



ZERA

MT3x0
Product Catalogue

Doc.No: 100352700
Version from: 01.07.2024

Device



STANDARD SET

MT310 Three-Phase Reference Meter CAT III

Inclusive adjustment and calibration for one mains frequency.

Ord.No. **1016658xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

The MT310 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase meters. Test voltage and test current can be measured by the Reference Meter directly from the mains or generated and measured via an external source (optional, e.g. MT400 or MT500).

The MT310 is designed for testing one test specimen.

- Accuracy class: 0.1
- Measurement direct: max. 300 V / 12 A
- Measurement via clamps: max. 120 A
- Selective power measurement
- Burden measurement for instrument transformer installations

Each inclusive the following accessories:

Qty	Description	Order-No.
1	MT3460, AC current clamp set incl. calibration	1016683xx
1	Power cord "Euro plug type C to figure-of-eight", 2.0 m	100067700
1	Power cord "stackable safety plug (black) to figure-of-eight" 2.0 m	100067608
1	Laboratory cable with stackable plug, 2.0 m black	X00006910
3	Laboratory cable with stackable plug, 2.0 m red	X00007597
3	Laboratory cable with stackable plug, 2.0 m yellow	X00006907
3	Laboratory cable with stackable plug, 2.0 m blue	X00007598
1	Accessories bag with connection adapters	100023714
1	Holding device for scanning head	100319600
1	Connection cable for scanning head input (SC)	Z10353027
1	TK326, scanning head	101064901
1	Interface cable, RS232	X00010844
1	Transport case for MT3xx, large	100023910
1	Complete documentation as	100090716

**STANDARD SET****MT320 Three-Phase Reference Meter CAT III**

Inclusive adjustment and calibration for one mains frequency.

Ord.No.	1016673xx
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Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

The MT320 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase meters. Test voltage and test current can be measured by the Reference Meter directly from the mains or generated and measured via an external source (optional, e.g. MT400 or MT500).

The MT320 is designed for testing one test specimen.

- Accuracy class: 0.05
- Measurement direct: max. 300 V / 12 A
- Measurement via clamps: max. 120 A
- Selective power measurement
- Burden measurement for instrument transformer installations

Each inclusive the following accessories:

Qty	Description	Order-No.
1	MT3460, AC current clamp set incl. calibration	1016683xx
1	Power cord "Euro plug type C to figure-of-eight", 2.0 m	100067700
1	Power cord "stackable safety plug (black) to figure-of-eight" 2.0 m	100067608
1	Laboratory cable with stackable plug, 2.0 m black	X00006910
3	Laboratory cable with stackable plug, 2.0 m red	X00007597
3	Laboratory cable with stackable plug, 2.0 m yellow	X00006907
3	Laboratory cable with stackable plug, 2.0 m blue	X00007598
1	Accessories bag with connection adapters	100023714
1	Holding device for scanning head	100319600
1	Connection cable for scanning head input (SC)	Z10353027
1	TK326, scanning head	101064901
1	Interface cable, RS232	X00010844
1	Transport case for MT3xx, large	100023910
1	Complete documentation as	100090716



MT310 Three-Phase Reference Meter CAT III

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016659xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkkS 50 Hz	xx → 02
DAkkS 60 Hz	xx → 03

The MT310 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase meters. The MT310 is designed for testing one test specimen.

Configuration:

- Direct current measurement up to 300 V / 12 A
- Accuracy for power/energy measurement: < ± 0.1 %
- Burden measurement for instrument transformer installations
- Wide range of accessories (optional)



MT310 Three-Phase Reference Meter CAT IV

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016672xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkkS 50 Hz	xx → 02
DAkkS 60 Hz	xx → 03

The MT310 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase meters. The MT310 is designed for testing one test specimen.

Configuration:

- Direct current measurement up to 300 V / 12 A
- Accuracy for power/energy measurement: < ± 0.1 %
- Burden measurement for instrument transformer installations
- Wide range of accessories (optional)



MT320 Three-Phase Reference Meter CAT III

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016674xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

The MT320 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase meters. The MT320 is designed for testing one test specimen.

