



ZERA

MT400
Product Catalog

Doc.No: 100352706
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Device



Three phase current source MT400

Including adjustment and standard factory calibration. The portable source MT400 provides current for on site testing of meter installations with low voltage.

- Supplied via test voltage or mains voltage
- Current generation up to 12 A
- Synchronization of the test currents on the grid voltage phases of the meter under test.
- Balanced/Unbalanced load conditions
- Individual phase angle setting
- Vector display of generated and measured values

Ord.No. **100248101**

Adjustment and Calibration / Device



Readjustment of MT400

Note: With initial purchase of an instrument the adjustment is included. This article only applies to a readjustment.

Ord.No. **100033898**



Factory calibration of a new instrument MT400 according to ZERA standard, 50 Hz

Note: This article only applies to a purchase of a new instrument MT400.

- Including factory calibration certificate

Ord.No. **100519710**



Factory re-calibration of MT400 according to ZERA standard, 50 Hz

Note: With initial purchase of an instrument the factory calibration is included. This article only applies to a re-calibration.

- Including factory calibration certificate

Ord.No. **100519712**



DKD calibration of MT400, 50 Hz

- Including DKD calibration certificate

Ord.No. **100519612**



Factory calibration of a new instrument MT400 according to ZERA standard, 60 Hz

Note: This article only applies to a purchase of a new instrument MT400.

- Including factory calibration certificate

Ord.No. **100519711**



Factory re-calibration of MT400 according to ZERA standard, 60 Hz

Note: With initial purchase of an instrument the factory calibration is included. This article only applies to a re-calibration.

- Including factory calibration certificate

Ord.No. **100519713**



DKD calibration of MT400, 60 Hz

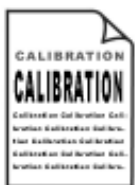
- Including DKD calibration certificate

Ord.No. **100519613**



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

Ord.No. **100006894**



Calibration, each additional load point for current and/or voltage, factory calibration

Ord.No. **100007094**

Power Cords



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 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 "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**



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



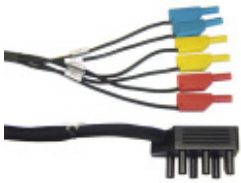
Power cord “stackable safety plug (violet/yellow) to figure-of-eight”, 2.0 m

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

Quick Connection Cable



Quick connection cable “current/rigid sleeve” for source, MT series, sloped, 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, sloped.
- 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. 100023452



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

To prevent connecting faults on the instrument’s side.

- 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. 100023454

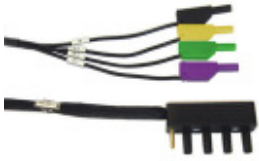


Quick connection cable for “current/rigid sleeve” for MT series, 12 A, 2.5 m, phase colours: yellow/green/violet

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 yellow, 2x green, 2x violet.
- Cable cross-section: 2.5 qmm

Ord.No. 100023419



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

To prevent connecting faults on the instrument’s side.

- 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 violet, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. **100023418**



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

When using source and instrument. Two connectors on the instrument’s side to connect source and instrument.

- Instrument’s side:
 - 1x 4-pin connector with anti-twist safeguard.
 - 1x 4-pin connector (slim) without 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. **100023456**



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

When using source and instrument. Two connectors on the instrument’s side to connect source and instrument.

- Instrument’s side:
 - 1x 4-pin connector with anti-twist safeguard.
 - 1x 4-pin connector (slim) without anti-twist safeguard.
- Mains side: 4x stackable, spring-loaded 4 mm plug with rigid insulating sleeve - 1x yellow, 1x green, 1x violet, 1x black
- Cable cross-section: 2.5 qmm

Ord.No. **100023462**



Quick connection cable “current/rigid sleeve” for source-instrument, MT series, 2.5 m, phase colours: red/yellow/blue

When using source and instrument. Two connectors on the instrument's side to connect source and instrument.

- Instrument's side:
 - 1x 6-pin connector with anti-twist safeguard.
 - 1x 6-pin connector, sloped, 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. **100023455**



Quick connection cable “current/rigid sleeve” for source-instrument, MT series, 2.5 m, phase colours: yellow/green/violet

When using source and instrument. Two connectors on the instrument's side to connect source and instrument.

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

Ord.No. **100023461**



Quick connection cable “voltage/retractable sleeve” with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue/black

When using source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- 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

Ord.No. **100013322**



Quick connection cable “current/retractable sleeve” with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue

When using two single devices for source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 1x multipoint Entrelec plug
- Cable cross-section: 2.5 qmm

Ord.No. **100013222**



Quick connection cable "voltage/Entrelec" with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue/black

When using two single devices for source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- Instrument's side: 1x 4-pin connector with anti-twist safeguard.
- Mains side: 1x multipoint Entrelec plug
- Cable cross-section: 2.5 qmm

Ord.No. **100013321**



Quick connection cable "current/Entrelec" with Entrelec box for MT series, 2.5 m, phase colours: red/yellow/blue

When using two single devices for source and instrument. Cable with Entrelec box for quick connection of source and instrument.

