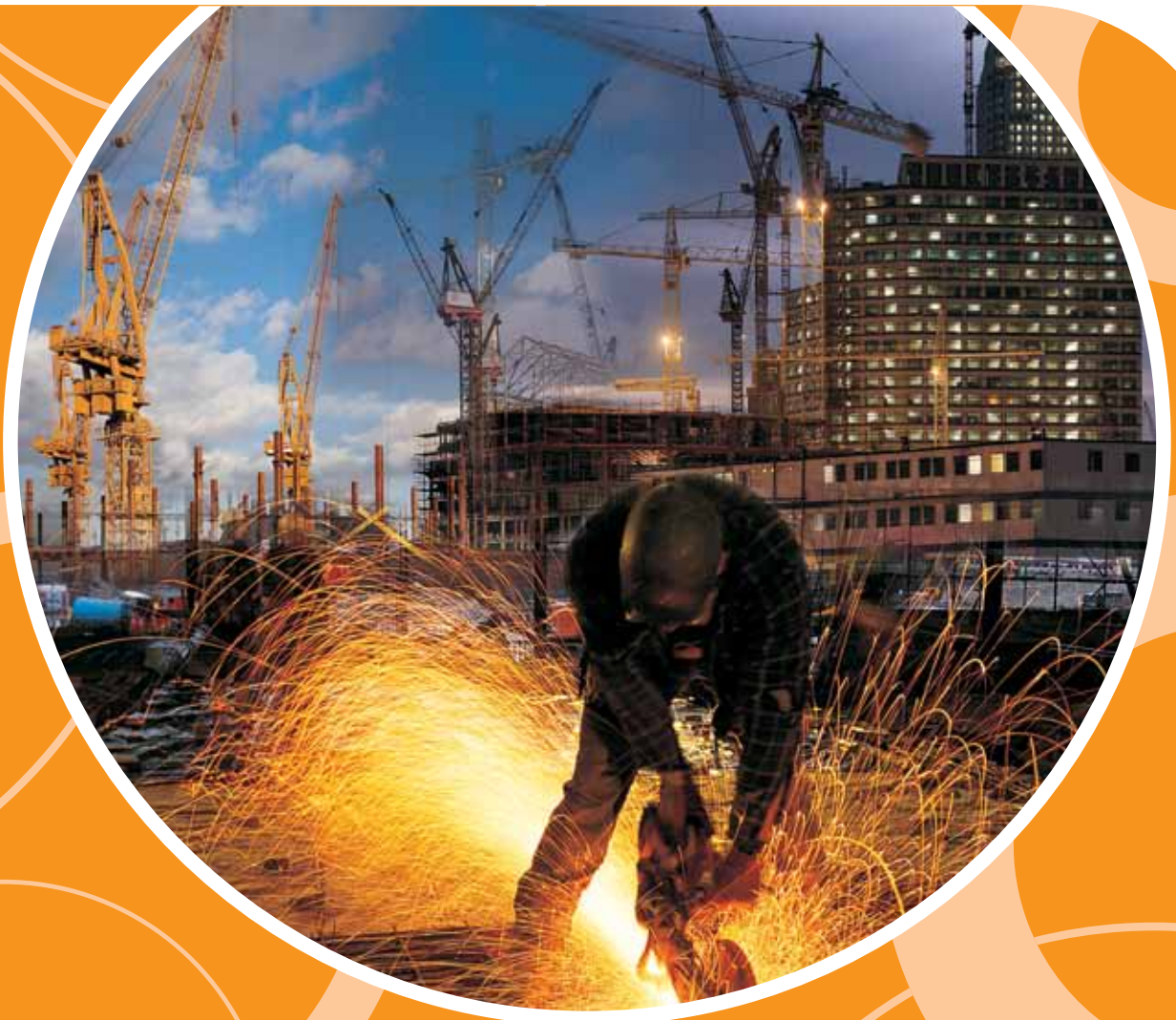
Industry Installations



Iskra®
Iskra MIS

Are You Looking for Solutions

Owing to its specificity, the industrial environment represents considerable barriers to electrical installations. We are faced with different problems and demands related to transmission, metering, switching and protection of electrical installations as well as efficient control of electrical devices and equipment.

