

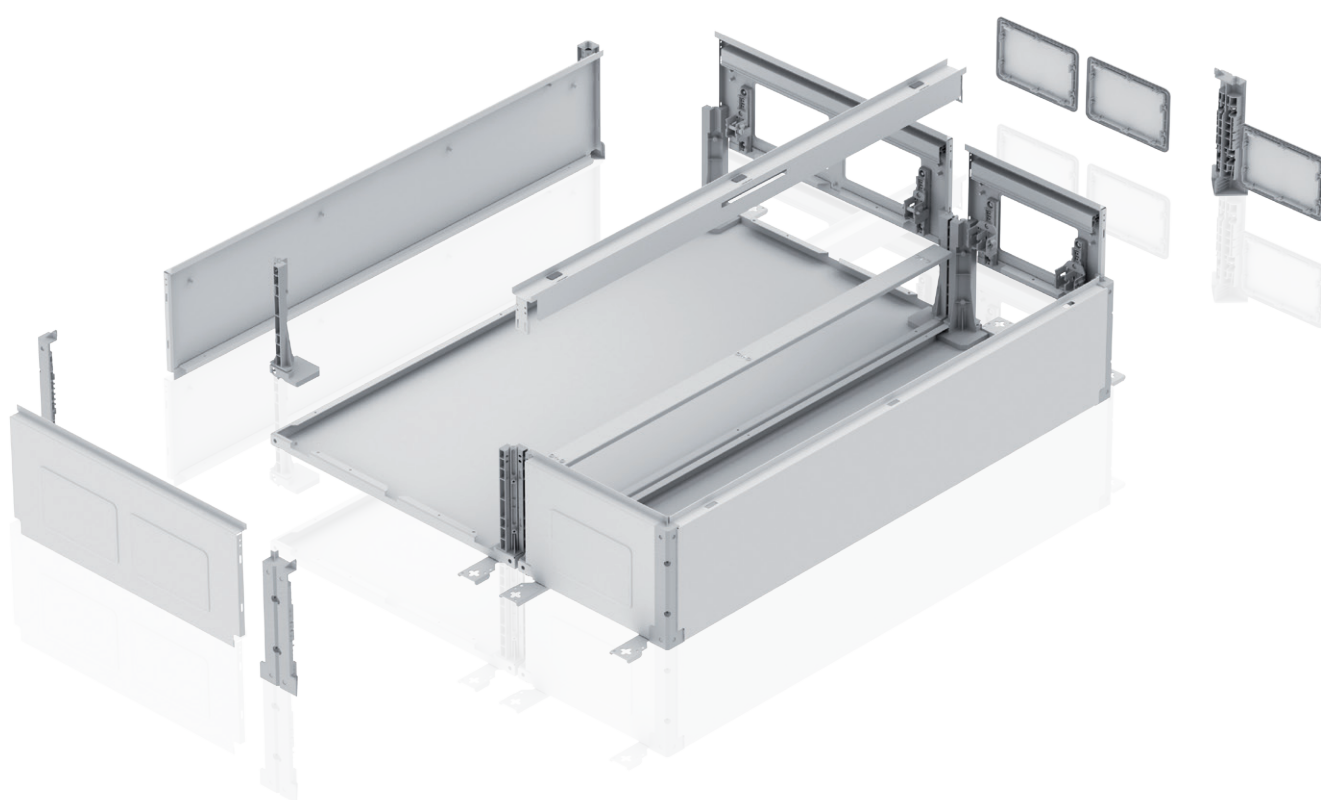


03/2016

System pro *E* energy TwinLine S 43

TwinLine S 43

The new modular wall-mounting and floor-standing cabinets



TwinLine S 43

The new modular wall-mounting and floor-standing cabinets

With the new TwinLine S 43 system, ABB offers a tailored and proven concept of modular wall-mounting and floor-standing cabinets.

This fully comprehensive product range includes two cabinet types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application. All cabinets are designed according to IEC 61439. The modular system is simple in planning, quick in assembly and safe in application.

A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine series. The flanges can be attached without the need of tools thanks to the handy push and lock technology.

All TwinLine cabinets can be connected in both, horizontally and vertically directions. Uprights for side-by-side positioning and connection sets for stacking the cabinets can be easily installed. The new plinth concept provides a safe transport in the workshop and on-site. The standard heights of 50 mm and 100 mm can be stacked and combined in order to fulfil installation needs.

TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180-degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility. The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly.

With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The internal configuration system fits in all TwinLine S 43 cabinets. CombiLine S provide a time-saving installation due to hook-in technology and a simple closure system for covers with the ¼ turn quick-lock. With its new mounting concept for the CombiLine S system, TwinLine provides more flexibility and access for installation and wiring. There is also the option to have continuous mounting plates that can be adjusted in depth.

Product benefits

- Innovative flange technology
- Significantly more usable area for cable entry
- All flanges are compatible with all flange openings and knockouts within the entire TwinLine system
- Simple connection of all cabinets in both, horizontally and vertically
- Modular plinth concept
- Optimal accessibility and ease of installation thanks to 180 degree door opening angle
- Wide range of the new modular distribution panel system, called CombiLine S
- Simplified accessories concept for reduced inventory levels
- Speedy and concise planning and calculations with the software

TwinLine S 43

The complete cabinet system in all sizes

With the new TwinLine S 43 system, ABB offers a tailored and future-proof concept of modular wall-mounting and floor-standing cabinets. This fully comprehensive product range includes two cabinet types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application.

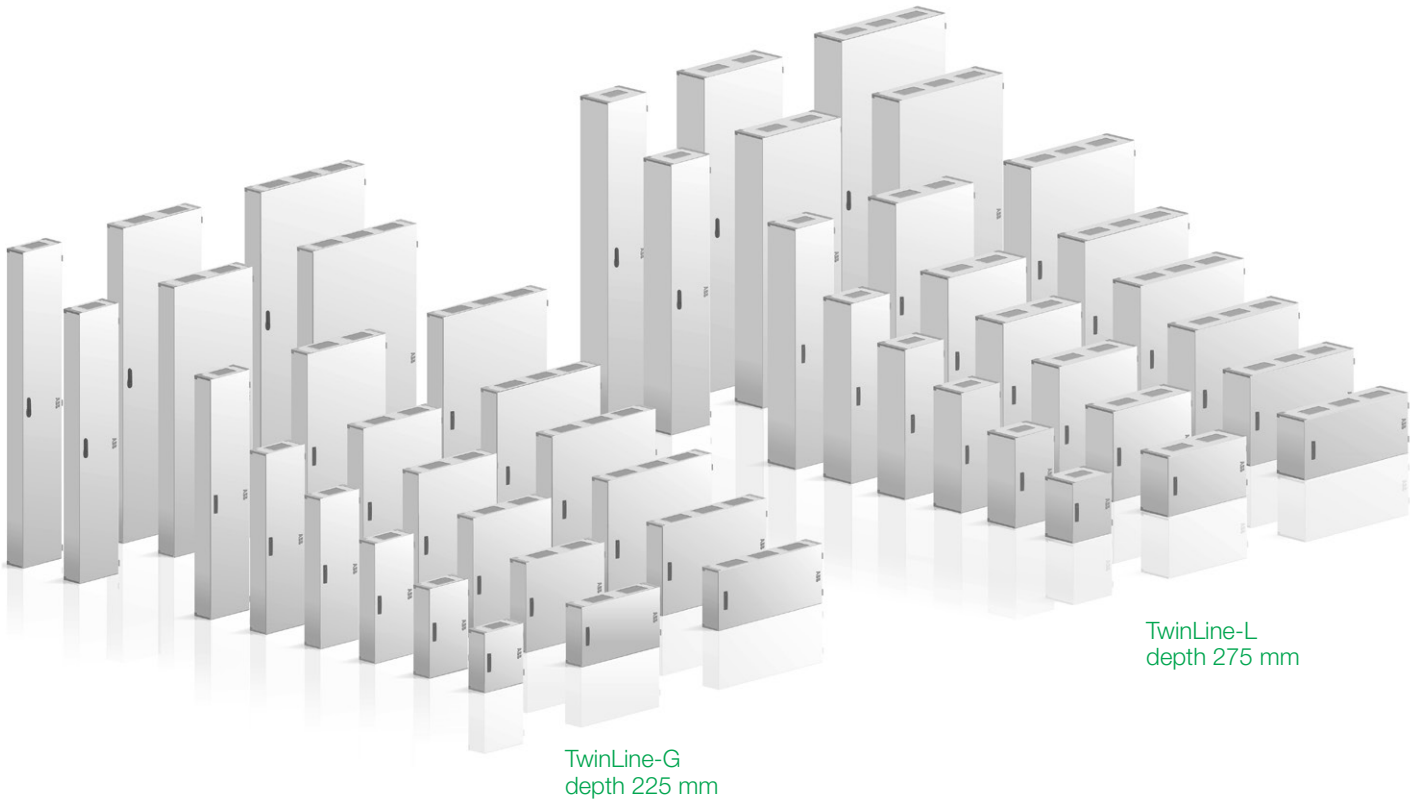
All cabinets are designed according to IEC 61439. The modular system is simple in planning, quick in assembly and safe in application. Highlights such as the innovative flange technology, optimal accessibility, ease of cabinet connection, the modular plinth concept and a flexible assembly of the new internal configuration, guarantee a modern energy distribution.



