

## EKF PRODUCT CATALOGUE

21 years

20 countries

1500 employees

17 000 SKU

350 distributors

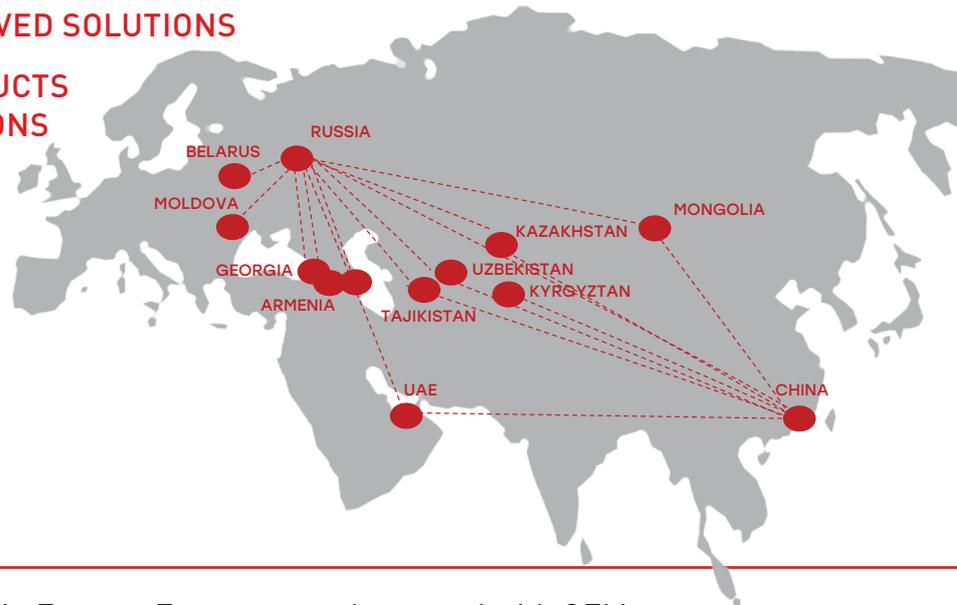
5 000 projects annually

1 000 engineering consultants

EKF IS A LEADING MANUFACTURER & SUPPLIER OF ELECTRICAL EQUIPMENT AND DERIVED SOLUTIONS

WE OFFER A WIDE RANGE OF PRODUCTS FOR MOST ELECTRICAL APPLICATIONS

Global team with local presence at Eastern Europe, Asia and Middle East



### R&D AND PRODUCTION

35 000 m<sup>2</sup> of **own production facilities** in Eastern Europe, complemented with OEM-synergy with Asian factories



