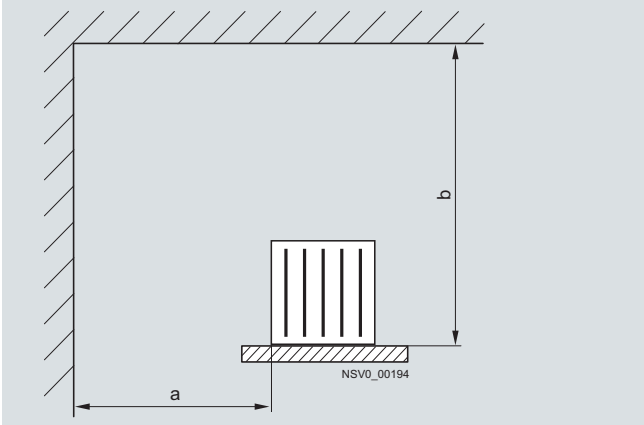
Horizontal edgewise mounting has the advantage of a larger suspension span and the need for fewer accessories (flanges) to achieve the increased degree of protection IP54 (see page 5/11).

Space requirement

To ensure easier mounting of the trunking units and tap-off units, minimum clearances from the building's elements must be observed when planning the route.

Busbar trunking system without tap-off units:

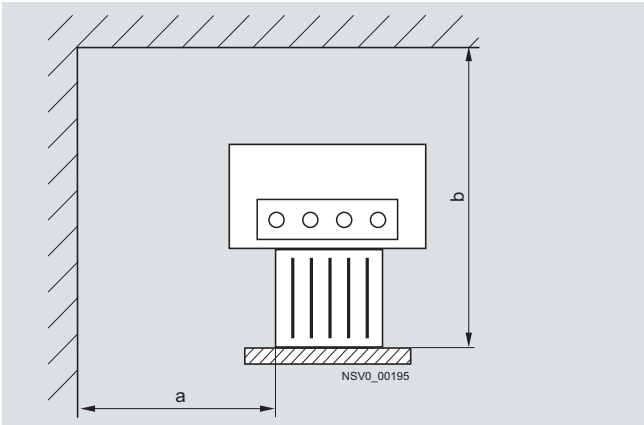
Minimum dimensions for busbar trunking system without tap-off units, including system-conform fixing brackets mounted horizontally on rack or wall beam:



Busbar system	Dimension a	Dimension b
	mm	mm
BD2A(C)-.-160(-400)	100	160
BD2A(C)-.-630(-1250)	100	280

Busbar trunking system with tap-off units:

Busbar trunking system with tap-off units, including system-conform fixing brackets mounted horizontally on rack or wall beam. The minimum dimension a applies for the front cable entry.



Busbar system	Dimension a	Dimension b
	mm	mm
BD2A(C)-.-160(-400)	300	620
BD2A(C)-.-630(-1250)	300	680

For a configuring example for horizontal installation see page 5/84.

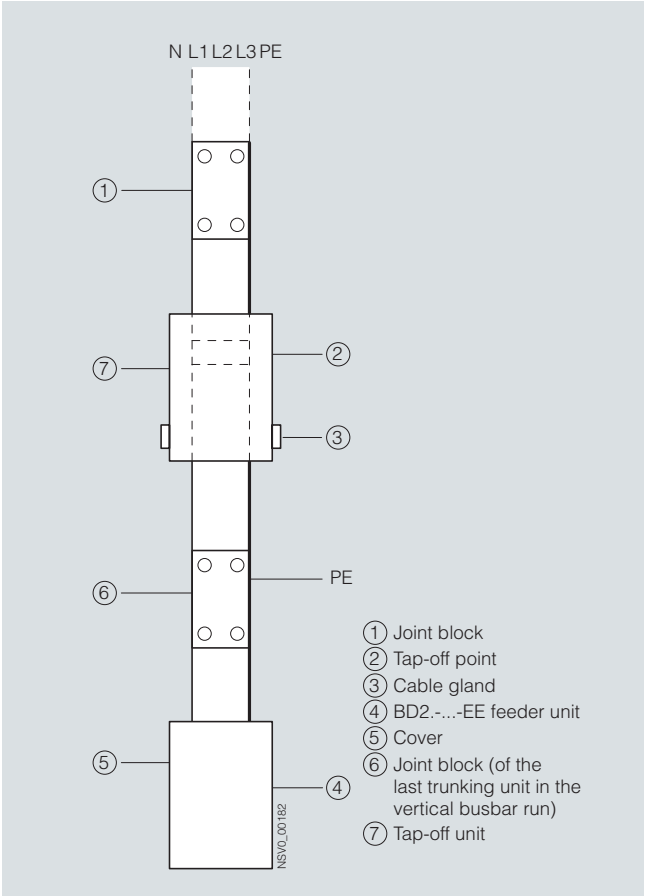
Route planning: Vertical installation

Mounting positions

When engineering vertical busbar lines (see page 5/86), the height of the storey measured from the center of one ceiling to the center of the next determines the choice of busbar lengths. If no fire protection is required, standard lengths with protective sleeves can be used. In this case, a minimum distance of 0.185 m must be maintained between the end of the trunking unit enclosure and the upper edge of the protective sleeve.

For vertically mounted systems, only one mounting position is possible. The PE bar must always be on the right-hand side, and the trunking unit end with the joint block must point towards the top. This ensures that

- the flange cover can be push-fitted to the terminal from the front and the screws can be tightened,
- the tap-off units are not mounted upside-down, i.e. they can only be fitted in the correct position.



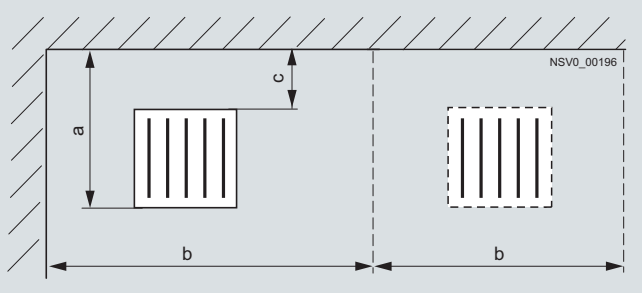
No current reduction is required for vertical busbar lines.

For more information about vertical installation see page 5/86.

Space requirement

To ensure easier mounting of the trunking units and tap-off units, minimum clearances from the building's elements must be observed when planning the route.

Busbar trunking system without tap-off units:



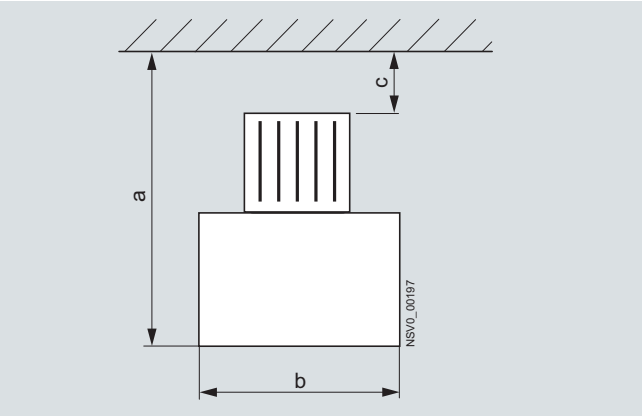
Busbar system	Dimension a	Dimension b[1]	Dimension c[2]
(incl. fixing bracket)	mm	mm	mm
BD2A(C)-.-160(-400)	130	640	30
BD2A(C)-.-630(-1250)	170	640	30

1) Space requirement due to fixing bracket.

2) Distance from wall due to fixing bracket.

Busbar trunking system with tap-off units:

A busbar system with connected tap-off unit is illustrated. Cable entry is from the bottom.



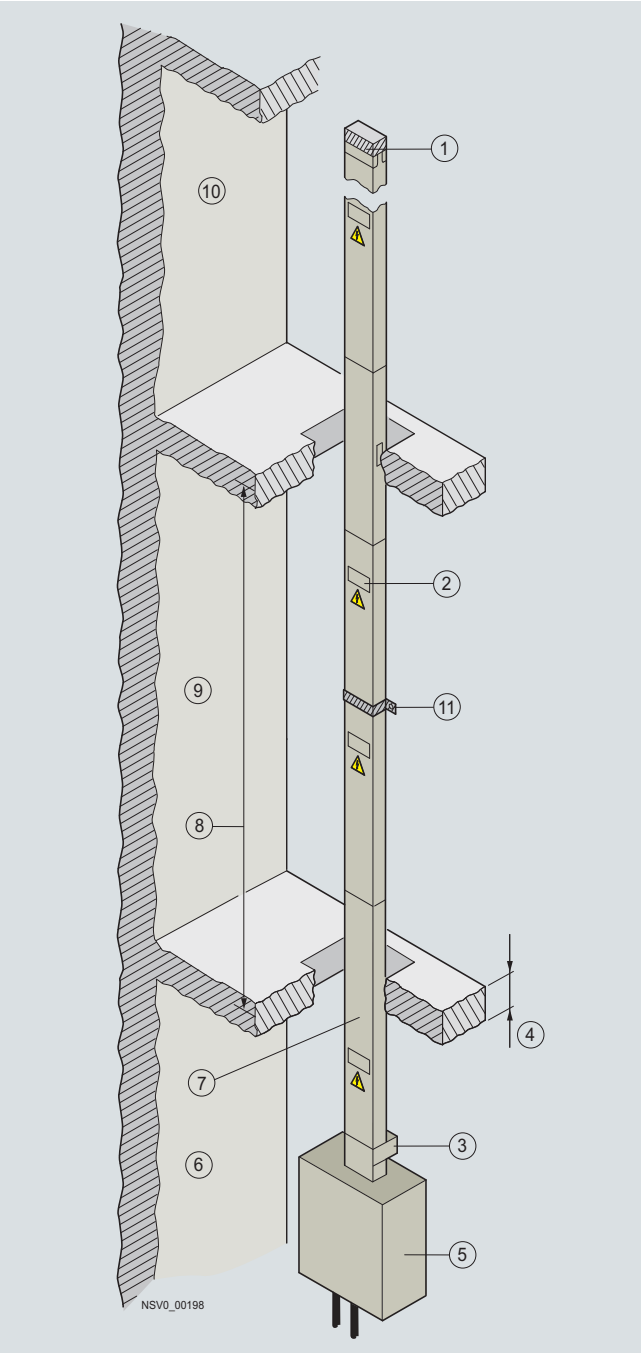
Busbar system	Dimension a	Dimension b	Dimension c[1]
(incl. fixing bracket)	mm	mm	mm
BD2A(C)-.-160(-400)	660	640	30
BD2A(C)-.-630(-1250)	700	640	30

1) Distance from wall due to fixing bracket.

Configuration information

Fire protection

The fire protection must always be seated centrally in the fire ceiling. Both standard trunking units and trunking units with optional lengths can be equipped with fire protection through compartmentalization.



① End flange, termination
② Tap-off point
③ Retaining element for vertical fixing
④ Ceiling thickness
⑤ End feeder unit
⑥ 1st storey
⑦ Center of fire protection
⑧ Storey height from center of one ceiling to the center of the next
⑨ 2nd storey
⑩ 3rd storey
⑪ Fixing with BD2-BB and spacer bracket

Tap-off units

For the tap-off units in the vertical run, the mounting position is stipulated. The outgoing cable must be connected from the bottom. This is the case when the PE conductor is on the right-hand side viewing from the front.

Vertical fixing

Vertical fixing brackets at the stipulated maximum intervals (see Table) must be used. The vertical brackets are fitted at the flange of the joint block. Fixtures in between are realized with the spacer bracket combined with the BD2-BB fixing bracket.

The distance from the wall can be varied:
- 30 mm minimum,
- 82 mm minimum.

Maximum length or height of vertical BD2-... busbar lines, supported by one vertical retaining element:

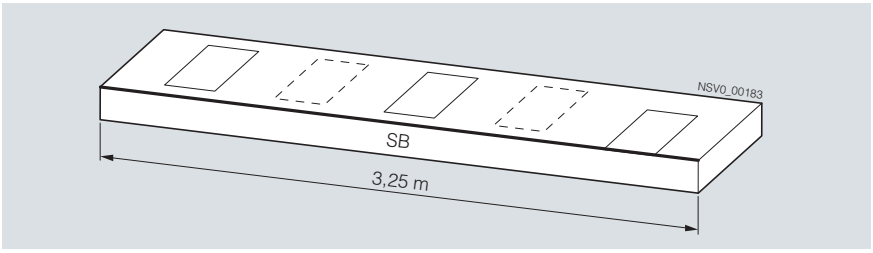
Rated operational current	**Max. length or height**	
	BD2A	BD2C
A	m	m
160	11.3	10.0
250	10.9	9.9
400	7.9	7.2
630	5.8	5.2
800	5.8	4.8
1000	5.3	4.1
1250	–	3.25

Defining the configuration reference dimensions

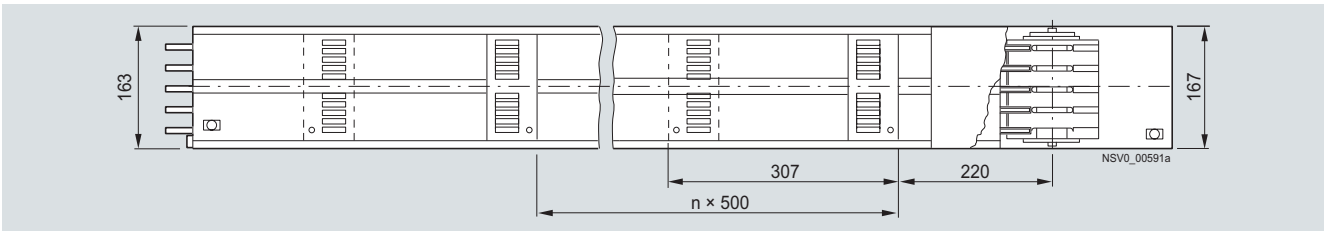
Straight trunking units, standard lengths, type BD2.-.-...-SB-.

Standard lengths from center of terminal to center of terminal

Example: standard length with tap-off points on both sides, type BD2.-...-SB-3



Dimensions in the configuration drawings BD2.-2, BD2.-3, tap-off point distance = 0.5 m

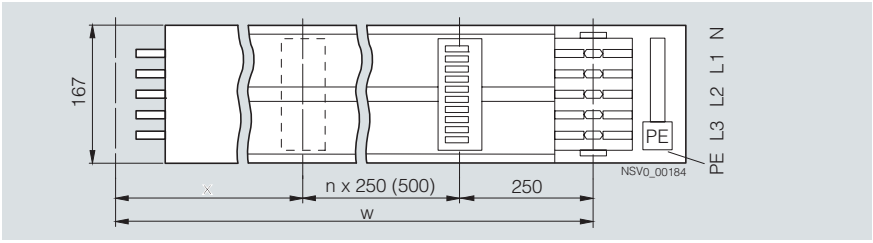


Dimensional drawing

Straight trunking units, optional lengths, type BD2.-.-...-WB-.

Example: BD2.-2, BD2.-3, tap-off point distance = 0.5 m

The open busbar end is used as the reference edge. The grid spacing between the tap-off points is shown in the diagram.

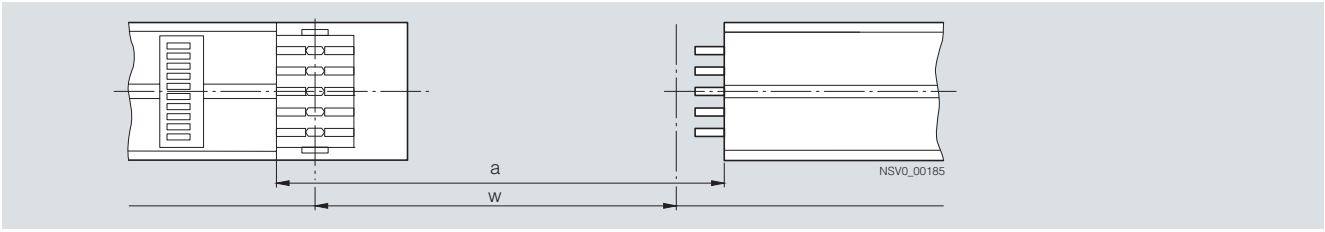


Length m	Tap-off units on both sides Number
0.5 ... 1.24	–
1.25 ... 2.25	4 ... 8
2.26 ... 3.25	8 ... 12

On optional lengths, it may not be possible to fit tap-off units to all tap-off points.

Distance x is the distance between the center of the terminal at the open end and the next tap-off point on the trunking unit. For the standard length x = 250 mm. For optional lengths, 260 mm ≤ x ≤ 490 mm (depending on the optional length w).

Measuring and determining the optional lengths on site



On site, the dimension a between the enclosure edges of the two trunking units to be connected is measured. The optional length is then determined as follows:

$$w[m] = a[m] - 0.14\ m$$

Junction units

X dimension (side with open busbar end): from center of terminal to outside edge of enclosure,
Y dimension (side with joint block): from center of terminal to outside edge of enclosure,
Z dimension: from outside edge of enclosure to outside edge of enclosure.

For dimensioning data see page 5/102.

Configuration information

Max. length/height of vertical BD2 busbar lines, supported by one BD2-BWV or BD2-BDV retaining element

BD2A-.-...								
Rated current	A	160	250	400	630	800	1000	1250
Max. supported length or height at max. load (see below)	m	11.3	10.9	7.9	5.8	5.8	5.3	–
Max. weight per 3.25 m trunking unit fitted with tap-off units	kg	50	53	74	106	108	108	–

BD2C-.-...								
Rated current	A	160	250	400	630	800	1000	1250
Max. supported length or height at max. load (see below)	m	10.0	9.9	7.2	5.2	4.8	4.1	3.25
Max. weight per 3.25 m trunking unit fitted with tap-off units	kg	50	53	74	106	108	108	108

Notes

For taller BD2 busbar lines, additional mountings must be used.

The maximum load applied to the BD2-BWV and BD2-BDV vertical retaining elements must not exceed 175 kg. They must be fitted in the area of the terminal.

Function

Overload and short-circuit protection

Busbar trunking systems need to be protected against short-circuits and overloads. Fuses and circuit breakers are available for use as protective devices. With the selection of this protective device, the level of the expected short-circuit currents, selectivity requirements or operating and signaling functions are also factors for consideration.

If circuit breakers are used, the thermally delayed overload release is set to the rated current value for the busbar trunking system. This means that the busbar trunking system can be 100 % loaded.

When you decide on your short-circuit protection via fuses and circuit breakers you must not exceed the specified short-circuit strength of the busbar trunking systems.

It depends on the level of expected short-circuit current whether a current limiting protective device is required and what short-circuit breaking capacity the protective device must have.

A tabular overview follows of the circuit breakers which can provide short-circuit and overload protection (400 V and 50 Hz) for the corresponding busbar system.

The following applies: $I''_k \leq I_{cc} \leq I_{cu}$

with

I''_k = The expected short-circuit current at the site of installation

I_{cc} = Rated conditional short-circuit current of the busbar trunking system

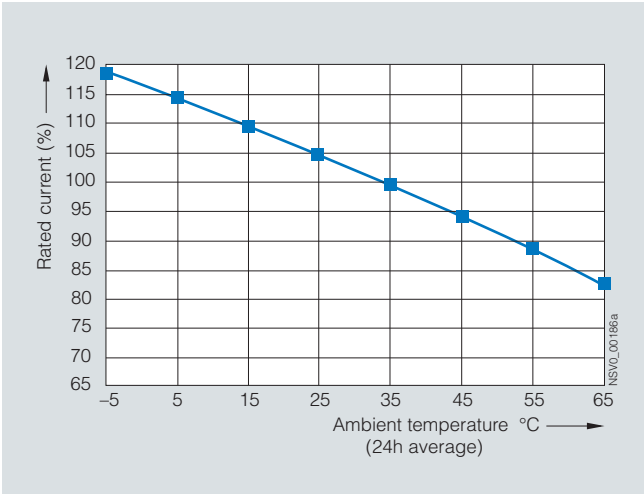
I_{cu} = Rated short-circuit breaking capacity of the circuit breaker

Type	Rated current	Circuit breaker with normal switching capacity	Rated conditional short-circuit current		Circuit breaker with medium switching capacity	Rated conditional short-circuit current		Circuit breaker with high switching capacity	Rated conditional short-circuit current	
	I_e A		I_{cu} kA	I_{cc} kA		I_{cu} kA	I_{cc} kA		I_{cu} kA	I_{cc} kA
BD2A(C)-160	160	3VL27 16-1...	40	20	3VL27 16-2...	70	20	3VL27 16-3...	100	20
BD2A(C)-250	250	3VL37 25-1...	40	40	3VL37 25-2...	70	50	3VL37 25-3...	100	50
BD2A(C)-400	400	3VL47 40-1...	45	45	3VL47 40-2...	70	45	3VL47 40-3...	100	45
BD2A(C)-630	630	3VL57 63-1DC36	45	45	3VL57 63-2DC36	70	70	3VL57 63-3DC36	100	100
BD2A(C)-800	800	3VL57 80-1AE36	50	50	3VL57 80-2AE36	70	70	3VL57 80-3AE36	100	100
BD2A(C)-1000	1000	3VL77 10-1AE36	50	50	3VL77 10-2AE36	70	60	3VL77 10-3AE36	100	60
BD2C-1250	1250	3VL77 12-1AE36	50	50	3VL77 12-2AE36	70	60	3VL77 12-3AE36	100	60

The values for the conditional rated short-circuit current I_{cc} apply to the busbar trunking systems without consideration of any tap-off units.