TwinLine S 43

The complete cabinet system in all sizes

- Simple in planning
- Quick in assembly
- Safe in application

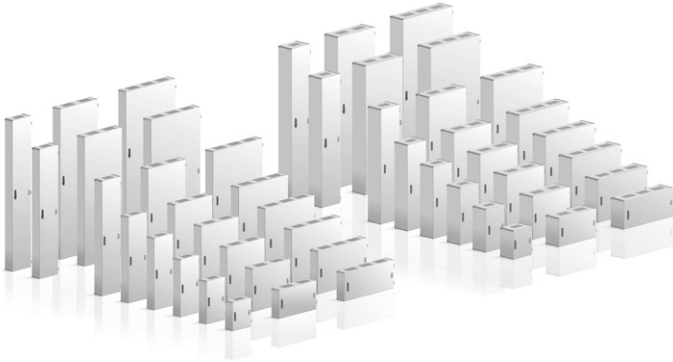


Cabinet type	TwinLine-G			TwinLine-L		
Degree of protection	up to IP43			up to IP43		
Protection class	⚡			⚡		
Depth	225			275		
Width	300	600	800	300	600	800
Height	400	600	800	400	600	800
	600	800	1000	600	800	1000
	800	1000	1200	800	1000	1200
	1000	1200	1400	1000	1200	1400
	1200	1400	1600	1200	1400	1600
	1400	1600	1800	1400	1600	1800
	1600	1800	2000	1600	1800	2000

> Dimensions in mm

TwinLine S 43

Product benefits



The complete cabinet system in all sizes

The fully comprehensive product range of modular wall-mounting and floor-standing cabinets includes the types TwinLine-G (depth of 225 mm) and TwinLine-L (depth of 275 mm) and provides a solution for every application. All cabinets are designed according to IEC 61439. The modular system is simple in planning, quick in assembly and safe in application.



Innovative cable entry

A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine cabinets. The flanges can be attached without the need of tools thanks to the handy push and lock technology.



Simple connection in series of all cabinets

All TwinLine cabinets can be connected in both, horizontally and vertically directions. Uprights for side-by-side positioning and connection sets for stacking the cabinets can be easily installed.

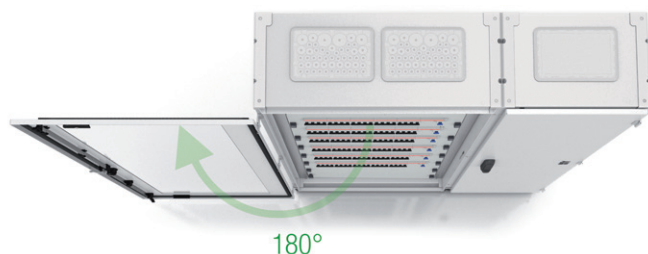


Time-saving plinth installation and safe transport

The new plinth concept provides a safe transport in the workshop and on-site. The plinth contains knockouts and has the possibility to install wiring ducts for cable support. The standard heights of 50 mm and 100 mm can be stacked and combined in order to fulfil installation needs.

TwinLine S 43

Product benefits



Optimal accessibility and ease of installation

TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180-degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility.



Removable frame for CombiLine S covers

With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly.



