insight

2024 – 25

COMPANY PROFILE
& PRODUCT CATALOG

insight

Comprehensive Range of Electrical Equipment Across All Sectors

About us.

Established in 2024 and based in Sharjah, UAE, Insight General Trading LLC is poised to make significant contributions to the electrical, Oil & Gas, and industrial sectors right from its inception. We specialize in providing a comprehensive range of high-quality products and solutions tailored to meet the diverse needs of industries such as Landscape, Solar, Construction, Industrial, Utilities, Electrical and Oil and Gas.

Driven by a passion for delivering superior quality and reliability, we ensure that every product meets stringent industry standards and customer expectations. Our team of experts combines technical expertise with a customer-centric approach to deliver tailored solutions that optimize performance and efficiency.

Vision

To be one of the top listed International trading company, offering the valuable services with quality and pricing and serving as a growth promoting agent.

Mission

Our goal is to create a powerful global trading Empire that meets the demands of the customers and progressing with the rapidly advancing state of Technology while offering a wide range of Engineering Solutions as needed.

INSIGHT – VALUES

1 - Integrity

2 - Networking

3 - Strategy

4 - Innovation

7 - Team

6 - Honesty

5 - Growth

At Insight General Trading LLC, we are dedicated to excellence and innovation. Our comprehensive product range includes **Switchgear Products, Low–Voltage Panel–boards, Control Panels, Customized Enclosure Solutions, Industrial Socket Panels, And Cable Management Solutions. We Also Offer Automation Solutions, Control Relays, Ready To Use Dol Starter, Vfd (Variable Frequency Drives), Soft Starters etc.** Additionally, our services extend to IT products which includes laptops, desktops, servers, and systems, along with customized identification and marking solutions. Furthermore, we specialize in junction boxes to create unique enclosure solutions tailored to our clients' specific needs.

SECTORS

- Industrial
- Infrastructure
- Residential
- Commercial
- Oil & Gas
- IT

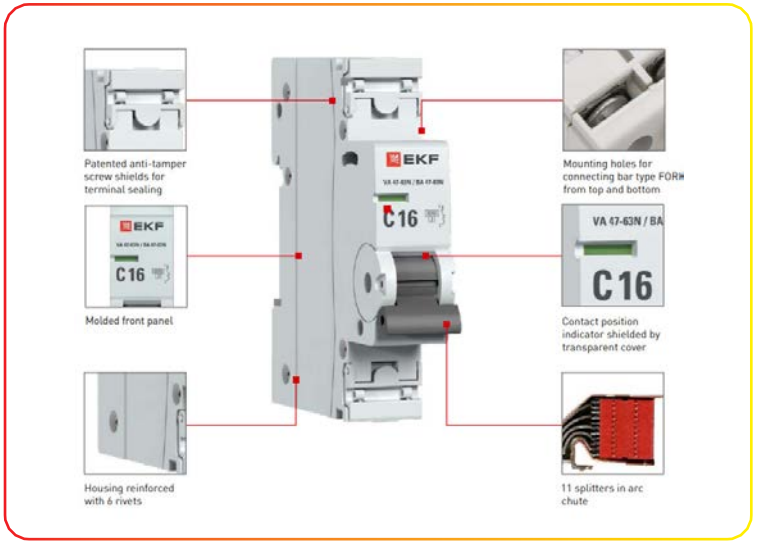
"At Insight General Trading LLC, we promise unwavering quality in every product, ensuring reliability and excellence in all our offerings."

Gijo George, founder of Insight General Trading LLC, utilizes his extensive electrical engineering experience to oversee projects from inception through execution. His profound industry insights and commitment to excellence have played a crucial role in establishing Insight General Trading LLC

Switchgear Products

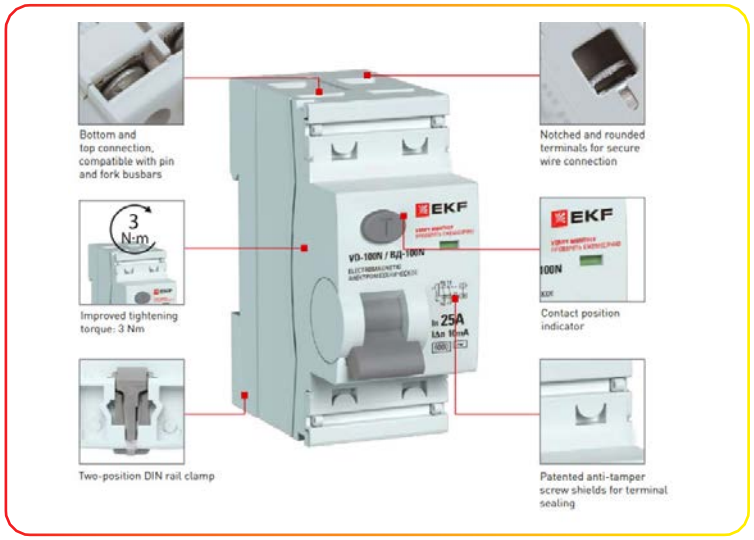
MCB - Key Technical Points

Technical Point	Description
Rated Current (In)	Available in various rated currents from 0.5A to 125A, allowing precise selection based on specific application requirements.
Breaking Capacity	High breaking capacity ranging from 6kA to 25kA, ensuring robust protection against short circuits.
Tripping Curves	Offered in different tripping curves (B, C, D, K, Z) to suit various types of loads and applications, ensuring the MCB responds appropriately to overcurrent conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60898-1, IEC/EN 60947-2, and other relevant certifications, ensuring safety and reliability.
Thermal and Magnetic Trip Mechanisms	Equipped with both thermal and magnetic trip mechanisms for accurate response to overcurrent conditions, providing dual protection.



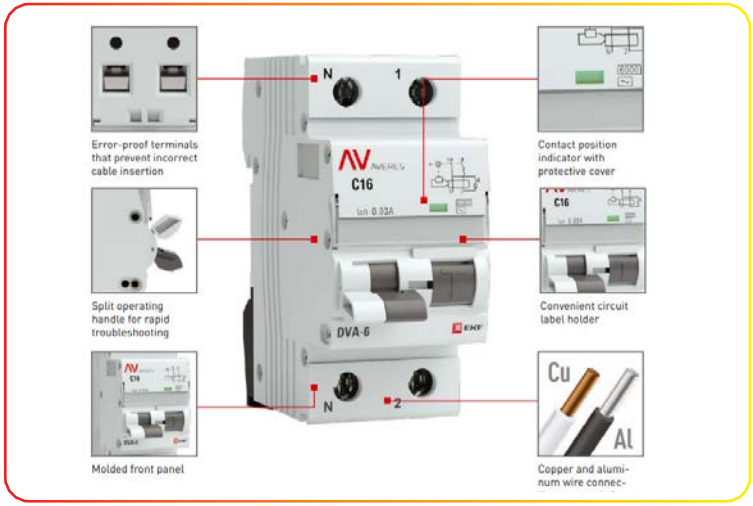
RCCB - Key Technical Points

Technical Point	Description
Rated Residual Operating Current (IΔn)	Available in different sensitivities (30mA, 100mA, 300mA, 500mA) to ensure protection against earth faults and enhance user safety.
Number of Poles	Available in double-pole (2P) and four-pole (4P) configurations, providing flexibility for different circuit designs.
Operating Temperature	Designed to operate within a wide temperature range, typically from -25°C to +55°C, ensuring reliable performance in various environmental conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 61008-1 and IEC/EN 61008-2, ensuring safety and reliability.
Test Button	Equipped with a test button to verify the proper functioning of the RCCB, ensuring ongoing safety and reliability.



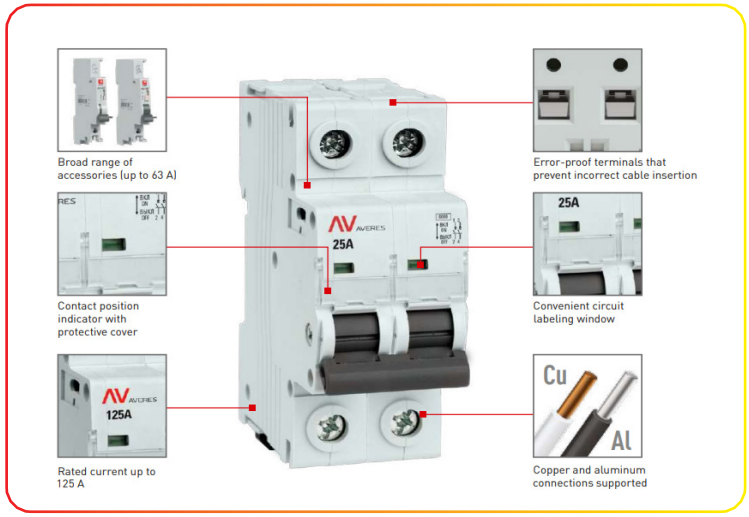
RCBO - Key Technical Points

Technical Point	Description
Rated Current (In)	Available in various rated currents from 6A to 63A, allowing precise selection based on specific application requirements.
Residual Current Sensitivity (IΔn)	Offered in different sensitivities (10mA, 30mA, 100mA, 300mA) to ensure protection against earth faults and enhance user safety.
Combined Protection	Provides both overcurrent (short circuit and overload) and residual current (earth fault) protection in a single device, ensuring comprehensive safety.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 61009-1, ensuring safety and reliability.
Test Button	Equipped with a test button to verify the proper functioning of the RCBO, ensuring ongoing safety and reliability.



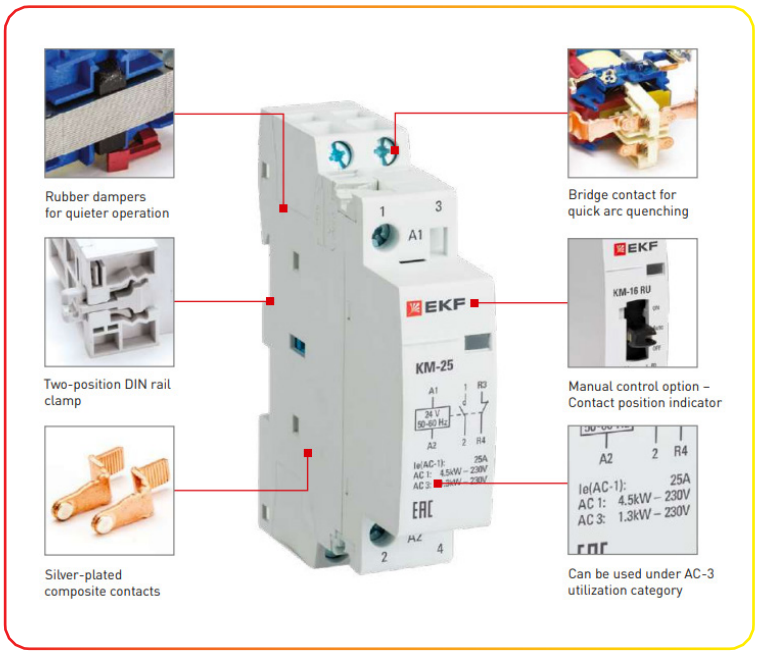
DIN Rail Isolators - Key Technical Points

Technical Point	Description
Rated Voltage (Ue)	Designed for various rated voltages, typically ranging from 230V AC to 690V AC, suitable for diverse electrical systems and applications.
Rated Current (In)	Available in different rated currents, offering flexibility for various load requirements, commonly ranging from 16A to 125A.
Number of Poles	Offered in single-pole (1P), double-pole (2P), triple-pole (3P), and four-pole (4P) configurations, providing options for different circuit designs and applications.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +55°C, ensuring reliable performance in various environmental conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-3, ensuring safety, reliability, and compatibility with industry regulations.



