
Subdistribution boards

Fire protection housing

Housing for preventive fire protection

Preventive fire protection is not just the job of the construction managers. Electrical designers and installers or switchgear manufacturers are responsible during planning and execution for making sure that their systems will not be the cause of a fire. In electrical switchgear, the following elements:

- Loose terminals
- Short circuits
- Fault arcs
- Overloads
- Insulation errors
- Lightning strikes

can cause a fire. Therefore, the system operator also needs to make the appropriate contribution by checking the electrical systems at fixed intervals, maintaining them and upgrading them as needed.

In the case of technical installations in industry or in building complexes with large concentrations of people, such as in airports, train stations, nursing homes, hospitals or hotels, it is vital that the functionality of safety-relevant electrical systems is maintained even during a fire.

ABB STRIEBEL & JOHN offers you an innovative housing system for preventive fire protection made of non-flammable material with optimal technical and economic expansion options.

A wide range of wall and standing housings are available in various cabinet sizes.

- 1** Fire protection from inside, fire resistance duration at least 30/90 minutes; The fire protection housing was tested in accordance with DIN 4102-11.
- 2** Fire protection from outside, fire resistance duration at least 30/90 minutes; The fire protection housing was tested in accordance with DIN 4102-12.

Subdistribution boards

Fire protection housing
General technical data

Technical parameters

Protection goal	<p>1 Fire protection from inside, fire resistance duration at least 30/90 minutes; The fire protection housing was tested in accordance with DIN 4102-11.</p> <p>2 Fire protection from outside, fire resistance duration at least 30/90 minutes; The fire protection housing was tested in accordance with DIN 4102-12.</p>
Mounting type	UP wall mounting/AP wall mounting/AP standing mounting
Housing material	Highly compressed, multi-layer fire protection panels (DIN 4102-1/DIN EN 13501-1) of building class 'A2' non-flammable, smoke-tight
Surface	coating light gray - similar to RAL 7035, edges in contrasting colors
Door	door hinge right or left as standard, left also possible after conversion, opening angle approx. 180 degrees
Lock	locking with sash lock through swivel handle with double bit half cylinder
Interior expansion	prepared for installing distributor fields and CombiLine module system fields
Cable entries	Top and bottom
Standard ventilation	Ventilation in case of fire self-closing
Additional equipment	IP54, various decorative surfaces, reinforced back wall for free installation, internal fan with smoke detector.

Standards/regulations*

DIN EN 61439-2 (VDE 0660-600-2) (modules EDFmounting frame)	X
DIN 43880 (rail-mounted devices)	X
Protection class	IP41/IP44/IP54
Installation site/environment	Interior space
Ambient temperature, 24-hour average	+ 35°
Ambient temperature maximum value	+ 40°
Ambient temperature minimum value	- 5°

Electrical characteristics

Rated impulse withstand voltage U_{imp}	III/6 kV
Pollution degree	3
Protection class	II
Rated surge current resistance I_{pk} 0.1 sec	max. 25 kA
Rated short-time current I_{cw} 1.0 sec	max. 12 kA
Rated frequency	50-60 Hz
Rated insulating voltage U_i	690 V
Rated operating voltage AC U_e	400 V

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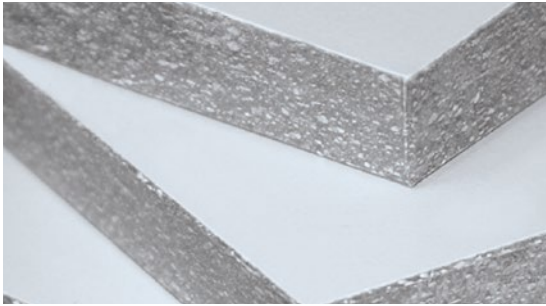
Fire protection housing

Standard features

**Material
+ Decor**
A2 Class

**Fire
Resistance**
30 Min.

**Fire
Resistance**
90 Min.

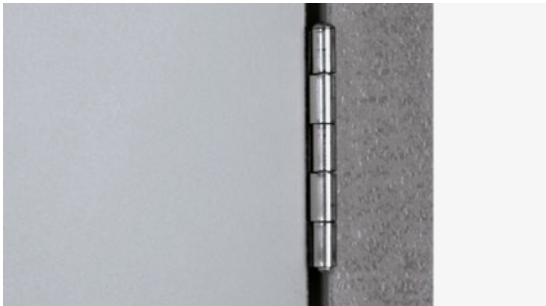


Material/design

- Building material with surface – A2-s1, d0
- Fire resistance F30/F90
- Protection class depending on application, IP41, IP44 or IP54
- Smoke-tight
- Cold smoke-proof
- Wall thickness reduced to 72mm

Locking using the swivel handle

The doors have swivel levers in stainless steel look, which are located centrally and can be locked with double bit half cylinders



Changeable door hinge

The door hinge is easy to change - to convert, unscrew the hinge from the door joint and screw it into the opposite joint. The door is fastened using the pre-drilled fixing holes in the door and the cabinet body. The door hinge is on the right as standard.

Stainless steel hinges

High-quality stainless steel hinges with a push-out axle pin allow for easy removal of the door. If necessary, significant weight reduction can thus be achieved for transport.

Subdistribution boards

Fire protection housing

Standard features



Mounting tabs

The flush-mounted wall housings are screwed from the outside with two mounting tabs attached to the head part, each with a dowel on the wall behind it. Therefore, the equipped housing can be easily and quickly mounted.



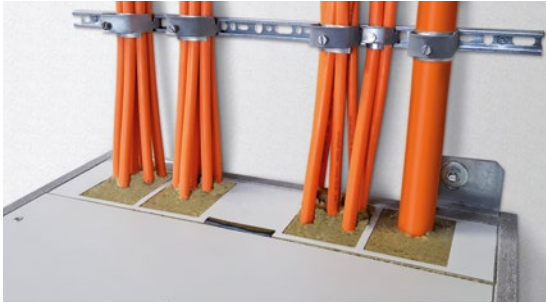
Integrated ventilation system

Consisting of fan and smoke detector, ready for connection (230 V AC), this reduces the area that can be fitted by one grid unit (RE).

Subdistribution boards

Fire protection housing

Standard features



Cable sheath

Cable sheaths for bundle or individual cable entry are located at the top and bottom of the housing.



Cable sheath (delivery condition)

The cable sheaths are standard in all wall and standing housings. This ensures quick and easy cable entry for every application.

Silicone seal

To increase the protection class to IP54, a full-perimeter silicone seal is needed for the cable entry points (see page 103).



- Empty housing, prepared for installing distributor fields and CombiLine module system fields each minus one raster unit per housing
- Doors are easy to remove - axle pin can be pushed out (reduced transport weight)
- Door opening angle 180 degrees
- Locking with rod lock, 2-point locking
- Color light gray - similar to RAL7035, with colored edges
- High chemical resistance (surface characteristics based on DIN EN 438-2)
- High mechanical strength and stability, Brinell hardness 50 N/mm²
- High material density 1,450 kg/m³
- Integrated ventilation system (area that can be fitted is reduced by one grid unit)

Subdistribution boards

Fire protection housing

Overview

**Material
+ Decor**
A2 Class

**Fire
Resistance**
30 Min.

**Fire
Resistance**
90 Min.

Flush-mounted wall housing UF, IP41



Housing depth 205 mm
Housing for flush mount

**Material
+ Decor**
A2 Class

**Fire
Resistance**
30 Min.

**Fire
Resistance**
90 Min.

Surface-mount wall housing AF, IP44



Housing depth 349 mm (internal depth 240 mm)
Housing for surface wall mounting

**Material
+ Decor**
A2 Class

**Fire
Resistance**
30 Min.

**Fire
Resistance**
90 Min.

Standing housing SF, IP44



Housing depth 349 mm (internal depth 240 mm)
Housing for standing installation

Subdistribution boards

Fire protection housing

Overview

Material
+ Decor
A2 Class

Fire
Resistance
30 Min.

Fire
Resistance
90 Min.

Sheath housing MF, IP41

Housing for mounting using available distributors



H₂O

Chem

Safe

Dust

U
Components

DIN

Material
+ Decor
A2 Class

Smoke
Protection
min leakage

Fire
Resistance
90 Min.

Electric operating compartment in compact design KEB, IP54

Housing depth 586 mm

Housing to place individually equipped distributors

External ventilation system with functional integrity required



Material
+ Decor
A2 Class

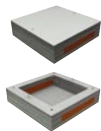
Fire
Resistance
30 Min.

Fire
Resistance
90 Min.

Terminal boxes without terminal block KF, IP41

Housing for wall or ceiling mounting

Mounting material for ceiling mounting available on request



Material
+ Decor
A2 Class

Fire
Resistance
30 Min.

Fire
Resistance
90 Min.