Flexibility in the assembling of internal configuration

With its new mounting concept for the CombiLine S system, TwinLine provides more flexibility and access for installation and wiring also outside of the cabinet. There is also the option to have continuous mounting plates that can be adjusted in depth.



The right internal configuration for every type of application

The wide range of the internal configuration system CombiLine S fits in all TwinLine S 43 cabinets. CombiLine S provides a time-saving installation due to hook-in technology and a simple closure system for covers with the ¼ turn quick-lock.

TwinLine S 43

Innovative cable entry

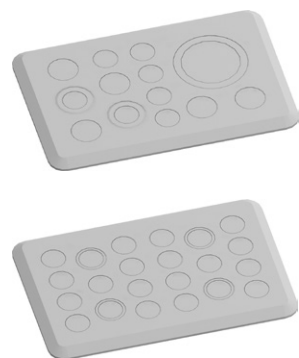
The usable cable entry area is one of largest cable entries available on the market. A wide range of flange types provides the right solution for every application. All flanges are suited for all flange openings and knockouts of the complete TwinLine cabinets. The flanges can be attached without the need of tools thanks to the handy push and lock technology.

- All flanges are compatible with all flange openings and knockouts within the entire TwinLine system
- Wide range of new flanges
- Tool-free flange installation thanks to push and lock technology



Membrane flange

- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology
- Optimal cable entry by a combination of hard and soft components
- Additional fixing and centring

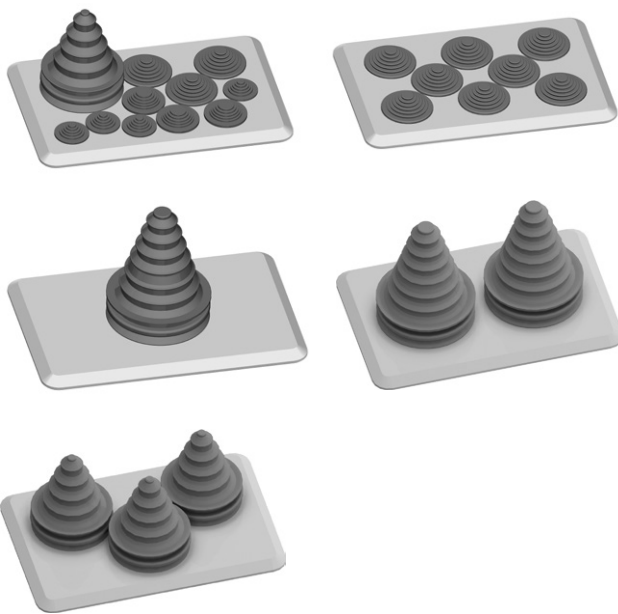


Flange for M screw fittings

- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology
- With two different hole patterns

TwinLine S 43

Innovative cable entry



Flange with cable sleeves

- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology



Closing flange

- 2-component flange with integrated seal, material: plastic
- Tool-free installation thanks to push and lock technology
- Can be used as closing flange or for customization, e.g. for cable sleeves or screw fittings



Closing flange

- With foam seal around perimeter, material: sheet steel 2 mm
- Continuous protective earth connection via flange fastener
- Can be used as closing flange or for customization, e.g. for cable sleeves or screw fittings

TwinLine S 43

Simple connection in series of all cabinets

All TwinLine cabinets can be connected in both, horizontally and vertically directions. Uprights for side-by-side positioning and connection sets for stacking the cabinets can be easily installed.



TwinLine S 43

Time-saving plinth assembly and safe transport

The new, innovative cabinet plinth literally forms the foundation of the TwinLine floor-standing cabinets while providing the perfect answer to the requests from the field for greater ease of installation. The plinth consists of four parts: the already connected corner and side parts and the front and back trim covers.

Removing the front and back trim covers makes transport more secure. You want to connect a cabinet in series? Not a problem with this cabinet plinth, since cable ducts and M-screw fittings can be fed through knockouts in the side parts.

To ease cross wiring it is also possible to integrate cable ducts.

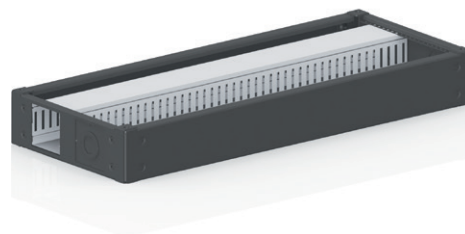
The plinths are available in heights of 50 and 100 mm and can be stacked or combined.

