

Kurzbedienungsanleitung  
Short-form Operating Instructions  
Mode d'emploi en bref  
Breves instrucciones de servicio

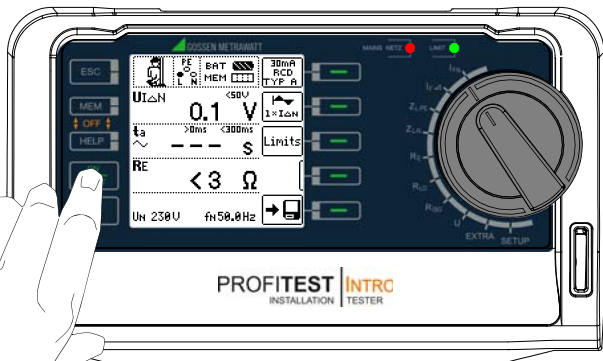
Brevi istruzioni d'uso  
Verkorte gebruiksaanwijzing  
Stručný návod

 **GOSSEN METRAWATT**

## PROFITEST INTRO

3-349-839-27  
2/5.15

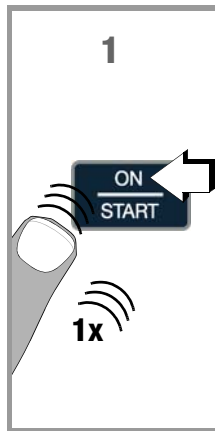
Bitte lesen Sie unbedingt die ausführliche Bedienungsanleitung im Format PDF unter [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com). Die Kurzbedienungsanleitung ersetzt nicht die ausführliche Bedienungsanleitung!



Please make sure to read the detailed operating instructions in pdf format at [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com). The short-form instructions are no substitute for the detailed instructions!