Facing doors VF, IP54

Doors which are installed in front of existing flush-mounted distributors



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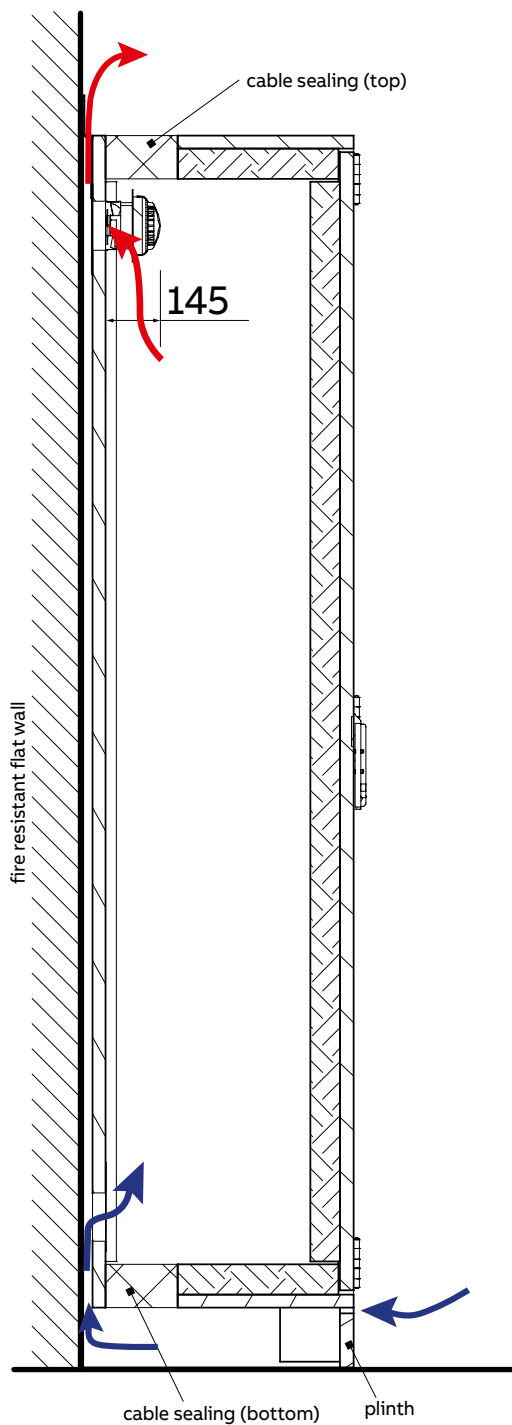
Fire protection housing

Additional equipment

Wall housing/standing housing when mounting or installing as freestanding unit

If installing as a free-standing unit, or in case of an extremely uneven wall, a BRW18 - BRW38 fire protection plate (42 mm thick) must be additionally screwed onto the back wall of the housing.

> The fire protection plate must be ordered separately, see page 103



Schematic representation of ventilation in a standing housing

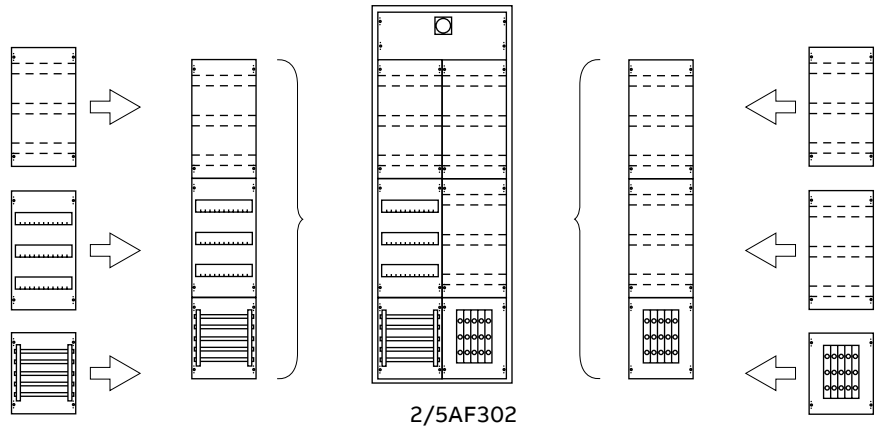
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Fire protection housing

Configuration example/mounting instructions

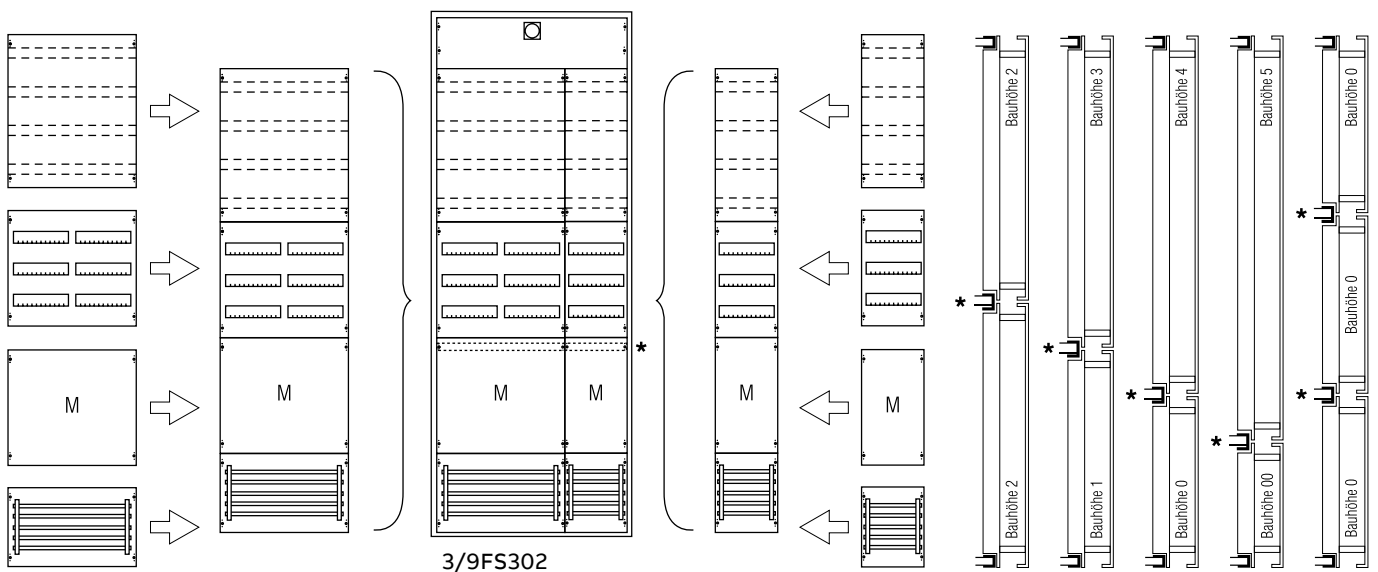
Configuration example:

Surface-mount wall housing AF



Configuration example:

Standing housing SF



*Middle support rail adjustable up and down

Important notes

For flush-mounted, surface-mounted and standing housings, the mounting frames needed to hold the CombiLine modules or distributor panels are prefitted (for CombiLine modules and distributor fields/combination sets see chapter 9)

There is a fan in the upper part of the housing which occupies the space of one grid unit (1 RE). This space has a closed cover and is not available for the installation of CombiLine modules or distributor fields/combination sets.

When planning modular system fields for standing housings, the middle support rail, which extends over the entire width of the housing, must be taken into account (see configuration example Standing housing SF).

Subdistribution boards

Fire protection housing

Flush-mounted wall housing

Material
+ Decor
A2 Class

Fire
Resistance
30 Min.


Fire
Resistance
90 Min.

Flush-mounted wall housing UF, IP41



Housing depth 205 mm
Housing for flush mount

Main features

- Material with A2 surface coating - non-combustible, tested in accordance with DIN 4102-1
- Fire resistance F30/F90, tested in accordance with DIN 4102-2
- Protection type in accordance with IP41  protection class II
- Smoke-tight, cold smoke-tight

Structure

- Flush mount (solid wall F30/F90)
- Prepared for installation of distributor fields
- Prepared for expansion with CombiLine modules on EDFmounting frame
- Changeable door hinge
- Door can be de-attached, thereby reducing weight
- Locking with sash lock using swivel handle with double bit half cylinder
- Cable entry at the bottom and top
- Door internal
- Opening angle 180 degrees

Surface

- Color light gray - similar to RAL 7035, with colored edges
- High chemical resistance
- High mechanical strength and stability

Additional equipment/options

- A variety of decorative surfaces

Subdistribution boards

Fire protection housing

Flush-mounted wall housing, IP41 □, depth 205 mm



Flush-mounted wall housing IP41 □, depth 205 mm

Overall height	Locking unit	Field width	Door hinge	Space units	External dimensions in mm	Type code	Order code	Price	Weight
								1 piece	1 piece
	RE	FB		PLE	H × W × D				kg
0	4	1	right	48	682 × 332 × 205	1/0UF2020	2CPX040008R9999		41
0	4	1	left	48	682 × 332 × 205	1/0UF2120	2CPX040009R9999		41
0	4	2	right	96	682 × 582 × 205	2/0UF2020	2CPX040020R9999		58
0	4	2	left	96	682 × 582 × 205	2/0UF2120	2CPX040021R9999		58
2	6	1	left	72	982 × 332 × 205	1/2UF2120	2CPX040029R9999		55
2	6	2	right	144	982 × 582 × 205	2/2UF2020	2CPX040040R9999		80
2	6	2	left	144	982 × 582 × 205	2/2UF2120	2CPX040041R9999		80



Flush-mounted wall housing IP41 □, depth 205 mm

Overall height	Locking unit	Field width	Door hinge	Space units	External dimensions in mm	Type code	Order code	Price	Weight
								1 piece	1 piece
	RE	FB		PLE	H × W × D				kg
0	4	1	right	48	682 × 332 × 205	1/0UF2021	2CPX040052R9999		49
0	4	1	left	48	682 × 332 × 205	1/0UF2121	2CPX040053R9999		49
0	4	2	right	96	682 × 582 × 205	2/0UF2021	2CPX040064R9999		70
0	4	2	left	96	682 × 582 × 205	2/0UF2121	2CPX040065R9999		70
2	6	1	right	72	982 × 332 × 205	1/2UF2021	2CPX040076R9999		67
2	6	1	left	72	982 × 332 × 205	1/2UF2121	2CPX040077R9999		67
2	6	2	right	144	982 × 582 × 205	2/2UF2021	2CPX040088R9999		99
2	6	2	left	144	982 × 582 × 205	2/2UF2121	2CPX040089R9999		99

> For dimensions and weights, see page 103
 > For CombiLine modules and distributor panels see chapter on interior expansion systems

Subdistribution boards

Fire protection housing

Surface-mount wall housing

Material
+ Decor
A2
Class

Fire
Resistance
30
Min.