Plinth with 50 and 100 mm height

- Innovative cabinet plinth for easy installation
- Up to three plinths can be “stacked” on top of each other (no additional accessories needed)
- The plinths of 50 and 100 mm height can be combined

Plinth with 100 mm height

- Optimal feed-through of cables using the side knockouts for cable ducts or cable screw fittings
- Quick cable duct installation in the plinth



Plinth with wiring duct

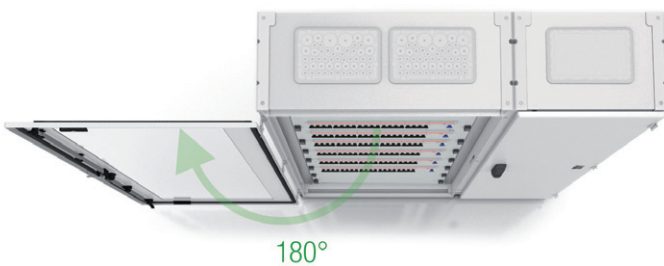


TwinLine S 43

Optimal accessibility for installation

The new series of cabinets also offers impressive accessibility with their 180-degree door opening angle. The removable frame for covers enables optimum access during operation, maintenance and function monitoring.

- The door opening angle is 180 degrees for both, individual cabinets and cabinets connected in series
- The innovative locking system is easy to install and allows you to quickly modify the door hinge
- Removable frame as standard makes it possible to remove all covers in one handling
- Significantly reduced installation time



Doors with 180 degree opening angle

TwinLine offers unrestricted access during operation, expansion, maintenance and functional monitoring. With its 180-degree door opening and the door locking system, with the possibility to switch the door hinges from right to left it guarantees excellent flexibility.



Removable frame for CombiLine S covers

With its wide range of the new modular distribution panel system, called CombiLine S, ABB offers the right solution for every application. The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick assembly.

TwinLine S 43

Flexibility in assembly

Flexibility in the assembling of the internal configuration
With its new mounting concept for the CombiLine S system, TwinLine provides more flexibility and access for installation and wiring.



Depending on the customers requirements there are two options to install and wire the internal configuration:

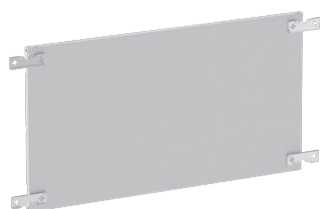
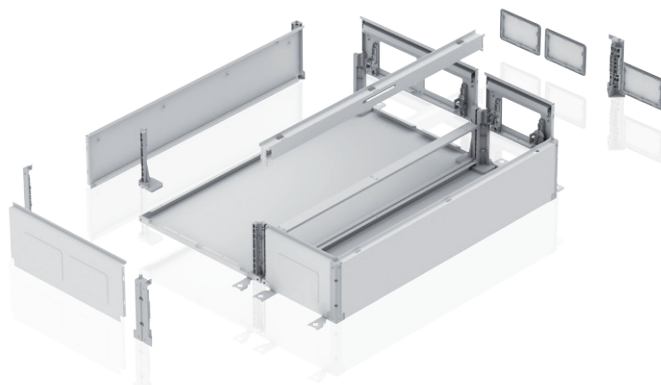
- Outside of the cabinet to have access from all sides
- Placed horizontally on two trestles to do the assembling and wiring inside the cabinet

There is also the option to have continuous mounting plates that can be adjusted in depth.



TwinLine S 43

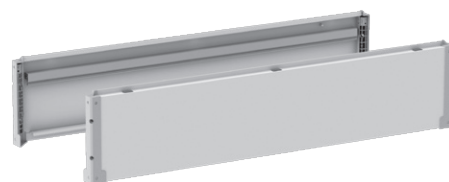
System overview



Rear wall



Top and bottom plate



Side walls



Installation set for removable frame



Uprights for side-by-side positioning of cabinets



Internal cable container



Transparent or sheet steel doors



Flanges



Plinth

TwinLine S 43

Technical specifications

Technical specifications

Standards / regulations	IEC 61439 -1/-2/-3*
Protection class	I, earthed
Degree of protection	IP43 Without door IP30
Mechanical impact strength	IK 08 for the cabinet enclosure IK 07 in the area of the flange knockouts IK 07 for transparent doors IK 08 for sheet steel doors
Conditions of installation	Indoor installation Ambient air temperature max. + 40°C Ambient air temperature min. - 5°C Operating temperature max. + 55°C Storage temperature max. + 55°C Storage temperature min. - 40°C

