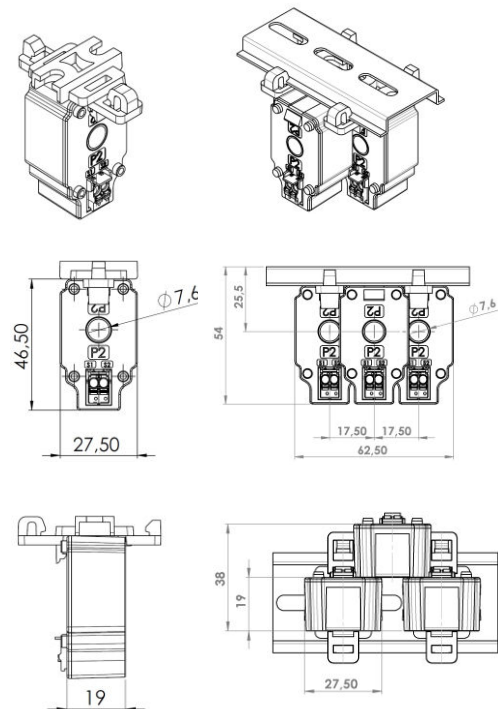
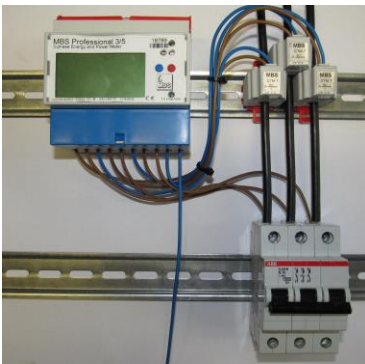


5. Dimensions



6. Application Example



The combination of three single-conductor current transformers to a three-phase current transformer set, centre spacing 17,5 mm. CTs for phase L1 and L3 are mounted on top hat rail by means of snap-on mounting (order nr. 55018), the CT for phase L2 can be clipped on the other two CTs.

7. Technical Data (see type label for precise details)

Input
Primary rated current I_{pr} : 32 ... 64 A
Thermal rated continuous current I_{cth} : $1,0 \times I_{pr}$ (100%)
Thermal rated short-time current I_{th} : $60 \times I_{pr} / 1s$
Rated surge current I_{dyn} : $2,5 \times I_{th}$
Rated frequency f_R : 50 ... 60 Hz

Output
Secondary rated current I_{sr} : 1 A
Accuracy class: 1
Rated power S_r : 0,2 ... 0,5 VA
Over-current limiting factor FS: FS5

Environmental conditions
Ambient temperature: -5 ... +50 °C
Storage temperature: -25 ... +70 °C
Relative humidity (non condensing): 5 ... 85 %
Altitude: up to 2000 m

Isolation Characteristics:
Max. voltage for electrical equipment U_m (in accordance with IEC 61010-1 under condition of:
- Over voltage category III
- Pollution degree 2
- Heterogeneous electrical field): 0,72/3/- kV
Insulation class: E

Safety
Degree of protection: IP20
Housing material: PA66 + PA6
UL-housing classification: UL94-V0

Connecting
Primary conductor opening: \varnothing max. 7,5 mm
Connection technology: „picoMAX® “ 3,5
Cross sections secondary: 0,2 – 1,5 mm² / AWG 24-14
Strip length: 8 – 9 mm / 0,31 – 0,35 in

Verified Standards
EN 61869-1
EN 61869-2
IEC 61010-1

The latest edition of the referenced normative document (including any amendments) applies.

Accessory
Snap-on mounting for top-hat rail (EN 60715) Order nr. 55018



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Operating Manual / Installation Guide

Please keep this!!

Low Voltage Current Transformer - Plug-in current Transformer -

Model Range CTM 7



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Before installation, initial operation or operation of the product, please read these instructions completely and accurately.

1. Safety Instructions



CAUTION

Following points must be noted:

- The current laws, standards and regulations.
- The state of the art at the time of installation.
- The Operating Manual.
- The recognized rules of technology.
- The fact that operating instructions can only carry out general rules and that these rules must be considered.
- Before mounting please check the device carefully for visible transport damage. In case of mechanical damage the device may not be put into operation.
- The equipment described is intended for installation by qualified electrical personnel only, and may only be installed in electrical operating areas or in enclosed housings. Any other use, or failure to comply with these instructions will result in voiding of warranty.
- The devices may be installed only in dry indoor areas.
- Do not mount on or against highly combustible materials.
- Operation with higher current than specified on the rating plate can cause overheating of the current transformer and therefore cause burns.

2. Functional Description

Current transformers of the CTM7 series are inductive, single-conductor current transformers. They are used to adapt the primary measure quantity to the input nominal value of the connected measuring devices. Based on the applied measuring principle, current transformers of this type are only for use in alternating current (AC) networks.

Current transformers are maintenance-free.

3. Warning notes



WARNING

Dangerous voltage can cause an electrical shock or burnings. Before beginning of installation work switch equipment free of voltage!

Make sure the information given on the rating plate and in the "Technical Data" under point 7 corresponds to the operating parameters of the installation.



WARNING

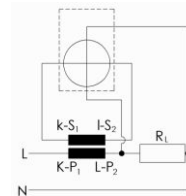
For the secondary circuit of the current transformer not under load (open), high voltages may appear on the secondary terminals. These voltages pose a danger both for persons and functional reliability of the current transformer.

"Open operation", i.e. operation without connection to a secondary circuit, is prohibited.

4. Installation

- Disconnect the power supply of the primary conductor.
- Install the current transformer on the primary conductor.
- To do so, lead the primary conductor (round conductor) through the window opening of the current transformer housing. The window opening is marked with "P1" and "P2".
- Establish the secondary connections. Note the markings "S1" and "S2" of the secondary terminals.

Measurement circuit



Note: Observe conductor cross-sections and length!

Conductor cross-section mm ²	Conduction loss VA/m
0,5	0,070
0,75	0,047
1,0	0,035
1,5	0,023

- To fit the unit to a mounting plate, use the optional available snap-on mounting for top hat rail (order nr.: 55018). This can be fixed on the mounting plate using two screws, max. Ø 5 mm.
- The assembly on top hat rail will also be carried out using the optional available snap-on mounting (order nr.: 55018).
- Check if the current transformer is mounted properly. Check if the secondary leads are mounted properly and firmly.
- Enable the primary circuit.



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This product was designed and manufactured in accordance with the applicable standards (IEC 61010, IEC 61869) and therefore meets the requirements of the Low Voltage Directive 2014/35/EU.

MBS AG states that they only use components from qualified manufacturers, whose specifications meet or exceed the requirements of the European Directive for the Restriction of use of certain Hazardous Substances **RoHS Directive 2011/65/EU**.

When the product has reached its "end of life", it must be recycled. Do not dispose as unsorted municipal waste! If necessary, contact a qualified recycler for disposal.