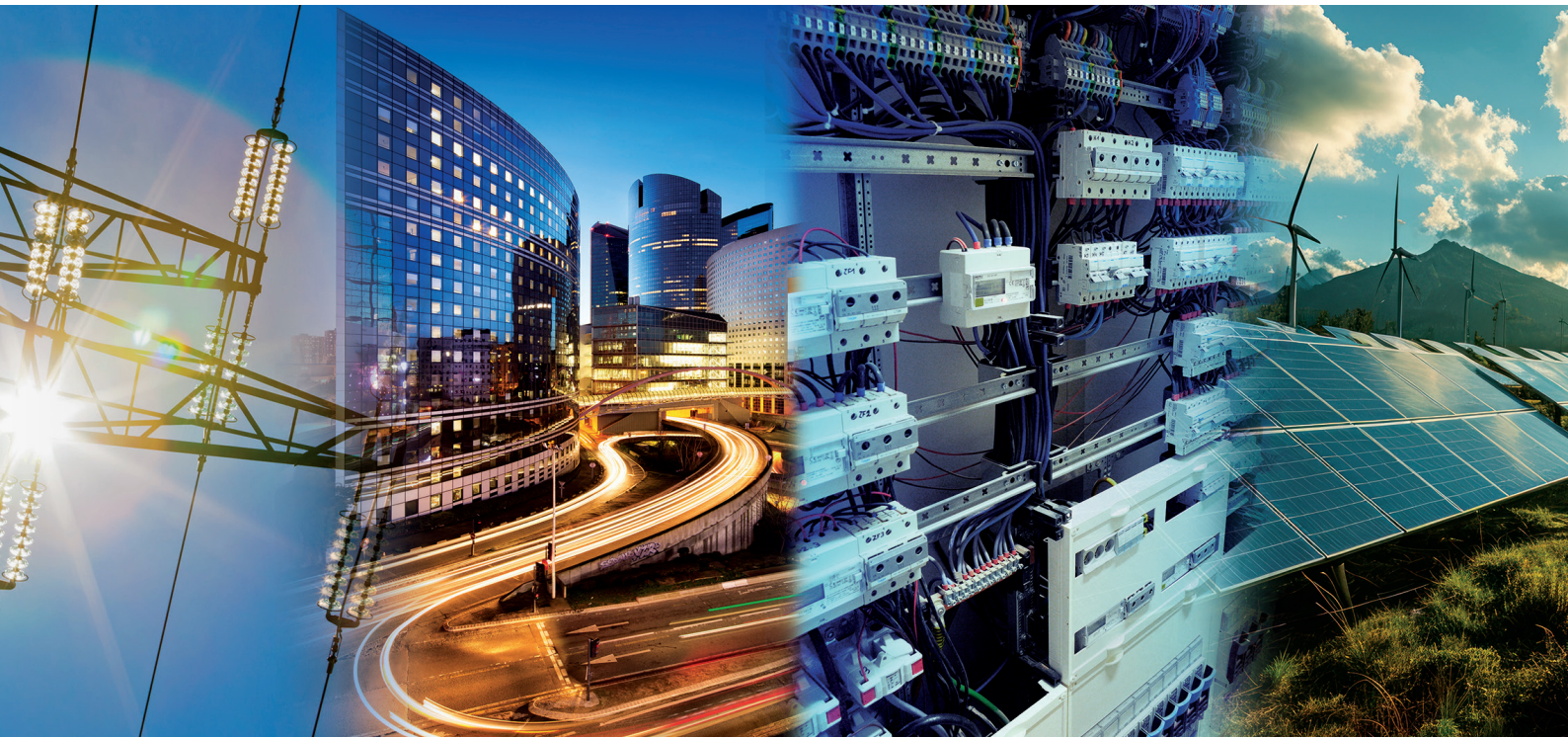


Reliable energy measuring

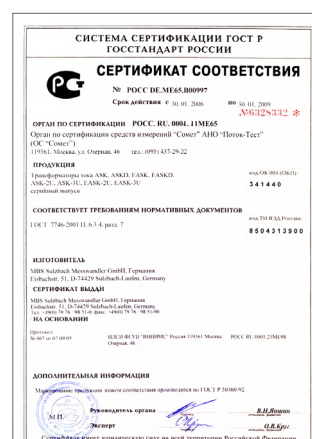
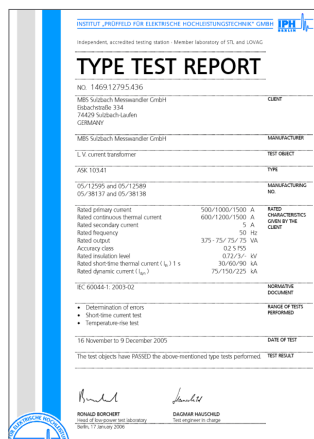


