
Ring Core Current Transformers for indoor applications

Product overview





ABB
ITs & Sensors

NEPOVOLANÝM
VSTUP ZAKÁZÁN

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ABB - a global technology leader

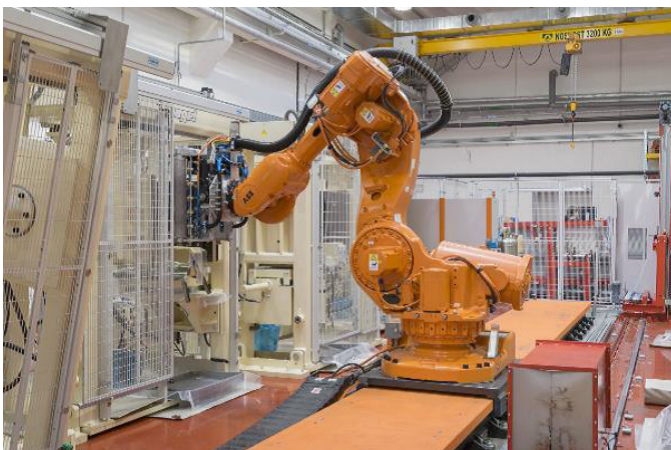
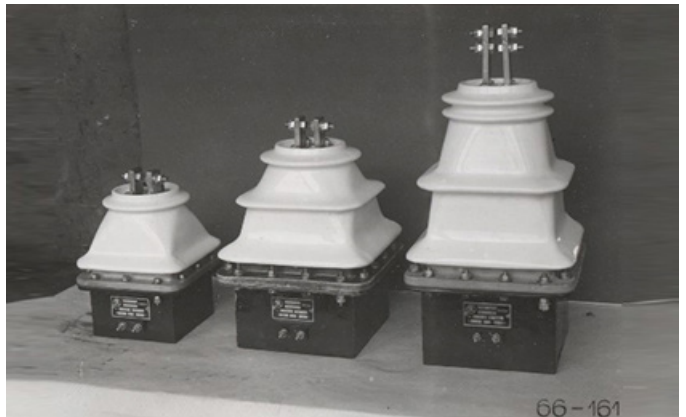
Foundation of the factory in Brno dates back to 1887. During its more than 120-year-history it gained deep knowledge and a strong position in the electro-technical field and became known all over the world. The production of transformers in the factory in Brno started in 1919. First transformers were oil insulated, production of transformers with epoxy insulation started already in 1952.

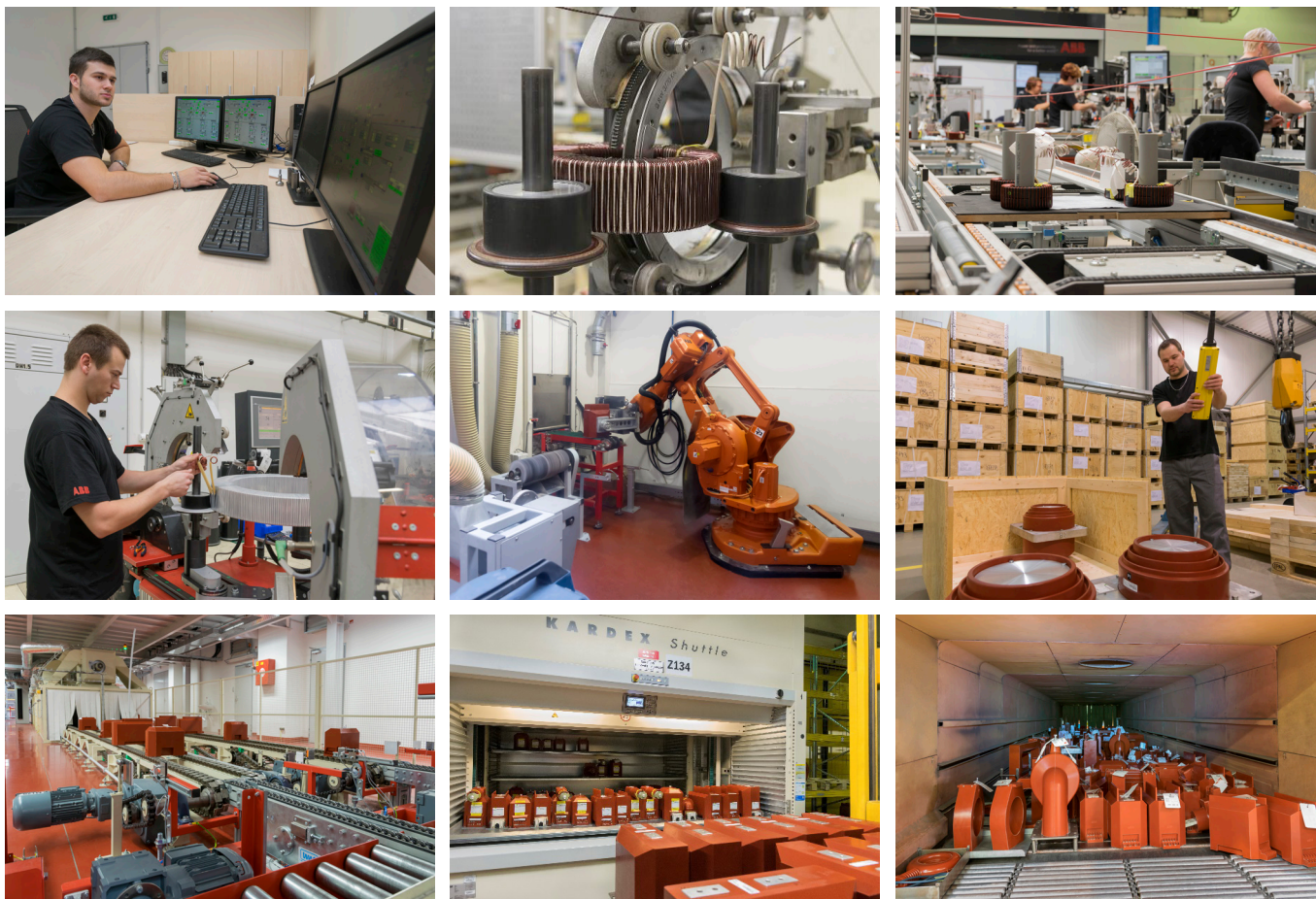
The production facility in Brno joined the ABB Group in 1993; since that time the production has been continuously developing and nowadays is one of the world's largest Instrument Transformers and Sensors production plant with an annual production of more than 150,000 units applications worldwide.