Configuration information

Temperature characteristic of BD2 systems

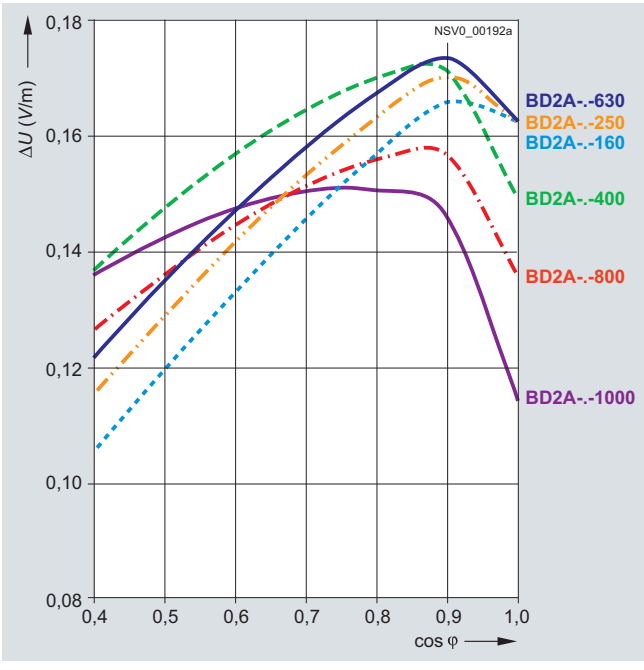


Voltage drop

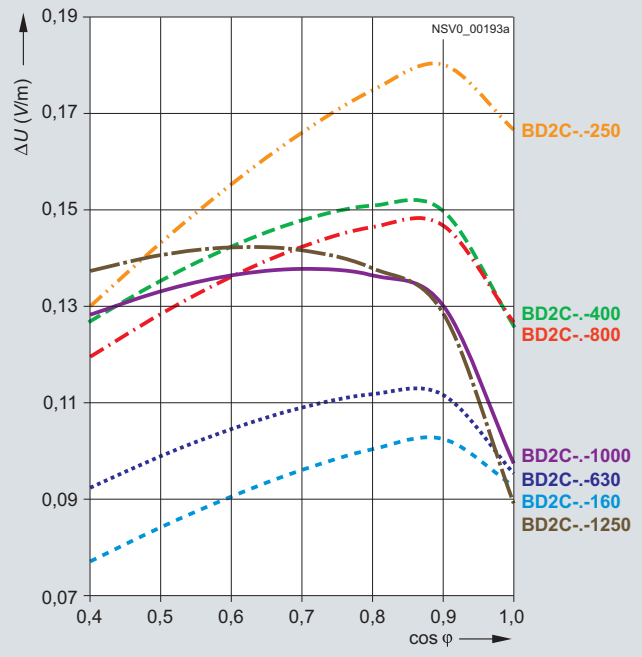
Voltage drop at rated current

The following diagrams show the voltage drop of the BD2A/BD2C systems

- Taking into account the heat resistors (according to IEC/EN 60439-2)
- With a load distribution factor a = 1
- Under loading with the rated current. (With a different load distribution factor, the curve value must be multiplied by the corresponding distribution factor.)



Voltage drop BD2A



Voltage drop BD2C

Calculation of the voltage drop

For long busbar lines, it may be necessary to calculate the voltage drop.

$$\Delta U = a \times \sqrt{3} \times I \times l \times (R \times \cos\varphi + X \times \sin\varphi) \times 10^{-3} \quad (V)$$

ΔU	=	Voltage drop	(V)
I	=	Load current	(A)
l	=	Length	(m)
a	=	Load distribution factor	
R	=	Ohmic resistance R_1	(mΩ/m)
X	=	Inductive resistor X_1	(mΩ/m)
cos φ	=	Power factor (p.f.)	

Factor "a" used in the equation for calculating the voltage drop is dependent on the load distribution.

Load distribution

Load distribution		Factor *a*
A → B▼	Infeed at A, one outgoing feeder at B	1
A → B▼ C▼ D▼ E▼	Infeed at A, outgoing feeders at B, C, D, E	0.5
B▼ A▲ C▼	Infeed at A, outgoing feeders at B, C	0.25
B▼ D▼ A▲ E▼ C▼	Infeed at A, outgoing feeders at B, C, D, E	0.125
A → ← B C▼ D▼ E▼ F▼	Infeed at A, B, outgoing feeders at C, D, E, F	0.25

5

Configuration information

Configuration

Configuring example: horizontal mounting position

Required details

The following details are required for configuring BD2 busbar trunking systems (horizontal installation):

- Installation flat or edgewise, horizontal or vertical, quantity, type and approximate ratings of prospective loads, p.f.
- Rated diversity factor α
- Feeding transformers (short-circuit current)
- Nature of the installation site (dimensions, construction of the building, transport paths, cellar, etc.)
- Routing of supply lines from other power sources
- Coordination of lighting system with the BD busbar line
- Crane operation in installation area

Given:

1. Σ of the actual load rating 600 kW, p.f. = 0.8; U_e = 400 V
2. Floor plan and machine layout
3. Rated diversity factor α = 0.6
4. Infeed cables 2 × 185 mm^2 from distribution board
5. Transformer: 1 × 500 kVA
6. Steel frame shed construction
7. Suspension height 3 m
8. Installed power on machine lines: 200, 182, 118, 100 kW
9. No crane operation
10. Edgewise mounting

Operational current

The operational current is calculated using the following formula:

$$I_B = \frac{P_{inst} \times \alpha \times b}{\sqrt{3} \times U_e \times \text{p.f.}} \times 10^3$$

with:

I_B	=	Operational current	(A)
P_{inst}	=	Installed power	(kW)
U_e	=	Rated operational voltage	(V)
p.f.	=	Power factor	
α	=	Rated diversity factor	
b	=	Supply factor	
		b = 1 = Single feeder unit	
		b = ½ = Double end feeder unit, center feeder unit	

If no data are available about the actual currents occurring simultaneously (derating factor), the following values according to IEC/EN 60439-1 apply:

Number of main circuits	Rated diversity factor α
2 and 3	0.9
4 and 5	0.8
6 to 9 inclusive	0.7
10 and more	0.6

Determining the operational current

Main busbar line: $I_B = \frac{600 \times 0.6 \times 1}{\sqrt{3} \times 400 \times 0.8} \times 10^3 = 650$ A

Machine line 200 kW: $I_B = \frac{200 \times 0.6 \times 1}{\sqrt{3} \times 400 \times 0.8} \times 10^3 = 217$ A

Machine line 182 kW: $I_B = \frac{182 \times 0.6 \times 1}{\sqrt{3} \times 400 \times 0.8} \times 10^3 = 197$ A

Machine line 118 kW: $I_B = \frac{118 \times 0.6 \times 1}{\sqrt{3} \times 400 \times 0.8} \times 10^3 = 128$ A

Machine line 100 kW: $I_B = \frac{100 \times 0.6 \times 1}{\sqrt{3} \times 400 \times 0.8} \times 10^3 = 108$ A

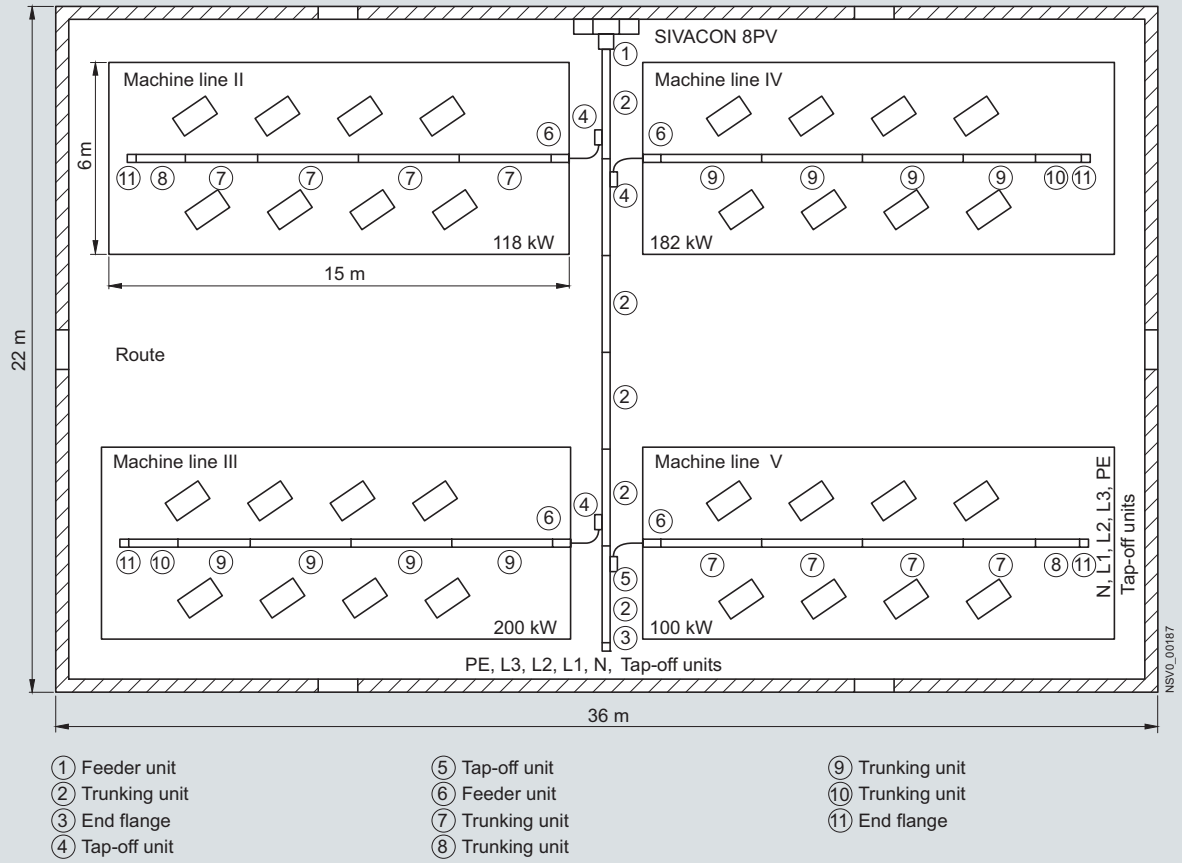
Installation plan

It contains:

- Position of the busbar trunking system in the building,
- Position of the PE and the tap-off openings and consequently the installation direction of the tap-off units,
- Number of components with item numbers,
- And the method and height of suspension.

The information assists the installer later.

If the system is correctly assembled, the entire system will have the same sense of rotation as the three-phase motors throughout the entire system. As a result, it will not be necessary to check the direction of rotation of the motors when relocating a machine.



Installation plan

Suspension: at a height of 3 m with ceiling mounted supporting structures. BD2 busbar line I, 800 A, supplies BD2 runs II, III, IV and V via tap-off units and end feeder units, connected by short cable lengths.

Parts list

The parts list should contain all the items shown on the installation plan, with type reference, description and quantity.

Item No. (installation site)	FWLK	Type	Benennung, Zuordnung Description Dénomination	Anzahl Quant.	Listenpreis List price Prix brut Einzeln Each Unitaire	 Zusammen Total
1		BD2A-1000-EE	Feeder unit	1		
2		BD2A-2-800-SB-3	Trunking units	6		
3		BD2-1250-FE	End flanges	1		
4		BD2-AK04/SNH1	Tap-off units	3		
5		BD2-AK3X/GS00	Tap-off units	1		
6		BD2A-400-EE	Feeder unit	4		
7		BD2A-2-160-SB-3	Trunking units	8		
8		BD2A-2-160-SB-1	Trunking units	2		
9		BD2A-2-250-SB-3	Trunking units	8		
1 0		BD2A-2-250-SB-1	Trunking units	2		
1 1		BD2-400-FE	End flanges	4		
1 2		BD2-1250-BB	Fixing brackets	5		
1 3		BD2-400-BB	Fixing brackets	14		

Configuration information

Configuring example: vertical mounting position

Required details

- Number and height of storeys
- Ratings and types of load per storey
- Rated diversity factor α
- Feeding transformers (characteristics, position)
- Special requirements (degree of protection, fire protection, etc.)

Given:

1. Six storeys with five apartments each
2. 38 kW connected load per apartment
3. U_e = 400 V, p.f. = 0.8
4. Rated diversity factor α = 0.8
5. Derating factor β = 0.45
6. Infeed cables 2 × 240 mm^2
7. Protection with 3VL57 80 circuit breaker
8. Details and site plans required for routing the trunking

Operational current

The operational current per storey, which also determines the required rated current of the tap-off units, is calculated using the following formula

$$I_{NB} = \frac{P_{inst} \times \alpha}{\sqrt{3} \times U_e \times \text{p.f.}} \times 10^3$$

with:

I_{NB}	=	Operational current per storey	(A)
P_{inst}	=	Sum of installed power per storey	(kW)
U_e	=	Rated operational voltage	(V)
p.f.	=	Power factor	
α	=	Rated diversity factor If α is not specified, the values from Table 1 can be used. If p.f. is not known, this can be set for a block of apartments = 1.	

$$I_{NB} = \frac{5 \times 38 \times 0.8}{\sqrt{3} \times 400 \times 0.8} \times 10^3 = 274 \text{ A}$$

The operational current per busbar line is:

$$I_B = I_{NB} \times \beta$$

with

β	=	Derating factor for the total number of loads. Good empirical values for derating factors can be obtained from your local power supply company. They vary from region to region. Average values are indicated in table 2.

Table 1 (according to IEC/EN 60439-1)

Number of main circuits	Rated diversity factor α
2 and 3	0.9
4 and 5	0.8
6 to 9 inclusive	0.7
10 and more	0.6

Table 2: Derating factor

Item	Factor β
Schools, nursery schools	0.6 ... 0.9
Carpenters' and joiners' workshops	0.2 ... 0.7
Restaurants, hotels	0.4 ... 0.7
Butchers	0.5 ... 0.8
Bakeries	0.4 ... 0.8
Laundries	0.5 ... 0.9
Conference halls	0.6 ... 0.8
Small offices	0.5 ... 0.7
Large offices	0.4 ... 0.8
Department stores, supermarkets	0.7 ... 0.9
Metal processing works	0.2 ... 0.3
Car factories	0.2 ... 0.3
Lighting systems for road tunnels	1.0
Building sites	0.2 ... 0.4

Once the system has been selected, in this case BD2A-2-800, the following documents must be completed to place an order:

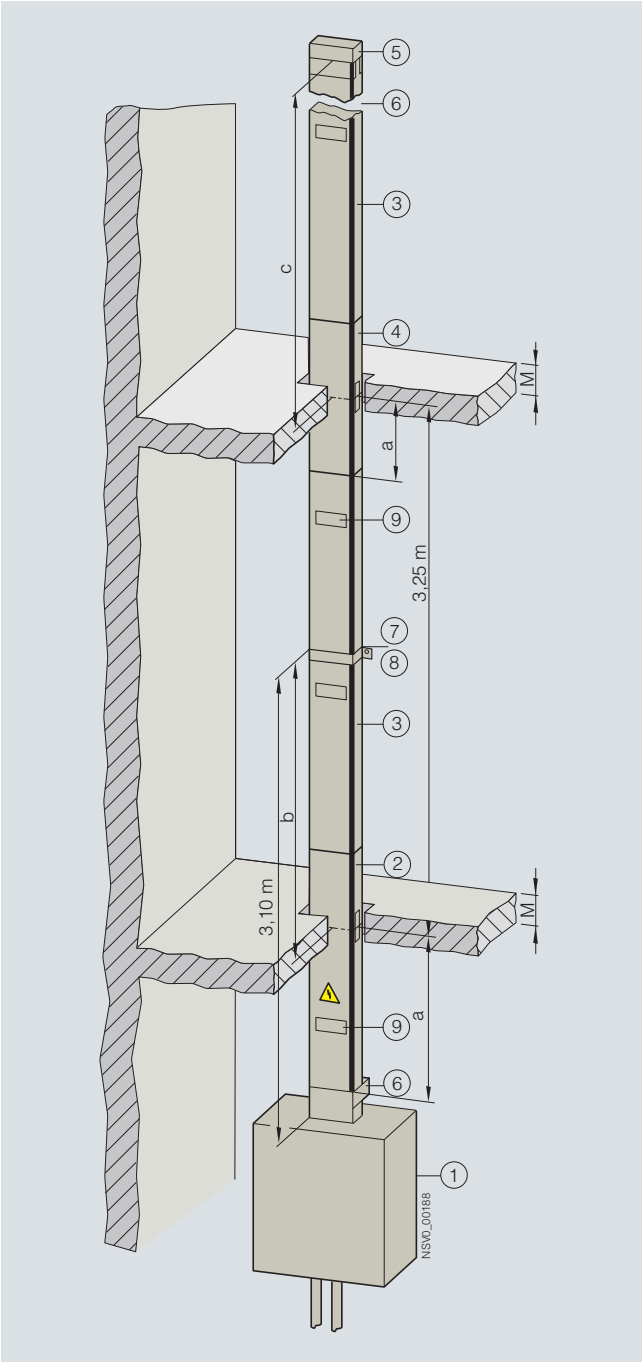
- Installation plan
- Parts list
- Order from

Parts list

Item No. (installation site)	F W L K	Type	Benennung, Zuordnung Description Dénomination	Anz. Qty. Qté
1		BD2A-1000-EE	End feeder unit	1
2		BD2A-2-800-WB-2W1,50 +BD2-S120-BX1,00-M0,25	Trunking unit with optional length 1.5 m + fire protection a = 1.0 m, ceiling thickness M = 0.25 m	1
3		BD2A-2-800-SB-2	Trunking unit 2.25 m	5
4		BD2A-2-800-WO-1W1,00 +BD2-S120-BX0.50-M0.25	Trunking unit with optional length 1.0 m + fire protection a = 0.5 m, ceiling thickness M = 0.25 m	4
5		BD2-1250-FE	End flanges	1
6		BD2-BWV	Vertical retaining elements	4
7		BD2-1250-BB	Fixing brackets	5
8		BD2-BD	Spacer bracket	5
9		BD2-AK05/SNH2	Tap-off unit with LV HRC fuse switch-disconnector	6
Alternatively:				
2 ... 4		BD2A-2-800-SB-3 +BD2-S120-BX1,00-M0,25	Trunking unit 3.25 m + fire protection a = 1.0 m, ceiling thickness M = 0.25 m	5

Configuration information

Installation plan



Explanations for the installation plan

① End feeder unit
② Trunking unit, optional length 1.5 m, with fire protection
③ Trunking unit, standard length 2.25 m
④ Trunking unit, optional length 1.0 m, with fire protection
⑤ End flange
⑥ Vertical retaining elements
⑦ Fixing bracket
⑧ Spacer bracket
⑨ Tap-off unit

a Position of fire protection in m;
center of fire protection is always at center of fire ceiling
b Dimension for spacer bracket in m
c Dimension for retaining element in m
M Ceiling thickness in m

Fixing elements:

- Second retaining element at approx. 5 m height (always near the terminal)
- Third retaining element at approx. 10 m height
- Fourth retaining element at approx. 15 m height

Note

The fixing points for all fixing brackets, retaining elements and spacer brackets must be specified in the installation plan.

Configuration information

More information

Rated currents and short-circuit currents of standard transformers

Rated voltage U_N	400/230 V			690/400 V		
Relative short-circuit voltage u_k		4 %[1]	6 %[2]		4 %[1]	6 %[2]
Rated power	Rated current	Short-circuit current I''_k[3]		Rated current	Short-circuit current I''_k[3]	
kVA	A	A	A	A	A	A
50	72	1805	–	42	1042	–
100	144	3610	2406	84	2084	1392
160	230	5776	3850	133	3325	2230
200	288	7220	4812	168	4168	2784
250	360	9025	6015	210	5220	3560
315	455	11375	7583	263	6650	4380
400	578	14450	9630	336	8336	5568
500	722	18050	12030	420	10440	7120
630	909	22750	15166	526	13300	8760
800	1156	28900	19260	672	16672	11136
1000	1444	36100	24060	840	20840	13920
1250	1805	45125	30080	1050	26060	17480

1) u_k = 4%, standardized according to DIN 42500 for S_{NT} = 50 ... 630 kVA.

2) u_k = 6 %, standardized according to DIN 42500 for S_{NT} = 100 ... 1600 kVA.

3) I''_k = Transformer initial short-circuit alternating current when connecting to a network with unlimited short-circuit power.

Approximating formula		
Transformer rated current	Transformer short-circuit alternating current	With
I_N [A] = k × S_{NT} [kVA]	$I''_k = I_N/u_k \times 100$	k = 1.45 at 400 V k = 0.84 at 690 V

Dimensioning and selection

Safe shutoff of the smallest single-pole ground short-circuit current

Since the level of the loop impedance is decisive in determining the level of the single-pole short-circuit current, DIN VDE 0100 Part 600 prescribes that the loop impedance must be determined between the following:

- Phase conductor and the protective conductor or
- Phase conductor and PEN conductor.

This value may be determined by:

- Measuring with measuring devices or
- Calculation or
- Simulation of the network in a network model.

In the "Technical Specifications" section, the impedance values for the BD2A/BD2C busbar trunking systems are listed so that it is possible to calculate the loop impedances of a busbar system, which contributes to the total loop impedance.

With the aid of the loop impedance of the entire busbar trunking system, it is easy to calculate the smallest expected single-pole short-circuit current.

$$I_{kl\,min} = \frac{c \times U_n}{\sqrt{3} \times Z_k}$$

with

c = Voltage factor 0.95

U_n = Voltage between the phase conductors

Z_k = Short-circuit impedance

Note: DIN VDE 0100 is equivalent to IEC 60364.

5

Degrees of protection for busbar trunking systems

Room types according to DIN VDE 0100 (IEC 60364)	Designation of the degree of protection according to IEC/EN 60529
Closed electrical operating areas	IP10
Electrical operating areas	IP20
Dry areas and rooms	IP20
Damp and wet areas and rooms	IP20

Usage in operating areas exposed to a fire hazard

In operating areas exposed to a fire hazard, IEC 60364-7-72 and DIN VDE 0100-720 places enhanced demands on the degree of protection of electrical equipment. The demands for busbar trunking systems are:

- For a fire hazard from dust and/or fibers: degree of protection IP5X
- For a fire hazard from readily flammable materials apart from dust and/or fibers: degree of protection IP4X

The BD2A/BD2C busbar trunking systems meet these demands. They are therefore suitable for applications in this area.

Degrees of protection of electrical equipment according to IEC/EN 60529

Degree of protection	1. figure		2. figure
	Touch protection	Protection against solid foreign bodies and dust	Protection against ingress of liquid
IP00	No special protection	No special protection	No special protection
IP20	Against finger contact	Against solid bodies ≥ ∅ 12.5 mm	No special protection
IP34	Against tools	Against solid bodies ≥ ∅ 2.5 mm	No damage caused by splashwater
IP41	Against wire	Against solid bodies ≥ ∅ 1 mm	No damage caused by vertically dripping water (vertical drops)
IP43	Against wire	Against solid bodies ≥ ∅ 1 mm	No damaged caused by spraywater
IP54	Against wire	Against hazardous dust deposits inside (dust-tight)	No damage caused by splashwater
IP55	Against wire	Against hazardous dust deposits inside (dust-tight)	No damage caused by hose-water
IP65	Against wire	Against penetration of dust (dust-tight)	No damage caused by hose-water
IP66	Against wire	Against penetration of dust (dust-tight)	In the event of temporary immersion, ingress of water will have no harmful effects (water jet)
IP67	Against wire	Against penetration of dust (dust-tight)	Water may not ingress in harmful quantities during immersion (temporary immersion)
IP68	Against wire	Against penetration of dust (dust-tight)	Water may not ingress in harmful quantities during immersion for indefinite periods (continuous immersion)

Touch protection against direct contact according to EN 50274

These regulations apply for the design of electrical equipment and its installation in electrical installations with rated voltages up to 1000 V AC or 1500 V DC – regarding protection against direct contact, where there are actuators (pushbuttons, toggle levers etc.) located in the direct vicinity of parts which are live or dangerous to touch.