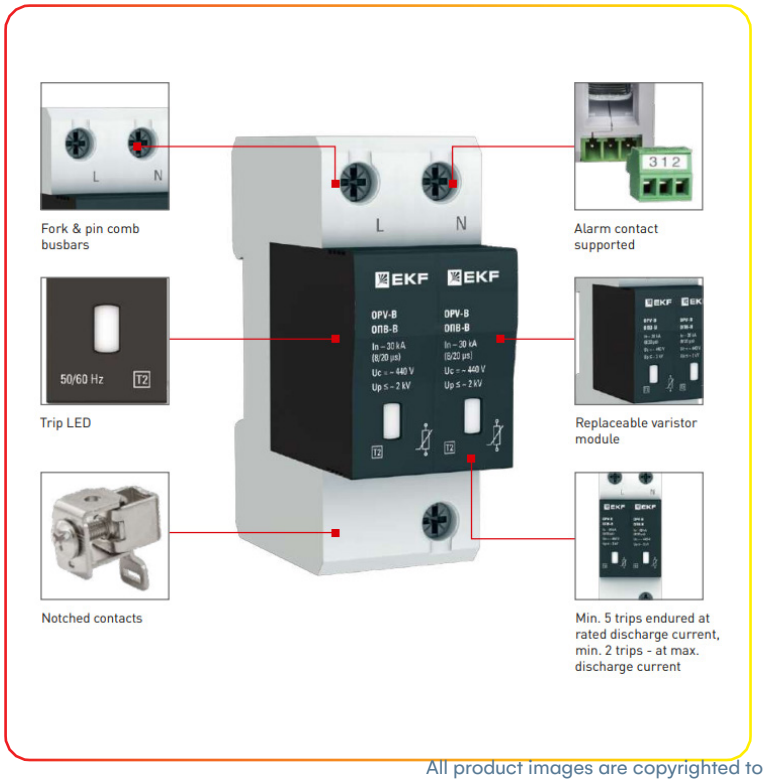
Modular Contactors - Key Technical Points

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 230V AC to 690V AC, suitable for diverse electrical systems and applications.
Rated Operational Current	Available in different rated currents, offering flexibility for various load requirements, commonly ranging from 20A to 100A.
Number of Poles	Offered in single-pole (1P), double-pole (2P), triple-pole (3P), and four-pole (4P) configurations, providing options for different circuit designs and applications.
Coil Voltage	Features a wide range of coil voltages to match control circuit requirements, ensuring compatibility with different control systems and voltage standards.
Auxiliary Contacts	Compatible with various auxiliary contacts, allowing for enhanced functionality and customization, such as signaling, interlocking, and remote operation.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +55°C, ensuring reliable performance in various environmental conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-4, ensuring safety, reliability, and compatibility with industry regulations.



Surge Protection Devices - Key Technical Points

Technical Point	Description
Voltage Rating	Designed for various voltage systems, commonly ranging from 120V to 690V, providing protection against transient voltage spikes in diverse electrical installations.
Surge Current Capacity	Capable of handling surge currents ranging from several kiloamperes (kA) to tens of kiloamperes (kA), ensuring robust protection against lightning strikes and power surges.
Response Time	Offers fast response times, typically in the range of nanoseconds (ns), providing quick suppression of transient voltage spikes to safeguard sensitive equipment and electronics.
Protection Modes	Provides comprehensive protection against various surge events, including common mode (line-to-earth), differential mode (line-to-line), and longitudinal mode surges.
Installation Type	Available in various installation types, such as Type 1 (for service entrance), Type 2 (for main distribution boards), and Type 3 (for final subcircuits), ensuring flexibility.
Remote Signaling Options	Equipped with remote signaling options, such as potential-free contacts or communication interfaces, allowing for remote monitoring and integration into building management systems.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -40°C to +80°C, ensuring reliable performance in harsh environmental conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 61643, UL 1449, and other relevant certifications, ensuring safety and reliability.



Molded Case Circuit Breakers (MCCBs) - Key Technical Points

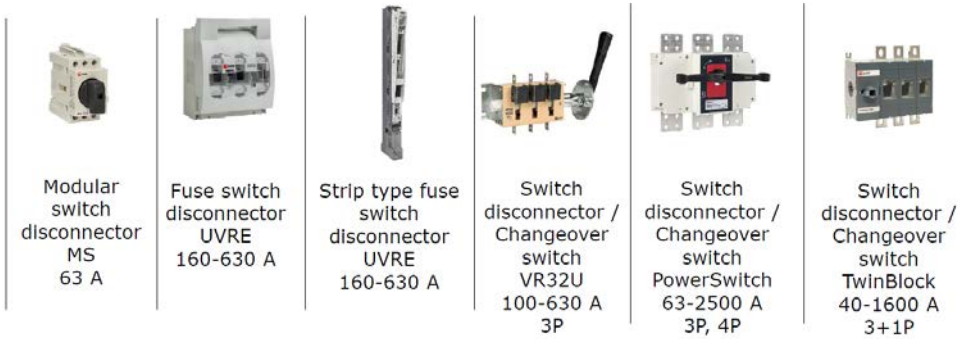
Technical Point	Description
Rated Current (In)	Available in various rated currents, typically ranging from 16A to 1600A, providing flexibility for different load requirements and applications.
Breaking Capacity	High breaking capacity, typically ranging from 10kA to 100kA, ensuring robust protection against short circuits and overcurrents.
Trip Units	Equipped with adjustable thermal and magnetic trip units to provide precise and reliable protection against overload and short circuit conditions.
Number of Poles	Offered in single-pole (1P), double-pole (2P), three-pole (3P), and four-pole (4P) configurations, providing options for various circuit designs and applications.
Voltage Rating	Designed for different voltage systems, commonly ranging from 230V to 690V, suitable for diverse electrical installations and industrial applications.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +70°C, ensuring reliable performance in various environmental conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-2, UL 489, and other relevant certifications, ensuring safety and reliability.

Air Circuit Breakers (ACBs) - Key Technical Points

Technical Point	Description
Rated Current (In)	Available in various rated currents, typically ranging from 400A to 6300A, providing flexibility for different load requirements and applications.
Breaking Capacity	High breaking capacity, typically ranging from 25kA to 100kA, ensuring robust protection against short circuits and overcurrents.
Trip Units	Equipped with adjustable electronic, thermal, and magnetic trip units to provide precise and reliable protection against overload and short circuit conditions.
Number of Poles	Offered in three-pole (3P) and four-pole (4P) configurations, providing options for various circuit designs and applications.
Voltage Rating	Designed for different voltage systems, commonly ranging from 400V to 690V, suitable for diverse electrical installations and industrial applications.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +70°C, ensuring reliable performance in various environmental conditions.
Arc Interruption	Utilizes advanced arc interruption technology to extinguish arcs quickly and safely, minimizing damage to equipment and ensuring personnel safety.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-2, UL 1066, and other relevant certifications, ensuring safety and reliability.

Switch Disconnectors - Key Technical Points

Technical Point	Description
Rated Current (In)	Available in various rated currents, typically ranging from 16A to 3200A, providing flexibility for different load requirements and applications.
Number of Poles	Offered in single-pole (1P), double-pole (2P), three-pole (3P), and four-pole (4P) configurations, providing options for various circuit designs and applications.
Voltage Rating	Designed for different voltage systems, commonly ranging from 230V to 690V, suitable for diverse electrical installations and industrial applications.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +70°C, ensuring reliable performance in various environmental conditions.
Enclosure Type	Available in various enclosure types, including metal and plastic enclosures, with different degrees of protection (IP ratings) against environmental factors.
Handle Type	Equipped with various handle types, such as direct and rotary handles, providing options for manual operation and control based on user preferences and requirements.
Mounting Options	Suitable for DIN rail or panel mounting, offering flexibility in installation and integration into electrical panels and control systems.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-3, ensuring safety, reliability, and compatibility with industry regulations.

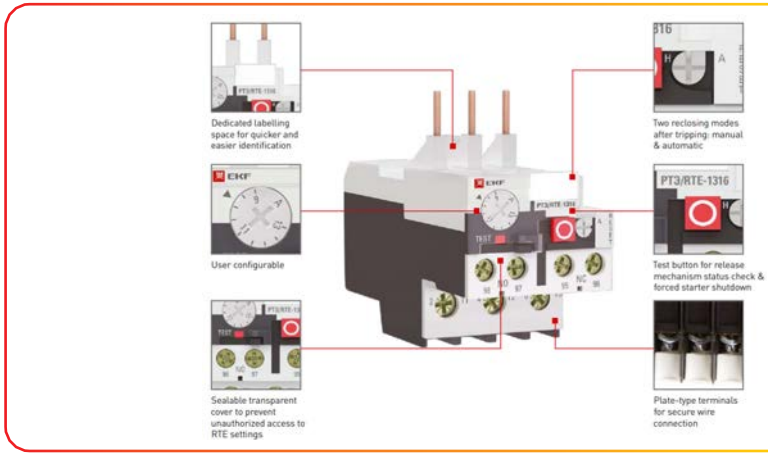


Automatic Transfer Switch (ATS) - Key Technical Points

Technical Point	Description
Rated Current (In)	Available in various rated currents, typically ranging from 16A to 6300A, providing flexibility for different load requirements and applications.
Number of Poles	Offered in single-pole (1P), double-pole (2P), three-pole (3P), and four-pole (4P) configurations, providing options for various circuit designs and applications.
Voltage Rating	Designed for different voltage systems, commonly ranging from 230V to 690V, suitable for diverse electrical installations and industrial applications.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +70°C, ensuring reliable performance in various environmental conditions.
Transfer Time	Provides fast and seamless transfer between power sources, typically within milliseconds, minimizing downtime and ensuring uninterrupted power supply.
Control Options	Equipped with various control options, including manual, automatic, and remote control, allowing for flexible operation and integration into control systems.
Enclosure Type	Available in different enclosure types, such as metal and plastic enclosures, with different degrees of protection (IP ratings) against environmental factors.
Communication Interface	Supports communication protocols such as Modbus, allowing for remote monitoring, control, and integration with building management systems (BMS) and SCADA systems.

