EKF

Master Catalog

Electrical Products For Professionals

Summer - 2020

PRODUCTION CAPACITIES

The company's production base includes:

- production sites in Moscow, Moscow and Vladimir regions;
- company's testing laboratory in Moscow which has the latest equipment.

EKF is a member of the import substitution program, which actively develops domestic production of electric boards and accessories, cable-carrying systems, measuring instruments, electric-installations and wiring products, and bus-line systems.

In 2019, the company launched its own production of a metal tray in Moscow and modular automotive equipment in the city of Aleksandrov, Vladimir region.

HIGH QUALITY STANDARDS

EKF products are under the development on the basis of modern technologies with consideration of the latest scientific achievements. All components and ready products pass testing and independent assessment in international and Russian centers. Certification of production sites in accordance with ISO 9001 guarantees a professional approach and consistently high quality of products.

MODERN LOGISTIC COMPLEXES

The company's efficient logistics system allows to maintain the prompt delivery of products to partners anywhere in Russia and around the CIS.
The EKF's modern logistics centers are located in Moscow, Novosibirsk, Yekaterinburg, Rostov-on-Don and Almaty. All terminals have an automated WMS warehouse management system and convenient access locations for the Euro Trailers.

EKF PRODUCT LINES - smart solutions for various industries

In accordance with the industry specifics and various budget possibilities of consumers, we have developed three product lines of equipment: AVERES, PROxima, and BASIC

10 YEARS — AVERES

Premium AVERES is the best solution for industry and complex facilities. The high quality standard is confirmed by the 10-YEARSr warranty which EKF provides for the devices of this line.

7 YEAR — PROxima EKF

Optimal PROxima is the optimal choice for residential construction, commercial real estate, and infrastructure projects. It is convenient and fast to install. Warranty – 7 YEARS.

3 YEAR — BASIC

Budget BASIC is the best solution for economy-class housing construction. The option of engineering procurement for the facilities on a turn-key basis without extra cost. Warranty - 3 YEARS.

CONTENT

RCBO (residual current circuit breakers) of DVA-6 EKF AVERES series

DESCRIPTION

Al/Cu · IP20 · WARRANTY 10 YEARS · EAC

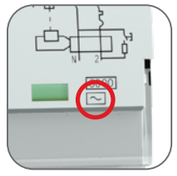
RCBO (residual current circuit breakers) of DVA-6 EKF AVERES series are designed for protection against leakage, overload and short-circuit currents. The special design of the lever provides the device informativity, indicating the cause of the failure (only part of the lever is lowered – short circuit or overload, both parts of the lever are lowered - leakage current). After the cause of the trigger has been eliminated, the device lever must first be lowered all the way down and then cocked (cocking from the trip position is not possible). Complete set of accessories for the expandability. The warranty period is 10 YEARS.

ALL-UNION STATE STANDARD IEC 61009-1-2014

C - switch operates between 50 and 10 -fold values of the rated current. It is recommended for installation in networks with a mixed load that include moderate starting currents (civil construction, office space).
B - the switch operates between 3 and 5 -fold values of the rated current. It is used in networks with a small or missing increase of in-rush starting current (lighting).
D – switch operates between 10 and 14 -fold values of the rated current. It is usually used

The maximum switching capacity (MSC) is the maximum possible short-circuit current which the circuit breaker can switch off the circuit under its protection
and save its work capacity at the same time.

Rated current – the basic value of the current, in comparison with which the protective actions of the automatic switch occur in case of the load current excess.



AC type – responds to sinusoidal AC leakage current, it has icon in the form of a sine wave.

Type A – launches in case of simultaneous AC or DC (P.C.) leakage current in the circuit under control or in cases of their gradual increase.

Selective – specially pre-assigned for a pre-set time limit value of non-disconnection, when the differential current flows.

The nominal tripping differential current IΔn – is the value of the tripping differential current at which the RCCB must operate under specified conditions.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammation and fire that occur as a result of leakage currents and the resulting short-circuits, ground fault and earth fault.
- Automatic shutdown of the electrical network section in case of overloads and short circuits.