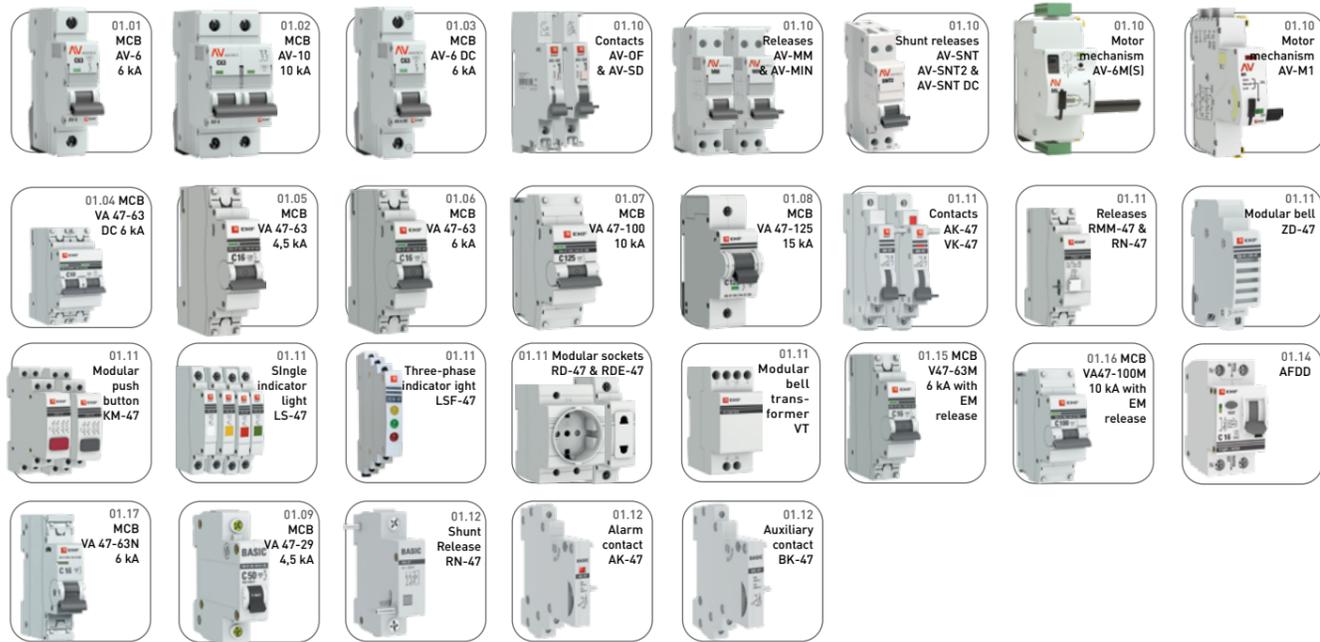
### QUALITY AND RELIABILITY

Quality control by the **in-house team of engineers** & world's **largest expert organization** in the TIC sector



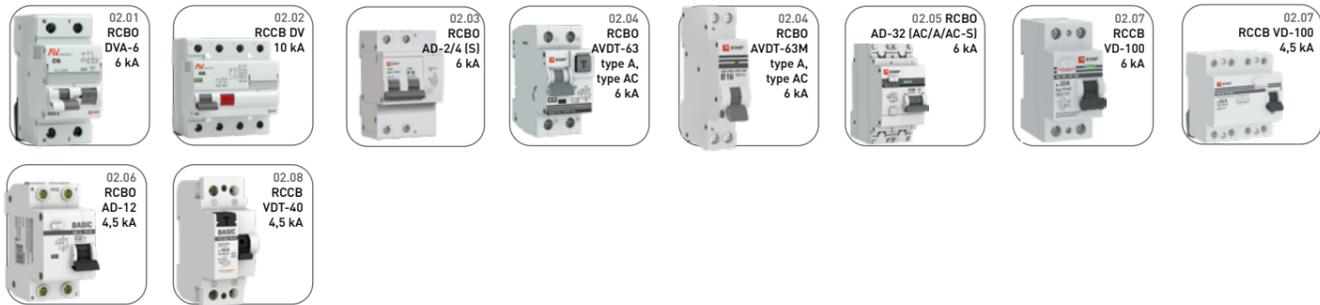
01 MINIATURE CIRCUIT BREAKERS (MCB) AND ACCESSORIES

Miniature circuit breakers are small-size devices used to manually open/close circuit sections and to protect electrical circuits against short-circuit and overload currents. EKF supplies devices for circuits with any specifications (single-, two-, three, and four-pole circuit breakers). The design of all BASIC, PROxima and AVERES MCBs features connection options for monitoring, control and service accessories.



02 RESIDUAL CURRENT DEVICES

The EKF modular devices comprise a wide range of residual current circuit breakers (RCCB) and residual current circuit breakers with overcurrent protection (RCBO). RCCBs and RCBOs are used to protect persons against electric shock and secure electrical equipment against negative effects by circuit emergencies.



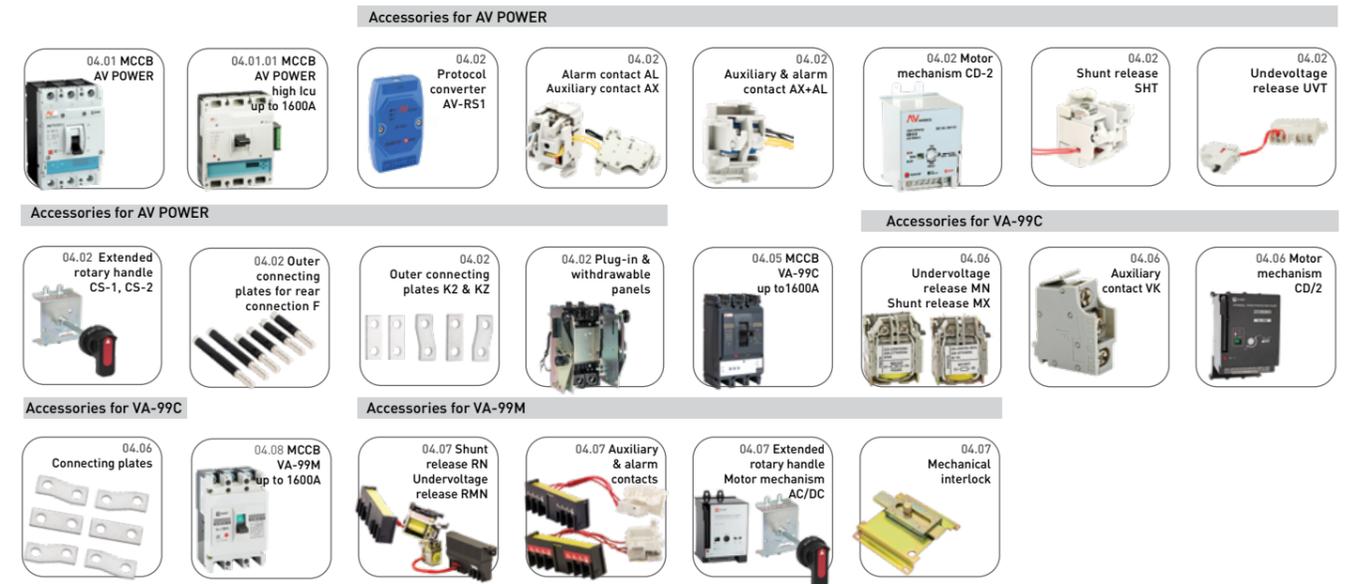
03 SURGE PROTECTIVE DEVICES (SPD)

