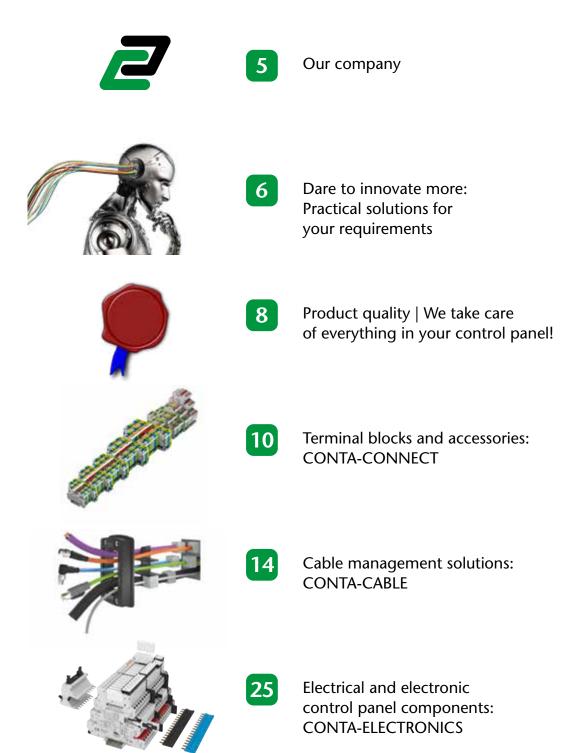
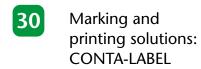




## **Contents**









Housing systems: CONTA-BOX



32 PCB terminals and connectors: **CONTA-CON** 



35 Accessories and tools: CONTA-TOOL



36 **Customised solutions** and special electronics



Contact us



Globally available for you



# Because the future needs intelligent connectivity solutions

**Inside the smartest workflows**: being at the heart of every smart connection, the driving force for improved workflows and productivity – that is our global commitment. That is why we are developing and manufacturing products for almost all industrial sectors. Whether it's mechanical and facility engineering, traffic and process engineering, clean room technology or renewable energy: in all these industries we are the perfect partner and expert in electrical and electronic connection technology.

In addition to developing and creating new products, we invest in modern, efficient manufacturing processes. Ensuring the highest quality is our top priority. Our top-class products are supported by this interplay between our top-class personnel and machinery. And our services are just as outstanding as our products. Your wishes and requirements are what motivate our customised solutions.



At CONTA-CLIP, we focus our thoughts and actions to successfully implement our ecological, economic and social goals.

We promote economic sustainability in the form of healthy growth, together with financial strength and consistent re-investment within the company. Our stable management, low staff turnover and employees involved in decision-making processes all provide a guarantee for social sustainability.

Our actions are also ecologically sustainable throughout the entire value chain. This is reflected in the selection of our materials and our use of energy within the company. We work with materials that contain no hazardous substances and support regenerative heat recovery. This enables us to take responsibility for future generations.





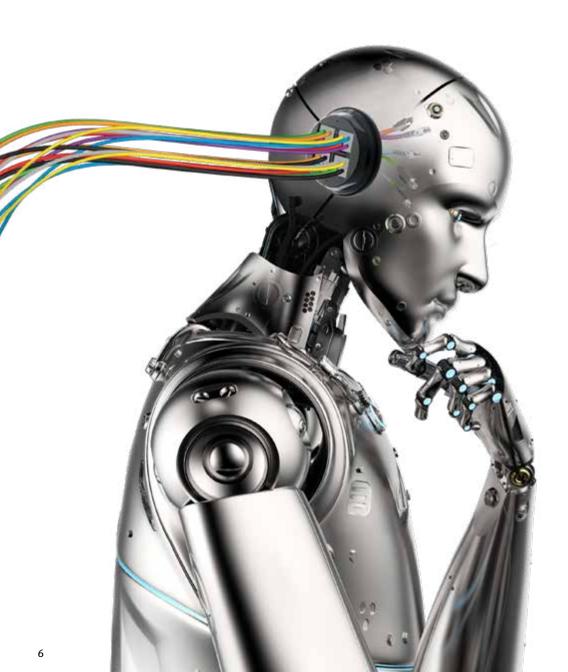




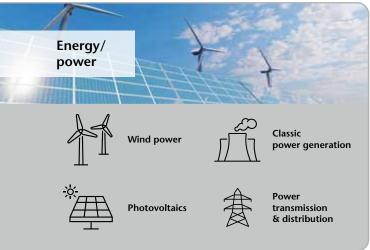
# Dare to innovate more: in markets where our customers are at home