Configuration:

- Direct current measurement up to 300 V / 12 A
- CT current measurement up to 120 A
- Accuracy for power/energy measurement: < ± 0.05 %
- Burden measurement for instrument transformer installations



MT320 Three-Phase Reference Meter CAT IV

Inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016675xx**

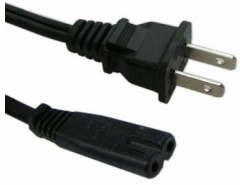
Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

The MT320 is a light weight and compact Reference Meter for on-site verification and calibration of single- or three-phase meters. The MT320 is designed for testing one test specimen.

Configuration:

- Direct current measurement up to 300 V / 12 A
- CT current measurement up to 120 A
- Accuracy for power/energy measurement: < ± 0.05 %
- Burden measurement for instrument transformer installations

Power Cords



Power cord "Plug type A to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Plug type A
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100277201**



Power cord "Euro plug type C to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Euro plug type C (CEE 7/16)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100067700**



Power cord "Plug type G to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Plug type G (BS1363)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100277200**



Power cord "Plug type I to figure-of-eight", 2.0 m

For supply via mains supply.

- 1x Plug type I (AS/NZS 3112, 2-pin)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100277202**



Power cord "stackable safety plug (black) to figure-of-eight", 2.0 m

For supply via test voltage.

- 2x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (2x black)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No. **100067608**

Current Clamps (see also Special Accessories)



MT3460, AC current clamp set 120 A

The CT set is electronically compensated. Calibration independent from the measuring standard inclusive adjustment and factory calibration for one mains frequency.

Ord.No. **1016683xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

DAkKS calibrations are only performed together with the corresponding measuring standard.

- Clamping diameter: 16 mm
- Output: D-Sub plug 25-pin
- Measuring range: 5 mA ... 120 A
- Error of measurement:
 - < ±0.15% @ 500 mA ... 120 A
 - < ±0.3% @ 100 mA ... < 500 mA
- Frequency range: 45 ... 65 Hz
- Overvoltage Category: CAT III 600 V / CAT IV 300 V



MT3416, AC current clamp set 300 A

The CT set is electronically compensated. Calibration independent from the measuring standard inclusive adjustment and factory calibration for one mains frequency.

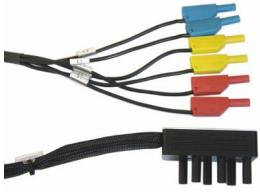
Ord.No. **1016692xx**

Calibration	Ord.No.
Factory 50 Hz	xx → 00
Factory 60 Hz	xx → 01
DAkKS 50 Hz	xx → 02
DAkKS 60 Hz	xx → 03

DAkKS calibrations are only performed together with the corresponding measuring standard.

- Clamping diameter: 52 mm
- Output: D-Sub plug 25-pin
- Measuring range: 100 mA ... 300 A
- Error of measurement:
 - < ±0,15 % / < 0,1° (1 A ... 300 A)
 - < ±0,3 % / < 0,1° (500 mA ... 1 A)
 - < ±0,6 % / < 0,15° (200 mA ... 500 mA)
- Frequency range: 45 ... 65 Hz
- Overvoltage Category: CAT III 600 V / CAT IV 300 V

Quick Connection Cable (see also Special Accessories)



Quick connection cable "current/rigid sleeve" for MT series, 12 A, 2.5 m, phase colours: red/yellow/blue

To prevent connecting faults on the instrument's side.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 6x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve. 2x red, 2x yellow, 2x blue.
- Cable cross-section: 2.5 qmm

Ord.No. 100023411



Quick connection cable "voltage/rigid sleeve" for MT series, 2.5 m, phase colours: red/yellow/blue/black

To prevent connecting faults on the instrument's side.

Measurement category III (CAT III).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with rigid insulating sleeve - 1x red, 1x yellow, 1x blue, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. 100023402



Quick connection cable CAT IV for "voltage/rigid sleeve" for MT series, 2 m, phase colours: red/yellow/blue/black

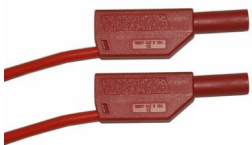
To prevent connecting faults on the instrument's side.

