NEW PRODUCTS

Issue 1/2024

PHOENIX CONTACT

New products 2024

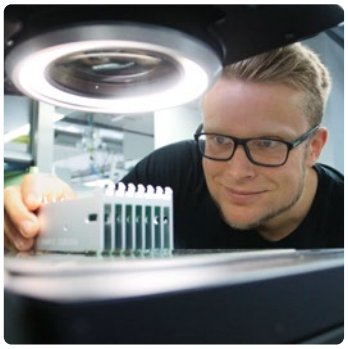
Developed with passion

With our passion for technology and innovation, are developing products for the All Electric Society. This is the key for a sustainable world in which sufficient affordable renewable energy is available for everyone. Discover our new products.

Also on the Internet: **phoenixcontact.com/new-products**

Technical challenges drive Dennis Geisler to top form. For example, when it comes to using the Push-X connection technology, even in the smallest installation space.

Find out more



You will find buttons throughout this e-paper that enable further interaction. Find more information in our web shop, order samples, watch videos, and view our products in 3D.

Gain info

Order sample

Play video

View 3D object

Discover our highlights of the year

With our highlights for electrification, networking, and automation, we are helping to tackle the major challenges of our time.

Our highlights are also available on the Internet: **phoenixcontact.com/highlights**

Compact AC charging cables

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Modular AC charging sockets

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Highly compact Ex i signal conditioners with SIL 3

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Power supplies for machine building

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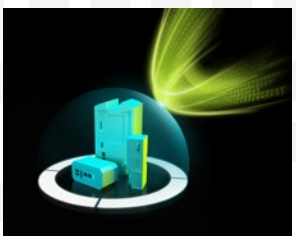

Device and update management with OPC UA

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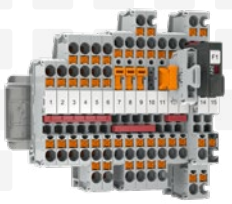

Terminal blocks with Push-X technology

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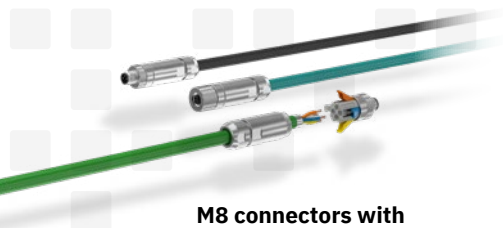

M8 connectors with Push-Lock connection

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DC connectors in the ArcZero series

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FR series board-to-board connectors

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Push-X in a PCB connector

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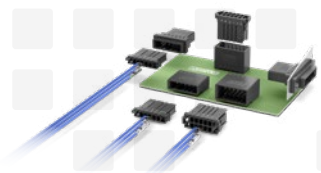

D21, D31, and D32 series CONNEXIS connectors

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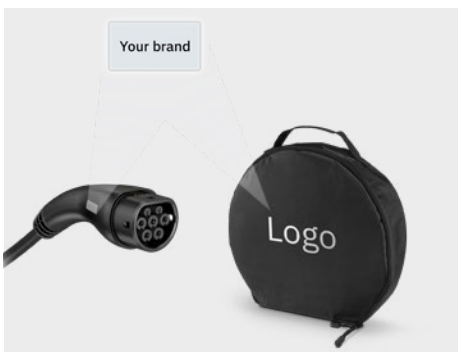
Reduced to the essentials – economical, price-conscious, and safe

Easy handling with compact dimensions and reduced weight



AC charging cable and bag with customer logo available

HIGHLIGHT

Compact AC charging cables

Reduced to the essentials

The particularly compact CHARX connect eco mode 3 charging cables feature proven Phoenix Contact quality, a solid feel, and an attractive price. They are currently available in the type 2 charging standard with the usual four performance classes from 3.7 kW to 22 kW.

Main features

- Charging standard: AC type 2
- Rated current: 20 A … 32 A
- Rated voltage: 250 V AC … 480 V AC
- Charging power: 3.7 kW … 22 kW
- Conductor cross-section: 1.5 mm² … 4.0 mm²
- External degree of protection: IP44 (when plugged in), IP54 (with protective cap)
- Internal degree of protection: based on IP67
- Certifications: CE, CB

CHARX connect
E-Mobility empowered by Phoenix Contact

Your advantages

- Proven Phoenix Contact quality at an attractive price
- Solid feel and easy handling with compact dimensions and a low weight
- Sustainable and resource-saving with reduced use of materials
- Available with your logo on request – for the consistent branding of your charging station
- Longitudinal water tightness reliably protects the charging connector and cable against water ingress

View 3D object

Gain more info:
Webcode #3304

Modular system: just four steps to create your individual charging socket

Intuitive one-hand operation

Winner of two awards for design and modularity

HIGHLIGHT

Modular AC charging sockets

Adaptable to your needs

CHARX connect modular is assembled based on the modular principle: Choose between round and square protective covers. Add an optional LED status indicator, temperature sensors, and shutter. Plug-in connecting cables, graded according to power and length, round off the package.

Main features

- Rated current: 20 A ... 32 A
- Rated voltage: 250 ... 480 V AC
- Conductor cross-section: 2.5 mm² ... 6 mm²
- Locking actuator voltage: 12 V, 24 V
- Cable length: 30 cm ... 200 cm (additional lengths on request)
- Temperature sensors: PTC chain
- RGB LED control: 3 PWM inputs
- Certifications: CE, CB

CHARX connect
E-Mobility empowered by Phoenix Contact

Your advantages

- Modular system provides maximum flexibility in the design of your charging station
- Charging status intuitively visible at a glance with color LED indicator
- Protected against overheating with precise temperature measurement
- Flexible mounting and easy maintenance with plug-in cables
- Waterproof and dirtproof due to fully molded contacts

View 3D object

Play video

Gain more info:
Webcode #2100

Protective covers for AC charging sockets

In a new design with optional LED display

The protective covers for our CHARX connect modular type 2 charging sockets are now available in a new, round design – with an integrated LED status indicator as an option. For the consistent branding of your charging stations, a custom design with your logo is available on request.

Main features

- Charging standard: AC type 2
- Degree of protection: IP54
- Impact protection rating: IK09
- LED control: 3 PWM inputs
- LED versions available with common cathode or anode
- Customer logo either stamped or as UV- and weather-resistant plastic label

CHARX connect
E-Mobility empowered by Phoenix Contact

Your advantages

- Fiberglass-reinforced housing protects against weather and vandalism
- Fast status detection via color LED display and intuitive one-handed operation
- Glowing, flashing, and pulsing in all colors with freely controllable multicolor LEDs
- Precision light guide technology ensures homogeneous light pattern with optimum light diffusion
- Power supply to the LEDs via mounting screws simplifies installation

Gain more info:
Webcode #3318

Shutters for AC charging sockets

More safety with intuitive operation

The new shutter for our CHARX connect modular type 2 charging sockets ensures that all electrical contacts have safe touch protection in compliance with national standards. It is simple and convenient to operate: the protective cover opens when the charging connector is inserted.

Main features

- Charging standard: AC type 2
- Touch protection in accordance with IEC 61851-1, IEC 62196-1, IEC 62196-2
- Degree of protection: IPXXD
- Suitable for rear mounting

CHARX connect
E-Mobility empowered by Phoenix Contact

Your advantages

- Touch protection for all power and signal contacts increases electrical safety
- Extended protection of the charging socket against vandalism and moisture
- Intuitive one-handed operation without the need to turn or push the male connector
- Compatible with all type 2 charging sockets and protective covers from Phoenix Contact

Gain more info:
Webcode #3431

RFID reader for AC charging controllers

With configurable LED display and buzzer

The new RFID reader for the CHARX control modular charging controllers features a bright, four-color LED status indicator as well as a buzzer for acoustic feedback during RFID interactions. Both can be conveniently configured to your needs.

Main features

- Connection to charging controller via RS-485
- Power supply with 12 V via charging controller
- Compatible RFID card types: ISO 14443A, ISO 15693
- Dimensions (W x H x D):
  100 mm x 55 mm x 7.6 mm
- For mounting inside the charging station or home charger

CHARX control
E-Mobility empowered by Phoenix Contact

Your advantages

- Users of your charging stations receive intuitive feedback on the RFID and charging status
- LED display lights up, flashes, or pulses with adjustable brightness in four selectable colors
- Buzzer sounds with adjustable duration, volume, and sound frequency
- Convenient configuration via web browser or configuration tool for CHARX control modular
- Ready for future requirements with NFC interface for future function extensions

Gain more info:
Webcode #3319

Surge protection box for retrofitting

Optimal protection for home charging stations and electric cars

Even though the main distribution box already has surge protection, the protective effect is often insufficient for long lines to the home charger. CHARX protect retrofit can be retrofitted easily in the carport and reliably protects the charging station and electric car from expensive damage.

Main features

- Suitable for home chargers with a charging power from 11 to 22 kW
- IP65 housing with transparent cover and cable glands
- Plug-in type 2 surge protection with status indicator and floating remote indication contact
- Nominal voltage: 230/400 V AC
- Nominal current: 32 A (at 6 mm²)
- Dimensions (H x W x D):
  130 mm x 180 mm x 111 mm

CHARX protect
E-Mobility empowered by Phoenix Contact

Your advantages

- Prevention of costly damage to the charging station and vehicle
- Flexible selection of cable cross-sections with a variable sealing area
- Tool-free Push-in connection technology saves time during installation
- No additional installation material required, thanks to through-wiring
- Weather-resistant, robust, and shockproof in accordance with impact protection rating IK08

Gain more info:
Webcode #3434

Billing compliant with calibration laws

Unlimited safety

High-performance versions

HIGHLIGHT

Uncooled HPC charging cables

High Power Charging with a permanent 375 kW

The new CHARX connect professional DC charging cables enable fast HPC charging with a permanent 375 kW at temperatures up to +40°C. At the same time, they eliminate the need for cost-intensive liquid cooling. Benefit from smart features and unlimited safety.

Main features

- Charging standard: CCS type 2
- DC rated current: 375 A
- DC rated voltage: 1,000 V
- Conductor cross-section: 4 x 55 mm²
- Temperature sensors: 2 x Pt 1000
- Four-conductor measurement technology
- External degree of protection: IP54 (when plugged in)
- Internal degree of protection: based on IP67

CHARX connect
E-Mobility empowered by Phoenix Contact

Your advantages

- High Power Charging without the need for liquid cooling with increased conductor cross-sections
- Prepared for four-conductor measurement technology, enabling simple billing compliant with calibration laws
- High-level safety with two-chamber sealing system for the separation of DC+ and DC-
- Particularly robust and durable connector design for high availability
- Fast and cost-effective maintenance with exchangeable mating face including the power contacts

View 3D object

Gain more info:
Webcode #3305

Compact CCS charging cables

The ideal charging solution up to 125 kW

The CHARX connect compact CCS type 1 charging cables are now available in a higher performance class up to 125 kW. With their sophisticated design, they are suitable for smaller DC charging stations and DC home chargers and are ideal for fleet solutions and your public/commercial applications.

Main features

- Charging standard: DC type 1
- Nominal current: 125 A
- Rated voltage: 1,000 V DC
- Conductor cross-section: 25 mm²
- Degrees of protection: IP44 (plugged in), internal component: IP67
- Certifications: UL 2251 (UL 2202-ready), ISO/IEC 15118

CHARX connect
E-Mobility empowered by Phoenix Contact

Your advantages

- The right charging cable for every application, from a carport through to a charging park
- Convenient handling due to the ergonomic design
- Optimum cable flexibility, also for use in cold weather
- Available with your logo on request – for consistent branding of your charging stations
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001

Gain more info:
Webcode #3402

Universal CCS charging inlets

Charging now possible with a constant 375 kW

The new performance class of CHARX connect universal CCS vehicle charging inlets now enables the constant and uncooled HPC charging of vehicles and mobile machines at 375 kW with a cable cross-section of 120 mm² – with significantly higher charging powers for short periods in Boost Mode.

Main features

- Charging standard: type 1, type 2
- Nominal current: 375 A
- Nominal voltage: 1,000 V DC
- Charging power (Boost Mode): >500 kW
- Cable cross-section: 120 mm²
- Pt 1000 temperature sensors on the DC contacts
- Certifications: CE, UL

CHARX connect
E-Mobility empowered by Phoenix Contact

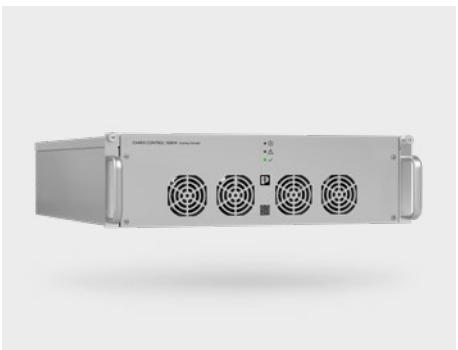
Your advantages

- HPC-capable: a cable cross-section of 120 mm² allows electric vehicles to be charged with a constant 375 kW
- Waterproof, dirtproof and dustproof due to degree of protection IP6K6K/IP6K9K in the front area even with the charging flap open
- Easy design-in through the compact design, uniform dimensions, and identical screw-on points
- Developed and produced in accordance with the IATF 16949 automotive standard

View 3D object

Play video

Gain more info:
Webcode #3403



Compact power control module

Efficient fast charging module

Convenient AC distribution module

HIGHLIGHT

Design modular DC charging infrastructure

19“ racks for fast charging

With CHARX modules, you can optimize the planning, installation, and operation of your charging station. All the components of your charging station are supplied and protected via the AC distribution. Together with the space-saving control module, space is created for further scalable AC/DC fast charging modules.

Main features

- 19“ standard size with 3 RUs per module (21 RUs with full configuration)
- Charging power scalable up to 150 kW
- Preconfigured charging controller for plug-and-play
- EMI requirements in accordance with IEC 61851-21-2 Class B
- Modules certified by independent testing bodies
- T-LOX connection and Push-in fast connection

CHARX control
E-Mobility empowered by Phoenix Contact

CHARX power
E-Mobility empowered by Phoenix Contact

Your advantages

- Modular design of the charging station with the CHARX system reduces complexity
- Ease of maintenance with quick and easy installation and replacement of modules
- Connection of up to five 30 kW power modules
- Easy handling with tool-free mounting
- 19“ standard modules enable a customer-specific design of the charging station, in which all components from the connector to the user guidance system can be individually designed

Play video

Gain more info:
Webcode #2529

Power control module for 19“ charging stations

Design modular DC charging infrastructure

CHARX control integrated combines all functions for controlling and monitoring your 19“ charging station. The control module manages up to five 30 kW power modules for fast DC charging up to 150 kW. It simplifies the planning, installation, and maintenance of your charging station.

Main features

- 19“ standard, three rack units
- Five DC inputs: 0 A ... 150 A, 0 V ... 1,000 V
- One DC output: 0 A ... 500 A, 0 V ... 1,000 V
- Nominal DC output power: 150 kW
- Integrated functions: charging controller, cellular modem, insulation monitoring, power contactors, fuse, surge protection, 24 V power supply

CHARX control
E-Mobility empowered by Phoenix Contact

Your advantages

- Efficient and space-saving, as all functions are combined in one highly integrated device
- Fast installation and maintenance with 19“ standard and Push-in fast connection
- Compliant with European safety and EMC standards in accordance with EN 61000
- Flexible use with free choice of charging controller programming in accordance with IEC 61131
- Easy system integration and remote access with comprehensive interfaces

View 3D object

Gain more info:
Webcode #3432

Distribution module for 19“ charging stations

Design modular DC charging infrastructure

CHARX power distribute can supply AC mains voltage to up to five power modules in your 19“ fast charging station. It also supplies power to the control module. Numerous integrated protective functions ensure maximum safety for downstream modules and lines.

Main features

- 19“ standard, three rack units
- One AC input: 3 x 400 V AC ... 480 V AC, 232 A
- Five AC outputs: 3 x 63 A
- One AC output: 3 x 6 A
- Switchgear and controlgear assembly in accordance with IEC 61439-7
- Overvoltage category III in accordance with IEC 60664-1

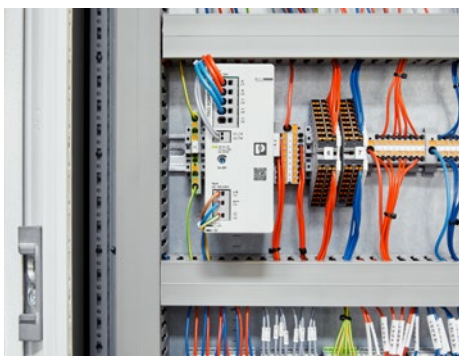
CHARX power
E-Mobility empowered by Phoenix Contact

Your advantages

- Efficient and space-saving supply of all power modules in the charging station
- Fast installation and maintenance with 19“ standard and Push-in fast connection
- Compliant with European safety and EMC standards in accordance with EN 61000
- Includes surge protection, miniature circuit breakers, and protection against overheating
- Enables fused connection of power modules of overvoltage category II

View 3D object

Gain more info:
Webcode #3433



Space-saving

Easy handling

Smart diagnostics

HIGHLIGHT

Power supplies for machine building

Plug-and-play solution with device protection

The new TRIO POWER power supplies with integrated, multichannel device protection feature a space-saving design, a robust and reliable supply, easy handling, smart diagnostics, and the IO-Link interface.

Main features

- 4- and 8-channel device protection
- Prioritized load management
- Dynamic boost of up to 150% for 5 s
- Low depth of just 125 mm
- Comprehensive signaling: group message contact, multicolor LED, and IO-Link interface

Your advantages

- Power reliability in one device due to the integrated multichannel device protection
- Low installation costs due to 70 % less wiring and installation effort
- Easy commissioning through intuitive manual operation or parameterization via IO-Link
- High availability due to prioritized load management with intelligent self-monitoring functionality
- Space-saving due to the low overall width and capability of being mounted side by side

Gain more info:
Webcode #3314

Power supplies for machine building

Compact plug-and-play solution

The new generation of TRIO POWER power supplies with output currents from 5 to 40 A feature with a space-saving design, a robust and reliable supply, easy handling, and smart diagnostics.

Main features

- Dynamic boost of up to 150% for 5 s
- Powerful output characteristic curve
- Group message contact and multicolor LED
- Low depth of just 125 mm
- Wide temperature range: -25°C ... +70°C, startup type tested: -40°C

Your advantages

- Space-saving with a low overall width, low installed depth, and capability of being mounted directly side by side
- Robust and reliable with dynamic boost with a powerful output characteristic curve for starting high loads
- Smart diagnostics with multicolor LED and grouping contact for a clear status display
- Easy handling with Push-in connection technology, marking fields, stripping identification, and tamper-proof setting

Gain more info:
Webcode #3313

Power supplies for machine building

For extreme environments

For the first time, TRIO POWER power supplies are available with a protective-coated printed circuit board for extreme environments. The coating protects against dust, corrosive gases, and 100% humidity. Failures due to creepage currents and electrochemical migration caused by corrosion are also prevented.

Main features

- Dynamic boost of up to 150% for 5 s
- Powerful output characteristic curve
- Collective signaling contact and multicolor LED
- Low depth of just 125 mm
- Wide temperature range: -25°C ... +70°C, startup type tested: -40°C

Your advantages

- Space-saving with a low overall width, low installed depth, and capability of being mounted directly side by side
- Robust and reliable with dynamic boost with a powerful output characteristic curve for starting high loads
- Smart diagnostics with multicolor LED and grouping contact for a clear status display
- Easy handling with Push-in connection technology, marking fields, stripping identification, and tamper-proof setting

Gain more info:
Webcode #3404

Power supply for building automation

For Power-over-Ethernet applications

The new STEP POWER power supply ensures high availability in PoE applications.
The additional voltage version with the voltage range from 48 to 56 V can be used in both industry and household applications.

Main features

- High insulation strength and low noise emission for high data integrity
- Efficiency: >94%
- No-load losses: <0.21 W
- Push-in connection
- Wide temperature range: -10°C ... +70°C

Your advantages

- The power is supplied and the data transferred over the same Ethernet cable in the application
- Energy savings with the highest level of efficiency in no-load and part-load operation (Efficiency Level VI)
- Space savings in the control cabinet with the narrow and low-profile designs combined with increased performance (up to 100%)
- Approval for household purposes (EN 60335) means it can be used in domestic applications for the first time

Gain more info:
Webcode #3405

Power supplies for building automation

Powering and charging via the USB port

The STEP power supplies supply power to both Raspberry Pis and Smart Home components via the USB port. In addition, they can be used for the fast charging of mobile end devices.

Main features

- No-load losses: <0.1 W
- USB-A and USB-C connection flexibility
- Max. output power 3 A
- Overall width 18 mm
- Wide temperature range: -10°C ... +70°C

Your advantages

- Two connection methods: USB-A and USB-C
- Easy installation in the subdistribution system with an integrated cable groove in the housing
- Large space savings in the control cabinet through use as a USB charger
- Energy savings with a particularly high efficiency in no-load and part-load operation (Efficiency Level VI)

Gain more info:
Webcode #3406

Power supply for building automation

For extreme ambient conditions

The new STEP POWER power supply with protective-coated printed circuit board ensures high availability even under demanding ambient conditions of as low as -40°C.