ADVANTAGES

Двойной рычаг – сигнализация причины срабатывания

Защитные шторки на клеммах

Удобное окно для маркировки цепи

Литая лицевая панель

Окно реального состояния контактов с защитой от искр

Возможна коммутация алюминиевым и медным проводом

Residual current switches of DV EKF AVERES series

DESCRIPTION

Al/Cu · IP20 · WARRANTY 10 YEARS · EAC

The residual current switches (RCCB) DV EKF AVERES are designed to protect a person from electric injuries in case of touches towards the open wiring or electrical equipment under voltage, and prevents fires that occur due to prolonged leakage currents and short-circuit currents that develop from them. In order to protect against overload and short-circuit currents, differential current switches must be used together with automatic switches. The AVERES product line includes differential current switches of all major types: A, AC, G, and S. Complete set of accessories for the expandability. The warranty period is 10 YEARS.

IEC 61008-1-2012, ALL-UNION STATE STANDARD R 51326.1-99

Rated RCCB (residual current circuit breaker) current – the maximum current which the RCCB can withstand for a long period of time, while maintaining its work capacity and safety features.

Rated voltage Un – the actual value of the voltage at which the RCCB has full work capacity.

AC type - responds to sinusoidal AC leakage current, it has icon in the form of a sine wave.

Type A – launches in case of simultaneous AC or DC (P.C.) leakage current in the circuit under control or in cases of their gradual increase.

Selective – specially pre-assigned for a pre-set time limit value of non-disconnection, when the differential current flows.

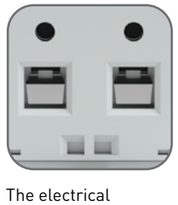
The nominal tripping differential current IΔn is the value of the tripping differential current at which the RCCB must operate under specified conditions.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammation and fire that occur as a result of leakage currents and the resulting short-circuits, short-circuits to the frame and short-circuits to ground.
- RCCB type A is used in buildings and residential areas with household electronic equipment (TV, personal computers, adjustable light sources, modern washing machines, etc.).

ADVANTAGES

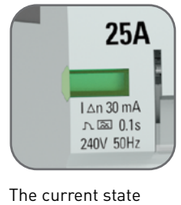
High value of withstand short circuit currents IΔn=10 000 A



The electrical protection shutter of the terminal

Convenient display for the electric circuit marking

Cast nameplate



The current state window of the contact elements with protection against sparks

Switching with aluminum and copper wire is possible

Residual circuit breakers: RCCBO-2, RCCBO -4, RCCBO -2S, RCCBO -4S EKF PROxima

DESCRIPTION

ALL-UNION STATE STANDARD
IEC 61009-1-2014

IP20 | WARRANTY 7 YEARS | Al/Cu | EAC

RCCB with overcurrent protection-2 (4) (S) EKF PROxima is a device which combines the functions of an automatic circuit breaker with a residual cut-off device. In case of the circuit breaker detection in the protected section of the network, the leakage current (damage) to the ground or overcurrent (overload or short-circuit current), there is the launch of device, which leads to disconnection of the protected network. A special difference between EKF Residual current circuit breaker with overcurrent protection is the feature of a built-in overvoltage protection unit. Aluminum and copper commutation is possible. Residual current circuit breaker with overcurrent protection -2 and Residual current circuit breaker with overcurrent protection -4 EKF PROxima are produced in standard and selective (Residual current circuit breaker with overcurrent protection -2S, Residual current circuit breaker with overcurrent protection - 4S) versions.

The characteristic of time-current response is the response range of the electromagnetic protection.

C – switch operates between **5** and **10** -fold values of the rated current. It is recommended for installation in networks with mixed power load, which includes moderate in-rush starting currents (civil construction, office space).

Rated current – the basic value of the current, in comparison with which the protective actions of the automatic switch occur in case of the load current excess.

The nominal tripping differential current IΔn – is the value of the tripping differential current at which the RCCB (residual current device) must operate under specified conditions.

S **Selective** – specially pre-assigned for a pre-set time limit value of non-disconnection, when the differential current flows.

AC type - responds to sinusoidal AC leakage current, it has icon in the form of a sine wave.

The maximum switching capacity (MSC) – is the maximum possible short-circuit current which the circuit breaker can switch off the circuit under its protection and at the same time remain operational.

Pickup voltage – the maximum voltage level above which the built-in protection launches.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.
- Automatic shutdown of the electrical network section in case of overloads and short circuits.