Fire
Resistance
90
Min.


Surface-mount wall housing AF, IP44



Housing depth 349 mm

Housing for surface wall mounting

Main features

- Material with A2 surface coating - non-combustible, tested in accordance with DIN 4102-1/ EN 135 01-1
- Fire resistance F30/F90, tested in accordance with DIN 4102-2
- Protection type in accordance with IP44  protection class II
- Smoke-tight, cold smoke-tight
- Ventilation system in the rear wall

Structure

- Wall mounting (solid wall F30/F90)
- Prepared for installation of distributor fields
- Prepared for expansion with CombiLine modules on EDF mounting frame
- Changeable door hinge on site, standard right
- Door can be de-attached, thereby reducing weight
- Locking with rod lock using swivel handle with double bit half cylinder
- Cable entry at the bottom and top
- Mounting tabs placed externally
- Door internal
- Opening angle 180 degrees

Surface

- Color light gray - similar to RAL 7035, with colored edges
- High chemical resistance
- High mechanical strength and stability

Subdistribution boards

Fire protection housing

Surface-mount housing, IP44 ☐, depth 349 mm



Surface-mount housing, IP44 ☐, depth 349 mm

Overall height	Locking unit	Field width	Space units	External dimensions in mm	Price 1 piece	Weight 1 piece			
							RE	FB	PLE
0	3	1	36	598 × 398 × 349			1/00AF302	2CPX043265R9999	51
0	3	2	72	598 × 648 × 349			2/00AF302	2CPX043266R9999	71
0	4	1	48	748 × 398 × 349			1/0AF302	2CPX043267R9999	62
0	4	2	96	748 × 648 × 349			2/0AF302	2CPX043268R9999	85
1	5	1	60	898 × 398 × 349			1/1AF302	2CPX043269R9999	73
1	5	2	120	898 × 648 × 349			2/1AF302	2CPX043270R9999	99
2	6	1	72	1048 × 398 × 349			1/2AF302	2CPX043271R9999	83
2	6	2	144	1048 × 648 × 349			2/2AF302	2CPX043272R9999	114
3	7	1	84	1198 × 398 × 349			1/3AF302	2CPX043274R9999	94
3	7	2	168	1198 × 648 × 349			2/3AF302	2CPX043275R9999	128
3	7	3	252	1198 × 898 × 349			3/3AF302	2CPX043276R9999	163
4	8	2	192	1348 × 648 × 349			2/4AF302	2CPX043278R9999	143
5	9	2	216	1498 × 648 × 349			2/5AF302	2CPX043281R9999	157



Surface-mount housing, IP44 ☐, depth 349 mm

Overall height	Locking unit	Field width	Space units	External dimensions in mm	Price 1 piece	Weight 1 piece			
							RE	FB	PLE
0	3	1	36	598 × 398 × 349			1/00AF303	2CPX043380R9999	53
0	4	1	48	748 × 398 × 349			1/0AF303	2CPX043381R9999	64
0	4	2	96	748 × 648 × 349			2/0AF303	2CPX043382R9999	87
1	5	1	60	898 × 398 × 349			1/1AF303	2CPX043383R9999	75
1	5	2	120	898 × 648 × 349			2/1AF303	2CPX043384R9999	101
2	6	1	72	1048 × 398 × 349			1/2AF303	2CPX043385R9999	85
2	6	2	144	1048 × 648 × 349			2/2AF303	2CPX043386R9999	114
2	6	3	216	1048 × 898 × 349			3/2AF303	2CPX043387R9999	119
3	7	1	84	1198 × 398 × 349			1/3AF303	2CPX043388R9999	96
3	7	2	168	1198 × 648 × 349			2/3AF303	2CPX043389R9999	130
3	7	3	252	1198 × 898 × 349			3/3AF303	2CPX043390R9999	165

Important note

A cooling shutter is required for E90 function integrity
(Cooling shutters for cables, Cooling shutters for cables, see page 125)

> For surface-mount wall housing dimensions and weights, see page 103

> For CombiLine modules and distributor panels see chapter on interior expansion systems

Subdistribution boards

Fire protection housing

Standing housing

Material
+ Decor
A2 Class

Fire
Resistance
30 Min.

Fire
Resistance
90 Min.


—
Standing housing SF, IP44 



Housing depth 349 mm

Housing for standing installation

Main features

- Material with A2 surface coating - non-combustible, tested in accordance with DIN 4102-1/ EN 135 01-1
- Fire resistance F30/F90, tested in accordance with DIN 4102-2
- Protection type in accordance with IP44  protection class II
- Smoke-tight, cold smoke-tight
- Ventilation system in the rear wall

Structure

- Freestanding installation
- Prepared for installation of distributor fields
- Prepared for expansion with CombiLine modules on EDFmounting frame
- Changeable door hinge, option of right or left
- Door can be de-attached, thereby reducing weight
- Locking with rod lock using swivel handle with double bit half cylinder
- Cable sheath for bundle entry or single entry
- Cable entry point, top and bottom
- Door internal
- Opening angle 180 degrees
- Base with removable front for pallet truck
- Ventilation system through the back wall of the housing

Surface

- Color light gray - similar to RAL 7035, with colored edges
- High chemical resistance
- High mechanical strength and stability

Important note

If installing as a free-standing unit, or in case of an extremely uneven wall, a fire protection plate (42 mm thick) must be additionally screwed onto the back wall of the housing (see page 103)

Subdistribution boards

Fire protection housing

Standing housing, IP44 ☐, depth 349 mm



Standing housing IP44 ☐, depth 349 mm

Overall height	Locking unit	Field width	Door hinge	Space units	External dimensions in mm	Type code	Order code	Price	Weight
								1 piece	1 piece
	RE	FB		PLE	H × W × D				kg
8	12	1	right	144	2048 × 398 × 349	1/8SF302	2CPX043290R9999		152
8	12	2	right	288	2048 × 648 × 349	2/8SF302	2CPX043292R9999		206
8	12	3	right	432	2048 × 898 × 349	3/8SF302	2CPX043294R9999		259
9	13	1	right	156	2198 × 398 × 349	1/9SF302	2CPX043304R9999		163
9	13	2	right	312	2198 × 648 × 349	2/9SF302	2CPX043306R9999		220
9	13	3	right	468	2198 × 898 × 349	3/9SF302	2CPX043308R9999		278



Standing housing IP44 ☐, depth 349 mm

Overall height	Locking unit	Field width	Door hinge	Space units	External dimensions in mm	Type code	Order code	Price	Weight
								1 piece	1 piece
	RE	FB		PLE	H × W × D				kg
8	12	1	right	144	2048 × 398 × 349	1/8SF303	2CPX043391R9999		154
8	12	2	right	288	2048 × 648 × 349	2/8SF303	2CPX043392R9999		208
8	12	3	right	432	2048 × 898 × 349	3/8SF303	2CPX043393R9999		261
9	13	1	right	156	2198 × 398 × 349	1/9SF303	2CPX043394R9999		165
9	13	2	right	312	2198 × 648 × 349	2/9SF303	2CPX043395R9999		222
9	13	3	right	468	2198 × 898 × 349	3/9SF303	2CPX043396R9999		280

Important note

A cooling shutter is required for E90 function integrity

(Cooling shutters for cables, see page Cooling shutters for cables, see page 125)

Subdistribution boards

Fire protection housing

Sheath housing

Material
+ Decor
A2 Class

Fire
Resistance
30 Min.

Fire
Resistance
90 Min.

Sheath housing MF, IP41



Housing depth 396 mm

Housing for mounting using available distributors

Main features

- Material with A2 surface coating - non-combustible, tested in accordance with DIN 4102-1
- Fire resistance F30/F90, tested in accordance with DIN 4102-2
- Protection class in accordance with IP41
- Smoke-tight

Structure

- Wall mounting
- Changeable door hinge
- Door can be de-attached, thereby reducing weight
- Locking with rod lock using swivel handle with double bit half cylinder
- Cable sheath for bundle entry
- Door internal
- Opening angle 180 degrees

Surface

- Color light gray - similar to RAL 7035, with colored edges
- High chemical resistance
- High mechanical strength and stability

Important note

The sheath housings are not suitable for fan mounting.
Sheath housings may only be mounted on fire-resistant walls.