SECURITY

- Overloads and short circuits are dangerous for installations
- Electronic devices are very sensitive to different incidents in the air and electrical power system
- Large currents present a permanent danger for badly designed and old electrical installations

CONTROL

- Switching of different loads of great power requires special switching devices
- Industrial processes do not allow mains failure since it causes great loss of income to the companies
- Different needs and demands for electric motors control have been created
- Modern electrical installations require efficient electric energy measurement and high quality analysis of electrical power system

OPTIMIZATION

- The needs for automation of industrial plants are growing from day to day
- Electric energy consumption and price are in constant increase
- The latest standards and qualified personnel are required for designing and implementation of electrical installations

For Your Comfort

Electrical installations in industry are complex installation systems connecting demanding electrical devices and equipment. Specially adapted products and solutions ensure modern designing, implementation and maintenance of electrical installations which surmount international and national directives. Their technical characteristics and solutions shall always be a step ahead the competition and current standard requirements.

Products and solutions for electrical installations in industry shall enable the system operation so that:

- Interruptions in electrical power system are prevented.
- Overheating of elements is prevented.
- Failures in expensive electronic equipment are prevented.
- Safety of electrical installations, devices and equipment is ensured.
- Continuous operation of industrial processes is ensured.
- Electric energy quality control is ensured.
- Economical automation of industrial buildings is enabled.
- Efficient use of electric energy is enabled.
- Modern designing and implementation of electrical installations are enabled.

Reasonable and environment-friendly use of electric energy without environmental burden after product life is made possible by the right choice of high quality products.

We Take Care

SAFETY PRECAUTIONS

Functionality of our products is not all that is important for our customers. Our products also have to be safe, made of quality materials and environmentally friendly.

All our products are compliant with standards and ensure complete protection of electrical installations, buildings and people. For the majority of products we were awarded certificates of conformity with standards, such as: UL, CSA, SEMKO, NF, VDE, GOST

CONCERN FOR THE QUALITY

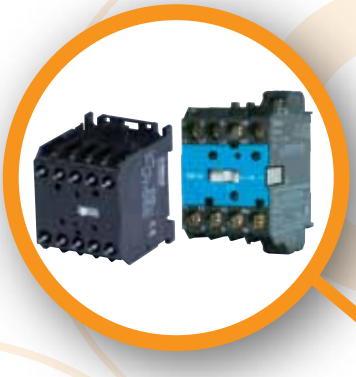
Our products are made of high quality materials and are 100% functionally tested. We constantly improve our products in order to adapt them to market needs. Innovative solutions are a driving force of the company.

CARE FOR THE ENVIRONMENT

When developing new products and packing, we choose environment friendly materials which can be recycled or at least disposed safely. We also introduce environment-friendly technological procedures and strive to reduce waste, energy and water.

Solutions for Your Electrical Instalations

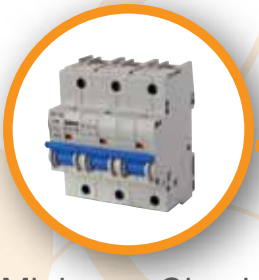
Mini Contactors
up to 5.5 kW



Thermal Overload Relays

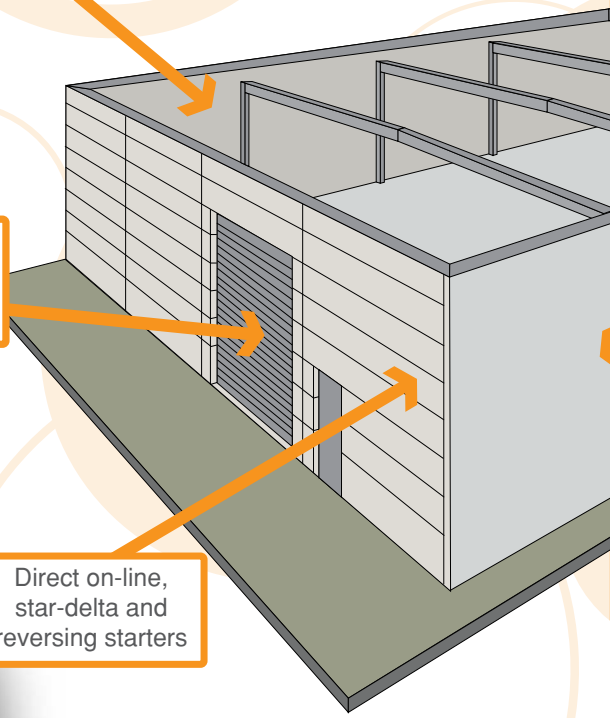
AC or DC switching of loads for connection with screws, fast-on and soldering on PCB