ADVANTAGES

Housing made of flame-retardant plastic

Electronic board with the increased contaminating signal safety

Contact status indicator display

Reset button for indication of leakage current actuation

Clips of silverized copper and anodized steel with notches

RCCB (residual current circuit breaker)-63 M EKF PROxima

DESCRIPTION

ALL-UNION STATE STANDARD
IEC 61009-1-2014

IP20 | WARRANTY 7 YEARS | Al/Cu | EAC

The small-size RCCB (residual current circuit breaker)-63M EKF PROxima is a device which combines the functions of an automatic circuit breaker with an electronic RCCB of the AC type in a small-size case with a width of one module. If the circuit breaker detects a leakage current (damage) to the ground or an overcurrent (overload or short-circuit current) on the protected section of the network, the device triggers, which leads to disconnection of the protected network. A specific difference between EKF differential circuit breakers with electronic RCCB is the presence of an overvoltage protection unit.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.
- Automatic shutdown of the electrical network section in case of overloads and short circuits.

The characteristic of time-current response is the response range of the electromagnetic protection.

C - switch operates between 5 and 10 -fold values of the rated current. It is recommended for installation in networks with a mixed load that include moderate starting currents (civil construction, office space).

Rated current – the basic value of the current, in comparison with which the protective actions of the automatic switch occur in case of the load current excess.

The nominal tripping differential current IΔn is the value of the tripping differential current at which the RCCB (residual current device) must operate under specified conditions.

AC type - responds to sinusoidal AC leakage current, it has icon in the form of a sine wave

The maximum switching capacity (MSC) is the maximum possible short-circuit current which the circuit breaker can switch off the circuit under its protection and at the same time remain operational.

ADVANTAGES

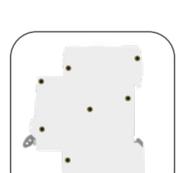
Compact housing with a width of one module

Housing made of flame-retardant plastic

Single front panel

Built-in power surge protection

Contact status indicator display



Increased case rigidity

RCCB (residual current circuit breaker)-63 EKF PROxima

DESCRIPTION

IP20 · WARRANTY 7 YEARS · Al/Cu · EAC

The RCCB (residual current circuit breaker)-63 EKF PROxima is a device which combines the functions of an automatic circuit breaker with an Electromechanical or electronic RCCB. If the circuit breaker detects a leakage current (damage) to the ground or an overcurrent (overload or short-circuit current) on the protected section of the network, the device triggers, which leads to disconnection of the protected network. Aluminum and copper wiring is possible.

All-Union State Standard IEC 61009-1-2014

The characteristic of time-current response is the response range of the electromagnetic protection.

C – switch operates between 5 and 10 -fold values of the rated current. It is recommended for installation in networks with a mixed load that include moderate starting currents (civil construction, office space).

Rated current – the basic value of the current, in comparison with which the protective actions of the automatic switch occur in case of the load current excess.

The nominal tripping differential current IΔn is the value of the tripping differential current at which the RCCB (residual current device) must operate under specified conditions.

AC type - responds to sinusoidal AC leakage current, it has icon in the form of a sine wave.

Type A - launches in case of simultaneous AC or DC (P.C.) leakage current in the circuit under control or in cases of their gradual increase.

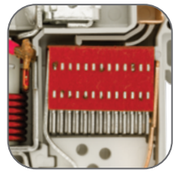
The maximum switching capacity (MSC) is the maximum possible short-circuit current which the circuit breaker can switch off the circuit under its protection and at the same time remain operational.

Rated voltage – the AC voltage at which the machine operates under normal conditions.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.
- Automatic shutdown of the electrical network section in case of overloads and short circuits.
- RCCB (residual current circuit breaker) of type A is used in buildings and residential areas with household electronic equipment (TV, personal computers, adjustable light sources, modern washing machines, etc.).

ADVANTAGES



Arc chutearc quench chamber with 13 plates

Modern electronic board with enhanced protection against pulse interference

Contact status indicator display

Recesses for easy disassembly with the DIN rail. It can be removed with a single screwdriver

Single front panel

Holes for fastening U-shaped bus lines of FORK type

Residual circuit breakers-32 EKF PROxima

DESCRIPTION

WARRANTY 7 YEARS · EAC · Al/Cu · IP20

The residual circuit breaker-32 EKF PROxima is a device which combines the functions of an automatic circuit breaker with a residual cut-off device. If the circuit breaker detects a leakage current (damage) to the ground or an overcurrent (overload or short-circuit current) on the protected section of the network, the device triggers, which leads to disconnection of the protected network. The assortment of Residual current circuit breaker with overcurrent protection -32 is filled with the selective diffusers of Residual current circuit breaker with overcurrent protection -32 of type A and Residual current circuit breaker with overcurrent protection -32 . ALL-UNION STATE STANDARD

The characteristic of time-current response is the response range of the electromagnetic protection.

