

Ing. Antonio Gordillo / Mercadotecnia PHOENIX CONTACT / 24 Mayo 2021

Welcome

Nuevos Productos 2021

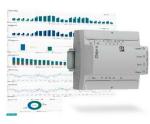


Main new products 2021



































clipx ENGINEER – Engineering Software



Applications

Plan and procure individual components, complete terminal strips, assembled mounting plates, and junction boxes more efficiently than ever, and to seamlessly transfer the data to production.

Maximum availability

Plan your terminal strips, mounting plates, and junction boxes with mobility at any location – thanks to the online and offline application.

Smart interfaces

Use smart interfaces to our applications for control cabinet manufacturing and in your CAE programs.

Simplified planning

Simplify your planning processes with the help of intelligent engineering assistants.



clipx ENGINEER



Maximum Modularity

- Web and Desktop version available
- Support of the engineering workflow in an early phase with functional engineering
- Support of many application domains

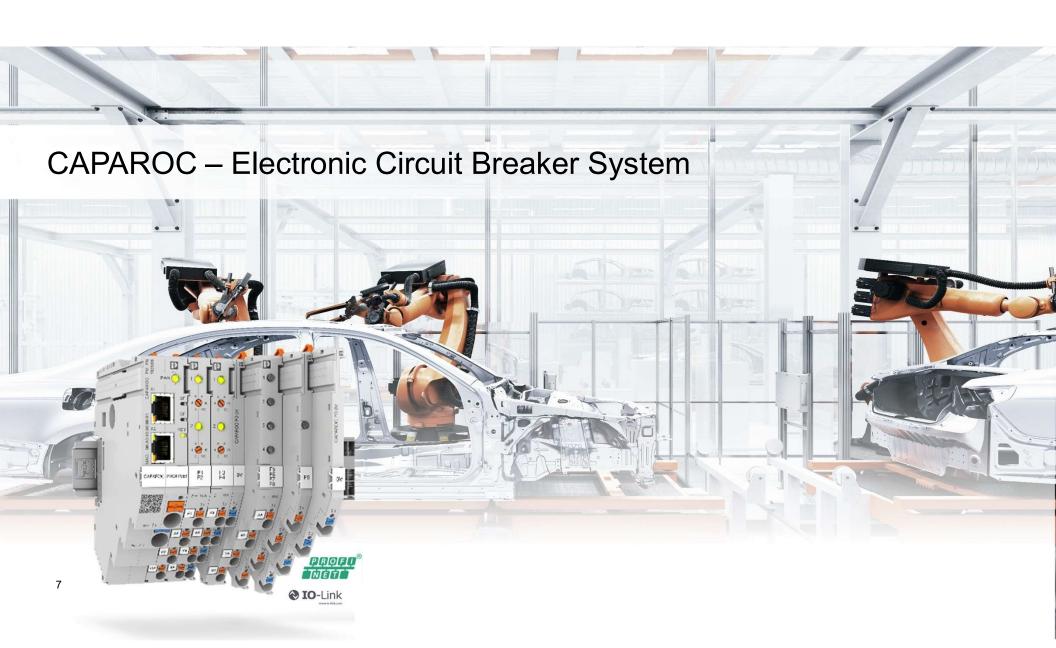
Intelligent Interfaces

- Bi-directional interfaces to all relevant CAE systems
- Integration of Phoenix Contact product configurators
- Constantly up-to-date data for manual and automated production processes

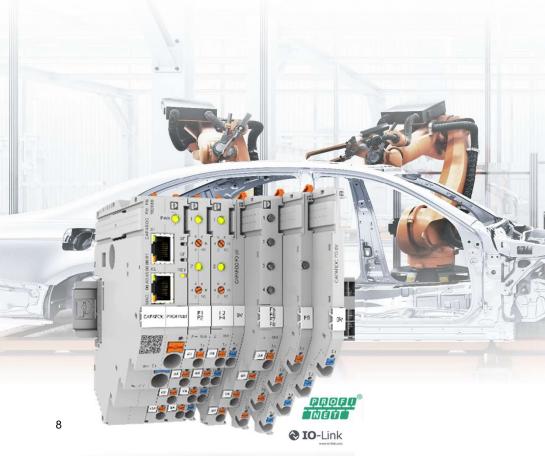
Progressive Process Support

- Online ordering with instant pricing and delivery date information
- 48h Fastlane terminal strip assembly
- Template library for functional engineering
- Data creation for third-party articles





CAPAROC – Electronic Circuit Breaker System



Applications

Protection against overload and short-circuit current, transparency of the status of the machine and start of capacitive loads.

Customizable standard

The system with a future: With a wide range of individual modules and many combination options, you can create your customized solution.

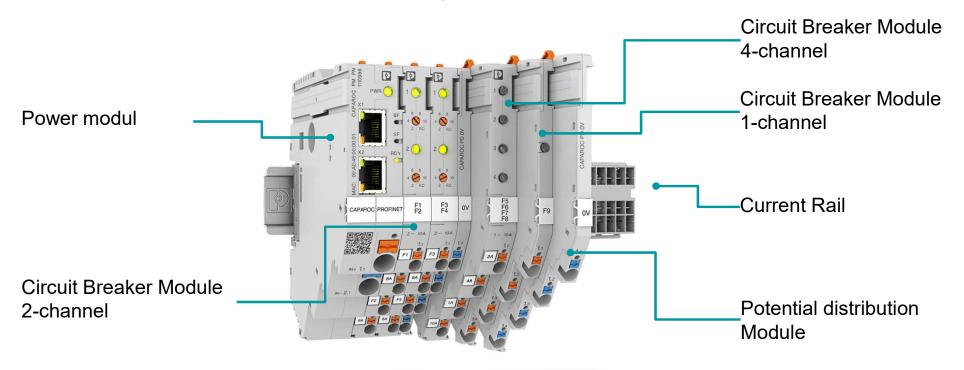
Easy operation

Experience particularly easy operation with tool-free assembly, uninterrupted installation and transparent operating status.

Intuitive design-in

Strikingly simple: The online configurator helps you to design exactly the system that you need. Appropriate digital services support you, for example with all your your individual digital data.