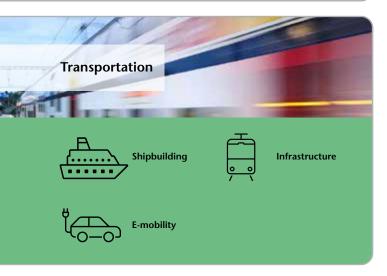
Cooperation is one of our main concerns. We see it as our mission to develop innovative solutions – together with you, our customers – for your specific markets. We view our problems as challenges that should be addressed with passion and commitment.

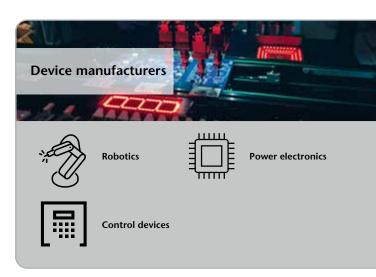
This is how we have come up with innovative solutions in practically all industries. As experts in electrical and electronic connection technology, we provide precise answers for your specific requirements – whether it's the classic task of connecting cables together securely or the monitoring and controlling of signals.















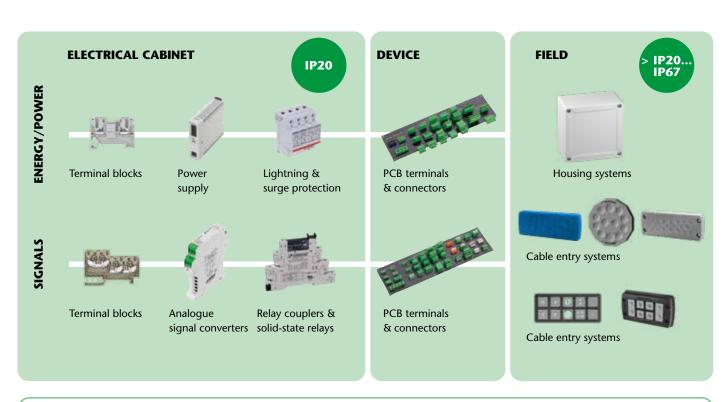
# What belongs in an electrical cabinet? Quality products from CONTA-CLIP!

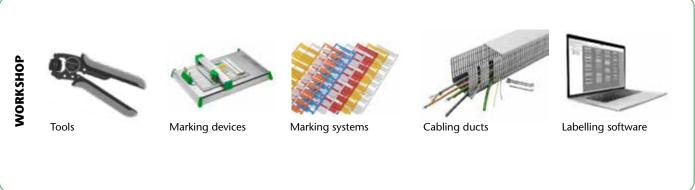
Users of electrical connection technology rely on our wide range of products and solutions. This is because our products are developed in close consultation with our users under the strictest quality standards. They are available worldwide and are designed to meet customer requirements. Our quality sets the standards. Certifications across the entire value chain (including for our suppliers) document this quality. Our quality management is based on DIN ISO 9001. Our products are also in compliance with all international approval conditions and standards.

