



Vertiv™
PowerBar HPB
Tap off Units



Contents

- 5. Product Overview
- 6. General Information and Part Code Structure
- 7. Vertiv PowerBar HPB Typical Layout
- 8-23. Vertiv PowerBar HPB Range - V-Type
- 24. Metering and Spreader Options
- 25. Hinge Options
- 26. Vertiv PowerBar HPB Tap-off and Busbar Trunkings
- 27. ABB MCCB Reference
- 28. Schnieder MCCB Reference
- 29. Switchfuse MCCB Reference
- 30. BIM Library
- 31. Quick Reference Guide

Vertiv's High Powerbar (HPB) is a 1000V totally encased, non-ventillated and low impedance busbar. Vertiv™ HPB sandwich construction range has been engineered for applications that require moving large amounts of power. Most commonly Vertiv HPB is used to distribute power from transformers to low voltage switchboards and then down to further power distribution boards.

Features:

- Vertiv™ PowerBar HPB is available with a choice of 99.97% conductivity copper or 55% conductivity aluminium conductors to suit the project specifications
- Vertiv PowerBar HPB is available 800A to 6300A with multiple bar configurations
- Each 3m powerbar can host up to 5 fixed tap off points
- All tap off points have an 'earth first, break last' safety feature
- Vertiv PowerBar HPB joint pack construction consist of a double headed shear nut for quick installation
- Vertiv PowerBar HPB have pressed outertags for tap off connections

Standards

The Vertiv PowerBar HPB range is fully ASTA Tested Certified. It is manufactured in a certified management system environment where Quality ISO 9001, Safety ISO 45001 and Environmental ISO 14001 standards are applied to all aspects of the manufacturing and installation processes.

It is manufactured in accordance with IEC61439-1 and IEC61439-6.

ASTA Certificates

Vertiv completed extensive testing at ASTA and KEMA accredited laboratories to ensure the product we supply meets the international requirements.

Type Tests

- 10.2** Strength of materials and parts
- 10.3** Degree of Protection of Enclosures
- 10.4** Clearances and Creepage Distances
- 10.5** Protection against electric shock and integrity of protective circuits
- 10.9** Dielectric properties
- 10.10** Temperature Rise Limits
- 10.11** Short Circuit Withstand Strength

All certificates available on request



ISO 45001
OHS 756381



ISO 9001:2015
FM 12680



ISO 14001:2015
No: EMS 566536



Product Overview

Vertiv offers a range of tap off units to fit our Vertiv™ High Powerbar (HPB) ranges for multiple applications. Vertiv can also manufacture tap off units to suit any power distribution, metering or control requirements.

Vertiv High Powerbar offers a 50% or 100% fully isolated earth for systems where earth isolation is required.

Safety

Vertiv PowerBar HPB tap off units are designed with the safety of the installer and user as the key criteria. The tap off unit has an extended earth contact bracket which ensures the earth ground is always the first point to connect with the busbar system during installation.

The tap off units have an interlock which prevents the tap off door from being opened while the tap off unit is in the ON position. The tap off unit is secured to the busbar housing using high tensile strength, lockable hardware, with an extended shutter actuator and mechanical clamping mechanism. This ensures the units are properly sealed during the installation and cannot be fitted incorrectly.

Cable Entry

The standard tap off unit usually has bottom and side removable gland plates for cable access, but other variations are available as necessary, including cable spreader boxes. For any special requirements please contact the Vertiv engineering department.

Tap Off Units

Vertiv can also manufacture tap off units based on your specific needs and requirements. These features include:

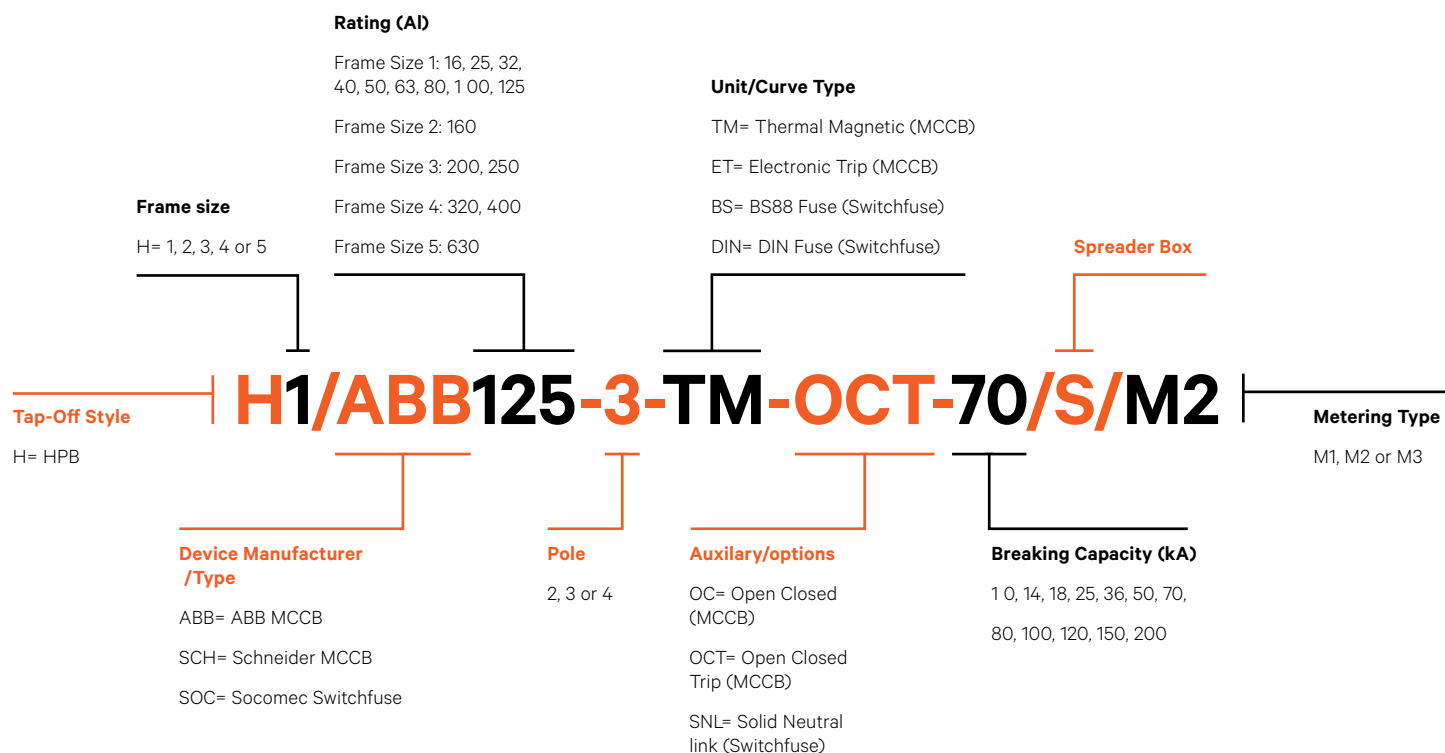
- Metering options for landlord electrical tariff purposes
- BMS monitoring of breaker status
- BMS monitoring of metering systems
- Automatic remote open/close features
- Load shedding features
- Integral sockets
- Integral distribution boards