Contactors - Key Technical Points

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 230V AC to 690V AC, suitable for diverse electrical systems and applications.
Rated Operational Current	Available in different rated currents, offering flexibility for various load requirements, commonly ranging from 9A to 630A.
Number of Poles	Offered in single-pole (1P), double-pole (2P), three-pole (3P), and four-pole (4P) configurations, providing options for different circuit designs and applications.
Coil Voltage	Features a wide range of coil voltages to match control circuit requirements, ensuring compatibility with different control systems and voltage standards.
Auxiliary Contacts	Compatible with various auxiliary contacts, allowing for enhanced functionality and customization, such as signaling, interlocking, and remote operation.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +70°C, ensuring reliable performance in various environmental conditions.
Enclosure Type	Available in various enclosure types, such as open, enclosed, and weatherproof enclosures, providing options for different installation environments.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-4, ensuring safety, reliability, and compatibility with industry regulations.



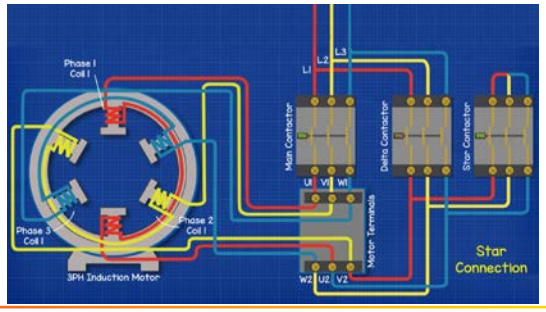
Overload Relays (OLRs) - Key Technical Points

Technical Point	Description
Rated Operational Current (In)	Available in various rated currents, typically ranging from a few amps to several hundred amps, providing protection against overload conditions in diverse applications.
Trip Class	Offered in different trip classes (e.g., Class 10, Class 20), indicating the response time and sensitivity to overloads, ensuring compatibility with specific motor applications.
Reset Mechanism	Equipped with manual or automatic reset mechanisms, allowing for convenient restoration of normal operation after an overload condition has been resolved.
Mounting Options	Suitable for direct mounting to motor contactors or as standalone devices mounted in electrical panels, providing flexibility in installation and integration.
Operating Temperature	Engineered to operate within a wide temperature range, typically from -25°C to +70°C, ensuring reliable performance in various environmental conditions.
Trip Indicator	Includes visual or remote trip indicators to signal when an overload condition has occurred, facilitating timely troubleshooting and maintenance.
Enclosure Type	Available in various enclosure types, such as open, enclosed, and weatherproof enclosures, providing options for different installation environments.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-4, ensuring safety, reliability, and compatibility with industry regulations.

Direct-On-Line (DOL) Starters - Key Technical Points

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 230V AC to 690V AC, suitable for diverse motor applications and electrical systems.
Rated Operational Current	Available in different rated currents, offering flexibility for various motor sizes and power requirements, commonly ranging from a few amps to several hundred amps.
Enclosure Type	Available in various enclosure types, such as open, enclosed, and weather-proof enclosures, providing options for different installation environments.
Start/Stop Controls	Equipped with start and stop push buttons or switches for manual control of motor operation, allowing for convenient and straightforward operation.
Overload Protection	Integrated with thermal overload relays or electronic overload protec-tion to safeguard the motor against overload conditions, ensuring motor longevity and safety.
Short Circuit Protection	Provides built-in short circuit protection, typically through the use of circuit breakers or fuses, to prevent damage to the motor and electrical system in case of a fault.
Trip Indicator	Includes visual or remote trip indicators to signal when an overload or short circuit condition has occurred, facilitating timely troubleshooting and maintenance.
Mounting Options	Suitable for direct mounting to motor contactors or as standalone devices mounted in electrical panels, providing flexibility in installation and inte-gration.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-4, ensuring safety, reliability, and compatibility with industry regulations.

Start Delta Components



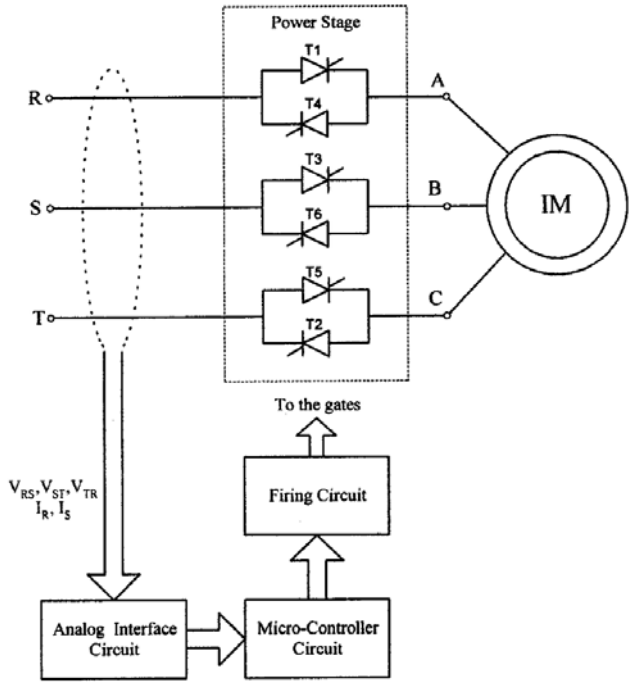
Star Delta Starters - Key Technical Points

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 230V AC to 690V AC, suitable for diverse motor applications and electrical systems.
Rated Operational Current	Available in different rated currents, offering flexibility for various motor sizes and power requirements, commonly ranging from a few amps to several hundred amps.
Enclosure Type	Available in various enclosure types, such as open, enclosed, and weatherproof enclosures, providing options for different installa-tion environments.
Control Mode	Features both star and delta control modes for motor starting, allowing for gradual acceleration and reduced starting current, minimizing stress on the electrical system.
Start/Stop Controls	Equipped with start and stop push buttons or switches for manual control of motor operation, allowing for convenient and straightforward operation.
Overload Protection	Integrated with thermal overload relays or electronic overload protection to safeguard the motor against overload conditions, ensuring motor longevity and safety.
Short Circuit Protection	Provides built-in short circuit protection, typically through the use of circuit breakers or fuses, to prevent damage to the motor and electrical system in case of a fault.
Trip Indicator	Includes visual or remote trip indicators to signal when an over-load or short circuit condition has occurred, facilitating timely troubleshooting and maintenance.
Mounting Options	Suitable for direct mounting to motor contactors or as stand-alone devices mounted in electrical panels, providing flexibility in installation and integration.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 60947-4, ensuring safety, reliability, and compatibility with industry regulations.

Variable Frequency Drive (VFD) Panels - Key Techni-

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 230V AC to 690V AC, suitable for diverse motor applications and electrical systems.
Rated Operational Current	Available in different rated currents, offering flexibility for various motor sizes and power requirements, commonly ranging from a few amps to several hundred amps.
Enclosure Type	Available in various enclosure types, such as open, enclosed, and weatherproof enclosures, providing options for different installation environments.
Control Mode	Equipped with variable frequency drives (VFDs) to control motor speed and torque by adjusting the frequency and voltage of the power supplied to the motor.
Start/Stop Controls	Equipped with start and stop push buttons or switches for manual control of motor operation, allowing for convenient and straightforward operation.
Programmable Parameters	Allows for programming of various parameters such as acceleration/deceleration time, ramp rates, and motor protection settings, enabling customization for specific applications.
Communication Interfaces	Supports communication protocols such as Modbus, Ethernet, and Profibus, allowing for remote monitoring, control, and integration with SCADA systems and PLCs.
Protection Features	Integrated with overload protection, short circuit protection, phase loss protection, and other safety features to safeguard the motor and electrical system from faults.
Display and Indicators	Includes operator interfaces with LCD displays, LEDs, and status indicators to provide real-time feedback on motor performance, faults, and operational status.
Standards Compliance	Manufactured in compliance with international standards such as IEC/EN 61800-5, ensuring safety, reliability, and compatibility with industry regulations.

Rating upto: 630kW



Soft Starters - Key Technical Points

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 230V AC to 690V AC, suitable for diverse motor applications and electrical systems.
Control Mode	Utilizes soft starter technology to control motor voltage and current during startup, gradually ramping up the motor speed to reduce mechanical stress.
Acceleration/Deceleration Time	Allows adjustment of acceleration and deceleration times to customize motor startup and shutdown characteristics for specific applications.
Motor Protection Features	Integrated with overload protection, phase loss protection, and thermal protection, ensuring motor safety and longevity.
Communication Interfaces	Supports communication protocols such as Modbus, Profibus, and Ethernet, enabling remote monitoring, control, and integration with PLCs and SCADA systems.

Industrial Plugs & Sockets - Key Technical Points

Technical Point	Description
Rated Operational Voltage	Designed for various operational voltages, typically ranging from 110V to 690V AC, suitable for diverse industrial applications and electrical systems.
Rated Operational Current	Available in different rated currents, offering flexibility for various power requirements, commonly ranging from 16A to 125A.
Enclosure Type	Available in various enclosure types, such as IP44, IP54, and IP67, providing protection against dust, water ingress, and mechanical damage in different environments.
Plug/Socket Configuration	Offered in different configurations including single-phase (2P+E), three-phase (3P+E, 3P+N+E), and special configurations for specific applications and regional standards.
Material and Construction	Constructed from high-quality materials such as polyamide, rubber, and metal alloys, ensuring durability, reliability, and resistance to harsh industrial conditions.
Standards Compliance	Manufactured in compliance with international standards such as IEC 60309, EN 60309, and UL 1686, ensuring safety, reliability, and compatibility with industry regulations.