Measurement category IV (CAT IV).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x 4 mm Multilam plug with rigid insulating sleeve - 1x red, 1x yellow, 1x blue, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. 100023483

Current and Voltage Cables (see also Special Accessories)



Laboratory cable with stackable plug, red, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. X00007597



Laboratory cable with stackable plug, yellow, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. X00006907

**Laboratory cable with stackable plug, blue, 2.0 m**

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00007598****Laboratory cable with stackable plug, black, 2.0 m**

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00006910****CAT IV Laboratory cable max. 12 A, 2.0 m**

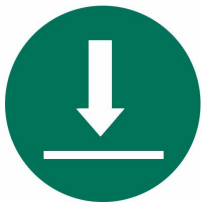
- 2x 4 mm plugs (non-stackable) with rigid insulating sleeve
- Lead cross section: 1 qmm
- Phase colours: Please specify the colour code when ordering

Ord.No. **1014308xx**

The cables will get a corresponding coloured marking.

20=black-white, 21=black, 22=red, 23=blue,
24= yellow, 25=green, 26=violet, 27=brown,
 28=grey, 29=white

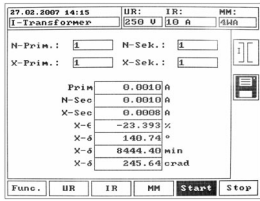
xx please select the colour

Software**Software SSM3000 / MTVis**

The software runs under Windows 7 or 10.

- SSM3000: For external control via PC.
- MTVis: To readout and display saved data.

Ord.No. **100090720**The software can be downloaded at www.zera.de.



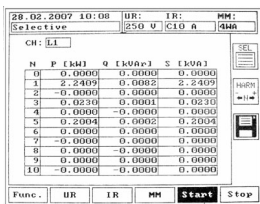
Software option for I-transformer testing, MT3x0 series

The option supports the simultaneous measurement of primary and secondary currents of a current transformer. The following values are tested:

- Transformer ratio
- Transformer error
- The phase angle between primary and secondary current

Note: This option is not available for the MT30.

Ord.No. 100078800

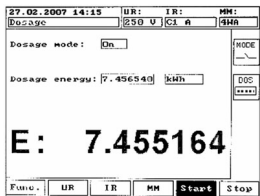


Software option for selective power measurement, MT3xx series

3 additional measuring modes for only fundamental power in

4W active, 4W reactive, and 4W apparent are available

Ord.No. 100078801



Software option for energy dosage, MT3xx series

By the help of this option you can specify a certain amount of energy that the electricity meter is supplied with by an external voltage or current source. The switching current of the external source is controlled.

Note: This option is not available for the MT30.

Ord.No. 100078802

Impulse Sensor (see also Special Accessories)



TK118, scanning head

For detection of LED signals of electronic meters.

- Fixing: Via provided suction cup or via optionally available stretchable holding device for scanning heads TK326/TK118.

Ord.No. 100201900



TK326, scanning head without holding device

For detection of rotor disc markings on Ferraris meters and LED signals on electronic meters.

- Fixing: Via stretchable holding device for scanning heads TK326/TK118.

Ord.No. 101064901



Holding device for scanning head TK326/ TK118

Stretchable holding device to fix the scanning head TK326 or TK118 at the electricity meter.

- Maximum wingspan: 19.0 cm.

Ord.No. **100319600**



K121, S0 pulse converter with measuring leads

For pulse detection of floating contacts as well as of S0 pulse output on electricity meters. Including two laboratory cables with safety plug/connection pin.

Ord.No. **100004210**



Connection cable for RJ10 socket input (SC)

The spiral cable for connecting of TKxxx or K121 to the ZERA instrument.

- 2x Modular connector RJ10
- Length: 1.00 m / expanded: 6.00 m

Ord.No. **Z10353027**



ZZ8636 Start-stop pushbutton for signal entry

The start-stop pushbutton is used for manual pulse entry when testing electricity meters.

Ord.No. **101091620**

Connectors (see also Special Accessories)



Accessories bag with connection adapters

- | | |
|--|-----------|
| 01 Accessories bag | 100214400 |
| 03 Spring clip | 100606750 |
| 04 4-mm plug adapter (banana plug) | X00004962 |
| 10 Adapter for terminal blocks | 101584400 |
| 10 Connecting terminals for current | X00011923 |
| 03 4-mm test clips (crocodile clips), slim | X00009329 |
| 03 4-mm test clips (crocodile clips), wide | X00010059 |
| 10 Fuse, 1.6 A / 440 V, 6.3 mm x 32 mm, time-lag | M00460183 |

Ord.No. **100023714**

Transport (see also Special Accessories)



Transport Case for MT3xx, large

Aluminum case with inlet from rigid foam, designed for

- 1 Instrument
- Accessories

Overall dimensions:

47 cm x 53,5 cm x 18 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered accessories.