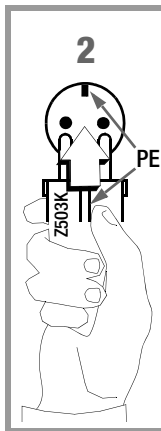
D

**1 Einschalten,  
2 Anschluss-  
3 & Akkutest**



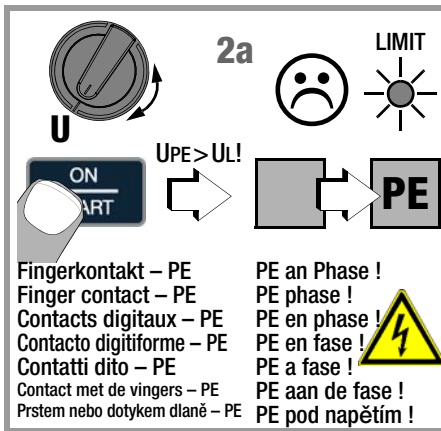
GB

**Switching on,  
Connection &  
rech. battery test**



F

**Activation,  
Test de connexion  
& piles recharch.**

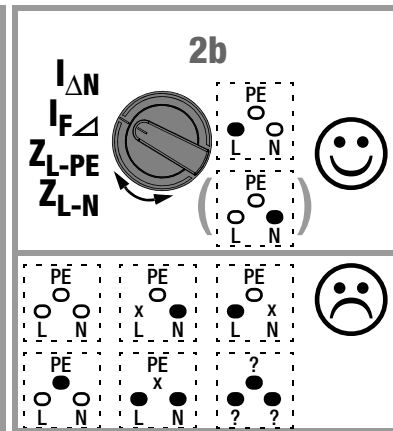


E

**Conectar,  
Prueba de con-  
exión & baterias**

I

**Accendere,  
Test collega-  
mento & batterie**

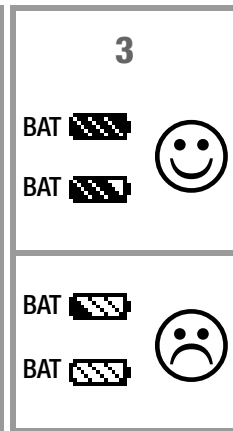


NL

**Inschakelen,  
Aansluittest  
opl. batterijtest**

CZ

**Zapnout,  
Test připojení  
a akumulátory**



D

GB

F

E

I

NL

CZ

**1 Helligkeit**  
**2 Kontrast**  
**3 Hilfe**  
 anfordern

**Brightness**  
**Contrast**  
**Request**  
 help

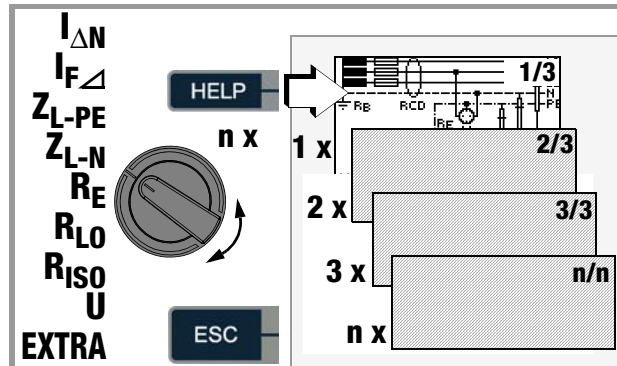
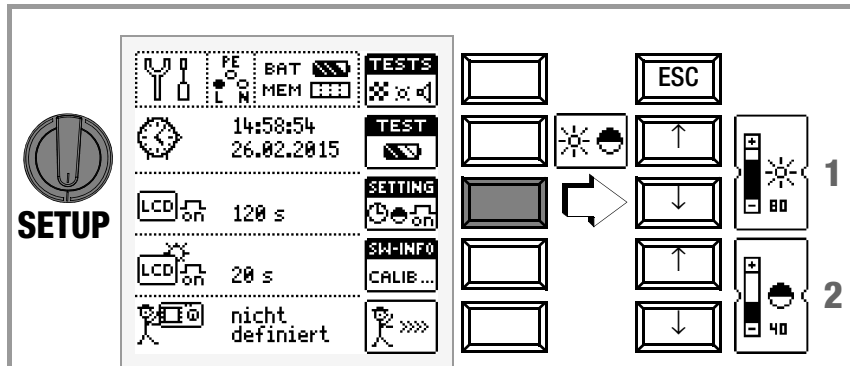
Intensité lumineuse  
**Contraste**  
**Demander**  
 aide

**Brillo**  
**Contraste**  
**Solicitar**  
 help

**Luminosità**  
**Contrasto**  
**Chiedere**  
 aiuto

**Helderheid**  
**Contrast**  
**Hulp**  
 inroepen

**Světelnost**  
**Kontrast**  
**Nápověda**



D

**Parameter:**  
 1-3 auswählen  
 4 bestätigen  
 5 übernehmen

GB

**Parameter:**  
 select  
 confirm  
 take over

F

**Paramètres**  
 sélectionner  
 confirmer  
 reprendre

E

**Parámetros**  
 seleccionar  
 confirmar  
 aceptar

I

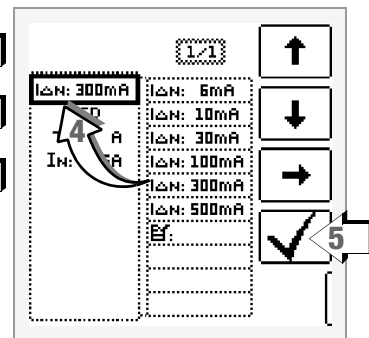
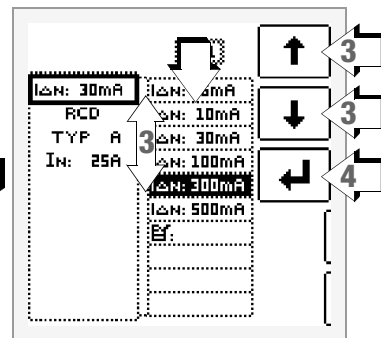
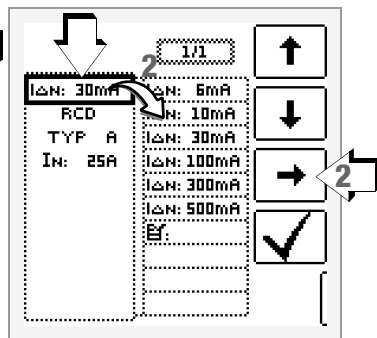
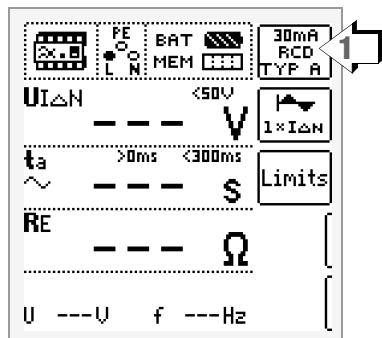
**Parametro**  
 selezionare  
 confermare  
 applicare