Junction Boxes - Key Technical Points

Technical Point	Description
Material	Constructed from durable materials such as polycarbonate, ABS, or stainless steel, providing protection against corrosion, impact, and environmental factors.
IP Rating	Available in various IP ratings (e.g., IP65, IP66) indicating the degree of protection against ingress of dust and water, ensuring suitability for different installation environments.
Size and Capacity	Offered in different sizes and configurations to accommodate varying numbers and sizes of cables and terminations, ensuring versatility for different wiring requirements.
Mounting Options	Provides multiple mounting options including surface-mount, flush-mount, and pole-mount, facilitating easy installation in various locations and applications.
Terminal Types	Equipped with various terminal types such as screw terminals, push-in terminals, and cage clamp terminals, allowing for secure and reliable connections of electrical conductors.
Certifications	Manufactured in compliance with industry standards such as IEC 60670, EN 60670, and UL 514, ensuring quality, safety, and compatibility with regulatory requirements.

Form-2 Enclosures - Key Technical Points

Technical Point	Description
Construction	Built with robust materials such as steel or aluminum, providing structural integrity and protection against environmental factors.
Internal Segregation	Features segregated compartments to house different electrical components such as busbars, terminals, and circuit breakers, ensuring organized and safe electrical distribution.
Modularity	Designed with modular construction allowing for easy assembly and customization of enclosure configurations to suit specific project requirements.
Accessibility	Equipped with hinged doors, removable panels, and access points for convenient access to internal components during installation, maintenance, and troubleshooting.
Ventilation Options	Provides ventilation options such as louvers, vents, or fan systems to dissipate heat generated by electrical components, ensuring optimal operating conditions and equipment longevity.
Standards Compliance	Manufactured in compliance with industry standards such as IEC 61439, ensuring quality, safety, and compatibility with regulatory requirements for low-voltage switchgear assemblies.

Sheet Steel Enclosures - Key Technical Points

Technical Point	Description
Material	Constructed from high-quality sheet steel, providing durability, strength, and resistance to corrosion and environmental factors.
Coating	Coated with protective finishes such as powder coating or galvanization, enhancing resistance to rust, scratches, and chemical exposure, ensuring longevity in various environments.
Enclosure Types	Available in various types including wall-mounted, floor-standing, and freestanding enclosures, catering to different installation requirements and space constraints.
Mounting Options	Provides versatile mounting options such as DIN rail, mounting plates, and brackets for easy installation of equipment and components inside the enclosure.
Accessories Compatibility	Compatible with a wide range of accessories such as cable glands, terminal blocks, and mounting rails, allowing for customization and flexibility in enclosure configurations.
Standards Compliance	Manufactured in compliance with industry standards such as IEC 62208, ensuring quality, safety, and compatibility with regulatory requirements for enclosures and electrical equipment.

GRP Enclosures - Key Technical Points

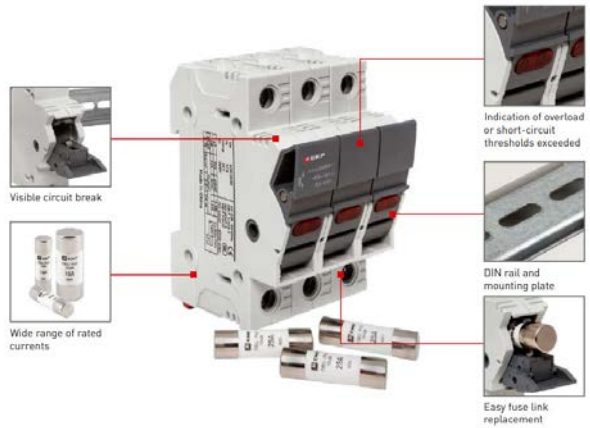
Technical Point	Description
Material	Constructed from Glass Reinforced Plastic (GRP), providing excellent durability, corrosion resistance, and insulation properties, suitable for harsh and corrosive environments.
Weatherproofing	Designed to withstand extreme weather conditions, UV radiation, and chemical exposure without deteriorating, ensuring long-term performance and protection of internal components.
Lightweight	GRP enclosures are lightweight yet sturdy, making them easy to handle and install in various locations, reducing installation time and costs associated with transportation.
Non-Conductive	Being non-conductive, GRP enclosures provide electrical insulation and safety for personnel and equipment, reducing the risk of electrical hazards and ensuring operator safety.
Versatility	Available in various sizes, shapes, and configurations to accommodate different equipment and application requirements, providing flexibility for diverse installation needs.
Standards Compliance	Manufactured in compliance with industry standards such as IEC 61439, ensuring quality, safety, and compatibility with regulatory requirements for electrical enclosures and equipment.

Polycarbonate Enclosures - Key Technical Points

Technical Point	Description
Material	Constructed from polycarbonate, a durable and lightweight thermoplastic known for its high impact resistance, UV stability, and excellent weatherability.
Weatherproofing	Designed to withstand harsh environmental conditions, including extreme temperatures, UV radiation, and chemical exposure, ensuring long-term durability and reliability.
Transparency	Offers transparent or translucent options for easy visual inspection of internal components without the need to open the enclosure, facilitating maintenance and troubleshooting.
Versatility	Available in various sizes, shapes, and configurations to accommodate different equipment and application requirements, providing flexibility for diverse installation needs.
Corrosion Resistance	Resistant to corrosion, rust, and degradation caused by moisture and chemicals, making them suitable for outdoor and corrosive environments such as industrial and marine applications.
Ease of Modification	Allows for easy modification, drilling, and customization of enclosure features to accommodate additional components, switches, or displays, providing versatility and adaptability.
Standards Compliance	Manufactured in compliance with industry standards such as NEMA and IP ratings, ensuring quality, safety, and compatibility with regulatory requirements for electrical enclosures.

Row Type Distribution Boards - Key Technical Points

Technical Point	Description
Design	Row type distribution boards feature a compact and modular design, enabling efficient organization and distribution of electrical circuits within limited space.
Mounting Options	Available in both surface-mounted and flush-mounted configurations, providing flexibility for installation in various locations and environments.
Number of Rows	Typically consists of multiple rows or tiers of DIN rail-mounted modular circuit breakers or other protective devices, allowing for the distribution of multiple circuits.
Busbar System	Equipped with a busbar system for efficient distribution of electrical power from the main supply to individual circuits, ensuring reliable and organized power distribution.
Enclosure Material	Constructed from high-quality materials such as steel or plastic, providing durability, protection against environmental factors, and compliance with safety standards.
Circuit Identification	Facilitates easy circuit identification and labeling through clear labeling spaces, transparent doors, or other marking options, ensuring clarity and ease of maintenance.
Standards Compliance	Manufactured in compliance with relevant industry standards such as IEC 61439, ensuring safety, reliability, and compatibility with regulatory requirements for electrical installations.

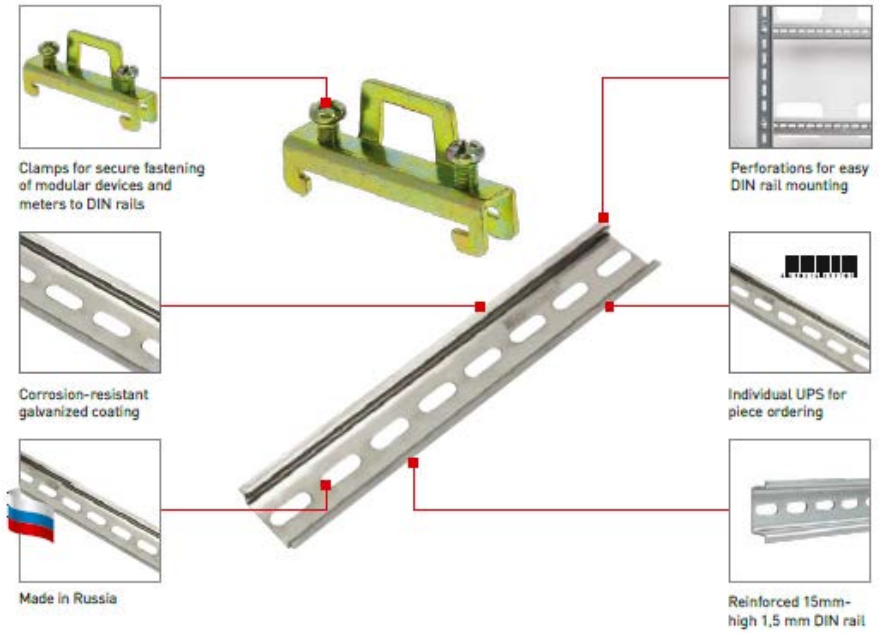


Fuses - Key Technical Points

Technical Point	Description
Functionality	Fuses serve as protective devices designed to interrupt the circuit in case of overcurrent, protecting electrical equipment and wiring from damage due to excessive current.
Construction	Typically composed of a metal wire or strip that melts when exposed to excessive current, thereby opening the circuit and preventing further flow of electricity.
Current Rating	Available in various current ratings ranging from a few milliamps to several hundred amps, allowing selection based on the specific requirements of the protected circuit.
Voltage Rating	Designed to operate at specific voltage levels, ranging from low voltage (e.g., 12V DC) to high voltage (e.g., 690V AC), ensuring compatibility with the electrical system.
Type	Various types of fuses are available, including cartridge fuses, blade fuses, and resettable fuses (e.g., PTC fuses), each suitable for different applications and environments.
Response Time	Fuses offer fast response times to overcurrent conditions, typically interrupting the circuit within milliseconds, providing rapid protection to sensitive equipment.
Replacement	In case of a fault, fuses must be replaced to restore circuit functionality, ensuring proper protection against future overcurrent events and maintaining system integrity.
Standards Compliance	Manufactured in compliance with international standards such as IEC 60269 and UL 248, ensuring safety, reliability, and compatibility with industry regulations.

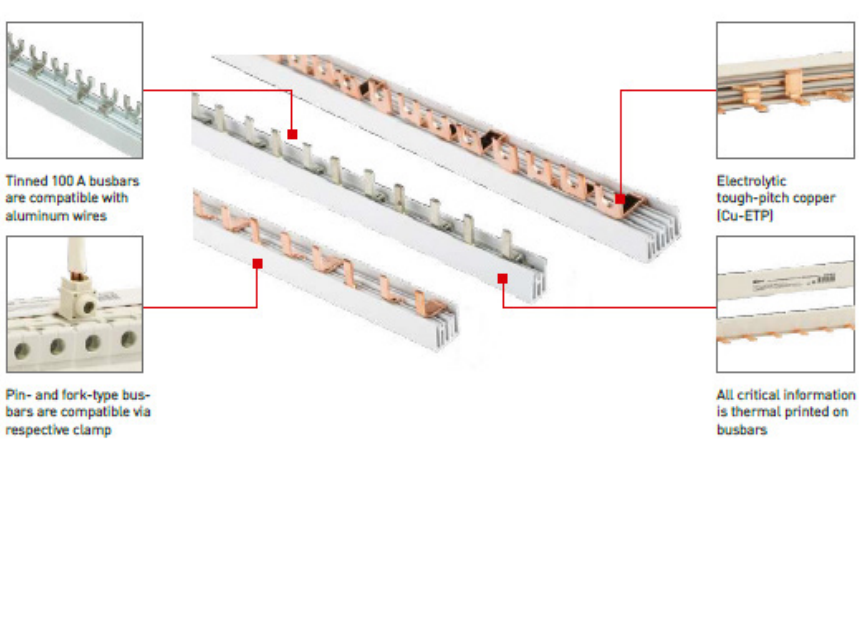
Din Rails, Brackets & Clamps

DIN rails are designed for mounting modular equipment in distribution enclosures. Clamps are used to secure modular equipment on DIN rails. DIN rail mounting brackets enable a rail to be indented from the mounting plate to route wires behind the DIN rail. With brackets for DIN rail angle installation, terminal clamps can be mounted at an angle for easier wire routing and connection.



