

1U compact solution



19" 1U Power-D-Box power distribution system (also for ETSI systems) accommodating plug-in thermal-magnetic circuit breakers type 2210-S or similar types, single or double pole, with or without signal contact.

8 single pole (or 4 double pole) circuit breakers are fitted transversely as vertical pairs, line entry is at the rear by means of screw terminals with 16 (25) mm² cable cross section capacity. Redundant design of the system (2 x 4 single pole circuit breakers) is also available.

The load terminals are connected from the front by means of high current sub-D connectors or by means of screw terminals up to 4 mm². Auxiliary contact terminals can be connected from the rear (serial or parallel connection possible).

For replacing or retrofitting circuit breakers part of the front plate can be removed.

Above and below the circuit breakers are two narrow strips for customer-specific marking. Permanent marking is available ex factory for the front plate as an option.

Max. rating per way is 16 A (due to the derating of the circuit breakers mounted closely side-by-side), max. load of the line entry is 63 A at DC 65 V / AC 250 V.

Control cabinets: flexible and selective protection



This control cabinet design focuses on reliability and space reduction. The goal is to have numerous differently rated loads supplied and selectively and reliably protected. Line entry of the high currents from battery-supported power supplies is via multi-stranded cables into six mutually independent circuits. Protection is provided by circuit breaker type 8345, a plug-in type offering ratings up to 125 A. Another downstream level (available redundantly) with e.g. eight each electronic circuit breakers type ESS20 allows selective protection of the power supply for very sensitive loads such as controls, sensors and similar. A total of six independent supply circuits with additional two sub-distributions can thus also be used redundantly as is often the case in the chemical industry.

There is an overriding monitoring and failure indication system above the power distribution and protection using thermal circuit breaker type 1180. Each individual circuit group is monitored in total and failures or disconnections are indicated immediately. All electrical outputs are fitted with spring-loaded screwless terminals which obviate regular "re-tightening" of screw connections. The entry lines are on the left side in the control cabinet, the load connections are on the right side. Both can optionally be fed from the bottom or the top via large wire tray systems. All circuit breakers are pluggable so that current ratings or trip characteristics can easily be adjusted to the conditions on site – without having to unfasten a single cable

High Power



Power distribution system for direct mounting to the rear wall of a control cabinet. Featuring type X8345-D01 power distribution rail with a variable number of modules possible.

Plug-in type 8345 circuit breakers are installed allowing load output currents of up to 125 A per module, with a maximum of 160 A for two adjacent positions.

Line entry is on the side, connected directly to internal busbars with up to 300 A at max. DC 110 V / AC 230 V.

Optional auxiliary contacts are also connected from the side by means of 2.8 mm blade terminals, all contacts are connected in parallel.

Reliable main and load terminal connections are by means of M10/M12 hexagonal screws.

The entire power distribution system is protected against brush contact by a slide-on plexi glass cover.

The system is mounted on the rear wall of a control cabinet by means of aluminium brackets. The system is also available as a version offering system redundancy.

The circuit breakers are hot-swappable without removing the protective cover.

Above and below the circuit breakers customer-specific marking is possible. Permanent marking is available ex factory for the front plate as an option.

Compact control cabinet for automotive systems



This control cabinet design focuses on reliability, space reduction and remote controllability. Protection of the line entry is by means of circuit breaker type 8345, offering flexible current ratings up to 125 A. Two of three main circuit breakers are remotely controllable, i.e. a switch installed in the cockpit allows remote ON and OFF operation of the decentralised circuit breaker. This helps to obviate long and heavy cables, enabling connection via smaller control lines. The second control level is fitted with 15 plug-in type circuit breakers type 1170.

Modular design

All load circuit breakers are pluggable so that current ratings and trip characteristics can easily be adjusted on site.

Switching and protective function

Remotely controlled circuit breakers in the main distribution provide cable protection to the battery and at the same time physical isolation of the battery, i.e. a battery master switch function.

Saving space

The new multi-way terminals in power distribution are able to protect up to four loads. Elimination of intermediate distribution terminals helps to reduce the number of cables significantly. Weight, space, wire damage or even breakage can be reduced by using E-T-A power distribution technology.

Cable harness

The supplied cable harness allows efficient installation, i.e. pre-wiring in the control cabinet is provided and has only to be connected to the loads. The cable length is factory pre-set and assigned to the corresponding vehicle type.

2U version with front terminals



The Power-D-Box is a 2U 19" power distribution system (also for ETSI systems), accommodating plug-in type double pole thermal-magnetic circuit breakers 2210-S with auxiliary contacts. All cable connections are on the front by means of feed-through terminals, partly pluggable.

Line entry is via two fixed feed-through screw terminals up to 10 mm² with cable feed from below, max. line current 50 A.

The load outputs are connected via double pole plug-in type screw terminals or alternatively spring-loaded terminals up to 4 mm². Polarisation is colour-coded. Cable feed is from the front. Max. load current is 16 A. All auxiliary contacts are combined as a group signal (series or parallel connection are possible) and also have plug-in type terminals up to 4 mm².

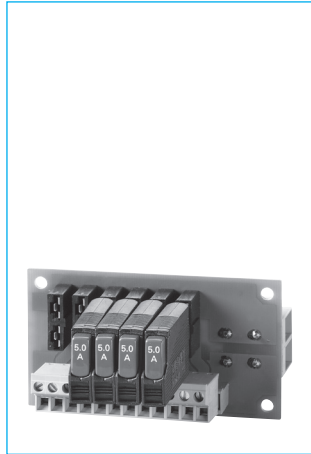
All connectors may optionally be fitted with a strain relief by means of wire wraps.

All terminals and circuit breakers are marked correspondingly.

The version shown above accommodates 8 double pole circuit breakers, variations upon request.

The front plate can be removed for replacing the circuit breakers.

Modular distribution system on pcb



Small compact power distribution system on printed circuit board to accommodate 6 plug-in type thermal overcurrent circuit breakers type 1180.

Line entry is on the rear via screw terminals up to 10 mm², max. 16 A (back-up fuse required).

Load outputs are connected via a plug-in type screw terminal busbar, cable cross section 2.5 mm², max. 10 A.

Dimensions of the system are 90 x 50 x 96 mm (l x w x d) including the installed circuit breakers.

Numbers of ways, termination as well as mechanical design of the power distribution system can be tailored to customers' needs.

Max. rated voltage DC 65 V, AC 250 V.

1U Compact Solution High Power



Two Power-D-Boxes, 1U 19" power distribution systems, for use with thermal high-performance circuit breakers type 482.

The power distribution systems feature a redundant design with 2 x 4 ways.

Connection of all cables can be either from the rear or on the front.

Line entry is on the right and left sides by means of screw-type feed-through terminals up to 16 mm² cable cross section, max. 100 A per side.

Load outputs are also via screw-type feed-through terminals up to 10 mm², max. 50 A per way (please observe derating factor of the circuit breakers).

Plug-in design of the circuit breakers allows easy adaptation to changing loads.

The max. installation depth is less than 180 mm including front and rear screw terminals.

Max. rated voltage is DC 72 V or AC 230 V.