NL

**Parameter**  
 kiezen  
 bevestigen  
 accepteren

CZ

**Parametry:**  
 vybrat  
 potvrdit  
 převzít



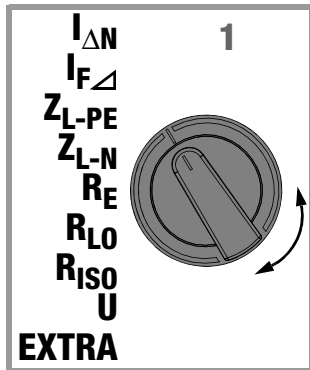
D

### Messung

1 auswählen

2 starten

3 RCD auslösen



GB

### Measurement

1 select

2 start

3 trip RCD

F

### Mesure

1 sélection

2 démarrer

3 déclencher RCD

E

### Medida

1 seleccionar

2 iniciar

3 iniciar RCD

I

### Misura

1 selezionare

2 avviare

3 sganciare RCD

NL

### Meting

1 kiezen

2 starten

3 RCD activeren

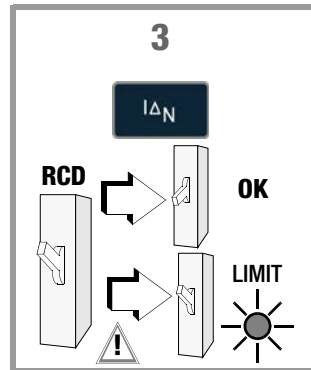
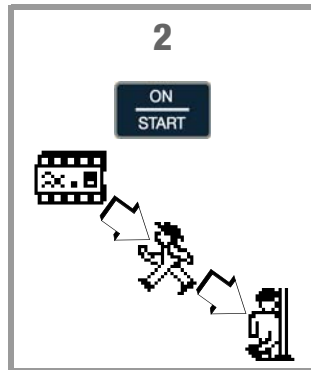
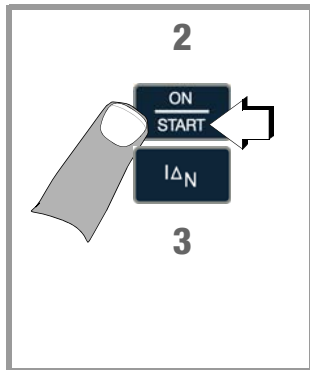
CZ

### Měření

1 zvolit

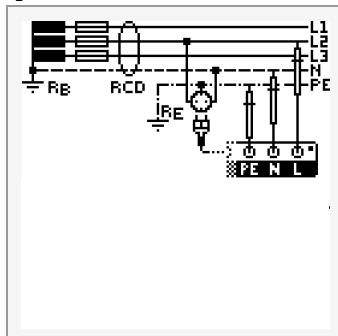
2 nastartovat

3 RCD vybavit

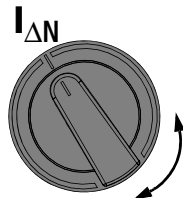


$I_{\Delta N}$

1



2



3

$I_{\Delta N}$  6 ... 500 mA,  $\text{xxx mA}$   
**RCD** SRCRD, PRCD, ...  
**Typ** AC, A/F, B/B+, EV/MI;  $I_N$  6...125 A

30mA RCD TYP A

UI $\Delta$ N <50V 1x $I_{\Delta N}$

ta >0ms <300ms Limits

RE ---  $\Omega$

U ---V f ---Hz

: 50%  $I_{\Delta N}$  (1s)  $\rightarrow$  1 x  $I_{\Delta N}$   
 500 mA: 1 x  $I_{\Delta N}$ , 2 x  $I_{\Delta N}$

0° 180° NEG. POS. POS.

$I_{\Delta N}$  , x 1, x 2, x 5

4

UL < 25 V, 50 V, 65 V,  $\text{xxx V}$   
 ta < 40 ms... 1.00 s,  $\text{xxx ms}$   
 ta > 0 ms... 500 ms,  $\text{xxx ms}$

30mA RCD TYP A

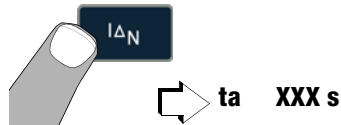
UI $\Delta$ N <50V 1x $I_{\Delta N}$

ta >0ms <300ms Limits

RE < 3  $\Omega$

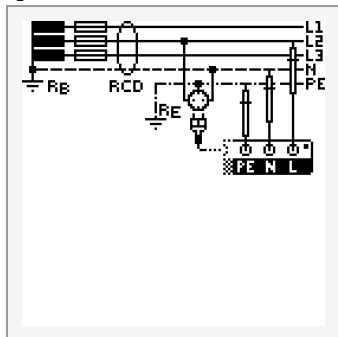
Un 230V fn 50.0Hz

5

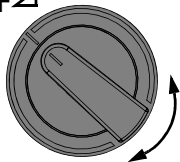


$I_{\Delta}$ 

1

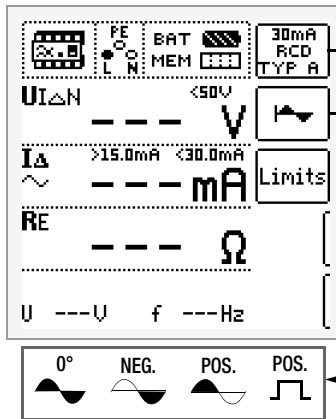


2

 $I_{\Delta}$ 

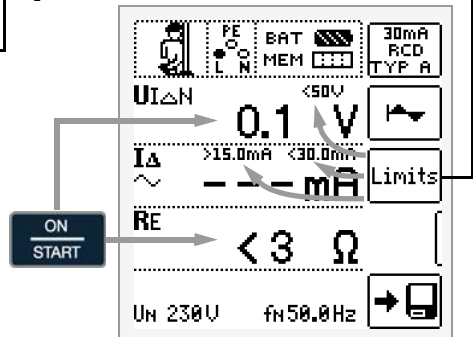
3

$I_{\Delta N}$  6 ... 500 mA,  $\text{xxx mA}$   
**RCD** SRCRD, PRCD, ...  
**Typ** AC, A/F, B/B+, EV/MI;  $I_N$  6...125 A