Ord.No.

100023910



Transport Case for MT3xx, Standard

Aluminum case with inlet from rigid foam, designed for

- 1 Instrument
- Accessories

Overall dimensions:

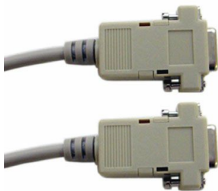
36 cm x 45 cm x 17 cm (H x W x D)

Please clarify whether the case size is suitable for the ordered accessories.

Ord.No.

100023933

Standard Accessories (see also Special Accessories)



Interface cable, RS232, crossed wired (null modem cable)

Connection cable for communication

- 2x D-Sub socket, 9-pin
- Cable length: 3.00 m

Ord.No.

X00010844



Protection cover for MT series 3xx/400/500

To protect the front plate against mechanical collision during transport without transport case.

Ord.No.

100466700

Documentation



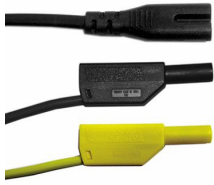
Complete Documentation

as pdf files on USB flash drive

Ord.No.

100090716

Special Accessories



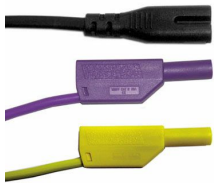
Power cord "stackable safety plug (black/yellow) to figure-of-eight", 2.0 m

For supply via test voltage.

- 2x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (1x black; 1x yellow)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No.

100067601



Power cord "stackable safety plug (violet/yellow) to figure-of-eight", 2.0 m

For supply via test voltage.

- 2x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve (1x violet/1x yellow)
- 1x Figure-of-eight socket (IEC 60320-1 C7)

Ord.No.

100067602

Special Accessories (Current Clamps and Probes)



MT3403, AC current clamp 1200 A

- Clamping diameter: 52 mm
 - Output: 2x 4 mm safety sockets
 - Measuring range: 10 mA ... 1200 A (1200 A for 40 min max. and a pause between measurement > 20 min)
 - Error of measurement:
 - < $\pm 0.3\%$ / 0.7° (100 A ... 1200 A)
 - < $\pm 0.5\%$ / 1.0° (10 A ... 100 A)
 - < $\pm 1.0\%$ / 2.0° (1 A ... 10 A)
 - Frequency range: 48 ... 65 Hz
 - Rated voltage: 600 V, CAT III / 300 V, CAT IV
- Note:* Connection to the MT device via input for direct current measurement.

Ord.No.

100032410



MT3413, AC current clamp 1800 A

Clamping of round or square conductors.

- Clamping diameter: 64 mm or busbar from 50 x 135 mm up to 64 x 100 mm
 - Output: 2x 4 mm safety sockets
 - Measuring range: 1 A ... 1800 A (1800 A measurement for max. 10 min)
 - Switchable ranges: 500 A, 1000 A, 1500 A
 - Error of measurement in 1500 A range:
 - < $\pm 1.5\%$ / 1.5° (75 A)
 - < $\pm 0.75\%$ / 0.75° (300 A)
 - < $\pm 0.5\%$ / 0.5° (1500 A)
 - Frequency range: 48 ... 65 Hz
 - Rated voltage: 600 V, CAT III / 300 V, CAT IV
- Note:* Connection to the MT device via input for direct current measurement.

Ord.No.

100032401

**MT3470, flexible AC current probes 3000 A, 0.45 m**

Flexible clamping adapter for enclosing conductors of any shape and in areas difficult to access.

- Diameter: ca. 14 cm
- Output: 2x 4 mm safety plug connection via adapter **MT3423**
- Measuring range: 500 mA ... 3000 A
- Switchable ranges: 3 A, 30 A, 300 A, 3000 A
- Error of measurement with optimal range selection:
 - 3-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (0,5 A ... 3 A)
 - 30-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (2 A ... 30 A)
 - 300-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (30 A ... 300 A)
 - 3000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 3000 A)
- Frequency range: 30 Hz ... 440 Hz
- Rated voltage: 1000 V, CAT IV

Note: Connection to the instrument is via adapter **MT3423**.
The adapter has to be ordered separately.