Subdistribution boards

Fire protection housing

Sheath housing, IP41, depth 396 mm



Sheath housing, IP41, depth 396 mm

Internal dimensions in mm H x W x D	External dimensions in mm H x W x D	Type code	Order code	Price 1 piece	Weight 1 piece kg
665 x 354 x 240	829 x 518 x 340	1/OMF300	2CPX042420R9999		85
815 x 354 x 240	979 x 518 x 340	1/1MF300	2CPX042421R9999		97
815 x 604 x 240	979 x 768 x 340	2/1MF300	2CPX042422R9999		124
1115 x 354 x 240	1279 x 518 x 340	1/3MF300	2CPX042423R9999		121



Sheath housing, IP41, depth 396 mm

Internal dimensions in mm H x W x D	External dimensions in mm H x W x D	Type code	Order code	Price 1 piece	Weight 1 piece kg
665 x 354 x 240	829 x 518 x 340	1/OMF301	2CPX042424R9999		89
815 x 354 x 240	979 x 518 x 340	1/1MF301	2CPX042425R9999		101
815 x 604 x 240	979 x 768 x 340	2/1MF301	2CPX042426R9999		127
1115 x 354 x 240	1279 x 518 x 340	1/3MF301	2CPX042427R9999		125

Important note

A cooling shutter is required for E90 function integrity
(Cooling shutters for cables, see page 125)

Subdistribution boards

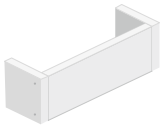
Fire protection housing

Accessories

Article	Dimensions in mm		Price 1 piece	Weight 1 piece kg
	H × W × D	Type code		
Fire protection panel				
If installing as a free-standing unit, or in case of an extremely uneven wall, a fire protection plate (42 mm thick) must be additionally screwed onto the back wall of the housing.				
for 1/8SF...		BRW18	2CPX042424R9999	30
for 2/8SF...		BRW28	2CPX042425R9999	60
for 3/8SF...		BRW38	2CPX042426R9999	90
Cooling shutters for cables				
Is always required for E90 function integrity				
field width 1	300 × 274 × 238	BKF1	2CPX041107R9999	13
2-field width	300 × 508 × 238	BKF2	2CPX041108R9999	18
3-field width	300 × 742 × 238	BKF3	2CPX041109R9999	23
Required accessories for conversion to IP54				
Silicone for sealing		ZB900	2CPX042432R9999	
cable entries with IP54 protection class				



BRW28



Subdistribution boards

Fire protection housing

Electric functional unit in compact design/fire resistance 90 minutes

Fire-resistant functional unit made of non-combustible A2 building material for enclosing electrical safety systems as prescribed by building regulations. Complete distributor housings, e.g. TwinLine, with at least IP54 protection are installed in the fire-resistant functional units.

Housing of individually equipped low-voltage switchgear assemblies without separate building law proof for functional integrity (MLAR/MEltBauVO).

In this design, switchgear assemblies are suited for higher power dissipation than fire protection housings.

Important!

The functional units are prepared for connection to on-site ventilation systems. The ventilation system must be designed so that ventilation is guaranteed for the intended time even in case of fire.

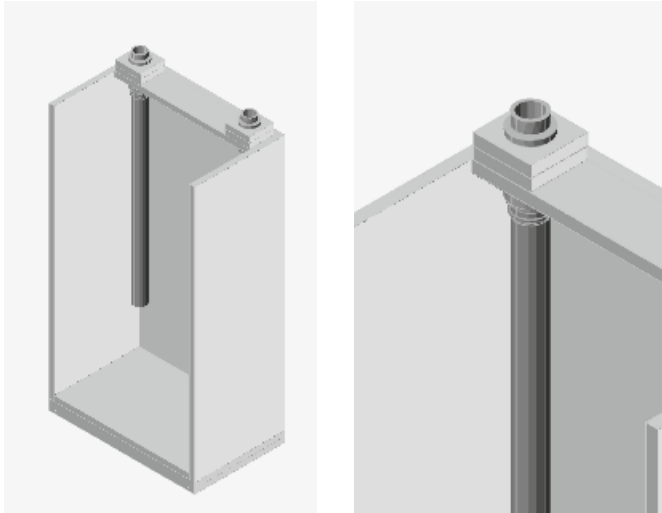


For a more clear illustration, there are no doors in the figures presented

Subdistribution boards

Fire protection housing

Electric functional unit in compact design/fire resistance 90 minutes



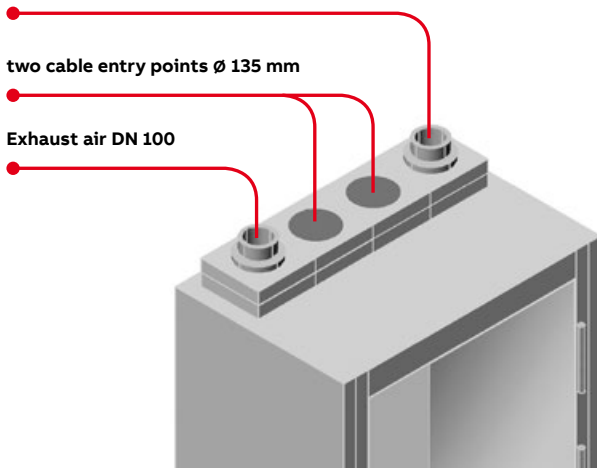
Ventilation

The functional units are prepared for connection to on-site ventilation systems. The ventilation system must be designed so that ventilation is guaranteed for the intended time even in case of fire.

Supply air DN 100

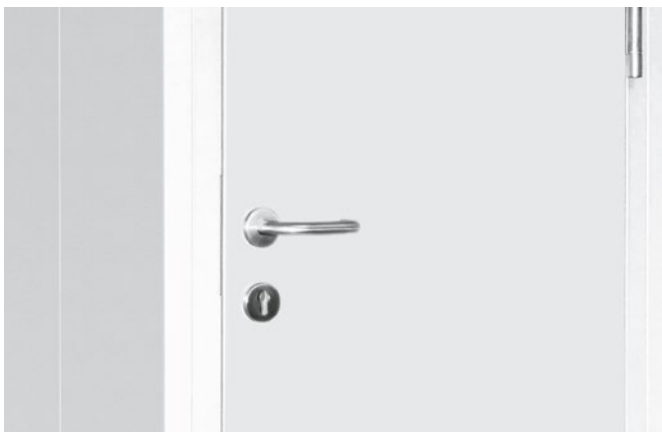
two cable entry points \varnothing 135 mm

Exhaust air DN 100



Cable entry

Cable entry from the top through two fire-resistant cable ducts.



Door

- With door handle, smoke-tight, self-closing
- Prepared for profile half cylinder
- Optionally with fire-proof window

Types of delivery

- Completely assembled
- As a kit for self-assembly

Subdistribution boards

Fire protection housing

Electric functional unit in compact design/fire resistance 90 minutes



Electric functional unit in compact design KEB, IP54 ±



Depth 586 mm

Housing in compact design

Main features

- Fire resistance 90 minutes, fire resistant
- EI 90/F 90 classification walls/ceiling
- T 90-RS classification of the door
- Smoke-tight door, tested for permanent function, self-closing
- IP54 protection class

Structure

- Functional unit with high mechanical and chemical resistance in two standard sizes
- Fire protection through the creation of a separate fire compartment
- Free-standing construction
- Door opening angle 180 degrees, self-closing
- De-attachable door, handle set in aluminum silver
- Locking via 3-latch lock for profile half cylinder
- Door with all-round smoke and fire protection seals, self-foaming in case of fire
- Fire-resistant, smoke-tight supply/exhaust air system per NW 100 mm for connection to on-site ventilation system
- Fire resistant cable sheaths 135 mm diameter
- Base mounted, included in scope of delivery

Material

- Material with surface coating, classified A2 - s1, d0: non-flammable
- Standard surface HPL is chemically highly resistant and insensitive to moisture
- Standard color light gray, similar to RAL 7035, edges and chamfers are darkened

Additional equipment/options

- Fire-proof viewing window in the door
- Additional cable entry point

Subdistribution boards

Fire protection housing

Functional units/base



KEB28R

Field width	External dimensions in mm H x W x D	Door hinge	Type code	Order code	Price 1 piece	Weight 1 piece kg
FB						
Completely mounted						
2-field width	2501 x 894 x 586	right	KEB28R	2CPX042930R9999		662
	2501 x 894 x 586	left	KEB28L	2CPX042931R9999		662
As a kit						
2-field width	2501 x 894 x 586	right	KEB28RB	2CPX042932R9999		662
	2501 x 894 x 586	left	KEB28LB	2CPX042933R9999		662



KEB38R

Field width	External dimensions in mm H x W x D	Door hinge	Type code	Order code	Price 1 piece	Weight 1 piece kg
Completely mounted						
3-field width	2501 x 1144 x 586	right	KEB38R	2CPX042934R9999		692
	2501 x 1144 x 586	left	KEB38L	2CPX042935R9999		692
As a kit						
3-field width	2501 x 1144 x 586	right	KEB38RB	2CPX042936R9999		692
	2501 x 1144 x 586	left	KEB38LB	2CPX042937R9999		692



BSR2



BSR3

Article	Dimensions in mm H x W x D	Type code	Order code	Price 1 piece	Weight 1 piece kg
Base* Width 810 mm 2-field width	84 x 894 x 586	BSR2	2CPX042938R9999		50
Base* Width 1060 mm 3-field width	84 x 1144 x 586	BSR3	2CPX042939R9999		65

* Bases are included in the scope of delivery of the functional units.
>For dimensions, see page 125

Subdistribution boards

Fire protection housing

Terminal boxes without terminal block

Material
+ Decor
A2 Class

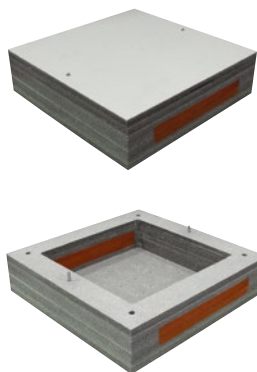
Fire
Resistance
30 Min.

Fire
Resistance
90 Min.


