

# Z821B / Z823

## Clip-on current transformers

3.348.769.21  
3/5.97

### 1 Safety precautions

The clip-on current transformers are constructed and tested in compliance with the safety rules of IEC 414 / VDE 0410 bzw. IEC 348 / VDE 0411. 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.

### 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

When you need service, please contact:

GOSSEN-METRAWATT GMBH  
Service  
Thomas-Mann-Straße 16 – 20  
D–90471 Nürnberg

Telefon (09 11) 86 02 - 4 11/4 12  
Telefax (09 11) 86 02 - 2 53

This address is for the Germany only.  
Abroad, our representatives or establishments are at your disposal.

## 6 Specifications

Clip-on current transformers		
Type	Z823B	Z821B
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.	
Nominal primary current	1 ... 1000 A~ cont. (1200 A max. 1 hour)	1 ... 2400 A~ cont. (3000 A 10 min „on“/ 30 min „off“)
Output signal	1 mV~ / A~	0.33 mV~ / A~
Ratio input:output	1000 : 1	3000 : 1
Accuracy/ max. error	$\pm (0.5 \% \text{ of } V_A^* + 0.5 \text{ mV})$	$\pm (0.5 \% \text{ of } V_A^* + 0.5 \text{ mV})$
Load	1 $\Omega$	1 $\Omega$
Frequency range	45 Hz ... <u>48 ... 65 Hz</u> ... 10 kHz	30 Hz ... <u>48 ... 65 Hz</u> ... 5 kHz
Max. operating voltage	660 V acc. to IEC 348	600 V / CAT II acc. to IEC 1010
Opening for round conductors up to for flat conductors up to	54 mm $\varnothing$ 54 mm (diagonal)	64 mm $\varnothing$ 5 times 5 mm x 125 mm or 3 times 10 mm x 100 mm
Dimensions	105 x 206 x 48 mm	145 x 333 x 49 mm
Weight	0.65 kg	1.8 kg
Ident number	Z823B	Z821B

\*  $V_A$  = Output voltage

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