Product Portfolio

www.mbs-ag.com

MBS has all important international approvals and certifications

- UL certificate (Current transformer series CTB)
- IPH (Institute „Prüffeld für elektrische Hochleistungstechnik“) approval
- ISO 9001:2015 and ISO 50001:2011 certificate
- PTB (Physikalisch-Technische Bundesanstalt) approval
- GOST certificate
- International approvals – Switzerland, Austria, Russia, Hungary, Czech Republic, Bulgaria, Romania, Slovakia and further countries



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Low-voltage current transformers



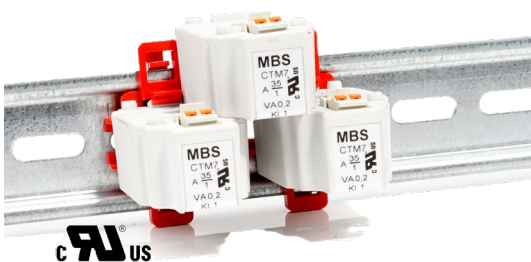
Plug-in current transformer ASK / ASR / WSK

- For various busbar and cable sizes
- Used mainly in switch cabinet and plant construction
- For currents from 1A to 5000A



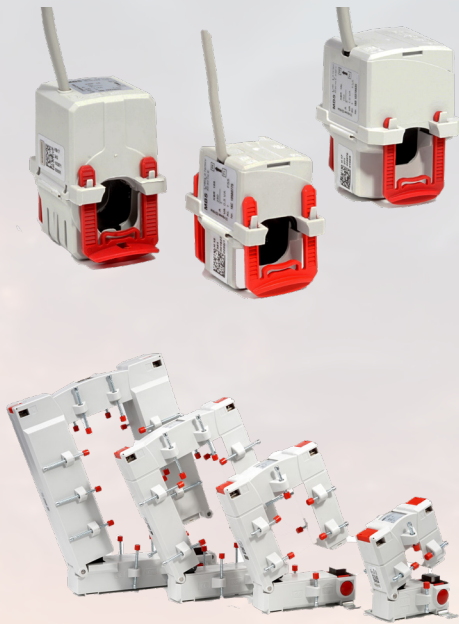
Plug-in current transformer CTB

- For various busbar and cable sizes
- Used mainly in switch cabinet and plant construction
- Screw-free connection technology, Cage Clamp®
- With UL approval



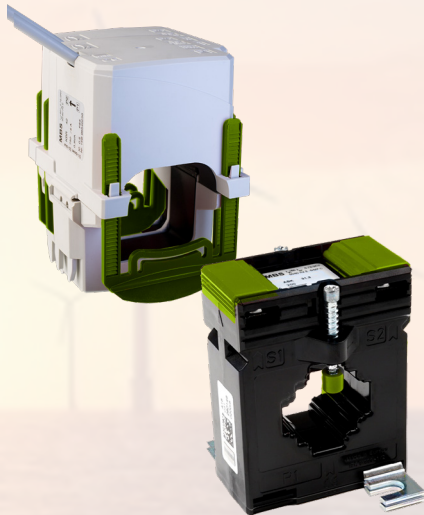
Mini current transformer CTM 7

- For primary currents between 32 A and 64 A
- Used mainly in switch cabinet and plant construction e.g. charging stations
- Connection via removable connection terminals
- With UL approval



Split-core transformer KBR/KBU

- Different designs for various busbar and cable
- Used mainly in switch cabinet and plant construction
- For retrofitting
- No splitting/cutting of the primary current circuit



Low-power current transformer KS

- Low losses for low consumption current measurement
- Can be used for all common universal measuring devices
- Output signals: 22.5 mV, 150 mV, 225 mV, 333 mV
- New technology in proven housings - over 50 designs



Billing transformer ECTB/EASK

- Current transformer for billing measurement
- High accuracy classes
- Our own testing centre
- Therefore short delivery times