Find out more at www.conta-clip.com





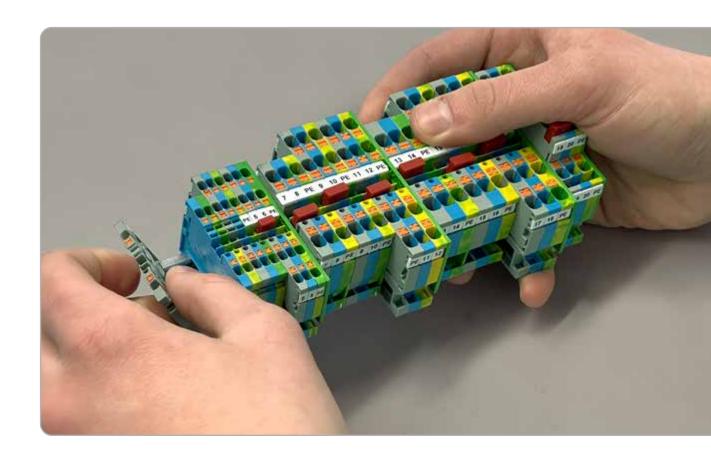




# The CONTA-CONNECT terminal blocks: built with expertise

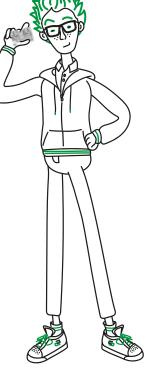
Terminal blocks are one of our main areas of expertise. We offer a high-quality and widely varied product portfolio. This enables you to be well equipped with the appropriate connection technology for all your challenges. We have the best solution for your requirements: including Push-in, screw, tension-spring or stud connection systems.

We offer a very versatile range of terminal blocks, which provide real added value when assembling terminal strips! They also promote speed, simplicity and safety. In addition, our terminal blocks are perfectly coordinated with each other. Thus, there are many options to combine accessories and optimise your warehousing.



# Looking for the right connection? You'll find what you are looking for here!

We provide all wire connection technologies for your industrial electrical connectivity applications. We have a wide range of feed-through and protective-earth terminals, as well as functional and special terminals for the following wire termination types:



## Push-in connection system PRK-FRK



Our wide range of innovative **PRK** and **FRK** terminal blocks with the Push-in connection system include feed-through terminals, PE terminals, disconnect terminals, fused terminals, multi-level terminals, installation terminals and initiator terminals, for wire cross-sections from 0.2 mm<sup>2</sup> to 16 mm<sup>2</sup>. These products are fast, safe and reliable.





- Wire insertion requires no tools and has low plug-in resistance
- High contact reliability due to constant spring-applied force
- High wire pull-out force
- Available for wire cross-sections up to 16 mm²
- Up to 50 % less time required

# Further connection technologies – customised to your requirements







Everything for classic wiring with screw connection systems (even for high currents): including **SRK** feed-through and PE terminals, and **RK** high-temperature variants for wire cross-sections from 0.2 mm<sup>2</sup> to 240 mm<sup>2</sup>. The classic: proven – safe – reliable





#### Your advantages

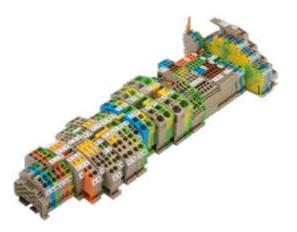
- Screw connection used worldwide
- Highest contact forces and large contact areas
- Connection of multiple wires is possible
- Available for wire cross-sections up to 240 mm²





Our versatile range of terminals for wire cross-sections from 0.2 mm² to 16 mm² includes: the **ZRK/ZSL** series of feed-through and PE terminals, the double-level **ZRKD/ZSLD**, the **ZIKD** three-level terminal blocks, motor-connection terminals, (blade-) disconnect terminals, fused terminals, direct-mount terminals, and initiator/actuator terminals for transmitting positioning, encoder and alert signals. The product features: proven – safe – reliable.





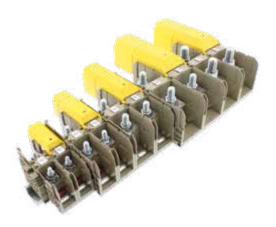
- Easy actuation of the clamping points
- Perfect for vibration-sensitive applications
- High contact reliability due to constant spring-applied force
- Available for wire cross-sections up to 16 mm²





Our HSK stud terminals ensure safe connections for all power-transmission applications. The rated cross-section of the terminals ranges from 35 mm<sup>2</sup> to 300 mm<sup>2</sup>. Depending on the wire cross-section, the **HSKG** stud terminals can be used with **M6**, **M8**, **M10**, **M12** and **M16** threaded studs. The rated current ranges from 125 to 520 amps, with a rated voltage up to 1000 volts. Perfect for your connections: innovative – safe – reliable.