"Finger-safe" relates only to the operating device (actuator) and only in the normal direction of actuation. A minimum distance of r = 30 mm in radius from the center point of the device to any live parts must be ensured.

The degree of protection IP20 is a more enhanced touch protection against direct contact than "finger-safe". It constitutes touch protection with electrical equipment from all directions. Devices with "finger-safe" touch protection and degree of protection IP00 can be assigned with additional touch protection by shrouding if required.

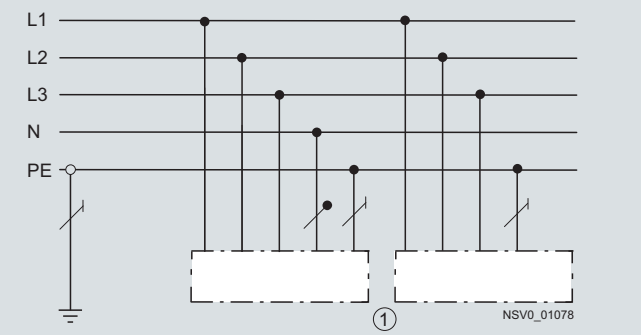
Configuration information

Power distribution systems (grid types) according to IEC 60364-3 or DIN VDE 0100-300

Determination of the protective measures and selection of the electrical equipment in accordance with the power distribution system used.

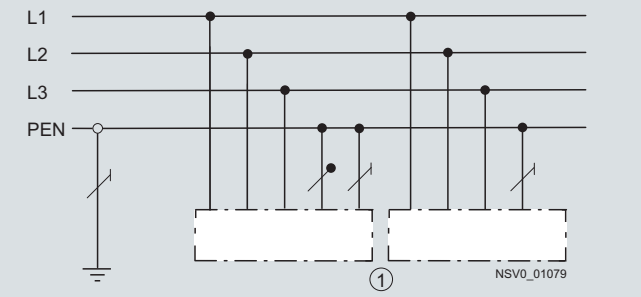
TN systems

TN-S system



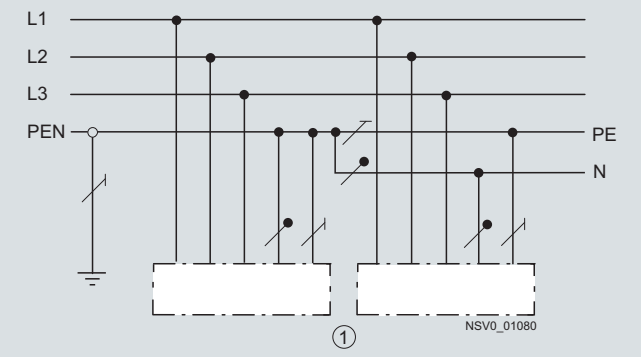
Separated neutral and protective conductors throughout the system.

TN-C system



Neutral and protective functions are combined throughout the system in a single conductor.

TN-C-S system

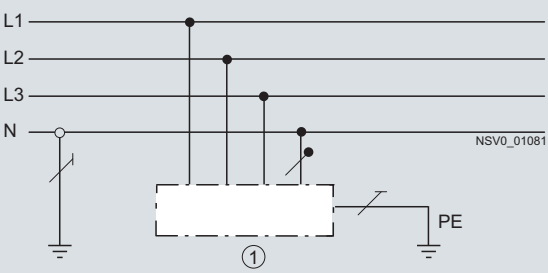


Combination between neutral conductor and protective earth functions. They are combined in one part of the system to a single conductor and separated in another part.

① Chassis
② Impedance

Other systems

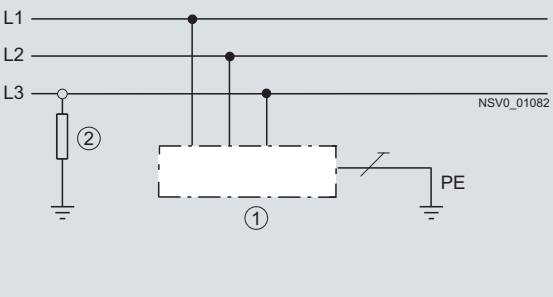
TT system



In a TT system, one point is directly earthed; the chassis of the electrical system is connected to earth which has no direct connection to the power earth.

In the modern TT system, protective measures include protective grounding as well as current-operated e.l.c.b. systems and voltage-operated e.l.c.b. systems.

IT system



In the IT system there is no direct connection between the live conductors and earthed components; the chassis of the electrical system is earthed.

The IT system corresponds with the system where a protective earth system for protective measures is applied.

Explanations

First character = grounding condition of the power supply source

- T = direct grounding of a point
- I = either insulation of all live parts from earth or connection of one point with earth via impedance

Second character = grounding condition of chassis of the electrical equipment

- T = chassis directly earthed, independently of any grounding of a point in the power supply
- N = chassis connected directly with the system earth in AC systems, the earth point is normally the neutral point

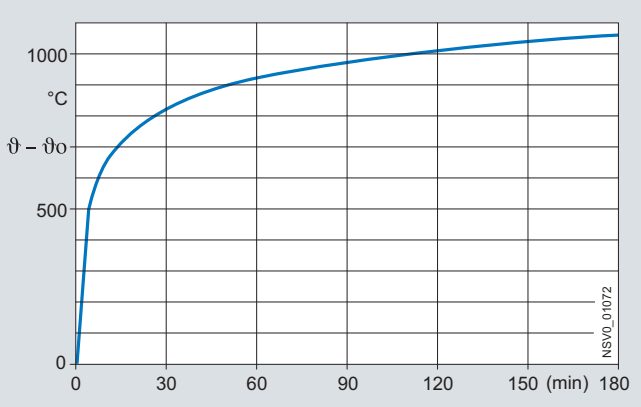
Additional characters = arrangement of the neutral conductor and protective earth conductor

- S = separate conductors for neutral and protective earth functions
- C = neutral and protective earth functions combined in a single conductor (PEN)

Functional endurance

Fire protection equipment and fire protection precautions for electrical installations are required especially with building structures of a particular type of utilization. Buildings of this nature include hospitals and places where people gather. The German standards DIN VDE 0108-1 "Buildings where people meet" and DIN VDE 0100-710 "Medically used areas" state that electrical systems must remain operational for certain periods of time in the event of a fire. This applies in particular to:

- Fire alarm systems
- Systems for sounding alarms and conveying instructions to visitors and employees
- Emergency lighting
- Passenger elevators with evacuation circuit which must remain serviceable in the incoming feeder area for at least 30 minutes under post-flashover fire conditions
- Water-pressure boosting equipment for firefighting water supply
- Ventilation systems of enclosed stairwells, elevator shafts and drive equipment rooms for fire service elevators must remain operational for at least 90 minutes.



Standard temperature curve (ETK) for assessing functional endurance

In order to provide the functional endurance of the busbar trunking system stipulated by the regulations, Siemens successfully carried out and completed tests in cooperation with Promat for BD2A/BD2C busbar system at the materials testing laboratory in Braunschweig in Germany.

During the fire tests, the busbar trunking systems were equipped with a cladding of Promatect L500 plates of various thicknesses (thickness d = 20 mm, 40 mm, 60 mm) and were subjected to a fire load of of external origin as defined by the "standard temperature curve (ETK)" in order to assess the functional endurance according to DIN 4102 Part 12.

More information on request.

Magnetic fields

General information

The busbars intended for power conveyance generate - as do all other conductors - alternating electromagnetic fields with a base frequency of 50 Hz. These magnetic fields can negatively influence the function of sensitive equipment such as computers or measurement devices.

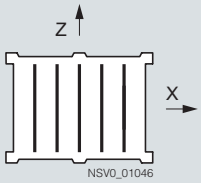
Limit values

The EMC directives and the standards derived from these do not contain any regulations or recommendations for engineering busbar trunking system installations. If busbar trunking systems are used in medical facilities, the DIN VDE 0100-710 standard can be consulted.

In DIN VDE 0100-710, guide values of mains frequency induced magnetic fields in facilities used for medical purposes are defined. Stations where patients are treated may not be subject to magnetic induction at 50 Hz which exceeds the following values:

- $B = 2 \times 10^{-7}$ Tesla for EEG
- $B = 4 \times 10^{-7}$ Tesla for ECG

In order to make it possible to decide in the planning stage which busbars should be used, Siemens has carried out extensive magnetic field measurements. The magnetic radiated noise of the busbar systems was measured using a 9.6 m long straight busbar arrangement. The busbars were loaded symmetrically with the rated current and the magnetic fields measured in their horizontal and vertical axes.



System of coordinates for magnetic field measurement

The limit value for inductive interference between multi-core cables and wires of the high-current system, conductor cross-section > 185 mm^2, and the stations where patients are treated will certainly not be exceeded if a minimum distance of 9 m as recommended by the DIN VDE 0100-710 standard is observed.

When busbars are used, this distance will usually turn out to be less since the sheet-steel enclosure is effective in reducing magnetic interference fields in the environment.

Measured values on request.

Note: DIN VDE 0100 is equivalent to IEC 60364.

Configuration information

Sprinkler test

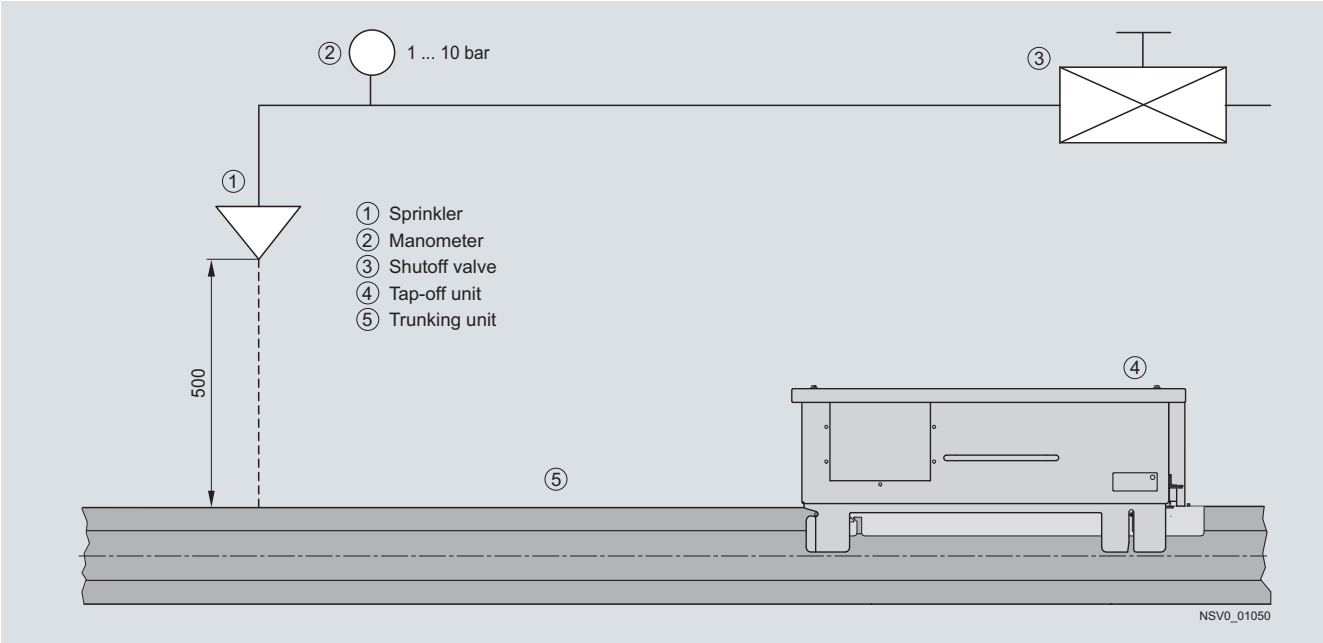
General information

Sprinkler fire-extinguishing systems in particular are used for protecting cable conduits and cable ducts. Here it is predominantly the cooling effect of the water on the surface of the fire which is exploited. Operation of the sprinkler for at least 30 minutes should be assumed.

Siemens has subjected its BD2A/BD2C busbar trunking systems to an extensive range of tests with sprinkler systems. Due to the absence of a mandatory standard or directive, the test was performed using a test setup which mirrored a practical application (see the sketch).

Test results

With the BD2A/BD2C busbar trunking system, the system with IP54 degree of protection was sprinkled in all fitted positions paying close consideration to the "VdS" directives for sprinkler systems. The insulation resistance was measured before and after sprinkling for 90 minutes, and a high voltage test according to EN 60439-2 was performed. This test was absolved successfully and indicated that the system could be operated immediately after sprinkling without any delays.



Sprinkler test setup

Comparison of busbar trunking and cable installation systems

Feature	Busbar trunking installation	Cable installation
TTA assembly	Yes	No
Mechanical safety	High	Low
Fire load	Low	High
Temperature characteristic	Ambient temperature According to IEC/EN 60439-1 and -2 max. +40 °C and +35 °C on a 24 hour average	According to DIN 57298 Part 4/ VDE 0298 Part 4/2.88 loads are based on +30 °C.
System structure	Clear due to linear system structure with in-line load feeders via tap-off units	Very large accumulation of cables at feed point due to point-to-point supply of loads from central power distribution unit
Protective devices for loads	In the tap-off unit: Means direct and immediate on-the-spot identification of assignment to load	Centrally in the distribution board: Makes the assignment to the load not directly verifiable. It is necessary to rely on correct inscription of the cables and loads.
Space requirement	Low	High as the corresponding distribution boards are required. Routing criteria (cable accumulation, type of routing, current carrying capacity, etc.) must be complied with.
Retrofitting capability if load feeders are changed	Great flexibility due to tap-off points in the trunking units and a great number of different tap-off units	Only possible at great expense; laying additional cables from the central distribution board to the load.
Planning and configuration	Simple and fast with EDP-aided planning tools being used	Highly intensive configuration (distribution and cable layouts, cable plans, etc.)
Dimensioning (current, voltage drop, protective earth conditions)	Not complex	Very complex
Troubleshooting	Low	High
Fire protection	Type-tested, ex-works	Dependent on the work standard applied on the building site
Functional endurance	Tested functional endurance according to DIN 4102-12	Dependent on the work standard applied on the building site
Electromagnetic interference	Low, due to sheet-steel enclosure and conductor configuration	Relatively high with a standard cable
Mounting	Very little fitting materials and tools required, short mounting times	Complex mounting materials and a comprehensive range of tools required, long mounting times
Weight	Up to ⅓ of the comparable cable weight	Up to 3-times the busbar trunking system weight
Halogen and PVC free	Trunking units are always halogen and PVC free	Standard cables are not always halogen and PVC free

Fire barriers

Overview

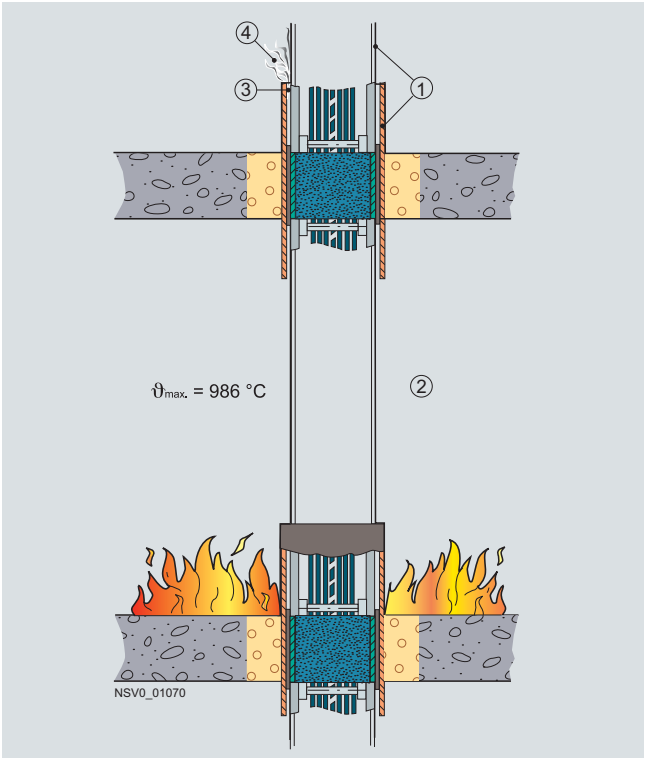
General requirements

The German state building authorities demand that buildings are designed so that "spreading of fire and smoke is prevented, and that effective fire fighting and rescue of persons and domestic animals is facilitated". Fire or flue gas may not spread from one storey or fire area to another.

All BD2A/BD2C busbar trunking systems can be equipped with fire barriers and generally comply with the standards for buildings including high-rise buildings. The busbar trunking system is supplied ex-works with fire barriers. Retrofitting is not possible. A general approval from the German Institute for Building Engineering (Deutsches Institut für Bautechnik in Berlin DIBt) in Berlin is available:

- BD2-S120: No. Z-19.15-1046,
- BD2-S90: No. Z-19.15-1048).

The fire resistance class with the BD2 system corresponds with version S 90 or S 120 according to DIN 4102 Part 9.
The demands for verification of fire resistance duration at 120 min as specified to ISO 834 according to IEC/EN 60439-2 are fulfilled. The requirements for a busbar trunking system as specified to DIN 4102 are shown in the illustration.



(1) Permissible temperature increase on components: max. 180 °C
(2) Scene of fire: application of fire according to the standard temperature curve DIN 4102, sheet 2
(3) Permitted temperature increase of escaping air: max. 140 °C
(4) No flammable gases are permitted to escape. No rescue work may be hindered by emerging smoke.

Configuration

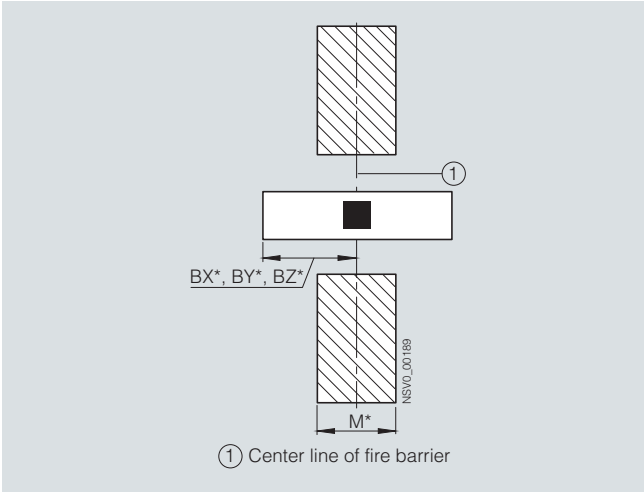
To ensure fire protection to the S90 or S120 function, the following points must be observed when configuring and installing trunking units and junction units with fire barriers:

- The center of the fire barrier in the trunking unit must be positioned in the center of the fire wall or ceiling.
  Exception: With branch/junction units, this may not be possible due to insufficient distance from the wall or ceiling, i.e. the center of the fire barrier may not coincide with the center of the fire wall or ceiling. In such cases, PROMATECT-H(L) panels are added to achieve the actually required wall or ceiling thickness.
- The following information must be provided: For BX*, BY* or BZ* trunking units, position of the center of the fire barrier in the trunking unit (or the center of the fire wall or ceiling for branch/junction units with insufficient distance from the wall or ceiling); the desired fire resistance rating S90 or S120; and the thickness M* of the wall or ceiling.
- There are no tap-off points in the area covered by the fire barrier.
- The trunking units must be installed by an approved fire protection installation specialist.
- In Germany, the BD2-S90-ZUL-D or BD2-S120-ZUL-D fire protection kit is required (see page 5/69).

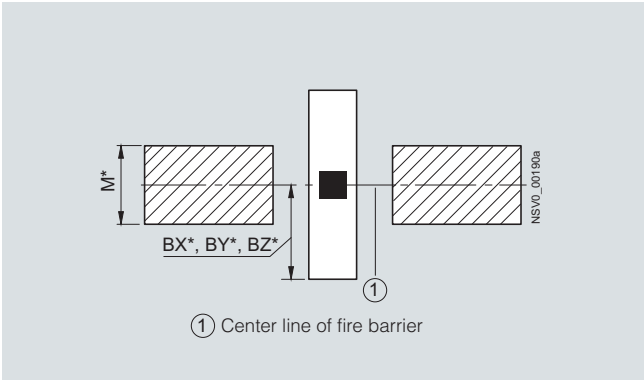
Notes

For BX* and BY*, replace the asterisk in the type reference by the required dimension in meters from the center of the joint block to the center of the fire wall or ceiling.

For BZ*, replace the asterisk in the type reference by the required dimension in meters from the outside edge of limb X (end without joint block) to the center of the fire wall or ceiling; for -M* specify the wall or ceiling thickness.



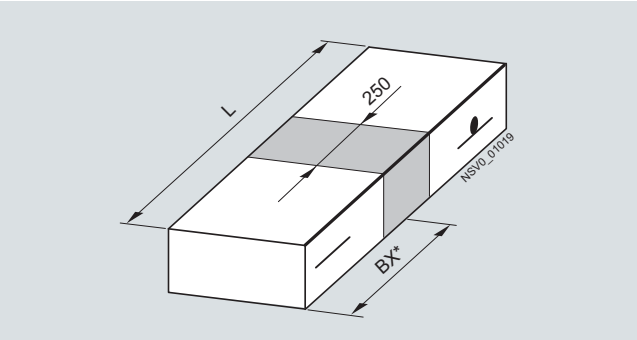
Positioning in the fire wall



Positioning in the fire ceiling

Design

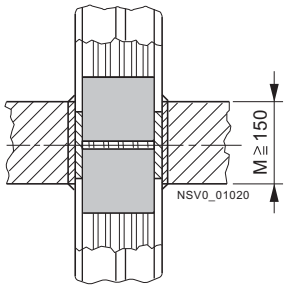
Position of fire barrier on the trunking unit



Type: BD2A-...-S(W).-. + BD2-S90(S120)-BX*-M*
BD2C-...-S(W).-. + BD2-S120-BX*-M*

Fire resistance rating S90

• Wall thickness M ≥ 150 mm

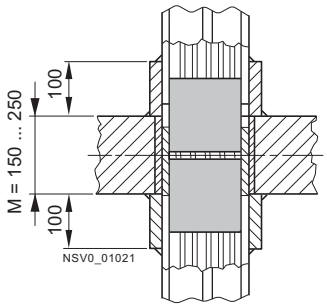


BD2A-...-S(W). + BD2-S90-BX*-M*[1)]

L (L min. = 370+M)	BX* min. = 185+M/2	BX*max. = L–BX* min.
520 (min.)	260	260
–	–	–
–	–	–
3250 (max.)	260	2980

Fire resistance rating S120

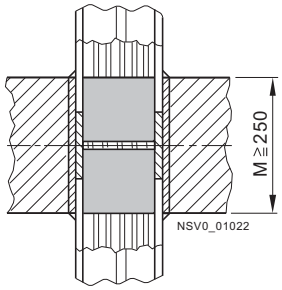
• Wall thickness 150 mm ≤ M < 250 mm



BD2A-...-S(W). + BD2-S120-BX*-M*[1)]

L (L min. = 570+M)	BX* min. = 285+M/2	BX*max. = L–BX* min.
720 (min.)	360	360
–	–	–
–	–	–
3250 (max.)	360	2890

• Wall thickness M ≥ 250 mm



BD2A-...-S(W). + BD2-S120-BX*-M*[1)]

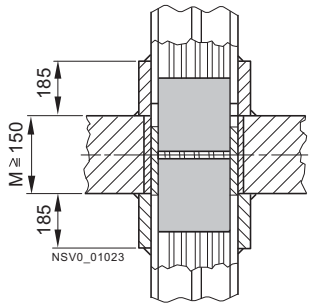
L (L min. = 370+M)	BX* min. = 185+M/2	BX*max. = L–BX* min.
620 (min.)	310	310
–	–	–
–	–	–
3250 (max.)	310	2940

1) Replace the asterisk * according to the table.