Terminal boxes without terminal block KF, IP41

Housing for wall or ceiling mounting

Mounting material for ceiling mounting available on request



Main features

- Material with A2 surface coating - non-combustible, tested in accordance with DIN 4102-1
- Fire resistance F30/F90, tested in accordance with DIN 4102-2
- Function integrity 30/90 minutes in accordance with DIN 4102-12
- Protection class in accordance with IP41 
- Smoke-tight

Structure


- Mounting via 4 holes in the frame corners using the enclosed mounting material
- Mounting to wall or ceiling possible
- Cover screwed with two self-locking nuts
- Cover provided with a handle groove
- Cable entry points from 2 sides
- In case of fire, the cable sheath automatically foams up
- Easy mounting of the fixtures using pre-drilled holes
- Easy insertion and clamping of the cables thanks to a detachable frame plate system (layer structure)

Surface

- Color light gray - similar to RAL 7035, with colored edges
- High chemical resistance
- High mechanical strength and stability

Subdistribution boards

Fire protection housing

Terminal boxes without terminal block, IP41 



Terminal boxes without terminal block, IP41

Internal dimensions in mm H × W × D	External dimensions in mm H × W × D	Cable entry point		Type code	Order code	Price 1 piece	Weight 1 piece kg
		W × H	Number				
200 × 200 × 84	350 × 350 × 128	50 × 170	2	KF35140	2CPX041092R9999		17
300 × 300 × 84	450 × 450 × 128	50 × 270	2	KF45140	2CPX041093R9999		25
400 × 400 × 84	550 × 550 × 128	50 × 370	2	KF55140	2CPX041094R9999		34



Terminal boxes without terminal block, IP41

Internal dimensions in mm H × W × D	External dimensions in mm H × W × D	Cable entry point		Type code	Order code	Price 1 piece	Weight 1 piece kg
		W × H	Number				
200 × 200 × 84	350 × 350 × 148	50 × 170	2	KF35161	2CPX041098R9999		21
300 × 300 × 84	450 × 450 × 148	50 × 270	2	KF45161	2CPX041099R9999		31
400 × 400 × 84	550 × 550 × 148	50 × 370	2	KF55161	2CPX041100R9999		43

Subdistribution boards

Fire protection housing

Facing doors

Material
+ Decor
A2 Class

Fire
Resistance
30 Min.

Fire
Resistance
90 Min.

Facing doors VF IP54

- Fire-resistant and smoke-tight seals
- Panel material with surface coating - non-flammable
- Fire resistance 30 and 90 minutes
- Mounting on different wall constructions

Fire protection facing doors are intended for the separation of existing flush-mounted wall distributions from escape and rescue paths (fire load insulation in accordance with MLAR). Likewise, functional integrity in case of fire is guaranteed if the appropriate proof can be provided.



Subdistribution boards

Fire protection housing

Facing doors

**Material
+ Decor
A2 Class**

**Fire
Resistance
30 Min.**

**Fire
Resistance
90 Min.**



Tested material with surface coating DIN 4102 Part 1; material class A2



Integrated frame with mounting points



Removable stainless steel hinges



Fire and smoke protection seal all around



2-point locking using rod lock



Swivel handle in stainless steel look with double bit half-cylinder

In the standard version, the distributor may protrude 20 mm out of the wall at the most. Old doors should be de-attached and removed. The facing door must be at least 115 mm above the existing distributor, i.e. this covering dimension plus the door thickness, due to the opening angle, must be maintained around the existing distributor.

If the current distributor protrudes more than 20 mm from the wall, an additional extension frame can be ordered for the facing door.

Subdistribution boards

Fire protection housing

Facing doors



Facing doors VF, IP54



Door depth for 30 minutes 51 mm

Door depth for 90 minutes 71 mm

Door mounted in front of existing flush-mounted distributors

Function

- Material with A2 surface coating - non-combustible, tested in accordance with DIN 4102-1
- Fire resistance F30/F90, tested in accordance with DIN 4102-2
- Fire load insulation 30/90 minutes in accordance with DIN 4102-11
- Function integrity 30/90 minutes in accordance with DIN 4102-12
- Smoke-tight
- Protection class in accordance with IP54

Structure

- 1-wing door
- Door opening angle approx. 180 degrees with F30 version, approx. 150 degrees with F90 version
- Door hinge on right
- Surrounding wall compensating frame (W x D: 115 x 28 mm) with mounting holes
- Doors opening onto the frame
- Locking with swivel handle in metal look with DIN half cylinder
- 2-point locking with rod lock
- Stainless steel hinges with push-out axle pin for de-attaching the door wings
- Mounting material: Frame dowels, screws included in scope of delivery

Surface

- Color light gray - similar to RAL7035, with colored edges
- High chemical resistance
- High mechanical strength and stability, Brinell hardness 50 N/mm²
- High material density 1,450 kg/m³
- Surface characteristics based on DIN EN 438-2

Additional equipment/options

- Additional compensating frame for larger covers
- A variety of decorative surfaces
- Door hinge on left

Subdistribution boards

Fire protection housing

Facing doors, IP54, door depth 51 mm and 71 mm



Facing doors, IP54, door depth 51 mm

Overall height	Field width	Door hinge	Internal dimensions in mm H × W × D	External dimensions in mm H × W × D	Type code	Order code	Price 1 piece	Weight 1 piece kg
	FB							
0	1	right	665 × 345 × 0	895 × 575 × 51	1/0VF10	2CPX041048R9999		30
0	2	right	665 × 565 × 0	895 × 795 × 51	2/0VF10	2CPX041049R9999		37
1	2	right	815 × 565 × 0	1045 × 795 × 51	2/1VF10	2CPX041050R9999		42
1	3	right	815 × 815 × 0	1045 × 1045 × 51	3/1VF10	2CPX041051R9999		53
2	2	right	965 × 565 × 0	1195 × 795 × 51	2/2VF10	2CPX041052R9999		47
2	3	right	965 × 815 × 0	1195 × 1045 × 51	3/2VF10	2CPX041053R9999		60
2	4	Double door	965 × 1065 × 0	1195 × 1295 × 51	4/2VF20	2CPX041057R9999		72
3	2	right	1115 × 565 × 0	1345 × 795 × 51	2/3VF10	2CPX043397R9999		58
3	3	right	1115 × 815 × 0	1345 × 1045 × 51	3/3VF10	2CPX043398R9999		71
3	4	Double door	1115 × 1065 × 0	1345 × 1295 × 51	4/3VF20	2CPX041058R9999		80
4	2	right	1265 × 565 × 0	1495 × 795 × 51	2/4VF10	2CPX041054R9999		58
4	3	right	1265 × 815 × 0	1495 × 1045 × 51	3/4VF10	2CPX041055R9999		73
4	4	Double door	1265 × 1065 × 0	1495 × 1295 × 51	4/4VF20	2CPX041059R9999		88
5	2	right	1415 × 565 × 0	1645 × 795 × 51	2/5VF10	2CPX043399R9999		70
5	3	right	1415 × 815 × 0	1645 × 1045 × 51	3/5VF10	2CPX043400R9999		86
5	4	Double door	1415 × 1065 × 0	1645 × 1295 × 51	4/5VF20	2CPX043401R9999		107
8	2	right	1865 × 565 × 0	2095 × 795 × 51	2/8VF10	2CPX041056R9999		79
8	4	Double door	1865 × 1065 × 0	2095 × 1295 × 51	4/8VF20	2CPX041060R9999		119



Facing doors, IP54, door depth 51 mm

Overall height	Field width	Door hinge	Internal dimensions in mm H × W × D	External dimensions in mm H × W × D	Type code	Order code	Price 1 piece	Weight 1 piece kg
	FB							
0	1	right	665 × 345 × 22	895 × 575 × 71	1/0VF11	2CPX041061R9999		42
0	2	right	665 × 565 × 22	895 × 795 × 71	2/0VF11	2CPX041062R9999		58
1	2	right	815 × 565 × 22	1045 × 795 × 71	2/1VF11	2CPX041063R9999		67
1	3	right	815 × 815 × 22	1045 × 1045 × 71	3/1VF11	2CPX041064R9999		86
2	2	right	965 × 565 × 22	1195 × 795 × 71	2/2VF11	2CPX041065R9999		76
2	3	right	965 × 815 × 22	1195 × 1045 × 71	3/2VF11	2CPX041066R9999		97
2	4	Double door	965 × 1065 × 22	1195 × 1295 × 71	4/2VF21	2CPX041070R9999		118
3	1	right	1115 × 345 × 22	1345 × 575 × 71	1/3VF11	2CPX043402R9999		70
3	2	right	1115 × 565 × 22	1345 × 795 × 71	2/3VF11	2CPX043403R9999		90
3	3	right	1115 × 815 × 22	1345 × 1045 × 71	3/3VF11	2CPX043404R9999		113
3	4	Double door	1115 × 1065 × 22	1345 × 1295 × 71	4/3VF21	2CPX041071R9999		132
4	2	right	1265 × 565 × 22	1495 × 795 × 71	2/4VF11	2CPX041067R9999		94
4	3	right	1265 × 815 × 22	1495 × 1045 × 71	3/4VF11	2CPX041068R9999		120
4	4	Double door	1265 × 1065 × 22	1495 × 1295 × 71	4/4VF21	2CPX041072R9999		146
8	2	right	1865 × 565 × 22	2095 × 795 × 71	2/8VF11	2CPX041069R9999		129
8	4	Double door	1865 × 1065 × 22	2095 × 1295 × 71	4/8VF21	2CPX041073R9999		201

Important notes

Minimum internal dimension of facing doors = niche dimension of the flush-mounted wall box without flush-mounted frame

Facing door swings over the frame on the hinge side => leave at least 40 mm (see page 123)

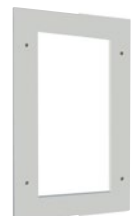
Subdistribution boards

Fire protection housing

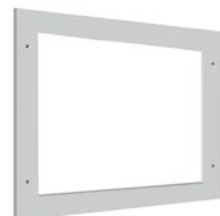
Extension frame for facing doors

Material
+ Decor
A2 Class

Fire
Resistance
90 Min.



