ICT125 - ICT126

Isolated Current Transformer



General

Special Feature ICT125

High Accuracy

Intelligent Fault Detection

Integrated or Stand-alone

The amount of meters on the market with a current-voltage-link that cannot be opened is steadily growing. To test a meter, however, the current and voltage must be galvanically separated. This task is carried out by these ICT.

Compared with ICT126 (1:1) the ratio of the transformer for ICT125 is 1:2 that means the input current is isolated and increases by the factor 2 (max. 320 A).

Each ICT consists of three precision current transformers with combined electronic fault compensation. This fault compensation regulates the losses in the converter core near to zero. This allows the ICTs to achieve high degrees of accuracy over the entire current range.

The ICT has a phase oriented error indication. It detects faults and transmits this information together with the position number to the system bus. Fault messages are directly shown on the screen, using the WinSAM control software. In addition, the status LEDs on the front panel of an ICT indicate the phase in which a fault has occurred. Faults can only be shown on a screen when this has been integrated into a system.

The ICT allows you to choose both options: installation in a system or use as a stand-alone device. Thanks to its compact design, existing test systems can be easily upgraded and extended. When testing three-phase meters, one ICT is required per meter. It is also possible to test single-phase meters.







Integrated Self-protection

Burden Measurement (optional)

Breaker-Test (optional)

If the ICT is located in an open current circuit, the integrated self-protection is activated at once and prevents damage at the device.

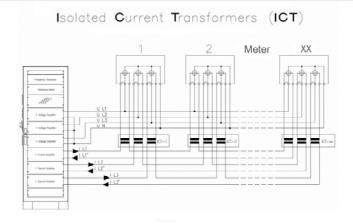
The ICTs provide with WinSAM (beginning from version 5) error detection and indication within the meter contact in every phase. After the burden measurement has been performed a corresponding message appears.

Moreover via WinSAM5 a breaker test function for meters with remote switch-off is available. For testing the contact (open or closed) a minimum of current will be send through the meter.



Breaker-Test

Use of ICTs in a multi-position system



Technical Data

ICT125 ICT126

General		
Power supply	230 V -10 % +15 %, 47 63 Hz	230 V -10 % +15 %, 47 63 Hz
Power consumption	max. 12 VA	max. 12 VA
Temperature range, operation	+5° + 40° C	+5° + 40° C
Temperature range, storage	-15° + 65° C	-15° + 65° C
Relative humidity (not condensing)	max. 95 %	max. 95 %
Dimensions (DxWxH)	355 x 214 x 210 mm	308 x 440 x 230 mm
Weight	~ 40 kg	~ 31 kg
Safety		
Declaration of conformity	CE conform	CE conform
Protection class according to DIN EN 61140		
Isolated Current Transformer		
Nominal current	100 A	100 A
Maximum current	160 A	160 A
Current prim.	10 mA 160 A	10 mA 160 A
Current sec.	20 mA 320 A	10 mA 160 A
Ratio	1:2	1:1
Ratio error 2)	< 0.05 % @ 2 A 320 A < 0.10 % @ 300 mA < 2 A < 0.15 % @ 40 mA < 300 mA < 0.3 % @ 20 mA < 40 mA	< 0.05 % @ 1 A 160 A < 0.10 % @ 150 mA < 1 A < 0.15 % @ 20 mA < 150 mA < 0.3 % @ 10 mA < 20 mA
Phase displacement 2)	< 1 min @ 2 A 320 A < 3 min % @ 300 mA < 2 A < 10 min @ 40 mA < 300 mA < 20 min @ 20 mA < 40 mA	< 1 min @ 1 A 160 A < 3 min @ 150 mA < 1 A < 10 min @ 20 mA < 150 mA < 20 min @ 10 mA < 20 mA
Max. rated burden 2)	500 mV/lsec @ 5 A 320 A 100 m Ω @ < 5 A	1 V / Isec @ 5 A 160 A 200 mΩ @ < 5 A
Max. length of meter cable 3)	800 mm @ ≥ 95 mm²	2000 mm @ ≥ 35 mm ²
Fundamental frequency	45 65 Hz	45 65 Hz

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Tel.: +49 (0) 2223 704-0 Fax: +49 (0) 22 23 704-70 E-Mail: zera@zera.de Web: www.zera.de 2: related to secondary side 3: at max. meter burden of $1m\Omega$ (ICT125), $5m\Omega$ (ICT126) Subjects to alteration.

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