Thanks to the automation and investments, ABB in Brno became the technology leader using the most modern production systems and concepts, such as automated production lines and testing.

Products gained their worldwide reputation in power distribution applications thanks to more than 2,000,000 installed units.

As a result of continuous research in ABB's Brno development center are products with latest design. As such, the center is committed to the pursuit for new opportunities, new technologies and to improve processes. One of the areas of the fully equipped development center is an independent testing laboratory used for type testing.





Additionally, the factory has its own testing laboratory with the latest equipment for precise measuring of all units, which are routinely tested according to required standards like IEC, CSN, GOST, BS, AS, ANSI. This laboratory is also certified by the following national bodies allowing ABB to issue metrology verification certificates when requested by customers:

- Czech Metrology Institute (Czech Republic)
- BEV (Austria)
- Gost Certificate (Russia)

ABB's Instrument Transformers and Sensors factory in Brno offers a wide range of Conventional Instrument Transformers as well as Electronic Instrument Transformers (Sensors).

Our conventional portfolio includes more than 100 types of products for indoor applications in medium voltage systems for voltages from 0.72 kV up to 40.5 kV.

The main line of ABB instrument transformers is designed in accordance with DIN 42600, which offers compatibility with a wide portfolio of applications. The portfolio reflects the market trends and is continuously developing according to the customers' requirements.

ABB in Brno has been certified in the following quality management systems ensuring that products that come out of the factory are of the highest quality:

- ISO 9001
- ISO 14001
- OHSAS 18001

Transformers for residual current measurement

KOLMA

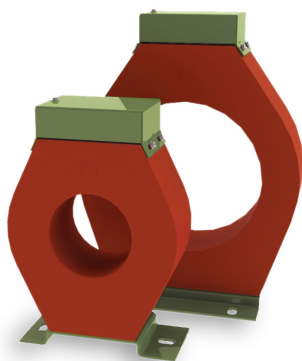
The transformers KOLMA are suitable for measuring of the sum of three phase current in a three phase cable. Transformers are usually used together with earth-fault protection relay.

