

Installation in conformity with standards

With precisely matched accessories

When mounting terminal blocks and assembling panels, you must always be able to rely on accessories fitting perfectly. Only then do the processes run smoothly and therefore productively. The requirements placed on terminal rails, busbars, as well as cover plates and support brackets, are correspondingly high. They have to comply with numerous standards and safety regulations.

Our promise

Our components are aligned to each other right down to the finest detail and hence make installation easier for you.

Information and ordering data for mounting accessories is available to you in our online catalogue. The webcode #01229 entered into the search screen of our website takes you directly into the Klippon® Connect area.

Terminal rails

Terminal and top-hat rails for component mounting and end brackets are important for holding and insulating the components. Depending on the application area, we offer terminal rails made of steel, stainless steel, aluminium, copper or plastic.

Stainless steel

Stainless steel is a collective term for all types of steel (alloys) with a high degree of purity and corrosion resistance.

Aluminium

Aluminium has the second best electrical conductivity after copper. One advantage is low weight, another is outstanding corrosion protection.

Copper

Copper has the best electrical conductivity of all metals used. The copper rail has the highest short-circuit protection.

Plastic

Plastic terminal rails have insulating properties and are very light. They can be used where clearance and creepage distances to the support bracket cannot be achieved with standard terminal rails.

Steel

Steel terminal rails are the most widespread on the market. Among metal terminal rails, they have the lowest short-circuit protection, similar to stainless steel.

Use as PE conductors or PEN busbars

Under certain circumstances, you can also use terminal rails as bus bars for protective conductors (PE conductors) or PEN conductors. The Weidmüller PE terminal blocks with spring and screw connections fulfil the requirements for PE conductors defined in IEC 60 947-7-2. According to VDE 0100 Part 540, protective earth conductors and neutral conductors with wire cross-sections above 10 mm² may be combined to form a conductor abbreviated as PEN.

Our installation tip

If a terminal rail is used as a PEN busbar, the following criteria have to be observed:

- Only profiles made of E-Cu or aluminium are permissible
- Short-circuit currents and thermal rated currents
- Insulate terminal rails with the "protective insulation" protective measure



Busbars

In the case of switchgear and control systems it, may be necessary to bring the neutral and PE conductor together on busbars. They offer the possibility of connecting a large number of conductors (on 1 m rails up to 70 conductors) with a low space requirement – either via a pressure piece or a clamping yoke. The SH rail support (which can also be arranged between the clamping yokes for longer bar) serves for fixing purposes. If the clamping yoke is used as protective earth connection, we can optionally supply it with green-yellow or as neutral conductor with blue insulation cap.

Cover profiles and support brackets

Several safety regulations, such as the accident prevention regulation "Electrical Installations and Equipment" (VBG 4) and VDE 0106 Part 100/3.83, require from you that active parts of electrical equipment are protected against direct touching. Our cover profiles with associated support brackets may be used for the most common terminal sizes. The support brackets can be arranged at the end or along the terminal strip. They can be fastened to TS 32, TS 35 or TS 15 terminal rails.

Our installation tip

- In order to combine neutral or protective earth conductors at a central point, the ZB clamping yoke can be used together advantageously with the 10 × 3 or 6 × 6 busbars
- The ZBE 6 can be retroactively swivelled on to the busbars

Our installation tip

- Linear intervals of the support brackets: the linear measure of the ADP 1, 2 and 3 between the support brackets should not significantly exceed 300 mm
- The cover profile is also snapped on to tags at the sides; extra tightness is achieved with pegs on the support brackets for sealing purposes
- The transparent design of the profiles allows terminals with accessories and marking to be identified at any time. Additional markings, e.g. from groups, can also be applied