	V-Type Tap Off Sizesw	Max Cable Size (mm ²) Base Entry	Max Cable Size (mm ²) Side Entry	Max Cable Size (mm ²) Side Entry with Spreader Box
MCCB and Switchfuses	Frame size 1: 125A	150	50	95
	Frame size 2: 160A	185	70	185
	Frame size 3: 250A	240	120	240
	Frame size 4: 400A	300	150	240
MCCB	Frame size 5: 630A	2x240	2x185	2x240

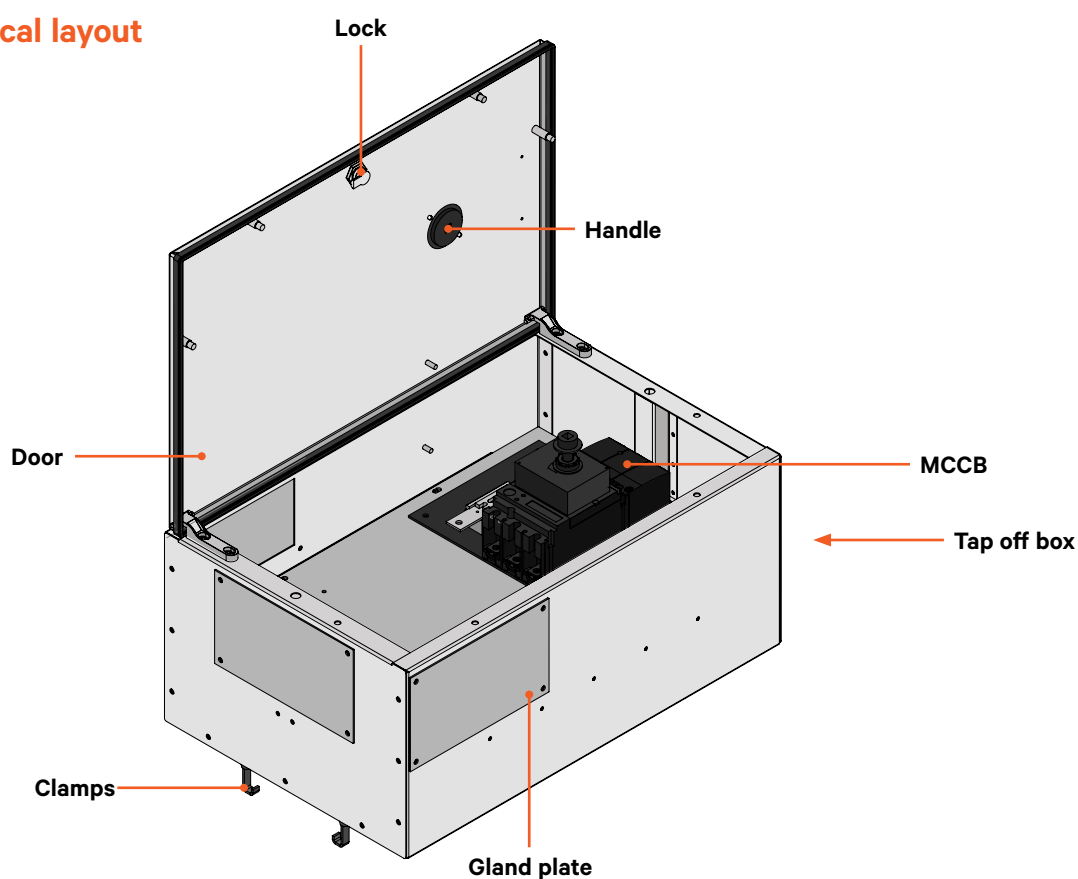
Part code structure

Part Code Example:

Vertiv™ HPB Frame size 1 / ABB 125A - 3 Pole - Thermal Magnetic - Open Closed Trip - 70kA / Spreader box / Metering Type 2



Vertiv™ HPB typical layout

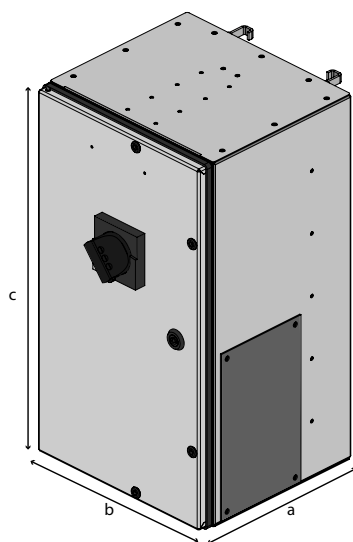


Vertiv™ HPB range V type

HPB-TOB-125A

- In steel enclosure
- Outgoing device - MCCB

H1/ABB 16-3-TM-OCT-50/S



Tap-off with MCCB 125A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
125	690	1	17.5	276	290	485

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
1	ABB	16	3	TM	OCT	50	S	H1/ABB'16-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		25						H1/ABB'25-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		32						H1/ABB'32-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		40						H1/ABB'40-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		50						H1/ABB'50-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		63						H1/ABB'63-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		80						H1/ABB'80-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		100						H1/ABB'100-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		125						H1/ABB'125-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 150mm²

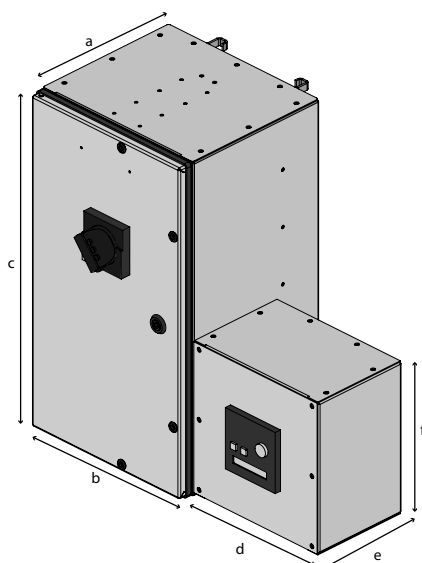
Max Cable size side entry: 95mm²

*Cable spreader box is required when using cable sizes over 50mm

HPB-TOB-M-125A

- In steel enclosure
- Outgoing device - MCCB

H1/ABB 16-3-TM-OCT-50/S/M1



Tap-off with MCCB 125A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
125	690	1	21.5	276	290	485	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
1	ABB	16	3	TM	OCT	50	S	M1	H1/ABB'16-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		25							H1/ABB'25-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		32							H1/ABB'32-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		40							H1/ABB'40-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		50							H1/ABB'50-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		63							H1/ABB'63-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		80							H1/ABB'80-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		100							H1/ABB'100-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷
		125							H1/ABB'125-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S /M1 ⁷