C – switch operates between 5 and 10 -fold values of the rated current. It is recommended for installation in networks with a mixed load that include moderate starting currents (civil construction, office space).

Rated current – the basic value of the current, in comparison with which the protective actions of the automatic switch occur in case of the load current excess.

The nominal tripping differential current IΔn – is the value of the AC voltage at which the machine operates under normal conditions.

Pickup voltage – the maximum voltage level above which the built-in protection launches.

Selective – specially pre-assigned for a pre-set time limit value of non-disconnection, when the differential current flows.

AC type – responds to sinusoidal AC leakage current, it has icon in the form of a sine wave.

Type A – launches in case of simultaneous AC or DC (P.C.) leakage current in the circuit under control or in cases of their gradual increase.

The maximum switching capacity (MSC) is the maximum possible short-circuit current which the circuit breaker can switch off the circuit under its protection and at the same time remain operational.

The energy limiting class – the disconnection occurs in 1/3 of the half-period (2.5-6 ms).

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.
- Automatic shutdown of the electrical network section in case of overloads and short circuits.

ADVANTAGES

Reset button for indication of leakage current actuation

Recesses on the case for the device cooling

Switching with aluminum and copper wire is possible

Round form terminals with notches for a reliable connection with the conductors

Fixing holes U-shaped bus lines of FORK type

Modern electronic board with enhanced protection against pulse interference

BASIC

Residual current circuit breaker with overcurrent protection-12 EKF BASIC

DESCRIPTION

IP20 · WARRANTY 3 YEARS · Al/Cu · EAC

Residual current circuit breaker with overcurrent protection -12 EKF BASIC are devices that combine the functions of an automatic circuit breaker with a residual cut-off device. If the circuit breaker detects a leakage current (damage) to the ground or an overcurrent (overload or short-circuit current) on the protected section of the network, the device triggers, which leads to disconnection of the protected network. ALL-UNION STATE STANDARD IEC 61009-1-2014.

The characteristic of time-current response is the response range of the electromagnetic protection.
C – switch will work between fivefold and 10 fold values of the rated current. It is recommended for installation in networks with a mixed load that include moderate starting currents (civil construction, office space).

AC type - responds to sinusoidal AC leakage current, it has icon in the form of a sine wave.

Rated current – the basic value of the current, in comparison with which the protective actions of the automatic switch occur in case of the load current excess.

The maximum switching capacity (MSC) is the maximum possible short-circuit current which the circuit breaker can switch off the circuit under its protection and at the same time remain operational.

The nominal tripping differential current I Δn – is the value of the tripping differential current at which the RCCB (residual current device) must operate under specified conditions.

The energy limiting class - limits the short-circuit current within 1/3 of the half-cycle.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.
- Automatic shutdown of the electrical network section in case of overloads and short circuits.

ADVANTAGES

Switching with aluminum and copper wire is possible

Reliable and a proven design

Operational comfort and reliability of use

Quality meets the international standards

Budget economy of 10-50% in comparison with European brands

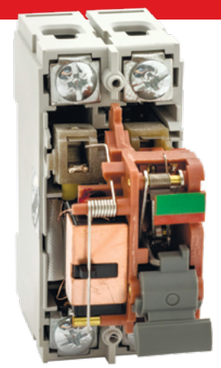
EKF PROxima residual current circuit breaker (RCCB) VD-100 4,5

DESCRIPTION

IP20 · WARRANTY 7 YEARS · Al/Cu · EAC

The residual current circuit breaker (RCCB) VD-100 EKF PROxima is a new generation of devices. It protects a person from electric injuries in case of touches towards the open wiring or electrical equipment under voltage, and prevents fires that occur due to prolonged leakage currents and short-circuit currents that develop from them. In order to protect the consumers against overload and short-circuit currents, RCCB must be used in conjunction with automatic switches. Capability of operation at -25 °C. Selective performance.

ALL-UNION STATE STANDARD R 51326.1-99 (IEC 61008-1-96)



Rated RCCB (residual current circuit breaker) – the maximum current which the RCCB can withstand for a long period of time, while maintaining its work capacity and safety features.