Fire barriers

Fire resistance rating S120

• Wall thickness M ≥ 150 mm



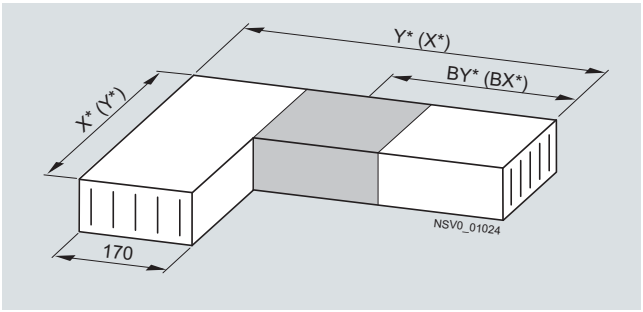
1) Replace the asterisk * according to the table.

BD2C-...-S(W). + BD2-S120-BX*-M*[1)]

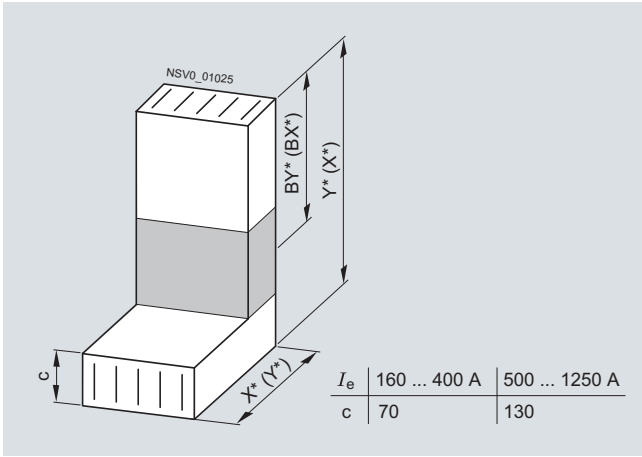
L (L min. = 740+M)	BX* min. = 370+M/2	BX*max. = L–BX* min.
900 (min.)	450	450
–	–	–
–	–	–
3250 (max.)	450	2800

Position of the fire barrier on branch/junction units

The minimum dimensions applicable for positioning fire barriers on the limbs of branch/junction units differ, depending on the routing of the trunking and the distance from the fire wall to the inside edge of the trunking unit.



Elbow, type: BD2A-...-LR(L)-X* (Y*), +BD2-S90(S120)-BX*(BY*)-M*
BD2C-...-LR(L)-X* (Y*), +BD2-S120-BX*(BY*)-M*

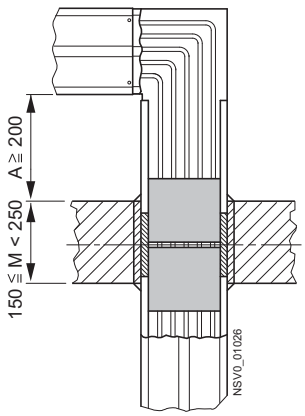


I_e	160 ... 400 A	500 ... 1250 A
c	70	130

Knee, type: BD2A-...-LV(H)-X* (Y*), +BD2-S90(S120)-BX*(BY*)-M*
BD2C-...-LV(H)-X* (Y*), +BD2-S120-BX*(BY*)-M*

Fire resistance rating S90

• Wall thickness 150 mm ≤ M < 250 mm
(distance from wall/inside corner A ≥ 200 mm)



BD2A-...-L... + BD2-S90-BX*(BY*)-M*[1)]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 185+M+A+170)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
710 (min.)	260	260
–	–	–
1250 (max.)	260	800

• Junction units LV, LH; 400 A

X*(Y*)(X*(Y*) min. = 185+M+A+70)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
610 (min.)	260	260
–	–	–
1250 (max.)	260	900

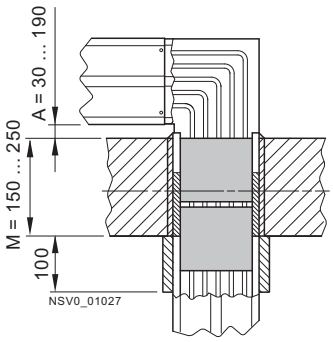
• Junction units LV, LH; 1000 A

X*(Y*)(X*(Y*) min. = 185+M+A+130)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
670 (min.)	260	260
–	–	–
1250 (max.)	260	840

1) Replace the asterisk * according to the table.

Fire resistance rating S90

• Wall thickness 150 mm ≤ M < 250 mm
(distance from wall/inside corner 30 mm ≤ A < 200 mm)



BD2A-...-L... + BD2-S90-BX*(BY*)-M*[1)]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 285+M+A+170)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
640 (min.)	360	360
–	–	–
1250 (max.)	360	970

• Junction units LV, LH; 400 A

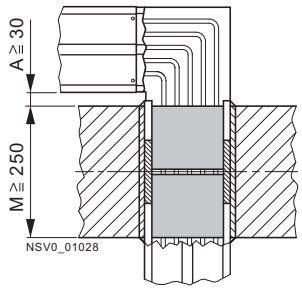
X*(Y*)(X*(Y*) min. = 285+M+A+70)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
540 (min.)	360	360
–	–	–
1250 (max.)	360	1070

• Junction units LV, LH; 1000 A

X*(Y*)(X*(Y*) min. = 285+M+A+130)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
600 (min.)	360	360
–	–	–
1250 (max.)	360	1010

Fire resistance rating S90

• Wall thickness M ≥ 250 mm
(distance from wall/inside corner A ≥ 30 mm)



BD2A-...-L... + BD2-S90-BX*(BY*)-M*[1)]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 185+M+A+170)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
640 (min.)	310	310
–	–	–
1250 (max.)	310	920

• Junction units LV, LH; 400 A

X*(Y*)(X*(Y*) min. = 185+M+A+70)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
540 (min.)	310	310
–	–	–
1250 (max.)	310	1020

• Junction units LV, LH; 1000 A

X*(Y*)(X*(Y*) min. = 185+M+A+130)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
600 (min.)	310	310
–	–	–
1250 (max.)	310	960

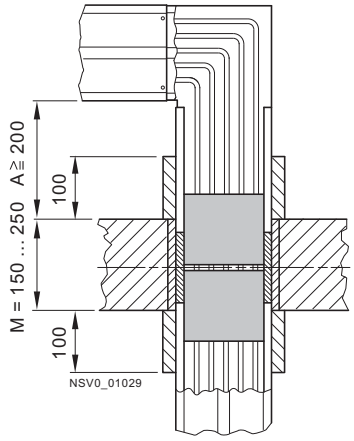
1) Replace the asterisk * according to the table.

Note: With other fire barrier configurations, please contact your local Siemens sales office.

Fire barriers

Fire resistance rating S120

• Wall thickness 150 mm ≤ M < 250 mm
(distance from wall/inside corner A ≥ 200 mm)



BD2A-...-L... + BD2-S120-BX*(BY*)-M* [1]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 285+M+A+170)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
810 (min.)	360	360
–	–	–
1250 (max.)	360	800

• Junction units LV, LH; 400 A

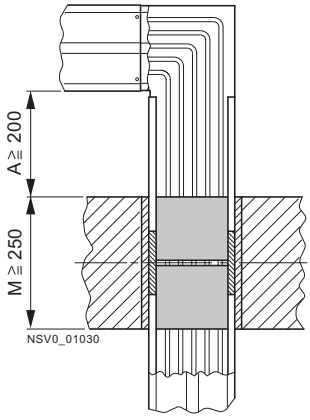
X*(Y*)(X*(Y*) min. = 285+M+A+70)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
710 (min.)	360	360
–	–	–
1250 (max.)	360	900

• Junction units LV, LH; 1000 A

X*(Y*)(X*(Y*) min. = 285+M+A+130)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
770 (min.)	360	360
–	–	–
1250 (max.)	360	840

Fire resistance rating S120

• Wall thickness M ≥ 250 mm
(distance from wall/inside corner A ≥ 200 mm)



BD2A-...-L... + BD2-S120-BX*(BY*)-M* [1]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 185+M+A+170)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
810 (min.)	310	310
–	–	–
1250 (max.)	310	750

• Junction units LV, LH; 400 A

X*(Y*)(X*(Y*) min. = 185+M+A+70)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
710 (min.)	310	310
–	–	–
1250 (max.)	310	850

• Junction units LV, LH; 1000 A

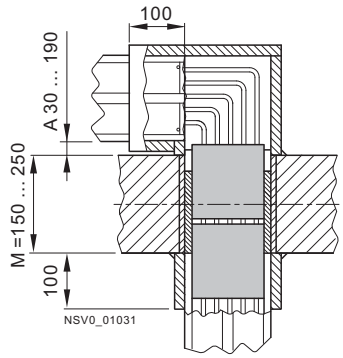
X*(Y*)(X*(Y*) min. = 185+M+A+130)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
770 (min.)	310	310
–	–	–
1250 (max.)	310	790

1) Replace the asterisk * according to the table.

Note: With other fire barrier configurations, please contact your local Siemens sales office.

Fire resistance rating S120

• Wall thickness 150 mm ≤ M < 250 mm
(distance from wall/inside corner 30 mm ≤ A < 200 mm)



BD2A-...-L... + BD2-S120-BX*(BY*)-M* [1]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 285+M+A+170)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
640 (min.)	360	360
–	–	–
1250 (max.)	360	970

• Junction units LV, LH; 400 A

X*(Y*)(X*(Y*) min. = 285+M+A+70)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
540 (min.)	360	360
–	–	–
1250 (max.)	360	1070

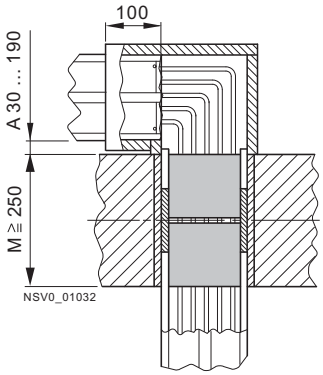
• Junction units LV, LH; 1000 A

X*(Y*)(X*(Y*) min. = 285+M+A+130)	BX*(BY*) min. = 285+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
600 (min.)	360	360
–	–	–
1250 (max.)	360	1010

The dimension X^*_{min} or Y^*_{min} on the side with corner covering is 460 mm.

Fire resistance rating S120

• Wall thickness M ≥ 250 mm
(distance from wall/inside corner 30 mm ≤ A < 200 mm)



BD2A-...-L... + BD2-S120-BX*(BY*)-M* [1]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 185+M+A+170)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
640 (min.)	310	310
–	–	–
1250 (max.)	310	920

• Junction units LV, LH; 400 A

X*(Y*)(X*(Y*) min. = 185+M+A+70)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
540 (min.)	310	310
–	–	–
1250 (max.)	310	1020

• Junction units LV, LH; 1000 A

X*(Y*)(X*(Y*) min. = 185+M+A+130)	BX*(BY*) min. = 185+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
600 (min.)	310	310
–	–	–
1250 (max.)	310	960

The dimension X^*_{min} or Y^*_{min} on the side with corner covering is 460 mm.

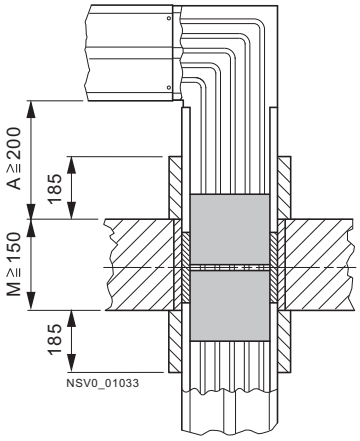
1) Replace the asterisk * according to the table.

Note: With other fire barrier configurations, please contact your local Siemens sales office.

Fire barriers

Fire resistance rating S120

• Wall thickness M ≥ 150 mm
(distance from wall/inside corner A ≥ 200 mm)



BD2C-...-L... + BD2-S120-BX*(BY*)-M* [1]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 370+M+A+170)	BX*(BY*) min. = 370+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
890 (min.)	450	450
–	–	–
1250 (max.)	450	800

• Junction units LV, LH; 400 A

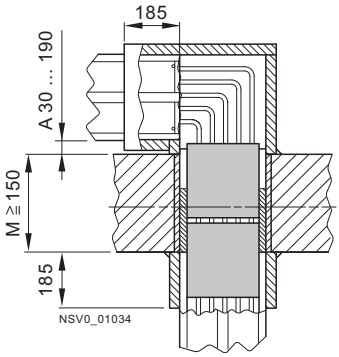
X*(Y*)(X*(Y*) min. = 370+M+A+70)	BX*(BY*) min. = 370+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
790 (min.)	450	450
–	–	–
1250 (max.)	450	900

• Junction units LV, LH; 1250 A

X*(Y*)(X*(Y*) min. = 370+M+A+130)	BX*(BY*) min. = 370+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
850 (min.)	450	450
–	–	–
1250 (max.)	450	840

Fire resistance rating S120

• Wall thickness M ≥ 150 mm
(distance from wall/inside corner 30 mm ≤ A < 200 mm)



BD2C-...-L... + BD2-S120-BX*(BY*)-M* [1]

• Junction units LL, LR

X*(Y*)(X*(Y*) min. = 370+M+A+170)	BX*(BY*) min. = 370+M/2	BX*(BY*) max. = X*(Y*)-170-A-M/2
720 (min.)	450	450
–	–	–
1250 (max.)	450	970

• Junction units LV, LH; 400 A

X*(Y*)(X*(Y*) min. = 370+M+A+70)	BX*(BY*) min. = 370+M/2	BX*(BY*) max. = X*(Y*)-70-A-M/2
620 (min.)	450	450
–	–	–
1250 (max.)	450	1070

• Junction units LV, LH; 1250 A

X*(Y*)(X*(Y*) min. = 370+M+A+130)	BX*(BY*) min. = 370+M/2	BX*(BY*) max. = X*(Y*)-130-A-M/2
680 (min.)	450	450
–	–	–
1250 (max.)	450	1010

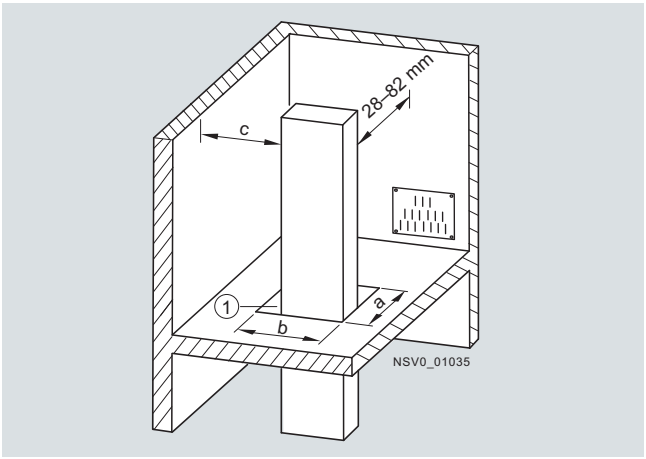
The dimension X^*_{min} or Y^*_{min} on the side with corner covering is 550 mm.

1) Replace the asterisk * according to the table.

Note: With other fire barrier configurations, please contact your local Siemens sales office.

Installing trunking units with fire barriers

Recommended minimum dimensions of ceiling or wall cut-out

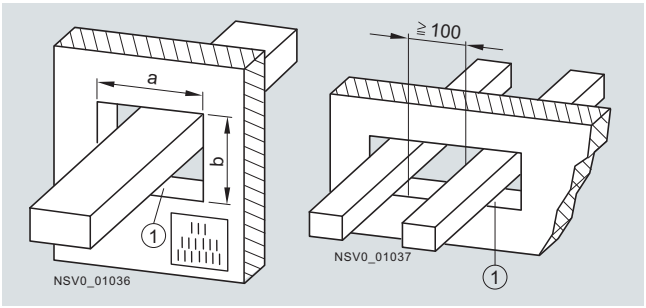


Positioning in the fire ceiling

System current strength up to	a[1] mm	b mm
400 A	90	200
1250 A	150	200

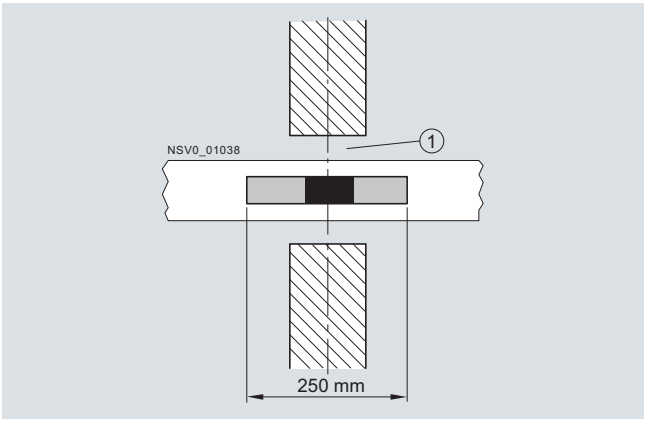
Trunking units with	c mm
Tap-off unit BD2-AK1..., BD2-AK02..., BD2-AK2..., BD2-AK03..., BD2-AK3...	125
Tap-off unit BD2-AK04..., BD2-AK05..., BD2-AK06...	200
BD2-BWV or BD2-BDV (with or without tap-off unit)	200
BD2.-...-EE (with or without tap-off unit)	200

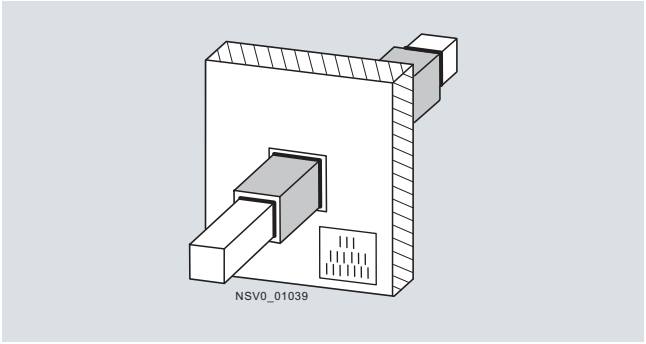
1) For Z units depending on the lengths X*, Y*.



Positioning in the fire wall

Mounting position





For installing trunking units with fire barriers, the following points must be observed in addition to correct positioning:

- Horizontally mounted busbar lines must be supported by a fixing bracket fitted approx. 500 mm before and after the component they pass through.
- The space ① surrounding the busbar trunking unit within the component it passes through must be packed with mineral-based mortar or ZZ fire protection sealant TS90.
- The gaps between PROMATECT-H(L) panels, the busbar trunking unit and the component must be sealed with ZZ fire protection sealant TS90 (included in scope of supply if panels are required).
- The mortar or ZZ fire protection sealant TS90 must conform to the applicable regulations for establishing fire resistance rating or the construction of the wall or ceiling (e.g. DIN 1045 and DIN 1053 Part 1).
- The installation must be carried out according to pertinent building regulations (included in scope of supply).

ZZ fire protection sealant TS90 is available from:

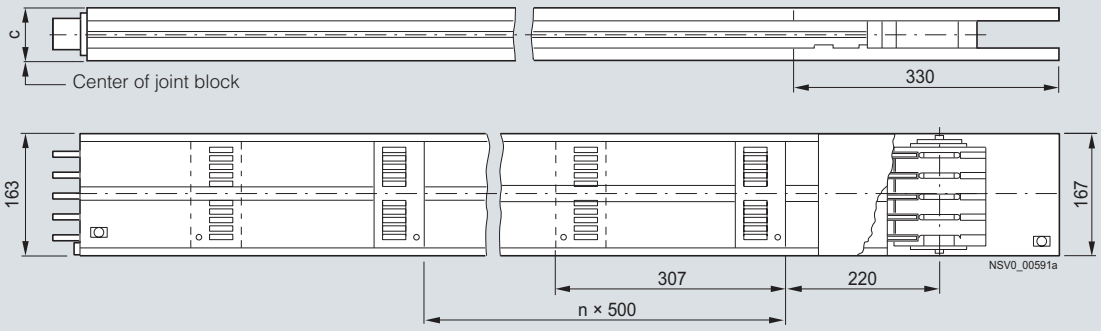
Fa. Diederich Industrievertretung
(Brandschutztechnik)
Cologne
Tel.: 02 21/9 66 52-0
Fax: 02 21 / 9 66 52-2.

Project planning aids

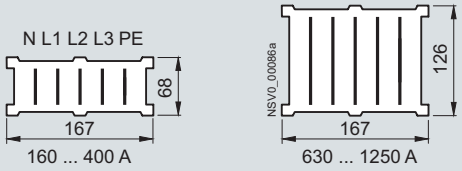
Dimensional drawings

Straight trunking units

BD2.-.-...