CAPAROC: Structure of the system



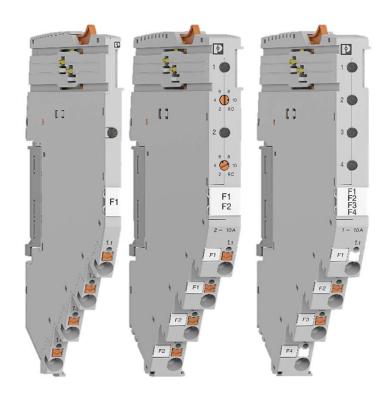


CAPAROC

The customizable standard

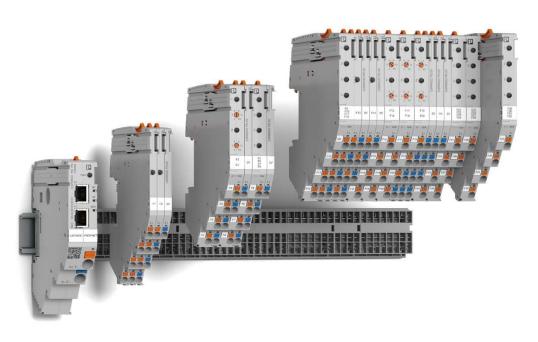
1-, 2- and 4-channel circuit breaker modules for maximum modularity

- Protect channel accuracy with up to four potential distribution terminals directly on the module
- Set in 1 A steps up to 10 A via the one-button operation or conveniently via the current stepswitch from 2 - 10 A, or simply set it remotely
- Space-saving protection on 3mm with the 4channel circuit breaker module
- With or without current limitation suitable for any application





CAPAROC: Product range





Power Module Status, Reset, I>80% Profinet interface



Potential distribution module 4-fold 0V distribution



Circuit Breaker Module 1-. 2-, or 3-channel



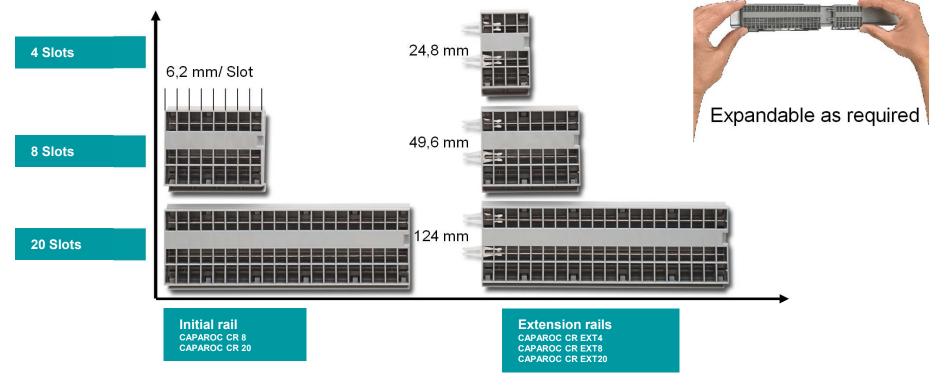
Current rails
Initial Current Rail (8- or 20-slots
Extension Current Rail (4, 8, or 20 slots)



CAPAROC - Circuit Breaker System

CAPAROC current rail variants

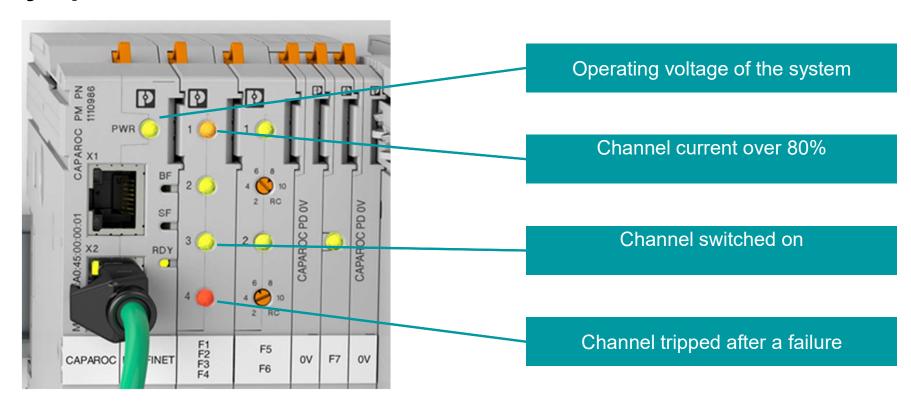






CAPAROC

Easy operation





Electronic Circuit Breakers

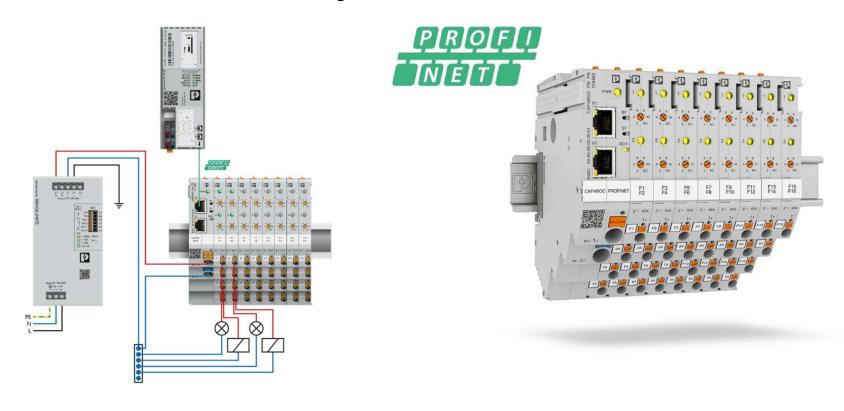
Circuit Breaker Portfolio





CAPAROC – Topology

Application comfortable adjustment via Profinet

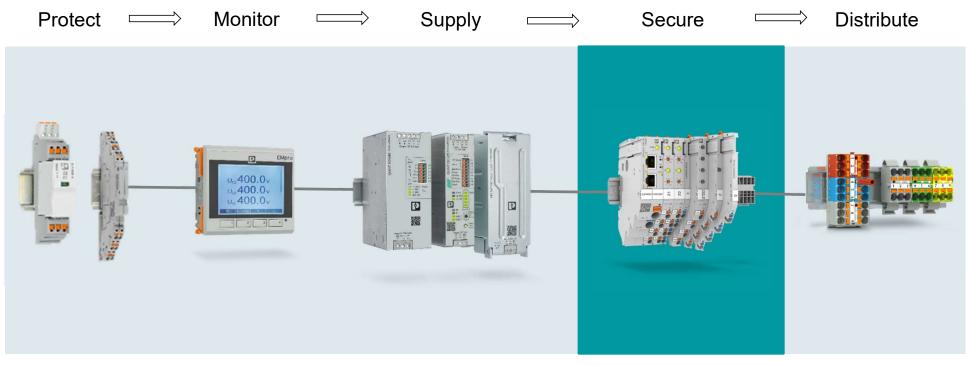






COMPLETE line - The complete solution for control cabinet construction

Power Reliability





CAPAROC



The customizable standard

- Wide range of combination options for every application
- Future-proof modular system
- Minimum space requirement (3mm per channel)

Simple operation for everyone

- Intuitive configurator for easy system configuration
- Toolless construction
- Uninterrupted exchange of modules during operation
- Transparent operating status

Strikingly simple design-in

- Comprehensive support from selection to digital services
- Individually configured systems permanently have a unique article number
- Continuous planning (interoperability) incl. power supplies





CAPAROC





EMMA – Energy Management Service for EMpro



Applications

Cloud solution for monitoring, analysis and evaluation of energy and power data

High-level user-friendliness

High-level user-friendliness with a systemic overall concept with intuitive menu navigation and automated data transfer to the Proficloud.