- Instrument's side: 1x 6-pin connector with anti-twist safeguard.
- Mains side: 1x multipoint Entrelec plug
- Cable cross-section: 2.5 qmm

Ord.No. **100013221**

Laboratory Cables



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****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. **100739800**

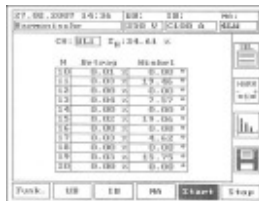
Software



CD-ROM with software SSM3000 / MTVis / WM303 / MCS
 The software runs under Windows XP. The documentation is on CD (PDF or Online-Help).

- SSM3000: To control the instrument.
- MTVis: To readout and display data saved in the instrument.
- WM303: To control WM303-I and WM303-U.
- Demo Meter Check Simulation (MCS): For simulation of circuit errors.

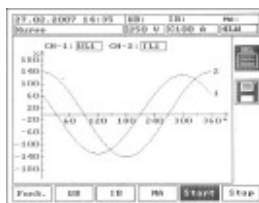
Ord.No. **100090705**



Software option for harmonic measurement, MT400/MT500

The harmonic measurement displays the value and angle of each single harmonic (voltage and current) up to the 40th in a chart or a diagram. Additionally the sum of all harmonics is displayed.

Ord.No. **100078830**



Software option for curve display, MT400/MT500

For simultaneous display of two curves (voltage and/or current measurement channels). Via the curve display you can see at a glance if the fundamental frequency differs from the sinus curve.

Ord.No. **100078831**

Documentation



Operation manual for MT400, English

Ord.No. **100367311**



Operation manual for MT400, Italian

Ord.No. **100367312**

Small Parts and Accessories Bag for Small Parts



Accessories bag with connection adapters

01	Accessories bag	100214400	Ord.No.	100023726
03	Spring clip	Z09508700		
04	4 mm plug adapter (banana plug)	X00004962		
06	Adapter for terminal blocks	X00004961		
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, 16 A / 500 V, 6.3 mm x 32 mm, very fast acting	M00460189		
10	Fuse, 6.3 A / 500 V, 6.3 mm x 32 mm, time-lag	100358600		

Fuse, 16 A / 500 V, 6.3 mm x 32 mm, very fast acting

Ord.No. **M00460189**



Fuse, 6.3 A / 500 V, 6.3 mm x 32 mm, time-lag

Ord.No. **100358600**



Transport



Aluminium case with cable tray, small

Hard-top case with inlet. To transport MT400/MT500 and accessories.

- Dimensions: H 440 mm × W 470 mm × D 250 mm

Ord.No. **100023960**



Aluminium case without cable tray, small

Hard-top case with inlet. To transport MT400/MT500 and accessories.

- Dimensions: H 370 mm × W 450 mm × D 250 mm

Ord.No. **100023961**



Nylon protective bag for MT400/MT500
 Inner dimensions: H 340 mm x W 290 mm x D 235 mm

Ord.No. **100062802**



Shoulder bag
 Nylon shoulder bag for transport of accessories.
 • Dimensions: H 410 mm x W 320 mm x D 170 mm

Ord.No. **100148201**

Additional Accessories for The Device



**Interface cable, RS232, cross wired
 (null modem cable)**

Cross wired connection cable.
 • 2x D-Sub socket, 9-pin
 • Cable length: 3.00 m

Ord.No. **X00010844**



Displayschutz für MT-Serie 3xx/400/500
 Zum Schutz der Frontplatte gegen
 mechanische Stöße während des
 Gerätetransports ohne Transportkoffer.

Ord.No. **100466700**



Adapter "USB to RS232"
 For use with an external PC/notebook.
 Can be used with Windows Vista.

Ord.No. **100286701**

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Notes on using the product catalogue

When ordering, always state the order number.

Pictures can differ from original product.

We follow ZVEI terms of delivery, see on www.zera.de

Deutsche Bank Bonn
bank code: 380 700 59
account: 005 705 150 0
IBAN: DE16 3807 0059 0057 0515 00
SWIFT: DEUTDEDK380

Commerzbank Bonn
bank code: 380 400 07
account: 113 313 100
IBAN: DE29 3804 0007 0113 3131 00
SWIFT: COBADEFF380

Kreissparkasse Köln
bank code: 370 502 99
account: 001 078 492
IBAN: DE15 3705 0299 0001 07
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