Ord.No.	100061320
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**MT3471, flexible AC current probes 3000 A, 0.8 m**

Flexible clamping adapter for enclosing conductors of any shape and in areas difficult to access.

- Diameter: ca. 25 cm
- Output: 2x 4 mm safety plug connection via adapter **MT3423**
- Measuring range: 500 mA ... 3000 A
- Switchable ranges: 3 A, 30 A, 300 A, 3000 A
- Error of measurement with optimal range selection:
 - 3-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (0,5 A ... 3 A)
 - 30-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (2 A ... 30 A)
 - 300-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (30 A ... 300 A)
 - 3000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 3000 A)
- Frequency range: 30 Hz ... 440 Hz
- Rated voltage: 1000 V, CAT IV

Note: Connection to the instrument is via adapter **MT3423**.
The adapter has to be ordered separately.

Ord.No.	100061321
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**MT3472, flexible AC current probes 30000 A, 1.2 m**

Flexible clamping adapter for enclosing conductors of any shape and in areas difficult to access.

- Diameter: ca. 38 cm
- Output: 2x 4 mm safety plug connection via adapter **MT3424**
- Measuring range: 500 mA ... 30000 A
- Switchable ranges: 30 A, 300 A, 3000 A, 30000 A
- Error of measurement with optimal range selection:
 - 30-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (0,5 A ... 30 A)
 - 300-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (10 A ... 300 A)
 - 3000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 3000 A)
 - 30000-A-range: $\leq \pm 1,0\%$ / typ. $0,5^\circ$ (300 A ... 30000 A)
- Frequency range: 30 Hz ... 440 Hz
- Rated voltage: 1000 V, CAT IV

Note: Connection to the instrument is via adapter **MT3424**.
The adapter has to be ordered separately.

Ord.No. **100061322**

**MT3423, adapter "4 mm safety plug to D-Sub plug 25-pin", 1.0 m.**

For connecting max. three flexible current probes of the same type to the instrument.

Suitable for the types **MT3470** and **MT3471**.

Equipped with:

- 3x socket for two 4 mm safety plugs
- 1x D-Sub plug, 25-pin

Ord.No. **100032220**

**MT3424, adapter "4 mm safety plug to D-Sub plug 25-pin", 1.0 m.**

For connecting max. three flexible current probes of the same type to the instrument.

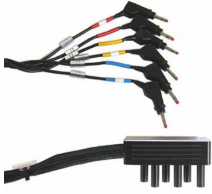
Suitable for the types **MT3472**.

Equipped with:

- 3x socket for two 4 mm safety plugs
- 1x D-Sub plug, 25-pin

Ord.No. **100032221**

Special Accessories (Quick Connection Cable)



Quick connection cable "current/retractable sleeve" for

Ord.No. **100013207**

MT series, 12 A, 2.5 m, phase colours: red/yellow/blue

To prevent connecting faults on the instrument's side.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 6x stackable, spring-loaded 4 mm plugs with retractable sleeve to prevent accidental touching. 2x red, 2x yellow, 2x blue.
- Cable cross-section: 2.5 qmm



Quick connection cable "voltage/retractable sleeve" for MT series, 2.5 m, phase colours: red/yellow/blue/black

Ord.No. **100013307**

To prevent connecting faults on the instrument's side.

Measurement category III (CAT III).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with retractable sleeve to prevent accidental touching - 1x red, 1x yellow, 1x blue, 1x black
- Cable cross-section: 2.5 qmm



Quick connection cable CAT IV for "voltage/rigid sleeve" for MT series,

Ord.No. **100023472**

2.5 m, phase colours: yellow/green/violet/black

To prevent connecting faults on the instrument's side.

Measurement category IV (CAT IV).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x 4 mm Multilam plug with rigid insulating sleeve - 1x yellow, 1x green, 1x violet, 1x black
- Cable cross-section: 2.5 qmm



Quick connection cable CAT IV for "voltage/rigid sleeve" for MT series, 2.5 m, phase colours:

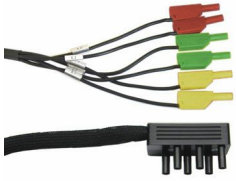
Ord.No. **100023484**

black/brown/grey/blue

To prevent connecting faults on the instrument's side.