4

UL < 25 V, 50 V, 65 V,  $\text{xxx V}$   
 $I_{\Delta}$  > 1.0 ... 250 mA,  $\text{xxx mA}$   
 $I_{\Delta}$  < 6.0 ... 1000 mA,  $\text{xxx mA}$

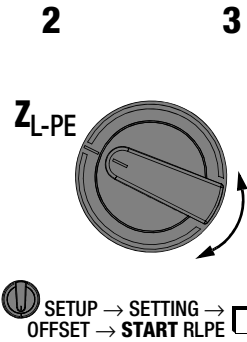
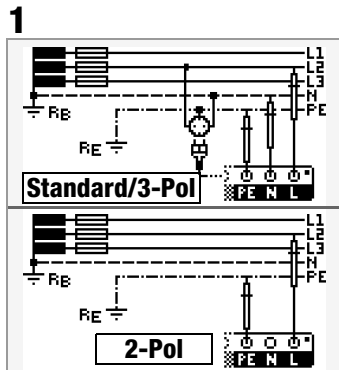


5



$I_{\Delta}$  XXX mA

# Z<sub>L-PE</sub>



**3**

$I_N$  2 ... 160 A,  $I_{\Sigma}$  xxxx A  
 Typ A, B/L, E, C/G, D, K, H ...  
 $\varnothing$  1,5-70 mm<sup>2</sup>, NY... HO...  
 1, 2, 3 ... 10

$U_L$  < 25, 50, 65 V,  $E_{\Sigma}$  xx V

0° 15 mA DC-L +   
 DC-H +

IN 16A TYP: B/L 1.5mm<sup>2</sup>

ZL-PE --- Ω

IK >120A --- A

Limits IK: 2/3Z

01/03 AUTO

RLPE-OFFSET 0.8 0 Ω

U ---V f ---Hz

ON START

**4**

$I_K$ : 2/3 Z, 3/4 Z, Ia, Ia + Δ%

L1-PE, L2-PE, L3-PE, AUTO

Standard   
 2-Pol

IN 16A TYP: B/L 1.5mm<sup>2</sup>

ZL-PE 697 mΩ

IK >120A 330 A

Limits IK: 2/3Z

01/03 AUTO

RLPE-OFFSET 0.8 0 Ω

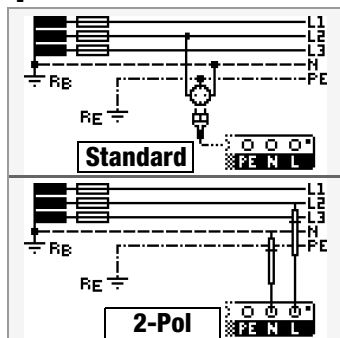
U 230V fn50.0Hz

ON START

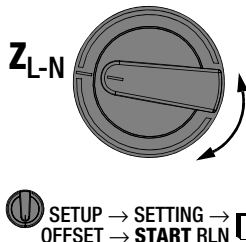


$Z_{L-N}$

1



2

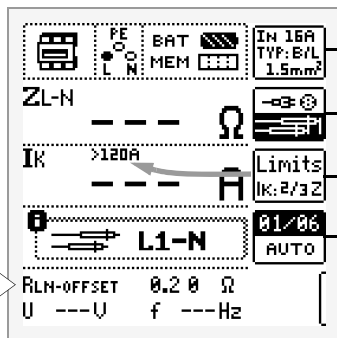


3

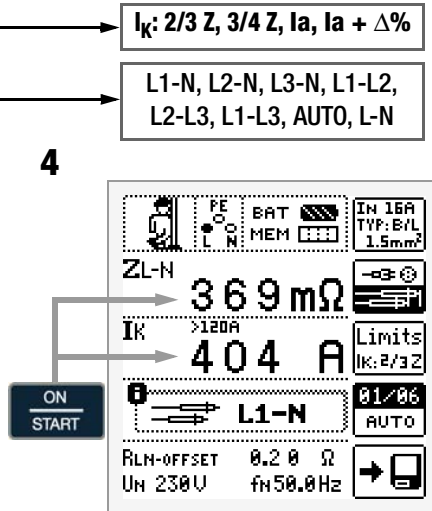
$I_N$  2 ... 160 A,  $\Sigma$ xxxx A  
Typ A, B/L, E, C/G, D, K, H ...  
 $\varnothing$  1,5...70 mm<sup>2</sup> NY... HO...  
●●● 1, 2, 3 ... 10