Fork-& Pin-Type Busbars

Busbars are copper plates (100 A busbars are made of tinned copper), secured in a flame-retardant dielectric housing, used to connect various types of wires in distribution enclosures. busbars are available in two versions: fork and pin types for rated currents of 63 and 100 A, in one-, two-, three- and four-pole models.

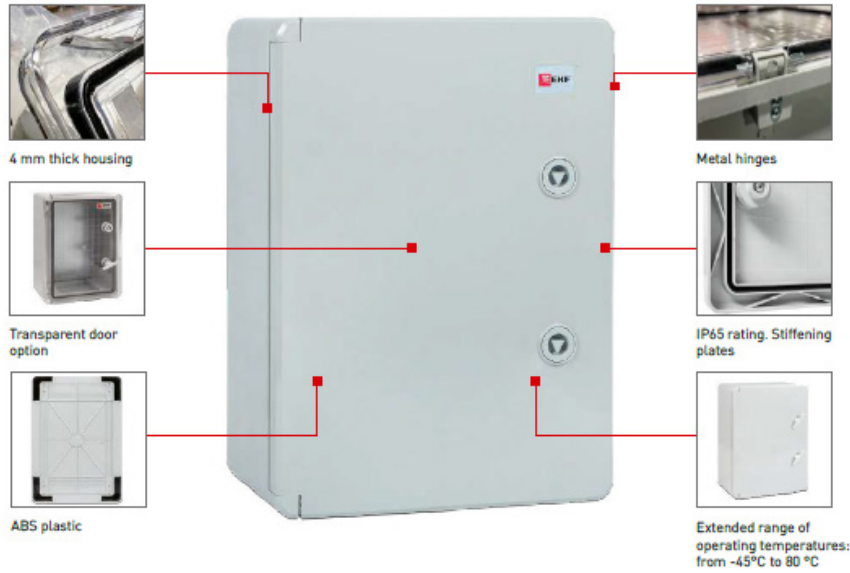


Insulated Flexible Copper Busbars

Insulated flexible copper busbars are designed for power distribution and connection of protection devices

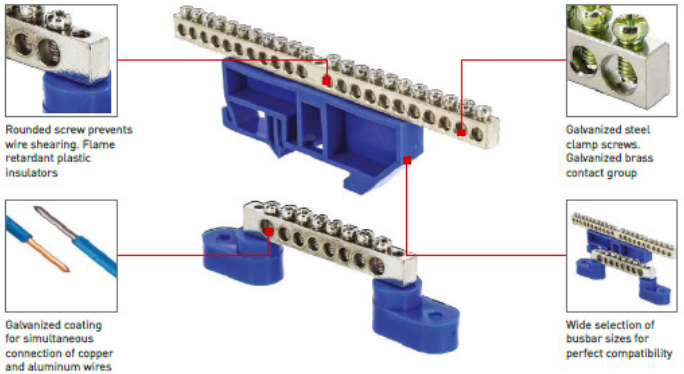
Plastic Enclosures With Mounting Plate

Wall-mounted plastic enclosures with mounting plate are designed for installing modular and power electrical equipment for assembly of distribution switchboards, automation and control cabinets. The enclosures are made of high-impact ABS plastic to reliably protect installed equipment. High degree of ingress protection (IP65) ensures safe operation of the equipment within the enclosure.



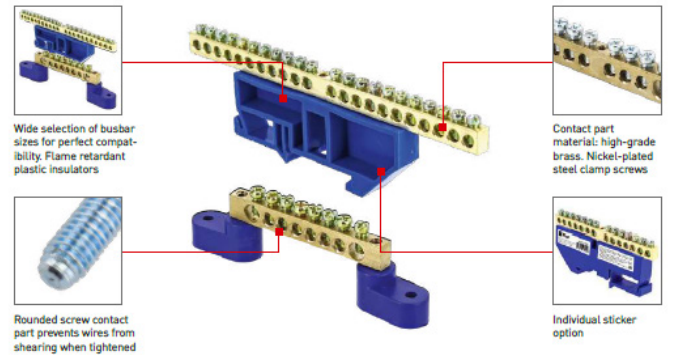
Neutral Busbars

Neutral busbars are designed to connect neutral conductors (N busbar) and protective earthing conductor (PE busbar). The galvanized neutral busbars are installed on insulators (in the kit).



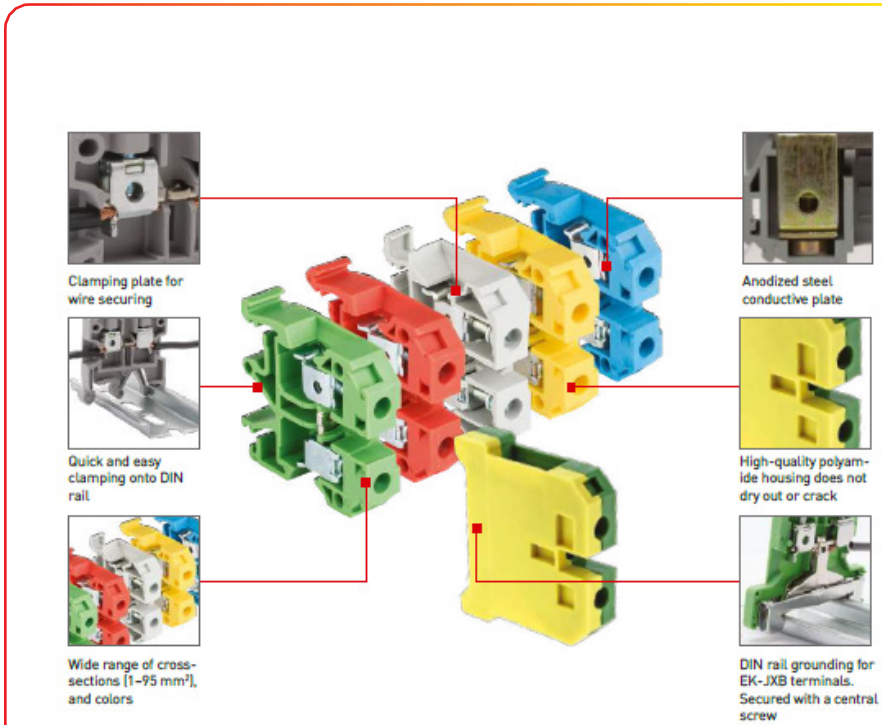
Brass Neutral Busbars

Neutral busbars are designed to connect neutral conductors (N busbar) and protective earthing conductor (PE busbar). The brass neutral busbars are installed on insulators (in the kit).



Terminal blocks JXB

Terminal blocks JXB and EK-JXB are mounted onto DIN rails in distribution enclosures for easy and safe wire connection of different cross-sections used for various applications. The wire is clamped with a screw. Terminal blocks are used in 50/60 Hz AC circuits.

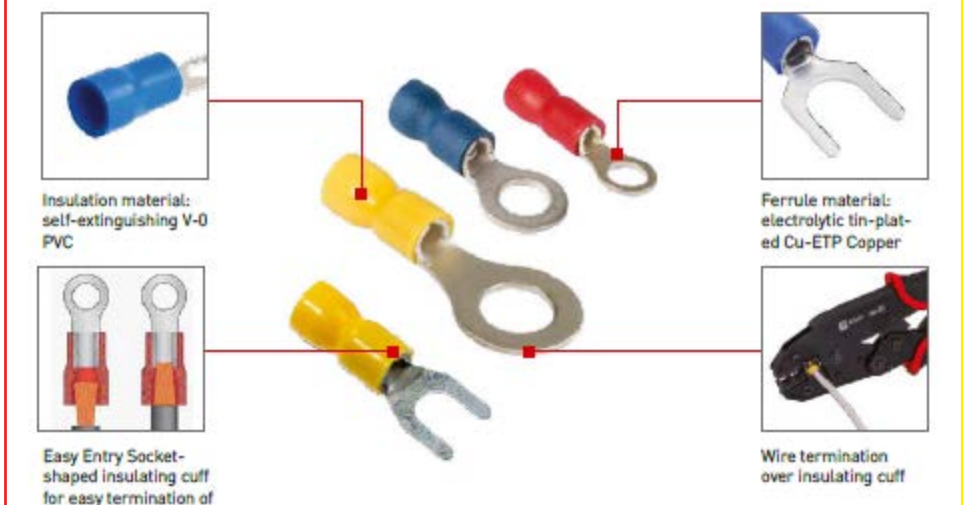


Insulated Cord End Terminals E & Te

Insulated cord end terminals (E & TE types) are designed for termination of stranded wires by crimping and securing in a terminal. A cord end terminal consists of conductive ferrule and polypropylene insulation cuff. With the Easy Entry design, you can easily fit the conductor into the cord end terminal.

Insulated Ring & Fork Terminals

Insulated ring (RV) and fork (SV) terminals are designed for termination of stranded copper wires to be used in electrical assemblies with screw contact connections. Ring terminals are used for fixed connections to electrical equipment. Fork terminals are best-suited for prompt wire recrossings, as they do not require complete connection dismantling.



Waterproof Cable Glands Pg

Waterproof cable glands PG are installed in wire entry points in distribution enclosures to protect wires from mechanical damage and to ensure dust & moisture ingress protection of the entries. The glands comprise a locking nut, housing, tooth-type coupling, cap nut, cable gland and neoprene gasket. Used in composite enclosures (panels, cabinets, junction boxes, etc.) to ensure P54 rating.

Insulated Tool Set

Tool sets include the optimal tool selection both for professional electricians and DIY enthusiasts, all packaged in a convenient soft carry case made of modern synthetic water- and dirt-repellent fabric with padded lining. Each tool has a separate compartment, so you won't lose your tools when the job is done. Insulated tools can be safely used for live work up to 1000 V AC. Tool sets contain insulated tools suitable for a wide variety of tasks. Every tool has been individually tested against 10 kV voltage in compliance with the requirements of IEC 60900. Operating temperature: -20 to +70 °C at max. relative humidity of 98%.