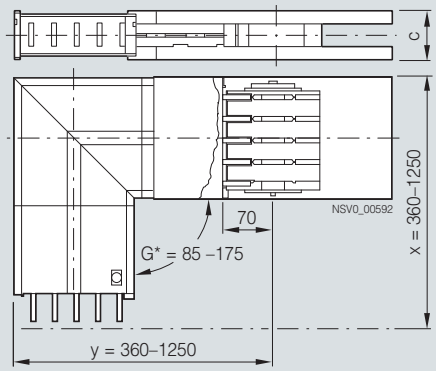
Length m	Number of tap-off points on both sides n × 500
0.5 ... 1.25	–
1.26 ... 2.25	4 ... 8
2.26 ... 3.25	8 ... 12
	On optional lengths, it may not be possible to fit tap-off units to all tap-off points



Junction units

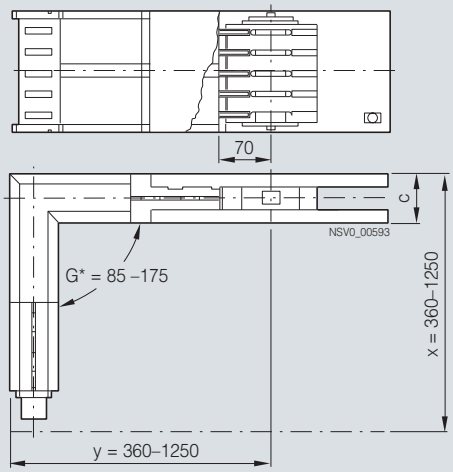
L-units

BD2.-...-LR-...(-G*)
BD2.-...-LL-...(-G*)



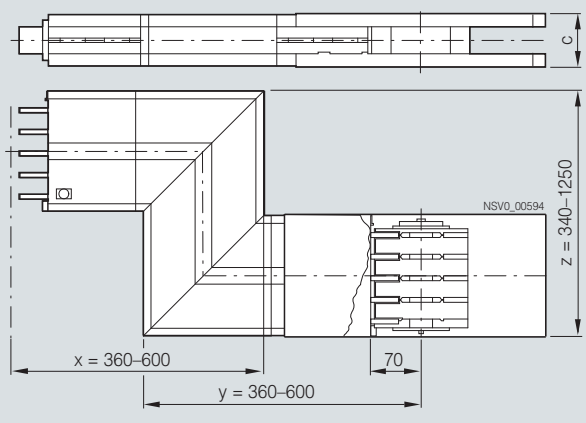
Rated current / A	c / mm
160 ... 400	68
630 ... 1250	126

BD2.-...-LV-...(-G*)
BD2.-...-LH-...(-G*)

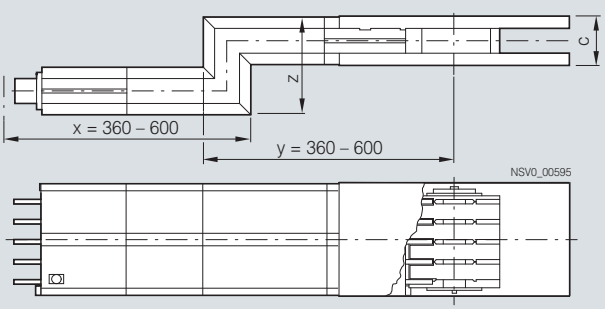


Z-units

BD2.-...-ZR-...
BD2.-...-ZL-...



BD2.-...-ZV-...
BD2.-...-ZH-...



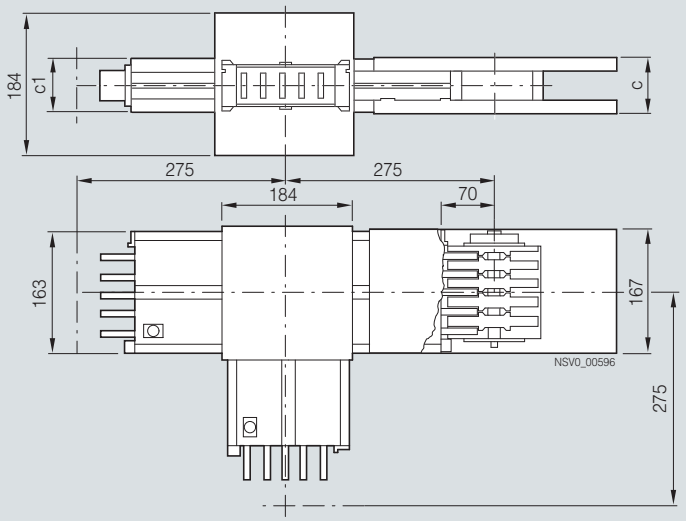
Rated current / A	z / mm
160 ... 400	140 ... 1250
630 ... 1250	260 ... 1250

5

Junction units

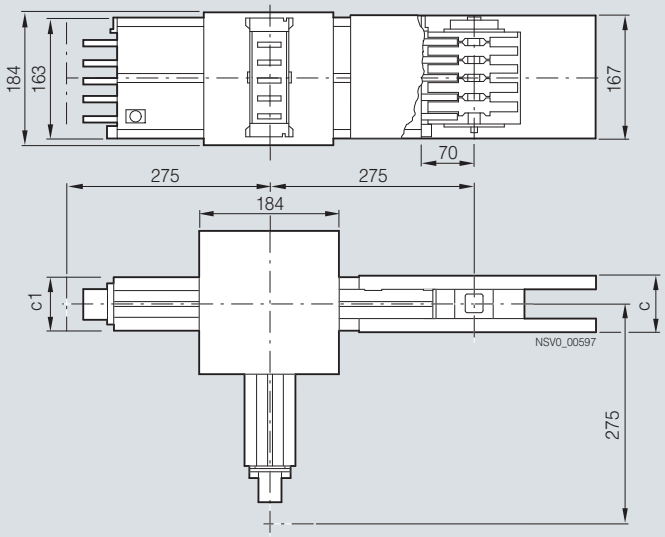
T-units

BD2.-...-TR
BD2.-...-TL



Rated current / A	c / mm	c1 / mm
160 ... 400	68	64
630 ... 1250	126	122

BD2.-...-TV
BD2.-...-TH



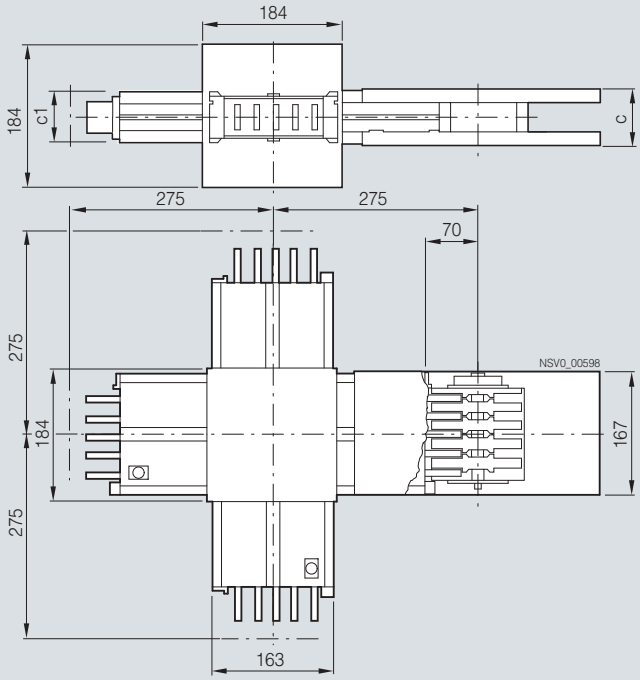
Rated current / A	c / mm	c1 / mm
160 ... 400	68	64
630 ... 1250	126	122

Project planning aids

Junction units

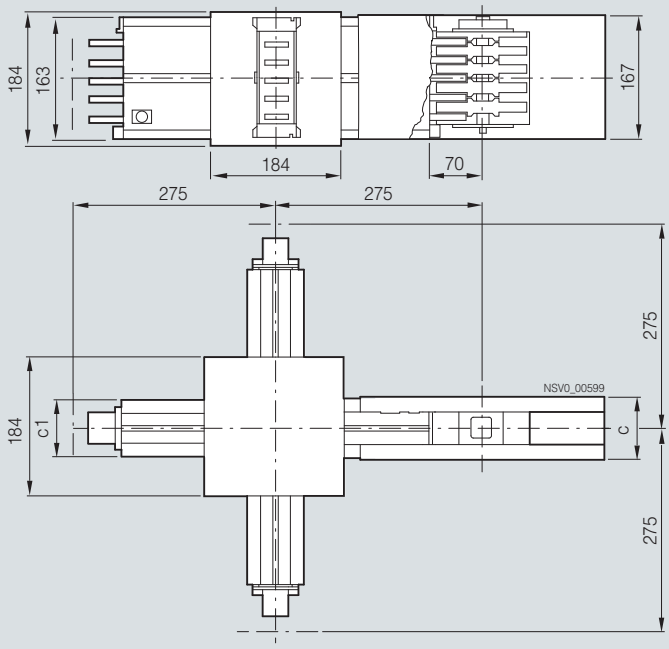
K-units

BD2.-...-KRL



Rated current / A	c / mm	c1 / mm
160 ... 400	68	64
630 ... 1250	126	122

BD2.-...-KVH

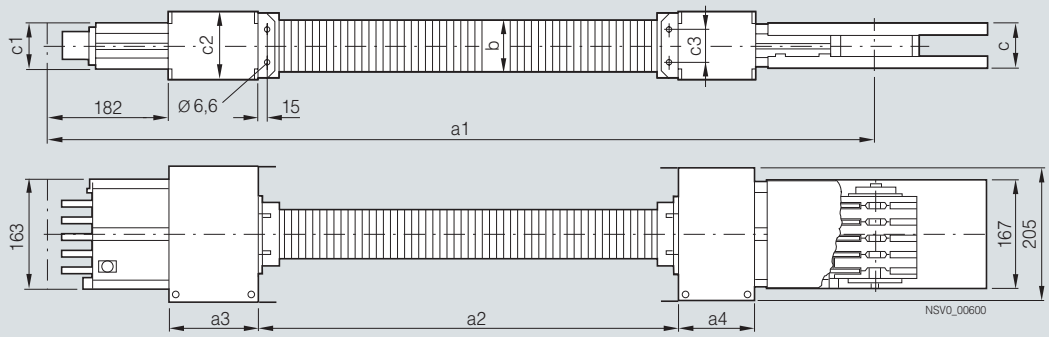


Rated current / A	c / mm	c1 / mm
160 ... 400	68	64
630 ... 1250	126	122

Junction units

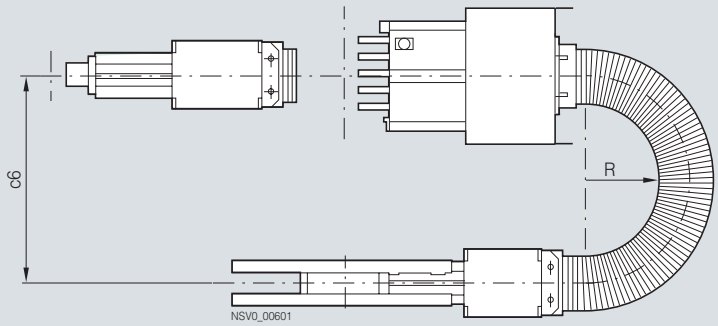
Flexible junction units

BD2-400-R, BD2-800-R



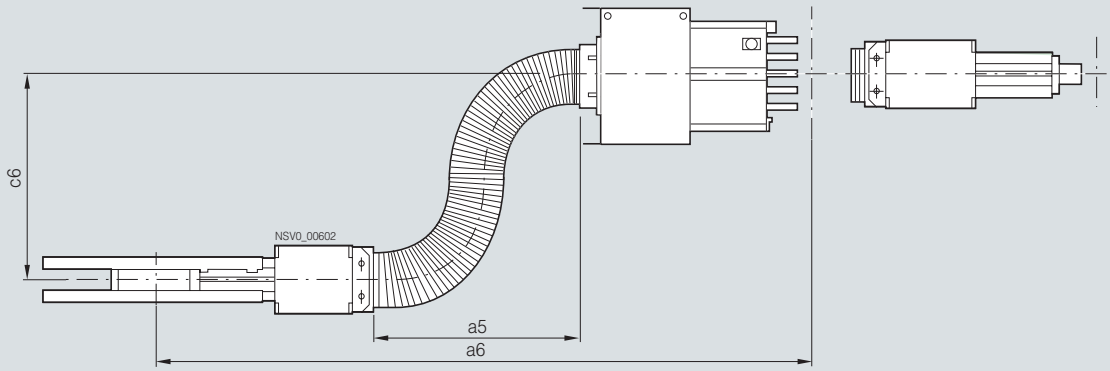
Type	a1	a2	a3	a4	b	c	c1	c2	c3
BD2-400-R	1250	512	187	187	79	68	64	101	50
BD2-800-R	1750	786	350	250	146.5	126	122	195	145

U shape



Type	c6	R_{min}
BD2-400-R	220	110
BD2-800-R	340	110

Z shape



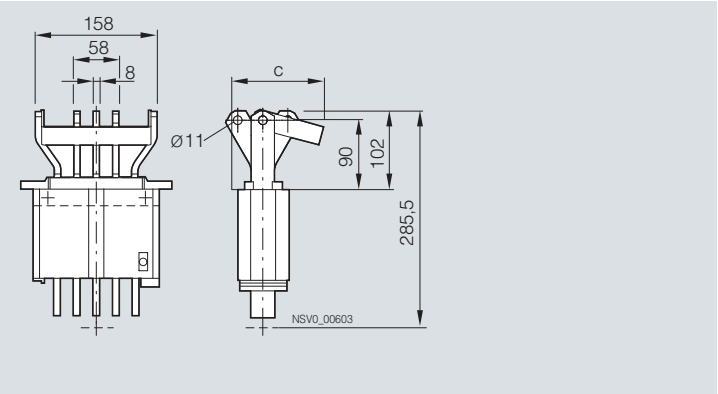
Type	a5	a6	c6	R_{min}
BD2-400-R	175	1000	355	110
BD2-800-R	530	1590	400	110

5

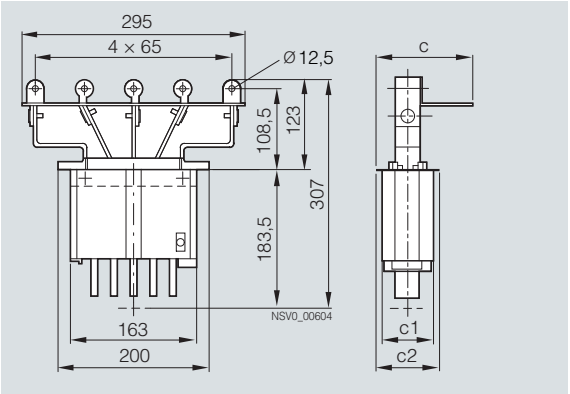
Project planning aids

Distribution board feeder units

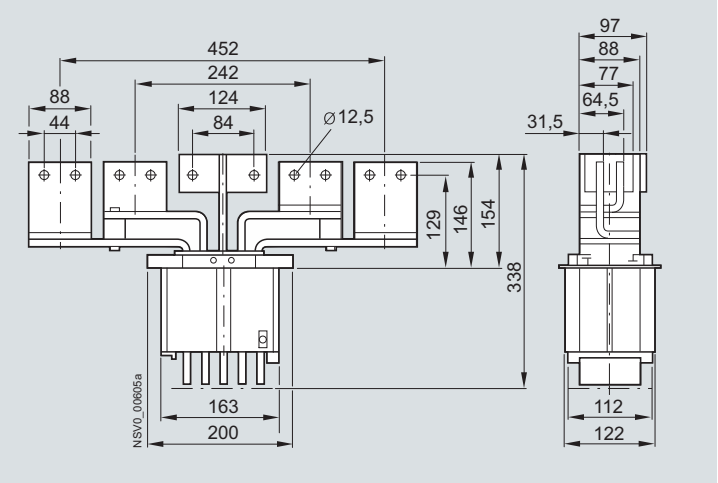
BD2.-250-VE



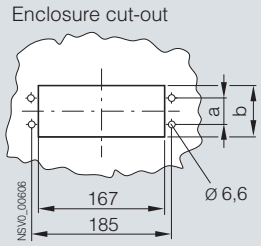
BD2.-400-VE, BD2.-1000-VE



BD2.-1250-VE



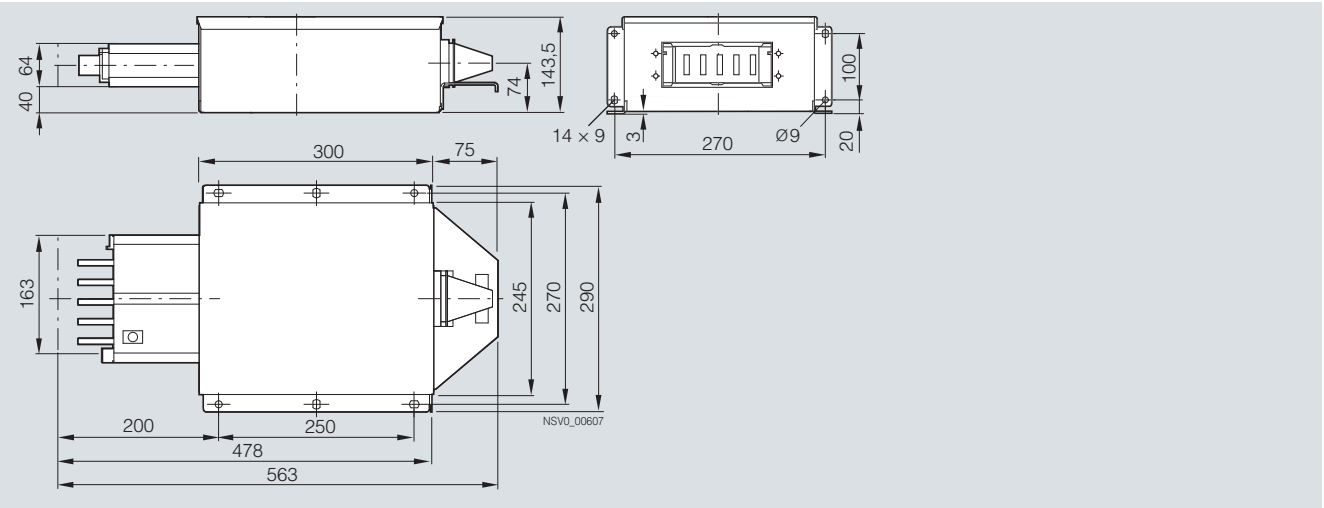
Enclosure cut-out



Type	a	b	c	c1	c2
BD2.-250-VE BD2.-400-VE	34	68	121	64	84
BD2.-1000-VE BD2.-1250-VE	92	126	155,5	122	142

End feeder units

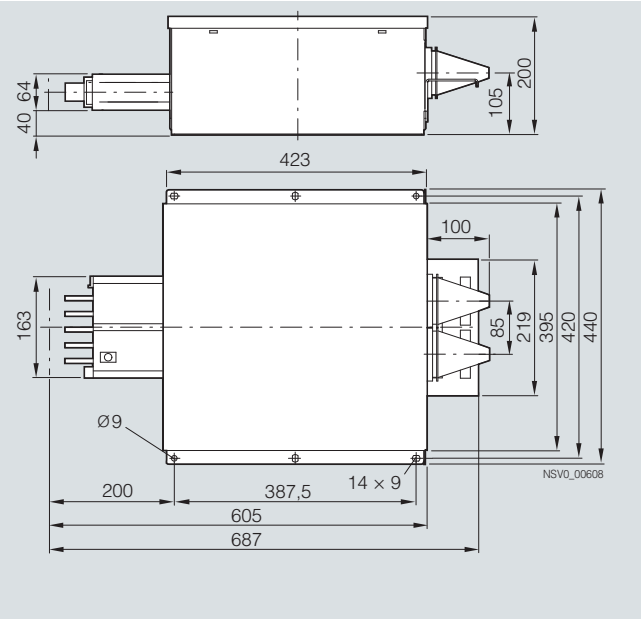
BD2.-250-EE



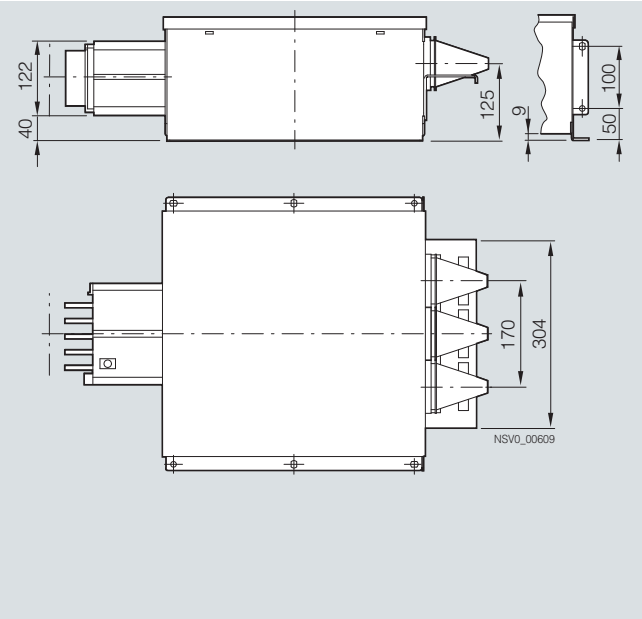
5

End feeder units

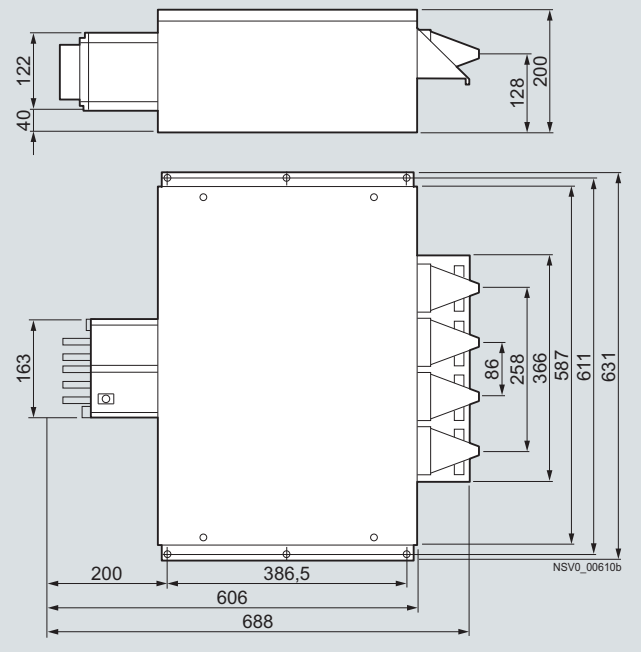
BD2.-400-EE



BD2.-1000-EE



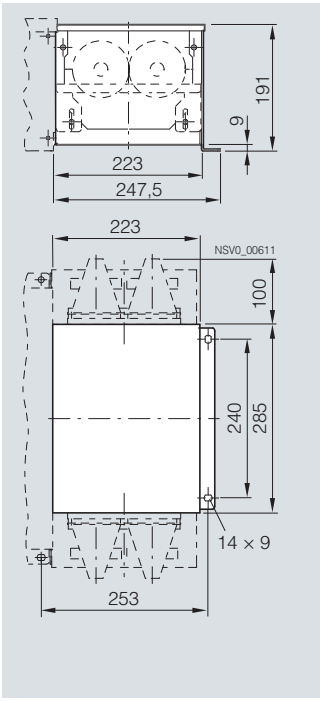
BD2.-1250-EE



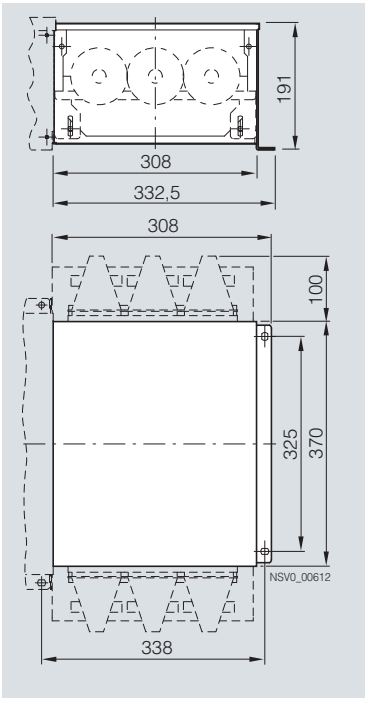
Project planning aids

Cabling boxes

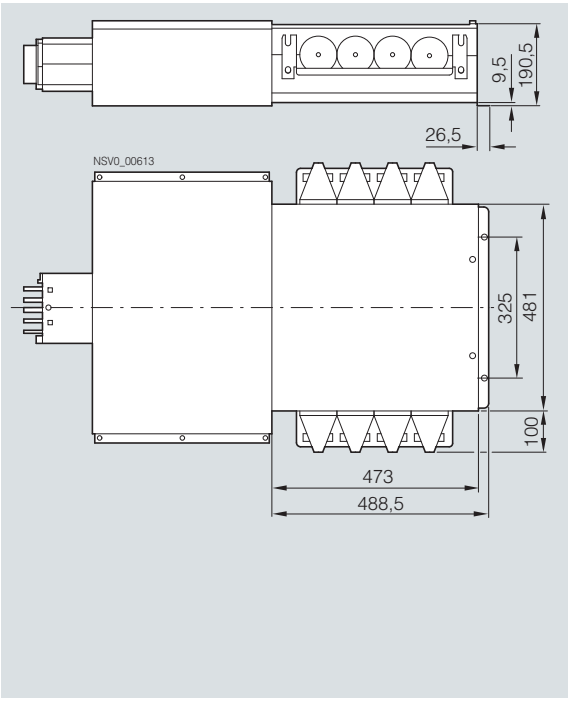
BD2-400-KR (BD2.-400-EE)