Standard

2-Pol

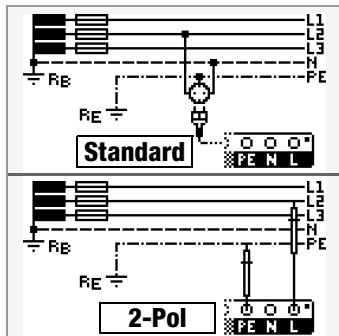


4

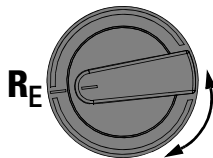


$R_E$

1a/b



2



SETUP → SETTING →  
OFFSET → START RLPE

3a

**Standard**

**2-Pol**

UL < 25, 50, 65 V,  $E_{xx}$  V

0° 15 mA DC-L+

DC-H+

RE (L-PE) <10.0Ω

**169 mΩ**

RANGE 10Ω

UL < 50V

Limits

RE=ZL-PE-1/2ZL-N:Rb=0

RLPE-OFFSET 0.16 Ω

U ---V f ---Hz

3b

**R =** **AUTO,**  
**10 kΩ (4 mA),**  
**1 kΩ (40 mA),**  
**100 Ω (0,4 A),**  
**10 Ω (> 0,8 A)**

RE: <1.00Ω, <2.00Ω, <10.0Ω  
 <50.0Ω, <100Ω,  $E_{xx}$  Ω

RE (L-PE) <10.0Ω

**---**

RANGE 10Ω

UL < 50V

Limits

RLPE-OFFSET 0.16 Ω

U ---V f ---Hz

D

**R<sub>LO</sub>/R<sub>ISO</sub>**



Folgende Messungen sind nur an spannungsfreien Messobjekten möglich.  
Fremdspannung sperrt die Messung!

GB

**R<sub>LO</sub>/R<sub>ISO</sub>**



The following measurements are only possible on voltage-free devices.  
Interference voltage disables the measurement!

F

**R<sub>LO</sub>/R<sub>ISO</sub>**



Les mesures suivantes ne sont possibles qu'avec des appareils sans tension.  
La tension étrangère empêche la mesure!

E

**R<sub>LO</sub>/R<sub>ISO</sub>**



Las siguientes mediciones son factibles sólo sobre objetos exentos de tensión.  
La tensión ajena bloquea la medición!

I

**R<sub>LO</sub>/R<sub>ISO</sub>**



Le seguenti misure sono possibili soltanto se l'oggetto da misura è privo di tensione.  
Le tensioni esterne impediscono la misura!

NL

**R<sub>LO</sub>/R<sub>ISO</sub>**



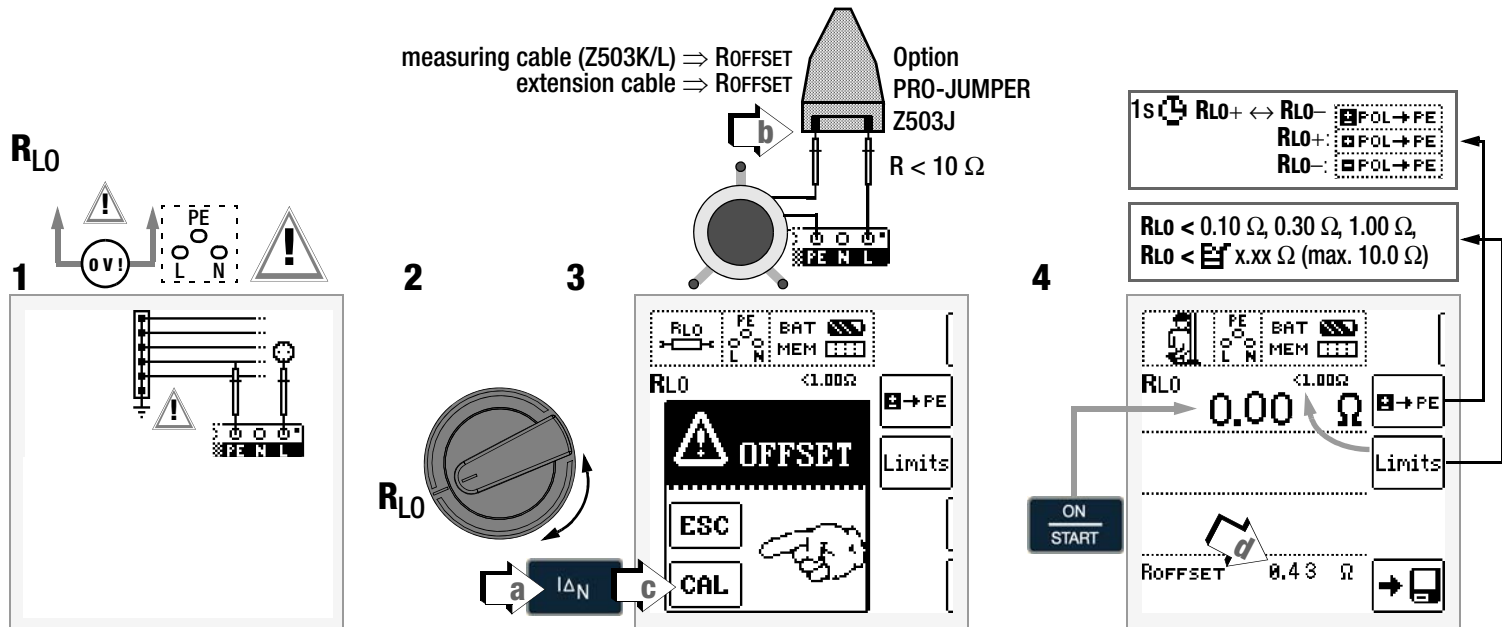
De volgende metingen zijn alleen aan spanningsloze meetobjecten mogelijk.  
Stoorspanning blokkeert de meting!