- Safe versatile connection system for transmitting power
- Connect multiple wires through several cable lugs
- Cable lugs have high contact forces and large contact areas
- Perfect for vibration-sensitive applications
- Available for wire cross-sections up to 300 mm²

## Chaos in the electrical cabinet? Not with our CONTA-CABLE cable management solutions

Intelligent cable management provides real competitive advantages by improving efficiency and productivity. Our **KDS** (cable entry) and **KES** (cable feed-through) cable management systems are very versatile and can help save much time. Here is some information about cable entries.

Our **KDS** cable entry systems can be used to optimally prepare electrical cabinets and machine housings for a wide range of applications. Our **KDS** products allow you to quickly create customised feed-through openings for assembled cables in any required size. Whether from the inside or the outside – our **KDS** cable entries offer the perfect solution to fit your requirements.







### KDSI-SR: fast, safe, easy



If you're managing cables for electrical cabinets, housings and machines, our inverse and modular **KDSI-SR** cable entry system ensures outstanding versatility and time savings. It can be used to safely seal cables with or without connectors. The one-piece screw frames make it possible to carry out a quick and complete assembly from the outside to the inside.



#### Your advantages

- Complete assembly from outside inwards
- Guarantee retained for assembled cables
- Retrofitting and servicing can be done quickly and easily
- High-density assemblies
- Integrated TPE gaskets
- Protection: IP66





The **KDS-SR** cable entry system saves installation time by enabling a rational and versatile method of work. The seals can be removed by pressing from the outside inwards. Changes, retrofits, servicing or the readjustment of the cable lengths can be made at any time without dismantling the frame.



- One-piece outer frame is quick and easy to assemble
- Dimensionally stable, glass-fibre reinforced plastic
- Retrofitting and servicing can be done quickly and easily
- Integrated foamed-in gasket
- Protection: IP66

# Further examples of intelligent cable management





The **KDS-FP** flange plate provides manufacturers of machines with a very cost-effective, convenient feed-through solution. It can be used to adapt housings and control panels to fit your updated requirements at any time, and can also considerably simplify your warehousing. You no longer have to stock control- or distribution panels with different configurations of assembled cable and cable outlets. Instead, you can uniformly prepare your products with the flange plate and then adapt them at any time to your specific cabling or tubing requirements.



- Lower costs with increased variability due to standardised opening dimensions
- No loss of guarantee when using assembled cables
- Versatile, high-density assemblies are possible
- Outstanding versatility with optimised warehousing
- Integrated foamed-in gasket
- Protection: IP66





The **KDS-FB** cable entry system for flat cables ensures outstanding versatility and time savings – especially when used for industrial trucks, crane systems and lift technology. The "fish skin" on the seals mechanically surround the inserted flat cable; this ensures optimum tolerance compensation and IP66 protection.



#### Your advantages

- One-piece outer frame is quick and easy to install
- Outstanding versatility, variability and variant selection
- Large selection of seals; excellent tolerance compensation due to "fish skin"
- Integrated TPE gaskets
- Protection: IP66

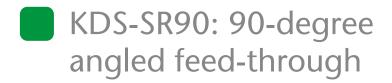




For metric cut-outs from **M20** to **M63**, we have the **KDS-R** round cable entry in our cable management product line. It can be used for cables with or without plugs. When maintenance or retrofitting with assembled cable harnesses, cables with diameters from 2 to 35 mm can be quickly and safely inserted into the electrical cabinets or housings and sealed according to IP66. The modular system ensures quick and easy installation in three steps.



- Assembled cables can be guided through
- Guarantee retained for assembled cables
- Retrofitting and servicing can be done quickly and easily
- Can be installed on standard metric break-outs
- High-density assemblies
- Integrated TPE gaskets
- Protection: IP66





We have developed an angled screw frame that enables a fast, safe 90-degree feed-through of cables and hoses. It provides IP66 protection. The **KDS-SR90** offers excellent protection against dust and deposits. It can be installed with assembled or unassembled cables and hoses in just a few steps. The installation uses M5 screws at the housing or electrical cabinet. The regular KDS inlays and seals are used to close the system. You can make changes to your cable management at any time without tools.



