The modular terminal block system for all applications

CLIPLINE complete
With CLIPLINE complete, the unique modular terminal block system from Phoenix Contact, the choice of connection technology is yours. The following connection methods are available:

- Universal UT screw connection
- Simple PT push-in connection
- Compact ST spring-cage connection
- Fast QT QUICKON connection
- Robust RT bolt connection
- Plug-in COMBI connection solutions

**UT screw connection**
Universal in every application. The screw connection technology is characterized by the multiple conductor connection and extremely high contact forces. The screw connection technology is known and accepted worldwide and can be used everywhere.

**PT push-in connection**
PT is the new generation of modular terminal blocks in the CLIPLINE complete system. Now you can directly wire conductors from 0.34 mm² extremely easily and without tools. The special contact spring allows easy insertion and ensures a high level of contact quality.

**ST spring-cage connection**
The proven connection technology for applications that are sensitive to vibration. The spring-cage always exerts the same constant force on the conductor, regardless of the influence of the operator. Wiring is easy using the space-saving front connection.
**QT QUICKON fast connection**
Connect the conductor without stripping. The fast connection technology represents up to a 60% reduction in wiring time. The conductor is connected easily, reliably, and quickly with just one turn of a standard screwdriver.

**RT bolt connection**
Robust connection for conductors with ring cable lugs. RT combines the bolt connection with the advantages of the CLIPLINE complete system, such as easy potential distribution through plug-in bridges, large marking surfaces, and uniform test accessories.

**COMBI plug-in connections**
Plug-in connections for the most stringent universal demands. The nominal current of the connected conductor can be carried through the plug-in contact. Plug-in connectors and basic terminal blocks with four connection technologies can be freely combined with each other, thanks to the uniform plug-in zone.

**CLIPLINE complete**
Modular terminal blocks with various connection methods enable you to react flexibly to the demands and requirements of your customers from anywhere in the world. All connection methods can be freely combined with one another using the same accessories.
Double function shaft
All terminal blocks – one line

The consistent function shaft in the CLIPLINE complete modular terminal block system gives you a high degree of flexibility and simplifies project planning and configuration of the control cabinet. All terminal blocks with the various connection technologies can be freely combined with one another. Bridging, marking, and test accessories are standardized and can considerably reduce your logistics costs.

Flexible plug-in bridge system
To allow fast and individual potential distribution, the terminal blocks in the CLIPLINE complete system have two function shafts. These are arranged in one line over all the terminal blocks, allowing for a combination of connection technologies. This makes it possible to implement all the tasks of potential bridging within a very short time.

Bridging between non-adjacent terminal blocks
Bridging between non-adjacent terminal blocks is established by removing individual contact tabs from the standard bridge. Two potentials can then be routed in parallel through a terminal strip. The contact points can also be marked.

Easy potential distribution
The reducing bridge allows terminal blocks with different nominal cross sections to be connected with ease. It can be used to quickly create power blocks, e.g., a 10 mm² terminal block with a 2.5 or 4 mm² terminal block, regardless of the connection method.
Switchable bridging
The switching jumpers enable individual cross connections. In test disconnect terminal blocks, the jumpers provide a current transformer short circuit. They can be positioned either side of the disconnect point in the bridge shaft and securely latched in place. The short circuit switching operation is safely executed with screw-type clamping units and this has to be done deliberately with a tool.

Large-surface marking
All modular terminal blocks have high and flat marker grooves. High marker grooves are essentially used for labeling terminal blocks and accommodating high terminal markings. Flat marker grooves – often used for labeling individual terminal points – are used to accommodate smaller, flat markings. All materials are available unprinted or marked according to your requirements.

Standardized test system
All test plugs in the system make contact in the freely accessible function shaft. A test plug with a 2.3 mm diameter is available for individual measuring lines. More complex testing tasks can be implemented using alignable test plugs. Test adapters can be assembled individually and are perfectly suited for use in test laboratories.

In addition to terminal marking, our MARKING system also provides perfect solutions for conductor, cable, and device marking. It places at your disposal the CLIP PROJECT planning and marking software, printing systems tailored to your requirements, and a wide variety of marking materials.
Uniform range of accessories for all terminal blocks – can be freely combined

The CLIPLINE complete system offers you a uniform range of accessories for all connection technologies.

Various functional inserts are available for use in disconnect terminal blocks. The COMBI plug-in system enables a plug-in wiring solution up to a nominal current of 41 A and a nominal voltage of 1000 V.

Multifunctional disconnect zone
All disconnect terminal blocks in the CLIPLINE complete system have a standardized disconnect zone.
The disconnect zone accommodates various plugs such as fuse plugs, component plugs, and isolating plugs.

Patented component plug
The P-CO component plug makes it possible to accommodate components via spring-cage contacts quickly and securely. Coding ensures connection without the risk of polarity reversal. For assembly, the spring-cage connections are opened or closed inside the plug by turning a standard screwdriver.