Main features

- PCB with protective coating
- Efficiency: >94%
- No-load losses: <0.21 W
- Push-in connection with conductor/ PCB connection direction: 45°
- Wide temperature range: -40°C ... +70°C

Your advantages

- PCB with protective coating for extreme ambient conditions
- NEC Class 2 output, certified in accordance with UL 1310
- Energy savings with high efficiency in no-load and part-load operation (Efficiency Level VI)
- Slim-line design saves space in the control cabinet
- Approval for household purposes (EN 60335) means it can be used in domestic applications for the first time

Gain more info:
Webcode #3315

Continue to supply AC loads without the grid

Buffering of large AC loads up to 5 kVA

Reliably power AC loads with the new QUINT HP UPS and a corresponding energy storage system for wall mounting. The UPS provides information about the state of charge, remaining time, and battery module life at all times. All parameters can be called up via the software.

Main features

- Online topology VFI-SS-111
- Power: 1.5 kVA and 2.5 kVA
- Slot for communication cards
- Wide temperature range: -25°C ... +60°C
- Comprehensive signaling via LEDs and digital I/Os

Your advantages

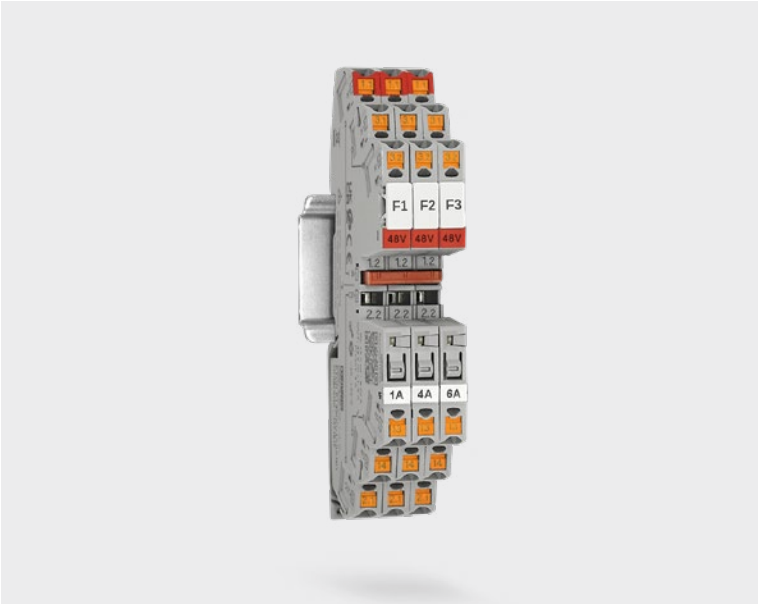
- Pure sine wave in normal and battery operation
- Can be switched in parallel for increased performance, redundancy, or for a 3 AC system
- Startup from the energy storage system possible, even without mains input
- Communication platform: Com.board with USB or serial interface
- Compact design with active cooling

Gain more info:
Webcode #3407

Narrow electronic circuit breakers

Universal protection also at 48 V DC

The PTCB single-channel electronic circuit breaker can be used universally in 48 V applications and safely starts heavy loads. With an overall width of 6 mm, the circuit breaker can be adjusted from 1 to 6 A and can be bridged to the CLIPLINE complete terminal block system.



Main features

- Integrated remote signaling and visual status indicator
- Can be reset
- Adjustable between six nominal current values
- Compatible with CLIPLINE terminal blocks
- 2 A version with NEC Class 2 (pending)
- Multi-stage characteristic curve for improved heavy-load starting

Your advantages

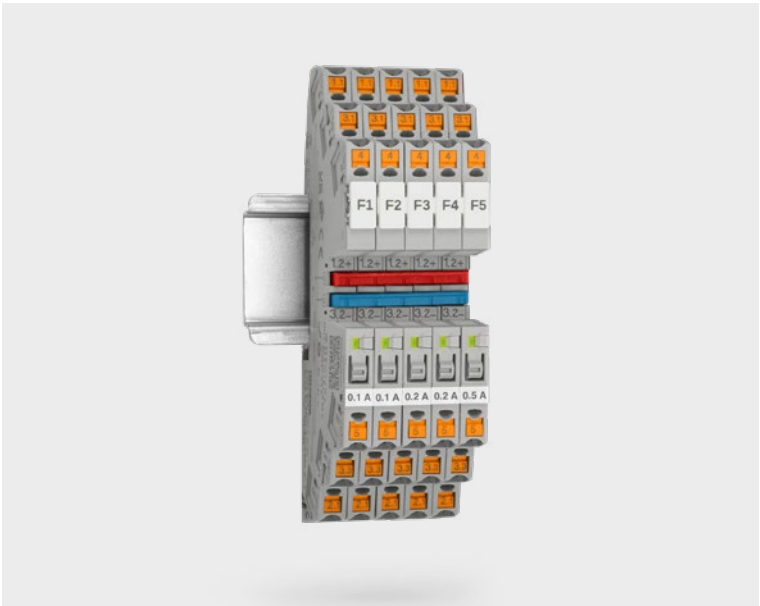
- Simple application setup with the capability of bridging to the CLIPLINE complete terminal block range
- More space in the control cabinet: particularly narrow protection with a width of just 6 mm
- Flexible use and a reduced inventory due to adjustable current values on each device for a wide range of applications

Gain more info:
Webcode #3421

PTCB eFuse

The new electronic microfuse

Ensure greater transparency for the fuse-protection of nominal currents below 1 A with the PTCB eFuse electronic device circuit breakers. Benefit from rapid recovery and effortless system planning, as well as integrated potential distribution with an overall width of just 6 mm.



Main features

- Remote signaling and visual status indication
- Can be reset on site and remotely
- Low voltage drop and precise tripping
- Adjustable between six nominal current values
- Current-limited and decoupled output
- Positive and negative wiring

Your advantages

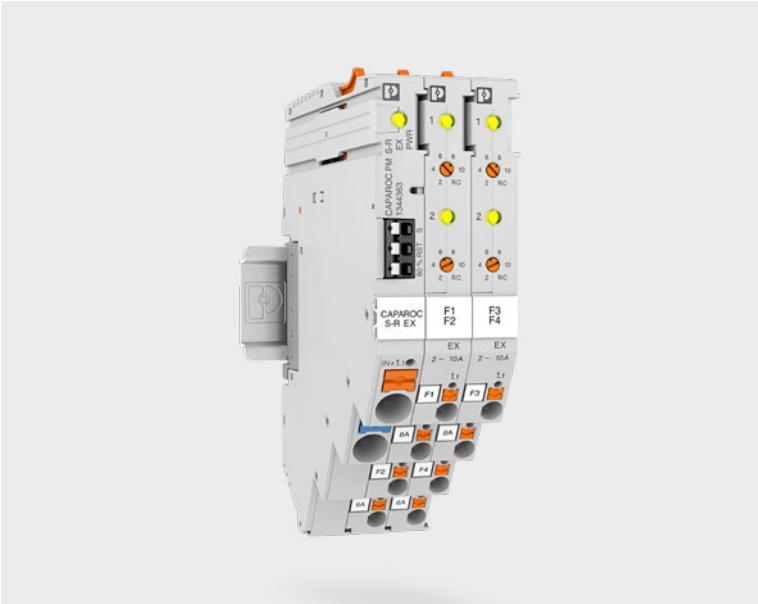
- Precise fault localization and fast recovery with status message and local and remote reset options
- Effortless system planning with precise shutdown, low voltage losses, and configurable current values
- More space in the control cabinet due to integrated potential distribution of positive and negative with an overall width of 6 mm
- Simple application setup with the capability of bridging to the CLIPLINE complete terminal block range

Gain more info:
Webcode #3316

Electronic circuit breaker system

Protection for explosion-protected areas

The adjustable CAPAROC circuit breaker system now also protects your loads in explosion-protected areas. The Ex e approvals for zone 2 significantly extend the wide range of possible system applications.



Main features

- Supply voltage: 12 V DC ... 24 V DC
- Group message and remote reset
- I >80% prewarning
- Read out and set nominal currents via a rotary switch
- Push-in connections: up to 4 or 16 mm²
- 2-way potential distribution

Your advantages

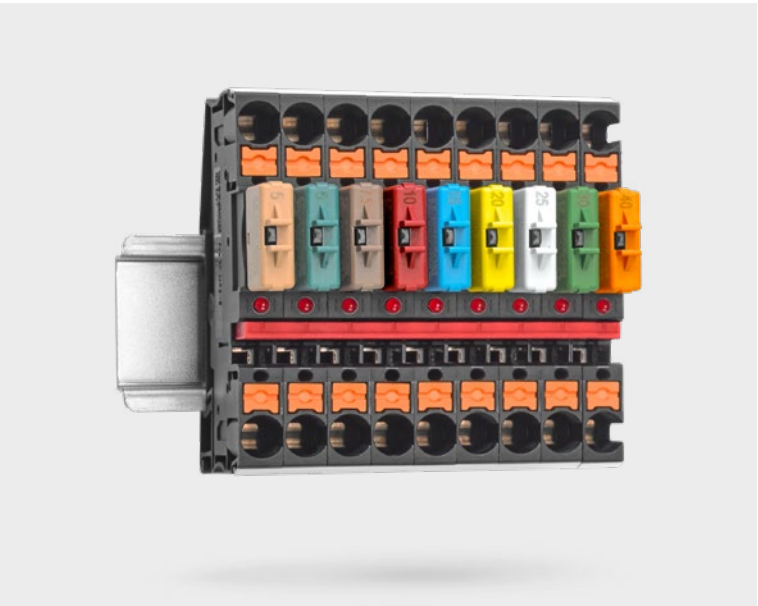
- The customizable standard, with individual combinations of the future-proof modular system
- Easy operation for everyone through tool-free assembly, uninterrupted installation, and transparent operating state
- Strikingly simple design-in with extensive support from the selection up to digital services

Gain more info:
Webcode #3060

TCP DC thermal device circuit breakers

Compact plug-and-play solution

TCP DC device circuit breakers are the reclosable alternative for your vehicle fuses. Easily retrofit your applications and reduce on-site service work. The portfolio offers the optimum overload protection for your application with two characteristic curves.



Main features

- Reclosable
- Easy to use in combination with our CLIPLINE portfolio
- Color coding of the different nominal currents (5 A ... 40 A)
- 2 characteristic curves
- Protection against unintentional restarting

Your advantages

- Fast, replacement part-free recommissioning after an event with the reconnection options
- Easy to retrofit in existing systems with vehicle fuses with identical pin connector pattern
- Optimum overload protection for the connected loads with a choice of different characteristic curves

Gain more info:
Webcode #3422

VAL-SEC-AGK-25 pick-off terminal blocks

Modular accessories for SEC type 2

Simplify the installation of SEC type 2 surge protective devices by using the VAL-SEC-AGK. The modular extensions enable easy EMC-optimized through-wiring. The VAL-SEC-AGK provides the ideal conditions for applications up to a 63 A load current.

Main features

- Snap-on pick-off terminal block
- Individually adjustable to any number of positions
- Maximum conductor cross-section: 25 mm²
- Maximum nominal voltage: 400 V
- Maximum load current: 63 A
- Overall width: 12 mm

Your advantages

- Enables EMC-optimized through-wiring of the SPD through modular extensions
- Simplified installation with the potential use of ferrules for through-wiring
- Perfect extension to the SEC-T2 product portfolio with a uniform design and an individually configurable number of positions

Gain more info:
Webcode #3430

Protection for telecommunications applications

For high-speed data transmissions

The new DT-TELE-WM-RJ45-PT-I protective device protects high-speed TC applications from damage caused by surge voltages. Simply mount the surge protection device on a DIN rail, on the control cabinet panel, or on the wall.

Main features

- Wall and DIN rail mounting with terminal blocks and system connector connection
- Usable up to 250 Mbps (VDSL) and 1.5 Gbps (G.fast)
- Integrated status indicator

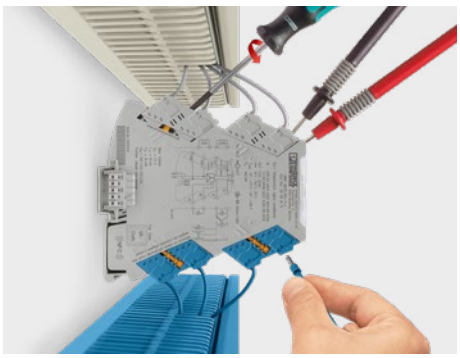
Your advantages

- Easy installation in cabinets and on the wall with screw mounting and latching onto a DIN rail
- No restriction of data transmission even at high speeds
- Precise function monitoring with the status indicator on the device

Gain more info:
Webcode #3419

Comprehensive explosion protection in just 6.2 mm

Safety for every signal type and signal direction



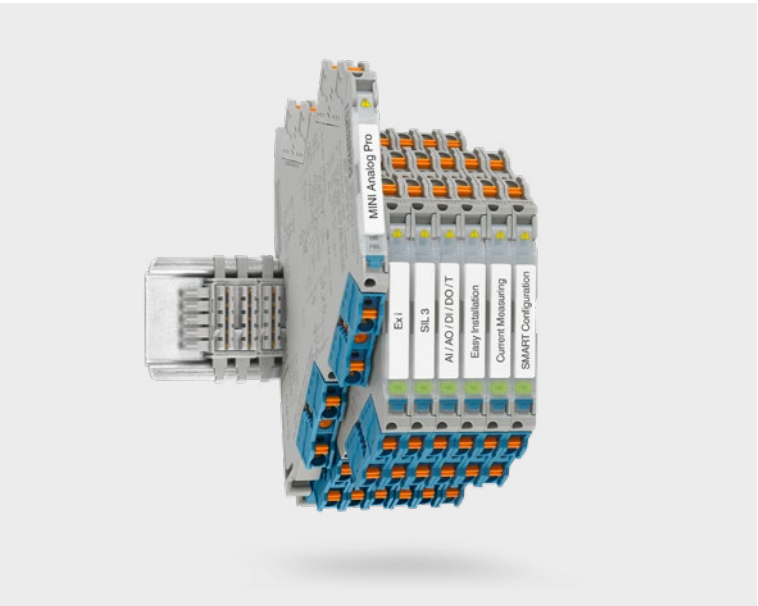
User-friendly operating concept

HIGHLIGHT

Highly compact Ex i signal conditioners with SIL 3

Ex i and SIL 3 with an overall width of just 6.2 mm

The Ex i signal conditioners of the MINI Analog Pro product family unify intrinsically safe explosion protection and functional safety up to SIL 3 1oo1 on an overall width of just 6.2 mm. Benefit from the user-friendly operating concept and end-to-end digitization.



Main features

- Ex i and SIL 3 1oo1 with a housing width of just 6.2 mm
- Clearly visible operating elements and plug-in connection terminal blocks
- Uninterruptible current signal measurement
- Temperature operating range from -40°C to+70°C and documented requirement for altitude operating ranges up to 5,000 m

Your advantages

- Explosion protection with international approvals, an extended temperature range, and a documented altitude range up to 5,000 m
- A safe solution for every signal type and direction with suitability for SIL 3 applications
- User-friendly design, operating concept, and numerous parameterization options
- End-to-end digitalization with configuration and monitoring app, communication gateways, digital tagging, and rating plate

Gain more info:
Webcode #3327

Ex i signal conditioners with SIL/PL

One- and two-channel, for all functions

The proven Ex i signal conditioners of the MACX Analog product family combine explosion protection and functional safety in one- and two-channel versions and signal duplicators on an overall width of just 12.5 mm. In addition, devices with limit value switches are also available.

Main features

- Ex i, SIL 2 SC 3, or SIL 3, PL (type-specific)
- Two-channel version for all signal types
- Extended temperature range and altitude operating range up to 5,000 m
- App and digital nameplate
- Compatible with MINI Analog Pro signal conditioners via bus connector

Your advantages

- Two-channel version for all signal types with Ex i, SIL 2 SC3, or SIL 3 on just 12.5 mm
- Explosion protection with international approvals, an extended temperature range, and a documented altitude range up to 5,000 m
- Ready for the digital future with configuration and monitoring app and digital nameplate
- System compatible with MINI Analog Pro signal conditioners

Gain more info:
Webcode #3328

DC energy meters with calibration approval

Designed for charging infrastructure

The extremely compact EMpro DC energy meter enables space-saving, direct measurement of currents and voltages of up to 650 A/1,000 V DC. The proven RS-485 interface and calibration approval are ideal for billing purposes in charging infrastructure.

Main features

- Measurement of up to 650 A/1,000 V DC
- Accuracy class B (EN 50470-3)
- Dimensions: 107.2 mm x 116 mm x 67 mm
- Operating temperature: -40°C ... +80°C
- SLIP interface with OCMF data format
- Cable-loss compensation
- In accordance with VDE-AR-E-2418-3-100

Your advantages

- DC direct measurement without converter with a space-saving design
- High reliability with a maximum permissible operating temperature of +80°C
- Simplified point-to-point protocol with a standardized e-mobility data format
- Calibration approval for billing purposes
- Ideal in combination with CHARX DC charging controller

Gain more info:
Webcode #3424

CONTACTRON Speed Starters

Shielding set with innovative clamping technology

Accessories set for easy and reliable connection of cable shields to the CONTACTRON Speed Starter. The set consists of a shroud, two shield connection terminal blocks for signal lines, and a shield connection terminal block for the motor cable.

Main features

- Overall width: 35 mm/45 mm
- Simple clamping and latching mechanism
- Set consisting of one shroud (35 mm/45 mm), two shield connection terminal blocks for signal lines, and one shield connection terminal block for the motor connection cable

Your advantages

- Fast and reliable mounting with optimized design, fixing, latching, and screw connection
- Lower susceptibility to electromagnetic interference with a large-surface contact area
- Reliable connection between the cable shield and plate with innovative clamping technology

Gain more info:
Webcode #3321

PSRmodular XC

Safety modules for extreme environments

The configurable PSRmodular XC safety modules are suitable for use under extreme ambient conditions (XC = eXtreme Conditions). This makes them ideal for applications in the process industry and in the maritime environment, for example.

Main features

- Certified in accordance with TÜV, UL, CSA
- Advanced approvals: maritime approval (DNV), G3
- Advanced approvals in preparation: ATEX zone 2, heat treatment (in accordance with EN 746, EN 298, EN 50156), UL Class I Div. 2
- Push-in technology

Your advantages

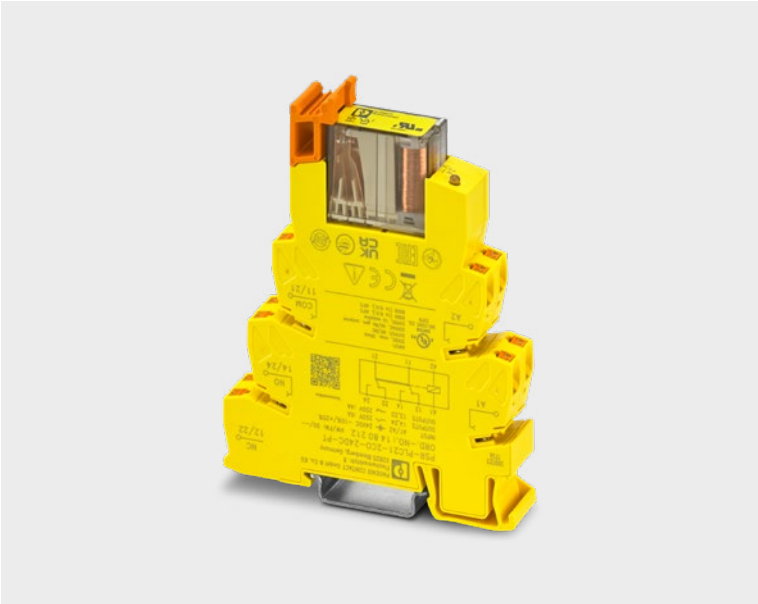
- High-level safety even under extreme ambient conditions up to PL e or SIL 3
- Highly reliable even in extended temperature ranges from -40 to +70°C
- Corrosion protection with additional conformal coating of the printed circuit board

Gain more info:
Webcode #3324

PSR-PLC21 safe coupling relays

Power adaptation and electrical isolation

The PSR-PLC21 is a safe coupling relay for power adaptation and electrical isolation in high- and low-demand applications. The safety function is designed in accordance with EN 60204-1 stop category 0.



Main features

- Overall width: 14 mm
- Integrated test pulse filter
- Push-in technology

Your advantages

- Reduced maintenance time with easy replacement of the elementary relay
- Space savings with the compact overall width
- Increased service life with integrated test pulse filter
- Safe diagnostics and easy proof test in accordance with IEC 61508
- Proven safety with force-guided relay contacts up to SIL 2/PL c

Gain more info:
Webcode #3325

1 Gbit/s

High data throughput

Secure network segmentation

Intelligent firewall

HIGHLIGHT

FL MGUARD 2100/4300 security routers

Security routers for industrial networks

With comprehensive security functions, the mGuard security routers protect your industrial network against unauthorized access by people or malware. The proven mGuard security technology enables you to control and safeguard communication within your production network.

Main features

- High processing speed of the mGuard security routers
- Extensive security functions
- mGuard Device Manager central management software

Your advantages

- With the high processing speed of the mGuard security routers, data flow within your network is not slowed down
- High level of security through proven mGuard security technology and over 20 years of experience in cybersecurity
- Long-term software maintenance and high security through timely updates enable many years of use

Gain more info:
Webcode #3219

Industrial 5G router – TC ROUTER

For public and private 5G networks

The new TC ROUTER 5004T-5G EU is a cellular router for wireless Ethernet communications over 5G networks. It is suitable for remote maintenance and remote control applications. The router features high data rates and enables easy and secure remote access to industrial applications.