Surge protective devices are used to suppress surge overvoltage (lightning and switching) in 230-440 V circuits. The EKF SPDs have non-linear components: arresters, varistors, and diodes. The SPD shall be installed parallel to power input and connected to protective earthing. When the voltage reaches the surge level, the SPD resistance drops instantaneously and the lightning current is conducted to ground, so the surge voltage pulse is reduced to a safe level. SPDs are classified by the test categories they undergo.



04 MOLDED CASE CIRCUIT BREAKERS (MCCB)

The EKF molded case circuit breakers are available in three series: Avers (AV POWER), PROxima and Basic. Avers and PROxima devices feature accessory connecting options to extend their capabilities.



05 AIR CIRCUIT BREAKERS (ACB)

The EKF air circuit breakers feature VA-45 and VA-450 versions. ACBs are used as input circuit breakers in residential buildings, commercial and industrial facilities to prevent emergencies in power mains and to quickly open/close circuits in manual or automatic mode. The ACB VA-45 is designed for rated currents between 630 and 6300 A. ACBs VA-450 feature small-size versions with rated currents between 200 and 1600 A. All EKF air circuit breakers are fitted with basic components: motor mechanism, closing/opening releases, shunt release, and auxiliary contacts. All EKF ACBs feature both fixed and withdrawable versions.



06 CONTACTORS, STARTERS, RELAYS AND ACCESSORIES

The EKF contactors feature devices (incl. modular versions) with rated currents between 6 and 1000 A. The direct-on-line starters are designed for rated currents between 0,63 to 95A. The EKF range also includes reverse direct-on-line starters. The EKF motor starters are used to close/open AC circuits up to 690 V and to protect motors against the effects by mains overload, open-phase operation and short-circuits. Interface relays are used to switch power circuits up to 10 A, ensure galvanic isolation of circuits and amplify control signals.



Accessories for KME, KTE & KT-6000



07 CONTROL AND AUTOMATION (FREQUENCY CONVERTERS, CONTROLLERS, CONTROL RELAYS, CAPACITOR CONTACTORS)

EKF offers a wide range of devices for process automation and electrical equipment control:

- Programmable devices (programmable logic controllers, operator panels, I/O modules with Ethernet and RS-485, and switches)
- Sensors (temperature, pressure, level etc.)
- Frequency converters
- Power supplies
- Voltage stabilizers
- Uninterrupted power supplies (UPS)
- Control relays (pulse, twilight, time, motor protection, phase control and selection, voltage and current monitoring, fluid level and temperature monitoring relays)
- Multipurpose, electronic and astronomical timers
- Automatic transfer switches
- Power limiters



08 SWITCH DISCONNECTORS, DISCONNECTORS, FUSES

The EKF switch disconnectors, disconnectors and fuses feature both conventional and state-of-the-art devices. These devices comprise fuses for AC circuits up to 660 V and fuse disconnectors for PVC; three-position switches TPS-63 EKF PROxima (16-63 A) and disconnectors RC for currents 250 and 400 A; switches and disconnectors (incl. switches TwinBlock with interlock and additional pole connections) and accessories; and switch disconnectors.