High current transformers



High current transformer ASKG

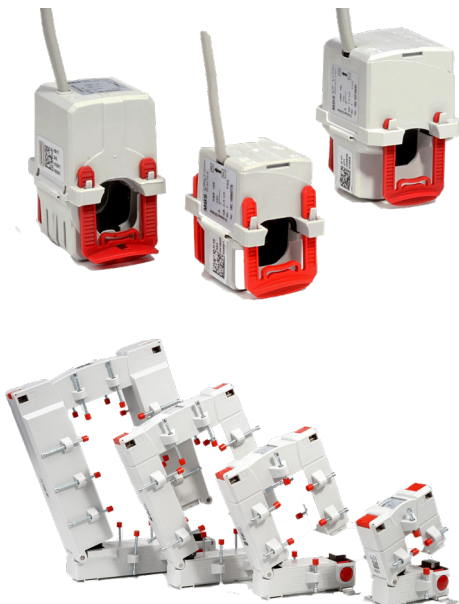
- External-field-compensated current transformer
- For primary currents between 3,000 A and 8,000 A
- High accuracy classes
- Used in wind energy

Harmonics measurement



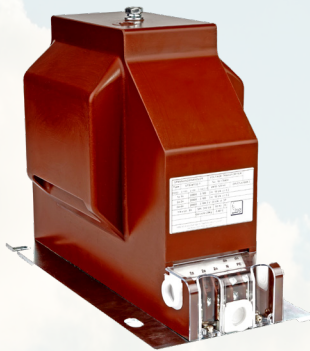
Harmonics measurement XCTB

- Measurements up to 20 kHz
- Used mainly by utility / grid operator and industry
- For compensation plant
- For use in networks distorted by harmonics
- Power quality measurement



Harmonics measurement XKBR/XKBU

- For retrofitting in networks distorted by harmonics
- Used mainly by utility / grid operator and industry
- Measurements up to 20 kHz
- Power quality measurement



Medium voltage transformer CTS/VTs

- Power quality measurement
- Frequency-optimised model, available with one or more cores or windings

Low-voltage voltage transformers



Low-voltage voltage transformer VTLS/VTLD

- Particularly voltage-resistant and highly efficient
- Class-accurate harmonics transmission up to 20 kHz
- Single- and two-pole insulated
- For voltages up to 1,000 V

Current transformer accessories



- Copper rail/pipe
 - Mounting bracket
 - Quick Fix
 - Clamping jaws, clamping module
 - Sealed shutters, anti-twist device
 - Fastening material
- ...and much more!

Medium voltage transformers



Medium voltage transformer CTS/VTs

- Slim design according to DIN 42600-8/9
- For operating voltages up to 36 kV
- For measurement, protection, or billing purposes
- Also available as multi-core transformer
- Self-powered transformer up to 2,000 VA



Cast resin transformer, solid and split-core CTR/CTO

- Split-core transformer for indoor use
- For measurement and protection purposes
- Many variants possible, thanks to modular construction
- Primary currents between 30 A and 5,000 A



Medium voltage sensors VAP/VSP

- Mainly installed in MV Substation
- Design suitable for all commercially available T-plugs
- Class-accurate transmission
- Extremely simple installation and retrofitting of voltage measurements



Medium voltage insulators

- Design as per DIN IEC 60273
- Cast resin in different sizes: 12 kV, 24 kV and 36 kV
- For in- and outdoor use
- Customer-specific cast resin parts are also available

Measuring transducer



Measuring transducer SWMU

- Monitoring, controlling and recording
- Multiple devices can be connected to the output
- Used for energy generation, distribution and control panels
- Reduced assembling effort



Measuring transducer MU

- For AC current, voltage, frequency, phase angle, power factor, effective power, reactive power, direct current and direct voltage
- With or without power supply
- Suitable for frequency converters
- Configurable as desired

Measuring transducer



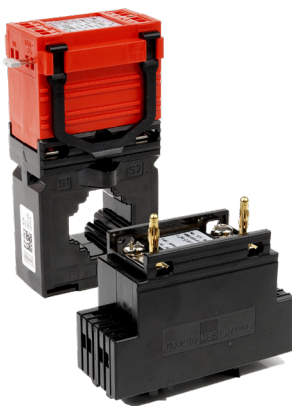
Measuring transducer EMBSIN

- Measuring transducer for all electrical parameters
- Monitoring of electrical networks and loads
- Used mainly in energy generation, distribution and control panels



Universal current sensor CCT

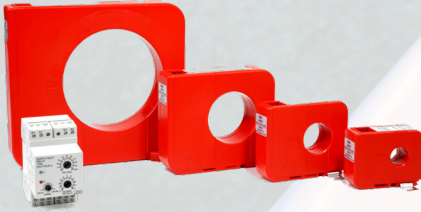
- Measurement of AC and DC with only one measuring transformer
- Range 0...100 kHz
- Low self consumption
- Safe connection
- PU-encapsulated: high mechanical resistance