Main features

- 5G router (5G NR, 3GPP Rel. 15) with 4G (LTE Advanced Pro) and 3G (HSPA+) fallback
- Four Ethernet ports (Gigabit)
- Four digital inputs and two digital outputs
- Extended temperature range: -40°C … +70°C
- GRE TAP tunnel for tunneling Layer 2 protocols such as PROFINET

Your advantages

- For public and private networks (SA/NSA)
- Maximum bandwidth for data-intensive applications
- VPN and stateful inspection firewall for secure communication over public networks
- Space-saving industrial design for DIN rail mounting with complete operation on the front panel
- Router control and monitoring via SMS or digital inputs and outputs

Gain more info:
Webcode #3317

Managed SPE switches

Direct integration of sensors

Single Pair Ethernet (SPE) enables consistent Ethernet communication from the sensor to the cloud. With the new Managed SPE switches, modern field devices and sensors can be integrated directly into the Ethernet network. In addition to data transmission, the devices are supplied optimally with power from the switch via Power over Data Line (PoDL).

Main features

- Features eight SPE 10Base-T1L connections and three RJ45 ports (10/100/1,000 Mbps)
- Power supply for sensors and field devices up to 3.2 W with PoDL Class 11
- Long distances up to 1,000 m with 10BASE-T1L
- All familiar FL SWITCH 2300 functions, such as the security feature and network redundancy

Your advantages

- Universal in application with all Ethernet and IP-based protocols (e.g., PROFINET, Modbus/TCP, and MQTT)
- The Single Pair Ethernet switch enables long distances of up to 1,000 m to be bridged with the 10Base-T1L standard
- Low complexity and installation effort, as no gateways or elaborate subsystems are required
- Direct Ethernet/PROFINET integration e.g., for transferring the measured values via MQTT to the cloud

Gain more info:
Webcode #3326

Managed TSN switches

Real-time-capable Ethernet networks

With the managed TSN switches, you can build applications with precise time synchronization. This ensures real-time communication and increased availability in your automation networks. New versions with fiber-optic connection are now available.

Main features

- Precise time synchronization (IEEE 801.2AS and IEEE 1588v2) and frame preemption (IEEE 802.1Qbu)
- CC-Link IE TSN compliance Class B certified and scheduling/traffic shaping (IEEE 802.1Qbv)
- Stream management via PROFINET
- Supports all familiar functions of the FL SWITCH 2300

Your advantages

- The TSN switches increase the performance, robustness, and availability of industrial networks
- Extensive new capabilities for building time-critical applications
- Can be used in classic applications, no device replacement is necessary for the future introduction of TSN

Gain more info:
Webcode #3388

Firmware 3.2 for managed switches

Extended security functions

Firmware version 3.2 is available for all devices of the FL SWITCH 2000, FL SWITCH TSN 2000, and FL NAT 2000 product families. The new firmware version has comprehensive new security functionalities for protecting your industrial network.

Main features

- External CA certificate support
- Configurable password conventions
- Several options for failed 802.1x authentication
- Configurable SNMPv3 authentication and encryption algorithms
- System usage notification for CLI and WBM
- PROFINET network load class III

Your advantages

- Improved port security and advanced security configuration options
- Increased security for device access
- Improved robustness for PROFINET communication
- Advanced functions for user management

Gain more info:
Webcode #3023

Raptor switches

Use in critical infrastructures

Raptor switches enable reliable and safe operation in extreme ambient conditions. The Raptor portfolio meets the stringent requirements of the IEC 61850-3 and IEEE 1613 standards. The switches are ideal for critical infrastructure and power supply applications.

Main features

- Scalable platform for changing performance and configuration requirements
- High connection density and diverse selection of communication modules
- Flexible standard 19“ rack and DIN rail mounting options

Your advantages

- Reliable managed switches that meet the demanding requirements of critical infrastructures
- High-performance operation, even under extreme environmental conditions with IEC 61850 and IEEE 1613 certification
- Comprehensive security functions for securing critical infrastructure networks

Gain more info:
Webcode #3390

Ethernet media converters

Secure communication via fiberglass

For high-level immunity to interference and long transmission ranges in industrial applications, media converters transparently convert Ethernet data to fiber optics. Depending on the device and cable, they bridge distances of up to 80 km at data rates of up to 1 Gbps.

Main features

- Transmission speed of 10/100/1,000 Mbps (depending on the device)
- Various fiber-optic connections: SC duplex, SC simplex (WDM), ST, LC, SFP
- Maximum range of up to 80 km
- Metal and plastic housing
- Comprehensive approval package: CE, UL, DNV-GL, IECEx, ATEX, UL Hazloc, IEC 61850, IEEE 1613

Your advantages

- Broad portfolio for every application
- Gigabit communication – ideal for high data throughput applications
- Compact design and flexible installation
- Low latency for applications with real-time protocols
- Redundant power supply

Gain more info:
Webcode #3391

MQTT edge gateway

Connecting Modbus devices to MQTT brokers

Bridge the gap between IoT and industrial controls with the GW MQTT/MODBUS... gateway. The gateway provides a simple interface to connect Modbus clients and servers to the local or cloud broker of your choice.

Main features

- Web based management
- Integrated Modbus client
- MQTT Sparkplug enabled
- Class I, Div. 2, ATEX, IECEx
- Temperature range: -40°C ... +70°C

Your advantages

- The simple interface makes configuration quick and easy, with no programming required
- The integrated Modbus client directly connects to Modbus servers without disturbing the controls environment
- Sparkplug provides a common namespace and payload framework simplifying integration

Gain more info:
Webcode #3392

PLC extension module for safety applications

AXC F XT SPLC 3000

This module is a PLC extension for PLCnext Control. It is connected on the left side of the controller. This extends the hardware portfolio for PLCnext Technology with a powerful safety PLC for PROFIsafe networks and for the highest functional safety requirements.

Main features

- PROFIsafe F-Host for communication with up to 300 F-Devices
- PROFIsafe F-Device integrated
- Width: 100 mm
- SCPU Arm® Cortex® A9 and A8 with 800 MHz and 600 MHz for the highest performance
- Safety level SIL 3/PL e

Your advantages

- Fully integrated with PLCnext Technology
- Can be programmed with PLCnext Engineer
- Highest level of modularity with safety I/Os
- Simultaneous communication as F-Host and F-Device in PROFIsafe networks

Gain more info:
Webcode #3409

Analog input/output modules

Axioline Smart Elements

Axioline Smart Elements can be integrated into systems with Smart Element interfaces. They are suitable for all devices from the PLCnext Control family and Axioline F bus couplers. The new I/O modules allow the operation of four analog -10 V to 10 V signals.

Main features

- Four analog output channels
- Signal range: -10 V ... 10 V
- Four analog input channels
- Signal range: -10 V ... 10 V

Your advantages

- Four analog channels in a compact housing
- Significant space savings in the control cabinet with the modularly combinable I/O system
- Reduced wiring time with Push-in technology
- Simple status signaling with LEDs

Gain more info:
Webcode #3411

Safety over EtherCAT (FSoE)

Axioline Smart Elements

The new TÜV-certified Axioline Smart Elements enable safe communication over EtherCAT (FSoE).

Main features

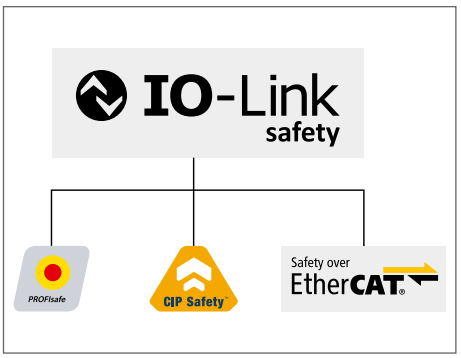
- Eight safe digital inputs with two test pulses
- Four safe digital outputs up to 2 A

Your advantages

- Safe communication over EtherCAT (FSoE)
- TÜV-certified for highest safety requirements up to SIL 3/PL e
- Significant space savings in the control cabinet with the modularly combinable I/O system
- Reduced wiring time with Push-in technology
- Simple status signaling with LEDs

Gain more info:
Webcode #3423

Integration into PROFIsafe systems with IO-Link Safety master



Network-independent integration into fieldbus systems

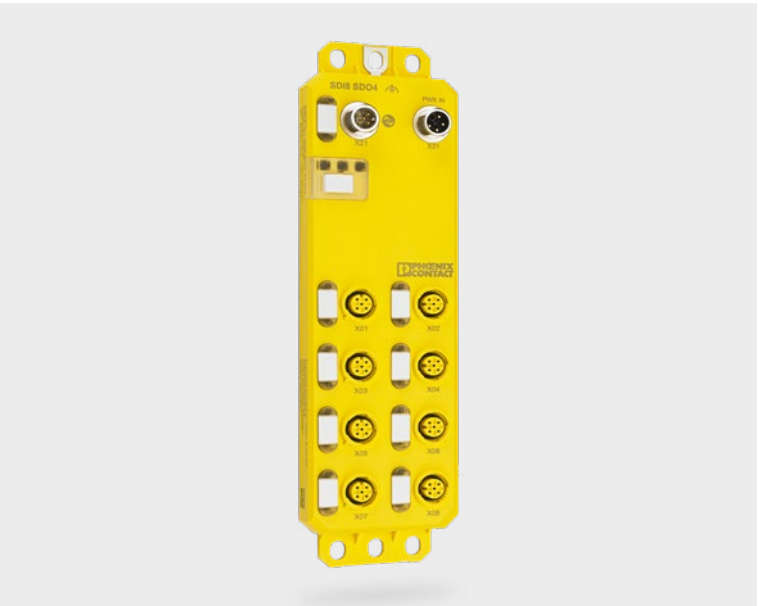
Access to extended diagnostic data from safe sensors and actuators

HIGHLIGHT

IO-Link Safety I/O box

Safe communication from start to finish

The IO-Link Safety I/O box enables the integration of safe sensors and actuators into IO-Link systems. IO-Link Safety technology enables consistent communication from the control level to the connection of safe sensors and actuators.



Main features

- Eight safe digital inputs
- Four safe digital outputs up to 2 A
- Extended diagnostics via IO-Link Safety

Your advantages

- Easy integration of safe sensors and actuators directly in the field level
- Extension of an IO-Link Safety system with safe digital inputs and outputs
- Minimum installation effort with control-cabinet-free mounting
- Can be used in applications up to the highest safety level, SIL 3/PL e
- Long service life and high system availability with the robust design

Gain more info:
Webcode #3323

Remote I/Os for zone 1

Axioline X

The new Axioline X I/O PROFINET solution can be installed directly in a zone 1 potentially explosive area. The high channel density of 32 inputs or outputs provides the installation flexibility required by the process industry.

Main features

- Integrated web server
- 32 intrinsically safe I/O channels
- Two PROFINET ports
- Built into a stainless steel housing with full ATEX and IEC Ex certification

Your advantages

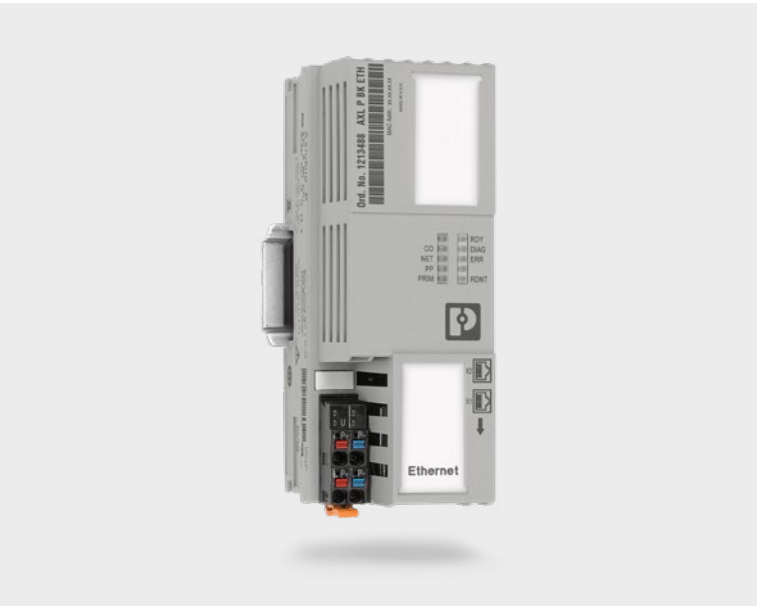
- I/O configuration and diagnostics via web server
- Easy to set up a PROFINET ring
- Increased flexibility with different signal types and configurable channels in one device

Gain more info:
Webcode #3332

Bus coupler for Modbus/TCP

Axioline P

The bus coupler with Modbus/TCP interface is equipped with all the robust functions of the Axioline P I/O system – including the redundancy capability. Now hot-swap capable I/Os can be connected with a Modbus/TCP connection.



Main features

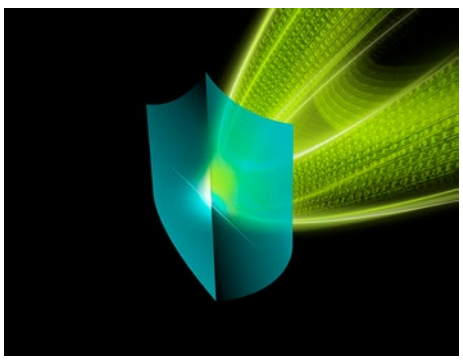
- Integrated web server
- I/O configuration via web server
- Redundant bus coupler

Your advantages

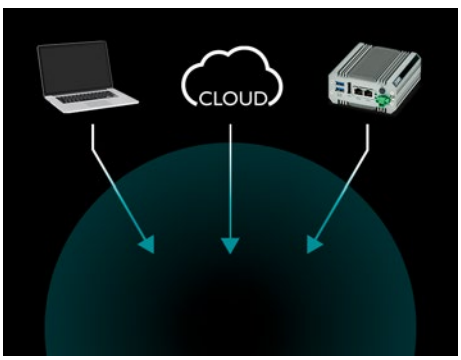
- No additional software required for commissioning the bus coupler
- Configure and manage I/Os via the web server
- The I/O system can be configured with two bus couplers with their own IP address for client/server communication

Gain more info:
Webcode #3412

Manufacturer-independent updates



Cybersecurity ensured



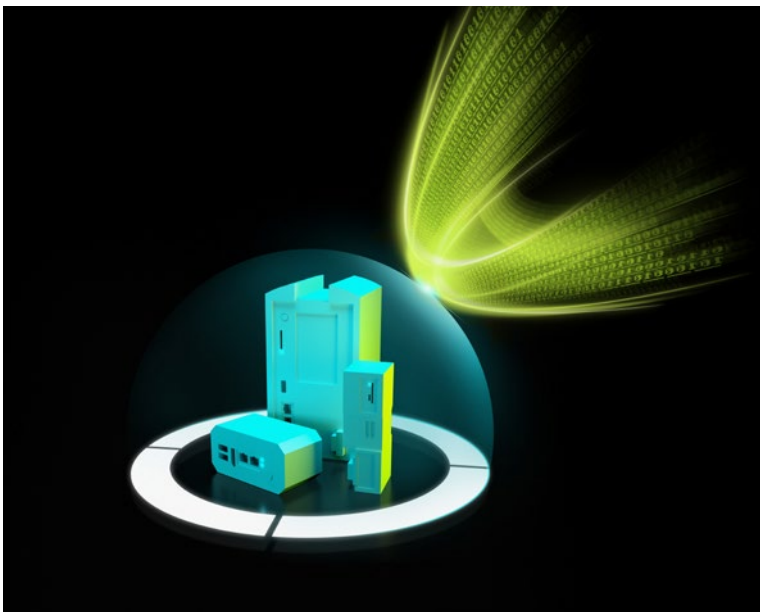
Customized integration

HIGHLIGHT

Device and update management with OPC UA

All devices kept up to date

Due to the growing complexity of automation, it is becoming increasingly difficult to keep software and firmware up to date. With the device and update management system, you can continuously update automation networks and close security gaps in a timely manner – and do so independently of the manufacturer using OPC UA.



Main features

- OPC UA Global Discovery Server integrated
- Certificate management
- REST APIs available
- Available as an app in the PLCnext Store and as Windows software
- Secure rollouts and updates for PLCnext Engineer projects
- Manufacturer-independent firmware updates

Your advantages

- Providing manufacturer-independent firmware and certificates
- Ensure cybersecurity and close security gaps promptly
- A variety of integration options

Gain more info:
plcnext-community.net/daum

VL3 UPC

Ultra-compact box PCs of the latest generation

VL3 UPC is a series of ultra-compact box PCs with the latest Elkhart Lake CPU technology and outstanding connectivity capabilities. This means that the box PCs are a perfect extension of the VL3 product family with an excellent price-performance ratio.

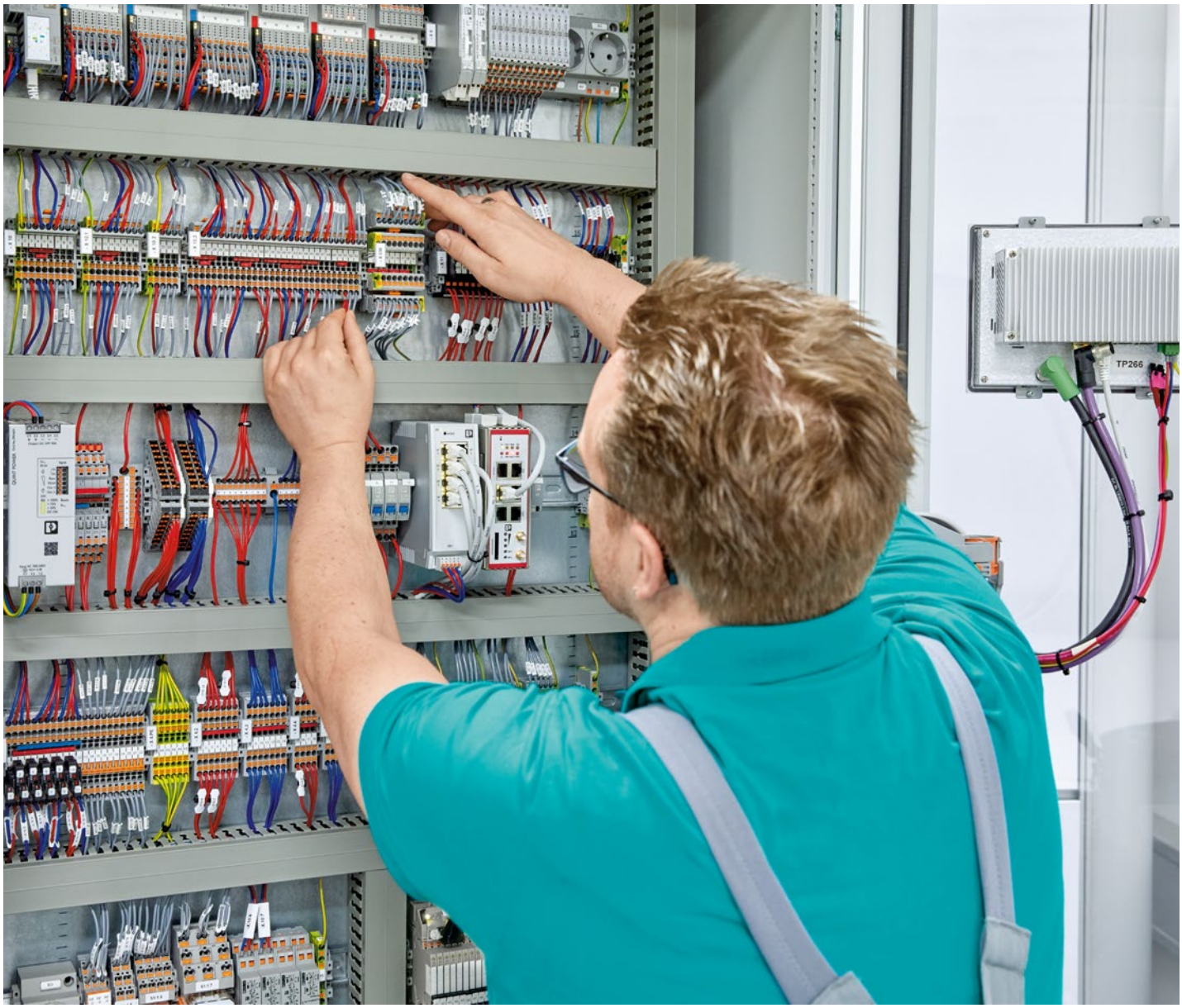
Main features

- Intel's long-term available sixth-generation Atom® processors (Elkhart Lake)
- Three fixed and one configurable item
- Flexible extension options such as WLAN, serial communication, Ethernet extension, and 4G/LTE modem
- Windows 11-capable

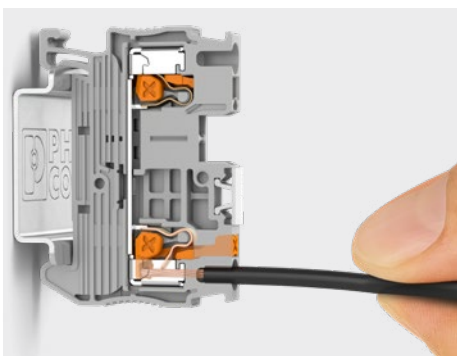
Your advantages

- State-of-the-art hardware platform for individual adaptations in terms of performance and storage capacity
- A compact design with advanced Elkhart Lake processor technology for powerful system performance
- Ideally for demanding edge computing installations in decentral control cabinets
- Practical connectivity capabilities enable communication with numerous networks and peripheral devices

Gain more info:
Webcode #3333



Easy installation



Significant time savings

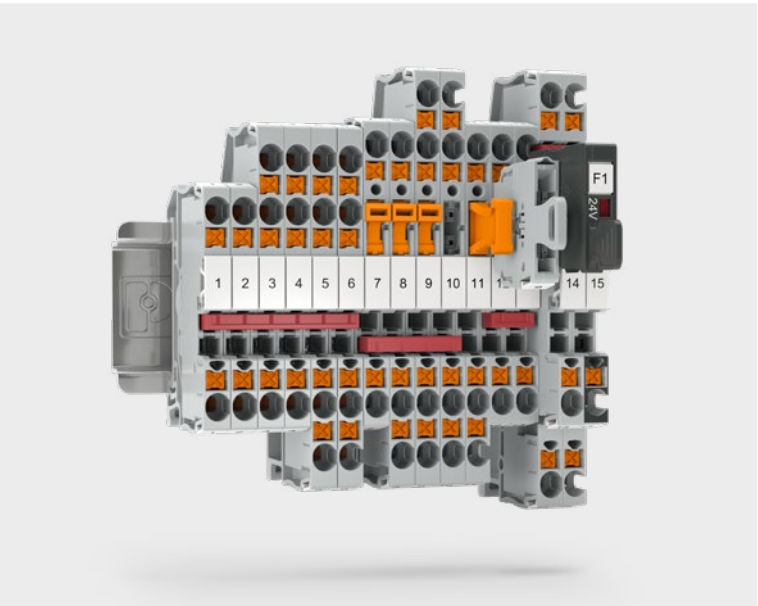
Intelligent actuating push buttons

HIGHLIGHT

Terminal blocks with Push-X technology

For effortless and fast wiring

The new XT terminal block family enables you to wire conductor cross-sections of 0.5 to 4 mm² within a few seconds and without any significant effort. The front-end Push-X technology enables tool-free wiring of rigid and flexible conductors with and without ferrules.