- Quicker installation
- Snap-on cover requires no tools
- Installation and modifications require no tools
- Outstanding strain relief
- Integrated TPE gaskets
- Protection: IP66





When guiding in non-assembled cables, lines or pneumatic hoses, the **KES** cable entry is an alternative to a cable gland or single-diaphragm feed-through. The **KES** cable entries are very flat; they enable space-saving professional cable entries with a very tight seal.





- Can be screwed/snapped on
- Outstanding stability
- Outstanding strain relief
- Simple assembly
- High-density assemblies
- Hygienic design
- Wide variety
- Two-way seal
- Protection: IP66

## KES-R M: Round cable entries for snap-on and screw connections



Speed up your installation by using the variants of the KES cable entry system. The **KES-R M** cable entries, with CONTA-CLIP's distinctive dodecagon design, are snapped directly from the outside onto a rounded break-out hole from M25 to M63. If the wall is thicker, or if you need a tighter seal up to protection class IP66, then you can also use a locknut to secure the entries from the inside of the panel. The assembly takes just seconds. Simply pierce the sealing membrane at the marked point and insert the electrical cables and pneumatic tubes!



- Hygienic design
- Snap-on and screw-on
- Increased strain relief
- Simple assembly
- High-density assemblies
- Double seal using the inner tulips
- Protection: IP66

# The control panel: where our expertise excels



## KES-GB-FDA: Cable entries for the food industry



In the food industry, there are strict hygiene regulations which require that all surfaces in the immediate vicinity of the process can be cleaned easily, thoroughly and without abrasion. Of course, this also affects the feed-throughs and cable glands. The cable entry plates from our **KES-GB-FDA** series meet the requirements for use in food production applications. They enable the reliable sealing of up to 32 cables in a very confined space.





- Can be screwed/snapped on
- Outstanding stability
- Outstanding strain relief
- Simple assembly
- FDA-compliant material
- Hygienic design: no dirt-prone niches
- High-density assemblies
- Two-way seal
- Protection: IP66





The **KES-E** cable entry system enables you to insert many cables (without plugs) with diameters ranging from 1 mm to 16.1 mm into a very confined space. The cable entry is inserted into the opening provided (with wall thickness A of 1.5 - 2.5 mm or B of 2.5 - 4 mm). In order to insert the cables, the corresponding membrane (with marked centring point) must be pierced; the cables are then simply guided through.





#### Your advantages

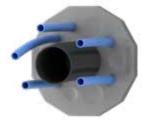
- Tool-free installation
- Outstanding stability
- Simple assembly
- High-density assemblies
- Hygienic design
- For walls of various thickness
- Protection class: IP54





We have added nine smaller sizes to the **KES-E-R** cable entry system for cables without plugs. There are 16 variants now available for round break-outs from M20 to M50, for wall thicknesses of 1.5 - 2.5 mm or 2.5 - 4.0 mm. These cable entries, with their striking dodecagonal design, are inserted into the housing openings without tools. They provide space for various cables with diameters starting at 1.0 mm. Simply pierce the membrane at the marked centre points and insert your cables, wires and hoses!







- Hygienic design
- Tool-free installation
- Simple assembly
- High-density assemblies
- Protection class: IP54

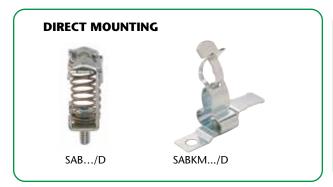
# Reduced risk of accidents, protecting personnel and machines



## SAB shield-connection clip: The safe way of grounding and shielding



Our shield-connection clips provide reliable protection for machinery and facilities. Naturally, our shield-connection clips also ensure maximum safety for users. Before commissioning a machine or facility, you must first check its grounding and shielding functions, this is of crucial importance. Protecting people and machines is our top priority. Our portfolio of shielding products comes in different connection technologies. It is one of the largest product lines available and offers the proper solution for every application.