Product features

Housing and door	Sheet steel, RAL 7035, powder-coated Door opening angle: 180 degrees Doors with espagnolette closure Doors for wall-mounting cabinets: with latch plate and 3 mm double bit pin Doors for floor-standing cabinets: with swivel handle and 3 mm double bit pin
Assembly options	Prepared to be fitted with CombiLine S modules and mounting plates
Forms of delivery	Build-up cabinets out of sets

* Powerloss determined by calculation with the method of IEC 60890 in accordance with IEC 61439-1 par. 10.10.4
The required values of the powerloss capacity are specified in tables from page 31.

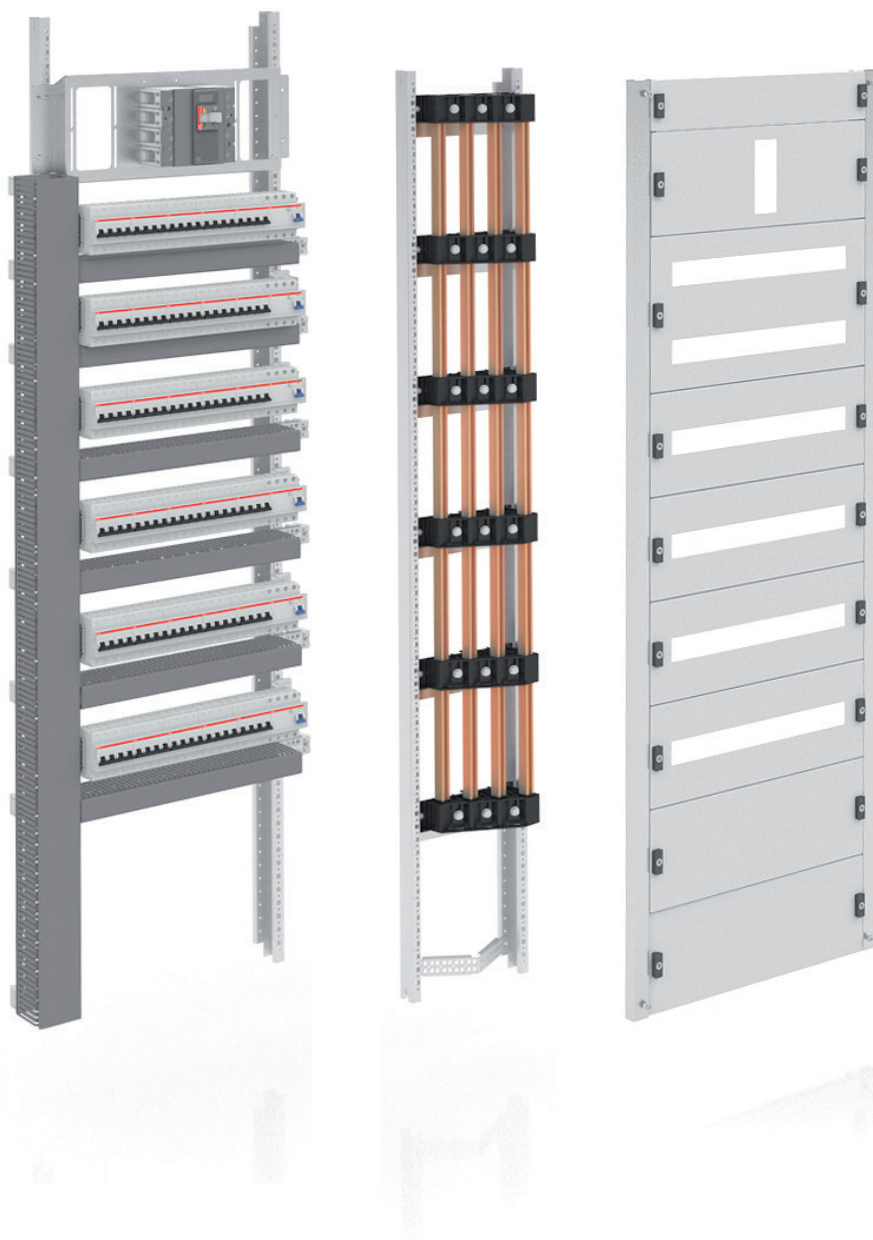
System pro *E* combi

CombiLine S distribution panel system

Simple in planning

Quick in assembly

Safe in application



System pro *E* combi

CombiLine S distribution panel system

The highly sophisticated quick mounting system from ABB makes the completion of modular cabinets with distribution panels an effortless process. Simple, quick and safe – these are the three attributes of this system that speak for themselves.

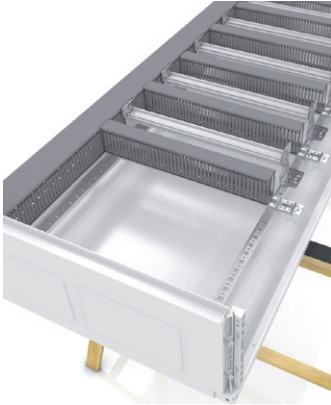
TwinLine makes internal configuration fun, with a modular system of wall-mounting and floor-standing cabinets for the modular CombiLine S distribution panel system. The wide range of the CombiLine S offers the right solution for every application. One internal configuration System for all cabinets.