Targeted overview

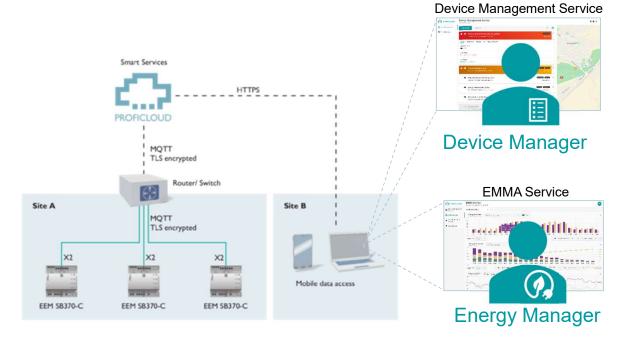
Access your energy and performance data anywhere in the world at any time. Purpose-oriented visualizations provide you with an targeted overview.

Continued further development

Constantly increasing value benefits for your energy management system with continuous, user-oriented further development.

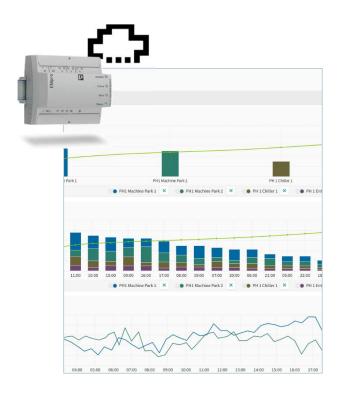
EMMA: Core Functionalities

- Feature set of 8 visualisation options
- Flexible range of functions in the field of energy data visualization
- Dynamic updating of widgets
- Highly intuitive user-guidance





EMMA



High Usability

- Direct connection to the cloud without gateway
- Device management for best application overview
- Dedicated functionality for energy managers

Full data access

- Access from anywhere anytime with online connection
- Scalable IT infrastructure

Secure data handling

- Direct connection with secure TLS encryption
- IoT established MQTT protocol





CONTACTRON Speed Starter



Applications

Speed starters for asynchronous motors start motors softly in machinery and plant engineering, especially in the field of intralogistics and materials handling.

Fast commissioning

Thanks to the simple operator interface consisting of a rotary switch, three buttons, and a display, all necessary settings can be made intuitively.

Safe shutdown

Safe two-channel shutdown up to SILCL 3 in accordance with IEC 62061, with integrated Safe Torque Off function.

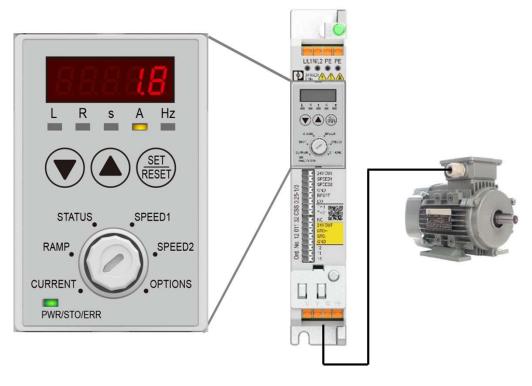
Cost-effective solution

Cost-effective solution that focuses on all the functions necessary for different speeds and soft start.

CONTACTRON Speed Starter: Handling



The easiest handling concept in the market.





CONTACTRON Speed Starter: Product range





1-phase with EMC filter 0,25 kW, 0,37 kW, 0,55 kW, 0,75 kW or 1,5 kW



3-phase with EMC filter 0,25 kW, 0,37 kW, 0,55 kW, 0,75 kW or 1,5 kW





CONTACTRON Speed Starter



Easy to use

- Fast handling
- Fast installation due to PT connection

Safety integrated

- Unique in this device class
- No additional contactor necessary

Smallest device on the market

- Space saving in the cabinet
- Cost saving





IPD – Installation Power Distribution

Applications

Connector system for indoor and outdoor applications with high IP protection for power distribution to the consumer, both indoors and outdoors

Time-saving installation

The Push-Lock connection of the connectors allows the easy, timesaving installation of flexible and rigid conductors. The terminal points are opened and closed easily using the lever.

Easy device connection

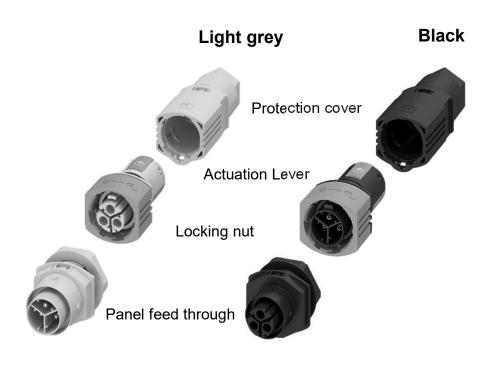
IPD panel feed-throughs with Push-in connection allow tool-free assembly with the direct connection of pretreated and rigid conductors. The pusher can be used to release already-installed conductors or to connect conductors without ferrules.

Secure locking

To allow you to work conveniently, even under adverse conditions, the IPD connectors are equipped with a fast locking system. The plugs latch clearly and securely into place and provide reliable protection against mismatching.

IPD: Product range









Connectors for lighting PHOENIX CONTACT



IPD



Easy connection

- Easy pluggable connectors with Push-in connection
- Made for Infrastructure market
- Complete³: Complete System Complete pluggable - Complete toolless

Planning and Visualization

• Future: Software for electrical installations to generate installation drafts as well as parts and price lists.

CAE Integrated

 Future: Integration in leading CAE technologies and platforms e.g. ZUKEN





M12 Push-Pull



Applications

Especially for confined spaces and high cabling density, e.g. in factory automation, M12 Push-Pull offers significant assembly advantages due to fast plugging and unplugging of the components.

Plug and Produce

With the M12 push-pull locking system, plugging is now reliable and convenient – even in confined spaces. You will reduce installation times by up to 80% compared to screw connections.

Flexibility through compatibility

M12 push-pull flush-type connectors are plug-compatible with the established M12 screw connectors and the push-pull locking systems of other manufacturers.

More compact designs

The new M12 push-pull concept with countersunk M12 ports allows flush integration into the housing. This lets you design more compact devices due to the higher packing density.

M12 Push-Pull







compatible





flying leads



future proof

... the new standard in automation technology!