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

⁷Meter type to be specified by client

Max Cable size bottom entry: 150mm²

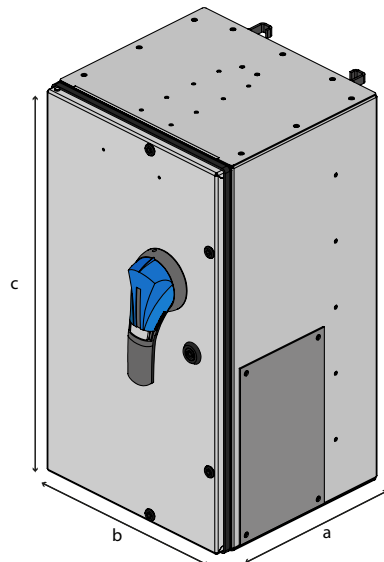
Max Cable size side entry: 95mm²*

*Cable spreader box is required when using cable sizes over 50mm

HPB-TOB-SOC-125A

- In steel enclosure
- Outgoing device - Switchfuse

H1/SOC32-3-BS-SNL-80/S



Tap-off with switchfuse 125A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
125	500	1	18	276	290	485

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
1	Socomec	32	3	BS	SNL	80	S	H1/SOC ¹ 32-3 ² -BS ³ -SNL ⁴ 80 ⁵ /S ⁶
		63						H1/SOC ¹ 63-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶
		100						H1/SOC ¹ 100-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶

¹Device manufacturer Socomec

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify BS or DIN

⁴Options. Specify SNL if required

⁵Breaking Capacity (80kA rms)

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 150mm²

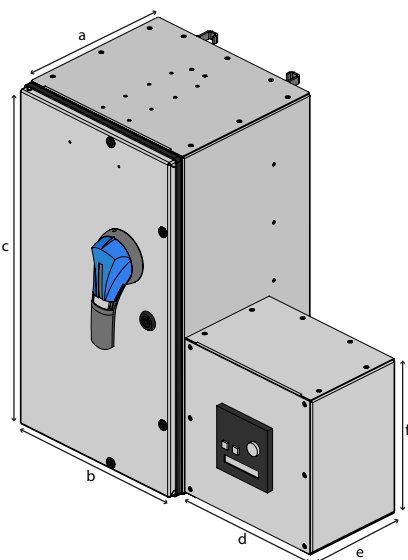
Max Cable size side entry: 95mm²*

*Cable spreader box is required when using cable sizes over 50mm²

HPB-TOB-M-SOC-125A

- In steel enclosure
- Outgoing device - Switchfuse

H1/SOC32-3-BS-SNL-80/S/M1



Tap-off with switchfuse 125A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
125	500	1	22	276	290	485	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
1	Socomec	32	3	BS	SNL	80	S	M1	H1/SOC ¹ 32-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶ /M1 ⁷
		63							H1/SOC ¹ 63-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶ /M1 ⁷
		100							H1/SOC ¹ 100-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer Socomec

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify BS or DIN

⁴Options. Specify SNL if required

⁵Breaking Capacity (80kA rms)

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 150mm²

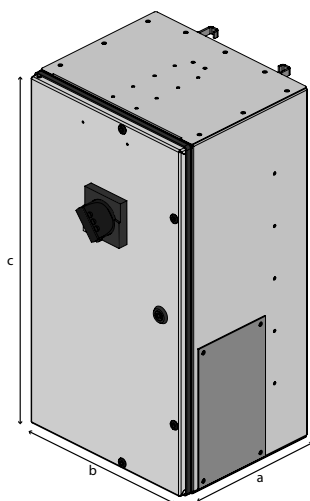
Max Cable size side entry: 95mm²*

*Cable spreader box is required when using cable sizes over 50mm²

HPB-TOB-160A

- In steel enclosure
- Outgoing device - MCCB

H2/ABB160-3-TM-OCT-50/S



Tap-off with MCCB 160A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
160	690	1	20	276	320	600

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
1	ABB	160	3	TM	OCT	50	S	H2/ABB160-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 185mm²

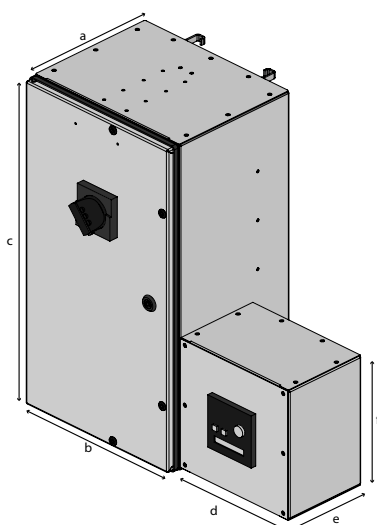
Max Cable size side entry: 185mm²*

*Cable spreader box is required when using cable sizes over 70mm²

HPB-TOB-M-160A

- In steel enclosure
- Outgoing device - MCCB

H2/ABB160-3-TM-OCT-50/S/M1



Tap-off with MCCB 160A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
160	690	1	24	276	320	600	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
2	ABB	16	3	TM	OCT	50	S	M1	H2/ABB160-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

⁷Meter type to be specified by client

Max Cable size bottom entry: 185mm²

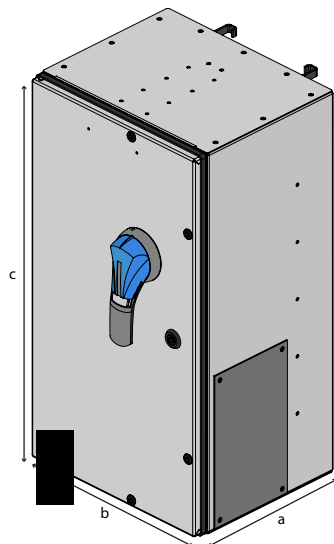
Max Cable size side entry: 185mm²*

*Cable spreader box is required when using cable sizes over 70mm²

HPB-TOB-SOC-160A

- In steel enclosure
- Outgoing device - Switchfuse

H2/SOC160-3-BS-SNL-80/S



Tap-off with switchfuse 160A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
160	500	1	20.5	276	320	600