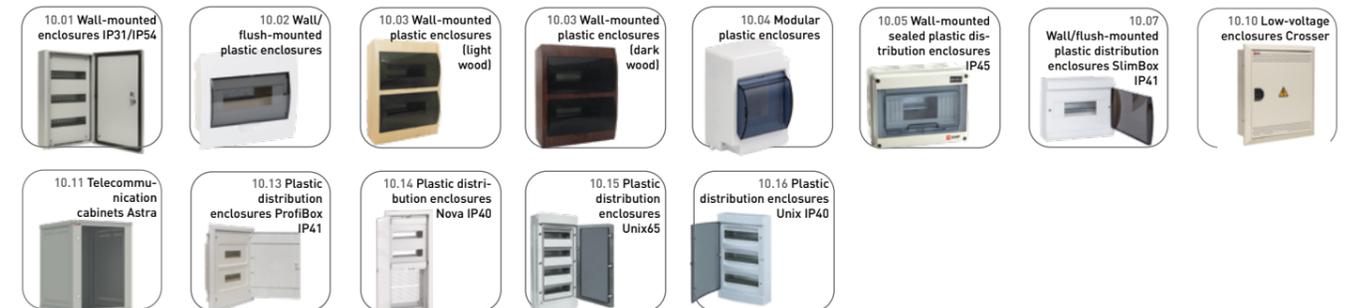
09 PUSH BUTTONS, CONTROL STATIONS, SWITCHES, PILOT SIGNALS

Push buttons, indicators, switches, and consoles are designed for manual start/stop of electrical equipment, and light and sound indication of electrical circuit status. Cam and packet switches are used to switch power supply circuits up to 400 V.



10 WALL/FLUSH-MOUNTED DISTRIBUTION ENCLOSURES

The distribution enclosures EKF PROxima and Basic comprise a wide range of wall- and flush-mounted, metal and plastic versions. The advantages of the EKF wall-/flush-mounted steel distribution enclosures: robust welded design, DIN-rails included, protective bezel, lock, glands (IP54), bus bars (sh), earthing lead, mounting kit and safety signs. Wall/flush-mounted distribution enclosures are made of heavy-duty plastic, and equipped with DIN-rails and N/PE bus bars.



11 WALL/FLUSH-MOUNTED METERING DISTRIBUTION ENCLOSURES

The metering distribution enclosures EKF PROxima feature wall-mounted plastic enclosures and metal (wall- and flush-mounted) enclosures. The advantages of the EKF wall-mounted plastic metering enclosures: degree of ingress protection - IP55, sealing option for doors and circuit breakers, operating temperature - from -40 to 45 °C. Wall/flush-mounted steel metering distribution enclosure has a powder coated welded housing. Some versions are supplied with a mounting plate.



12 WALL-MOUNTED ENCLOSURES WITH MOUNTING PLATE

The EKF enclosures with a mounting plate are presented both by mid-price versions and low-cost versions. The former as compared to the latter are fitted with an earthing lead, mounting kit and marking stickers. The IP54 versions are fitted with additional fasteners to facilitate installation of the enclosure.



14 FLOOR STANDING ENCLOSURES

EKF offers several lines of floor-standing metal enclosures: Fort, 70 Unit, Unit, 1M, etc.