2/2EF11



4/2EF21

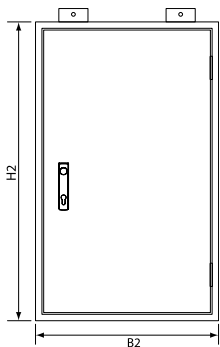
Overall height	Field width	Internal dimensions in mm	External dimensions in mm	Type code	Order code	Price 1 piece	Weight 1 piece
FB	H x W x D	H x W x D	H x W x D				kg
Extension frame for 1-wing doors							
0	1	665 × 345 × 22	895 × 575 × 22	1/0EF11	2CPX041074R9999		10
0	2	665 × 565 × 22	895 × 795 × 22	2/0EF11	2CPX041075R9999		12
1	2	815 × 565 × 22	1045 × 795 × 22	2/1EF11	2CPX041076R9999		13
1	3	815 × 815 × 22	1045 × 1045 × 22	3/1EF11	2CPX041077R9999		15
2	2	965 × 565 × 22	1195 × 795 × 22	2/2EF11	2CPX041078R9999		14
2	3	965 × 815 × 22	1195 × 1045 × 22	3/2EF11	2CPX041079R9999		16
4	2	1265 × 565 × 22	1495 × 795 × 22	2/4EF11	2CPX041080R9999		17
4	3	1265 × 815 × 22	1495 × 1045 × 22	3/4EF11	2CPX041081R9999		19
8	2	1865 × 565 × 22	2095 × 795 × 22	2/8EVF1	2CPX041082R9999		22
Extension frame for 2-wing doors							
2	4	965 × 1065 × 22	1195 × 1295 × 22	4/2EF21	2CPX041083R9999		18
3	4	1115 × 1065 × 22	1345 × 1295 × 22	4/3EF21	2CPX041084R9999		20
4	4	1265 × 1065 × 22	1495 × 1295 × 22	4/4EF21	2CPX041085R9999		21
8	4	1865 × 1065 × 22	2095 × 1295 × 22	4/8EF21	2CPX041086R9999		26

Subdistribution boards

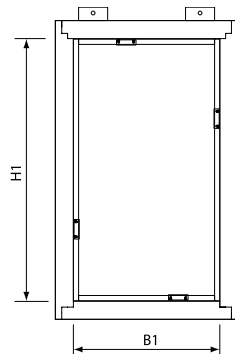
Flush-mounted wall housing

Dimensions, weights, power loss

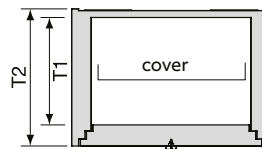
Front view



Internal view



Top view



Material
+ Decor
A2 Class

Fire
Resistance
30 Min.

Permissible power dissipation (W) at 25 °C ambient temperature	Internal dimensions in mm	External dimensions in mm	Type code	Order code	Price 1 piece	Weight 1 piece kg
W	H1 × W1 × D1	H2 × W2 × D2				
11	600 × 250 × 138	682 × 332 × 205	1/0UF2020			41
11	600 × 250 × 138	682 × 332 × 205	1/0UF2120			41
22	600 × 500 × 138	682 × 582 × 205	2/0UF2020			58
22	600 × 500 × 138	682 × 582 × 205	2/0UF2120			58
16	900 × 250 × 138	982 × 332 × 205	1/2UF2020			55
16	900 × 250 × 138	982 × 332 × 205	1/2UF2120			55
32	900 × 500 × 138	982 × 582 × 205	2/2UF2020			80
32	900 × 500 × 138	982 × 582 × 205	2/2UF2120			80

Material
+ Decor
A2 Class

Fire
Resistance
90 Min.

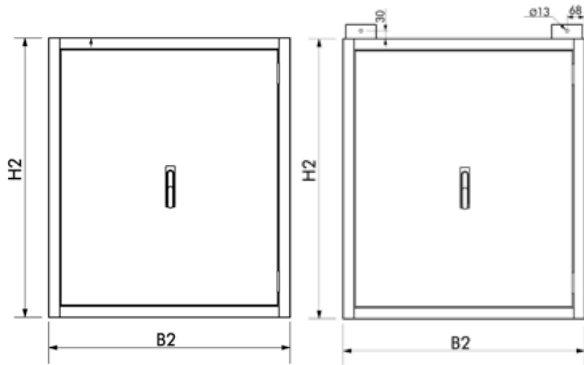
Permissible power dissipation (W) at 25 °C ambient temperature	Internal dimensions in mm	External dimensions in mm	Type code	Order code	Price 1 piece	Weight 1 piece kg
W	H1 × W1 × D1	H2 × W2 × D2				
9	600 × 250 × 118	682 × 332 × 205	1/0UF2021			49
9	600 × 250 × 118	682 × 332 × 205	1/0UF2121			49
19	600 × 500 × 118	682 × 582 × 205	2/0UF2021			70
19	600 × 500 × 118	682 × 582 × 205	2/0UF2121			70
14	900 × 250 × 118	982 × 332 × 205	1/2UF2021			67
14	900 × 250 × 118	982 × 332 × 205	1/2UF2121			67
28	900 × 500 × 118	982 × 582 × 205	2/2UF2021			99
28	900 × 500 × 118	982 × 582 × 205	2/2UF2121			99

Subdistribution boards

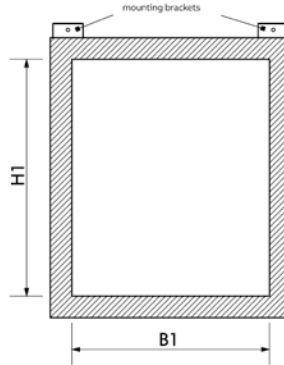
Sheath housing/cooling shutters

Dimensions, weights, power loss

Front view



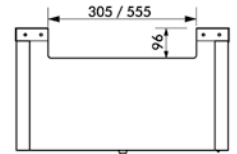
Internal view



Side view



Top view



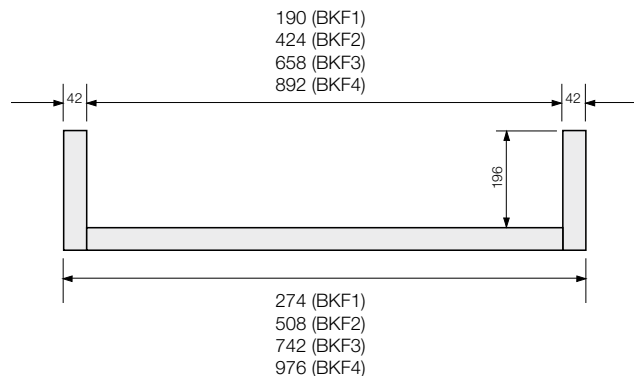
Permissible power dissipation (W) at 25 °C ambient temperature	Internal dimensions in mm	External dimensions in mm	Type code	Order code	Price 1 piece	Weight 1 piece kg
W	H1 × W1 × D1	H2 × W2 × D2				
16	665 × 354 × 240	829 × 518 × 340	1/OMF300			85
18	815 × 354 × 240	979 × 518 × 340	1/1MF300			97
24	815 × 604 × 240	979 × 768 × 340	2/1MF300			124
23	1115 × 354 × 240	1279 × 518 × 340	1/3MF300			121



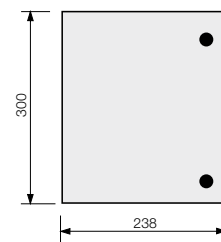
Permissible power dissipation (W) at 25 °C ambient temperature	Internal dimensions in mm	External dimensions in mm	Type code	Order code	Price 1 piece	Weight 1 piece kg
W	H1 × W1 × D1	H2 × W2 × D2				
16	665 × 354 × 240	829 × 518 × 340	1/OMF301			89
18	815 × 354 × 240	979 × 518 × 340	1/1MF301			101
24	815 × 604 × 240	979 × 768 × 340	2/1MF301			127
23	1115 × 354 × 240	1279 × 518 × 340	1/3MF301			125