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
2	Socomec	160	3	BS	SNL	80	S	H2/SOC160-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶

¹Device manufacturer Socomec

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify BS or DIN

⁴Options. Specify SNL if required

⁵Breaking Capacity (80kA rms)

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 185mm²

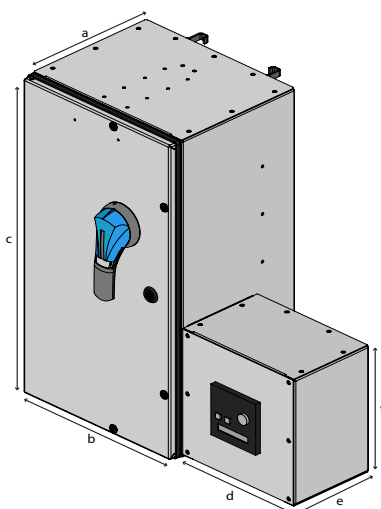
Max Cable size side entry: 185mm²*

*Cable spreader box is required when using cable sizes over 70mm²

HPB-TOB-M-SOC-160A

- In steel enclosure
- Outgoing device - Switchfuse

H2/SOC160-3-BS-SNL-80/S/M1



Tap-off with switchfuse 160A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
160	500	1	24.5	276	320	600	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
2	Socomec	160	3	BS	SNL	50	5	M1	H2/SOC160-3 ² -BS ³ -SNL ⁴ -80 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer Socomec

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify BS or DIN

⁴Options. Specify SNL if required

⁵Breaking Capacity (80kA rms)

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

⁷Meter type to be specified by client

Max Cable size bottom entry: 185mm²

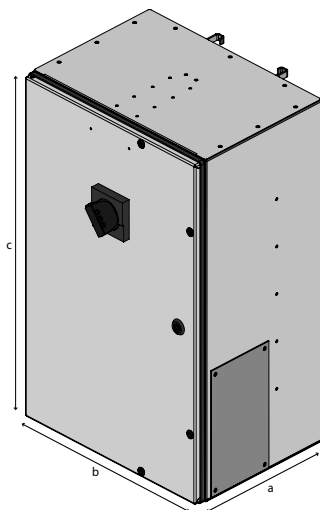
Max Cable size side entry: 185mm²

*Cable spreader box is required when using cable sizes over 70mm²

HPB-TOB-250A

- In steel enclosure
- Outgoing device - MCCB

H3/ABB200-3-TM-OCT-50/S



Tap-off with MCCB 250A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
250	690	1	25	306	420	650

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
3	ABB	200	3	TM	OCT	50	S	H3/ABB'200-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		250						H3/ABB'250-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 240mm²

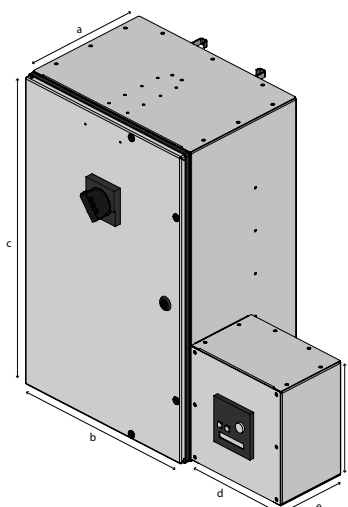
Max Cable size side entry: 240mm²*

*Cable spreader box is required when using cable sizes over 120mm²

HPB-TOB-M-250A

- In steel enclosure
- Outgoing device - MCCB

H3/ABB200-3-TM-OCT-50/S/M1



Tap-off with MCCB 250A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
250	690	1	29	306	420	650	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
2	ABB	200	3	TM	OCT	50	S	M1	H3/ABB'200-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶ /M1 ⁷
		250							H3/ABB'250-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

⁷Meter type to be specified by client

Max Cable size bottom entry: 240mm²

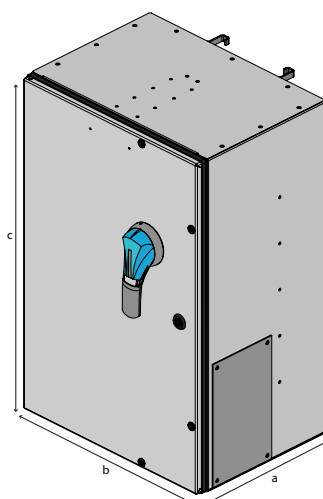
Max Cable size side entry: 240mm²*

*Cable spreader box is required when using cable sizes over 120mm²

HPB-TOB-SOC-250A

- In steel enclosure
- Outgoing device - Switchfuse

H3/SOC200-3-BS-SNL-80/S



Tap-off with switchfuse 250A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
250	500	1	25.5	306	402	650

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
3	Socomec	200	3	BS	SNL	80	S	H3/SOC'200-3'-BS'-SNL'-80 ⁵ /S ⁶
		250						H3/SOC'250-3'-BS'-SNL'-80 ⁵ /S ⁶

¹Device manufacturer Socomec

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify BS or DIN

⁴Options. Specify SNL if required

⁵Breaking Capacity (80kA rms)

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 185mm²

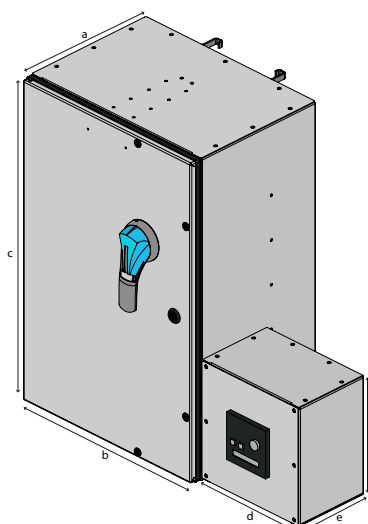
Max Cable size side entry: 185mm²*

*Cable spreader box is required when using cable sizes over 70mm²

HPB-TOB-M-SOC-250A

- In steel enclosure
- Outgoing device - Switchfuse

H3/SOC200-3-BS-SNL-80/S/M1



Tap-off with switchfuse 250A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
250	500	1	29.5	306	420	650	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
3	Socomec	200	3	BS	SNL	80	S	M1	H3/SOC'200-3'-BS'-SNL'-80 ⁵ /S ⁶ /M1 ⁷
		250							H3/SOC'250-3'-BS'-SNL'-80 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer Socomec

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify BS or DIN

⁴Options. Specify SNL if required

⁵Breaking Capacity (80kA rms)