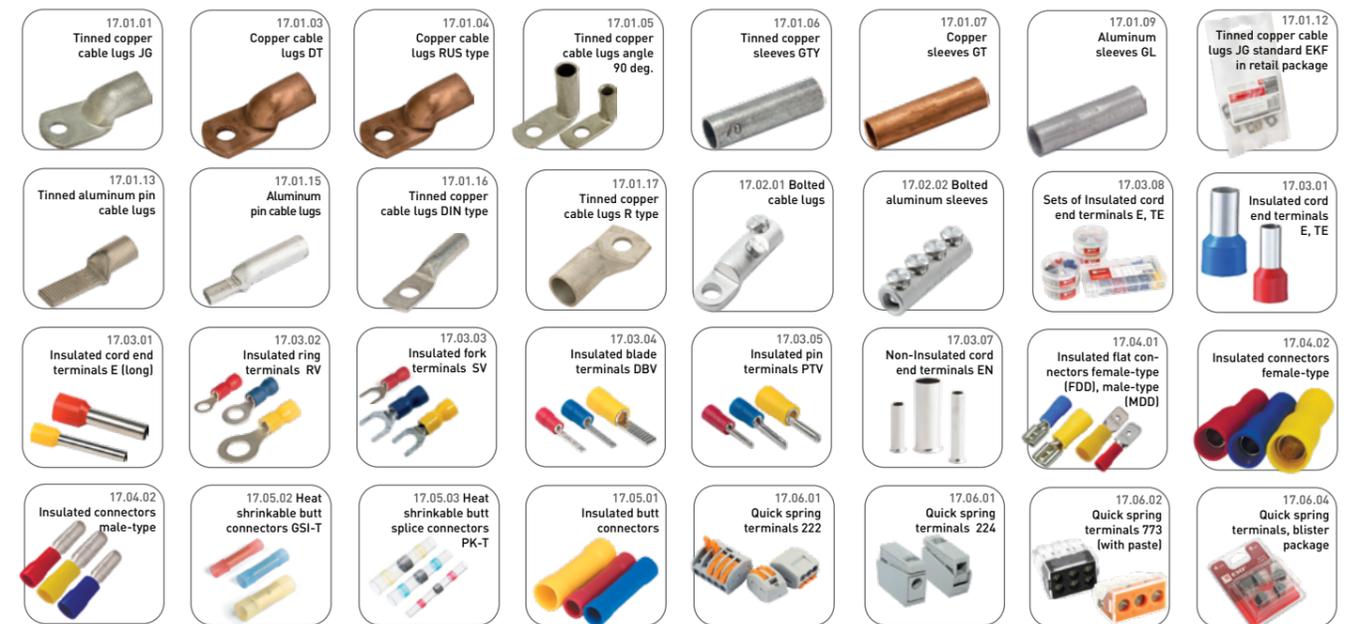
16 DISTRIBUTION ENCLOSURE COMPONENTS

The EKF enclosure components comprise a wide range of accessories for enclosure assembling and devices for temperature control. The major accessories include terminals and terminal blocks, busbars and connecting burs (PIN / FORK, brass and galvanized N/PE, with and without insulators), distribution blocks, busbar insulators, etc.



17 PRODUCTS FOR ELECTRICAL INSTALLATION

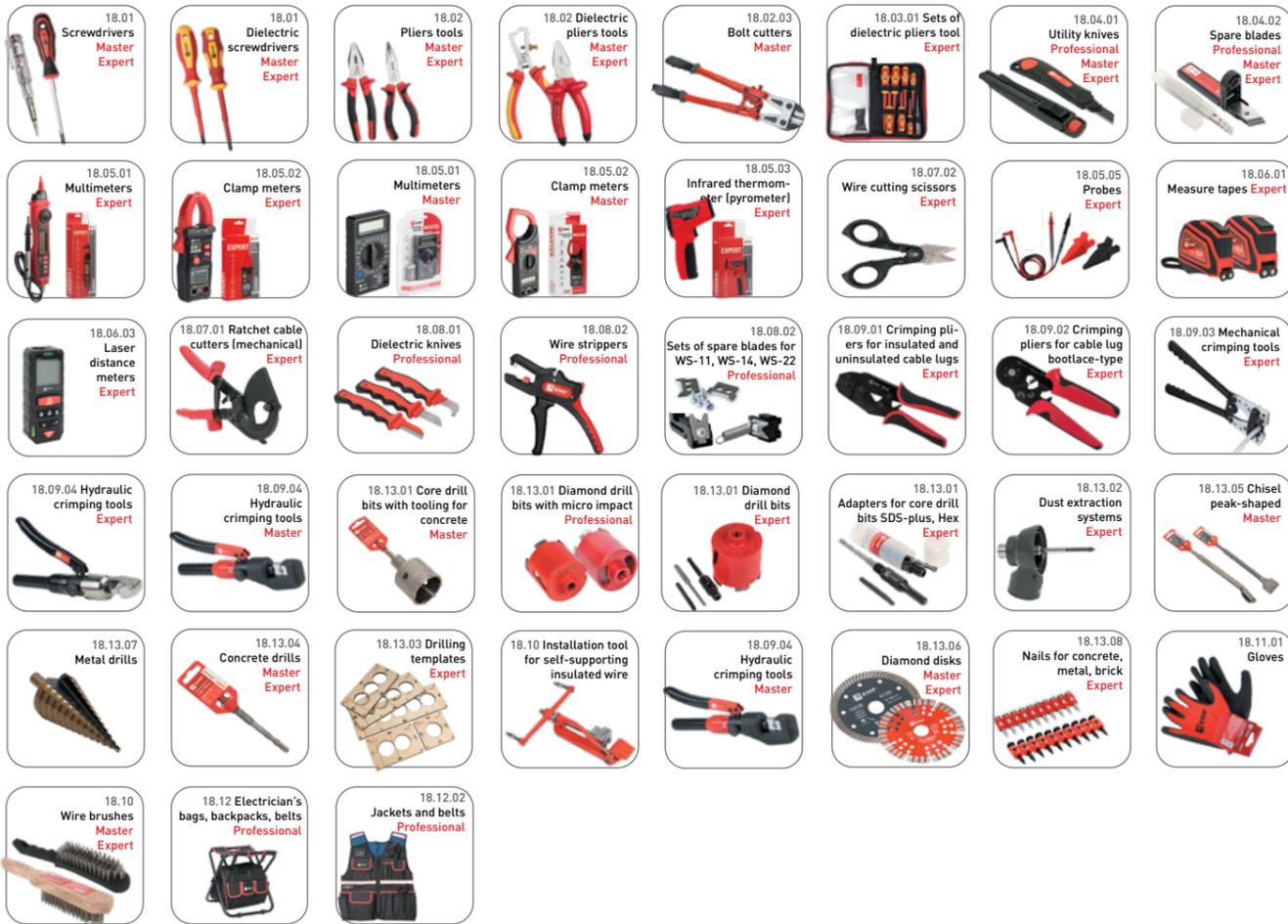
EKF offers a wide range of products used for electrical installation works, including cotton and PVC insulation tapes, copper and aluminum cable lugs and end terminals, heat-shrink tubes, insulated connectors, quick-spring terminals, terminal blocks, and branching clamps. Moreover EKF supplies a wide range of products for cable tying and marking: black and white nylon ties, cable ties FlexLock of various colors, masonry and anchor cable ties, ties with holes and mounts, and plastic brackets.