Measurement category IV (CAT IV).

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x 4 mm Multilam plug with rigid insulating sleeve - 1x black, 1x brown, 1x grey, 1x blue
- Cable cross-section: 2.5 qmm



Quick connection cable for “current/rigid sleeve” for MT series, 12 A, 2.5 m, phase colours: yellow/green/red

For the connection of source and reference standard if they are used as separate devices.

Cable length between the devices is 1.65 m.

- Instrument’s side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 6x stackable, spring-loaded 4 mm plugs with rigid insulating sleeve - 2x yellow, 2x green, 2x red.
- Cable cross-section: 2.5 qmm

Ord.No. **100023481**



Quick connection cable for “voltage/rigid sleeve” for MT series, 2.5 m, phase colours: yellow/green/red/black

To prevent connecting faults on the instrument’s side.

Measurement category III (CAT III).

- Instrument’s side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with rigid insulating sleeve - 1x yellow, 1x green, 1x red, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. **100023482**

Special Accessories (Current and Voltage Cables)



Laboratory cable with stackable plug, green, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00006908**



Laboratory cable with stackable plug, violet, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **X00006909**



Laboratory cable with stackable plug, brown, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **100414100**

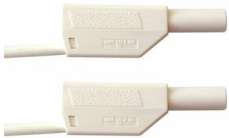


Laboratory cable with stackable plug, grey, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **100414103**



Laboratory cable with stackable plug, white, 2.0 m

Measurement category III (CAT III).

- 2x stackable 4 mm plugs with rigid insulating sleeve
- Lead cross section: 2.5 qmm

Ord.No. **100662500**

Special Accessories (Connectors)



Connecting terminals for current

- Insulating screw joint for flexible wire connection max cable size 1,5 ... 16 mm²
- Socket: 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00011923**



Adapter for terminal blocks

- Connection via insulated flexible copper conductor.
- Socket: 4 mm rigid socket in insulator, made of brass, accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **101584400**



4 mm plug adapter (banana plug)

- Plug: 4 mm spring-loaded plug, made of brass.
- Socket: 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00004962**



4 mm cable lug adapters

- Cable lug adapter, made of brass for permanent installation, e. g. for connecting screw terminals.
- Socket: 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00004963**



Spring clip

- Connection via spring clip.
- Socket: spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **100606750**



Test plugs for terminal blocks

- Plug: 4 mm test plug, made of brass with spring-loaded plug for connecting into rail mounted terminals with 4 mm sockets.
- Socket: 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **100102400**



4 mm test clips (crocodile clips), wide

- Crocodile clip made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire.
- Socket: 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00010059**



4 mm test clips (crocodile clips), slim

- Small, slim crocodile clip made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire.
- 4 mm rigid socket in insulator accepting spring-loaded 4 mm plugs with rigid insulating sleeve.

Ord.No. **X00009329**



Accessories bag without content
DIN A6, material: polypropylene

Ord.No. **100214400**

Fuse, 1.6 A / 440 V, 6.3 mm x 32 mm, time-lag

Ord.No. **m00460183**



Special Accessories (Transport)



Carrying strap for reference meter, black, width 25 mm
Belt length: 700 - 1,400 mm, adjustable by sliding buckle,
metal snap hooks on both sides.

Ord.No. **100170000**

Special Accessories (General)



Adapter "USB to RS232" (32/64 bit), 1.5 m
For use with an external PC/Notebook (32/64 bit)
with WINDOWS OS (7, 8, 10).

Ord.No. **101421801**



MT3450, Temperature sensor
Sensor for measuring of the ambient temperature on site.
The measured temperature value is displayed and saved
in the MT device.
Temperature range: -20° C ... +60° C (± 1° C)
Resolution: 0,1° C
Cable length: 3 m

Ord.No. **100904000**



Tripod with fixing device for MT310/MT320 devices

For mounting and customized positioning of the measuring standard on site.

Ord.No. **100114805**



Plexiglass protection cover for MT3xx,

The cover is made of plexiglass and serves for mechanical protection of the LCD display. To enable the access to the soft-key keyboard the cover is designed with cut-outs.