Main features

- Push-X technology
- Nominal cross-section: 2.5 mm²
- 20 AWG ... 12 AWG
- Nominal current: 24 A
- Nominal voltage: 800 V

Your advantages

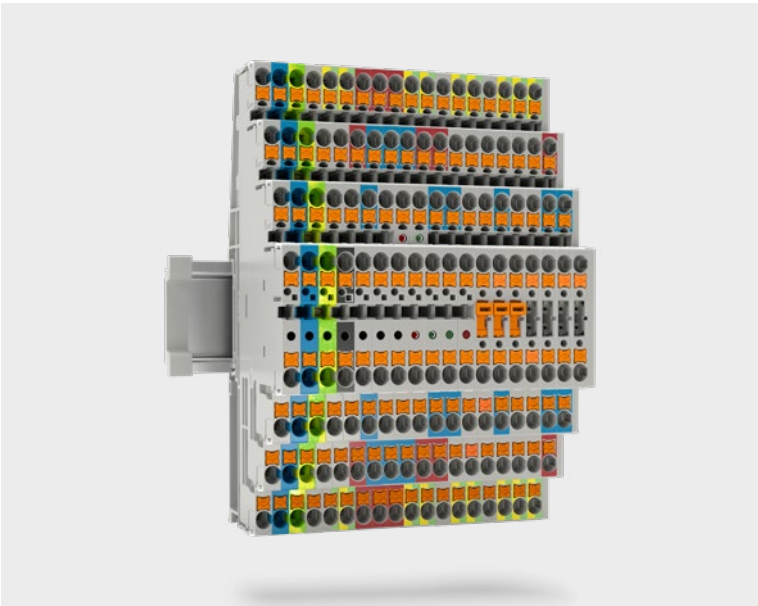
- Feather-light plugging and superior handling comfort with a pretensioned contact spring
- Reduced installation times with the factory-opened clamping space
- Clear identification of the conductor connection with the force-guided actuating element and the acoustic click sound when the spring is released
- Wiring of all conductor types, whether rigid or flexible with and without ferrules

Gain more info:
Webcode #3307

Four-level terminal blocks with Push-in technology

For space-saving wiring

The four-level terminal blocks with Push-in technology enable the space-saving installation of terminal strips. The new product family consists of feed-through and functional versions and enables the compact integration of functional connectors and components.



Main features

- Push-in technology
- Nominal cross-section: 2.5 mm²
- 20 AWG ... 12 AWG
- Nominal current: 24 A
- Nominal voltage: 800 V
- Various function versions

Your advantages

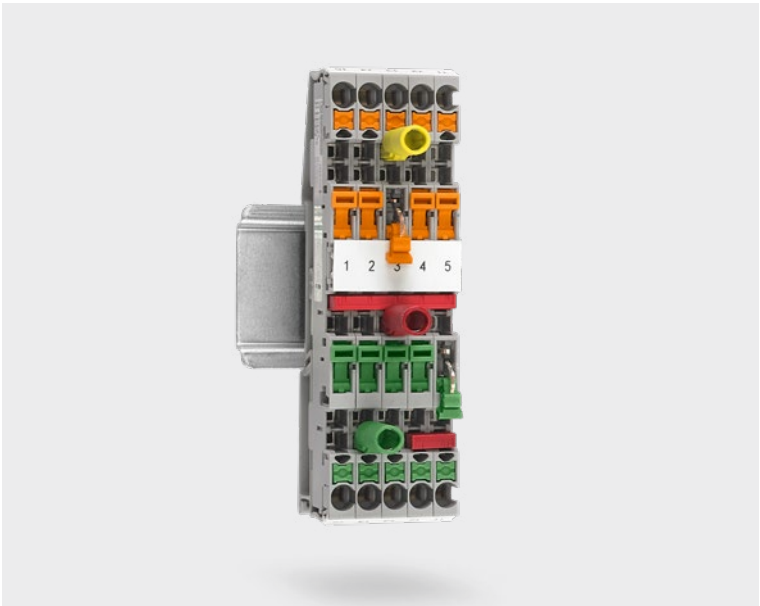
- Time-saving conductor connection, thanks to tool-free direct connection technology
- Compact design enables wiring in confined spaces
- High conductor pull-out forces with the spring construction
- Increased flexibility with function shafts on each level

Gain more info:
Webcode #3308

Disconnect terminal blocks with multi-level disconnect zone

Compact universal signal distribution

The double knife disconnection of the PT 2,5-2MT terminal block family, in conjunction with the 3 x 2 function shafts, offers a wide range of distribution applications in a confined space. The terminal blocks reduce the length of the terminal strip by half compared to a standard disconnect terminal block.



Main features

- Push-in technology
- Nominal cross-section: 2.5 mm²
- Cross section: 0.14 mm² … 4.0 mm²
- Nominal current: 16 A
- Rated voltage: 400 V
- Multiple bridging and testing tasks possible in one terminal block

Your advantages

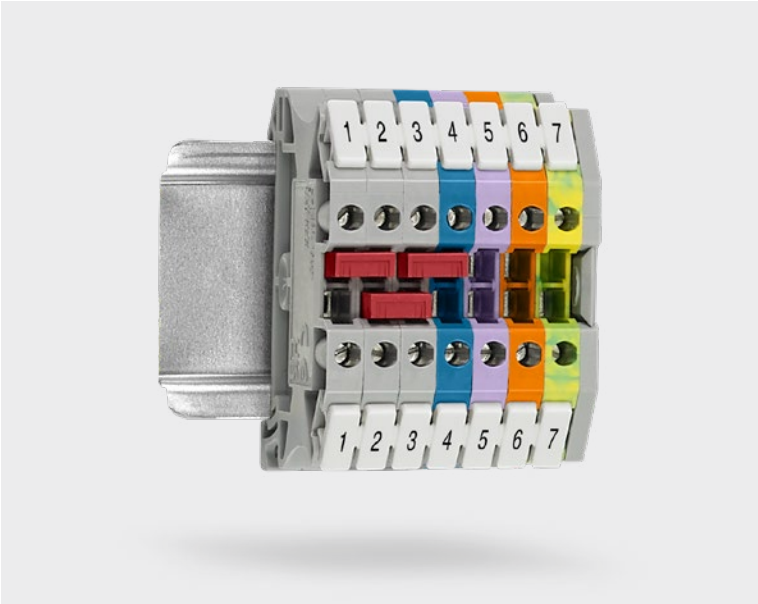
- Space-saving signal distribution and test tasks with two disconnect knives in one terminal block
- Good overview with color-matched disconnect knives and actuating push button
- PT 2.5-2TG version available for use with P-FU pluggable fuse plugs and P-CO device plugs
- Individual connection of different components possible, e.g., RC element

Gain more info:
Webcode #3395

UT 1,5 terminal blocks with screw connection

Space-saving conductor wiring

The UT 1,5 screw terminal blocks with a terminal width of just 4.2 mm round out the screw terminal block portfolio. The screw connection is maintenance-free due to the Reakdyn principle. Due to the double function shaft, the terminal blocks can be connected with FBS standard bridges in a time-saving manner.



Main features

- Screw technology
- Nominal cross-section: 1.5 mm²
- Cross section: 0.14 mm² … 1.5 mm²
- Nominal current: 17.5 A
- Nominal voltage: 1,000 V
- Mounting type: NS 35/7.5, NS 35/15, NS 35/15-2.3

Your advantages

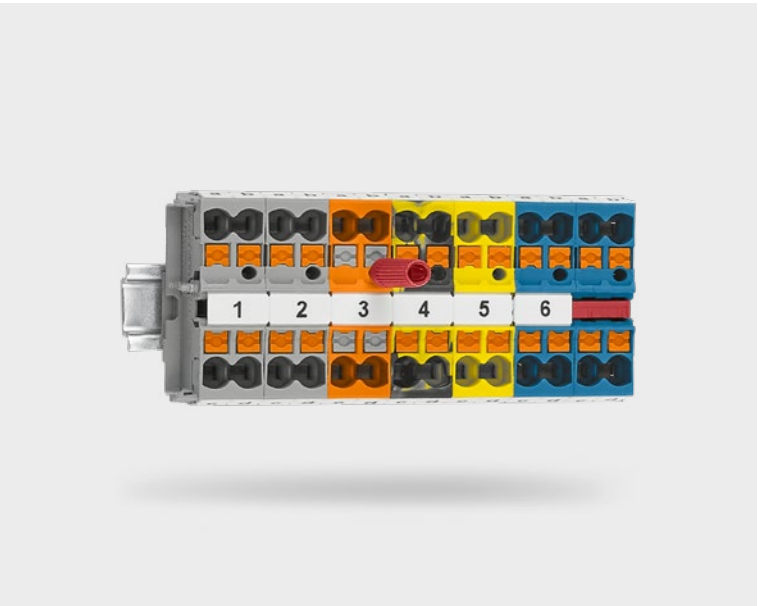
- High space saving and flexibility with the possible connection of two identical conductors
- Maintenance-free conductor connection with the Reakdyn principle
- High vibration resistance
- Compatible with the CLIPLINE complete terminal block system
- Long-term stable connections with the use of high-quality materials

Gain more info:
Webcode #3397

Double miniature terminal blocks

Fast mounting in confined spaces

The MPTD double miniature terminal blocks enable particularly space-saving wiring. Due to the function shaft, the terminal blocks can be used very flexibly despite their compact design.



Main features

- Push-in technology
- Nominal cross-section: 2.5 mm²
- Cross section: 0.14 mm² … 4.0 mm²
- Nominal current: 24 A
- Rated voltage: 800 V
- Mounting types: NS 15, NS 35, securing pin, flange
- Compatible with the CLIPLINE complete terminal block system

Your advantages

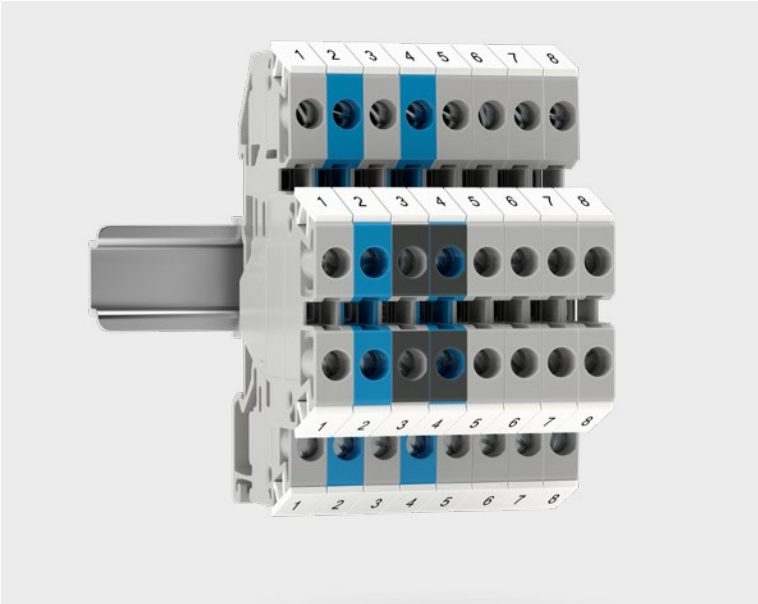
- Significant space savings with the compact design
- Increased flexibility with the simple function shaft
- Clear arrangement with marking grooves on each individual terminal point
- Time-saving conductor connection with tool-free and maintenance-free Push-in connection technology
- Testing options for all common test probes

Gain more info:
Webcode #3394

Mini double-level terminal blocks

For particularly space-saving wiring

The MUTTB mini double-level terminal blocks enable particularly space-saving wiring. With the function shafts on both levels, the terminal blocks are very flexible in application, despite their compact design.



Main features

- Screw connection technology
- Nominal cross-section: 2.5 mm²
- Nominal current: 22 A
- Rated voltage: 500 V
- Function shafts on both levels

Your advantages

- Significant space savings with a compact design
- Can be mounted on NS 15 and NS 35 rails
- Increased flexibility with function shafts on both levels
- Easy level bridging with compatible PV bridges and bridged versions
- Multiconductor connection possible with the universal screw connection technology

Gain more info:
Webcode #3312

LPS service connectors

For quick and easy testing

The LPS service connectors are suitable for various testing applications. The connectors are equipped with Lever Push-in technology, which enables quick wiring and rewiring. The contact springs have a silver-plated surface to ensure permanent and consistent quality.

Main features

- Lever Push-in technology (LP)
- Silver-plated surface of the current-carrying parts
- Nominal current: 24 A
- Nominal voltage: 800 V
- Modular versions

Your advantages

- Maximum operating convenience – the lever technology enables fast and effort-saving wiring
- High-level flexibility – connection of different conductor types with and without ferrules
- Quick mounting – simple integration into the function shaft of the terminal blocks

Gain more info:
Webcode #3309

LPO pick-off plugs

Additional load contacts quickly integrated

The LPO pick-off plugs with Lever Push-in technology enable the simple integration of additional load contacts via the function shaft of the terminal blocks. This means the LPO connectors provide a significant advantage, in particular if design changes are necessary in the control cabinet.

Main features

- Lever Push-in technology (LP)
- Special spring design for high holding forces
- Nominal current: 24 A
- Nominal voltage: 800 V
- Modular versions

Your advantages

- Maximum operating convenience – the lever technology enables quick and easy wiring
- High-level flexibility – connection of different conductor types with and without ferrules
- Quick mounting – simple integration into the function shaft of the terminal block
- Secure connection – the design of the pick-off plugs enables a durable and robust connection

Gain more info:
Webcode #3310

LP COMBI connectors

Integration of preassembled conductors

The LP COMBI connectors are connectors for the uniform plug-in zone of the plug-in terminal blocks. The connectors are equipped with lever Push-in technology (LP), which makes it very easy to operate the connectors with one hand.

Main features

- Lever Push-in technology (LP)
- Nominal cross-section: 2.5 mm²
- Can be configured individually

Your advantages

- Maximum operating convenience – the lever technology enables fast and effort-saving wiring
- High-level flexibility – connection of different conductor types with and without ferrules
- Easy plugging – with the proven COMBI plug-in zone
- High-level vibration resistance – vibration resistant with the versatile latching accessories

Gain more info:
Webcode #3311

Front adapters for Allen Bradley ControlLogix®

With a unique look and feel

The front adapters for Allen Bradley ControlLogix® are available for 20- and 36-pos. I/O cards. The front adapters are specifically designed for direct connection between a variety of popular I/Os and the VIP Cabling portfolio.

Main features

- Plug-in PT connections for the separate voltage supply
- Shield connection for analog signals
- Options for marking on the adapter
- For modules up to 120 V AC/DC, 1 A

Your advantages

- Unique look and feel compared to Allen Bradley OEM adapter products
- Direct compatibility with the existing PLC Relay and VIP portfolio
- Individual marking with standard marking material
- Selection of four standard cable lengths for easy configuration
- High quality with 100% testing

Gain more info:
Webcode #3322

M12 connectors for Single Pair Ethernet

Ethernet finally goes the distance

With the advent of Single Pair Ethernet (SPE), the established Ethernet protocol is moving down to the final automation levels. Easy integration into your conventional sensors is made possible by the new SPE connectors in the ONEPAIR series in size M12.

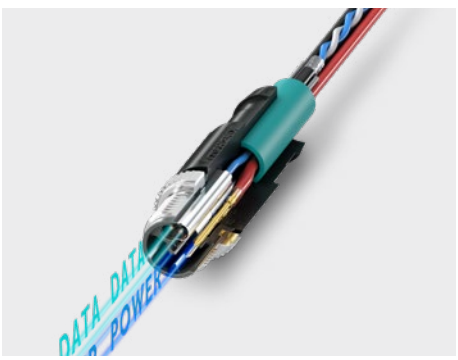
Main features

- Transmission standards: 10Base-T1, 100Base-T1, 1000Base-T1
- Data rates up to 1 Gbps (up to 600 MHz)
- Power over Data Line (PoDL) up to 60 W
- Ranges up to 1,000 m (10Base-T1L)
- 360° shielded connectors
- Cable structure: 1 x 2 x 22/7 AWG
- Degree of protection: IP67

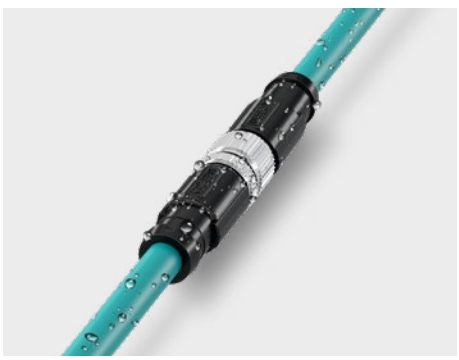
Your advantages

- Easily integrated: M12 male and female versions for established inductive sensors and flying leads
- Cross-application: ranges of up to 1,000 m, data rates of up to 1 Gbps, and powers of up to 50 W
- Totally protected: Advanced Shielding Technology provides a reliable shield connection for network cables, even under extreme environmental conditions
- Future-proof: standardized connectors and cables in accordance with IEC 63171-5

Gain more info:
Webcode #3215



Greater convenience and space savings



Particularly robust

International standard

HIGHLIGHT

M12 hybrid connector for SPE

For high-performance IIoT devices

More power in one connector: the SPE M12 hybrid connector combines data and power for Single Pair Ethernet. With two circuits of two times 8 A, voltages up to 63 V, and the robust M12 design, this connector is ideally suited for use in harsh environments.

Main features

- Manufacturer-independent IEC standard in accordance with IEC 63171-7 (coding 2)
- Transmission standards: 10Base-T1, 100Base-T1, 1000Base-T1
- Data rates up to 1 Gbps (up to 600 MHz)
- Power transmission up to 2 x 8 A/63 V DC
- Degree of protection: IP65, IP67
- Housing with DUO contour for screw and push-pull locking

Your advantages

- Future-proof: manufacturer-independent IEC standard in accordance with IEC 63171-7 (coding 2)
- Space-saving: data and power transmission is now combined in just one M12 connector for Single Pair Ethernet
- Powerful: the SPE M12 hybrid connector is suitable for numerous applications such as drives, machine building, and robotics
- Robust: ideally suited for industrial applications as well as for field use in harsh environments

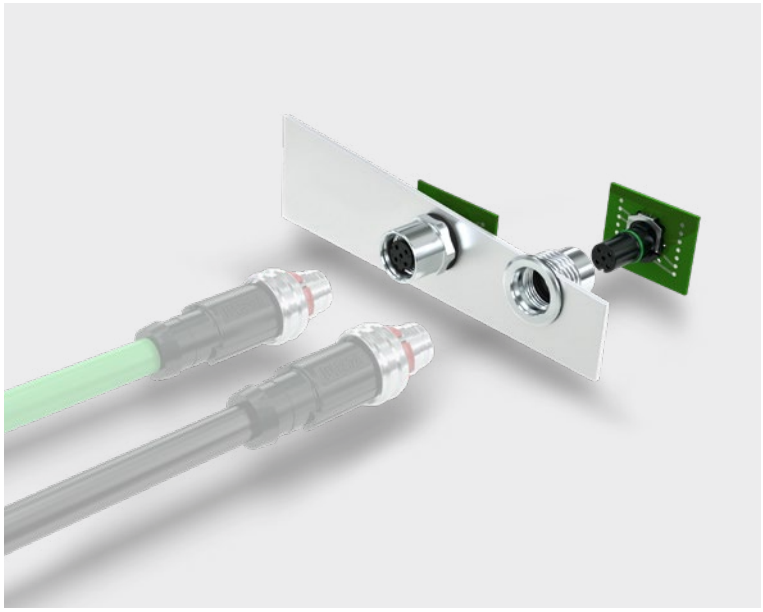
Play video

Gain more info:
Webcode #3295

Shielded M12 push-pull device connectors

Reliable signal and data transmission

The new SMD M12 device connectors with push-pull internal locking allow secure and tool-free device connection. The recessed M12 push-pull flush-type female connector closes out flush with the housing, thus enabling compact housing designs.