**18 TOOL**

EKF offers the customers tools for assembly, installation and routine maintenance work. The range includes screwdrivers and pliers tool in standard and dielectric versions; multimeters, measuring pliers and infrared thermometers; knives, strippers and crimping pliers for electrical installation work of any complexity. A wide range of tooling for power tool applications: drill bits, step drill bits, core drill bits, diamond discs, etc. The EKF range also contains a complete set of tools for installing self-supporting insulated wires (SSIW) - see group 28



**19 MEASURING TRANSFORMERS**

There are current and voltage transformers that convert the current or electrical voltage to values that are safe for measuring instruments. EKF manufactures the TTE, TTE-A and TTE-R current transformers with rated primary current from 5 to 5000 A. They are used in power consumption measurement and electrical automation systems. TTE - current transformers with universal window and accuracy class 0.5 or 0.5S. TTE-A - current transformers with integrated busbar, accuracy class 0.5 and 0.5S. TTE-R are split-type current transformers with accuracy class 0.5.



**20 ELECTRICITY METERS**

The group of devices used to meter electricity consumption includes single-phase, three-phase, and three-phase multi-rate meters SKAT EKF PROxima. The range of meters used for single-phase network includes both electromechanical and electronic units. The SKAT single-phase electricity meter is compact, easy to install (one-way connection) and has an integrated tamper-evident seal. The SKAT three-phase electromechanical and electronic meters are used to meter electricity consumption in three-phase circuits. They are small, easy to install and easy to seal, with an integrated seal. Depending on the model, they shall be mounted onto a DIN rail or mounting plate. The SKAT 315 three-phase electricity meter is an electronic multi-rate electricity meter with possible programming via computer and special software.



**21 MEASURING INSTRUMENTS**

The range of measuring instruments includes analogue and digital ammeters and voltmeters, as well as multifunctional programmable measuring devices. An analogue ammeter is an instrument to measure current and display the result with a scale and an arrow. A digital current meter shows data on the display. An analogue voltmeter is an arrow instrument to measure voltage. Digital ammeters and voltmeters differ from analogue instruments in terms of higher accuracy and calibration interval.

The digital instruments include both panel-mounted and DIN-rail models. The multifunctional digital programmable instrument can measure various 3-phase mains parameters and transfer measurement results via ModBus protocol.



**22 SOCKET OUTLETS, SWITCHES**

EKF offers a wide range of socket outlets and switches in the medium («Valencia», «Vladivostok», «Prague», «Rome», «Murmansk») and low price («Minsk») segments, as well as the new «Stockholm» in a minimalist design with a number of technical features such as automatic terminals, a unique mosaic support connection mechanism and a high-quality polycarbonate housing material. A wide range of models can meet all customer needs. All products are subjected to testing in the laboratory and meet the highest safety standards. The «Minsk» and «Valencia» support both copper and aluminium wire connection.



**23 EXTENSION LEADS, MAINS FILTERS, LAMP HOLDERS AND ACCESSORIES**

EKF manufactures a wide range of products for powering various equipment at construction sites and private countryside plots, in residential, office and administration buildings.

The range includes extension cables with cord lengths from 1.8 to 50 meters. Extension cable reel (plastic) «Atlant 2.0» (1.3 to 3.5 kW) is used for domestic needs. Extension cable reel (metal) «Gefest 2.0» (3.5 kW) can be used at construction sites and countryside plots. The «Blockbuster» mains filter is a device with six sockets, an illuminated button, shuttered. The outdoor extension cables «Zeus 2.0» are used when the standard length of cord is insufficient. EKF offers a wide range of carbonite, plastic and ceramic lampholders.