Overload protection to prevent overheating



Miniature Circuit Breakers
up to 125 A

Branch circuits overload and short-circuit protection industrial electrical installations



Direct on-line, star-delta and reversing starters

Motor Starters

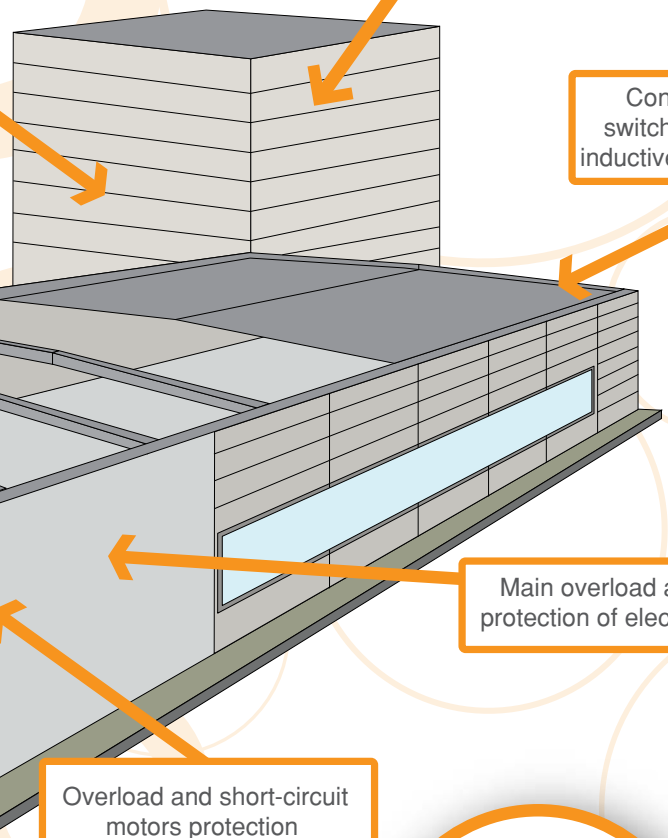
Here They Are !

Surge Protection Devices

Protection electrical and electronic equipment against transients

Motor Contactors
up to 335 kW

Control of motors and switching others resistive, inductive and capacitive loads



Main overload and short-circuit protection of electrical installations

Moulded Case Circuit Breakers
from 16 to 1250 A

Overload and short-circuit motors protection

Motor Protection Switches
range: 0.1 - 32 A

Moulded Case Circuit Breakers

SN

Features
Range from 16 A to 1250 A
3- and 4-pole versions
30 kA /36 kA /50 kA /70 kA breaking capacity
Protection with thermal-magnetic and electronic release
Wide range of internal and external accessories
CB approved

Use:
Moulded case circuit breakers are assurance for your electrical installations and equipment. They are designed to reliably protect all installation system against overloads and short-circuits.
(A typical constituent part of electrical energy distribution fields in transformer stations, protection of electric motors, industrial distribution boxes, etc.).

SN Applications

Motor Contactors

KNL6

Features
Width: 45 mm
4 to 15 kW (400 V) . . . AC3
UL, CSA (except for KNL18), GOST
AC, DC
Accessories

Use:
Contactors are used for switching electric motors and other resistive, inductive and capacitive loads.
(Electric motors, welders, agricultural machinery, air-conditioning machines, pumps, industry, etc.).

KNL Applications

Motor Contactors

KNL 43 - KNL 63

Features
Width: 45 mm
4 to 15 kW (400 V) . . . AC3
UL, CSA, GOST
DC
Accessories

Use:
Contactors are mainly used for switching electric motors. (Pumps, industry, compressors, lifting equipment, systems for energy alternative sources,industry, etc.).

KNL 80 - KNL 110

Features
Width: 75 mm
41- 61 kW (400 V) . . . AC3
3-pole versions
UL, GOST
Accessories

Use:
Contactors are used for switching electric motors and other resistive, inductive and capacitive loads. Lifting equipment, pumps, fans, industry, etc.).

KNL Applications

Motor Contactors

KNL 80 - KNL 630/1000

Features
50 - 335 kW (400 V) . . . AC3
KNL630/1000... 600 kW AC1
3-pole versions
UL, GOST
Accessories

Use:
Contactors are used for switching electric motors and other resistive, inductive and capacitive loads. (Mills, fans, lifting equipment, transport systems, pumps, shipyards, ironworks, industry, etc.).