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

⁷Meter type to be specified by client

Max Cable size bottom entry: 240mm²

Max Cable size side entry: 240mm²*

*Cable spreader box is required when using cable sizes over 120mm²

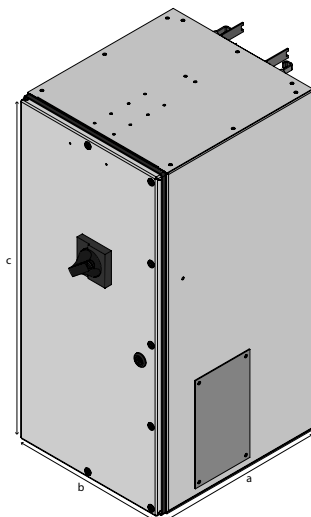
HPB-TOB-400A

- In steel enclosure
- Outgoing device - MCCB

Tap-off with MCCB 400A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
400	690	1	50.5	398	400	860

H4/ABB320-3-TM-OCT-50/S



Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
4	ABB	320	3	TM	OCT	50	S	H4/ABB'320-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶
		400						H4/ABB'400-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Auxiliary. Specify OC or OCT if required

⁴Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁵If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 300mm²

Max Cable size side entry: 240mm²*

*Cable spreader box is required when using cable sizes over 150mm²

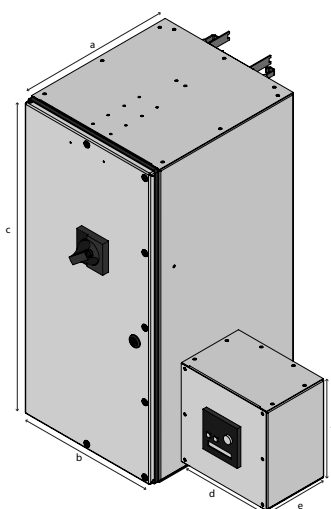
HPB-TOB-M-400A

- In steel enclosure
- Outgoing device - MCCB

Tap-off with MCCB 400A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
400	690	1	54.5	398	400	860	240	161	240

H4/ABB320-3-TM-OCT-50/S/M1



Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
4	ABB	320	3	TM	OCT	50	S	M1	H4/ABB'320-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶ /M1 ⁷
		400							H4/ABB'400-3 ² -TM ³ -OCT ⁴ -50 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Auxiliary. Specify OC or OCT if required

⁴Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁵If cable spreader is required (*See note below for when cable spreader box is needed)

⁶Meter type to be specified by client

Max Cable size bottom entry: 300mm²

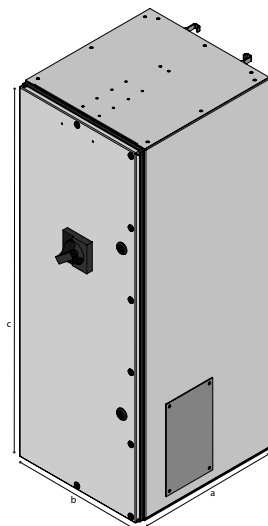
Max Cable size side entry: 240mm²*

*Cable spreader box is required when using cable sizes over 150mm²

HPB-TOB-630A

- In steel enclosure
- Outgoing device - MCCB

H5/ABB630-3-TM-OCT-50/S



Tap-off with MCCB 630A max

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
630	690	1	62	398	530	860

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Part Number
5	ABB	630	3	TM	OCT	50	S	H5/ABB'630-3-TM ¹ -OCT ⁴ -50 ⁵ /S ⁶

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

⁵Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 2x240mm²

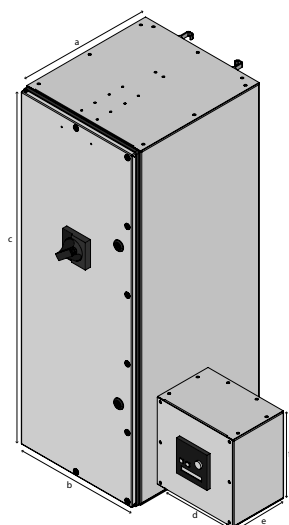
Max Cable size side entry: 2x240mm²*

*Cable spreader box is required when using cable sizes over 2x185mm²

HPB-TOB-M-630A

- In steel enclosure
- Outgoing device - MCCB

H5/ABB630-3-TM-OCT-50/S/M1



Tap-off with MCCB 630A max + metering

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)			Meter size (mm)		
				a	b	c	d	e	f
630	690	1	66	398	530	860	240	161	240

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary	Breaking Capacity (kA)	Spreader Box	Metering Type	Part Number
5	ABB	630	3	TM	OCT	50	S	M1	H5/ABB'630-3-TM ¹ -OCT ⁴ -50 ⁵ /S ⁶ /M1 ⁷

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 2, 3 or 4 pole

³Auxiliary. Specify OC or OCT if required

⁴Breaking Capacity (kA rms). Please specify 50/100kA etc.

⁵If cable spreader is required (*See note below for when cable spreader box is needed)

⁶Meter type to be specified by client

Max Cable size bottom entry: 2x240mm²

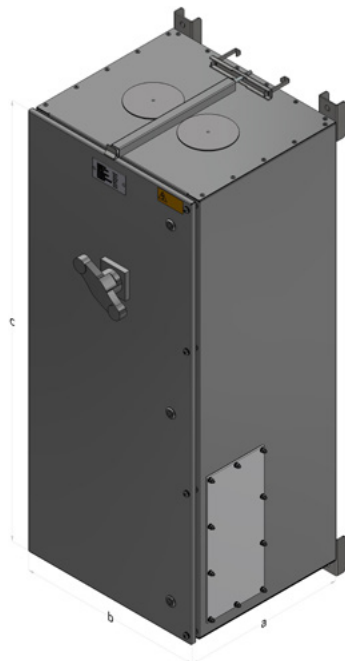
Max Cable size side entry: 2x240mm²*

*Cable spreader box is required when using cable sizes over 2x185mm²

HPB-TOB-800A

- In steel enclosure
- Outgoing device - MCCB

H6/ABB800-3-TM-OCT-36-S



Tap-off with MCCB 800A

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
800	690	1	93	445	500	1172

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary Breaking Capacity (kA)	Spreader Box	Part Number
6	ABB	800	3	TM	36	-	H6/ABB1800-32-TM3-OCT4-365-S6