Each accessory complies with safety requirements, is made of non-combustible materials and has been designed for quick and easy installation of the product.





24 POWER CONNECTORS

The wide product range includes plug connectors, rubber schuko connectors and industrial power connectors for connecting power tools and electrical appliances at the countryside plots, various construction and industrial equipment, as well as mobile facilities such as shops and cafés. The power plug connectors include fix/wander sockets and plugs rated 16, 32, 63 or 125 A. The rubber power connectors include straight angled plugs as well as wall-mounted and wander sockets rated 16 and 32 A and IP44 dust and moisture protection. Industrial power connectors are available as fix (wall-mounted and panel-mounted) and wander sockets and wander plugs rated 16-125A.



26 HEATING AND WATER PROTECTION SYSTEMS

The heating and water leakage protection systems include underfloor heating, architectural heating and a complete water leakage protection solution. Underfloor heating is an electric cable or film infrared heating system, where a heating cable or infrared thermal film, which is laid directly into the floor are used as a heating element. Architectural heating is designed to combat the frost and icicles formation in outdoor areas, roofs and drainage paths of buildings and facilities and to protect pipes against freezing during the cold season. The AquaExpert system is designed to automatically shut off the water supply and provide an audible warning in the event of water leakage in water supply, heating and sewerage systems.



27 CABLE CARRIER SYSTEMS

EKF Cable Carrier Systems are a group of products used to install electrical lines including plastic cable trunking, corrugated and plain rigid tubes PVC and HDPE, non-flammable halogen-free tubes FRHF, double-walled corrugated tubes HDPE, spiral wrap hoses, junction boxes, etc.

- EKF also produces a wide range of accessories for connecting all types of cabling systems.
- Heavy corrugated tubes are used for flush-installation of electrical wiring - inside walls, ceilings and floors.
- Purpose of plain rigid tube is flush-/surface-/ outdoor installation of utility lines.
- A spiral wrap hose is a flexible tube made from steel banding. Used to protect cables from possible damage (including by rodents) and to prevent the spread of fire in the event of a wiring insulation fire.
- The EKF brand line of junction boxes includes a large number of models for flush-/surface-/outdoor installation.
- Workplace arrangement systems C-Line include floor systems, parapet cable trunking and modular socket outlets and switches.



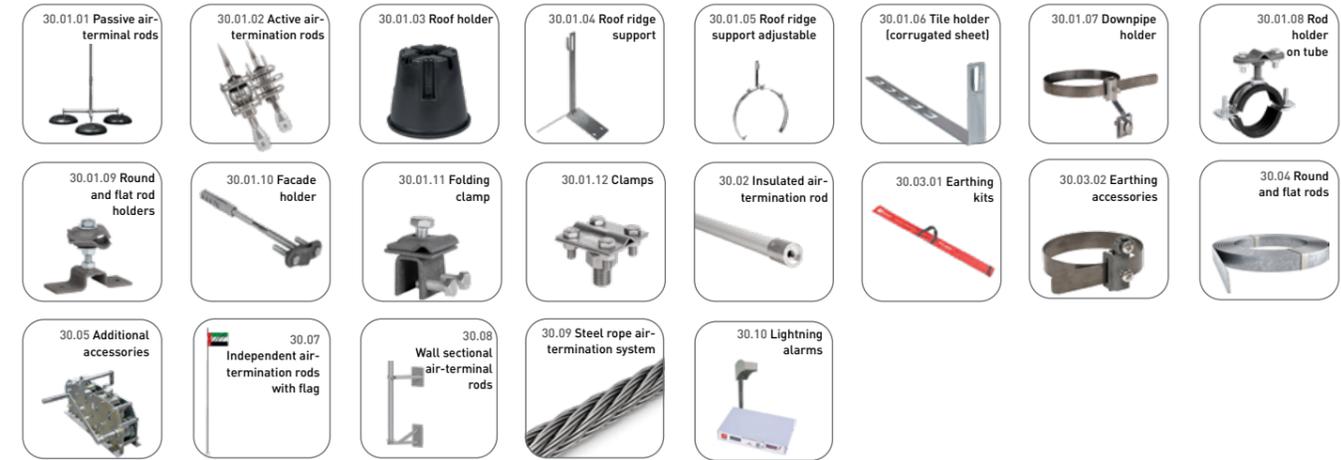
28 FITTINGS AND INSTALLATION TOOL FOR SELF-SUPPORTING INSULATED WIRES

The range includes fittings for self-supporting insulated wires (SSIW). The fittings for SSIW are a wide range of devices that can be used to fix wires to supports or buildings, to carry out the wiring, to connect consumers and perform input to the power substation. The fittings for SSIW are suitable for power supply arrangement in industrial and civil buildings, cottage villages, and construction sites.