M12 Push-Pull





Plug-and-Connect

- Convenient fast and secure connecting
- Connector skips back when not snapped correctly

Safely shielded

 Reliable shield connection even under extreme mechanical strain thanks to the innovative spring concept

One Standard – One Connection

 Manufacturer-independent M12 push-pull locking system supported by the main user consortium PNO & AIDA





CHARX – Everything for Your E-Mobility Charging Infrastructure



DC power electronics for fast charging stations



Fast installation and maintenance

19" standard dimensions as well as
Push-Lock and T-LOX quick connection
technology

Cost and space saving

 Efficient, space-saving operation due to high efficiency, high power density and innovative design

Flexibility

- Scalable charging power through flexible interconnection of modules
- Flexible design of charging systems thanks to galvanic isolation



Surge protection for charging stations



Availability

High system availability due to powerful protection circuitry

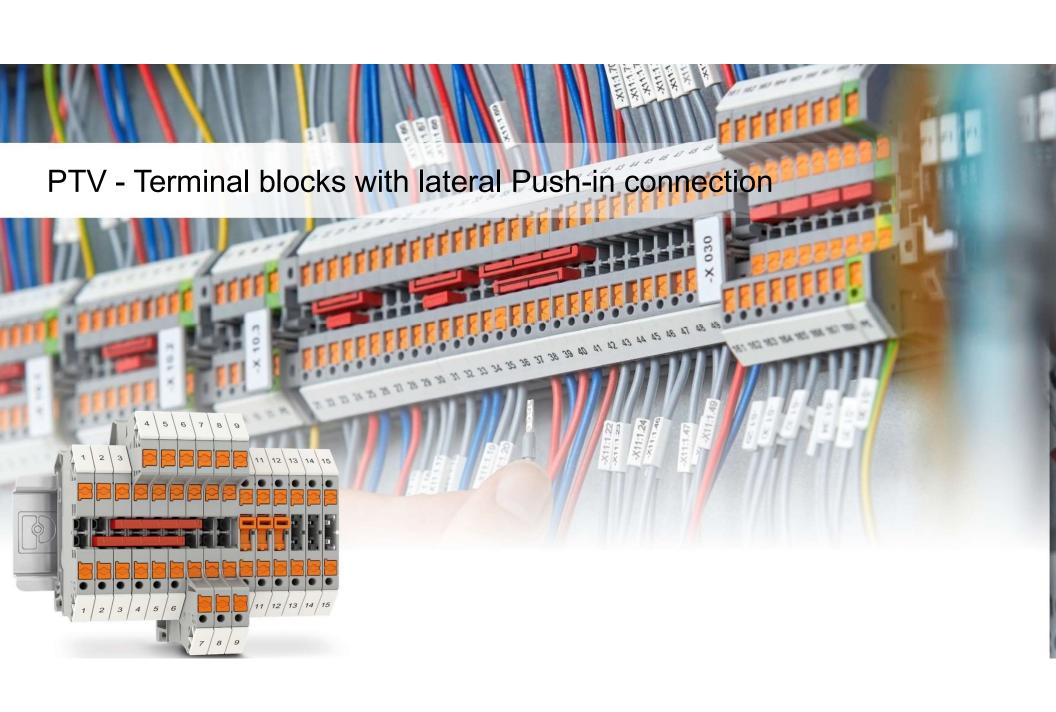
Reliability

- Uninterrupted continuation of the charging process due to protected power supply
- Additional protection of the connected electric vehicle

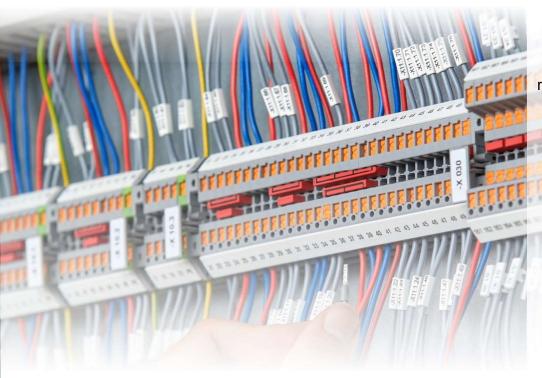
Easy handling

- Easy insulation measurement and simple replacement during servicing with consistently pluggable protective devices
- No mismatching of plugs, thanks to mechanical coding





PTV – Terminal blocks with lateral Push-in connection



Application

Universal industrial control cabinet wiring with lateral conductor routing for optimum clarity. Retrofit projects, applications with limited wiring space.

System modernization

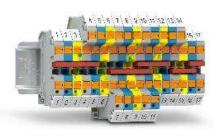
You can utilize your existing control cabinet layouts with screw-terminal wiring and modernize your systems.

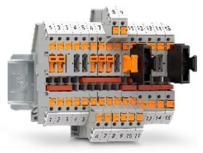
Push-in technology

Because the conductor feed is rotated through 90°, the terminal blocks are ideal for switching over to Push-in technology.

PTV: Product range

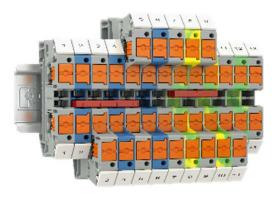




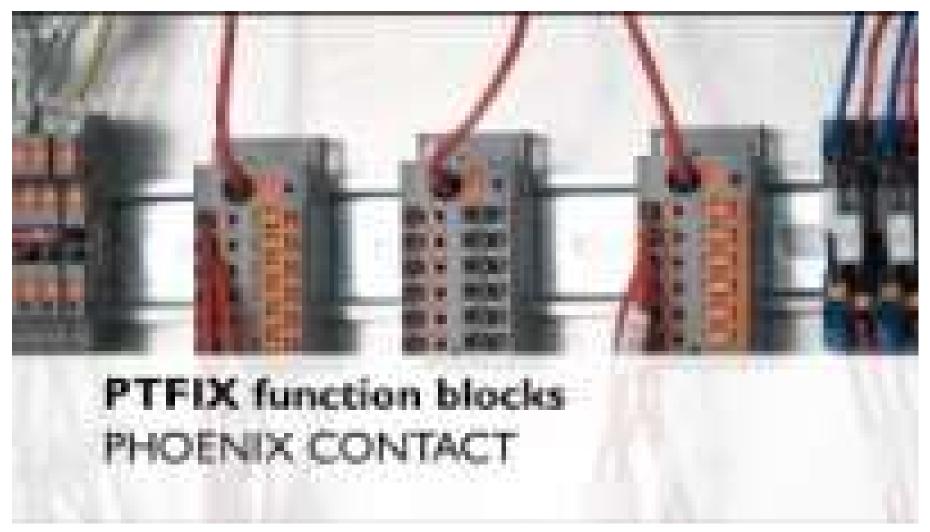














PTV 6



Innovative Push-in Technology

- High clarity through lateral wiring
- Simple, self-explanatory technology
- minimized installation height

Digital type plate

- All tech. product information per QR code
- Ready for eCl@ss advanced and BMEcat
- Access to all approval data at any time