BD2-1000-KR (BD2.-1000-EE)

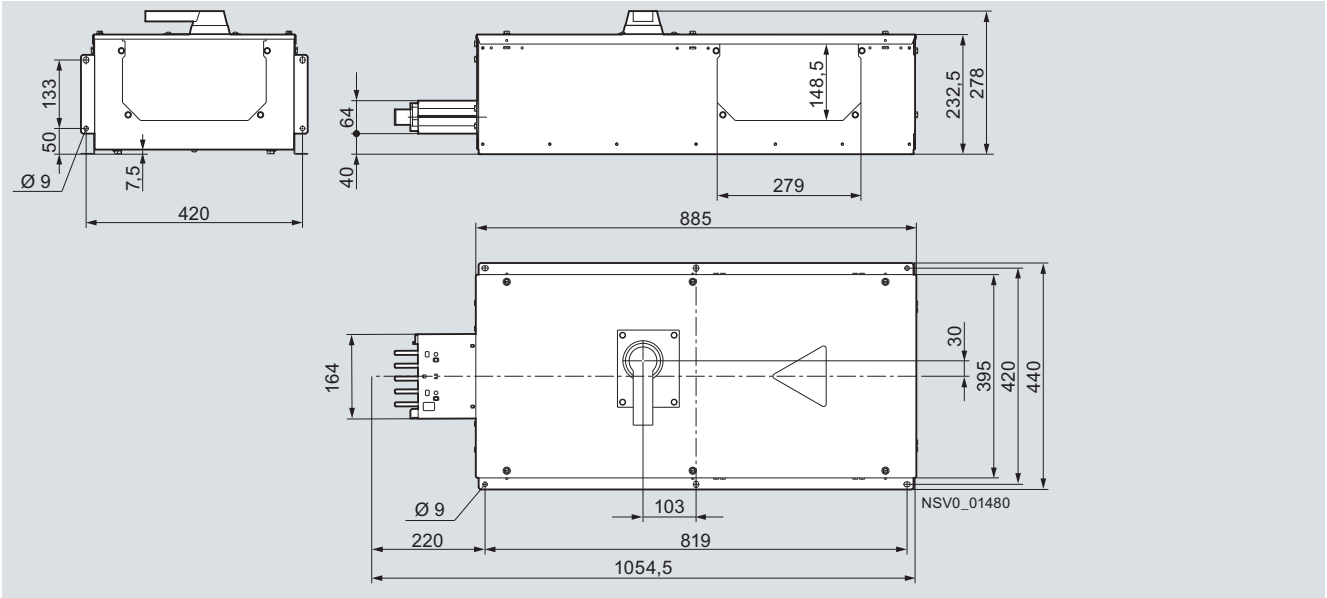


BD2-1250-KR (BD2.-1250-EE)



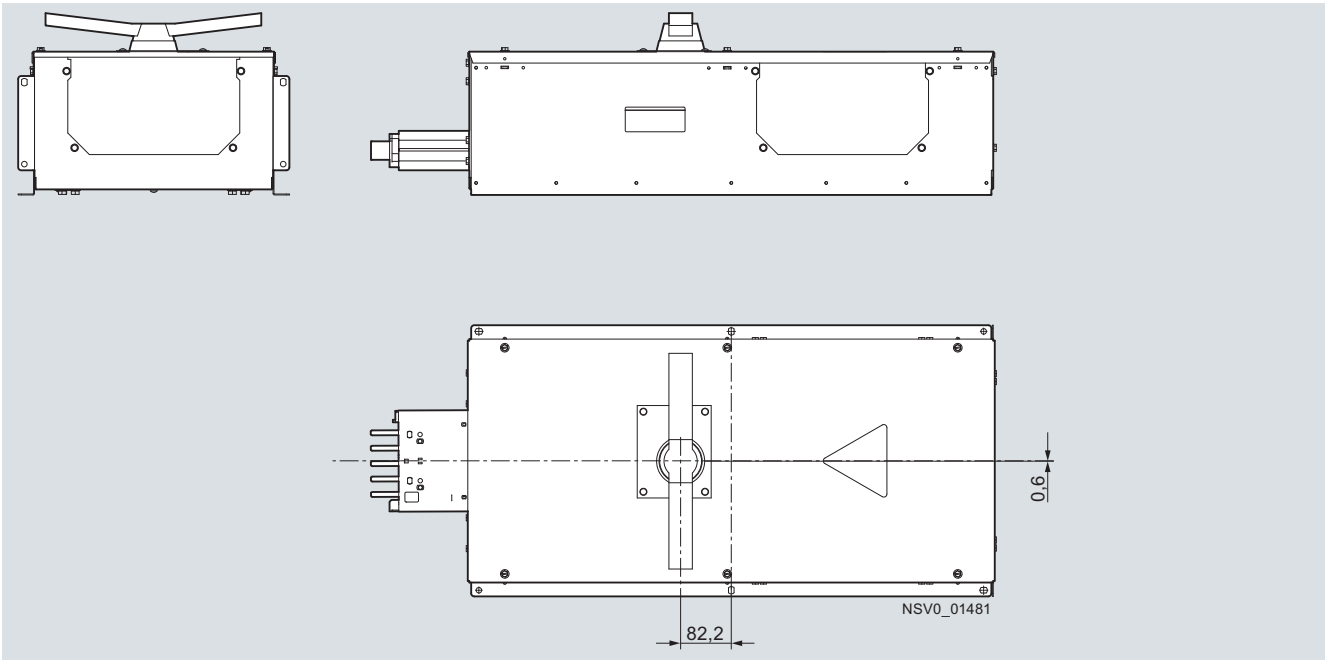
End feeder unit with switch disconnector

BD2C-250-EESC, BD2C-315-EESC

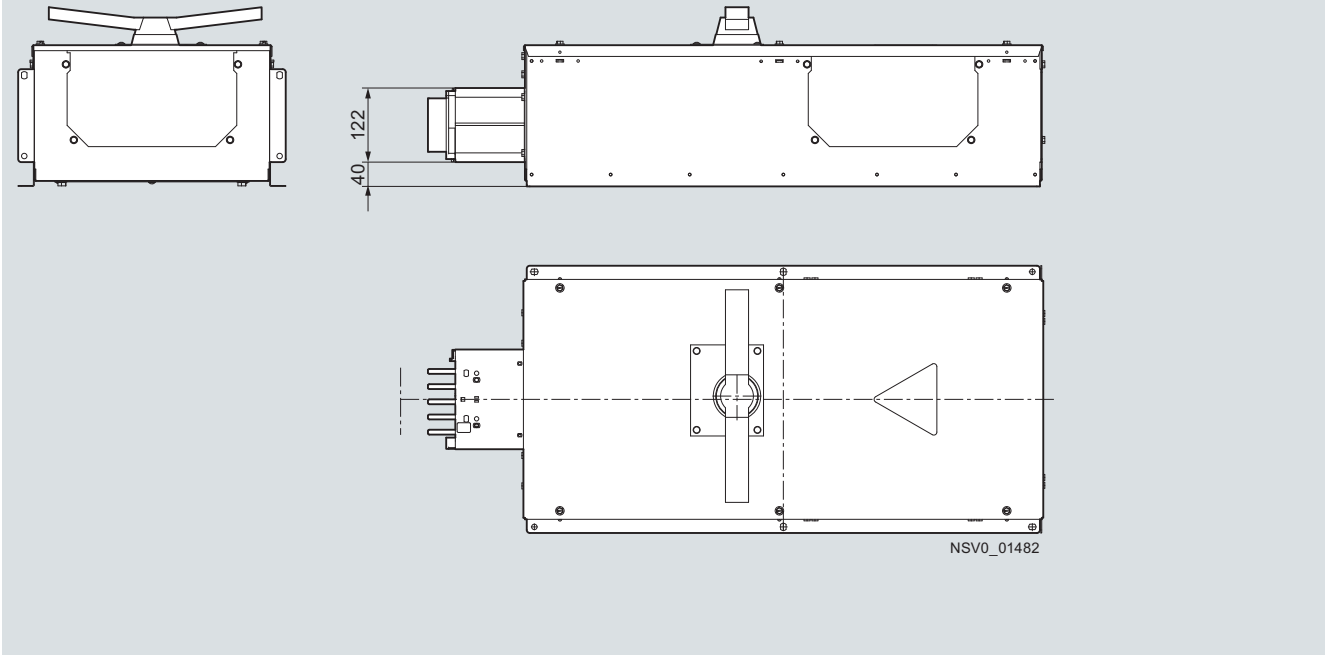


End feeder units with switch disconnector

BD2C-400-EESC



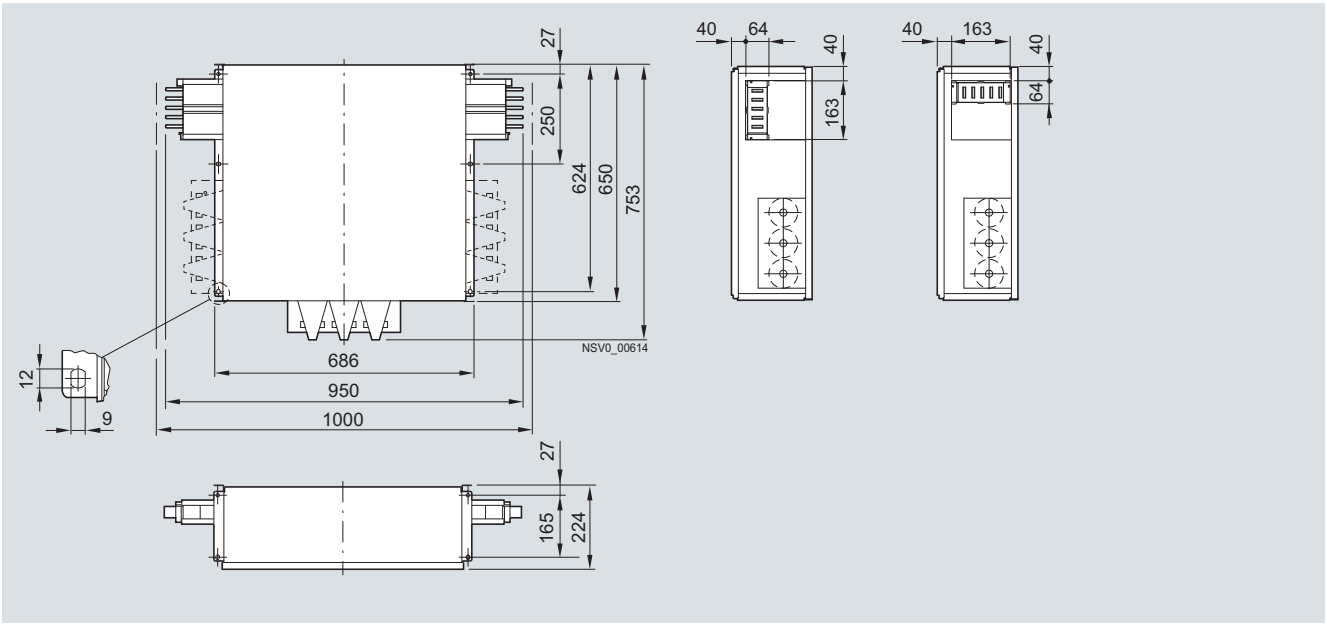
BD2C-630-EESC, BD2C-800-EESC



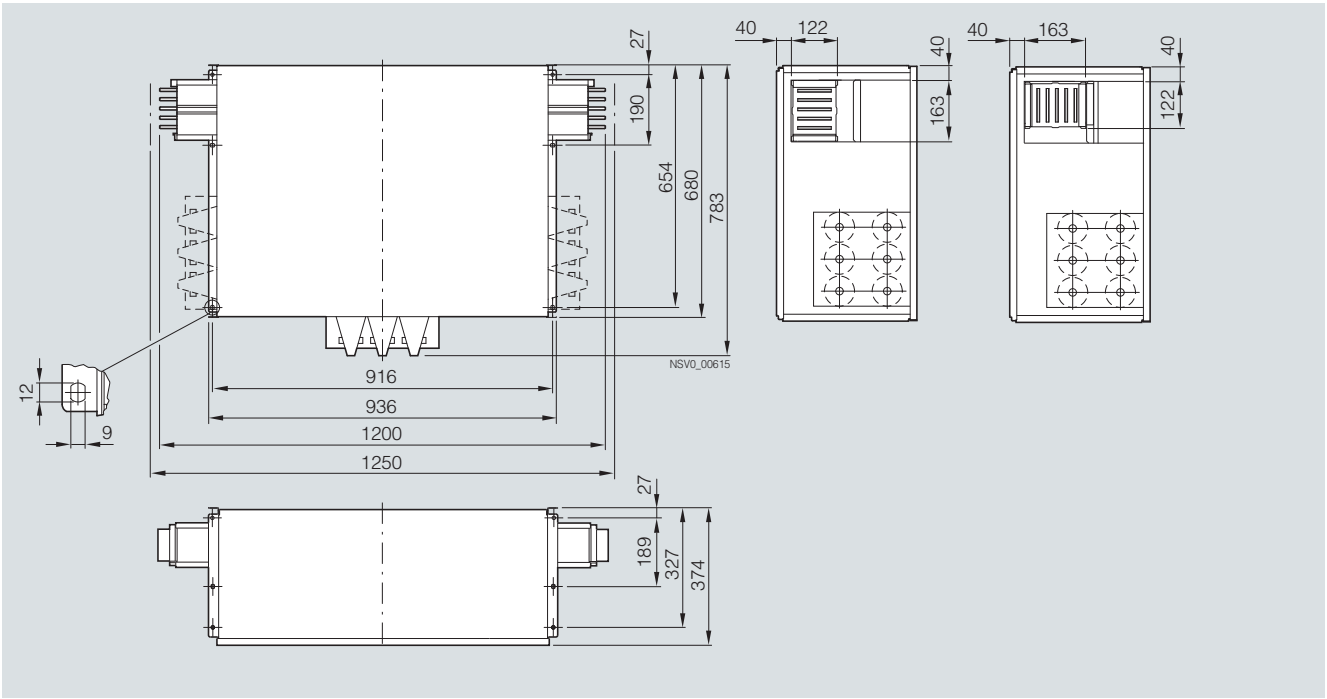
Project planning aids

Center feeder units

BD2.-400-ME



BD2.-1000-ME

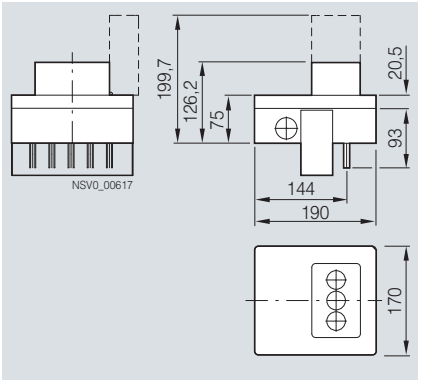


5

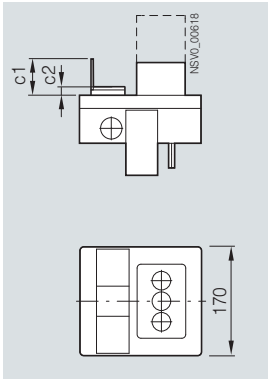
Tap-off units

Size 1 up to 25 A

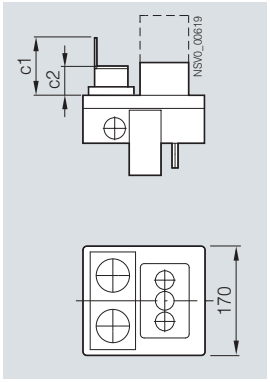
BD2-AK1/...



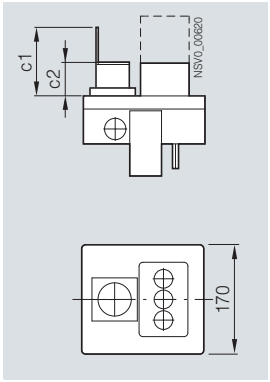
BD2-AK1/2SD163...,
BD2-AK1/3SD163...,
BD2-AK1/3DK...,
BD2-AK1/2T23...,
BD2-AK1/3T23...,
BD2-AK1/T25...



BD2-AK1/2CEE163...



BD2-AK1/CEE163...,
BD2-AK1/CEE165...

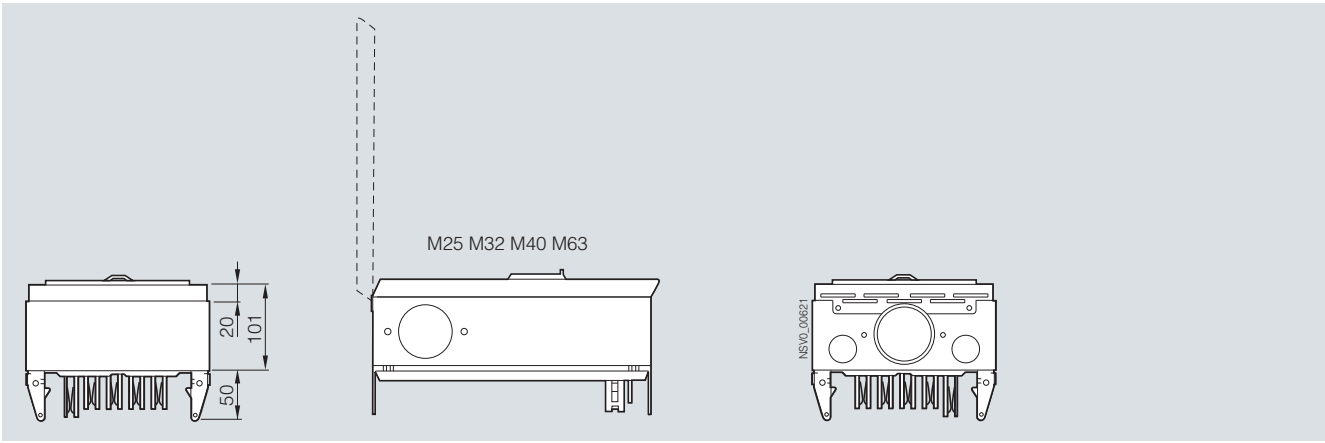


Type	c1	c2
BD2-AK1/2SD163..., BD2-AK1/3SD163..., BD2-AK1/3DK..., BD2-AK1/2T23..., BD2-AK1/3T23..., BD2-AK1/T25...	71	13
BD2-AK1/2CEE163..., BD2-AK1/CEE163...	88	44
BD2-AK1/CEE165...	106	52

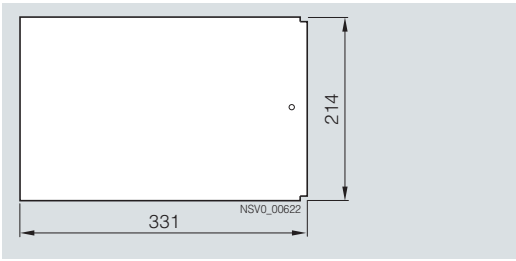
Project planning aids

Tap-off units

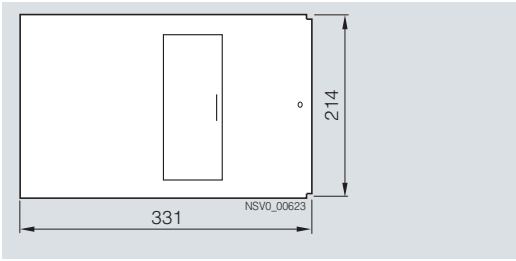
Size 02 up to 63 A



BD2-AK02X/F...
BD2-AK02X/GB...
BD2-AK02X/S...