Main features

- Push-pull internal locking
- Standardized in accordance with IEC 61076-2-010
- SMD housing screw connections
- Raised and countersunk versions
- SMD signal and data: A, B, D, X, and Y-coded
- Degree of protection: IP65, IP67
- Duo contour: compatible with full-thread M12

Your advantages

- Plug-and-produce: quick and reliable connection even in confined spaces
- Greater flexibility: one M12 device connection for screw and push-pull connectors
- Easy design-in: countersunk M12 ports for compact device concepts
- Highly future-proof: standardized product range for worldwide availability

View 3D object

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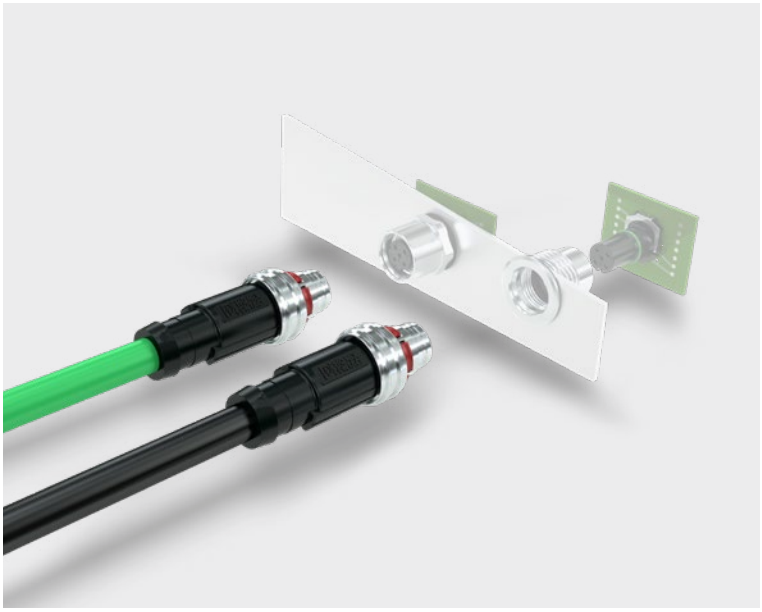
Gain more info:
Webcode #3243

Shielded M12 push-pull connectors

Reliable signal and data transmission

M12 push-pull connectors latch into place by means of direct insertion and enable easy and secure connection for applications in confined spaces and with high cabling density. The new, shielded, A- and D-coded versions guarantee reliable signal and data transmission.



Main features

- Push-pull internal and external locking
- Standardized in accordance with IEC 61076-2-010
- A- and D-coded
- Advanced Shielding Technology
- Conductor cross-section: 0.34 mm²
- Degree of protection: IP65, IP67
- PUR, halogen-free

Your advantages

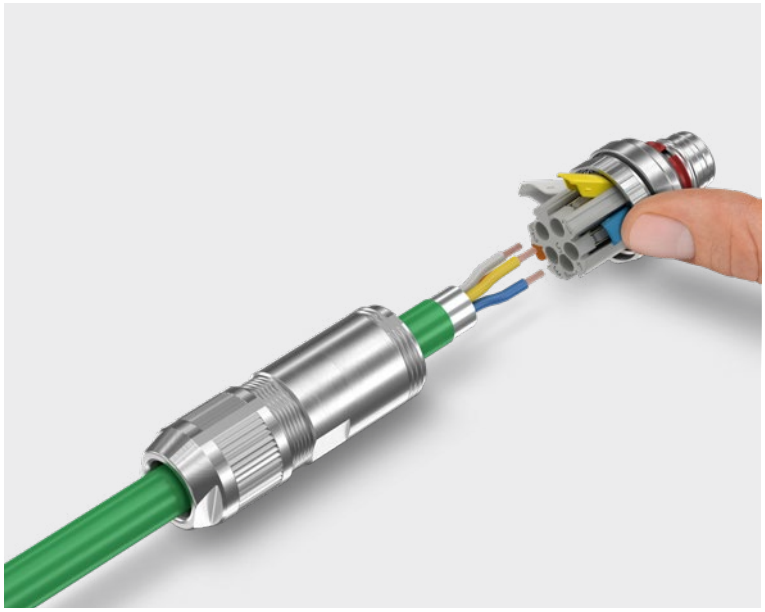
- Plug-and-produce: quick and reliable connection even in confined spaces
- Fast installation: time savings of 80% during installation compared to screw connection
- Flying leads: connectors with internal and external locking
- Totally protected: reliable shield connection with Advanced Shielding Technology
- Highly future-proof: standardized product range for worldwide availability

Gain more info:
Webcode #3214

M12 push-pull connectors

Consistent tool-free connection

Two leading technologies in one M12 connector: the new M12 connectors designed for assembly featuring push-pull fast-locking and Push-Lock connection enable convenient, tool-free conductor connection and provide secure installation by simply plugging directly into the device port.



Main features

- Push-pull fast locking system
- Push-Lock connection technology
- Data connectors: PROFINET CAT5 (100 Mbps), D-coded, 4-pos., shielded, straight and angled
- Signal connectors: A-coded, 4- or 5-pos., shielded, straight and angled
- Connection cross-section: 0.14 mm² ... 0.75 mm²

Your advantages

- Quick and reliable connection even in confined spaces
- Establish flying leads with connectors in male and female versions
- Tool-free connection of rigid and flexible conductors with and without ferrules
- Intuitive conductor connection with color coding and numerical coding of the contact levers
- Long-term stability and vibration resistance of the PE connection and 360° shielding

Gain more info:
Webcode #3213

M12 push-pull connectors

Easy and space-saving data transmission

The M12 push-pull connectors designed for assembly for Ethernet applications enable reliable high-speed data transmission and impress with their extremely small space requirements. With fast-locking, installation is effortless, it can be simply plugged into the device.

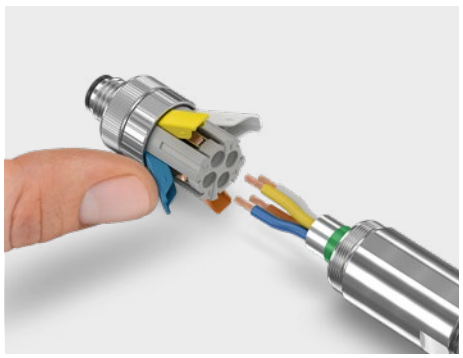
Main features

- Push-pull internal locking
- Compact crimp connection
- X-coded for Ethernet applications
- Number of positions: 8
- Connection cross-section: 0.14 mm² ... 0.34 mm²
- 360° shielding
- Straight and angled versions
- Degree of protection: IP65, IP67

Your advantages

- Easy installation: quick and reliable plugging, even in confined spaces
- Significant space savings: extremely compact with the small wiring space and high contact density
- Safe use: reliable 360° shield connection
- Robust connection: suitable for railway applications with high shock and vibration loads
- Highly future-proof: standardized product range for worldwide availability

Gain more info:
Webcode #3417



User-friendly, intuitive connection

Space-saving installation

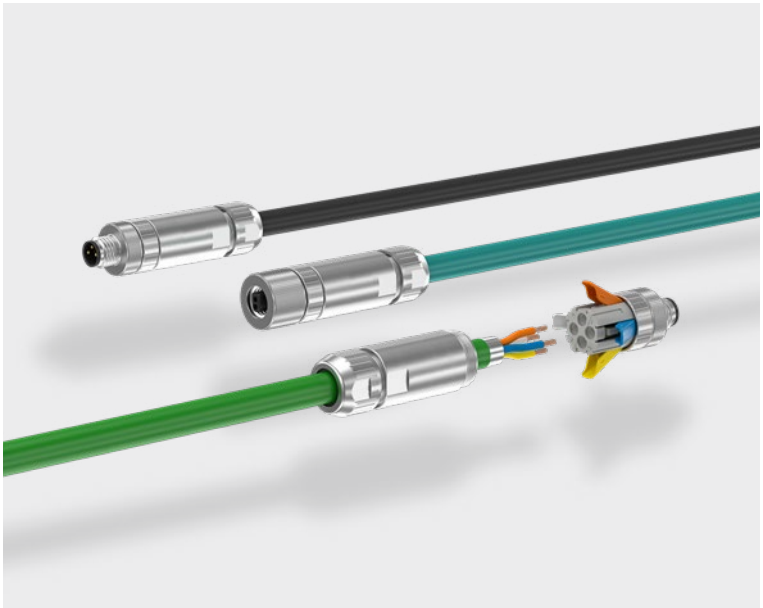
Future-proof cabling

HIGHLIGHT

M8 connectors with Push-Lock connection

Tool-free and space-saving cabling

In increasingly networked systems, functions are decentralized and intelligent devices and sensors are miniaturized. Flexible and space-saving cabling is possible with M8 connectors designed for assembly. The Push-Lock connection enables convenient wiring without tools.



Main features

- Push-Lock connection technology
- PROFINET CAT5 (100 Mbps)
- D-coded, 4-pos., shielded
- Connection cross-section: 0.14 mm² ... 0.75 mm²
- Temperature range: -40°C ... +85°C

Your advantages

- The Push-Lock technology enables the easy and tool-free connection of rigid and flexible conductors with and without ferrules
- Intuitive conductor connection with color coding and numerical coding of the contact levers
- 30% smaller than an M12 connector, the compact design of the M8 Push-Lock connectors offers significant space savings

Gain more info:
Webcode #3335

Active protection against electric arcs

Fast device replacement under load

Robust materials

HIGHLIGHT

DC connectors in the ArcZero series

Safe connection and disconnection under load

The DC connector can be safely connected and disconnected under load. ArcZero technology provides reliable protection against hazardous electric arcs. Connecting and disconnecting under load enables selected components to be fully shut down, thus ensuring high system availability.

Main features

- Connection cross-sections of 1.5 to 6 mm²
- Rated voltage: 400/800 V DC
- Rated current: 20 A
- Up to 1,000 insertion cycles
- VDE approval

Your advantages

- Safe connection and disconnection under load
- Fast disconnection of flying leads
- Time-saving maintenance or replacement of connected devices
- Robust outdoor design even for extreme conditions
- Particularly durable and economical

Play video

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Gain more info:
Webcode #3350

PRC 20 series installation systems

Smart power distribution up to 20 A

The PRC 20 series supplements the existing PRC products for up to 35 A with the 20 A performance class. PRC 20 series items are designed for smart and effective power distribution in generator and load circuits. The robust PRC connectors are suitable for indoor and outdoor use.

Main features

- Rated voltage: 500 V AC/DC
- Rated current: 20 A
- Conductor cross-section: up to 2.5 mm²
- Degree of protection IP65/IP67/IP69
- Impact resistance: up to IK08
- 2- to 5-pos.
- Color coding and mechanical coding

Your advantages

- Duo-Unlock technology enables the choice of locking method (manual or with tool) during installation
- Screw connection with wire guard for quick mounting
- Mechanical and color coding as installation aids for error-free commissioning
- Always the ideal solution with the modular system

Play video

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Gain more info:
Webcode #2884

Assembled IPD installation cables

Quick and easy power distribution

Experience simple and tool-free power distribution with the IPD installation system. Assembled IPD cable assemblies facilitate installation and support fast commissioning, especially in large cabling projects.

Main features

- Number of positions: 2+PE; 4+PE
- Voltage/currents: 3-pos.: 450/500 V, up to 16 A, 5-pos.: 450/600 V, up to 16 A
- Push-Lock connection
- Degree of protection: IP66, IP68
- Cable length: 0.5 m, 1 m, 3 m, 5 m
- Versions with male to female or free cable end

Your advantages

- Convenient handling, even in areas that are difficult to access
- Easy and reliable installation thanks to pluggable connection with fast-locking and mechanical coding to prevent mismatching
- Highly reliable with a robust housing with a degree of protection up to IP66 and IP68
- Customer-specific versions from a batch size of 1 on request

Gain more info:
Webcode #3418

HEAVYCON modular contact inserts

Space-saving with a high packing density

With HEAVYCON modular you can create your own tailored space-saving connector. The new, 42-position modular contact inserts with crimp connection feature a compact design and are designed for high-position applications.

Main features

- Contact insert module
- Number of positions: 42
- Crimp connection
- Nominal voltage: 150 V
- Rated current: 10 A
- Connection cross-section: 0.14 mm² … 2.75 mm²
- Suitable for B series housings

Your advantages

- Space-saving and a high packing density with compact clamping chambers
- Extremely compact modular interface achieved by combining various transmission media in the same housing

Gain more info:
Webcode #3336

HEAVYCON D7 contact inserts

Compact signal and power transmission

With the HEAVYCON D7 connector, you can transmit signals and power even in confined spaces. New Push-in contact inserts with the number of positions of 5(+PE) and power contact inserts with the number of positions of 2(+PE) with up to 40 A/830 V extend the product range.

Main features

- Q05-I-PT with Push-in connection also for the PE contact
- Q02-I-AT with axial screw connection with a large cross-section range
- Temperature range: -40°C ... +125°C
- Suitable for D7 series housings (plastic or metal)
- Shock and vibration-resistant in accordance with DIN EN 61373

Your advantages

- Easy connection without tools with Push-in technology
- Quick and safe wiring, even in confined spaces and when installed
- Cost-effective and fast coding with plastic profiles
- Connection-compatible with the market standard

Gain more info:
Webcode #3414

HEAVYCON EVO multi-gland cable glands

Maximum flexibility during cabling

With multi-gland cable glands for HEAVYCON EVO heavy duty connectors, you can simply run different cables into your control cabinet via just one plug-in interface. Variable, tool-free mounting saves time and offers high flexibility.

Main features

- Suitable for B series HEAVYCON EVO plastic housing
- Possible clamping ranges: 3 mm ... 6 mm, 6 mm ... 10 mm, and 10 mm ... 15 mm
- Cable gland material: PA
- Cable seal material: TPE SEBS
- Temperature range: -40°C ... +100°C
- Degree of protection: IP65

Your advantages

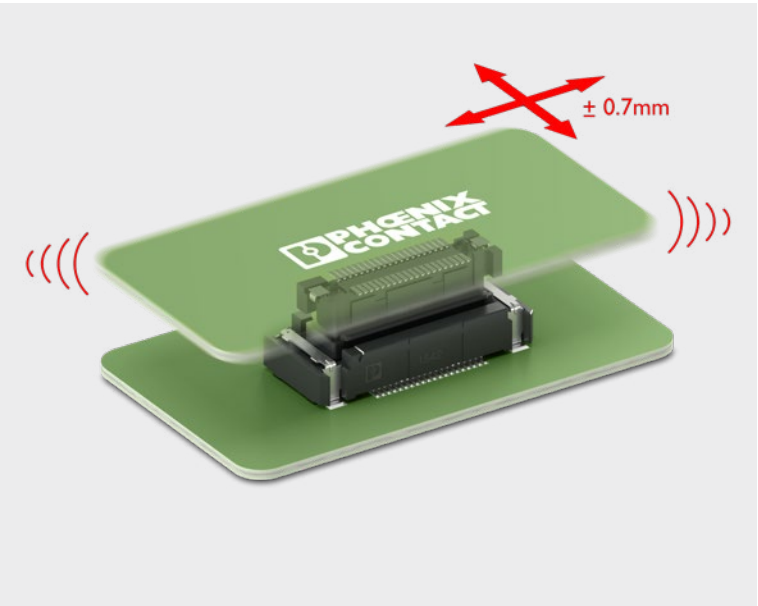
- Save time and money: simple, tool-free cable gland mounting
- More flexibility: determine the cable outlet direction directly at the installation site and conveniently add cables at a later date
- Easy handling: different cables can be pushed effortlessly through pierced membranes
- Safe, reliable use: high degree of protection with the membrane seal and retention with a cable tie

Gain more info:
Webcode #3415

FS series board-to-board connectors

Fast data transmission with a pitch of 0.635 mm

The space-saving board-to-board connectors in the FS 0,635 series enable mezzanine PCB arrangements with high-speed data transmission rates up to 30 Gbps. The floating system features a tolerance compensation of up to 0.7 mm in the x and y direction, as well as 0.6 mm in the z direction.



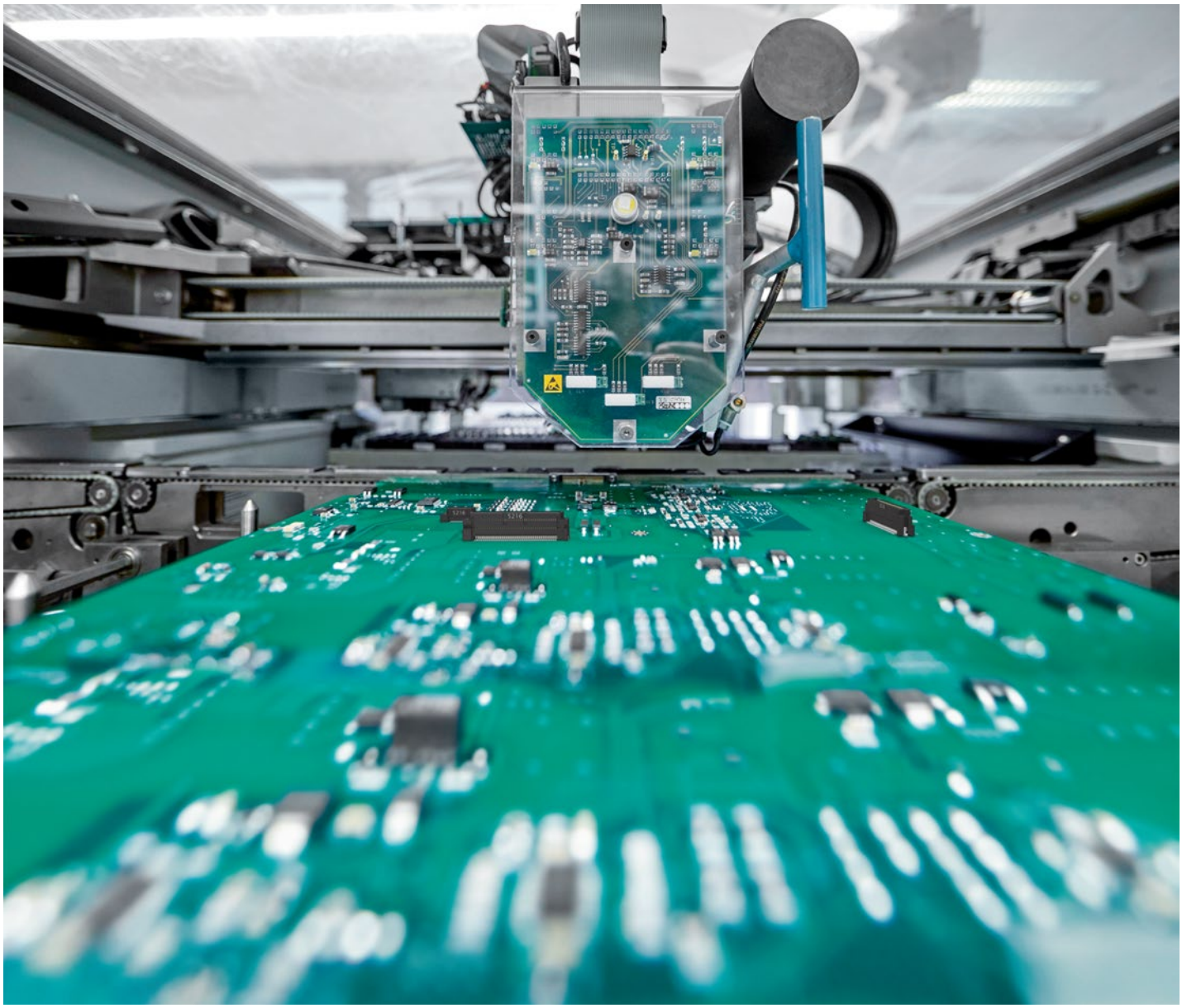
Main features

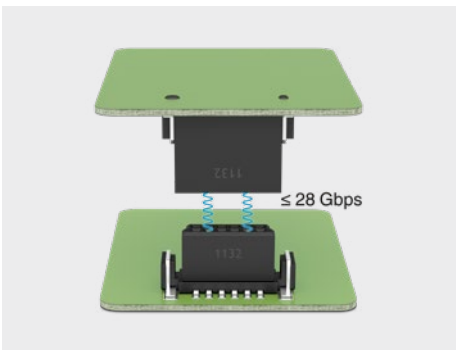
- Pitch: 0.635 mm
- 20- to 80-pos.
- Stack heights: 6 mm ... 16.6 mm
- Data rates up to 30 Gbps
- Currents up to 0.5 A
- Insertion cycles: 50
- Test voltage: 250 V AC
- Floating tolerances: ±0.7 mm (x, y direction)

Your advantages

- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Cost and space savings with the comprehensive portfolio available in various stack heights
- Easy mating with integrated keyways and tolerance compensation for error-free connections
- Compensation of tolerances and mechanical stresses for a secure connection with the floating function

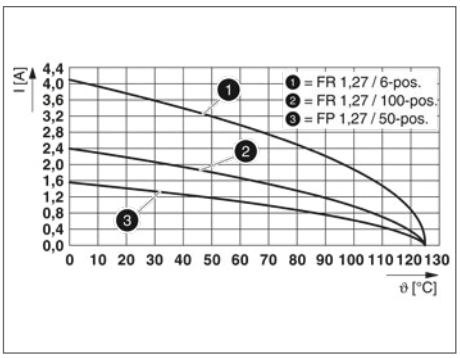
Gain more info:
Webcode #3443





High-speed data transmission with up to 28 Gbps

Robust board-to-board and wire-to-board connectors



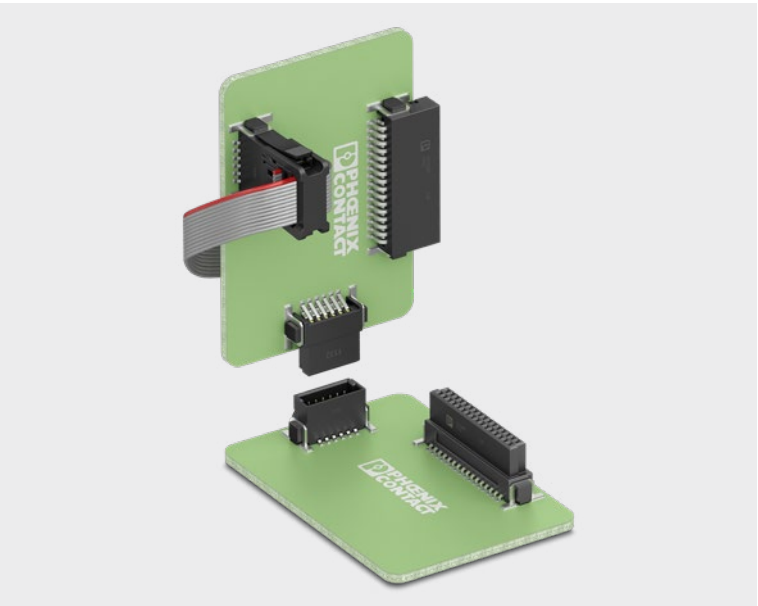
Long-term stable signal transmission and currents up to 2.3 A

HIGHLIGHT

FR series board-to-board connectors

High-speed data transmission with a pitch of 1.27 mm

Are you looking for a compatible replacement for your established board-to-board connection with a pitch of 1.27 mm that will also prepare you for future industrial requirements? – The FR 1,27 series provides ideal solutions – including high-speed data transmissions and an efficient design-in.