Ord.No. **100053201**

Readjustment (for Service)

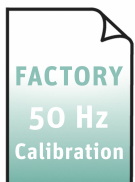


Adjustment of MT3xx series

Note: Calibration and Calibration report are not included.

Ord.No. **100033852**

Calibration (for Service)



Factory Calibration for MT3xx series, 50 Hz

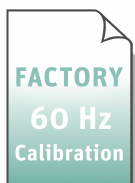
incl. ZERA calibration report.

Ord.No. **100007038**

Load points according to ZERA regulations.

Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration for MT3xx series, 60 Hz

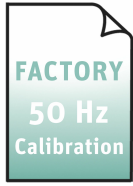
incl. ZERA calibration report.

Ord.No. **100007054**

Load points according to ZERA regulations.

Summary of used load points can be downloaded at www.zera.de.

Additional load points are subject to charges.



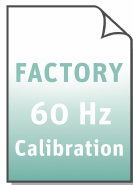
Factory Calibration for MT3xx series, along with current clamp MT3460*, 50 Hz
incl. ZERA calibration report.

Ord.No. **101243210**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

*valid also for previous versions



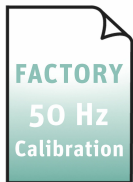
Factory Calibration for MT3xx series, along with current clamp MT3460*, 60 Hz
incl. ZERA calibration report.

Ord.No. **101243211**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

*valid also for previous versions

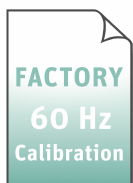


Factory Calibration for MT3460 / MT3465 50Hz
incl. ZERA calibration report.

Ord.No. **101242304**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

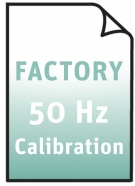


Factory Calibration for MT3460 / MT3465 60Hz
incl. ZERA calibration report.

Ord.No. **101242305**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

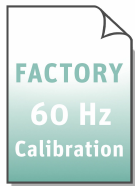


Factory Calibration for MT3416 / MT3417, 50 Hz
incl. ZERA calibration report.

Ord.No. **100519701**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration for MT3416 / MT3417, 60 Hz
incl. ZERA calibration report.

Ord.No. **100519704**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



Factory Calibration
for instrument, each additional
load point for power and energy

Ord.No. **100007093**



Factory Calibration
for instrument, each additional
load point for current and/or voltage

Ord.No. **100007094**



Factory Calibration
for current clamps, each additional
load point for for power and energy

Ord.No. **100007092**

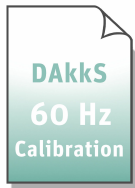


DAkks DKD-Calibration for MT3xx, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100006838**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



DAkks DKD-Calibration for MT3xx, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100006854**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

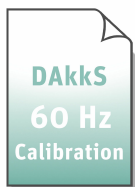


DAkks DKD-Calibration for MT3xx incl. current clamp MT3460, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173919**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



DAkks DKD-Calibration for MT3xx incl. current clamp MT3460, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173920**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

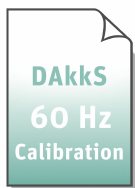


DAkks DKD-Calibration for MT3460 / MT3465, 50 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173912**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



DAkks DKD-Calibration for MT3460 / MT3465, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **101173913**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.

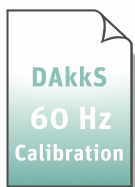


DAkks DKD-Calibration for MT3416 / MT3417, 50 Hz
Incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519600**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



DAkks DKD-Calibration for MT3416 / MT3417, 60 Hz
incl. DKD-Calibration Certificate acc. IEC 17025

Ord.No. **100519603**

Load points according to ZERA regulations.
Summary of used load points
can be downloaded at www.zera.de.

Additional load points are subject to charges.



**DAkKS DKD-Calibration (acc. IEC 17025)
for instrument, each additional
load point for power and energy**

Ord.No. **100006893**



**DAkKS DKD-Calibration (acc. IEC 17025)
for instrument, each additional
load point for current / voltage**

Ord.No. **100006894**



**DAkKS DKD-Calibration (acc. IEC 17025)
for current clamps, each additional
load point for power and energy**

Ord.No. **100006892**

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