Fire–Resistant Junction Boxes Ip55

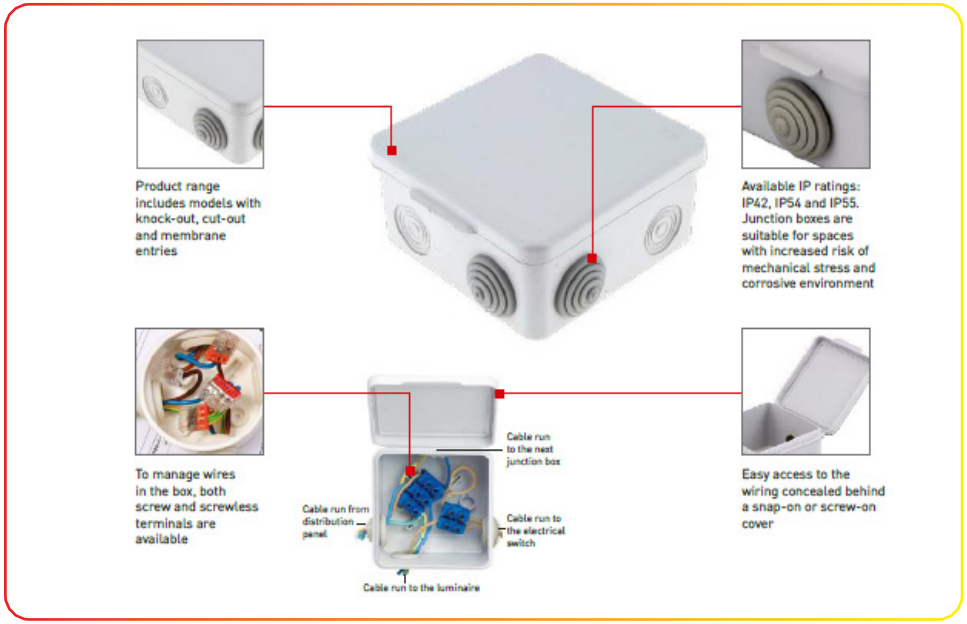
Fire–resistant boxes are used for open wiring in fire–resistant cabling systems, for routing, branching and splicing cables, while ensuring their continued performance in the event of fire, as well as protecting wiring from dust and moisture ingress.

Polyamide Cable Braid

Cable braid enables quick and convenient joining of wires inside cable ducts, metal trays and distribution enclosures, protecting wires from damage and chafing and making the whole installation arranged.

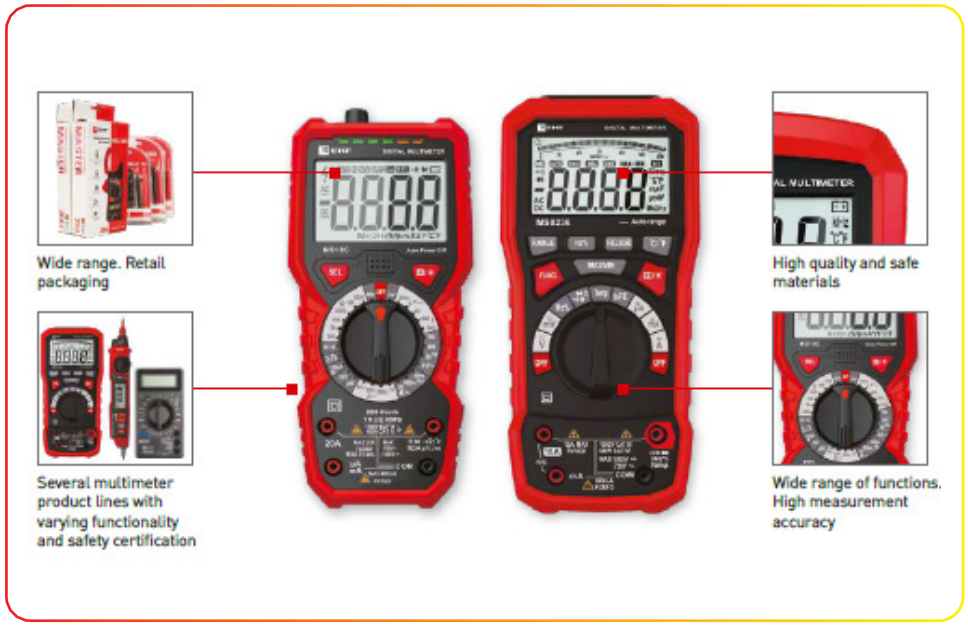
Power Connectors

Power connectors are designed to connect portable or stationary electrical equipment to 50/60 Hz AC circuits with the rated voltage of 220/230/240 or 380/400/415 V. The connectors are used for power supply of industrial and construction electrical equipment, power tools, mobile shop & food trucks, etc.



Surface-Mounted Junction Boxes

Surface-mounted junction boxes are used with corrugated, rigid or reinforced cable conduits for power or low-voltage circuits. Cable glands enable safe and secure connection of corrugated, rigid or reinforced conduits that meets all safety standards. Junction boxes are mounted to walls, ceilings or cable trays.



Digital Multimeters

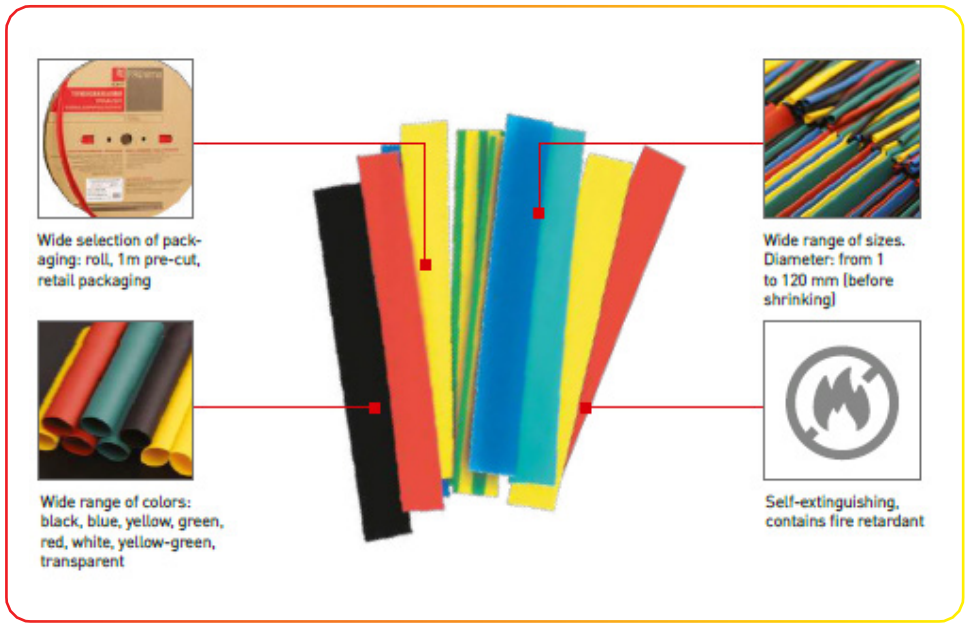
Multimeters are versatile electronic test instruments used in electrical engineering and electronics to determine the key characteristics of the AC and DC circuit. Depending on their functional equipment, the devices can measure basic parameters: current, voltage, circuit resistance, and also determine the polarity. Digital multimeters comply with the requirements of IEC 61010-1 for device safety and IEC 61326-2-1, IEC 61326-2-2 for electromagnetic compatibility. MASTER is a well-balanced range of easy-to-use and reliable products. EXPERT features high quality measuring instruments with a wide range of functions for everyday use. PROFESSIONAL features devices with extra functions

Digital Clamp Meters

Digital clamp meters are designed to measure current without breaking the circuit. Some models have additional functions for measuring voltage, frequency and temperature. Current clamps comply with the requirements of IEC 61010-1 for device safety and IEC 61326-2-1, IEC 61326-2-2 for electromagnetic compatibility. MASTER series offers a balanced range of simple and reliable products. EXPERT features high quality measuring instruments with a wide range of functions for everyday use.

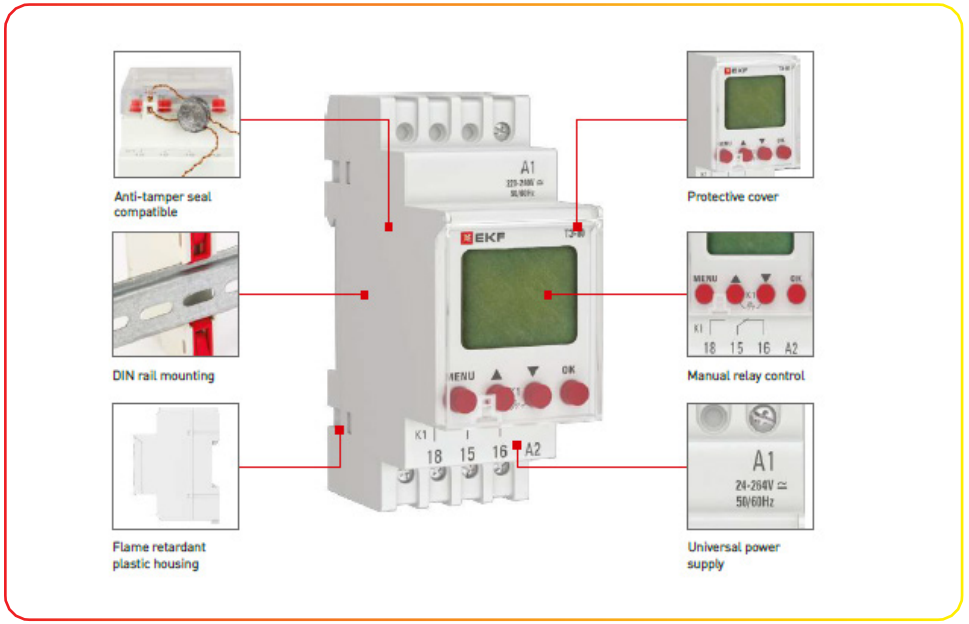
Crimping pliers

Crimping pliers enable electricians to join all the separate parts of an electrical circuit, ensuring secure connection and good conductivity of electric current, leading to lower heat at the contact points and a decreased risk of short circuit and burnt contacts.