¹Device manufacturer. Please specify ABB or SCH

²Poles. Please specify 3 or 4 pole

³Unit type. Please specify TM or ET

⁴Auxiliary. Specify OC or OCT if required

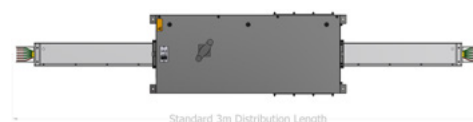
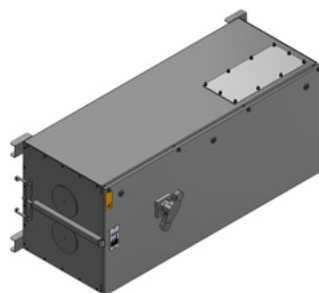
⁵Breaking Capacity (kA rms). Please specify 36/50/70kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 2x240mm²

Max Cable size side entry: 2x240mm²*

*Cable spreader box is required when using cable sizes over 2x185mm²



HPB-TOB-1000A

- In steel enclosure
- Outgoing device - MCCB

H6/ABB800-3-TM-OCT-36-S



Tap-off with MCCB 1250A

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
1000	690	2	124	445	500	1365

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary Breaking Capacity (kA)	Spreader Box	Part Number
7	SCH	1000	3	ET	50	-	H7/SCH11000-32-ET3-OCT4-505-S6

¹Device manufacturer. Please specify SCH

²Poles. Please specify 3 or 4 pole

³Unit type. Please specify ET

⁴Auxiliary. Specify OC or OCT if required

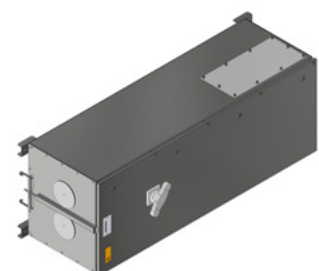
⁵Breaking Capacity (kA rms). Please specify 50/70kA etc.

⁶If cable spreader is required (*See note below for when cable spreader box is needed)

Max Cable size bottom entry: 3x185mm²

Max Cable size side entry: 3x185mm²*

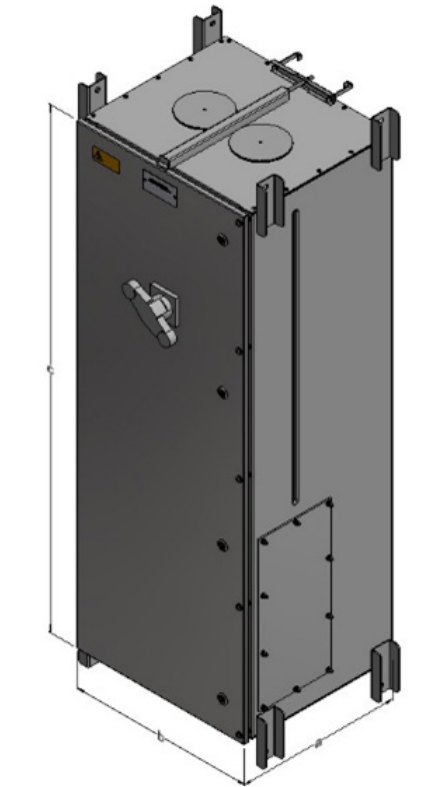
*Cable spreader box is required when using cable sizes over 2x185mm²



HPB-TOB-1250A

- In steel enclosure
- Outgoing device - MCCB

H8/SCH1250-3-ET-OCT-50-S

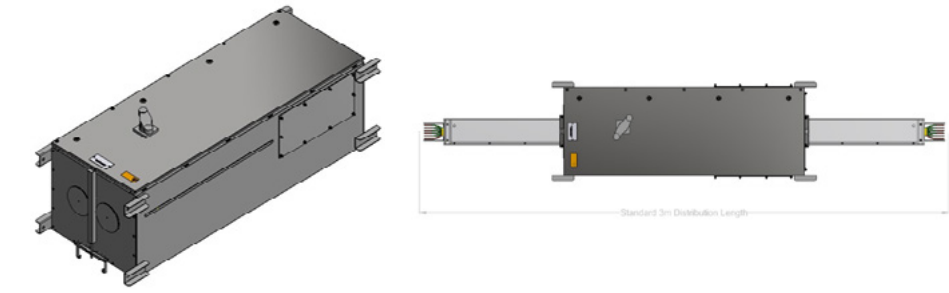


Tap-off with MCCB 1600A

Current (A)	Voltage (V)	Tap off slots	Approx Weight (Kg)	Dimensions (mm)		
				a	b	c
1250	690	2	148	445	500	1365

Frame Size	Device Manufacturer	Rating (A)	Poles	Unit Type	Auxiliary Breaking Capacity (kA)	Spreader Box	Part Number
8	SCH	1250	3	ET	50	-	H8/SCH1250-32-ET3-OCT4-50S-S6

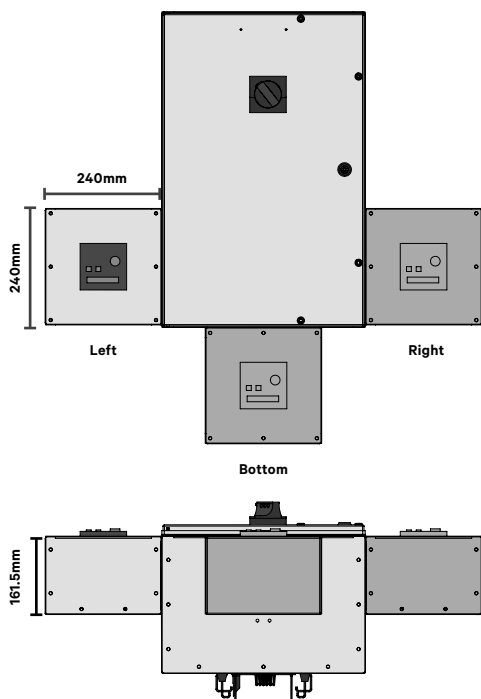
- ¹Device manufacturer. Please specify SCH
- ²Poles. Please specify 3 or 4 pole
- ³Unit type. Please specify ET
- ⁴Auxiliary. Specify OC or OCT if required
- ⁵Breaking Capacity (kA rms). Please specify 50/70 kA etc.
- ⁶If cable spreader is required (*See note below for when cable spreader box is needed)
- Max Cable size bottom entry: 3x240mm²
- Max Cable size side entry: 3x240mm²*
- *Cable spreader box is required when using cable sizes over 2x185mm²



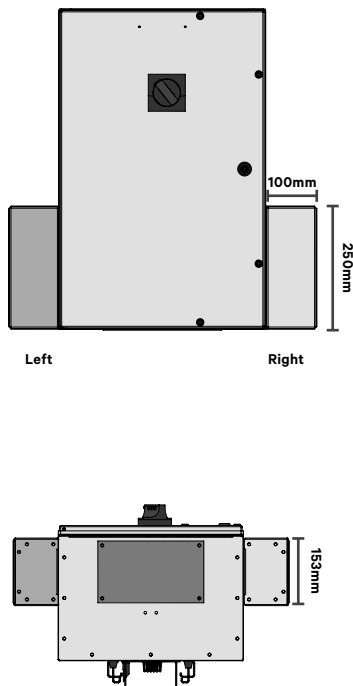
Meter and spreader positions

Please confirm meter/spreader positions with the Project Engineer, if required.