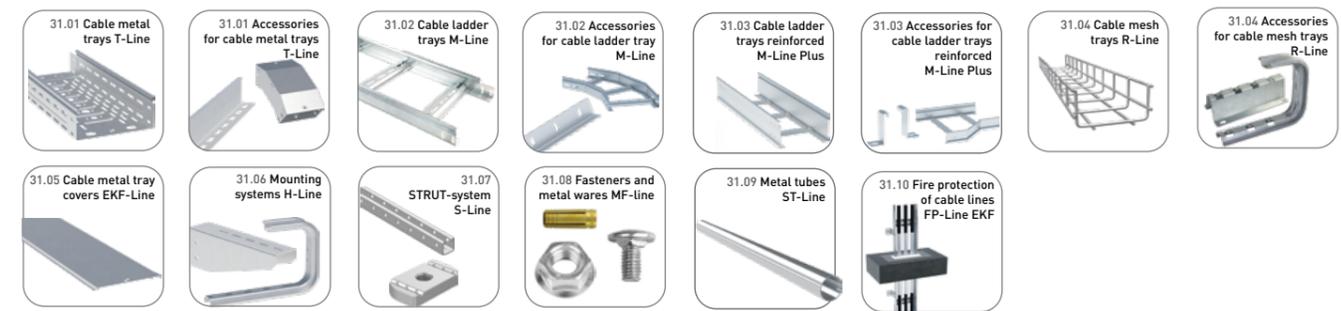
30 AIR-TERMINATION PROTECTION

EKF offers the air-termination protection and earthing system (ATPES) «CUPOL» designed for comprehensive protection of facilities against atmospheric static discharges and network overvoltages. It includes a wide range of Russian-made parts for active and passive air-termination protection in projects of various complexity. The reliable and easy-to-install ATPES «CUPOL» is universal both for industrial and infrastructure facilities, as well as for residential buildings.



31 CABLE METAL TRAYS AND STRUT-SYSTEM

Metal cable tray systems and accessories are designed to arrange open cable routing of power and low-voltage engineering systems in industrial, civil, commercial and municipal buildings. Metal cable trays enable cable routing arrangement for vertical (walls), horizontal (floor, ceiling) and inclined surfaces. Trays, accessories and mounting systems are produced using patented technology. A wide range of accessories and mounting parts can arrange cable routing of any complexity.



**32 SMART HOME**

The EKF Connect smart devices enable bringing comfort in your home to a new level. All devices can be remotely controlled via the EKF Connect mobile app, available on iOS and Android. Control is available via voice assistants. You can group devices together and set up scenarios to control multiple devices with a single voice command or by pressing a button.



**33 DATA COLLECTION AND TRANSFER DEVICES**

A modem is designed for the wireless data transfer between two or more devices at a certain distance. Particularly useful in places where wiring is not possible or where there is no internet access. These modems are a cheap and effective solution for the «Internet of Things» with the need to transmit limited information, e.g. Smart Home, AMR systems, etc.



**34 POWER FACTOR CORRECTION COMPONENTS**

Low voltage capacitor bank (automatic) is a complete device that acts on the reactive component of the apparent power transmitted from the mains to the load. The reduced reactive component transmitted through the network leads to reduced load on the line and on the power transformer. This results in increased capacity and reduced losses in the system. This is achieved due to capacitors, namely power three-phase capacitors controlled by a controller that analyses the state of the network.



**35 LIGHTING**

EKF presents the range of LED luminaires LUMA. The LUMA luminaires are designed both for professional applications and for end users. The LUMA range includes industrial lighting (LED triproof luminaires, highbay luminaires), municipal lighting (LED bulkhead luminaires for municipal services, LED linear luminaires, including those with a switch), office lighting (LED panels 9 mm, 19 mm with uniform illumination and 25 mm), commercial lighting (downlights), emergency lighting (EXIT/EXITplus, BACKUP luminaires IP20 and SAFEWAY luminaires IP54), outside lighting (LED floodlight, LED streetlight). EKF also has a large range of infrared and microwave motion sensors, as well as twilight relay.



**37 AUTOMATIC TRANSFER SWITCH**

The ATS is designed to provide standby power supply to loads connected to a power supply system with main and standby inputs. The ATS automatically switches on the back-up line in the event of a power failure on the main line.