# CONTA-ELECTRONICS: Well-designed solutions right from the start

Nowadays, the industry demands increasingly specific requirements from electronics. That's no surprise, since there are complex production facilities involved. These requirements must be considered at the start of planning for machines and facilities, when specifying the electronic components.

Our CONTA-ELECTRONICS product line offers you a variety of active and passive components for transmitting and converting analogue and digital signals at the coupling level. This product line includes power supplies, multi-function timing relays, coupling relays, digital switching modules, interface modules, opto-couplers, signal converters, GSM communication modules and much more.

Our quality, variety and expertise all contribute to ensure that you get customised and smart solutions for your requirements. Thus, you are guaranteed to find the best component suited to your machines and facilities.





# GSM-PRO2: Communicates perfectly, decentralised monitoring and process control

The **GSM-PRO2** is the remote maintenance/control solution for controlling and monitoring decentralised systems or facilities. This communicator signals when the process has reached a certain status or specific limit. Digital and analogue inputs values can also be transmitted via e-mail or SMS (text message). The digital relay outputs can be switched using an SMS sent from the decentralised control room or from the service technician. Our Android and iPhone apps are available to make monitoring and control functions even easier.







# GSM-PRO2 4G modules with IoT portal CONTA-SUPERVISION

The CONTA-SUPERVISION IoT portal for the **GSM-PRO2 4G** modules is a platform for managing a wide variety (simple to complex, centralised to decentralised) of processes. With CONTA-SUPERVISION, you can monitor sensors and remotely control actuators at any location, regardless of your existing internal IT infrastructure.

The IoT portal CONTA-SUPERVISION, used together with the CONTA-CLIP **GSM-PRO2 I/O** communication module, acts as a versatile switching point. It does not matter whether it is centralised or decentralised. The GSM-PRO2 module works in parallel with an existing application or can be fully integrated as a new application. The **GSM-PRO2 I/O** communication module and any other extension modules with digital or analogue inputs can be read out using the CONTA-SUPERVISION IoT portal. The digital (relay) outputs can be easily operated with the touch of a finger. The possible extension modules are clearly displayed in the CONTA-SUPERVISION IoT Portal.



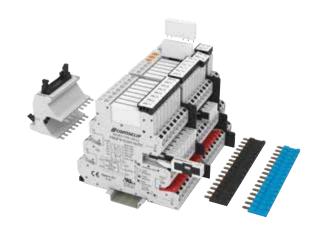
## Our electronic components: Quality down to the last detail



## IRC interface relay: Space-saving, user-friendly, reliable



IRC relay couplers and MFR-IRC timing relays embody a new strategy for the 6.2 mm coupling relays. Our five different relay versions provide optimised use of space, simple installations, ease of use, and excellent functionality. They can be adapted for various application requirements because of the interchangeable mechanical relays and opto-couplers (SSRs). Different coloured cross-connections help to simplify your installation process. Our input/output relays and our plug adapters for PLC/ribbon cable connections further simplify wiring and reduce the space needed in the electrical cabinet. For the IRC relay and the MFR timing relay, the fuse modules can be used to easily add a micro-fuse to the output circuit.





## Signal converters: Reliable, multi-functional, compact



Whether for manufacturing, electrical machinery and facilities, control engineering, power distribution, building automation, or process engineering – it is always important to guarantee that the signal exchange between the peripheral devices and the upper-level central control and guide systems is operationally safe. Our product portfolio includes a wide range of different signal converters with different designs for meeting many requirements.





A stable power supply: With safe connections and fast installation guaranteed



The operability of the electrical controller depends on the reliability of the selected power supply. A stable and safe power and voltage supply guarantees a trouble-free production process for facility/mechanical engineering. Our product line includes many variants: including un-smoothed and smoothed transformers, unregulated and regulated mains power supplies, as well as primary clocked power supplies.





## Transfer modules: Compact, simple, versatile



Interface modules allow for a passive mechanical-electrical implementation of standard connectors onto screw or tension-spring PCB terminals. The individual signals of the multi-pole or high-pole connectors are implemented one-to-one at the PCB – from the individual wires via connectors to pre-assembled cables. Thus, your installation time and associated costs are reduced. Because of the compact design of the interface modules, their clear terminal labelling, and their simple assembly on TS 35 DIN rails, this system represents an attractive alternative to a pure individual wire approach.