Comfortable planning

- Easy configuration and planning via PROJECT complete
- Delivery service for pre-assembled rails



PTVME 6/S



Innovative design

- Push-in technology for screw cabinet layout
- Screwless operation lever, 1000V approved
- Vertical wiring direction and cable marking

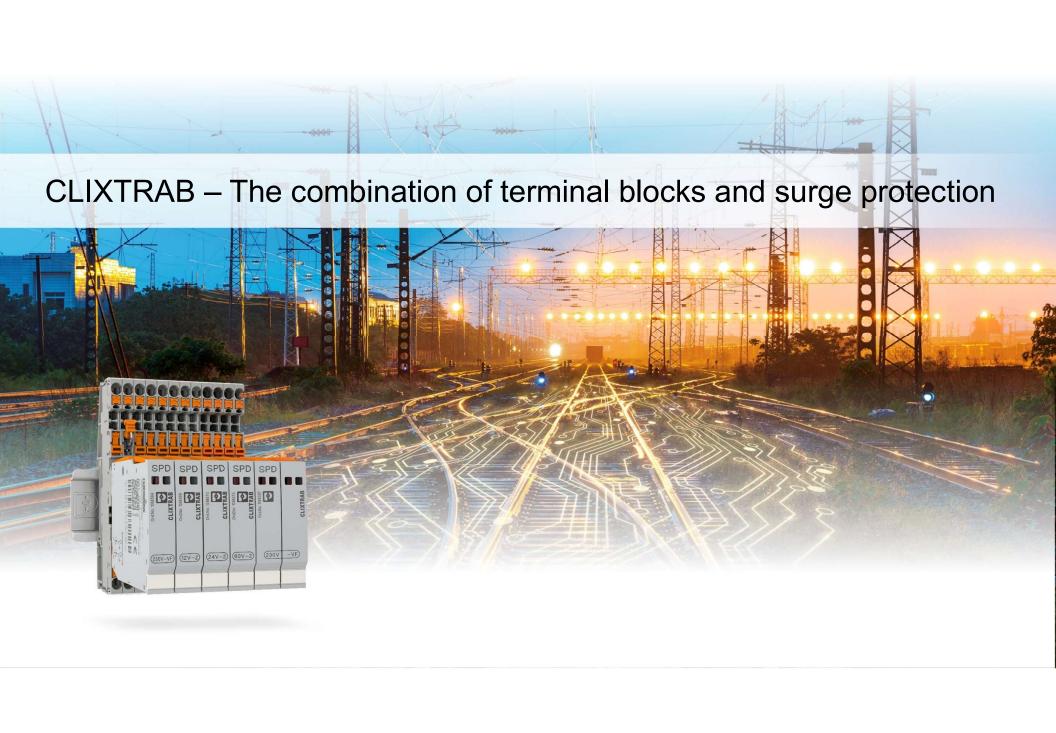
Full integration

- Ready for eCl@ss advanced and BMEcat
- Download portal with full set of CAE data
- Digital Twin model for automated wiring

Carefree package

- Clear indication of switching status
- Delivery service for pre-assembled rails
- Comfortable planning in PROJECT complete





CLIXTRAB – The combination of terminal blocks and surge protection



Easy handling

CLIXTRAB enables easy installation due to the combination of Pushin terminal blocks and pluggable surge protection.

No influence on signal circuits

No impermissible influence on signals due to leakage current free circuits.

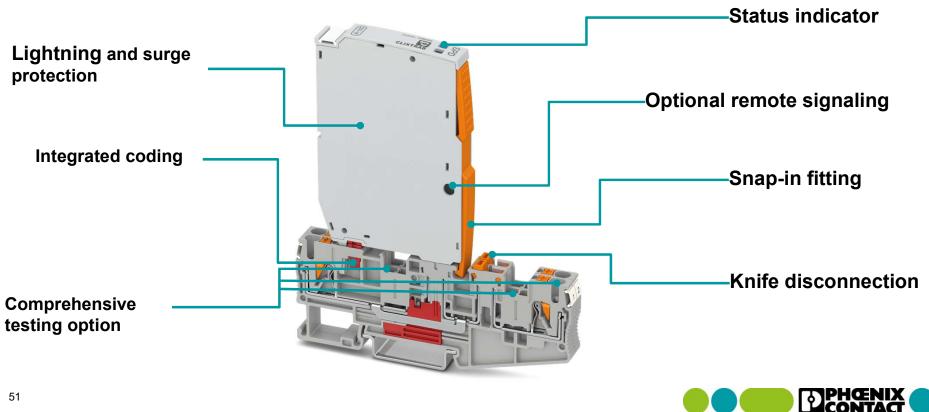
Fast error identification

Quick and easy diagnostics with mechanical status indicator and optional remote signaling for integration into digital infrastructures.

Future-proof

CLIXTRAB satisfies international standards and directives, such as the DB RIL 819.0808 railway directive.

CLIXTRAB – The combination of terminal blocks and surge protection





CLIXTRAB: Product range



CLIXTRAB Family



Base element PT 2,5-MT-CLT



Surge protection plugs CLT-...-P, 230V, 12V, 24V, 60V



CLIXTRAB with COMPLETE line accessories



CLIXTRAB



Narrow width

- Most easy installation with CLIPLINE complete system
- Two terminal blocks instead of three
 narrow width of 10.3 mm

Diagnostic function

- Diagnosis of overload
- Optional remote signaling provides 24/7 monitoring
- Integration into digital infrastructures

Testable with CHECKMASTER 2

- Meaningful results with regard to predamage of components
- Simple maintenance and documentation









Applications

Home Energy Management System to control and distribute the energy generated in the home.

Approvals

Comprehensive approvals for industrial applications:
UL/EN/IEC 61010-1 and ANSI/UL 121201 (Hazloc)
Approval for household purposes: EN 61558-2-16
Approval enables use in the field of e-mobility: EN 61851-21-2

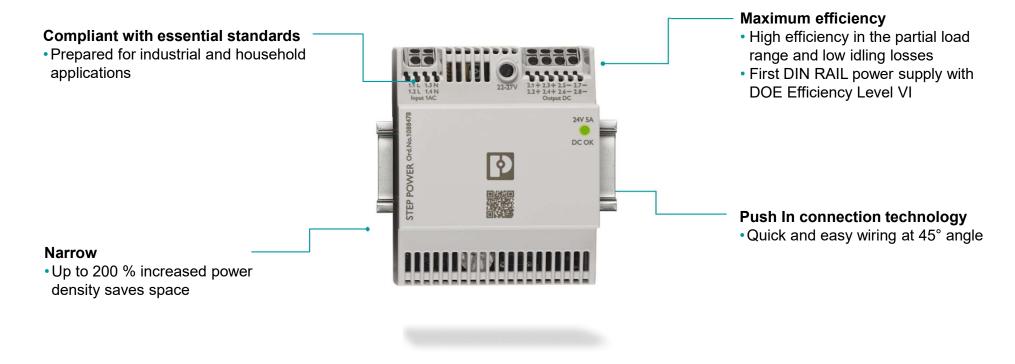
Efficiency Level VI

The low no-load losses and high efficiency grant optimal energy efficiency in the building. STEP3 satisfy the currently high efficiency standard requirements and therefore obtain Efficiency Level VI.