Heat-shrink tubes

Polyethylene heat-shrink tubes can be used for electrical insulation, labeling and finishing. Heat-shrink tubes are designed for sealing couplings, terminating cable ends with caps, insulating cables, strands, and wire connection points, bundling wires; for mechanical protection and color coding of products, etc. The tube shrinks under high temperature (from 90 to 125 °C). The tube shrinks quickly, tightly conforming to the shape of the cable shape. For home use, heat-shrink tubes are a user-friendly substitute for insulating tape.

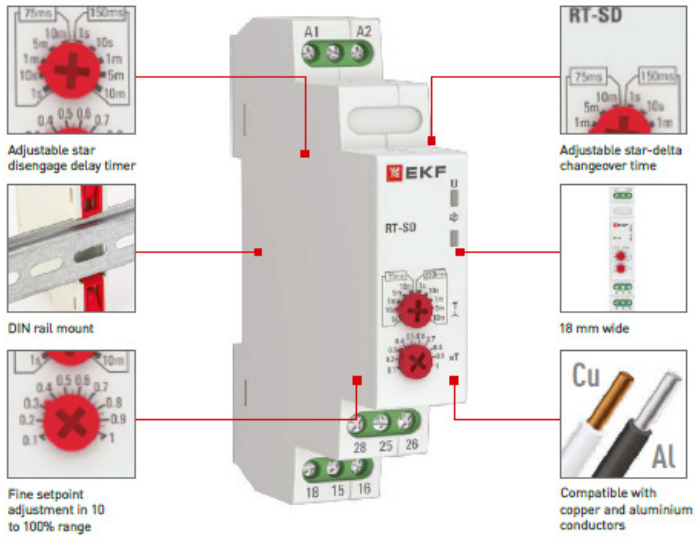


Digital timers TE-80

Digital timers TE-80 with an LCD are relays, activated (switched on/off) by a time setting. With a built-in clock, they can be used to keep time. Timers support pulse mode operation, outputting an impulse 1 to 99 seconds long. This can be used, e.g. to activate school bells. Copper and aluminum wire connections are supported.

Time relays RT-SD Star-Delta

Time relay RT-SD is a microprocessor-based switching device intended for star-delta (wye-delta) electric motor starting. This form of soft starting lowers the inrush current and extends the service life of the motor.



Modular Push Buttons, Pilot Lights & Selector Switches

Pilot lights, push buttons and selector switches are intended for management and control of plant and equipment to be used in 50/60 Hz AC circuits up to 660 V and in DC circuits up to 440 V. They can be installed, e.g., in lead-in distributors, automatic transfer switches, motor control centers etc.protection. Power supply units are installed onto a mounting plate.

Voltage Stabilizers

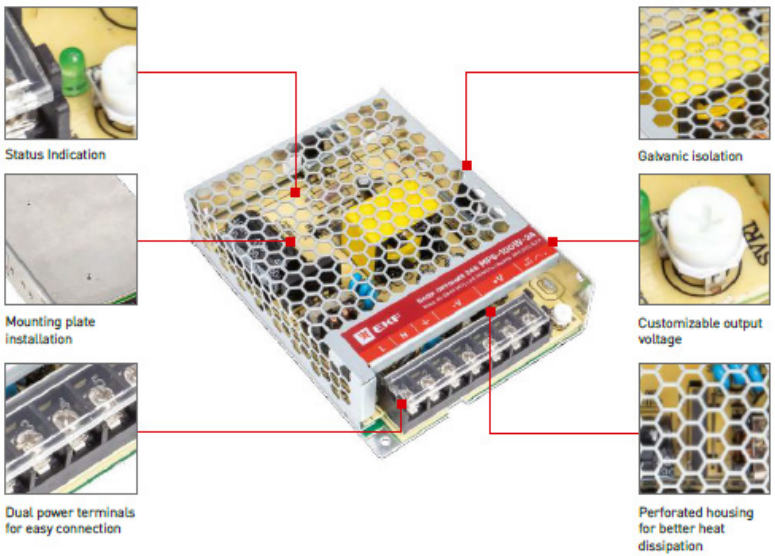
The relay-based AC voltage stabilizer is designed to provide stable single-phase sine wave power that meets the requirements of EN 50160 to industrial loads when the mains power quality is substandard. The stabilizer filters out interference and does not distort the voltage waveform. If the mains voltage is too high or too low, the device equalizes it, enabling continuous operation of the equipment and protecting it from harmful voltage fluctuations.

Uninterruptible Power Supplies

Line-interactive uninterruptible power supply (UPS) with a rated power of 600 to 3000 VA in freestanding (tower) enclosure. The devices are equipped with a liquid crystal display (LCD) that shows operating parameters, operating mode, and alerts the user of any faults or problems. The UPSes are equipped with an automatic voltage regulator (AVR), that maintains constant output voltage, protecting the connected load from power faults and instabilities. When the input power fails, the UPS switches to battery power. E-Power SSW200 UPSes feature minimal transfer time to battery power. Devices are not designed to protect equipment with AC motors.

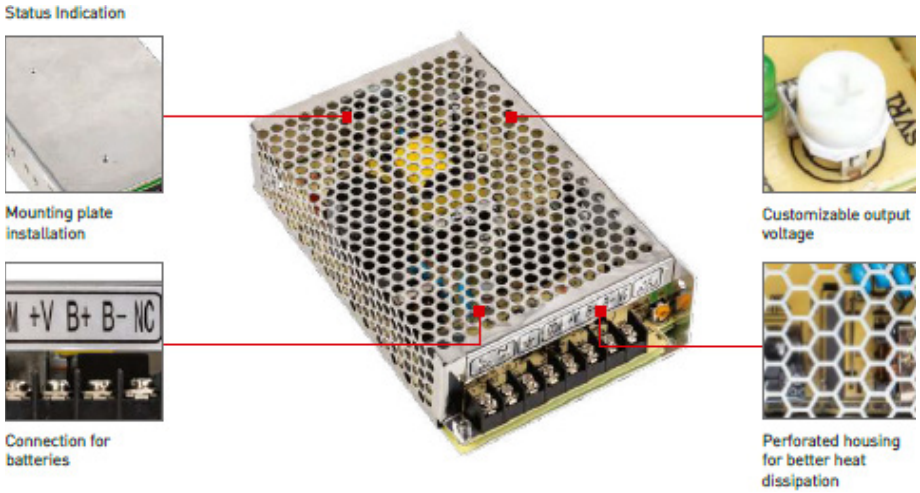
Enclosed Power Supplies

Enclosed power supply is a switched-mode power supply that converts input AC voltage into a stabilized DC voltage. The power supply features compact size as well as overload and short circuit protection. Power supply units are installed onto a mounting plate.



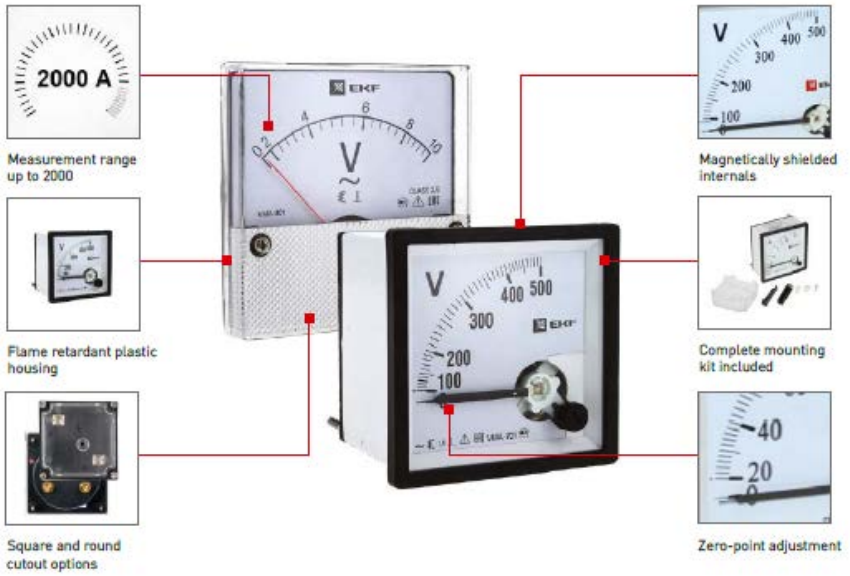
Insulated Cord End Terminals

The 24V power supply with UPS function MPSu is designed to supply stabilized 24 V DC voltage to electronic devices, switching to battery power when necessary. The power supply is a switched-mode power supply with overload, overheating and short circuit protection at the output the cord end terminal.



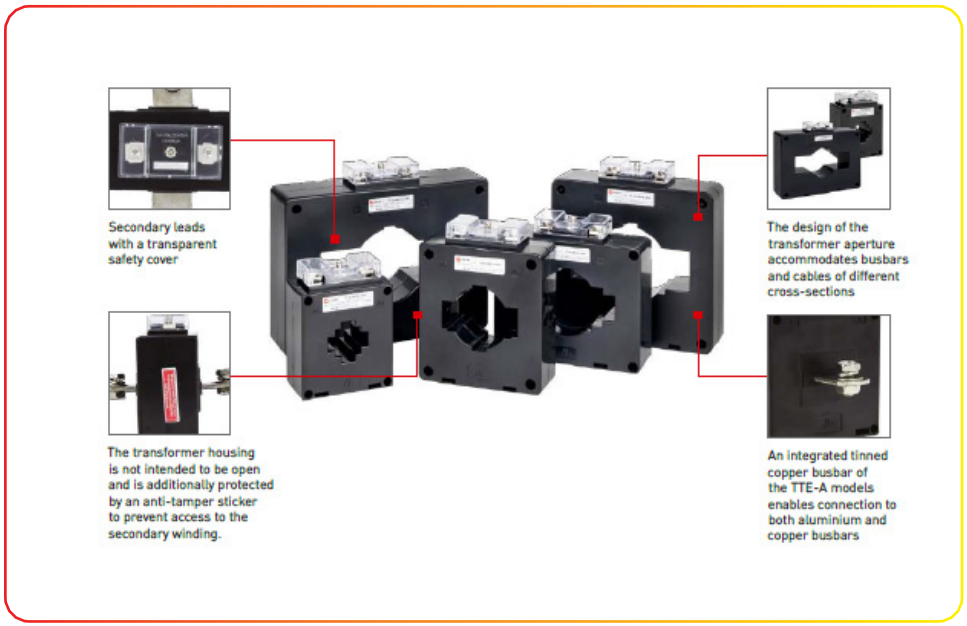
Modular Push Buttons, Pilot Lights & Selector Switches Xb4

Modular push buttons, pilot lights and selector switches XB4 consist of three parts: a head and auxiliary contacts connected to a metal mounting base. You can assemble the device perfectly fitted to your application. A variety of colors and mechanisms meet all kinds of demands for switchboard and control panel layouts. Accessories include replacement lamps with a base for installation in buttons and switches with illumination options.