Main features

- Pitch: 1.27 mm
- 6- to 100-pos.
- Stack heights: 8 mm ... 13.8 mm
- Data rates up to 28 Gbps
- Currents up to 2.3 A
- Insertion cycles: 500
- Test voltage: 500 V AC

Your advantages

- Robust 6- to 100-pos. board-to-board and wire-to-board connectors compatible with the established market standard
- Significantly improved high-speed data transmission with up to 28 Gbps extends the application options
- Time savings during the development process with customer-specific simulations for data integrity
- Gold-plated contact points enable long-term stable signal transmission and currents up to 2.3 A

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Gain more info:
Webcode #1520

Customized printing

Integrated coding

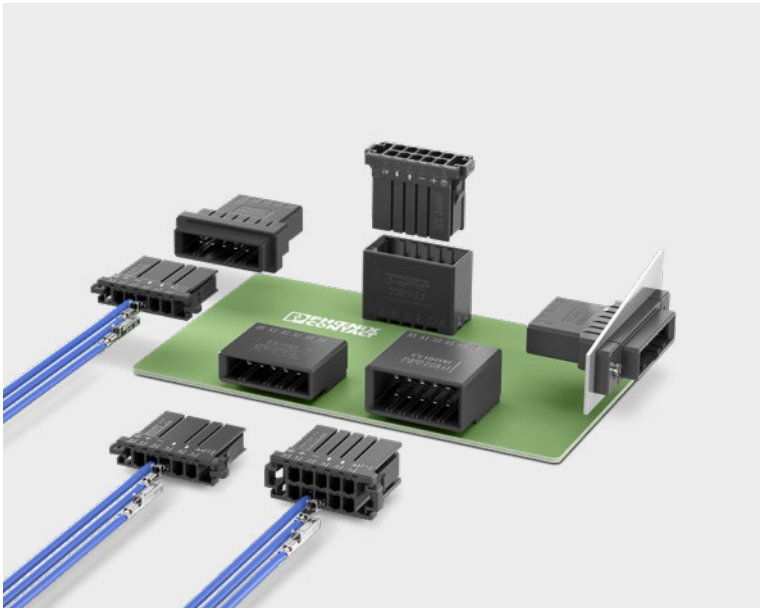
Preassembled connectors

HIGHLIGHT

D21, D31, and D32 series CONNEXIS connectors

For automated production with a pitch of 2.50 mm, 3.81 mm, 5.08 mm

CONNEXIS series PCB connectors with crimp connection for cable assemblies simplify and accelerate automated production. The D21, D31, and D32 families enable a wide range of applications with various designs and versions, such as flying leads and panel feed-throughs.



Main features

- Cross-sections from 28 AWG ... 14 AWG
- Currents up to 8 A
- Voltages up to 320 V
- Pitch: 2.50 mm, 3.81 mm, 5.08 mm
- Crimp connection
- Halogen-free plastics

Your advantages

- Quick and safe assembly due to custom number, letter, and symbol printing
- Error-free connection due to versions with mechanical keying
- Easy, time-saving production with preassembled connectors
- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Wide range of possible applications due to different contact surfaces that are either tin- or gold-plated

Play video

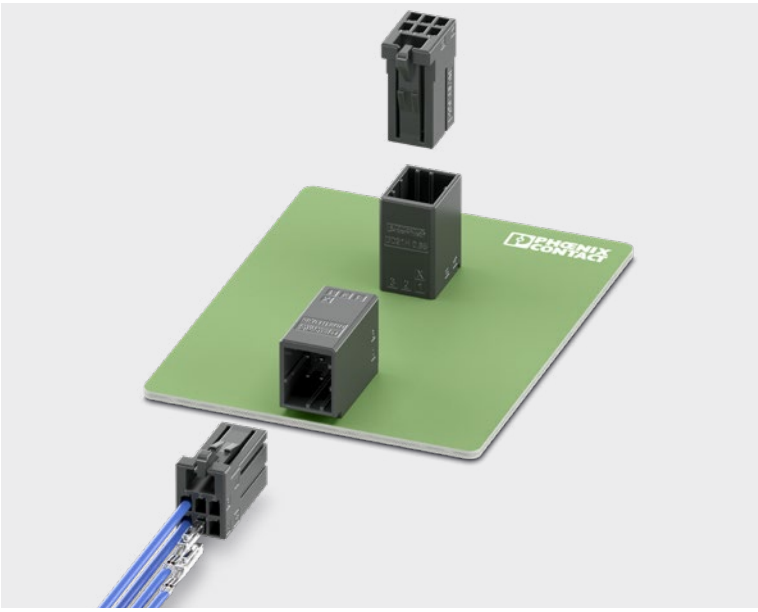
Order sample

Gain more info:
Webcode #3229

D21 series CONNEXIS connectors

For automated production with a 2.50 mm pitch

CONNEXIS PCB connectors with crimp connection for cable assemblies simplify and accelerate automated production. The D21 family with a 2.50 mm pitch enables a wide range of applications with various designs and versions, such as flying leads and panel feed-throughs.



Main features

- Cross-sections from 28 AWG ... 18 AWG
- Currents up to 5 A
- Voltages up to 160 V
- Pitch: 2.50 mm
- Crimp connection
- Halogen-free plastics

Your advantages

- Quick and safe assembly due to custom number, letter, and symbol printing
- Error-free connection due to versions with mechanical keying
- Easy, time-saving production with preassembled connectors
- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Wide range of possible applications due to different contact surfaces that are either tin- or gold-plated

Play video

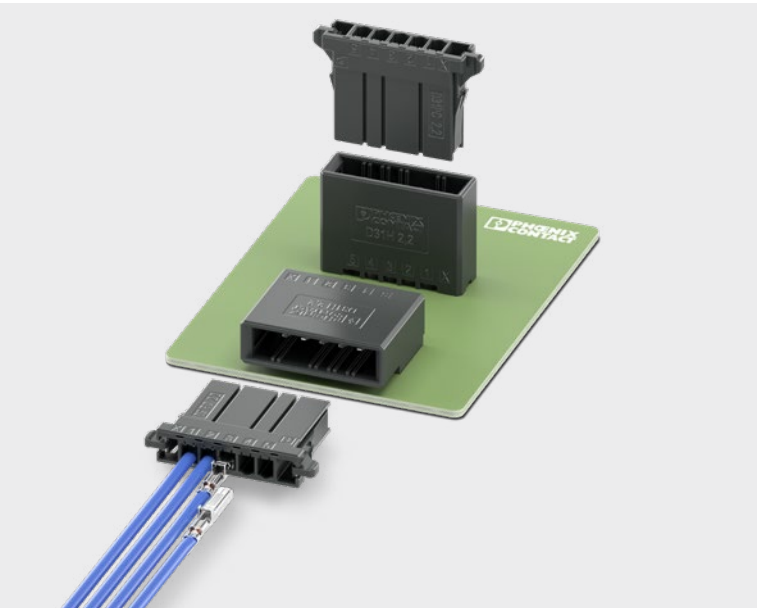
Order sample

Gain more info:
Webcode #3229

D31 series CONNEXIS connectors

For automated production with a 3.81 mm pitch

CONNEXIS PCB connectors with crimp connection for cable assemblies simplify and accelerate automated production. The D31 family with a 3.81 mm pitch enables a wide range of applications with various designs and versions, such as flying leads and panel feed-throughs.



Main features

- Cross-sections from 28 AWG ... 14 AWG
- Currents up to 8 A
- Voltages up to 160 V
- Pitch: 3.81 mm
- Crimp connection
- Halogen-free plastics

Your advantages

- Quick and safe assembly due to custom number, letter, and symbol printing
- Error-free connection due to versions with mechanical keying
- Easy, time-saving production with preassembled connectors
- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Wide range of possible applications due to different contact surfaces that are either tin- or gold-plated

Play video

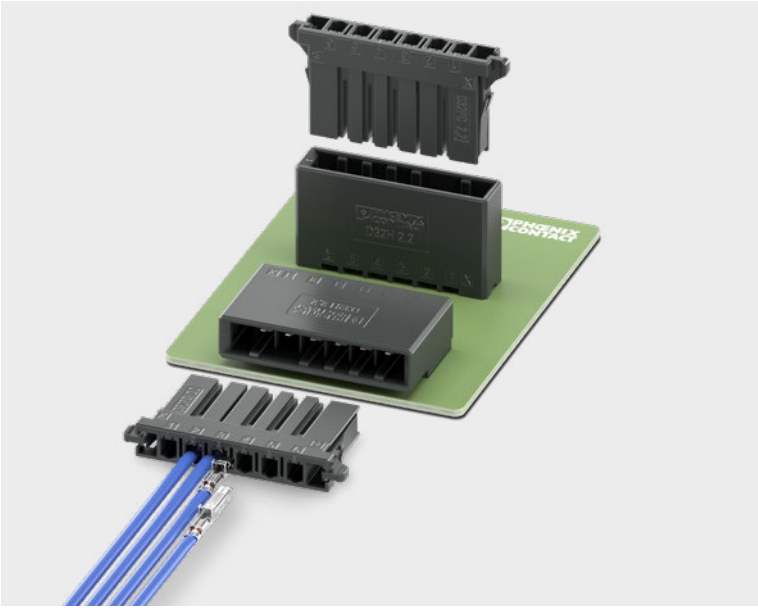
Order sample

Gain more info:
Webcode #3229

D32 series CONNEXIS connectors

For automated production with a 5.08 mm pitch

CONNEXIS PCB connectors with crimp connection for cable assemblies simplify and accelerate automated production. The D32 family with a 5.08 mm pitch enables a wide range of applications with various designs and versions, such as flying leads and panel feed-throughs.



Main features

- Cross-sections from 28 AWG ... 14 AWG
- Currents up to 8 A
- Voltages up to 320 V
- Pitch: 5.08 mm
- Crimp connection
- Halogen-free plastics

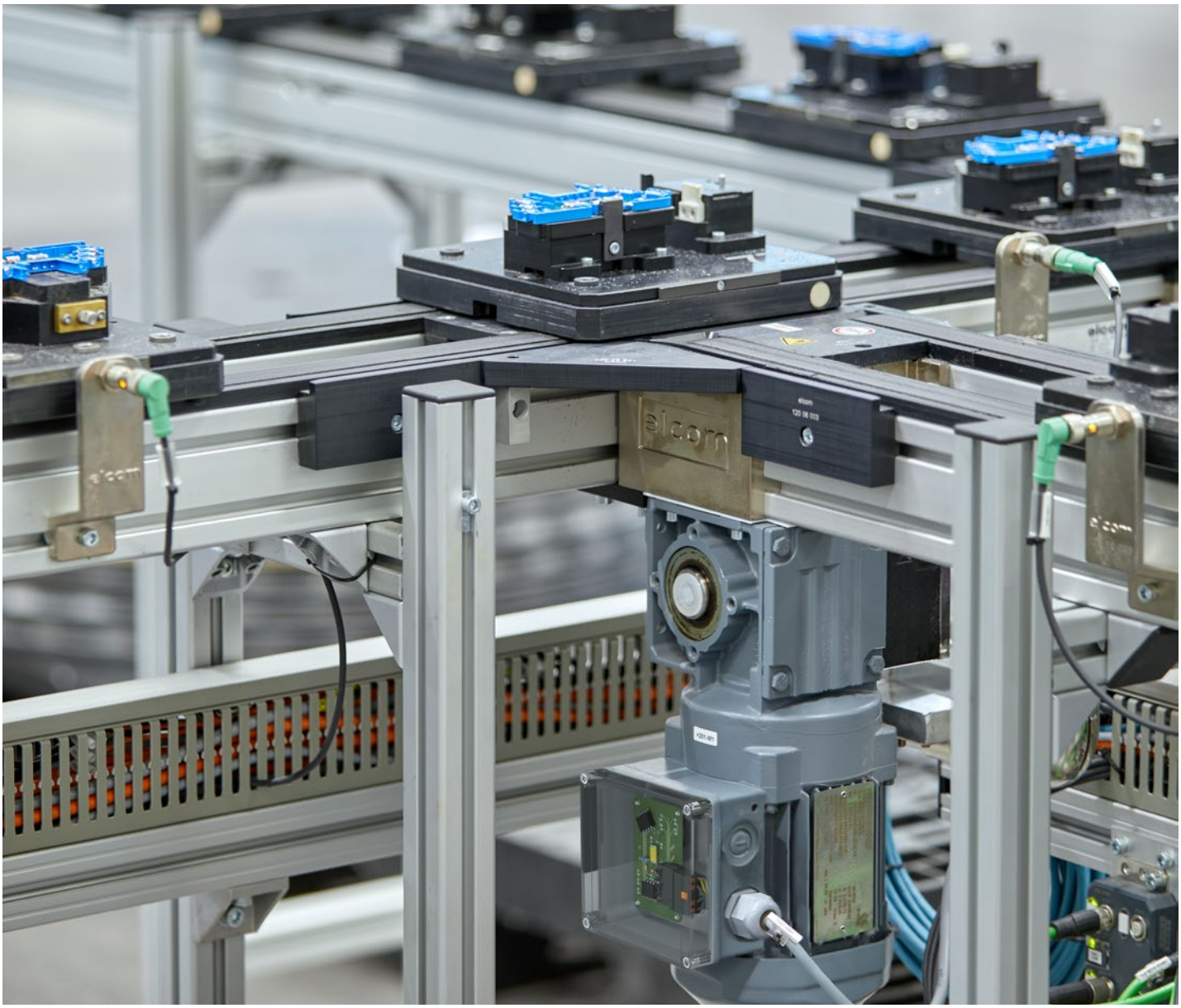
Your advantages

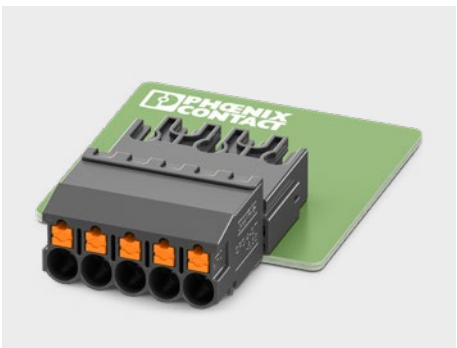
- Quick and safe assembly due to custom number, letter, and symbol printing
- Error-free connection due to versions with mechanical keying
- Easy, time-saving production with preassembled connectors
- Design-in support during device development through M-CAD/E-CAD data and a free sample service
- Wide range of possible applications due to different contact surfaces that are either tin- or gold-plated

Play video

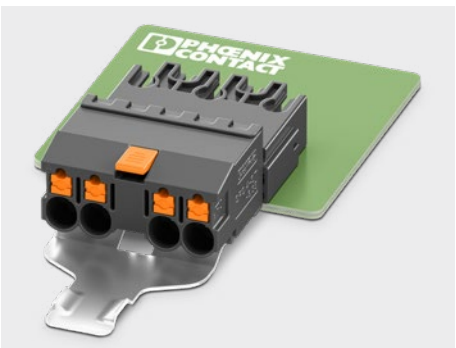
Order sample

Gain more info:
Webcode #3229





More space for the device design



Innovative shield contacting

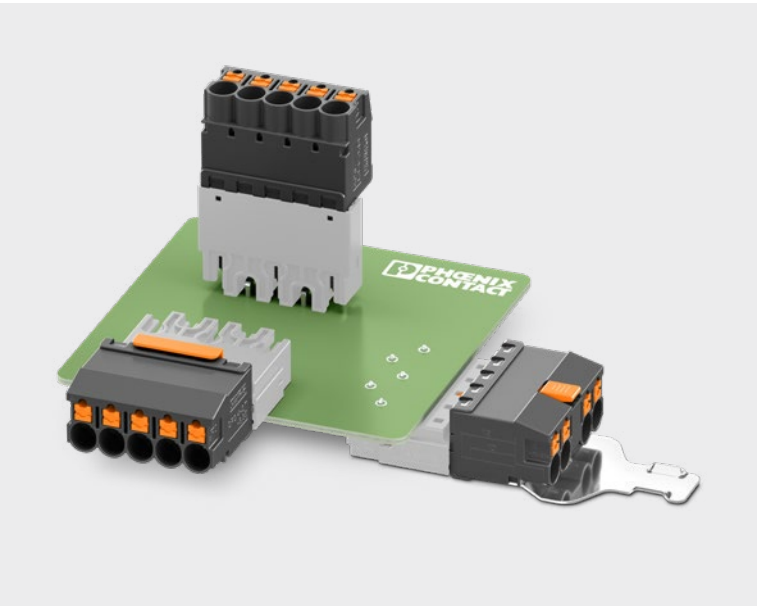
Always the right locking type

HIGHLIGHT

SPC 4 series PCB connectors

Complete design flexibility

SPC 4 series connectors are compact and save a lot of space on the device with a pitch of 6.35 mm. For device designers, freedom is the trump card with the innovative shield contacting. Locking by means of top lock or middle flange ensures a safe connection.



Main features

- Pitch: 6.35 mm
- Currents up to 24 A
- Voltages up to 1,000 V
- 2- to 12-pos.
- Optionally with center latching flange
- Increased touch protection in accordance with IEC/UL 61800-5-1

Your advantages

- Compact: connectors with a pitch of 6.35 mm save space on the device front
- Innovative: device designers have more freedom with the clever shield contacting mechanism
- Multivariant: locking via top lock or center flange is reliable and space-saving

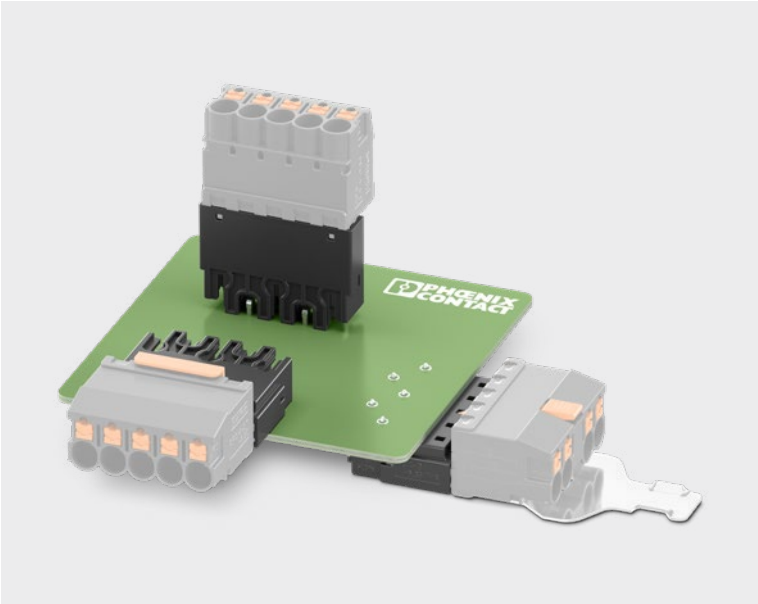
Play video

Gain more info:
Webcode #3247

Compact headers for the PC 4 series

For automated reflow soldering

With a pitch of 6.35 mm, the compact PC 4 series headers save a great deal of space on the device. The enhanced touch protection on the header and connector offers extra safety. The THR headers enable a reflow soldering process and automated assembly, and help reduce production costs.