CZ

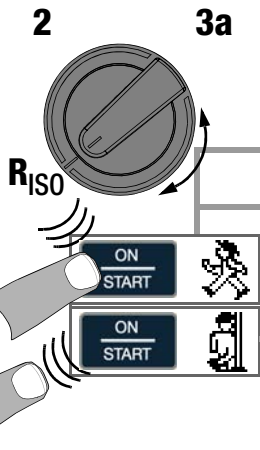
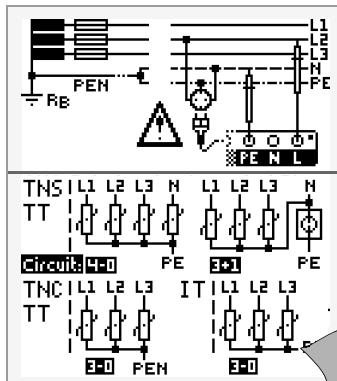
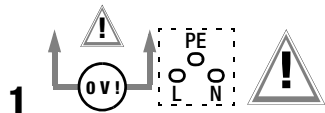
**R<sub>LO</sub>/R<sub>ISO</sub>**



Následující měření se provádějí v zařízeních bez napětí.  
Cizí napětí blokuje měření!

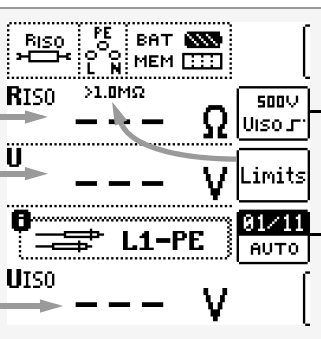


$R_{ISO} (R_{INS}) / R_{E(ISO)}$



$U_N: 50 \dots 1000 \text{ V}$ ,  $E_f^{xxx} \text{ V}$   
 $U_{ISO} (U_{INS})$

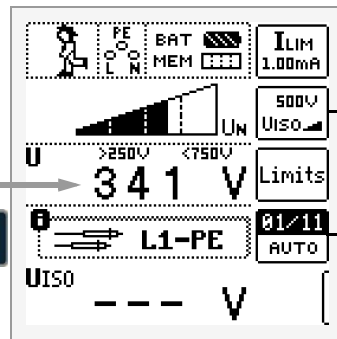
$I_{\Delta N}$  AUTO: L1-PE ... L1-L3



3b

$U_N: 50 \dots 1000 \text{ V}$ ,  $E_f^{xxx} \text{ V}$   
 $U_{ISO} (U_{INS})$

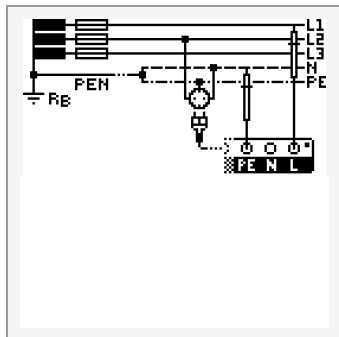
$I_{\Delta N}$  AUTO: L1-PE ... L1-L3



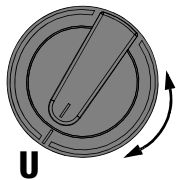
$$U_{L-N} / U_{L-PE} / U_{N-PE}$$

$$f$$

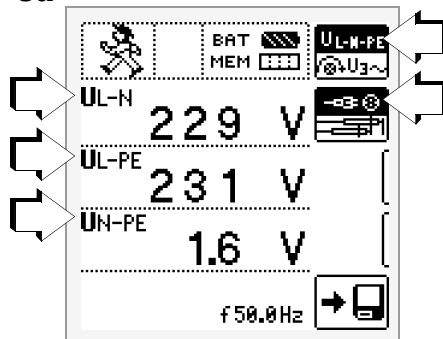
1



2



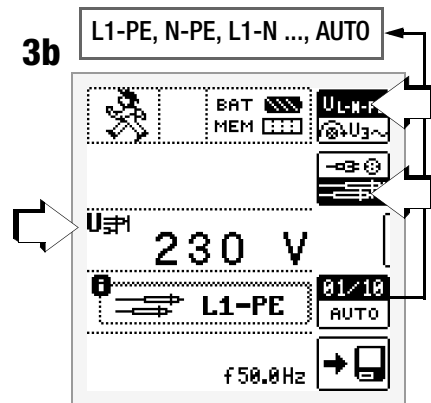
3a



Standard



3b



2-POL



D

**U3~**  
Drehfeld

GB

**U3~**  
Phase sequence

F

**U3~**  
Champs tournant

E

**U3~**  
Trifásico

I

**U3~**  
Senso ciclico

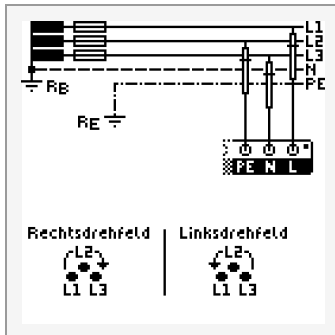
NL

**U3~**  
Draaiveld

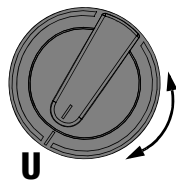
CZ

**U3~**  
Sled fázi

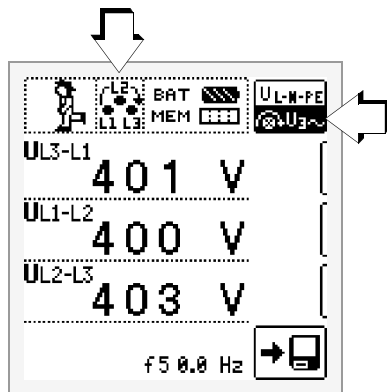