Cooling shutters for cables

Top view



Side view

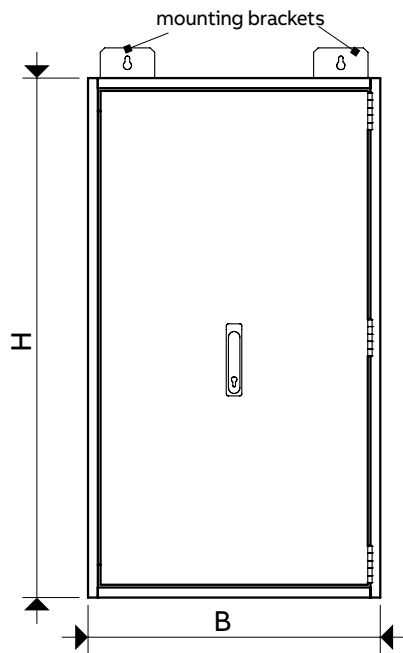


Subdistribution boards

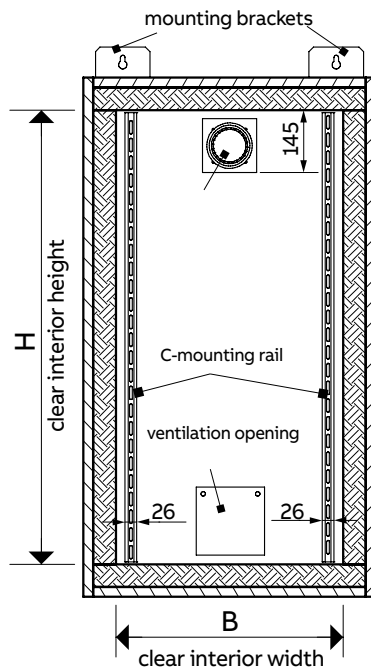
Surface-mount wall housing

Dimensions, weights, power loss

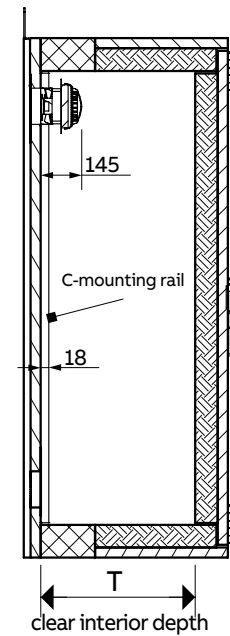
Front view



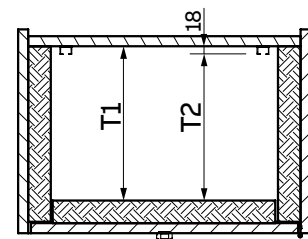
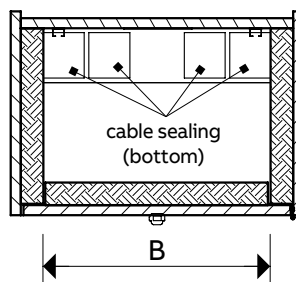
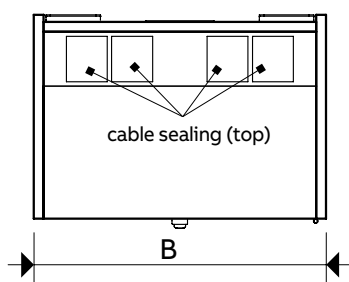
Internal view



Side view



Top view



External depth of housing	349 mm
Internal depth of housing T1	240 mm
Usable internal depth T2	222 mm

Subdistribution boards

Surface-mount wall housing

Dimensions, weights, power loss

Power dissipation Pv max. (W)	Internal dimensions in mm H1 × W1 × D1	External dimensions in mm H2 × W2 × D2	Type code	Order code	Price 1 piece	Weight 1 piece kg
237	598 × 398 × 349	454 × 254 × 240	1/00AF302			51
223	598 × 648 × 349	454 × 504 × 240	2/00AF302			71
214	748 × 398 × 349	604 × 254 × 240	1/0AF302			62
232	748 × 648 × 349	604 × 504 × 240	2/0AF302			85
220	898 × 398 × 349	754 × 254 × 240	1/1AF302			73
242	898 × 648 × 349	754 × 504 × 240	2/1AF302			99
226	1048 × 398 × 349	904 × 254 × 240	1/2AF302			83
251	1048 × 648 × 349	904 × 504 × 240	2/2AF302			114
232	1198 × 398 × 349	1054 × 254 × 240	1/3AF302			94
261	1198 × 648 × 349	1054 × 504 × 240	2/3AF302			128
290	1198 × 898 × 349	1054 × 754 × 240	3/3AF302			163
271	1348 × 648 × 349	1204 × 504 × 240	2/4AF302			143
280	1498 × 648 × 349	1354 × 504 × 240	2/5AF302			157

> Recommended approximate values for mounting and installation on a fire resistant wall. A derating of the electrical equipment must be considered.

Compliance with the limit overheating temperature in accordance with the valid DIN VDE 61439-1 must be observed.

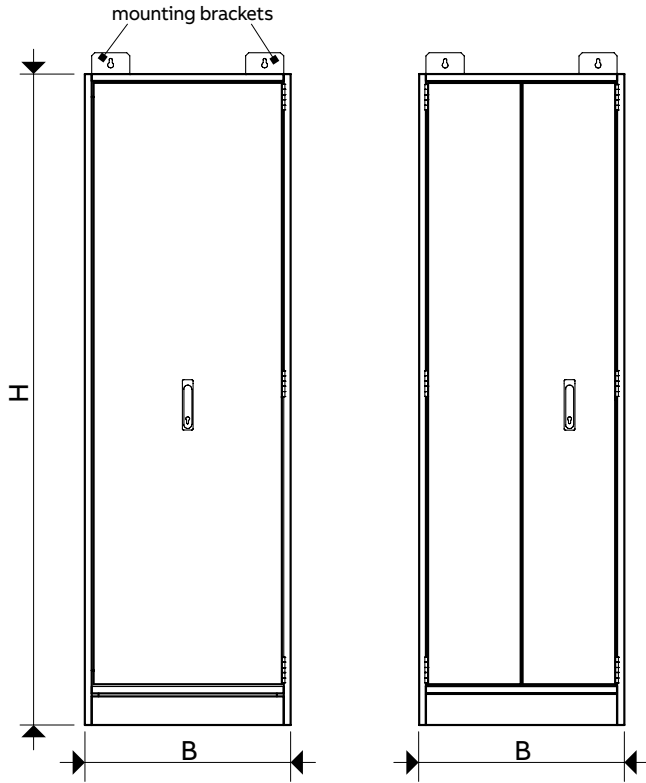
> Power loss in normal operation at $\Delta T = 13$ K (inside 35 °C, outside 22 °C), with fan

Subdistribution boards

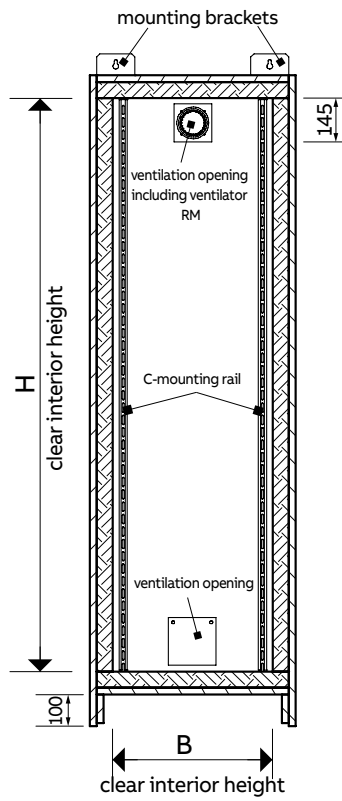
Standing housing

Dimensions, weights, power loss

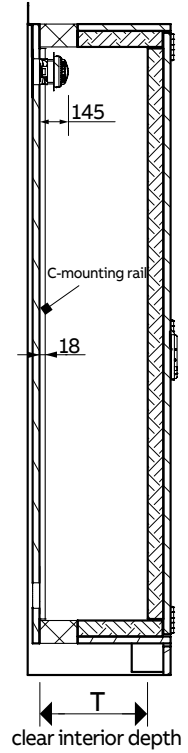
Front view



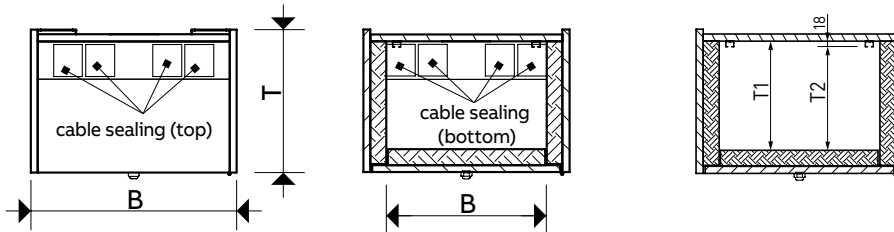
Internal view



Side view



Top view



External depth of housing	349 mm
Internal depth of housing T1	240 mm
Usable internal depth T2	222 mm

Subdistribution boards

Surface-mount wall housing

Dimensions, weights, power loss

Power dissipation P _v max. (W)	Internal dimensions in mm H1 × W1 × D1	External dimensions in mm H2 × W2 × D2	Type code	Order code	Price 1 piece	Weight 1 piece kg
261	2048 × 398 × 349	1804 × 254 × 240	1/8SF302			152
309	2048 × 648 × 349	1804 × 504 × 240	2/8SF302			206
357	2048 × 898 × 349	1804 × 754 × 240	3/8SF302			259
267	2198 × 398 × 349	1954 × 254 × 240	1/9SF302			163
318	2198 × 648 × 349	1954 × 504 × 240	2/9SF302			220
370	2198 × 898 × 349	1954 × 754 × 240	3/9SF302			278

> Recommended approximate values for mounting and installation on a fire resistant wall. A derating of the electrical equipment must be considered.

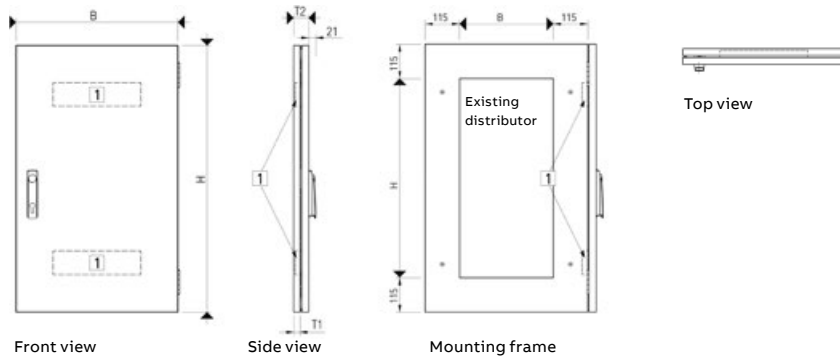
Compliance with the limit overheating temperature in accordance with the valid DIN VDE 61439-1 must be observed.

