## Enclosures and Cable Glands

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For every industry and every application
Klippon® Protect enclosure system
gives safety and protection to connection solutions

Enclosures fulfil an important safety function and prove their worth every day, even under the toughest of conditions. All industries have their own specific requirements in terms of enclosure technology – from machine construction through transport and energy engineering to the process industry. At the same time, the enclosures must meet the strict requirements with respect to the necessary international approvals. Our Klippon® Protect enclosure system covers all approvals required for use in industrial and explosive risk zones. It is also so flexible that it allows optimum adaptation to your requirements.

Our promise
The flexible Klippon® Protect enclosure system forms the perfect addition to our Klippon® Connect range of terminal blocks. You can rely on our assembled enclosure assemblies which are optimised to your requirements and offer excellent protection. Individual services round off our range to provide you with optimum process support.

Universal range
Whether it is stainless steel, aluminium or plastic, the universal enclosures from Klippon® Protect offer your assembly excellent protection in industrial or explosive risk zones. With these robust enclosures in the relevant degrees of protection, you can implement various field applications to suit your requirements. The matching system accessories enable simple integration, expansion and customisation.
Services
Our assembly services combine consultancy, application expertise and industry know-how to offer you a tailored solution. We provide you with exclusively produced enclosures. This helps your plant fulfil the highest standards of safety, quality and performance against international competition. You can benefit from our one-stop-shop production quality to reduce your costs, increase efficiency and simplify quality management.

Even with individually assembled products, we guarantee quick, quality-focused production and order-based product availability. From small quantities to complete location supplies: everything is available where you need it within a short space of time.

More detailed information on our wide range of Klippon® Protect enclosure systems can be found at www.weidmueller.com/klipponprotect

Additional information can be found in Chapter V - Customer-specific services.

Order data is available in our online catalogue. Enter the code #01227 into the search box on our website to go to Klippon® Protect directly.

Highlight
Control Station is a real highlight of our application range. This customer-specific assembled enclosure is a robust "on-site control station" and is perfect for emergency stop applications. It is used when it comes down to the safe switch-off of system components, such as in the process industry or machine construction.
Introduction

When quality is the key

Weidmüller’s enclosures are often used in harsh environments. They remain reliable for many years thanks to the high quality levels, even when exposed to external influences like water, dust, hard impacts, shock, vibration, corrosion, and extreme temperature fluctuations.

All components used in potentially explosive atmospheres are subject to strict safety regulations and are checked to the finest detail in terms of their functionality as well as their resistance and resilience against the prevailing environmental conditions.

As each enclosure is only as strong as its weakest point, Weidmüller consistently ensures that each individual component is of the highest quality and that it will not therefore cause a weak point in the enclosure. Evidence of this high quality and the functionality of the enclosure is provided by our own laboratory following intensive and careful testing to the international standards.

IP protection class testing

The most important function of an enclosure is to protect the internal components from external influences like moisture or dust.

Enclosures are therefore classified in terms of IP (Ingress Protection) protection classes. To certify this, the enclosures are tested in line with DIN EN 60529 in an accredited Weidmüller laboratory.

Further tests are carried out in our accredited laboratory:

- Impact resistance testing (IK number)
- Shock and vibration test
- Salt spray test (proof of corrosion resistance)
- Long-term testing in accordance with IECEx
  - Heat resistance
  - Cold resistance
- Computer tomography (CT)
Weidmüller is globally known for its high quality enclosures. To guarantee these high quality standards only the highest quality materials were used for the production of the Klippon® TB range. Their production was done using state of the art techniques.

High quality Klippon® TB enclosures are manufactured in nine steps:

- Fully automated laser cutting
- Computer-aided bending
- Process-safe welding
- Innovative welding of the female threaded sockets
- Surface treatment (electropolishing)
- Sealing gasket cutting
- Final assembly
- In-process quality controls
- Innovative packaging

More information online at: www.weidmueller.com
Customer specific assembly — consultation, product, development and production – all from a single source

Our application and manufacturing expertise influences decisions on all areas of modern connection technology. They therefore play an integral part of every solution.

Enclosures
Perfect protection and safety
- On customers request assembled with terminal blocks, electronics and cable glands
- Enclosures for all IP protection classes
- Ex enclosures for hazardous areas
- Placement of inspection glasses, drill holes and threads
- Elaborate machining operations like the milling of contours
- Welding, according to DIN EN ISO 3834-3, for stainless steel and sheet steel enclosures
- Surface coating as and when required
- Individual device and system markers

Heavy duty connectors
Perfect connection with system
- Placement of drill holes and cable glands
- Equipped with plug-and-play components
- Wiring of subassemblies
- Cable assembly
- All housings are available with individual laser marking

Terminal strips
Configuration made to measure
- Machining of mounting rails
- Snapping components onto terminal rails
- Placement of cross connections
- Mounting of standard wires
- Marking of terminals, devices, wires and cables
Electronics
Individual solution from the beginning
• Modular terminal blocks, component plugs, snap on bases, enclosures for electronics: integration of relevant electronic components
• Snap-on base: Component carrier design or simple wiring of the modules
• Interface units
• Modification of existing electronic products: Modification of the circuitry or specific calibration
• Combination of components: Relays or optocouplers in combination with other components

Cable assembly
Our special service
• Pre cutting of wires and cables
• Installation of
  - Heavy duty connectors
  - PCB connectors or DIN connectors
• Conditioning of wire ends
• Mounting of wire end ferrules and cable lugs
• Connection of wires to terminal rails
Harmonisation –
the key to market success!

Weidmüller’s products and services meet not only its own internal high standards, but also international quality and safety standards. The Klippon® TB enclosure range is one of the first products to be approved and certified as being compliant with IEC /EN 60079. This range of standards provides a harmonised approach to the development and manufacture of equipment for use in potentially explosive atmospheres.

Klippon® Protect is specially tailored to meet the ever changing and extremely harsh environments of these industries. Certified in accordance with international standards, they also meet the new ATEX and IECEx regulations for potentially explosive atmospheres and have further certifications for use in standard industrial applications. You can find innovative solutions from Weidmüller everywhere; from power distribution or control and monitoring systems in boiler and turbine control systems, in fuel management and combustion control systems, or in transmission and distribution applications.

Excellent expertise on application-specific solutions for explosive risk zones

Weidmüller provides comprehensive expertise and a selection of certified components and application-specific solutions for use in explosive risk zones. Our competent team is here to take care of each individual customer requirement.

Special measures must be taken to guarantee employee health and safety in explosive hazard areas. This is regulated by the ATEX European Community directives 1999/92/EU and 2014/34/EU, which classify the various areas of danger and associated selection of explosion-protected equipment into zones.

In line with European regulations, Weidmüller is monitored and regularly audited by a named body. This means Weidmüller meets all the requirements of the IECEx scheme for equipment based on the standards of the International Electrotechnical Commission.

More on this can be found in chapter W - Technical Appendix.