Main features

- Pitch: 6.35 mm
- Currents up to 24 A
- Voltages up to 1,000 V
- 2- to 12-pos.
- Optionally in tape-on-reel packaging
- Increased touch protection in accordance with IEC/UL 61800-5-1

Your advantages

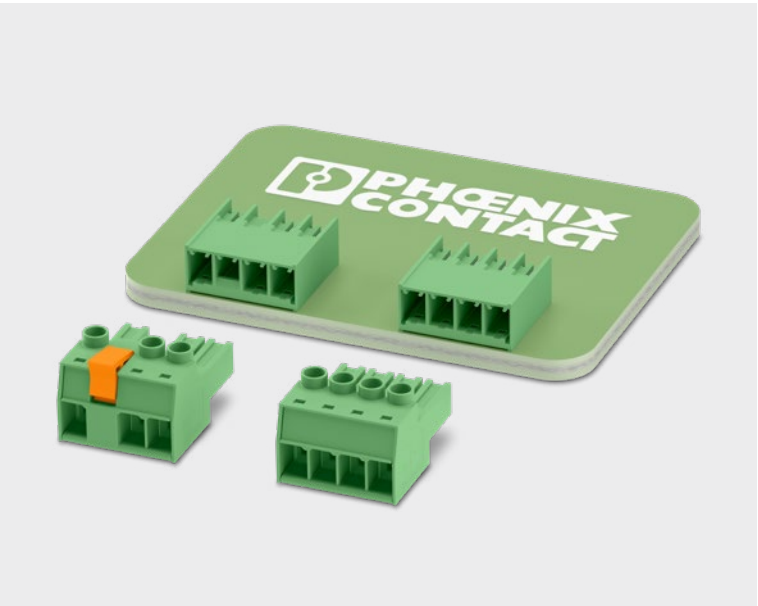
- Compact: headers with a 6.35 mm pitch help save space on the device front
- Safe: enhanced touch protection on header and connector offers extra safety
- Efficient: the THR headers help reduce production costs with their suitability for reflow soldering and automated assembly

Gain more info:
Webcode #3248

PC 6 series connectors

Flexible for power electronics

The PC 6 connector is a logical addition to the new LPC 6 and PC 6/...-ST-BUS product families with a pitch of 7.62 mm. With this series, the classic connection technology with screw connection is also available with enhanced touch protection for the new pin connector pattern.



Main features

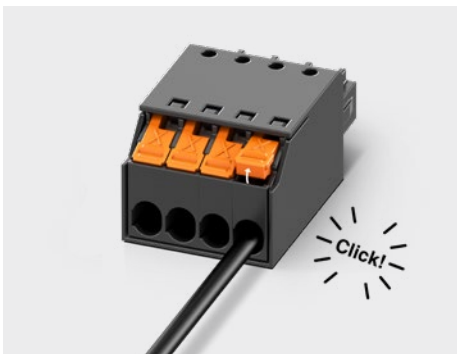
- Pitch: 7.62 mm
- Currents up to 41 A
- Voltages up to 1,000 V
- 2- to 6-pos.
- Optionally with center latching flange
- Increased touch protection in accordance with IEC/UL 61800-5-1

Your advantages

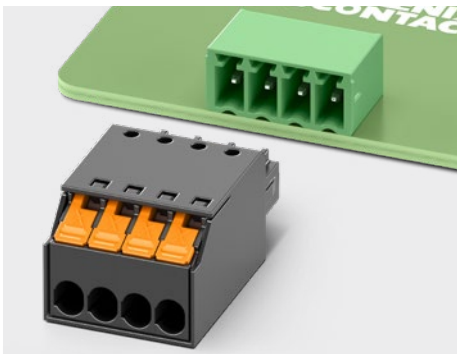
- Pin connector pattern compatible with LPC 6 lever-actuated PCB connectors
- Increased touch protection for maximum safety even when not plugged in
- Well-known connection principle allows worldwide use
- High contact reliability with integrated steel reinforced spring contact

Gain more info:
Webcode #3262

Direct force-saving and tool-free conductor connection



Connection of all conductor types with and without ferrules



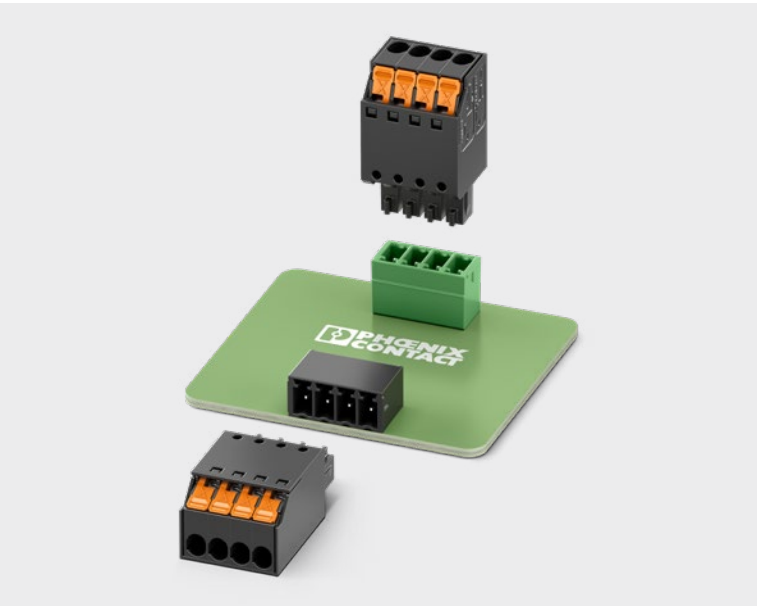
Reliable with acoustic and visual feedback

HIGHLIGHT

Push-X in a PCB connector

Highly convenient operation during conductor connection

The convenient Push-X conductor connection is integrated into XPC 1,5 series PCB connectors. Push-X technology enables you to connect flexible and rigid conductors quickly and with virtually zero effort.



Main features

- Currents up to 8 A
- Voltages up to 160 V
- Conductor cross sections up to 1.5 mm²
- Pitch: 3.5 mm
- 2- to 16-pos.

Your advantages

- Fast conductor connection for all conductor types with and without ferrules
- Highly convenient operation with the effortless and tool-free direct-connection technology
- Acoustic feedback during conductor connection
- The lever position shows the connection status
- Compatible with COMBICON PCB connectors with a pitch of 3.5 mm

Play video

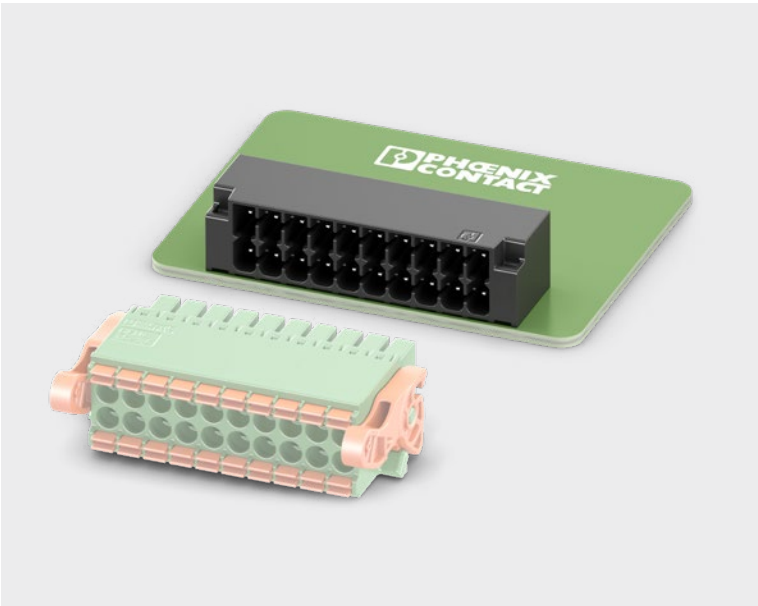
Order sample

Gain more info:
Webcode #3261

Compact headers in the DMC 1,5 series

For automated reflow soldering

The new reflow-solderable headers with a 3.5 mm pitch extend the DMC series. These are based exclusively on the proven lock-and-release technology. This technology can be used for intuitive and robust locking and the forceless ejection between the connector and header.



Main features

- Currents up to 8 A
- Voltages up to 160 V
- 2- to 20-pos.
- Pitch: 3.5 mm
- Standard pin length: 2.0 mm and 2.6 mm
- Material: high-temperature LCP plastic
- Optionally in tape-on-reel packaging

Your advantages

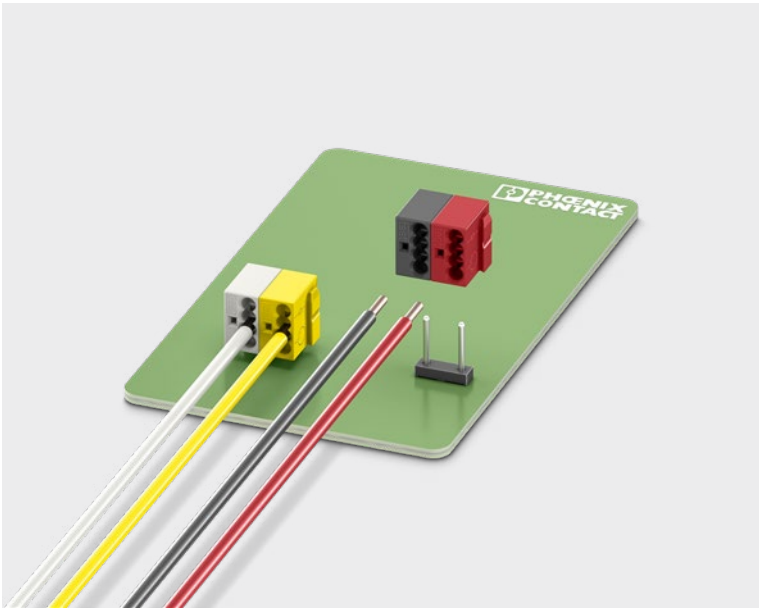
- Designed for integration into the SMT soldering process
- Packaging available for automated pick-and-place assembly
- Small component size for applications where space is at a premium
- The same pin layout and design as existing DMC 1,5 headers with integrated screw flange and lock-and-release locking system

Gain more info:
Webcode #3387

Push-in PCB connectors

For KNX automation

With the PTS 0,5 series, Phoenix Contact is extending its portfolio for building automation to include compact PCB connectors for KNX communication. J-Y(ST)Y installation cables (0.6 mm and 0.8 mm) can be connected tool-free via the Push-in connection.



Main features

- Currents up to 6 A
- Voltages up to 320 V
- Pitch: 5.75 mm
- Conductor diameter up to 0.8 mm
- Push-in connection
- 2-pos.
- Four connections per potential
- THR-capable pin strips in either tape-on-reel or cardboard packaging

Your advantages

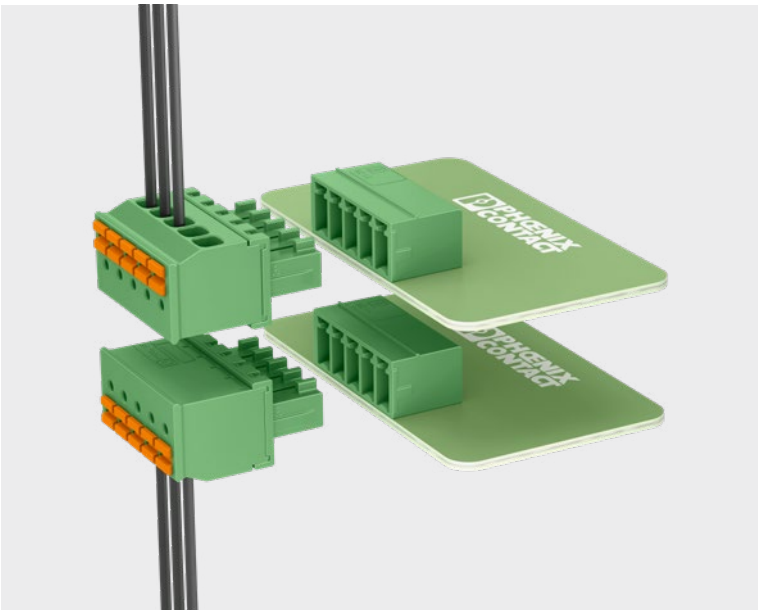
- Tool-free, time-saving Push-in connection
- Defined contact force ensures that contact remains stable over the long term
- Quick and convenient testing using the integrated testing option
- Clear contact assignment with color coding
- Ideal for bus applications: simple, uninterrupted loop through of potentials

Gain more info:
Webcode #3440

FMCOR/W 1,5 PCB connectors

Conductor connection orthogonal to the operating direction

The new FMCOR/W 1,5 PCB connectors from Phoenix Contact enable convenient conductor connection orthogonally to the operating direction. The connectors feature Push-in connections with color-contrasting operating elements.



Main features

- Pitch: 3.5 mm
- Currents up to 8 A
- Voltages up to 160 V
- 2- to 16-pos.
- Available with or without flange and lock-and-release lever
- Facing the conductor entry on the coding side or rippled side

Your advantages

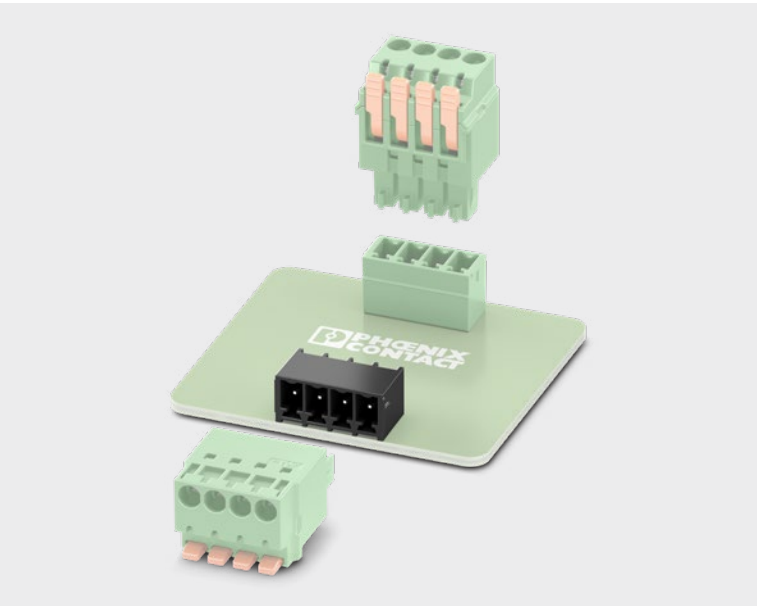
- The conductor connection orthogonal to the direction of operation simplifies the cabling of DIN-rail-mountable devices
- Tool-free, time-saving Push-in connection
- Intuitive operation with color-coded actuating push button

Gain more info:
Webcode #3444

Turned headers of the MC 1,5 series

For automated reflow soldering

The new inverted headers with a 3.81 mm pitch extend the MC series with the ability to rotate the connector connection through 180°. The THR headers enable a reflow soldering process and automated assembly, and help reduce production costs.



Main features

- Pitch: 3.81 mm
- Currents up to 8 A
- Voltages up to 160 V
- 2- to 16-pos.
- Standard pin length: 1.9 mm
- Material: high-temperature LCP plastic

Your advantages

- Designed for integration into the SMT soldering process
- High flexibility when it comes to device design: one header for connectors with different connection technologies
- Familiar mounting principle enables worldwide use

Gain more info:
Webcode #3445

Gold-plated, inverted crimp contacts

For PCB connector housings

The IMCC 0.5-MP series inverted crimp contacts are ideal for wire-to-wire connections with a gold-plated contact surface. As bulk goods or taped products, they enable manual or automated processing of small and large position quantities of the new, inverted connector housing.

Main features

- Conductor cross sections: 0.14 mm² to 0.75 mm²
- Currents up to 6 A
- B crimp and insulation crimp
- Gold-plated contact surface
- Packaged as bulk goods or taped products

Your advantages

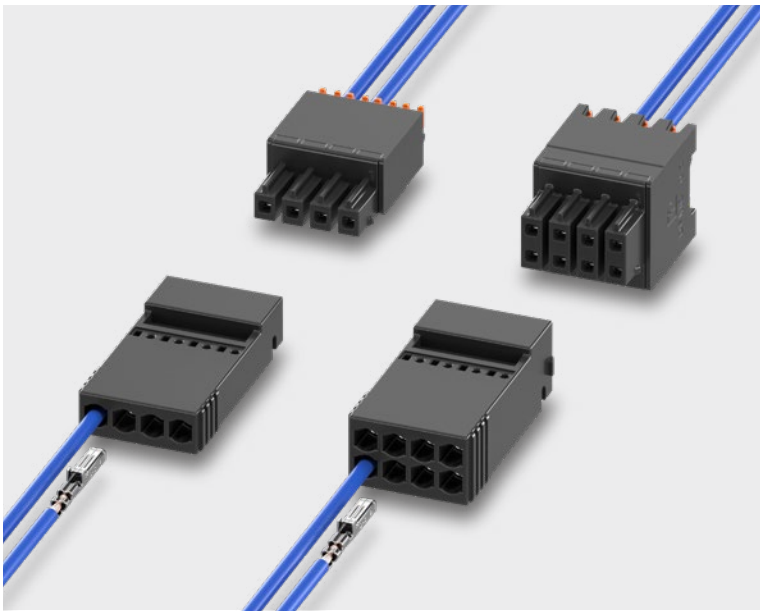
- Gold-plated contacts ensure transfer quality remains stable over the long term
- Hand crimping pliers with a high crimping force generated by a low hand force
- Qualified tools for making connections between contacts and wires of different cross-sections for automated crimping available as an option
- The tools have adjustable crimp heights

Gain more info:
Webcode #3447

Inverted connector housings

2.54 mm pitch for crimp technology

The inverted, single-row and double-row housings for connectors of the I(D)MCC 0,5 series complete the portfolio with a compact pitch of 2,54 mm. This also enables wire-to-wire solutions with the DFMC 0,5 connection system. Different crimp contacts are available for selection.



Main features

- Conductor cross sections: 0.14 mm² to 0.75 mm²
- Currents up to 6 A
- Voltages up to 160 V
- Pitch: 2.54 mm
- 2-pos. to 16-pos. with 4 to 32 contacts
- Single and double row versions

Your advantages

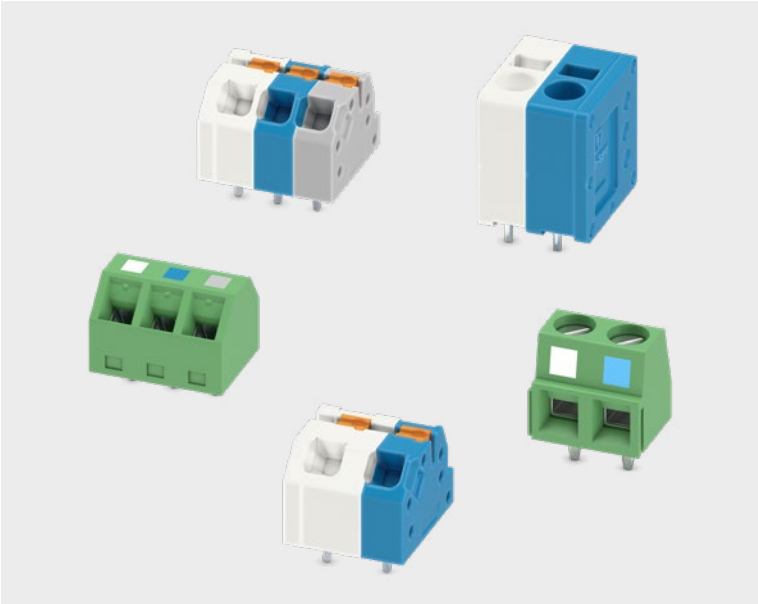
- Cost-effective connection of crimped conductors in large quantities
- Contacts arranged in a double row enable high packing density in a compact area
- Compact size for applications where space is at a premium

Gain more info:
Webcode #3446

SPE PCB terminal blocks of the COMBICON program

Connection technology for Single Pair Ethernet

Single Pair Ethernet (SPE) is a powerful technology for realizing Industry 4.0 and IIoT applications. This is where the PCB terminal blocks of the COMBICON program come into their own, with their clear color coding and intuitive handling.



Main features

- Screw and Push-in connection technology
- Pitch: 3.5 to 5.08 mm
- Connection directions: 0°, 45°, and 90°
- Conductor cross-sections: 0.14 to 2.5 mm² (26 AWG to 12 AWG)
- Suitable for Power over Data Line (PoDL) applications

Your advantages

- Intuitive handling with clear color coding
- Fast and easy integration of field devices
- Space-saving connection technology for devices (miniaturization)
- Suitable for shielded and unshielded SPE cables
- Tested and confirmed data rates up to 1,000 Mbps

Gain more info:
Webcode #3357

Compact Push-in PCB terminal blocks

For power electronics up to 125 A

The horizontal PCB terminal blocks of the SPT 35 series feature a large clamping space with minimum dimensions. Conductors with a cross section of up to 35 mm² can be connected by means of convenient and tool-free Push-in connection technology and transmit currents of 125 A.

Main features

- Currents up to 125 A
- Voltages up to 1,000 V (1,000 V UL)
- Pitch: 15.00 mm
- Conductor cross sections up to 35 mm²
- Push-in connection
- 1- to 5-pos.