> Power loss in normal operation at ΔT = 13 K (inside 35 °C, outside 22 °C), with fan

Subdistribution boards

Facing doors

Dimensions

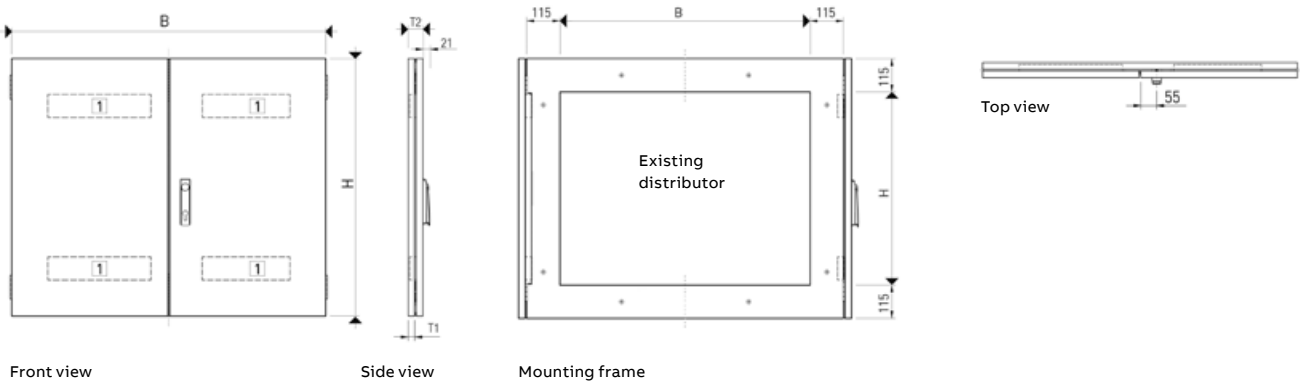


Front view

Side view

Mounting frame

Top view

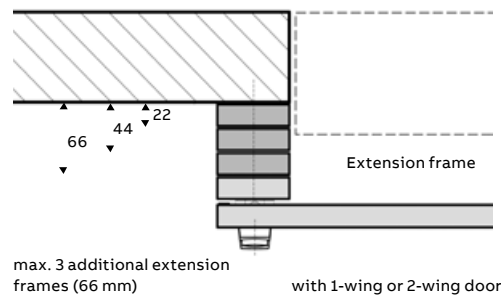


Front view

Side view

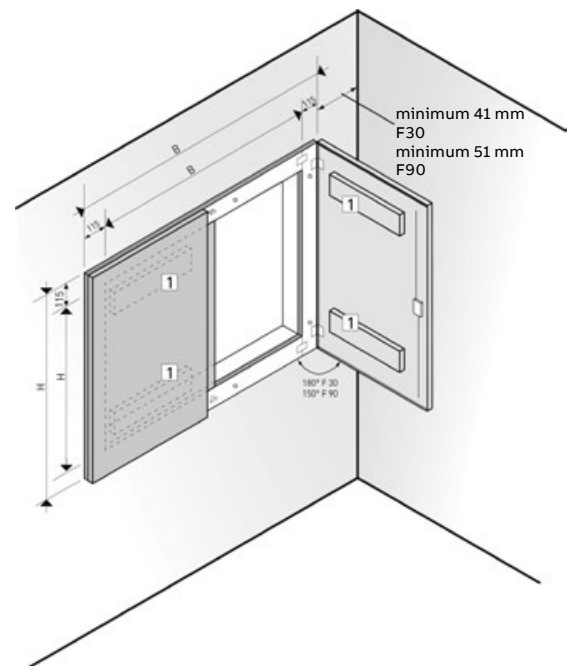
Mounting frame

Top view



max. 3 additional extension frames (66 mm)

with 1-wing or 2-wing door



Facing door with mounting frame
Door swivels over the frame on the hinge side.
Leave at least 41/51 mm distance from the wall.

1 Bar above and below on the inside of the door, only for 30-minute design.

Subdistribution boards

Facing doors

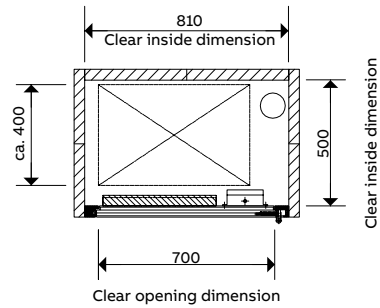
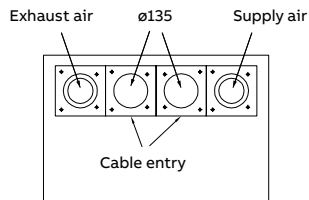
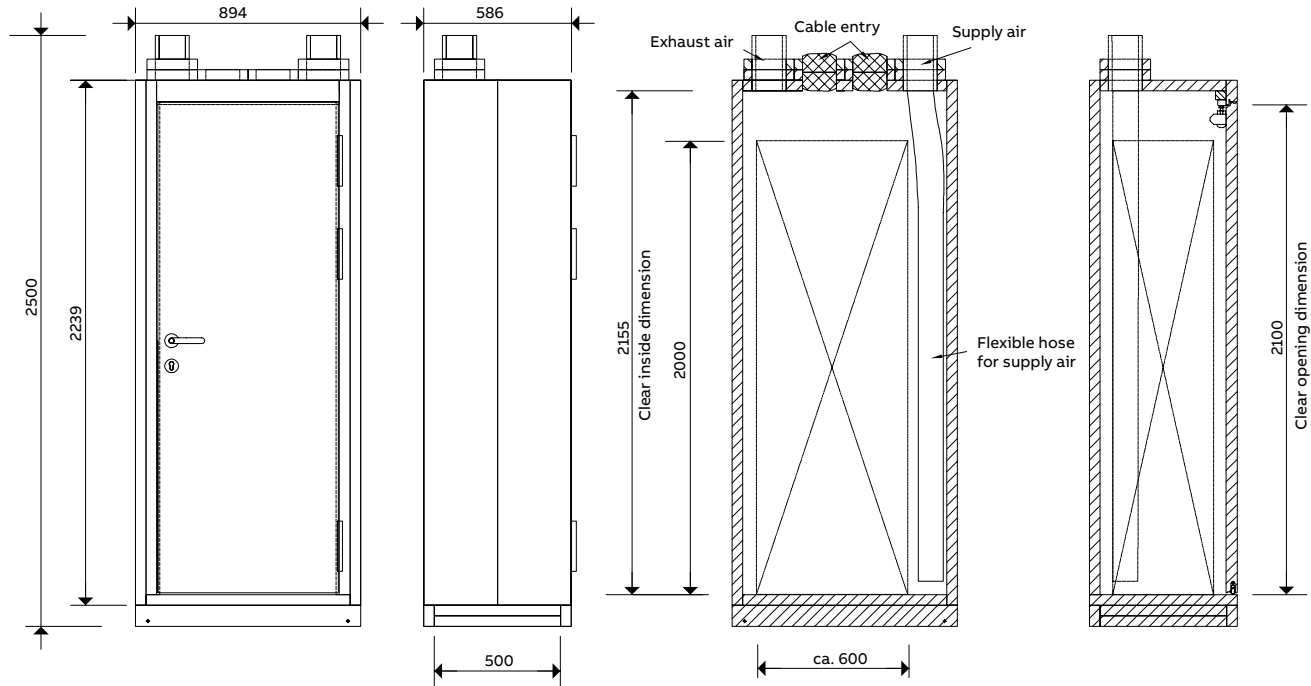
Dimensions

Type code	Internal dimensions in mm			External dimensions in mm		
	H1	B1	D1	H1	B1	D1
1/0VF10	665	345	0	895	575	51
2/0VF10	665	565	0	895	795	51
2/1VF10	815	565	0	1045	795	51
3/1VF10	815	815	0	1045	1045	51
2/2VF10	965	565	0	1195	795	51
3/2VF10	965	815	0	1195	1045	51
2/3VF10	1115	565	0	1345	795	51
3/3VF10	1115	815	0	1345	1045	51
2/4VF10	1265	565	0	1495	795	51
3/4VF10	1265	815	0	1495	1045	51
2/5VF10	1415	565	0	1645	795	51
3/5VF10	1415	815	0	1645	1045	51
2/8VF10	1865	565	0	2095	795	51
1/0VF11	665	345	22	895	545	71
2/0VF11	665	565	22	895	795	71
2/1VF11	815	565	22	1045	795	71
3/1VF11	815	815	22	1045	1045	71
2/2VF11	965	565	22	1195	795	71
3/2VF11	965	815	22	1195	1045	71
1/3VF11	1115	345	22	1345	575	71
2/3VF11	1115	565	22	1345	795	71
3/3VF11	1115	815	22	1345	1045	71
2/4VF11	1265	565	22	1495	795	71
3/4VF11	1265	815	22	1495	1045	71
2/8VF11	1865	565	22	2095	795	71
4/2VF20	965	1065	0	1195	1295	51
4/3VF20	1115	1065	0	1345	1295	51
4/4VF20	1265	1065	0	1495	1295	51
4/5VF20	1415	1065	0	1645	1295	51
4/8VF20	1865	1065	0	2095	1295	51
4/2VF21	965	1065	22	1195	1295	71
4/3VF21	1115	1065	22	1345	1295	71
4/4VF21	1265	1065	22	1495	1295	71
4/8VF21	1865	1065	22	2095	1295	71

Subdistribution boards

Electric functional unit in compact design

Dimensions for 2-field width



Power loss:

To calculate the allowable power dissipation for the low-voltage switchgear assemblies in the compact electric functional unit, assume an ambient temperature of 35 °C.

Subdistribution boards

Electric functional unit in compact design

Dimensions for 3-field width