All of the individual parts required for assembling are packed separately and supplied in the form of a set.

The benefits: These sets allow you to take a flexible approach towards stock keeping, and avoid a time-consuming search for system parts such as brackets, screws or fastening elements. The instructions supplied with the system make assembly a child's play. Quick and clear planning and calculation become perfect with planning software.

CombiLine S distribution panel system

Product benefits



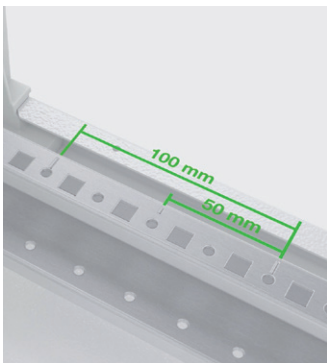
One internal configuration system for all cabinets

All internal configuration and the busbar system for the cable containers up to 400 A fits in both cabinet depths. The internal configuration up to 800 A and the busbar system behind the device area also fits in a 275 mm cabinet depth.



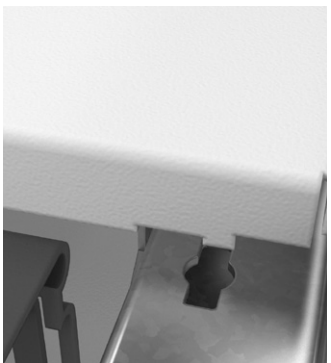
Flexible in assembling

With its new mounting concept CombiLine S provides more flexibility and access for installation and wiring. Placed horizontally on two trestles, the assembly and wiring is very comfortable. An other option is to swing-out the whole internal configuration to have access from all sides.



Assembly of internal configuration

CombiLine S provide a time-saving installation due the hook-in technology. This quick assembly limits the numbers of screws. Markers in 50 mm grid are on the mounting profiles for simple positioning.