1



2



3



**Rechtsdrehfeld**  
**Right rotation**  
**Rotation à droite**  
**Sentido de giro normal**  
**Senso ciclico DX**  
**Rechts draaiveld**  
**Pravotočivé pole**



**Linksdrehfeld**  
**Left rotation**  
**Rotation à gauche**  
**Sentido de giro inverso**  
**Senso ciclico SX**  
**Links draaiveld**  
**Levotočivé pole**

D

GB

F

E

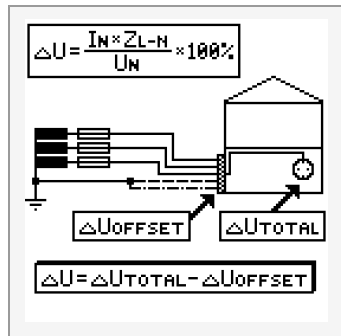
I

NL

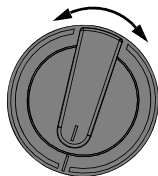
CZ

**EXTRA**Spannungsfal-  
messungVoltage drop  
measurementMesure de chute  
de tensionMedida de  
Caídas den tensiónMisura della  
caduta di tensioneMeten  
spanningsdalingMěření úbytku  
napětí

1



2

**EXTRA**

3

TAB, DIN, VDE, NL,  $\text{IEC} < x\%$

$\Delta U$  4.49 %  
 $Z_{L-N}$  644 m $\Omega$

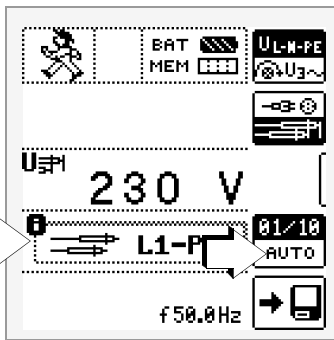
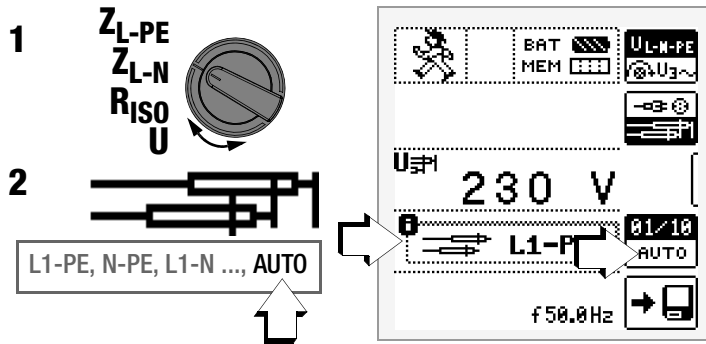
$\Delta U_{OFFSET}$  0.00 %  
 $Z_{OFFSET}$  0 m $\Omega$   
 $RLN-OFFSET$  0.25  $\Omega$   
 U ---V f ---Hz

L1-N, L2-N, L3-N, L1-L2, L2-L3, L1-L3, L-N  
**Standard**   
**2-Pol**   
 $I_N$  2 ... 160 A,  $\text{IEC}$  xxxx A  
 1,6 ... 20 x  $I_N$ , gL/gG, gL/G  
 $\varnothing$  mm<sup>2</sup> NY... HO...  
 1, 2, 3 ... 10