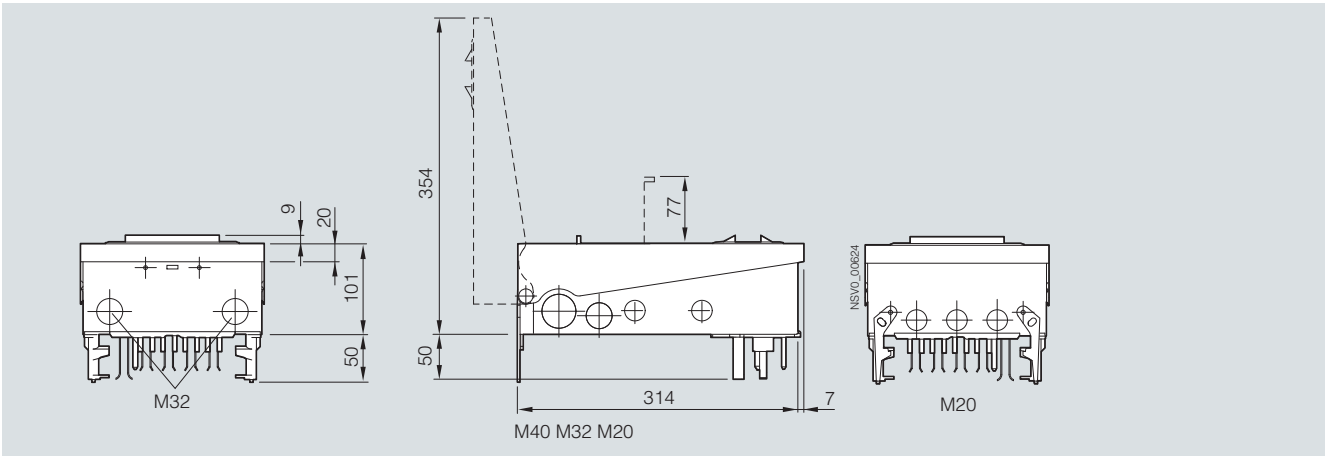


BD2-AK02M2/A...
BD2-AK02M2/F

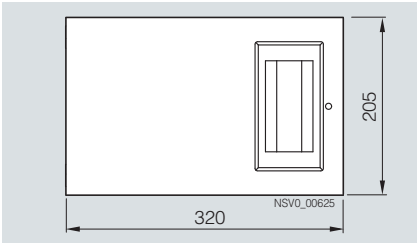


Tap-off units

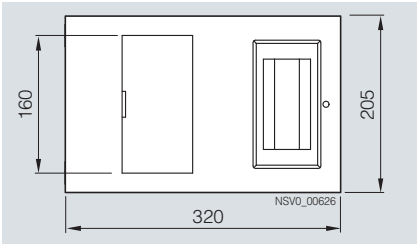
Size 2 up to 63 A



BD2-AK2X/F...,
BD2-AK2X/GB...,
BD2-AK2X/S...



BD2-AK2M2/A...,
BD2-AK2M2/F

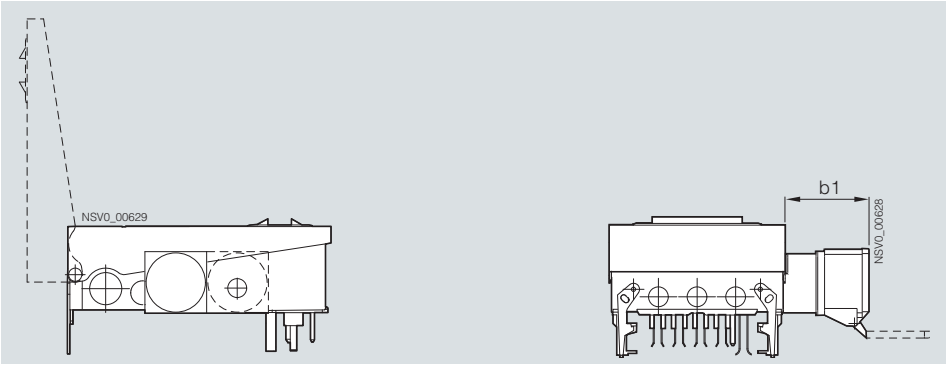


Project planning aids

Tap-off units

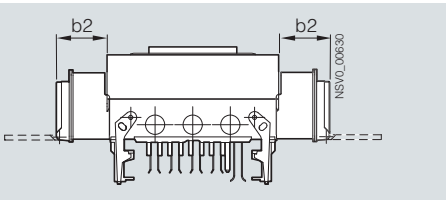
Size 2 up to 63 A, versions with CEE, BS- CH- and Schuko socket outlets

BD2-AK2M2/ CEE165FIA163
BD2-AK2X/CEE325S33
BD2-AK2M2/CEE325A323
BD2-AK2X/2CEE165S14
BD2-AK2M2/2CEE165A163
BD2-AK2X/2CEE165S27
BD2-AK2M2/T25...
BD2-AK2M2/T23(T25)...CEE165...
BD2-AK2M2/T23(T25)...CEE325...

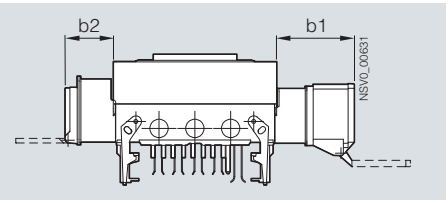


Type	b1	b2
BD2-AK2X/CEE325S33 BD2-AK2M2/CEE325A323 BD2-AK2M2/T23(T25)...CEE325	98	--
BD2-AK2X/2CEE165S27 BD2-AK2X/2CEE165S14 BD2-AK2M2/ CEE165FIA163 BD2-AK2M2/2CEE165A163 BD2-AK2M2/T23(T25)...CEE165	86	--
BD2-AK2M2/T25...	54	--
BD2-AK2X/3BS133...	--	54
BD2-AK2M2/2SD163CEE165A163	86	54

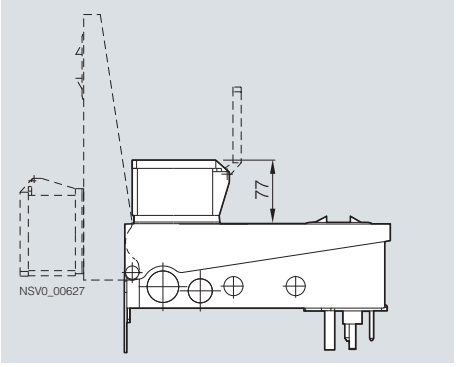
BD2-AK2X/3BS133...



BD2-AK2M2/2SD163CEE165A163



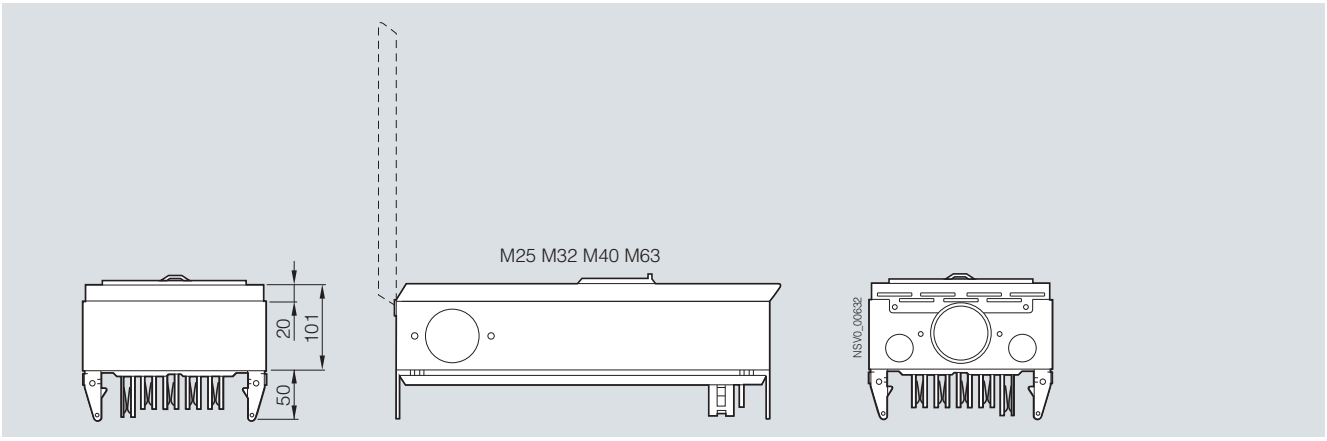
BD2-AK2X/ CEE635S33



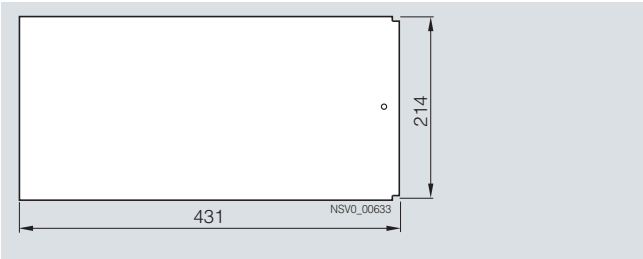
5

Tap-off units

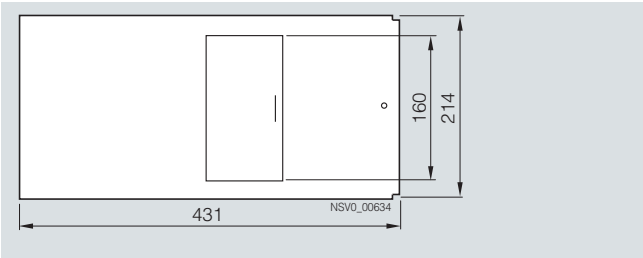
Size 03 up to 125 A



BD2-AK03X/F...
BD2-AK03X/GB...
BD2-AK03X/TPNR...
BD2-AK03X/SPNR...

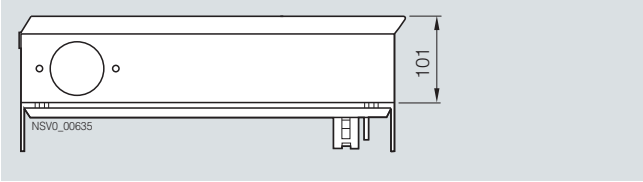


BD2-AK03M2/A...

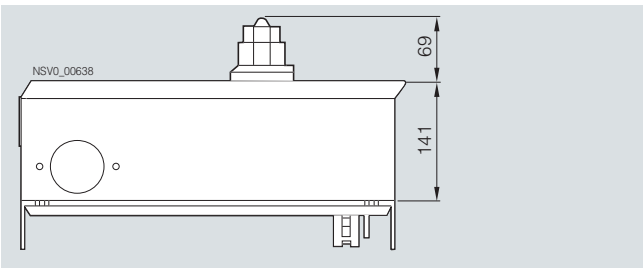


With fuse switch-disconnector and circuit breaker

BD2-AK03X/GSTA00



BD2-AK03X/FS...

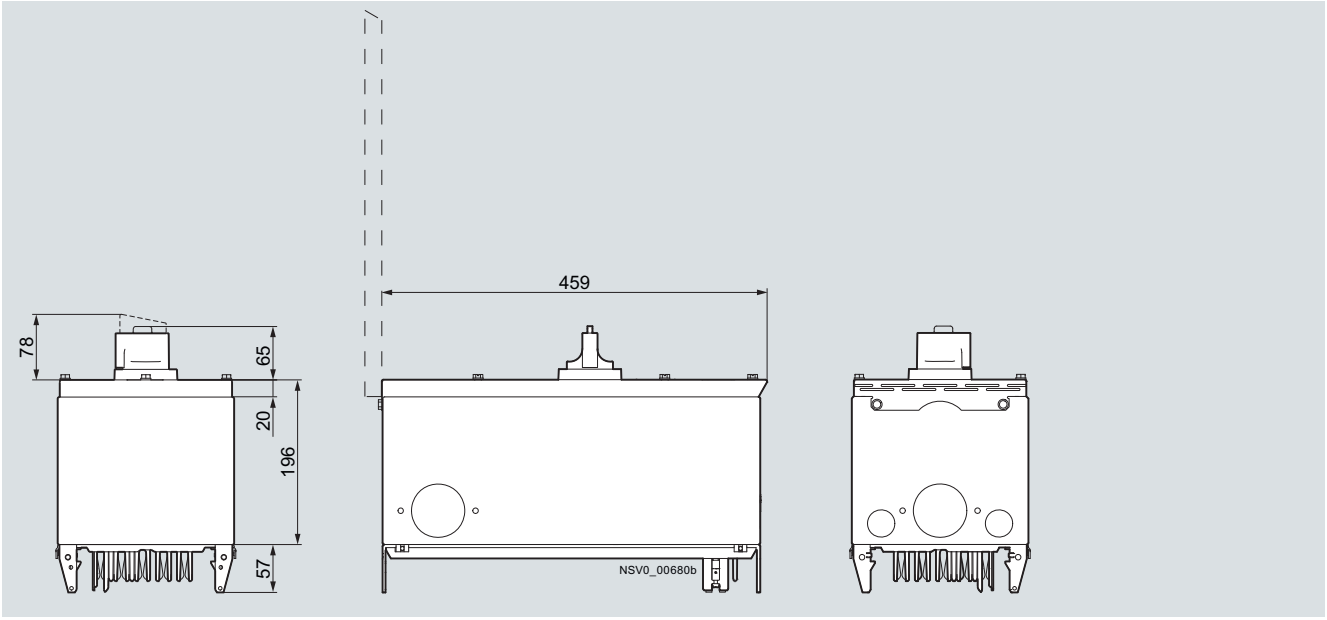


Project planning aids

Tap-off units

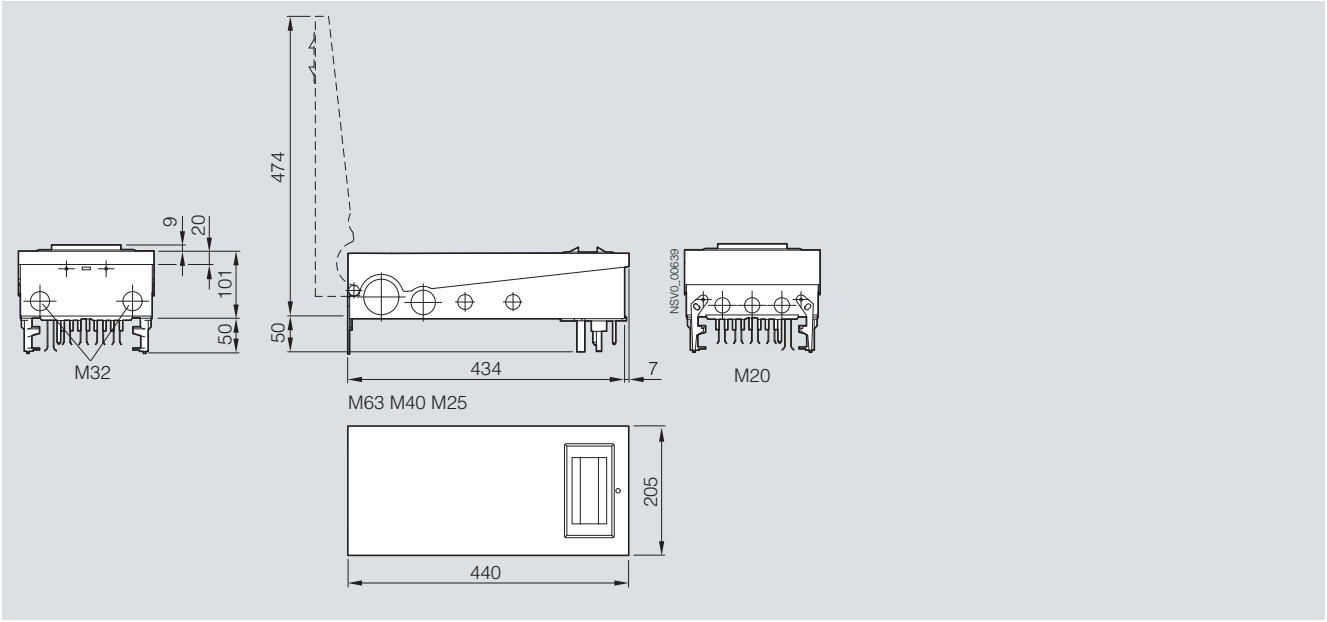
Size 03 up to 125 A

BD2-AK03X/LSD...



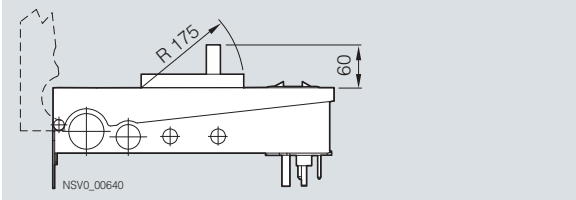
Size 3 up to 125 A

BD2-AK3X/GS00
BD2-AK3X/GB...



With fuse switch-disconnector

BD2-AK3X/GSTZ00

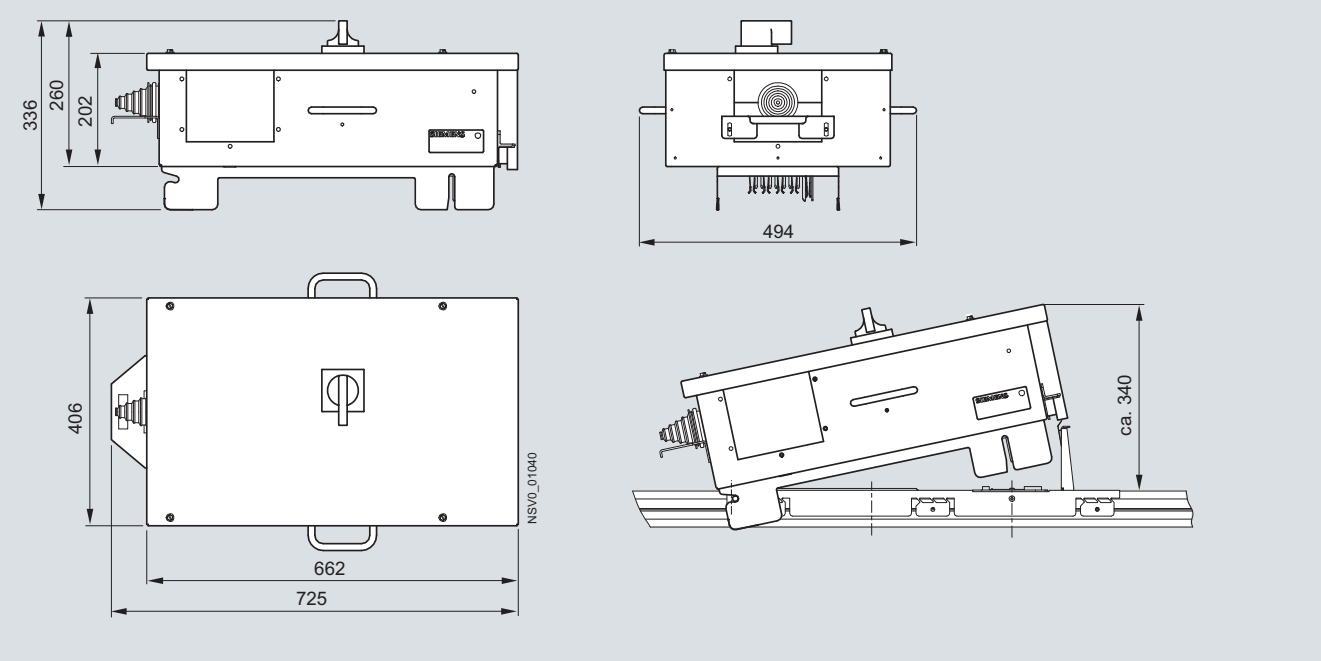


5

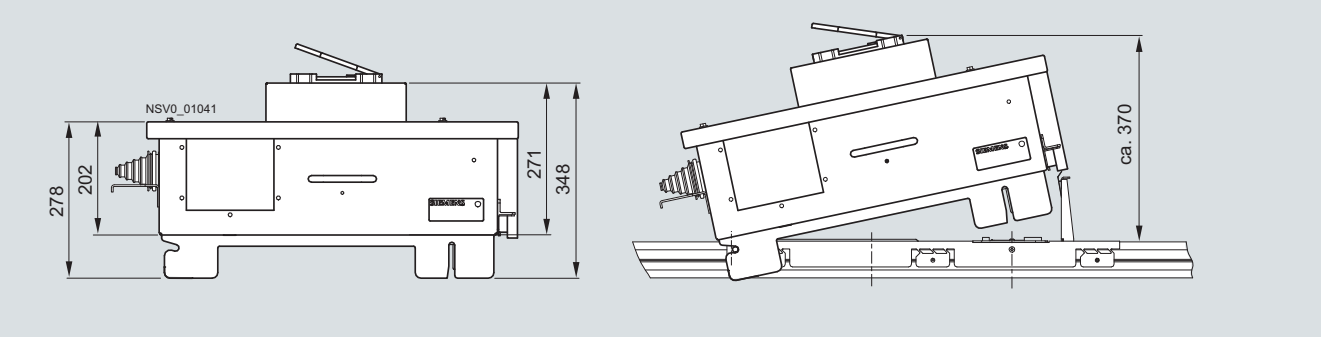
Tap-off units

Size 04 up to 250 A

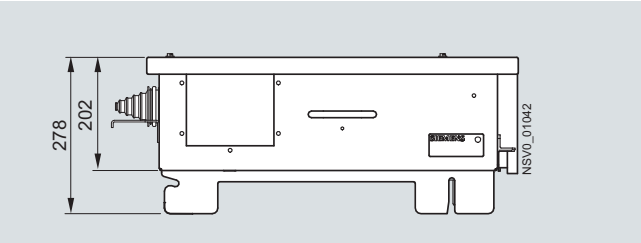
BD2-AK04/LSD...



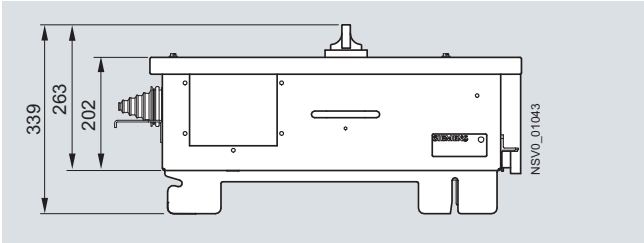
BD2-AK04/LSM...



BD2-AK04/SNH1, BD2-AK04/GB250J-...



BD2-AK04/FS...