Your advantages

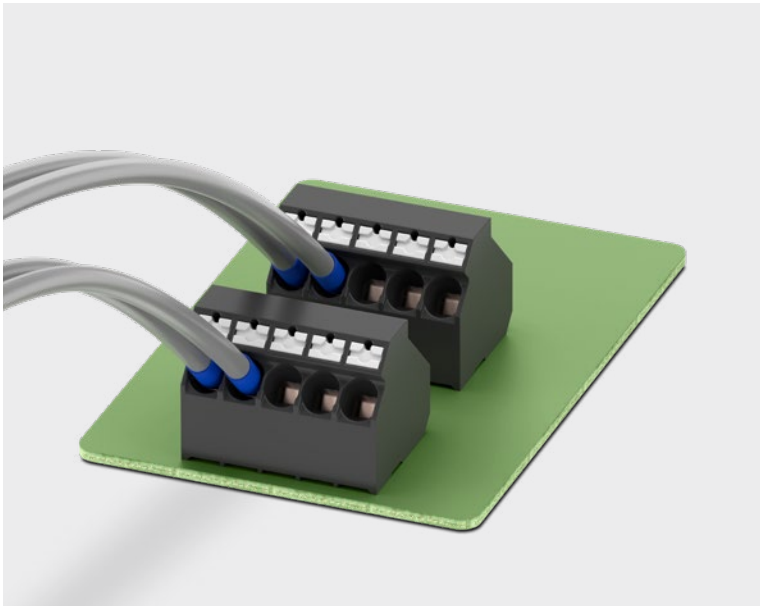
- Tool-free, time-saving Push-in connection
- Ideal for use in the device front with the horizontal connection and actuation direction
- Defined contact force ensures that contact remains stable over the long term

Gain more info:
Webcode #3441

Angled THR PCB terminal blocks with 2.5 mm²

Fast connection with Push-in spring connection

PCB terminal blocks of the SPTA-THR 2,5 series extend the product range to include angled, reflow-solderable versions for automated assembly processes. Thanks to the angled connection, the PCB terminal blocks are particularly suitable for multi-row arrangement on the PCB.



Main features

- Currents up to 32 A
- Voltage up to 400 V
- Conductor cross-sections: 0.2 to 4 mm²
- Pitch: 5.0 mm
- 2- to 12-pos.
- Supplied in box or tape-on-reel packaging

Your advantages

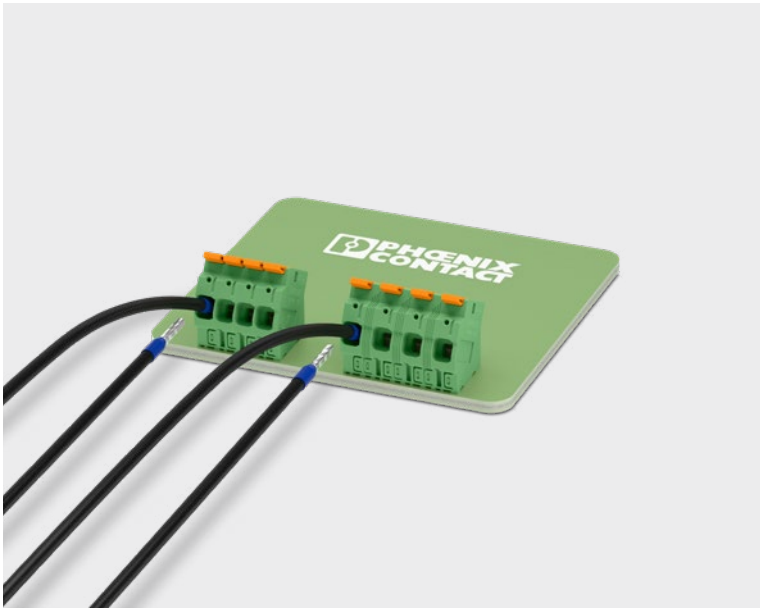
- Tool-free, time-saving Push-in spring connection
- Defined contact force ensures that contact remains stable over the long term
- Intuitive operation with color-coded actuating push button
- Angled connection enables multi-row arrangement on the PCB
- Designed for integration into the SMT soldering process

Gain more info:
Webcode #3299

Lever-actuated PCB terminal blocks

With angled connection direction up to 25 mm²

PCB terminal blocks of the LPTA 16 series enable the tool-free connection of conductors with cross-sections up to 25 mm². The clear position of the colored actuation lever and the defined contact force of the lever-actuated Push-in connection ensure reliable contacting.



Main features

- Currents up to 76 A
- Voltages up to 1,000 V
- Conductor cross-sections: 0.75 mm² ... 25 mm²
- Pitch: 10 and 15 mm
- 1- to 8-pos.
- Angled version with a 30° connection direction
- Increased touch protection in accordance with IEC/UL 61800-5-1

Your advantages

- Intuitive operation, thanks to color-coded actuating lever
- Tool-free lever principle enables time-saving connection and release of conductors with or without ferrules
- Distinct lever positions give a reliable feedback whether the clamping space is opened or closed
- Defined contact force ensures that contact remains stable over the long term

View 3D object

Gain more info:
Webcode #3297

PCB terminal blocks in two pitches

For ICS series electronics housings

New PCB terminal blocks in two pitches extend the connection variety for ICS series electronics housings. Choose between screw or Push-in connection versions of the new terminal blocks for your device solution.

Main features

- For ICS overall widths of 20, 25, and 50 mm
- Push-in spring connection and screw connection
- Pitch: 5.75 mm
- Alignment left and right

Your advantages

- Simple handling in just a few steps
- Fixed wiring and a reduced number of individual parts
- Choice between different pitches and connection methods
- One partner for everything: the right components for your device solution

Gain more info:
Webcode #3439

Upper parts for Push-in connection

For BC modular electronics housing series

Using the new upper housing sections from the BC modular series, you benefit from the convenient operation of the Push-in connection technology on the front of the housing. Configure your custom-fit housing solution equipped with Push-in PCB terminal blocks in the SPT-THR 1,5 or 2,5 series.

Main features

- Width: 71.6 mm to 161.6 mm
- Nominal voltage: 160-400 V
- Nominal cross-section: up to 4 mm² (rigid)
- Number of positions: up to 24 per housing chamber
- Color: RAL 7035 and RAL 9005
- Flammability rating V0 in accordance with UL 94

Your advantages

- SPT-THR-harmonized housings enable fast device development and optimal protection for the electronics
- Individual configuration of each housing chamber for diverse applications in building automation
- Standard-compliant housing and installation dimensions for use in distribution boards
- Easily create the right item for you: use our intuitive online configurator

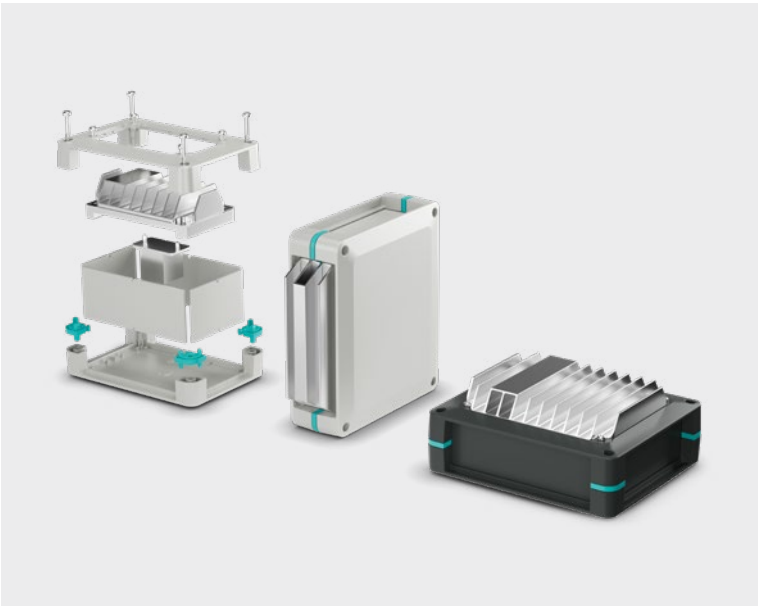
Play video

Gain more info:
Webcode #3438

Passive heatsinks and heat distribution

For UCS series electronics housings

The thermal requirements for applications are increasingly stringent. The UCS heat sink solutions enable targeted passive heat dissipation from UCS housings. Combining them with individually adapted heat spreaders enables an optimum thermal design in devices.



Main features

- Material: aluminum
- Application-specific adjustments at different hotspots
- Can be used for UCS housings in the versions 125-87 to 237-195
- Heat sink solutions for integration into the half shell
- Heatsink as side panel in sizes 125 and 145 mm

Your advantages

- Heatsink solutions enable devices to be used in thermally demanding applications
- Optimal thermal path for reliable heat dissipation
- Custom-tailored to various hot spots
- Heatsink solutions can be used in a variety of housing sizes
- Made-to-fit system solutions with mounting materials

Gain more info:
Webcode #3300

Large-volume OCS series outdoor housings

For autonomous systems

Large-volume OCS series electronics housings are the ideal choice for autonomous device systems in extreme environments. The certified housings made from polycarbonate are lightweight, resistant, and permanently and reliably protect your electronics against humidity, heat, UV radiation, and mechanical strain.

Main features

- Temperature range: -40°C ... 80°C (short-term +120°C)
- Approvals: UL 508A and EN 62208
- Degrees of protection: IP66/68/69, IEC 60529, or NEMA 250, type 4X, 12, 13, 6P
- Impact strength: class IK10, EN 50102
- Plastic: polycarbonate (UV-stabilized f1, UL 746C)

Your advantages

- Can be used worldwide: internationally certified housing system
- Durable due to UV-stabilized polycarbonate for outdoor use
- Safely installed electronics: the housings protect against jet water and other harmful substances
- Resistant: stable even under heavy mechanical strain within a wide temperature range

Gain more info:
Webcode #3249

Large-volume OCS series outdoor housings

Three larger housing versions available

The OCS products are rugged, large volume outdoor housings designed for electronics that can also operate in extreme ambient conditions. With the three new housing versions, adding to the current sizes in the range, more are available with more space for the electronics.

Main features

- Six standard sizes each with two cover versions
- Temperature range: -40 … +80°C (short-term +120°C)
- Approvals: UL 508A and EN 62208
- Degrees of protection: IP66/68/69, IEC 60529, or NEMA 250, type 4X, 12, 13, 6P
- Impact strength: class IK10, EN 50102
- Optional accessories for wall or mast mounting

Your advantages

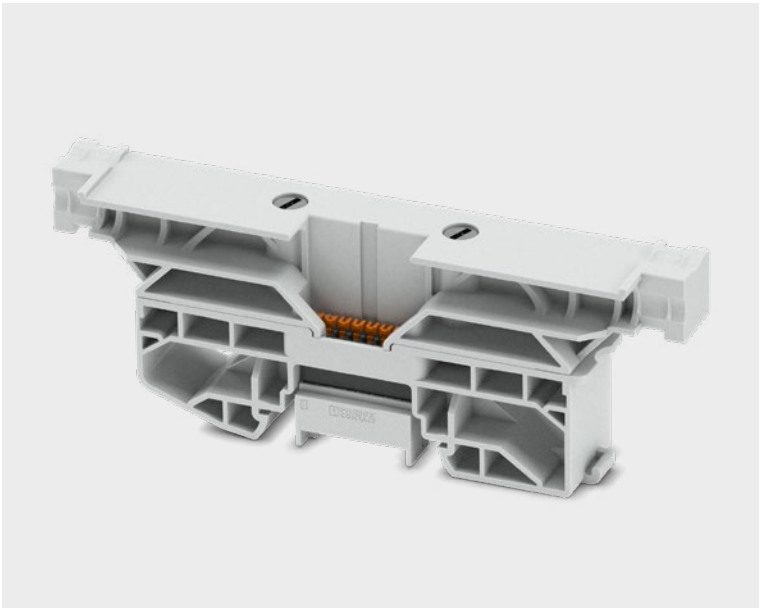
- Internationally certified housing system
- Special plastic enables safe continuous operation
- Provides protection against the ingress of jet water
- Withstands even heavy mechanical strain
- Space for several electronic components

Gain more info:
Webcode #3249

Connectors for 8-position TBUS connectors

Module communication over several levels

Some applications also require data and signals from the module communication beyond the module network, for example, in the case of a line feed. Here, input and output connectors for the 8-position TBUS connect modules over several levels. They can be used on the left, right, and center.



Main features

- 8-position module communication
- Available as input and output
- End bracket function

Your advantages

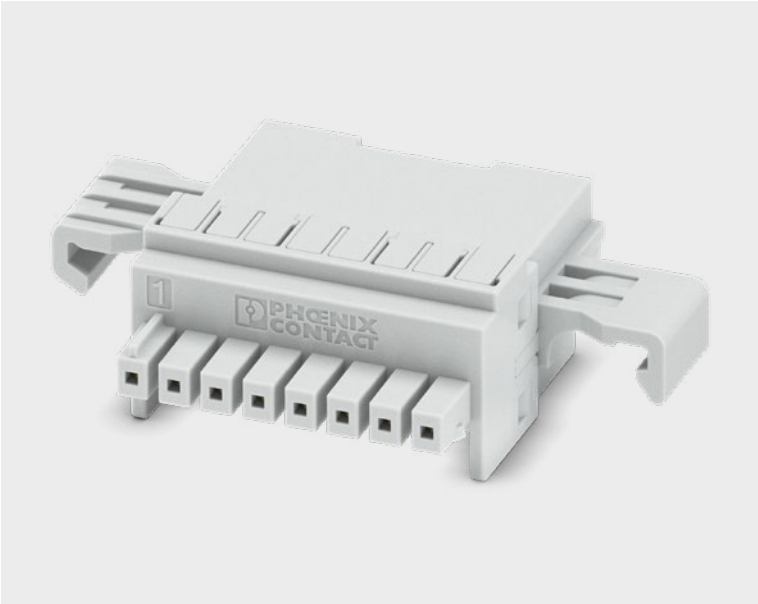
- Input and output of the 8-position bus connection in the module network with ME-IO and ICS housings
- Optimum use of space with ordered cable routing
- Easy marking with a large printing area

Gain more info:
Webcode #3460

Bridge for TBUS connectors

Making optimum use of installation space

The transmission of data and signals for applications without a necessary output to the PCB can be looped through by a bridge for DIN rail connectors below the module. This enables you to maximize the use of the PCB surface.



Main features

- 8-position module communication
- Available in the widths 18.8, 20, and 25 mm

Your advantages

- Can be integrated into device applications based on ME-IO and ICS housings
- Increased maximum PCB surface
- Connection of the positions in the field with FMC connectors

Gain more info:
Webcode #3461

Thermal transfer printers

For single and double-sided marking

Use the THERMOMARK E.300 DOUBLE for single and double-sided marking of roll materials. Combine it with the E.CUTTER(/P) to cut or perforate continuous format materials or connect it to the THERMOMARK E.SLEEVE applicator.

Main features

- For single and double-sided printing of materials in roll format
- Print resolution of 300 dpi
- Suitable for continuous use in production and for processing large print volumes
- Compatible with the THERMOMARK E.SLEEVE, E.CUTTER, and E.CUTTER/P
- 4.3“ LCD multicolor touch display

Your advantages

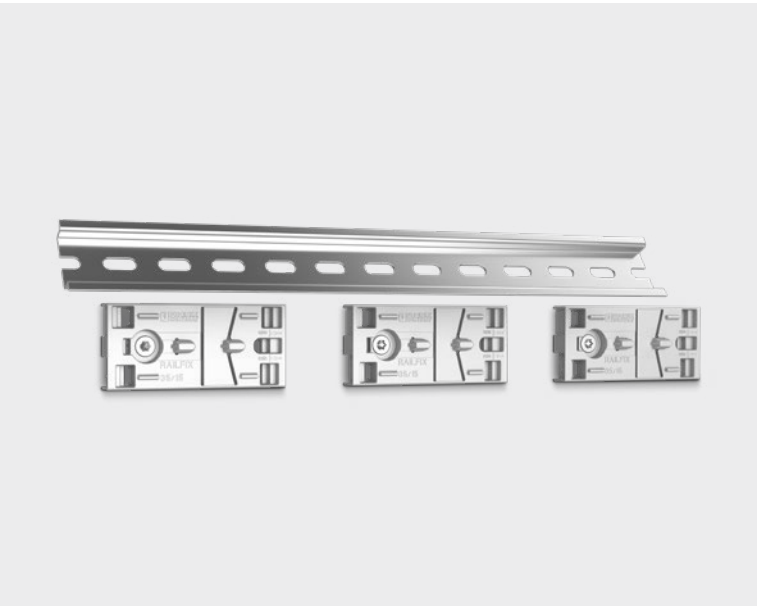
- Efficient printing and application system: combine the printer with the THERMOMARK E.SLEEVE
- Printing on both sides guarantees optimum legibility of the shrink and marking sleeves
- Easy processing of any materials in continuous format by using E.CUTTER and E.CUTTER(/P)
- With OPC UA, status messages can be transmitted to the marking software in real time and in both directions

Gain more info:
Webcode #3413

RailFIX

Efficient mounting of DIN rails

The RailFIX adapters make it easy to mount fully assembled terminal strips. To attach the DIN rail, there is no need to leave a gap between the terminal blocks during assembly. For fastening, the DIN rail is pushed under the locking clips and fixed with an M5 screw.



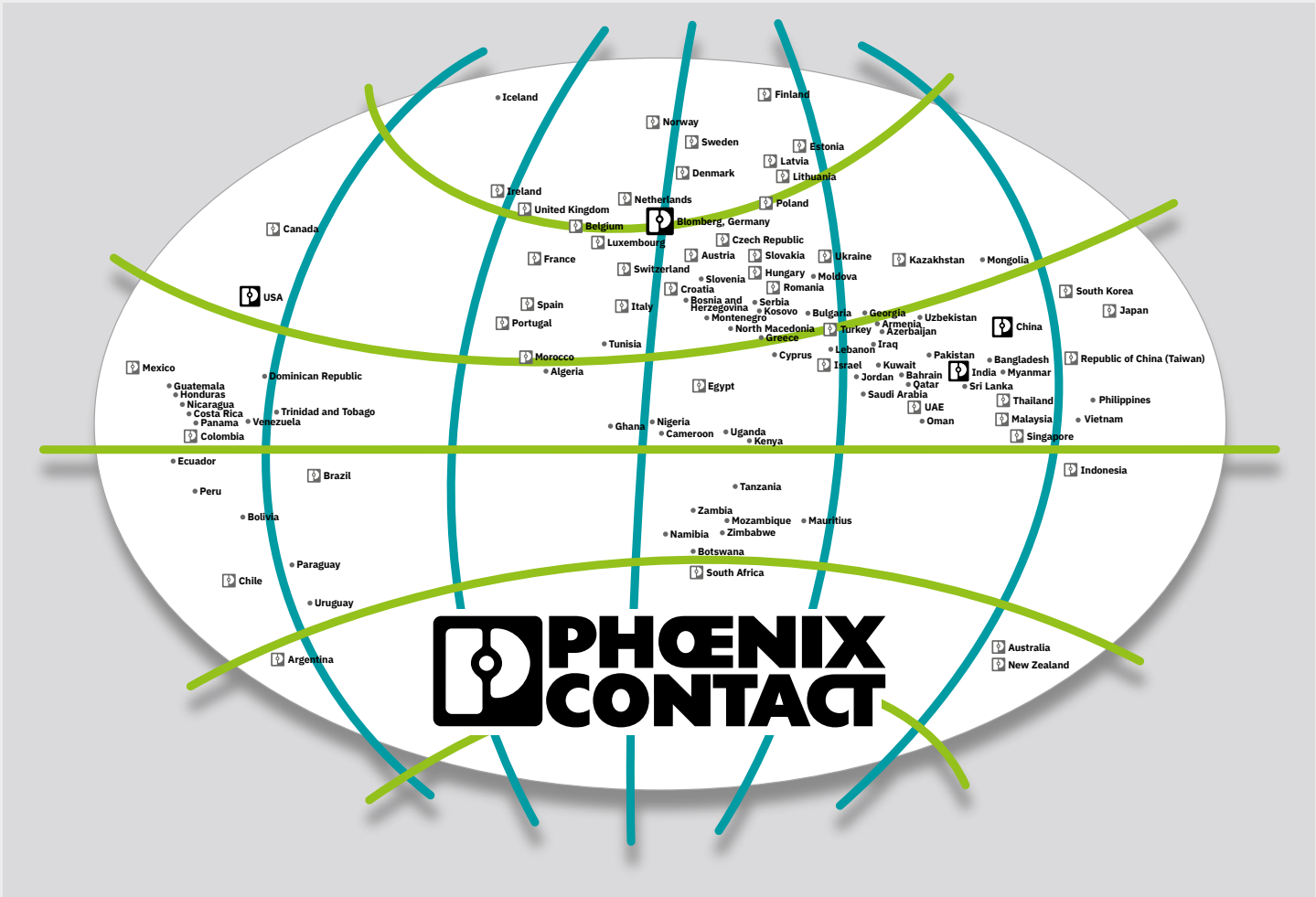
Main features

- Fixed centering pin for economical mounting of the adapters
- Mounting slots for mounting using a standard screwdriver
- System locking with a standard M5 screw
- Available for NS 35/7,5 and NS 35/15 steel DIN rails
- Shielding via conductive material

Your advantages

- Simple assembly process for assembled DIN mounting rails
- Individual components do not have to be removed for DIN rail mounting
- Compatible with DIN rails with the standard 15 mm x 6.2 mm hole pattern
- Vibration-resistant for safe transport of the control cabinet
- High robustness of the material (metal)

Gain more info:
Webcode #3393



Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing future-oriented products and solutions for the electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network reaching across more than 100 countries with over 22,000 employees, we maintain close relationships with our customers, something we believe is essential for our common success.

Our wide range of innovative products makes it easy for our customers to implement the latest technology in a variety of applications and industries. This especially applies to the target markets of energy, infrastructure, industry, and mobility.

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