Metering Box Positions



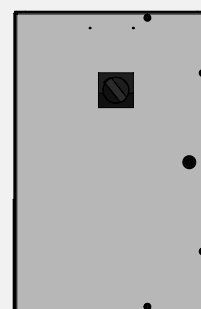
Spreader Box Positions



Phasing options

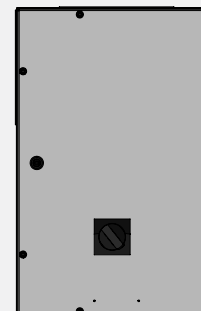
Bottom Entry is standard, if Top Entry is required please confirm with Project Engineer.

N L1 L2 L3 E



Bottom Entry (standard)

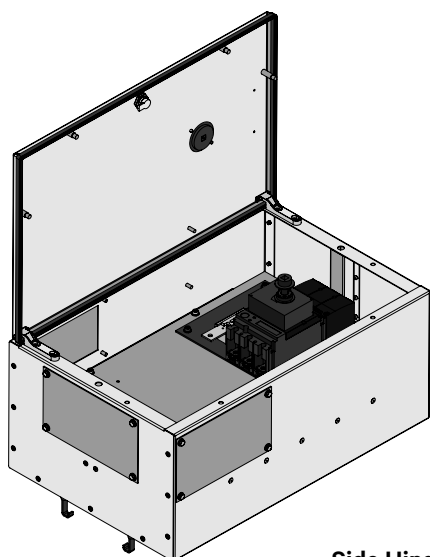
N L1 L2 L3 E



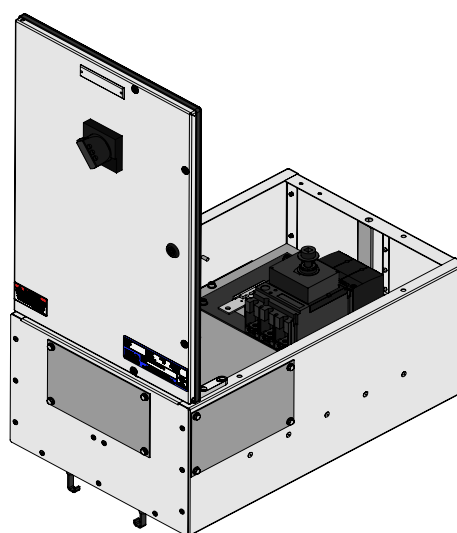
Top Entry

Hinge options

Side Hinge is standard. If Bottom Hinged is required, please confirm with the Project Engineer.



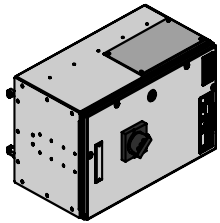
Side Hinged



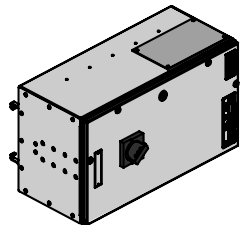
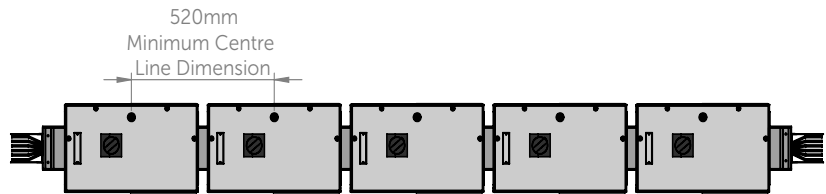
Bottom Hinged

Tap-off units and busbar trunkings

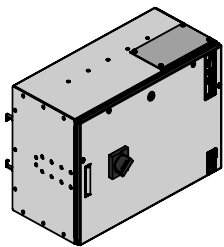
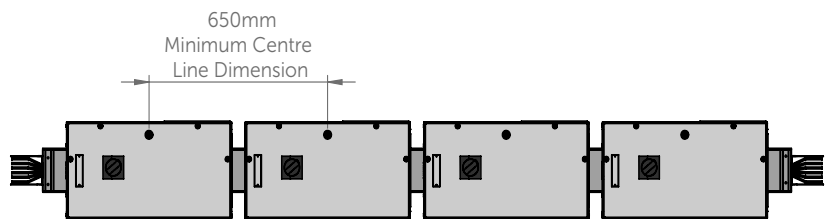
The example below represents how many tap-off units of the same rating can be fitted on to a 3m busbar trunking system at minimum centres.



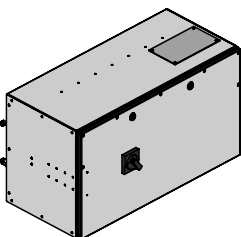
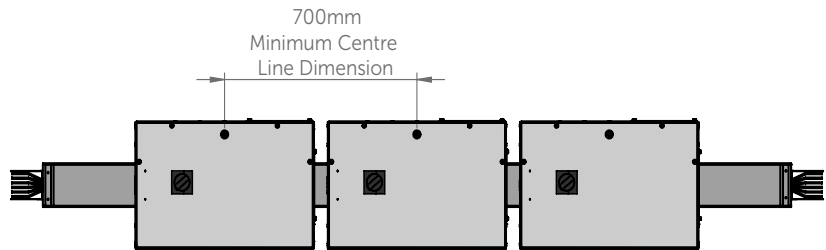
HPB-TOB-125A



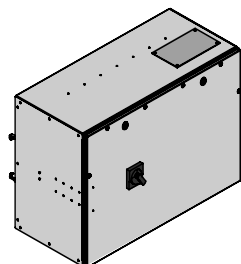
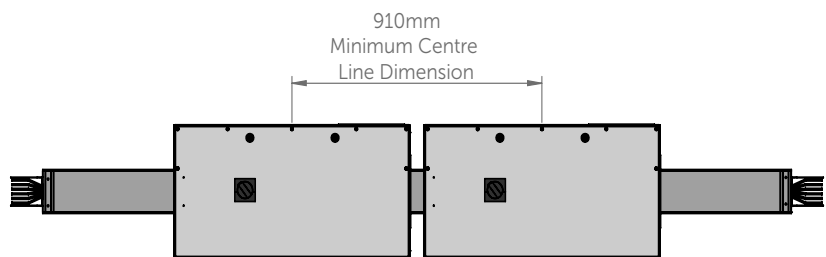
HPB-TOB-160A