SETUP → SETTING →  
 OFFSET → START RLN



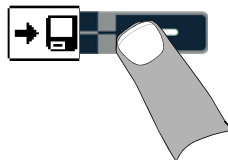
$Z_{L-PE}$ ,  $Z_{L-N}$ ,  $R_{ISO}$ ,  $U$  → **AUTO**



**3a**



**3b**



	$Z_{L-PE}$	$Z_{L-N}$	$R_{ISO}$	$U$
01/11	L1-PE	L1-N	L1-PE	L1-PE
02/11	L2-PE	L2-N	L2-PE	L2-PE
03/11	L3-PE	L3-N	L3-PE	L3-PE
04/11		L1-L2	N-PE	N-PE
05/11		L2-L3	L+N-PE	L1-N
06/11		L1-L3	L1-N	L2-N
07/11			L2-N	L3-N
08/11			L3-N	L1-L2
09/11			L1-L2	L2-L3
10/11			L2-L3	L1-L3
11/11			L1-L3	

D

GB

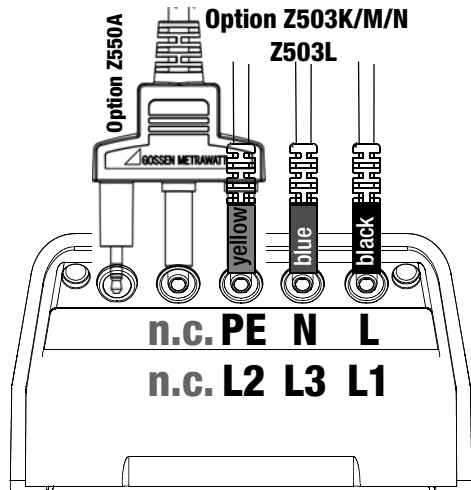
F

E

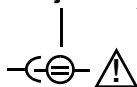
I

NL

CZ

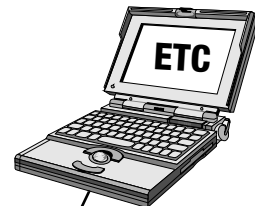
**Anschlüsse****Sockets****Connexions****Conexiones****Collegamenti****Aansluitingen****Přípoje**

**Option Z502R**  
Ladegerät  
Charger  
Chargeur  
Cargador  
Caricabatterie  
Laadapparaat  
Nabiječka



**Option Z502F**  
Barcodeleser  
Barcode scanner  
Lecteur de codes à barres  
Lector de códigos de barras  
Lettore codici a barre  
Barcodelezer  
Čtečka čárového kódu

RS232



D

1 Ausschalten  
2 Akkus



3 2 Sicherungen

GB

Switching off  
Rechargeable  
batteries

2 Fuses

F

Désactivation  
Piles  
rechargeables  
2 Fusibles

E

Apagar  
Baterías

2 Fusibles

I

Spegnere  
Batterie

2 Fusibili

NL

Uitschakelen  
Oplaadbare  
batterijen

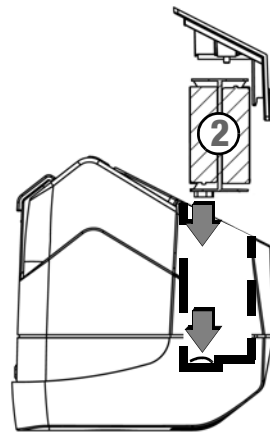
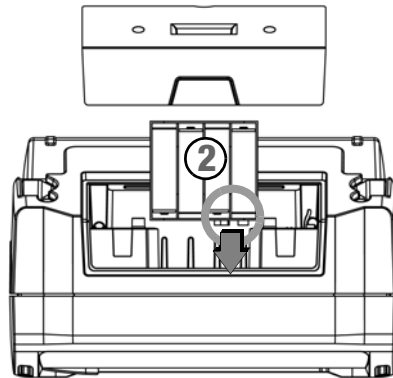
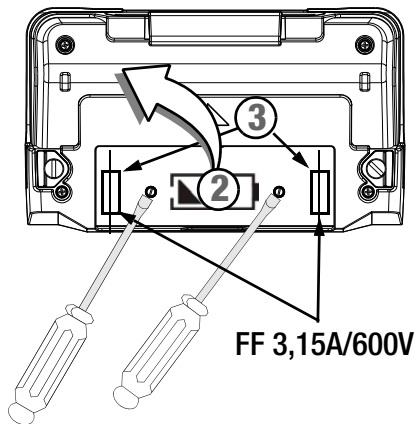
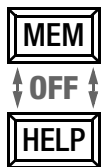
2 Zekeringen

CZ

Vypnout  
Akumulátory

2 Pojistky

1



**D**

Gedruckt in EU  
Änderungen vorbehalten

**GB**

Printed in EU  
Subject to change  
without notice

**F**

Imprimé en UE  
Sous réserve de  
modifications

**E**

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Reservados todos los  
derechos

**I**

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**NL**

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Wijzigingen voorbehouden

**CZ**

Tištěno v EU

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