GOSSEN METRAWATT

Z3511 ... 14

Clip-on current transformers

3-348-601-21
9/6.13

1 Safety precautions

The clip-on current transformers are constructed and tested in compliance with the safety rules of IEC 414/VDE 0410 and/or IEC 348/VDE 0410. When properly used, the safety of both the user and the unit is assured. It is not assured, however, if the units are misused or carelessly handled.
To maintain the safe and proper condition and to ensure safe operation, it is absolutely necessary to carefully and completely read the operating instructions before using the unit. These instructions must be followed in all respects.

2 Instructions for use

Clip-on current transformers have a core that can be opened on one side so that the primary conductor need not be disconnected for measuring. They have only one secondary winding which encloses the core near the fulcrum of the tongue legs. The front surfaces of the core, which become visible when the tongue legs are opened, must always be kept clean. Even small dirt particles can cause a large measuring error. The same goes for greasy or soiled front surfaces. All metal parts are enclosed by insulating material so that the transformer can be used safely.
The secondary connection is made via hard-wired leads with contact-protected connection plugs. A protective circuit prevents high voltages when the secondary circuit is interrupted.



Attention!
The clip-on transformer Z3512A is fitted with a voltage output. It has to be connected to the alternating voltage path of the measuring unit. All other clip-on transformers are to be connected to the current measuring path.

3 Repair, replacement of parts and calibration

When opening the unit, live parts may be exposed. The unit must be disconnected from the measuring circuit prior to repair, replacement of parts or calibration. If repair or calibration cannot be avoided unless the unit is open and live, this work must only be performed by a qualified person who understands the danger involved.

4 Faults and extraordinary stress

When it must be assumed that safe operation is no longer possible, take the unit out of service and secure it against accidental use. It is assumed that safe operation is no longer possible,

- when the unit shows obvious signs of damage,
- when the unit no longer functions,
- after prolonged storage under adverse conditions,
- after severe transportation stress.

5 Repair and Replacement Parts Service Calibration Center and Rental Instrument Service

If required please contact:

GMC-I Service GmbH
Service Center
Thomas-Mann-Str. 20
90471 Nürnberg, Germany
Phone: +49 911 817718-0
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This address is only valid in Germany. Please contact our representatives or subsidiaries for service in other countries.

6 Specifications

Clip-on current transformers				
Type	**Z3511**	**Z3512**	**Z3512A**	**Z3514**
Description/ Applications	The current transformers serve to expand AC measuring ranges. In conjunction with indicating and recording instruments it is possible to measure AC currents on lines and bus bars without the need to interrupt them. The secondary connection is made via hard-wired leads with contact-protected connection plugs. A protective circuit prevents high voltages when the secondary circuit is interrupted.			
Nominal primary current	4 … 600 A~	0.1 … 1000 A~ (… 1200 A~)	a: 1 … 1000 A~ b: 0.1 A … 100 A~ c: 10 mA … 10 A~ d: 1 mA … 1 A~	1 ... 2400 A~ (... 3600 A~)
Output signal	1 mA~ / A~	1 mA~ / A~	a: 1 mV~ / 1 A~ [1)] b: 10 mV~ / 1 A~ c: 0.1 V~ / 1 A~ d: 1 V~ / 1 A~	1 mA~ / A~
Measuring of the indicating instrument	≥ 500 mA~	≥ 1.2 A~	0 … 1 **V~** (3 **V~**)	≥ 2000 mA~
Transmission ratio input : output	1000 : 1	1000 : 1	a: 1000 : 1 b: 100 : 1 c: 10 : 1 d: 1 : 1	1000 : 1
Accuracy/ max. error as per IEC 185	Class 1 (1.25 VA) ±(3% rdg. +0.4 A)	Class 0.5 (5 VA) ±(0.5% rdg. +0.05 A)	a: 1% … 0.2% φ=2…1° b: 1% … 0.2% φ=2…1° c: 1% … 0.5% φ=5…2° d: 3% … 0.7% φ~10°	Class 0.5 (5 VA) ±(0.5% rdg. +0.1 A) at 200 ... 2000 A
Input Impedance (Load)	max. 5 Ω	max. 5 Ω	10 MΩ // 100 pF	max. 0.6 Ω
Frequency range	48 Hz … 65 Hz … 1 kHz	30 Hz … 48 Hz … 65 Hz … 5 kHz	a: 10 Hz … 500 Hz (1 kHz) b: … d: 10 Hz … 3 kHz	30 Hz ... 48 Hz ... 65 Hz ... 5 kHz
Max. operating voltage	600 V CAT III as per IEC 61010	600 V CAT III as per IEC 61010	600 V CAT III as per IEC 61010	600 V CAT III as per IEC 61010
Opening for round cond. up to flat conduct. up to	30 mm ∅ 5 x 63 mm	52 mm ∅ 53 mm (diagonal)	52 mm ∅ 53 mm (diagonal)	64 mm ∅ 5 times 5 x 125 mm or 3 times 10 x 100 mm
Dimensions	66 x 195 x 34 mm	105 x 206 x 48 mm	111 x 216 x 45 mm	145 x 333 x 49 mm
Weight	0.42 kg	0.65 kg	0.55 kg	1.8 kg
Cable length	1.5 m	1.5 m	1.5 m	1.5 m
Ident nummer	GTZ3510000R0001	GTZ3511000R0001	Z225A	GTZ3514000R0001

[1)] The clip-on transformer Z3512A is fitted with a voltage output. It has to be connected to the alternating voltage path (**V~**) of the measuring unit. Output sensitivity can be selected in 4 steps. Error indication refers to 10% … 100% of each selected maximum current (e. g. in switch position a: 10 A … 100 A).

Edited in Germany • Subject to change without notice • PDF version available on the Internet

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