Compact fuse plugs
The fuse plugs turn the disconnect terminal blocks of the CLIPLINE complete system into fully functional fuse terminal blocks for overload and short-circuit protection. When offset, the compact P-FU ...-5 fuse plug fits onto the disconnect terminal blocks with a 5.2 mm pitch, thereby providing maximum space savings.
Uniform plug-in zone
The COMBI plug-in system enables the time-saving and modular configuration of your application. Its distinguishing feature is its standardized plug-in zone. This plug-in zone allows terminal blocks and plugs to be combined to suit the application, regardless of the connection technology.

Individual coding
Easy and individual coding increases wiring safety and provides protection against incorrect connection. As such, the individual coding elements are inserted at the coding position in the basic terminal block and the coding tab is removed at the corresponding plug.

Latching and cable housing
Latches which are snapped onto the outside of the plug housing are available for attaching the plugs to the basic terminal blocks. Snap-on strain relief and closed cable housings are available if required to relieve the strain on the cables at the plugs. These housings are split in two, making them easy to fit.

The COMBI system provides maximum protection, since the basic terminal blocks and plugs have a touch-proof design. Alongside the safety aspect, this offers great flexibility for configuration work: the supply can be routed via the terminal blocks or the plugs.
CLIPLINE complete –
quality in every application

The quality of our products is our top priority. This is not tested subsequently on finished products, but is ensured responsively during every step of production.

A process-oriented, integrated management system ensures that not only legislation and standards, but also customer requirements are taken into account in the manufacturing of our products.

### Standard testing for modular terminal blocks

**Mechanical test**
- Connection capacity
- Mechanical strength
- Bending test – flexion test
- Conductor pull-out test
- Tight fit of the modular terminal block

**Material test**
- Needle flame test
- Aging test

**Electrical test**
- Air and creepage distances
- Surge voltage test
- Voltage-drop test
- Temperature-rise test
- Short-time current resistance
- Insulation test

### Process engineering

**Explosion protection**
- IECEx and ATEX
- Protection types
- Routine test

**Cold and heat**
- Temperature shock test

**Industrial atmosphere**
- Corrosion test
The CLIPLINE complete modular terminal block system has been tested and approved for a wide range of national and international approvals. The maximum level of safety in these standards is achieved by routine testing of the standard CLIPLINE complete modular terminal blocks according to the ATEX directive. They can also be used in the Ex e area.

### Traffic technology and shipbuilding
- **Shock and vibration test**
  - Vibration test
  - Shock test

- **Behavior in fire**
  - Surface inflammability
  - Smoke gas development
  - Behavior in fire
  - Fire protection
  - Smoke gas toxicity

### Power supply
- **Product test**
  - Salt spray
  - Vibration test

### Material test
- **Material test**
  - Inflammability classification
  - Halogen-free flame protection

- **Shock protection**
  - Finger and back-of-hand safety

- **Product test**
  - Environmental tests
  - Glow-wire test

- **Material test**
  - Comparative tracking index (CTI)
  - Insulating material properties
  - Fire load determination

Request a copy of our CLIPLINE complete Quality brochure for details on all approvals and standard tests.
Our services –
control cabinet engineering made easy

CLIP PROJECT combines our proven planning software for terminal strip configuration with a high-performance marking tool. Direct data exchange with all conventional CAE programs, along with the creation of complete project documentation (such as order, parts, structure, and mounting lists) are what make this configuration software unique.

And there's more: with CLIP PROJECT you can also create the marking for all of your applications.

**You decide...**

**We help you with implementation.**

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**Configuration**
Use CLIP PROJECT to develop your DIN rail modules – complete with bridging, marking, and further accessories. An automatic correction function ensures that your structure contains all of the necessary end covers, holders, etc..

**Production**
CLIP PROJECT creates complete order, parts, structure, and mounting lists as well as a two-dimensional drawing of your terminal strips at the click of a mouse. This allows you to make up your terminal strips quickly and easily, thereby simplifying and speeding up production.

**Mounting**
Regardless of whether you pre-assemble the terminal strips or combine the components in the control cabinet, CLIP PROJECT provides you with consistent documentation for creating the structure without any problems.
We make everything to suit your requirements.

Guaranteed access to the latest software version and the most up-to-date product data at all times, as the comprehensive CLIP PROJECT range is automatically updated via the Internet.

**Marking service**
Do you want to be able to handle short-term peaks in demand?
No problem. With our marking and printing service you can increase your printing capacity easily and flexibly, without the need for additional investment.

**Terminal strip service**
With CLIP PROJECT, you can create terminal strips to suit your requirements. Just use the built-in e-mail function to send the data to us, and we will deliver the completely assembled and marked terminal strips directly to your production facility. Quick and easy – all you need to take care of is installation.

**Box service**
The perfect solution for every application. We integrate your components into industrial housing, either directly or on terminal strips, regardless of whether they are made from stainless steel, sheet steel, aluminum, polyester or polycarbonate. We take care of the wiring for you, too. All you need to do is install the terminal boxes.
In dialog with customers and partners worldwide

Phoenix Contact is a globally present, Germany-based market leader. Our group is synonym for future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation. A global network across more than 100 countries, and 15,000 employees ensure a close proximity to our customers, which we believe is particularly important.

The wide variety of our innovative products makes it easy for our customers to find future-oriented solutions for different applications and industries. We especially focus on the fields of energy, infrastructure, process and factory automation.

You will find our complete product range at: phoenixcontact.com