Rated conventional short-circuit current Inc- indicates the maximum short-circuit current.
The RCCB can withstand the load and still remain functional.

The nominal tripping differential current I Δn – is the value of the tripping differential current at which the RCCB (residual current device) must operate under specified conditions.

The energy limiting class - limits the short-circuit current within 1/3 of the half-cycle.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.
- RCCB type A is used in buildings and residential areas with household electronic equipment (TV, personal computers, adjustable light sources, modern washing machines, etc.).

ADVANTAGES

Contact elements from oxygen-free copper with content of silver

Indicator display for contact status

Two-position DIN rail clamp

Housing made of flame-retardant plastic

Switching with aluminum and copper wire is possible

Notched terminals for reliable connection to conductors

BASIC

Residual current circuit breaker (RCCB) VDT-40 EKF BASIC

DESCRIPTION

IP20

WARRANTY 3 YEARS

Al/Cu

Residual current circuit breaker (RCCB) are designed to protect a person from electric injuries in case of touches towards the open wiring or electrical equipment under voltage, and prevents fires that occur due to prolonged leakage currents and short-circuit currents that develop from them. In order to protect the consumers against overload and short-circuit currents, RCCB must be used in conjunction with automatic switches.

All-Union State Standard R 51326.1-99 (IEC 61008-1-96)

Rated RCCB current – the maximum current which the RCCB can withstand for a long period of time, while maintaining its work capacity and safety features.

Rated voltage Un – the actual value of the voltage at which the RCCB has full work capacity.

The nominal tripping differential current IΔn is the value of the tripping differential current at which the RCCB must operate under specified conditions.

APPLICATION

- Protection of people from electric injuries if they accidentally touch the open conductive parts of the electric installation;
- Protection of electrical equipment (EE) in case of damage to the insulation of conductors and failures of electrical equipment (EE);
- Prevention of inflammations and fires arising from the flow of leakage currents and the resulting short circuits, ground faults and earth faults.

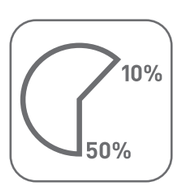
ADVANTAGES

Switching with aluminum and copper wire is possible

Reliable and a proven design

Operational comfort and reliability of use

Quality meets the international standards



Budget economy of 10-50% in comparison with European brands

Surge arrester OPV EKF PROxima

DESCRIPTION

IP20

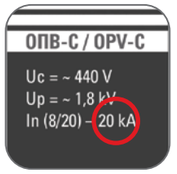
WARRANTY 7 YEARS

Al/Cu

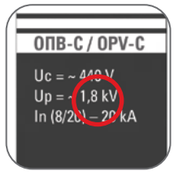
SA (Surge arrester) OPV EKF PROxima is designed to limit transient overvoltages and divert current pulses in 50 Hz alternating current networks. Aluminum and copper commutation is possible.

ALL-UNION STATE STANDARD R 51992-2011
(IEC 61643-1: 2005)

Maximum continuous operating voltage Uc – the maximum voltage of the AC or DC current value, which is applied for a long time to the terminals of the SPD (Surge protection device).



Rated discharge current In is the peak value of the current flowing through the SPD (Surge protection device), with a waveform of 8/20 microseconds.



The protection voltage level Up is a parameter which characterizes the SPD (Surge protection device) in terms of the voltage limitation at its terminals, the value of which is selected from among the preferred values. This value must be higher than the highest of the measured limited voltages.

Type and class of lightning arrester
Type 1 - withstands direct lightning discharge.
Type 2 - serves as the second level of lightning protection and protects electrical networks.
Type 3 - designed to protect the equipment and household appliances.

APPLICATION

The voltage selector is designed for protection:
- against lightning overvoltages of electrical installations, arising from the direct lightning strike to the external circuit, with indirect lightning strike (within a cloud, between clouds or to nearby objects), lightning to the ground;
- from switching overvoltages of electrical installations that occur as a result of:
  - switching in high-power energy delivery systems;
  - switching of power supply systems near the electrical installations;
  - resonant voltage fluctuations within the electrical circuits;
  - damages in systems, for example, when short-circuit to earth, arc discharges.

ADVANTAGES

Option of connection by means of comb and U-shaped bus line

Auxiliary contact element that can be connected

Notches on the contact elements

Wear indicator

Replaceable varistor module

They can withstand at least five launches at rated discharge current and at least two – at