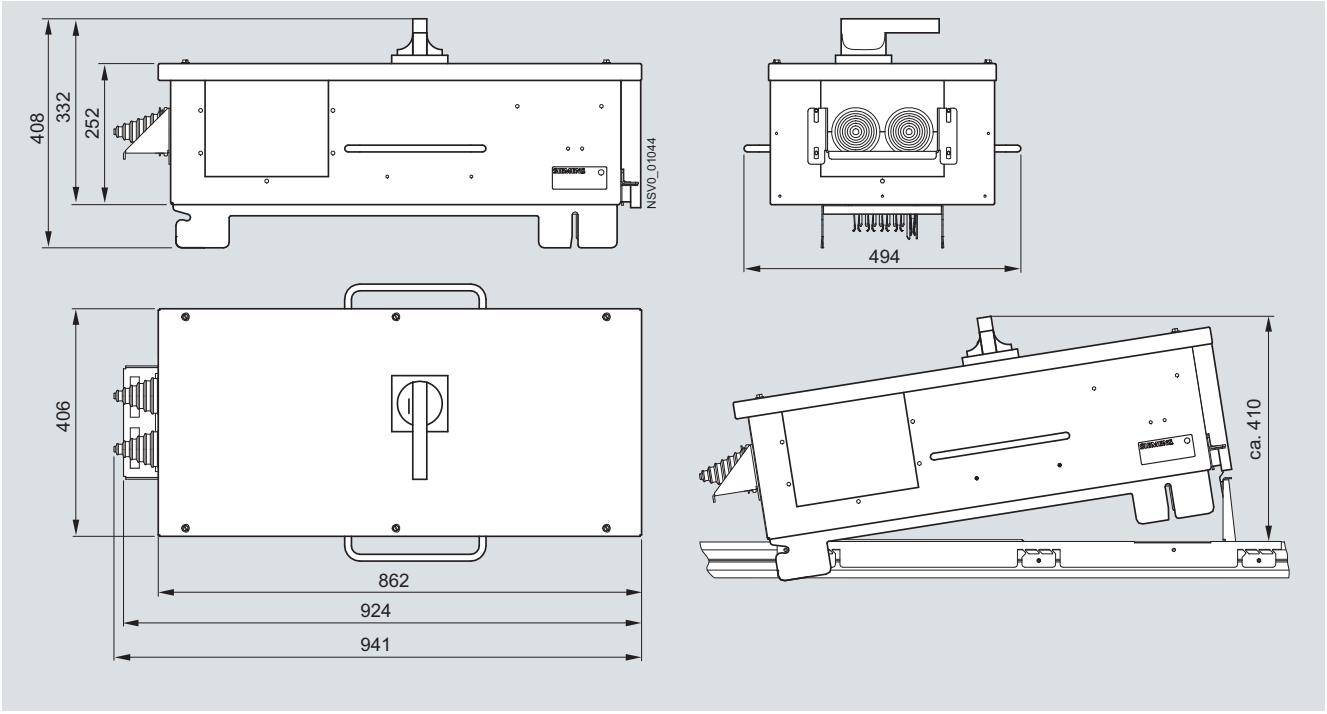
5

Project planning aids

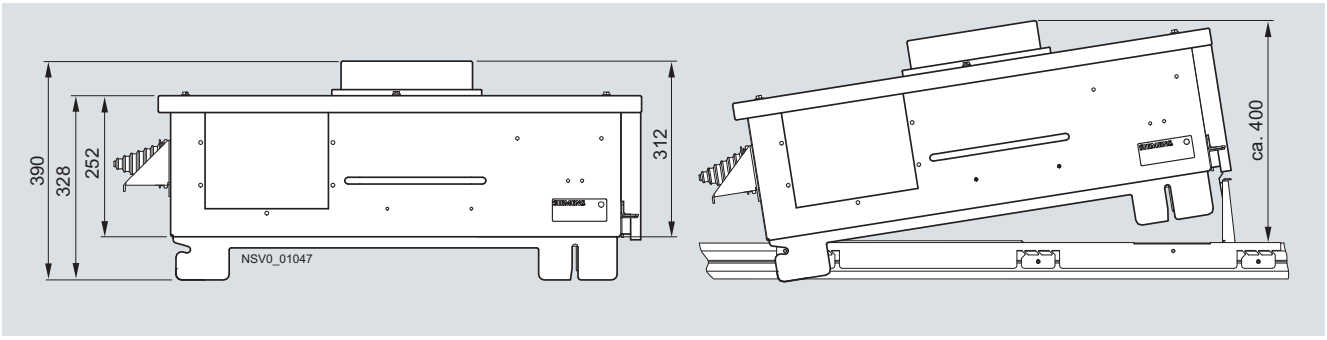
Tap-off units

Size 05, 06 up to 630 A

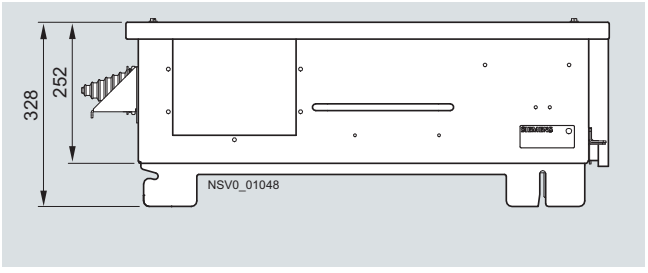
BD2-AK05/LSD..., BD2-AK06/LSD...



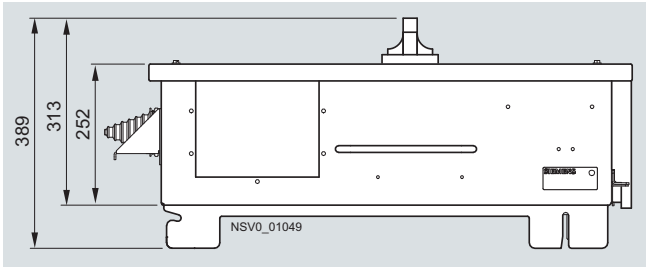
BD2-AK05/LSM..., BD2-AK06/LSM...



BD2-AK05/SNH2, BD2-AK06/SNH3, BD2-AK5/GB...R1003

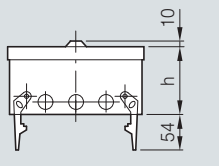


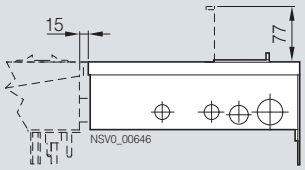
BD2-AK05/FS...



5

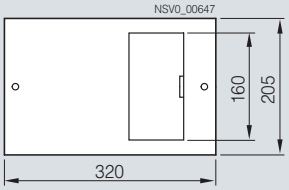
Ancillary equipment units



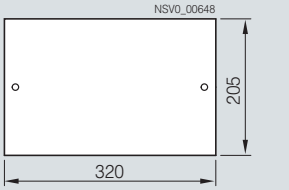


Type	h
BD2-GKM2/F	101
BD2-GKX/F	151

BD2-GKM2/F



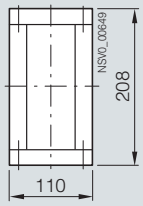
BD2-GKX/F



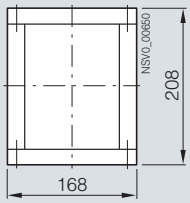
Project planning aids

Protective sleeves

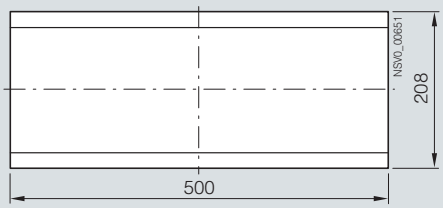
BD2-400-D



BD2-1250-D

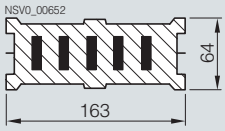


BD2-...-D

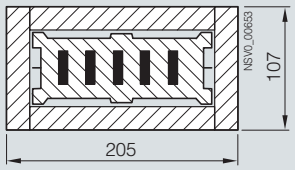


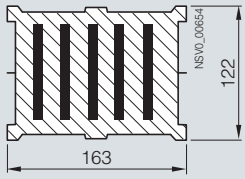
Fire barriers

+BD2-S90 (S120)-...

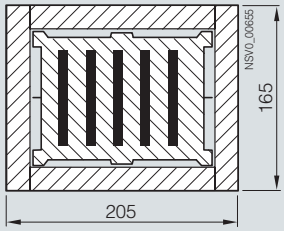


BD2.-160 (-250, -400) -...



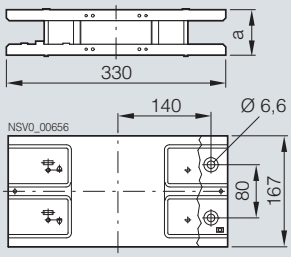


BD2.-630 (-800, -1000, -1250) -...



Joint blocks

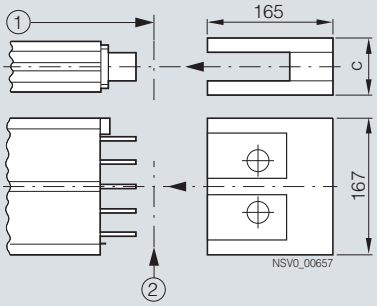
BD2-400-SK, BD2-1250-EK



Type	a mm
BD2-400-SK	68
BD2-1250-EK	126

End flanges

BD2-400-FE, BD2-1250-FE



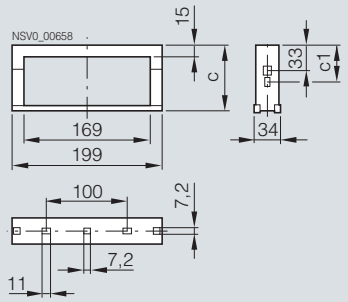
Type	c mm
BD2-400-FE	68
BD2-1250-FE	126

① Length of trunking unit
② End of end flange = center of joint block

Fixing

Fixing brackets, flat and edgewise

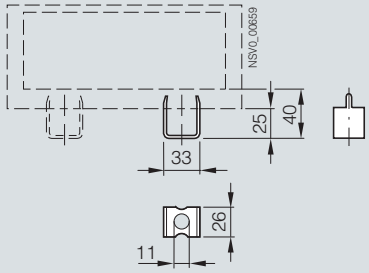
BD2-400-BB, BD2-1250-BB



Type	c mm	c1 mm
BD2-400-BB	86,5	48
BD2-1250-BB	144,5	77

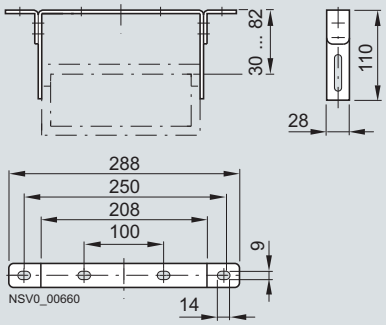
Spacer

BD2-DSB



Spacer bracket

BD2-BD

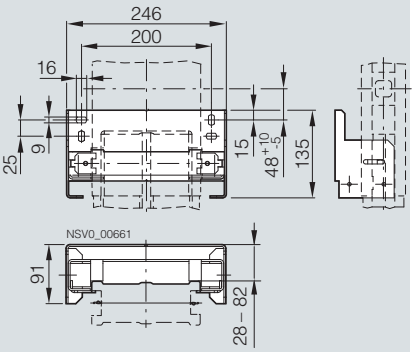


To secure systems directly to concrete walls, always use steel expansion bolts approved by the local building inspectorate.

For example:
- RICO, Order No. 15J1-A08/40
- Fischerwerke, type SLM8N, article no. 50521

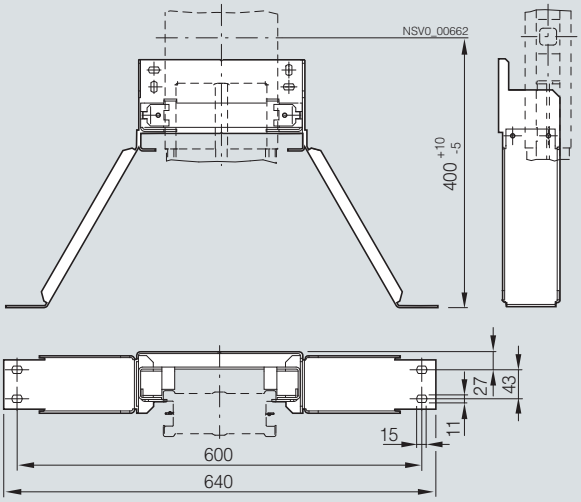
Vertical retaining element

BD2-BWV



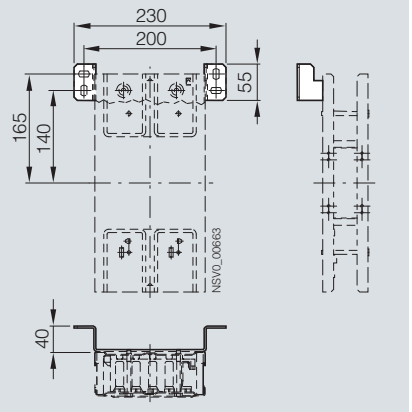
Vertical retaining element

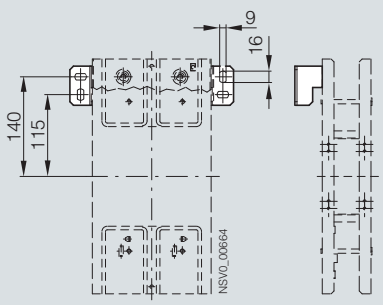
BD2-BDV



Vertical fixing bracket

BD2-BVF





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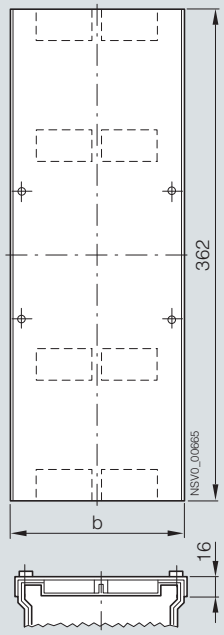
Project planning aids

Protective covers according to IP54

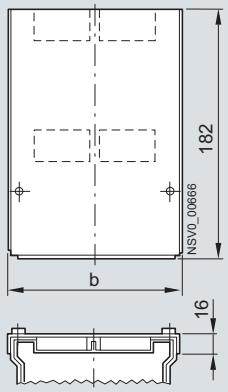
Edgewise mounting position

BD2-400-HF, BD2-1250-HF



Type	b mm
BD2-400-HF	72
BD2-1250-HF	130

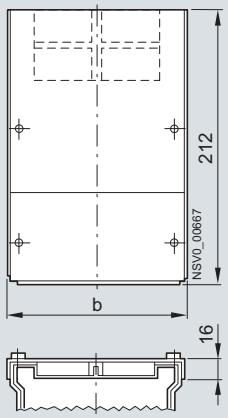
BD2-400-HFE, BD2-1250-HFE



Type	b mm
BD2-400-HFE	72
BD2-1250-HFE	130

Vertical mounting position

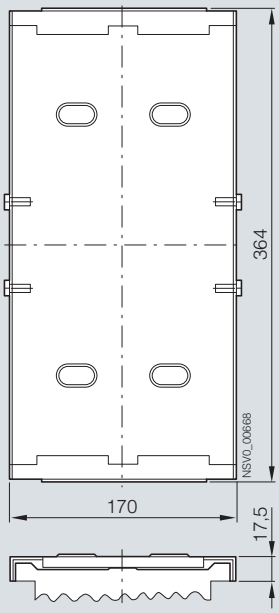
BD2-400-VF, BD2-1250-VF



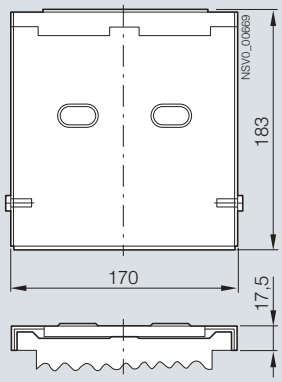
Type	b mm
BD2-400-VF	72
BD2-1250-VF	130

Flat mounting position

BD2-FF

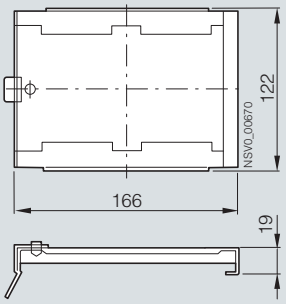


BD2-FFE



Flat and vertical mounting position

BD2-FAS

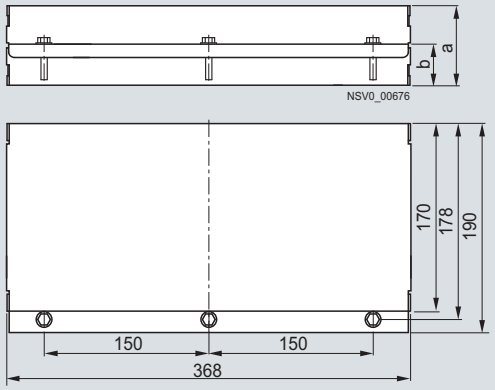


5

Protective covers according to IP55

For connection point or end flange

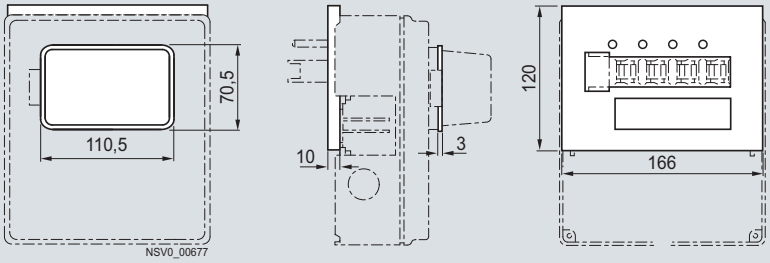
BD2-400-FS, BD2-1250-FS, BD2-400-FSE, BD2-1250-FSE



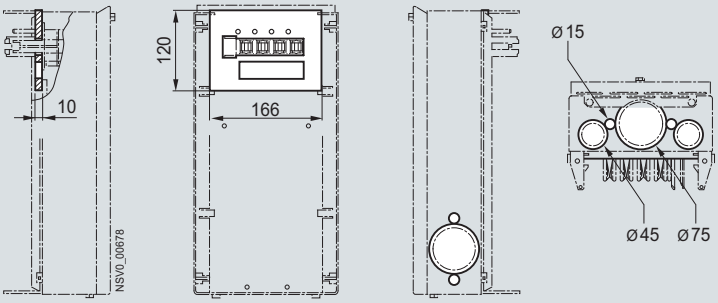
Type	a	b
BD2-400-FS	72	37
BD2-1250-FS	130	66
BD2-400-FSE	72	37
BD2-1250-FSE	130	66

For tap-off units

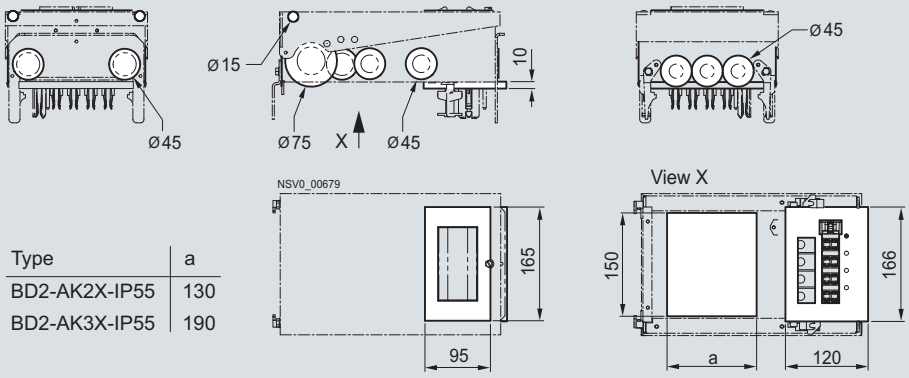
BD2-AK1-IP55



BD2-AK02-IP55, BD2-AK03-IP55



BD2-AK2X-IP55, BD2-AK3X-IP55



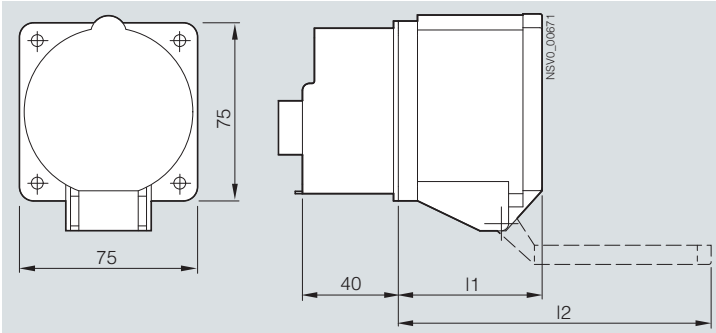
Type	a
BD2-AK2X-IP55	130
BD2-AK3X-IP55	190

Project planning aids

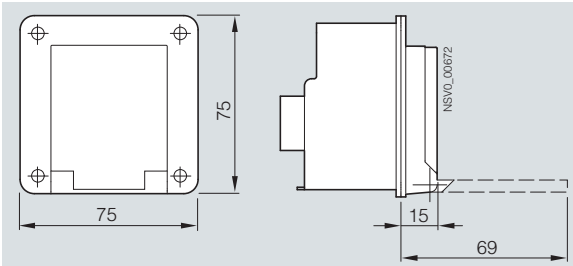
Socket outlets including accessories

Socket outlets with adapter enclosure

BD2-CEE

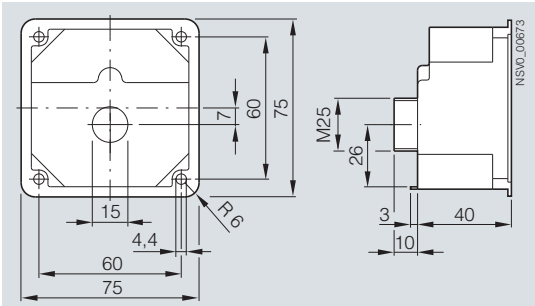


BD2-SD163



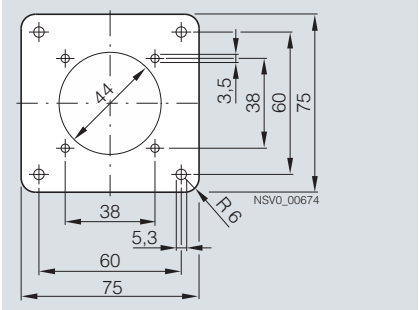
Adapter enclosure

BD2-AG

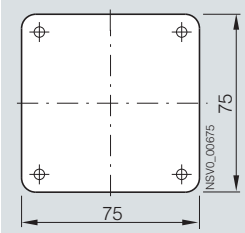


Adapter plate

BD2-APM



BD2-APO



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Siemens Industrial Automation & Drive Technologies
Sir William Siemens House
Princess Road
Manchester
M20 2UR

Tel 0161 446 6400
Fax 0161 446 5789

www.siemens.co.uk/busbars