Easy handling

Flexible mounting, either snap onto the DIN rail or screwed onto flat surfaces and quick and easy startup thanks to tool-free push-in connection technology.

STEP POWER (3rd Gen.): Advantages





STEP POWER (3rd Gen.): Product range



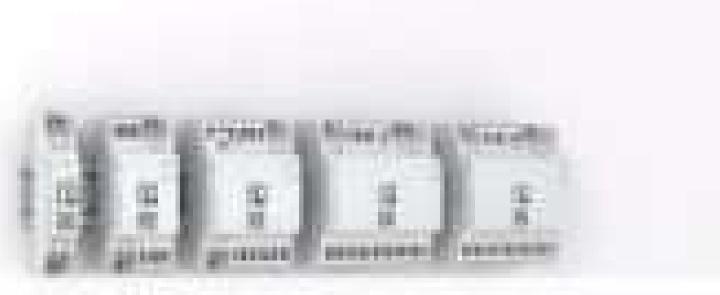
STEP POWER 3th generation 2021

Output 24 V / 0.63 A \dots 5 A

US market / e.g. LED applications

Flat design!





STEP POWER PHOENIX CONTACT



STEP POWER (3rd Gen.)



Smallest power losses

- Maximum energy savings both in the partial load range and at no load
- Only DIN-rail power supply with Energy Efficiency Level VI

Complete digital integration

- Design-in: Time savings thanks to simple CAE integration by PROJECT complete
- Simple integration through eCl@ssclassification of the technical data
- QR code leads directly to product documentation (DB, CAD)

Versatile application

- Worldwide approvals in industrial and private applications
- Simplify the approval of the terminal device



THERMOMARK GO – Mobile label printer



THERMOMARK GO – Mobile label printer

Applications

Allows markers to be created on the spot whenever they are needed, saving time.

Create labels on-site

Intuitive and easy handling thanks to state-of-the-art connectivity to mobile devices such as smartphones and tablets in combination with the MARKING system app.

Intuitive label configuration

The MARKING system app guides users through the marking process.

Easy handling

The THERMOMARK GO.SERIES devices operate with just one uniform material cartridge system.

THERMOMARK GO: Structure of the system

Ideal companion

with a weight of just 743 g

Flexible marking

with pre-punched labels and continuous media with material widths up to 24 mm

Versatile use

with more than 100 different materials for all applications



Easy connection via Bluetooth, NFC, or USB

Intuitive and convenient

with easy and complete control via the MARKING system app



THERMOMARK GO: Product range





Marking marterial
More than 100 different material
cartridges



Transport bag Shoulder bag for storing the THERMOMARK GO



Transport case
Practical and robust case for storing
the THERMOMARK GO



Power supply unit incl. 4 adapters for operation of the THERMOMARK GO



THERMOMARK GO:







Manual
Industrial Marking

Automated
Industrial Marking

Automatic
Industrial Marking

Shopfloor Productivity



THERMOMARK GO



Easy Communication

- Touch and GO: Easy pairing via Bluetooth or NFC
- Full smart device control
- Automatic updates

Digital Marking Experience

- Context-sensitive menu structures
- Application Wizards: Easy creation of labeling solutions

Ease of Operation

- Smart Edit: Automatic material recognition
- Die-cut labels
- GO SERIES cartridge system



Main new products 2021





















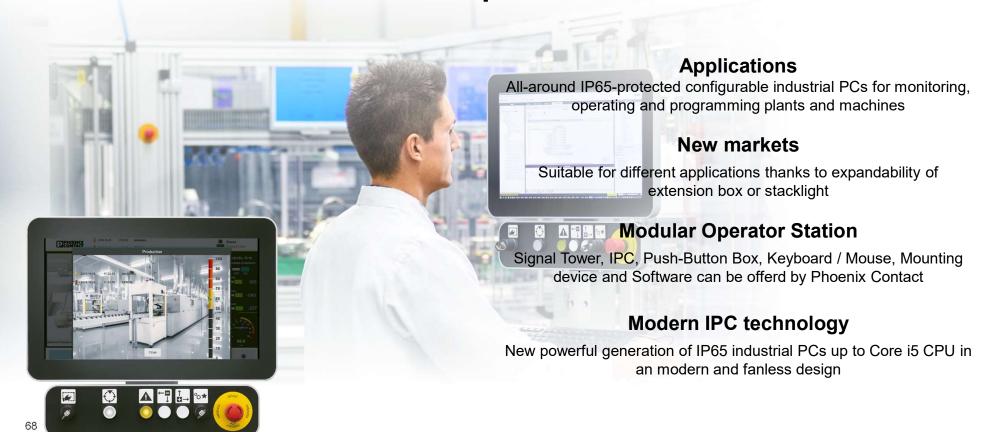








All-in-one industrial PCs – IP65 protection for use in the field



All-in-one industrial PCs



Powerful performance classes

- Intel Pentium N4200
- Intel Core i5-7442EQ

Configurable display sizes

- 15,6" (1920 x 1080 Pixel (Full HD)
- 18,5" (1920 x 1080 Pixel (Full HD)
- 21,5" (1920 x 1080 Pixel (Full HD)

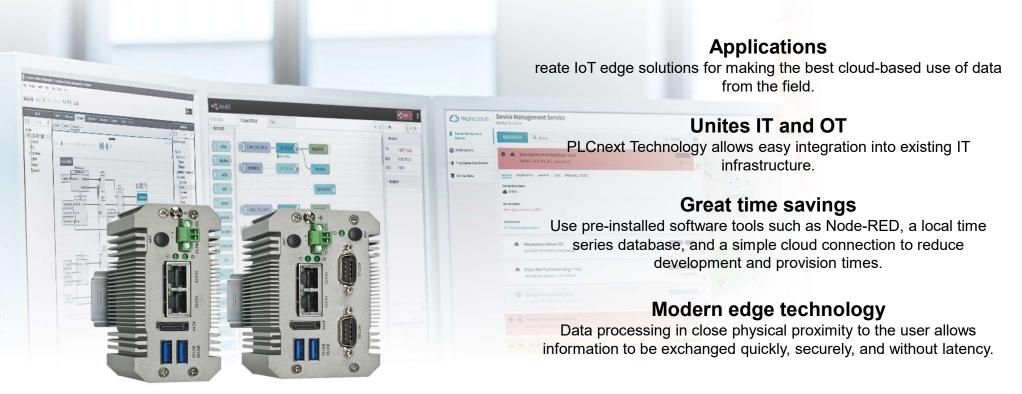
Mounting configurations

- VESA 100 mounting
- Pole mounting
- Support arm mounting





EPC 15xx – PLCnext Control for Edge computing



PLCnext Control for Edge computing



Compact IPC design

- all-metal housing
- passive cooling (Fan-free system design)