HPB-TOB-250A



HPB-TOB-400A



HPB-TOB 630A

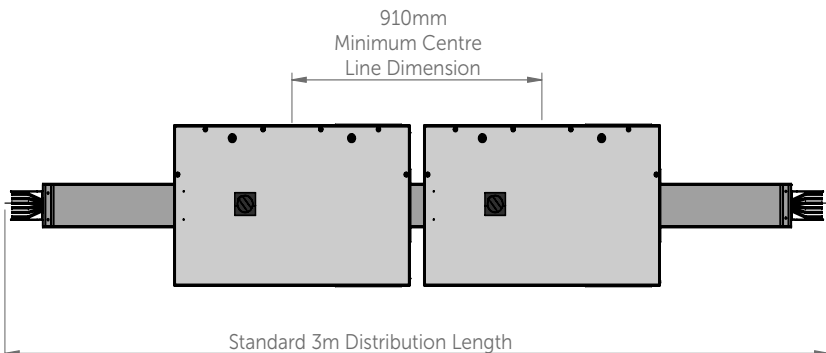


ABB MCCB reference

Frame Size	ABB MCCB's	Rating (A)	Configuration	Breaking Capacity (kA)
Frame Size 1	XT1 (Thermomag)	Up to 125	3 or 4	18, 25, 36, 50, 70
	XT2 (Electronic)	Up to 125	3 or 4	18, 25, 36, 50, 70
Frame size 2	XT1 (Thermomag)	160	3 or 4	18, 25, 36, 50, 70
	XT2 (Electronic)	160	3 or 4	36, 50, 70, 120, 150
Frame size 3	XT3 (Thermomag)	Up to 250	3 or 4	36, 50
	XT4 (Electronic)	Up to 250	3 or 4	36, 50, 70, 120, 150
Frame size 4	T4 (Electronic)	Up to 400	3 or 4	36, 50, 70, 120, 150
Frame Size 5	T5 (Electronic)	Up to 630	3 or 4	36, 50, 70, 120, 150
Frame Size 6	T6 (Electronic)	800	3 or 4	36, 50, 70

Schneider MCCB reference

Frame Size	Schneider MCCB's	Rating (A)	Configuration (Poles)	Breaking Capacity at 415V (kA)
Frame Size 1	NSX100 (Thermalmag)	Up to 125	2, 3 or 4	25, 36 ,50, 70, 100, 150, 200*
	NSX100 (Electronic)	Up to 125	2, 3 or 4	25, 36 ,50, 70, 100, 150, 200*
Frame size 2	NSX160 (Thermomag)	160	2, 3 or 4	25, 36 ,50, 70, 100, 150
	NSX160 (Electronic)	160	2, 3 or 4	25, 36 ,50, 70, 100, 150
Frame size 3	NSX250 (Thermomag)	Up to 250	2, 3 or 4	25, 36 ,50, 70, 100, 150, 200*
	NSX250 (Electronic)	Up to 250	2, 3 or 4	25, 36 ,50, 70, 100, 150, 200*
Frame size 4	NSX400 (Electronic)	Up to 400	3 or 4	36 ,50, 70, 100, 150, 200
Frame Size 5	NSX630 (Electronic)	630	3 or 4	36 ,50, 70, 100, 150, 200
Frame Size 6	NS800 (Electronic)	800	3 or 4	50, 70
Frame Size 7	NS1250 (Electronic)	1000 (derated)	3 or 4	50, 70
Frame Size 8	NS1600 (Electronic)	1250 (derated)	3 or 4	50, 70

*1 and 2 pole only

Switchfuse reference

Frame Size	Socomec Switchfuses	Rating (Amps)	Configuration (Poles)	Breaking Capacity (kA)
Frame Size 1	Fuserbloc BS88 32	32	2 , 3 or 4	80
	Fuserbloc BS88 63	63	2 , 3 or 4	80
	Fuserbloc BS88 100	100	2 , 3 or 4	80
	Fuserbloc DIN 32	32	2 , 3 or 4	80
	Fuserbloc DIN 63	63	2 , 3 or 4	80
	Fuserbloc DIN 100	100	2 , 3 or 4	80
Frame size 2	Fuserbloc BS88 160	160	2 , 3 or 4	80
	Fuserbloc DIN 160	160	2 , 3 or 4	80
Frame Size 3	Fuserbloc BS88 200	200	2 , 3 or 4	80
	Fuserbloc BS88 250	250	2 , 3 or 4	80
	Fuserbloc DIN 200	200	2 , 3 or 4	80
	Fuserbloc DIN 250	250	2 , 3 or 4	80

BIM library

Vertiv is committed to supporting our clients by providing direct access to our comprehensive BIM library.

Architects, contractors, engineering consultants and others are able to directly place specific items into a 3D BIM environment to produce accurate and efficient plans, containment drawings and bills of quantities to form a fully integrated overall project.

Vertiv provides high quality digitized data, available in a range of formats. Our intelligent BIM libraries are maintained and updated to reflect any changes in the products.

Log on to access the library

bim.vertiv.com

Quick reference guide

Critical Dimensions

- The distance from the centre of a joint to the wall, ceiling or floor must be at least 190mm.
- All joints must be accessible for maintenance. Joints should not be located inside a wall, ceiling or floor.
- Busbar's should be spaced apart allowing for sufficient physical access, for ease of installation and future maintenance. There must be a minimum distance of 50mm between the busbar and any wall/ ceiling/ other busbar.
- Allow adequate space for tap off units to be installed easily and safely.
- Busbar lengths are available from 600mm-4000mm.
- Distribution busbar lengths are available from 900mm- 4000mm.
- Edgewise elbow sections are available with leg lengths from 257mm- 600mm.
- Flatwise elbow sections are available with a maximum leg length of 750mm. The minimum leg length varies depending on the busbar.

Operating Conditions

- Ambient temperature from -5°C to +40°C
- Relative humidity of 95% or below.
- This product designed for indoor use and can be installed horizontally or vertically.

Critical Details

- Busbar drawings must include all relevant dimensions. Centre-line dimensions are expected. Please highlight any dimensions that are not centre-line.
- Walls and floors must be indicated and the relevant dimensions provided.
- The phasing and location of all switchboards must be provided.
- Full details are required for any transformer connections.
- Horizontal busbar must be installed with the neutral phase to the top. Please indicate the phase orientation for vertically installed busbar.