Characteristic

- Available diameters: 58, 90, 100, 180 mm
- Test winding available
- Multiratio tap secondary available
- Mounting by base plate
- Transformer height: up to 80 mm
- Up to 5 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 kV
- Primary current: 50 - 1 250 A (higher values on demand)
- Rated short - time thermal current: up to 60 kA /1 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



KOLA

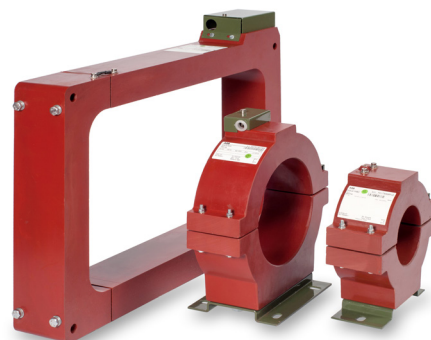
A ring core current transformers KOLA are suitable for wide range of applications. They are mainly used for residual current metering together with earth-fault protection relay. Thanks to its construction the transformer can be installed without disconnecting the cable.

Characteristic

- Available diameters:
 - 100, 180 mm ring type
 - 497 x 300 mm rectangular type
- Openable type (split core)
- Mounting:
 - by base plate for ring types
 - by the fixation point in the current transformer body for rectangular
- Transformer height:
 - 90 mm rectangular type
 - 85 mm ring type
- 2 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 kV
- Primary current: 50 - 1 250 A (higher values on demand)
- Rated short - time thermal current: up to 60 kA /1 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



IFW

Earth fault transformers, three-phase, with resin insulation, mainly used for residual current metering together with earth-fault protection relay. Thanks to its construction the transformer can be installed without disconnecting the cable.

Characteristic

- Openable type (split core)
- Inner diameter: 105 mm
- Test winding available
- Responsive to zero current (earth fault current) from very low values approx. 0.1 A
- Compatible with earth fault protection relays of any type
- Compliant with WTO-99/A10-041 standard

Ratings

- Highest voltage for equipment: ? kV
- Primary current: 100 or 120 A
- Rated short - time thermal current: up to 10 kA /5 s
- Secondary current: 1 A
- Frequency: 50 or 60 Hz



IO1s

Earth fault transformers, three-phase, with resin insulation, mainly used for residual current metering together with earth-fault protection relay.

Characteristic

- Inner diameter: 101 mm
- Responsive to zero current (earth fault current) from very low values approx. 0.1 A
- Compatible with earth fault protection relays of any type
- Compliant with WTO-99/A10-041 standard

Ratings

- Highest voltage for equipment: ? kV
- Primary current: 100 or 120 A
- Rated short - time thermal current: up to 10 kA /5 s
- Secondary current: 1 A
- Frequency: 50 or 60 Hz



Indoor ring core current transformers

KOKM 06

The KOKM transformers are suitable thanks to its wide variants of inner dimensions for majority of the switchgear applications especially for the measurement of residual current in application with multiple cables.

Characteristic

- Available diameters: 150 x 500 mm to 450 x 650 mm
- Mounting by the fixation point in the current transformer body
- Transformer height: 80 mm
- Up to 4 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 kV
- Primary current: 50 - 2 000 A
- Rated short - time thermal current: up to 100 kA /1 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz

KOKM 1

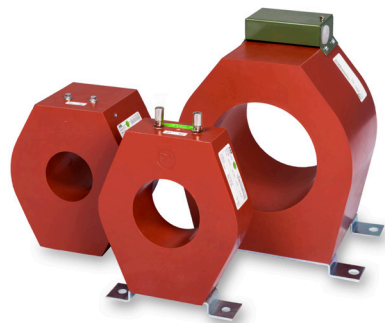
The KOKM transformers are suitable thanks to its wide variants of inner dimensions for residual current measurement in majority of the switchgear. They are used for wide range of applications especially for the measurement of residual current in cables.

Characteristic

- Available diameters: 33 - 500 mm
- Secondary reconnection available
- Variant with sealable secondary terminal available
- Mounting by baseplate (except T and W type)
- Transformer height: from 60 to 300 mm
- Up to 6 secondary terminals

Ratings

- Highest voltage for equipment: 1.2 kV
- Primary current: 50 - 10 000 A
- Rated short - time thermal current: up to 100 kA /1 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



KOKM for GIS panels

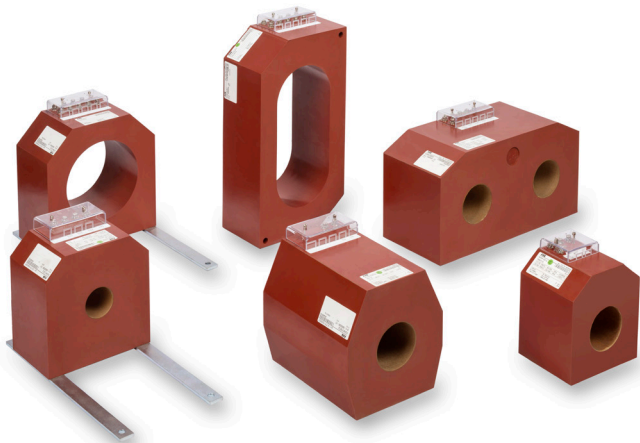
The ring core current transformers KOKM are suitable for the measurement of phase current. The inner diameter is designed to fit on the medium voltage bushing.