simple and secure management

integrated web-based management tool

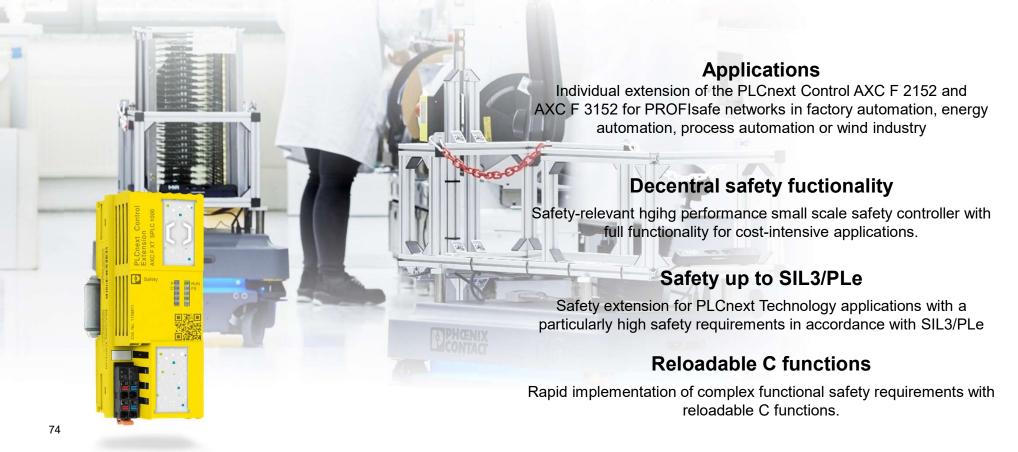
Powerful hardware

- Powerful Intel® Celeron® processor
- Extended local data storage
- Linux operating system





SPLC 1000 – PLC extension for PLCnext Control



SPLC 1000





INSPIRING INNOVATIONS



Axioline Smart Elements – Network-independent safety solutions



Axioline Smart Elements



Networkindependent safety solutions

- Up to SIL 3 in accordance with EN 61508
- Up to SILCL 3 in accordance with EN 62061
- Up to Cat. 4/PL e in accordance with EN ISO 13849-1

Compact I/O modules

- 8 safe inputs with 1-channel assignment
- 4 safe inputs with 2-channel assignment
- 4 safe outputs with 1-channel assignment
- 2 safe outputs with 2-channel assignment

Easy configuration

Via the SAFECONF software





Safety switches - Emergency switching-off / emergency stop



Safety switches



Increased occupational safety

 Illuminated buttons in accordance with the EN ISO 13850 for a reliable differentiation between active and inactive emergency stop devices in the event of danger

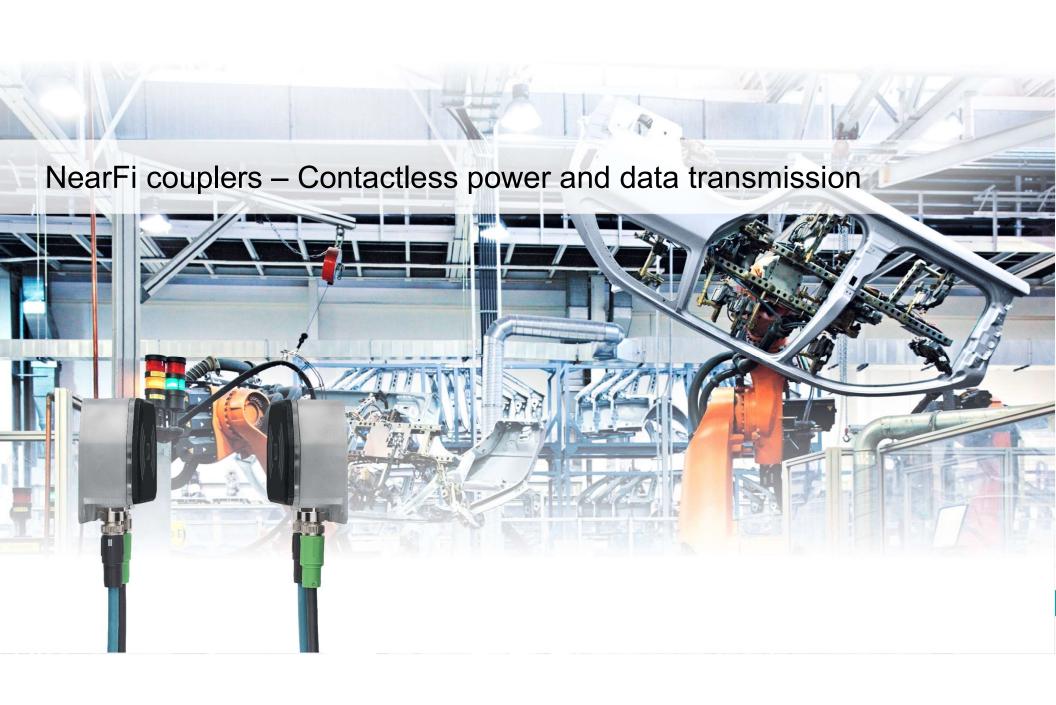
Rapid on-site diagnostics

 colored switching position indicator for an easy distinction of actuated switches from unactuated switches at a glance

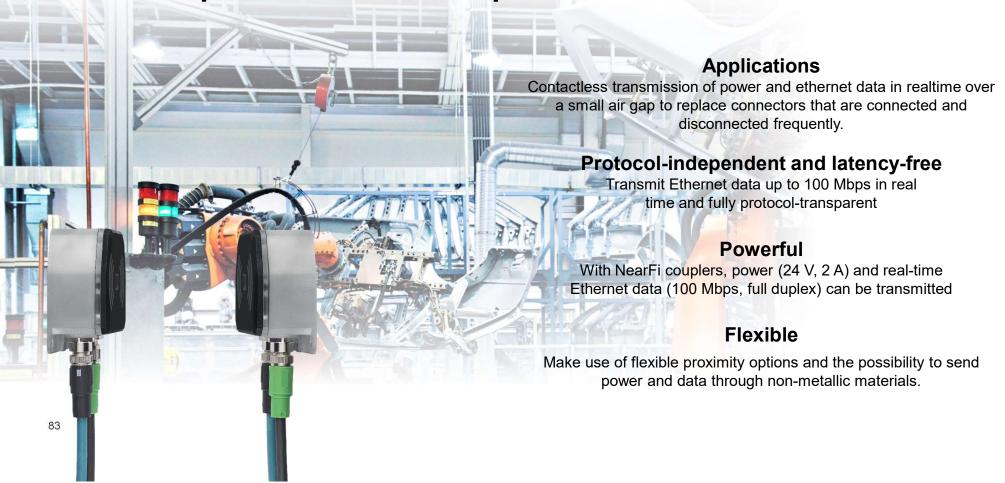
Protection against installation errors

 Self-monitoring emergency stop contact modules will automatically switch the machine to the safe state if errors or damage occur between the contact module and actuator when installing the emergency stop switch