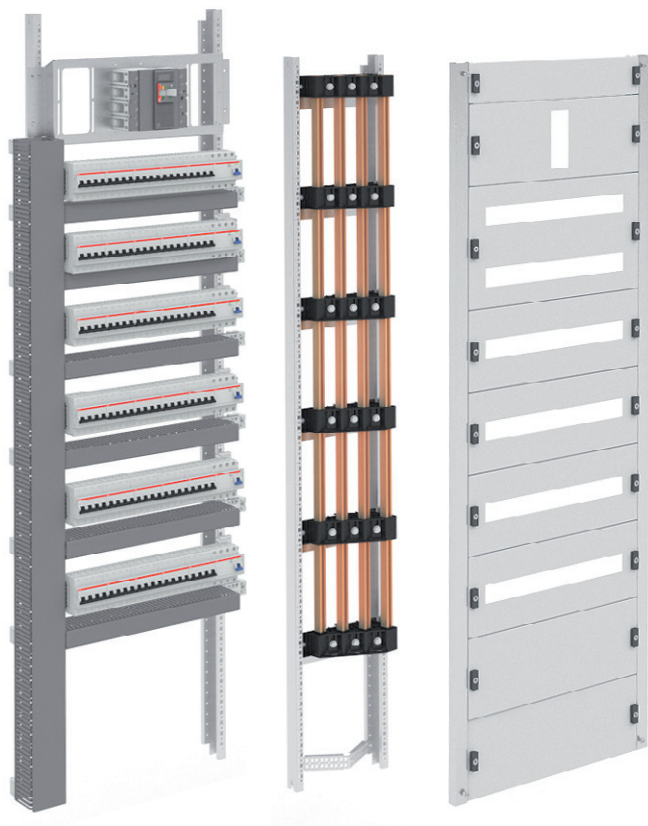


Easy handling of covers

Time-saving fixation and adjustment as well as the simple closure system with 1/4 turn quick-lock provides easy handling of the covers and standard earth connection. When using devices in the covers a safe earth connection is guaranteed through 6 mm² cable with ring shoes on both sides. Optimal accessibility give the hinge set with 90 degree opening angle.

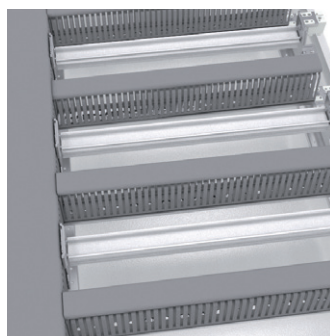
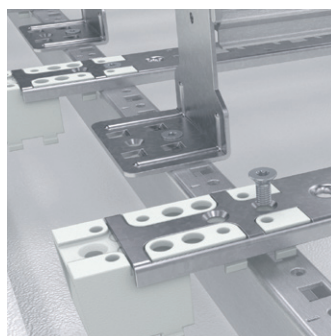
CombiLine S distribution panel system

Product benefits



Optimal accessibility and ease of installation

The removable frame as standard gives the possibility to remove all covers in one handling and provides a quick access.



Wiring system

One support for different dimensions of wiring ducts; to have the same level for horizontal and vertical usage. An additional profile for stabilization of wiring duct and for mounting wire holders is available.

Form of internal separation up to form 2b

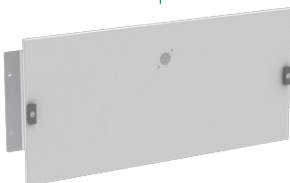
For the busbar system behind the device area is a horizontal transparent partition available. To separate the busbar system in external cable container it is possible to use a vertical separation.

CombiLine S distribution panel system

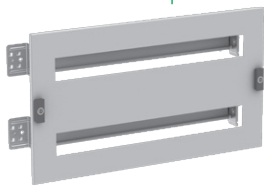
The right module for ervery type of Application



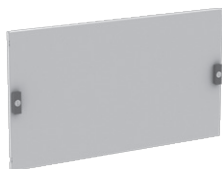
Tmax breakers



OT breakers



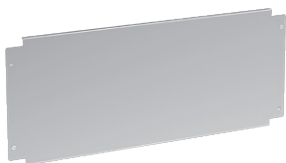
DIN rail components



Standard covers



Covers for measuring instruments



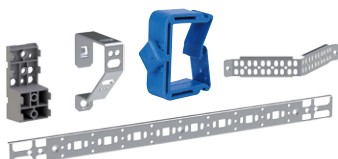
Mounting plates



Internal form of separation form 2b



Busbar systems



Accessories

CombiLine S distribution panel system

Technical specifications

Technical specifications	
Standards / regulations	IEC 61439 -1/-2/-3
Protection class	I, earthed
Degree of protection	IPXXC

Electrical characteristics	
Rated impulse withstand voltage (U_{imp})	6 kV
Overvoltage category	III
Pollution degree	3
Rated current (I_n)	up to 800 A
Rated peak withstand current (I_{pk})	up to 74 kA
Rated short-time withstand current (I_{cw}) 1.0 sec.	up to 35 kA
Rated frequency (f)	50 - 60 Hz
Rated insulation voltage (U_i)	1000 V
Rated operational voltage (U_o)	690 V

Notes

Contact us

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