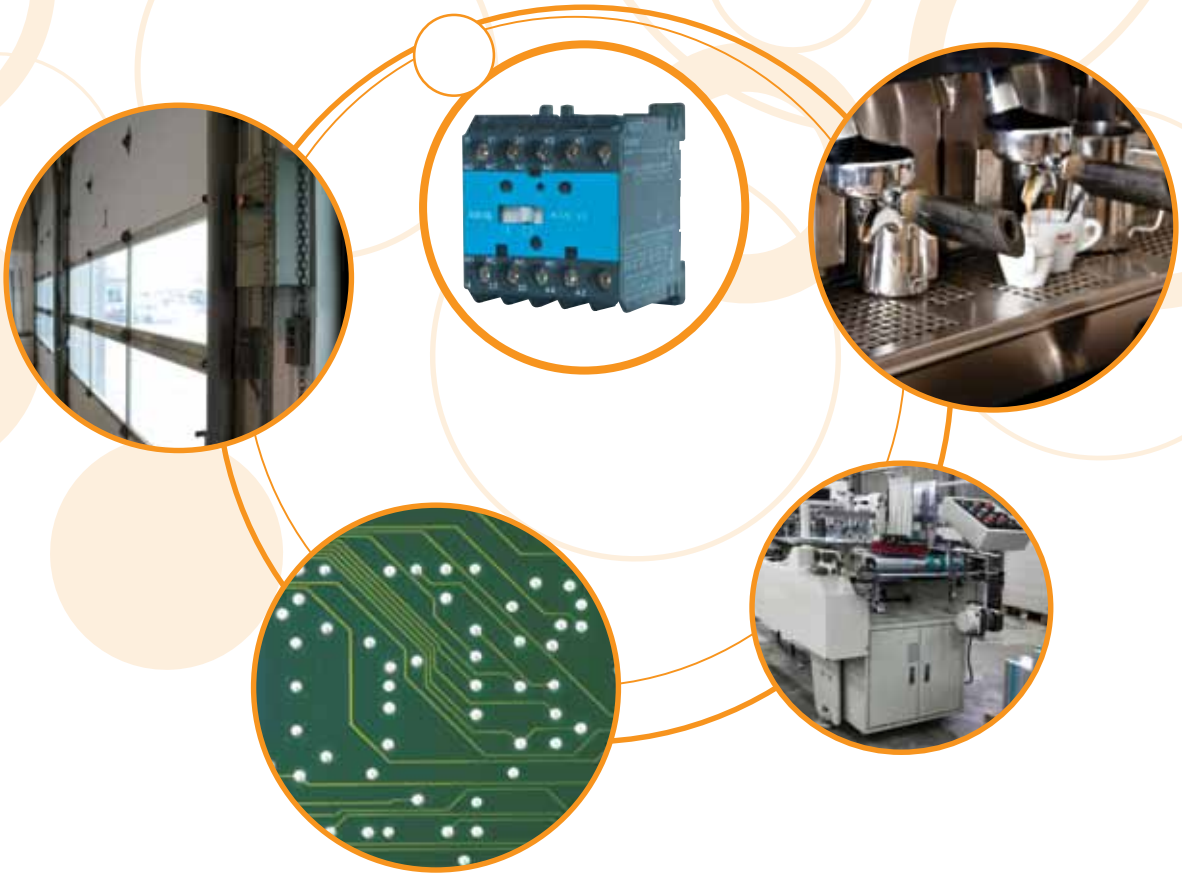
Mini Contactors

K03, K07

Features
Width: 35 and 45 mm
2.2 to 5.5 kW (400 V) . . . AC3
UL, CSA, GOST
AC or DC
Accessories

Use:
Contactors are used for switching electric motors and other resistive, inductive and capacitive loads. (Door drives, small pumps, household appliances, industry, etc.).

K0 Applications



Motor Protection Switches

MS25

Features
Range: 0.1 . . . . 25 A
Width: 45 mm
UL, SEMKO
VERSIONS: **MS25** with thermal and magnetic short-circuit release for 3-phase consumer, **MS25** with thermal overload release for 3-phase consumer, **MS20, MST20** for single-phase consumer
Reaction to phase failure
Accessories

Use:
Start-up and protection of electric motors (industry, small machines, external use, agricultural machines, compressors, repair shops, etc.).