NearFi couplers – Contactless power and data transmission



NearFi couplers





Wireless transmission of ethernet in real time

- up to 100 Mbps
- Latency-free
- Protocol-transparent

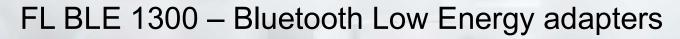
Rugged design

- Robust IP65 housings
- M12 connections for Ethernet & power
- Resistant to dust and dirt
- Flexible proximity options
- Mounting via a flange or the inside thread

Easy commissioning and diagnostics

- Plug and play no configuration needed
- Integrated alignment aid
- All-round visual signaling with bright LEDs
- Digital output for diagnosis via a higherlevel control system.







FL BLE 1300 – Bluetooth Low Energy adapters



Applications

Allows the integration of Bluetooth-Low-Energy-capable sensors into industrial controllers and IoT systems.

Ready for IoT

Make data acquired from BLE-sensors available to PLCs and cloud applications or perform a simple evaluation of the sensor data directly in the field

Future-proof standard

The BLE 5 standard allows the latest encryption methods and is also backward-compatible with sensors that meet the Standard BLE 4.2 and 4.0 standards.

Flexible communication

Connect up to eight sensors via TCP with almost all controllers and PC-based software systems.

FL BLE 1300



Made for industrial use

- IP65 degree of protection
- Industrial temperature range
- Robust M12 connections

Easy installation

- Integrated antenna
- Easy mounting via two drill-holes directly onto a housing wall
- QUICKON M12 fast connection technology

Future proof communication

- Supports Bluetooth Low Energy 5.0
- Communication via GATT profile for easy and flexible access to the sensor data
- Access to up to eight sensors via TCP





FL SWITCH TSN 2300 - Managed TSN Switches

Applications

The Managed TSN Switches facilitate the setup of applications with precise time synchronization, thus ensuring real-time communication and increased availability in your automation networks.

More performance, robustness, and availability

TSN standards enable deterministic real-time communication, making network convergence of IT and OT possible

Easy configuration

The user-friendly TSN configuration via PROFINET 2.4 engineering is just as easy as with classic PROFINET RT.

Proven and future proof

Supporting all functions of the FL SWITCH 2300 series, the devices can also be used in classic applications.



FL SWITCH TSN 2300



Support of TSN features

- IEEE 802.1AS (precise time synchronization)
- Frame preemption
- Stream management via PROFINET

User-friendly configuration

- Web-based Management
- PROFINET Device
- SD card
- Command-line Interface

Support of classic Switch features

- Redundancy (e. g. RSTP, MRP)
- Security (e. g. port security, user management)
- Quality of Service (e. g. CoS, DSCP)
- Extensive diagnostics (e. g. Syslog, SNMP)





FL SWITCH 1600/1700 and 2600/2700 - Switches in IP67



Applications

Unmanaged and Managed switches for applications in which the switches are to be mounted in decentralized installation on the field level where they are not protected by a control cabinet.

Compact, robust, for use practically anywhere

The metal housing and slim-line design give you practically limitless opportunities when selecting the mounting location

Proven and innovative at the same time

The flexible M12 connections enable both, the use of classic M12 connectors and the innovative M12 Push-Pull fast locking system

Efficient power supply with minimum wiring work

The redundant power input/power output concept allows you to supply power to several switches or I/O stations with minimum cabling work.

FL SWITCH 1600/1700 and 2600/2700



Highest flexibility

- Unmanaged and Managed switches
- Flexible mounting on a metal profile, the machine or a wall
- Flexible cable connection: M12 screw or M12 push-pull connection

Optimized for industrial use

- Robust metal housing
- IP65 / IP66 / IP67 degree of protection
- Temperature range: -40°C ... +70°C

Easy configuration

 Configuration via a mode button on the device, a microSD card, the web-based management, CLI, SNMP, and PROFINET device (only Managed Switches)



Inline function I/O module for building automation Light management with DALI



Inline function I/O module for building automation Light management with DALI



Application

DALI (Digital Addressable Lighting Interface) is a lighting control system which is very popular in the building automation industry. Phoenix Contact offers a new DALI module which can be used with the ILC 2050 BI controller.

Great flexibility

Implementation of light scenes which can be used and exchanged as needed.

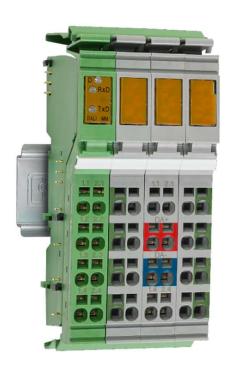
Direct storage

Configuration data is stored directly in the lights. This data defines the group assignment as well as the dimming level in each scene.

Robust communication protocol

Communication and power supply between DALI control device and DALI lights can be routed through one cable, saving time and money on installation.

Inline function module



Complete solution

- Direct connection to the ILC 2050 BI without gateway
- Matching I/O modules certified by the DALI Alliance DiiA according to the latest DALI-2 standard.

No programming effort

 The Emalytics software enables the easy and fast DALI configuration and engineering thanks to the DALI tools and libraries available.

Certified

- DALI master with integrated DALI bus supply
- Suitable for both single and multi-master operation
- Supports the DALI-2 standard



ERS 1000 – Room operating unit for building automation



ERS 1000 – Room operating unit for building automation



Applications

The new ERS 1000 is a room operating unit for typical room functions such as lighting, shading and temperature settings. It is a part of the building automation solution "Emalytics".

Compatible switch programs

The ERS 1000can be installed in commercially available switch programs. (A listing is available)

Large range of functions

The intuitive menu navigation via appealing icons and the individual labeling of all operating functions enable the user to make targeted settings in the room. Furthermore, special functions such as scenario control and information display as well as quick and easy recording of sensor data are included.

Easy commissioning

The ERS 1000 is connected to the ILC 2050 BI controller via Ethernet. It can be integrated simple and configurated individual in Emalytics building management system.

ERS 1000



High usability

One operating unit for a wide range of room functions instead of many individual controls and switches

Easy commissioning

 All functions are already programmed into the device.

Comprehensive product portfolio

- Room climate measurement with extension with sensor modules
- Power supply for the ERS 1000-R room operating units with voltage feed-in via the Ethernet cable.