Characteristic

- Available inner diameters: 50 - 155 mm for ring types, 70/212, 154/309 and 130/280 for oval window types
- Secondary reconnection available
- Variant with sealable secondary or cable terminal available
- Mounting by fixation points in the current transformer body or in the base plate (depending on type)
- Transformer height from 60 up to 300 mm
- Up to 10 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 or 1.2 kV
- Primary current: 50 - 2 500 A (higher values on demand)
- Rated short - time thermal current: up to 63 kA /1 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



KOKM 072 for RMU

A current transformer with plastic housing is suitable for the measurement of phase current. Version with specially designed secondary current of 0,075 A is intended for use together with ABB REJ 603 and Woodward WIC1x and WIB1x self-powered protection relays.

Characteristic

- Available diameters: 42, 50, 60 mm
- Mounting by fixation points in a plastic housing
- Variant with sealable secondary terminal available
- Up to 6 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 kV
- Primary current: 7.2 - 600 A (higher values on demand)
- Rated short - time thermal current: up to 25 kA /3 s
- Secondary current: 0.075 A, 1 A, 5 A
- Frequency: 50 or 60 Hz



Indoor special current transformers

KORI

A current transformer with plastic housing are suitable for assembling on the cable, busbar, bushing. KORI transformers are suitable for the measurement of phase current and are used for the air insulated switchgear portfolio.

Characteristic

- Available diameters: 59, 70, 90 mm
- Reconnectable on secondary side
- Mounting by fixation points in a plastic housing
- Sealable secondary terminal available
- 6 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 kV
- Primary current: 50 - 2500 A
- Rated short - time thermal current: up to 50 kA /3 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



BD 00

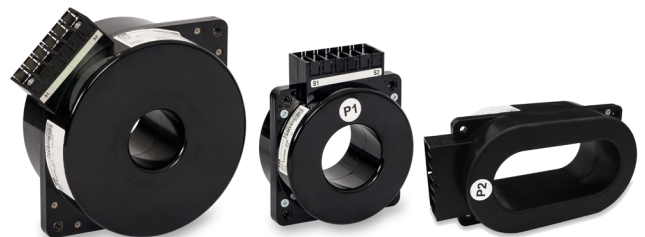
A current transformer with plastic housing are suitable for assembling on the insulated and shielded cable, busbar, bushing. BD transformers are suitable for the measurement of phase current and are used for the air insulated switchgear portfolio.

Characteristic

- Available ring type diameters: 59, 69, 70, 85 mm
- Available oval type diameter: 71x171 mm
- BD 00 A2 for two cables per phase installations
- Reconnectable on secondary side
- Mounting by fixation points in a plastic housing
- Sealable secondary terminal available
- 6 secondary terminals

Ratings

- Highest voltage for equipment: 0.72 kV
- for type A, B is 50 - 1250 A, for type C is 100 - 1250 A, for BD 00 is 100 - 2500 A
- Rated short - time thermal current: up to 31.5 kA /3 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



Current transformers for oil-immersed transformers

KOLT

The KOLT transformers are specially designed for to be mounted inside the power transformer poles. They have been tested in oil environment and designed for phase current measurement. The KOLT transformers are tested in oil immersed environment according to ASTM D 3455-02 and CSN EN 60422: 2007

Characteristic

- Available diameters: 30 - 1 200 mm, higher on demand
- Reconnection on secondary side available
- Transient classes available
- Transformer height up to 250 mm (higher on demand)
- Version without or with aluminium frame available
- Secondary outlets, number of secondary outlets depends on number of coils and reconnections

Ratings

- Highest voltage for equipment: 0.72 kV
- Primary current: 100 - 5 000 A (higher values on demand)
- Rated short - time thermal current: up to 100 kA /1 s
- Secondary current: 1 or 5 A
- Frequency: 50 or 60 Hz



CONTACT US

ABB s.r.o.
ELDS Brno
Videnska 117, 619 00 Brno,
Czech Republic
Tel.: +420 547 152 021
+420 547 152 854
Fax: +420 547 152 626
E-mail: kontakt@cz.abb.com

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