# Looking for a versatile marking solution for your electrical cabinet? CONTA-LABEL has got you covered!

It's very important to take advantage of structured labelling to get a quick overview. By using the right marking and printing solutions, you can significantly reduce costs and save much time. Our marking and printing solutions are easy to use.



# Well-structured with striking colours: our marking components for ink-based marking systems



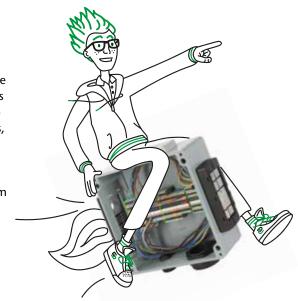
The CONTA-LABEL products include polyamide markers for labelling wires, cables, devices and facilities with ink print. These markers are available in many shapes and colours: in the classic **MC** Maxicard format for self-printing with the EMS plotter system **EMS** or other ink-jet systems, or ready-to-use customised printed in the **PMC** Pocket-Maxicard format.



# CONTA-BOX: Where customised configurations are easy and versatile to create

Our large, varied selection of housing systems is proven, versatile and, above all, safe. Our standard or custom machined housings are made of polystyrene, polycarbonate, polyester, ABS and aluminium. They provide solutions for protecting electronic circuits, integrated devices or terminal strips.

Special requirements call for customised solutions. We use our expertise to process the housings and assemble them with our wide range of terminal blocks, PCB terminals and electronics to satisfy customer requirements.







# Modular components in one product line: CONTA-CON

## PCB connectors: Rational connection technology



Whether at the signal or power level, you'll find the proper connection terminal for all your applications in our PCB terminal product portfolio. Different connection systems, pitches, customised labelling or colour coding ensure an error-free wiring process for the user.



- Push-in, tension-spring or screw-connection wire termination systems
- Wire cross-section up to 6 mm²
- Material: PA 6.6 UL 94 V-0
- Up to 24 poles
- Good electrical and mechanical characteristics

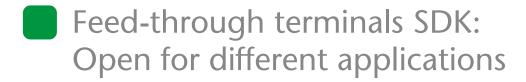




No matter what your application-specific connection terminal requirements are, you'll find what you're looking for in our PCB terminal portfolio - for both the signal and power levels. A wide variety of connection systems and pitches, customised labelling, coding alternatives between female/male connectors, and colour coding: all these options ensure an easy and error-free workflow.



- Your advantages
- Push-in, tension-spring or screw-connection wire termination systems
- Wire cross-section up to 2.5 mm²
- Material: PA 6.6 UL 94 V-0
- Up to 24 poles
- Good electrical and mechanical characteristics
- With or without flange





The **SDK 4**, **SDK 10** and **SDK 16** feed-through terminals are suitable for a wide range of devices and housing applications. The coordinated system components can be combined to achieve various voltages – with a maximum voltage level of 1000V (UL 600V) for rated currents up to 76A.

The maximum rated voltage is achieved by using the optional partition plates, spacer plates and adapter plates, while taking into account the contamination degree 3. Wire cross-sections between 0.2 and 16 mm<sup>2</sup> must be used. The feed-through terminals have a two-part construction and are for panel thicknesses of 1 – 4 mm. They are available in a screw-connect version or a screw/solder-connection version. The latter version is designed for encapsulated device requirements and provides the optimal seal for each application.



- Versatile system with optional usage of partition, spacer and adapter plates.
- Many possibilities to safely mount in the wall.
- Also available in customer-specific colours on request
- Simple and clear markings of the device connection

# CONTA-TOOL: Tools with added value

We offers a variety of tools which help you to efficiently process wires and cables. Our product line includes what you need for a successful and safe installation: stripping tools for shortening and stripping individual wires/ strands, screw tools for safely connecting wires and cables to our terminal blocks, crimping tools for processing wire-end ferrules, as well as cable lugs and (BNC/TNC) plug-in connectors. One highlight...