NMC for alternating current

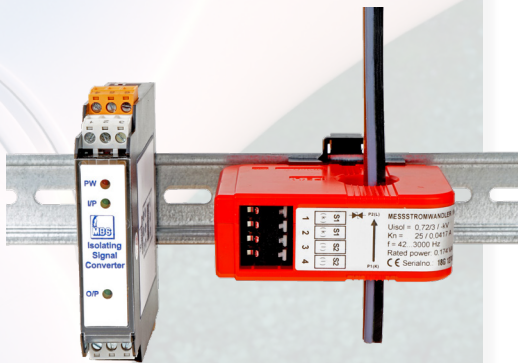
- Modular structure
- For sinusoidal alternating current
- Display, register, monitor and control
- Simultaneous operation of conventional pointer instruments
- For simple clip-on connection to MBS current transformers

Differential current transformers (RCM)



Differential current transformer, Type A DACT

- Differential current measurement for insulation testing
- Early recognition saves the need to switch the equipment off
- Protection for industrial equipment
- Connection to universal measuring devices



DACT + ISC

- For converting the differential currents into standard signal 4...20 mA
- Combination with DACT differential current transformer
- For differential currents between 20 mA and 25 A



RCMB 70 differential current monitor, Type B/B+

- DC / AC differential currents up to 100 kHz can be measured
- Equipment can be switched off via circuit breakers
- Conversion to 4...20 mA
- Therefore multiple options (universal device and PLC)
- User-friendly
- Centring aid optionally available

Rogowski coil



FASK

- Easy to apply and remove without disconnecting the power circuit
- No dangerous voltages during open operation - electricians are protected
- Can also be used in harsh environments
- Measuring range 0 to 10 kA
- Secondary conductor lengths 3 m, 5 m and 10 m
- Supply cable can be shortened without loss of accuracy



ROI Integrator

- ROI integrator converts into 3 x 1 A standard signal
- Simultaneous connection of 3 Rogowski coils possible
- Compact housing
- Easy to connect



Universal converter QE-485

- Universal converter for Rogowski coils, current transformers, measuring transducers and all-current sensors
- Free configurable analogue output as well as digital output (analogue and Modbus)
- Additional temperature measurement

Energy meters



Single and three phase energy meters M1PRO/M3PRO

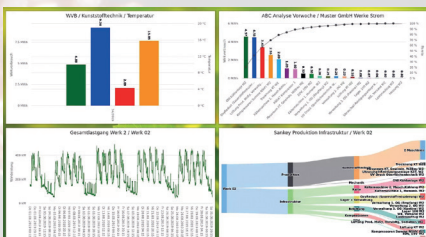
- Transformer meters or for direct measurement
- For energy and power measurement, demand and load analysis
- For energy controlling, cost centre management and for billing applications
- MID approved
- S0 pulse output and various interfaces possible



Communication modules M-Bus, KNX, Modbus, LAN-TCP/IP eVision, Wireless M-Bus

- Universal communication modules for extending communication functions
- Infra-red interface installed on the side
- Compact housing
- Easy to operate

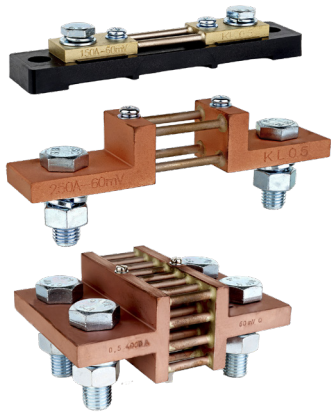
Energy management



Energy management

- ISO 50001 certified
- For assessment, analysis and invoicing
- Can be integrated into existing system
- Intuitive to operate, short learning curves
- Modular design
- The solution for industry and skilled trades, energy providers and service providers, public utilities and mechanical and plant engineering

Shunts



Shunts

- For DC current from 1 A to 20,000 A
- With voltage drops of 60 mV, 100 mV, 150 mV, 300 mV
- Various designs
- Special versions available if required

Insulators and rail holders



Insulators and rail holders

- Can be used under difficult working conditions
- Reinforced with glass fibre and self-extinguishing
- Very good electrical and mechanical properties
- Type-tested short-circuit resistance

Customisation



Customisation

- Are you looking for a product tailored to your project? We'll work with you to develop the ideal solution. You are at the forefront of what we do!

Laboratory services



In-house testing laboratory

- Do you need detailed test results and special measurements? We'll be happy to do this for you at our testing centre which boasts state-of-the-art measuring equipment.
- Tests according to ISO 17025
- State-recognized testing laboratory for electricity EBW 90
- Conformity tests
- International approvals – Switzerland, Austria, Russia, Hungary, Czech Republic, Bulgaria, Romania, Slovakia and further countries

Reliable energy measuring



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