Analogue Ammeters & Voltmeters

Analogue ammeters and voltmeters are designed to measure current and voltage in AC electrical circuits. The devices are intended to be used indoors, in electrical enclosures and electrical installations of industrial, residential, public buildings and structures. Ammeters and voltmeters are mounted on the front panel of a distribution enclosure (through a square or a round cutout). Dimensions of the instrument
faceplates: 72 × 72, 80 × 80, and 96 × 96 mm.



Current Transformers

Current transformers TTE and TTE-A are current-sensing units designed to transform and transmit current to metering, protective, automation, alarm, and control equipment in 50/60 Hz AC circuits with the rated voltage of up to 0,66 kV. They can be installed in incoming switchgear, in conjunction with electricity meters. The product range incorporates the transformers with an integrated busbar section (TTE-A) or an aperture to accommodate busbar or cable (TTE-30, TTE-40, TTE-60, TTE-85, TTE-100, TTE-125).

Digital Ammeters & Voltmeters

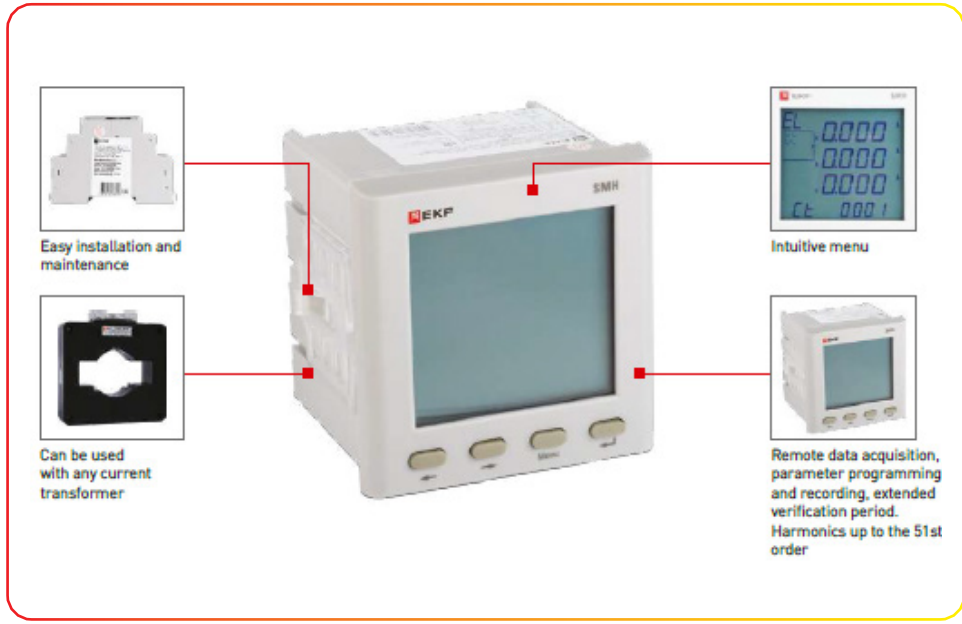
Digital ammeters and voltmeters are designed to measure current and voltage in single-phase and three-phase electrical AC circuits. The devices are intended to be used indoors, in electrical enclosures and electrical installations of industrial, residential, public buildings and structures. Ammeters and voltmeters can be connected either directly or via a transformer. The measuring range of transformer-connected instruments depends only on the rating of the measuring transformer. Microprocessor control enables accuracy class of 0,5 – several times higher than that of analogue ammeters and voltmeters.

Din Rail Digital Ammeters & Voltmeters

Digital ammeters and voltmeters are designed to measure current and voltage in single-phase and three-phase electrical AC circuits. The devices are intended to be used indoors, in electrical enclosures and electrical installations of industrial, residential, public buildings and structures. Ammeters and voltmeters can be connected either directly or via a transformer. The measuring range of transformer-connected instruments depends only on the rating of the measuring transformer. Microprocessor control enables accuracy class of 0,5 – several times higher than that of analogue ammeters and voltmeters.

Multifunctional Meters

Multifunctional meters are digital programmable devices designed for measuring the parameters of three-phase three- or four-wire circuits with symmetrical and asymmetrical loads, direct display of measured values and their digital transmission. The devices enable control, analysis and optimization of electrical equipment, systems and industrial networks.

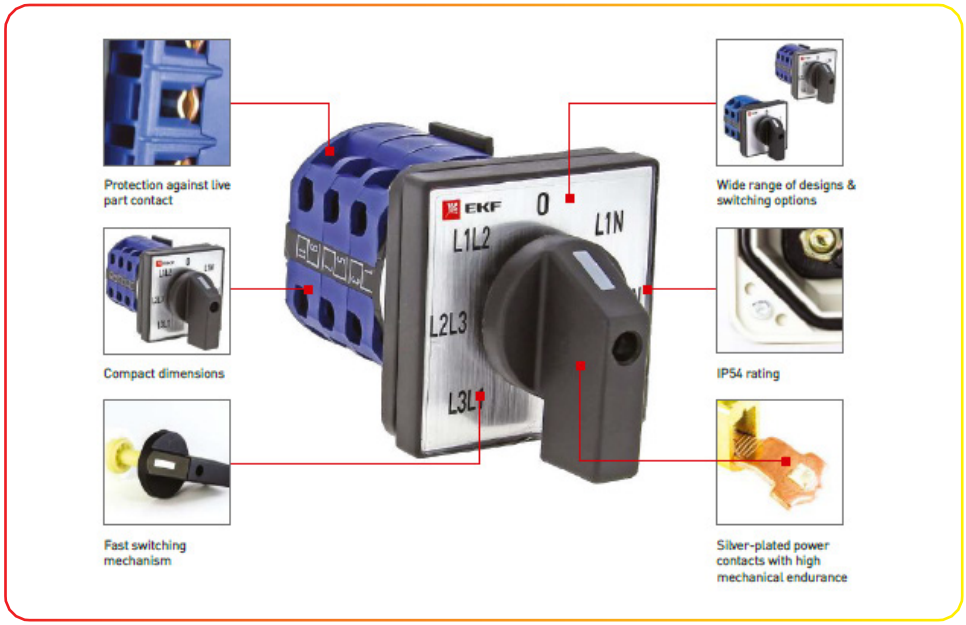


Cam Switches

Cam switches are mechanical switching devices designed for 50/60Hz AC circuits with rated voltage up to 415 V. Higher silver content in the contacts provides lower transient resistance and higher immunity to environmental exposure.
Cam switches are available in several versions:

- Standard cam switch with different wiring options and number of poles
- Three-phase cam switch with improved contact group (switch disconnector);
- Three-phase cam switch in an IP54 protective box (switch disconnector).

Standard and 3-phase switches switches are front-mounted to be installed on the front panel of distribution enclosures, control panels, etc. 3-phase switches in IP 54 protective box are rear-mounted onto the mounting plate.



Capacitor

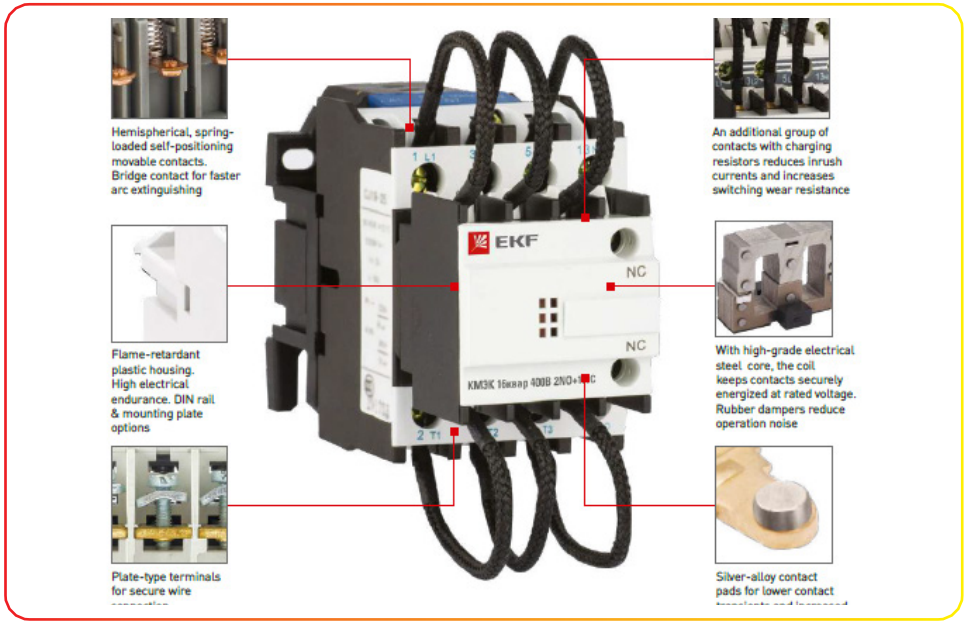
Capacitors are designed for static and dynamic power factor correction in AC circuits. Low-voltage three-phase PFC capacitors KPS PRO are three delta-connected capacitors in a single housing. The capacitors are manufactured using metallized self-healing polypropylene film with a low loss factor, providing high performance characteristics. Three metallized film capacitors are installed in a cylindrical aluminum housing and filled with inert gas, improving their cooling and heat dissipation and extending the service life of the capacitor. To protect the capacitors they are equipped with a high pressure disconnector. All KPS PRO three-phase capacitors utilize discharge resistors to improve their safety. A plastic-shrouded terminal block enables safe and easy connection of leads to the capacitor. Both copper and aluminum wire connections are supported.

Reactive Power Regulators

Reactive power regulators monitor the power factor of the circuit and switch the banks of PFC capacitors to maintain the optimal power factor. When switching capacitors, the regulator first selects for capacitors with lowest time in operation, increasing the service life of the entire low voltage capacitor bank.

Capacitor Contactors

Capacitor contactors are specialized two-stage contactor for switching capacitors in low voltage capacitor bank installations. KMEK contactors consist of a housing, two rows of fixed contacts, and moving contacts inside the moving part of a magnetic circuit. Charging resistors are connected to the first row of contacts. The fixed part of the magnetic circuit is secured in the KMEK housing. A spring keeps the contacts from closing. When voltage is applied to the control coil, a magnetic field appears in the magnetic system of the contactor, which, overcoming the resistance of the spring, closes the magnetic system and first closes the upper group of contacts and after 0,1–0,2 seconds – the second power group of contacts. This way, the inrush current of the capacitors is mitigated by resistors. When the control coil is de-energized, the spring opens the contacts. Both copper and aluminum wire connections are supported.



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