Our crimping pliers have a square or trapezoidal crimp. They ensure error-free and low-fatigue crimping of wire-end ferrules, with or without insulating collars, up to 18 mm in length. With just one crimping pliers, you can cover a crimping range from 0.08 mm² to 16.0 mm² or 2 x 0.25 mm² to 2 x 10.0 mm² for twin wire-end ferrules. The 360° rotatable crimping insert and 45° detent provides excellent versatility. That makes it easy to adjust the tool to your preferred working position.



- Just one tool for a wide processing range
- Easily change between square and trapezoidal crimp inserts
- Crimp according to DIN 46228
- Automatic adjustment to the wire cross-sections
- Auto-lock feature for improved safety
- Ergonomic design for fatigue-free work
- Easy handling with minimal force needed
- Easy to operate even in hard-to-reach places
- High-quality, durable construction

## Our solutions: Customised for your requirements

We also meet individual customer requirements for processing housings, assembling terminal strips and creating new designs. We can prepare DIN rails and housings according to your specifications and fit these with cable glands or customer-specific products as needed.

We develop your customised connection solution based on our expertise and proven connection components. We then provide you with a reliable and customised connection solution that fits your application.

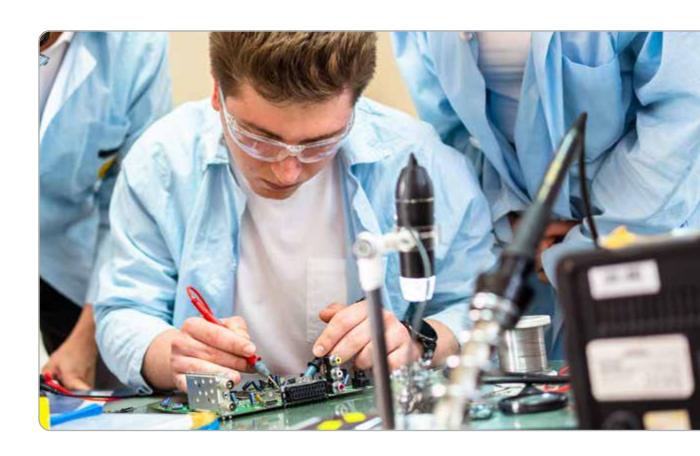
We assemble compete terminal blocks onto DIN rails. We can also label according to your requirements and assume responsibility for the component storage. Thus, you only need one part number to specify a complex pre-assembled unit. We take care of stocking the individual components and managing the parts lists.



# Special electronics: Precisely tailored to customer needs

Our standard series products, such as relay modules, converter modules, power supplies and overvoltage protection, are well-known in the functional electronics sector. However, we also offer many customised solutions. Our experts will work together with you to develop prototypes that match your custom requirements: including design, procurement of components, production, delivery and after-sales support.

This means you get everything from a single source: from problem solving to production, for small or large batches, for simple or complex functional units.



# Your direct connection to us

#### Always the right contact for questions, advice and help

Contact us anytime! We are your partner for supporting you with questions about electrical and electronic connection technology. Our customer service and support team will answer all your questions reliably and competently. You can also take advantage of our online service or chat with us.





# Active worldwide: Our locations

Are you working abroad? No problem. Our worldwide subsidiaries and distribution partners help us to be globally networked and deliver on-time. Simply scan the QR code shown here to find out more about the sales and service partners responsible for your country on our website.





Our locations in Africa

Algeria Morocco South Africa

Our locations in Asia

**Bahrain** China Hong Kong India Israel Japan Jordan Malaysia Oman Pakistan Qatar Saudi Arabia Singapore South Korea Taiwan Turkey **United Arab Emirates**  Our locations in Oceania

Australia New Zealand

**Our locations in Europe** 

Austria Belgium Bulgaria Croatia Czech Republic Denmark **Finland** France Germany Great Britain Greece Hungary Iceland Ireland Italy Latvia Netherlands Norway

Poland Portugal Romania

Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Ukraine

**Our locations in North America** 

Canada Mexico United States

**Our locations in South America** 

Bolivia Brazil Chile Columbia Ecuador



## Experts for Electrical Connectivity