MS18

Features
Range: 0.1 . . . . 18 A
Width: 45 mm
Characteristics: - with thermal and magnetic release, - automatic switch-off at over-current with thermal or magnetic release, - control with under-voltage release or shunt release.
Accessories

Use:
Start-up and protection of electric motors (80% of motors have rated power for which switches up to 18 A are used).

Motor Protection Switches

MS32

Features
Higher possible setting current: 32 A instead of 25 A
Higher short circuit breaking capacity because of different contact system solution: MS32 till 10 A has 100 kA higher ranges 25 kA,
More additional moduls like auxiliary contacts HSV and relative auxillary contacts block for mounting on top of switch,
Additional moduls are built on switch without opening the cover of switch which prevent unskilled assembly space ,
Height of MS32 is smaler than MS25, so you can mount it in distribution boards and where is problem with space,
Accessories

Use:
Start-up and protection of electric motors (industry, small machines, external use, agricultural machines, compressors, repair shops, etc.).

MS Applications

MOTOR STARTERS - OPEN VERSIONS

Combinations for Reversing

Combination Starters

Star-Delta Motor Starters

Use:
Start-up and overload protection of electric motors. They can be mounted to DIN rail 35/7 mm , EN60715, units are completely wired (machine tools, repair shops, industry, switching cabinets, etc.).

Contactor Combinations

DIRECT ON-LINE STARTERS

Features
Degree of protection IP55 and IP65
External assembly
up to 15kW rated power
A cover with keys, no wires
Standard combinations: contactor + motor protection switch contactors + thermal overload relay with or without main switch

Use:
Mainly for start-up and overload protection of electric motors (machine tools, agriculture, repair shops, etc.).

REVERSING STARTERS

Features
Degree of protection IP65
External assembly
up to 15kW rated power
A cover with keys, no wires
Standard combinations: contactors + thermal overload relay with or without main switch

Use:
Mainly for start-up and overload protection of electric motors in the conditions: up-down, left-right, forward-back, etc. (lifting equipment, repair shops, conveyor belts, industry, sawmills, machine tools, etc.).

Contactor Combinations

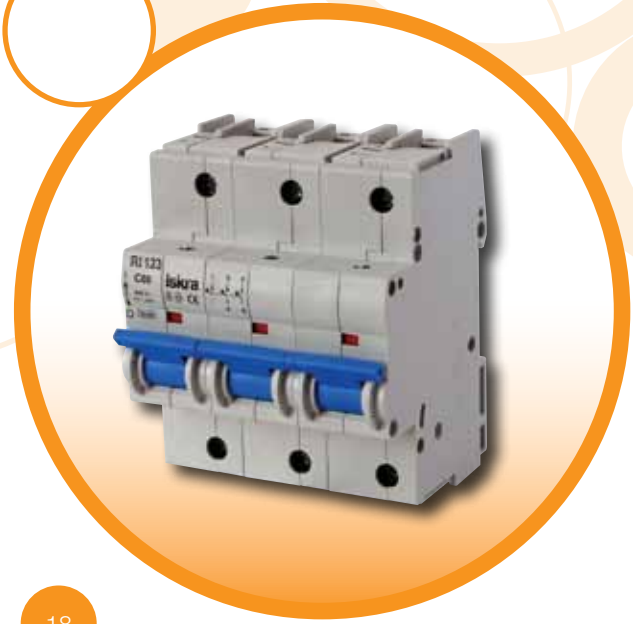
STAR-DELTA STARTERS

Features
Degree of protection IP65
External assembly
up to 25kW rated power
A cover with keys, no wires
Standard combinations:
contactors + thermal overload relay
with or without main switch

Use:
Mainly for start-up and overload protection of electric motors in star-delta connection (machine tools, repair shops, compressors, sawmills, mills, pumps, machine tools, etc.).

Miniature Circuit Breakers

RI 120



Features
Rated currents : 80 . . . 125 A
Tripping chararacteristic: B, C
Rated short-circuit capacity: 10 kA
Number of poles: 1,2,3,4,1+N,3+N
AC versions

Use:
They are used for protecting house and industrial installations. (Constituent parts of distribution boxes in industry and other types of installations, etc.).

Notes

Notes

Iskra®
Iskra MIS

Ljubljanska c. 24a, SI - 4000 Kranj, Slovenia
Tel.: +386 4 23 72 112, Fax: +386 4 23 72 129
E-mail: info@iskra-mis.si, www.iskra-mis.si

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