Technical Specifications

Safety and environmental conditions

CE marking	LV directive 2014/35/EU RoHS directive (EU) 2015/863
Standard	EN-IEC 61010-1:2010 WEEE directive 2012/19/EU

This product is designed to be safe under the following conditions:

Location	Indoor use
Altitude	Up to 2000m
Ambient temperature	-10 °C .. +55 °C
Storage temperature	-20 °C .. +70 °C
Relative humidity	5% .. 85%, non condensing
Pollution degree	2
Degree of protection	IP20

The RM27 is only suitable for insulated primary conductors.

Specifications

Standard	IEC 61869-10:2017
Rated short-time thermal current (Ith):	40 A / 1 s
Rated dynamic current (Idyn)	2,5 x Ith
Continuous thermal current (Icth)	120%
Rated insulation level	0,72/3/- kV
Rated frequency	50 Hz
Class of insulation	E (120 °C)
Secondary terminal	Female clamping connector picoMAX 3.5 WAGO, suitable for conductor size: 0,2 .. 1,5 mm² solid, stranded or ferruled (Strip length 8 .. 9 mm)

Specifications per type

	RM27
Suitable for cable	ø 7,5 mm
Approximate weight	40 g

ELEQ reserves the right to carry out modifications on its products, in order to improve them, without prior notice.

Safety instruction

All activities for installation, commissioning and maintenance of this current transformer must be performed by qualified personnel that have the knowledge of applicable safety precautions. This guide assumes that the reader of this document has sufficient electro-technical knowledge to understand the content of this document.

General

The RM27 is a low power current transformer (LPCT) and can only be used measuring electrical alternating currents. The RM27 is suitable only for mounting on insulated primary conductors in a weather protected and dry location.

Explanation of symbols

This product is designed according to the EN-IEC 61010-1:2010 standards and therefore this product meets the requirements of the Low Voltage Directive 2014/35/EU.

Read the installation guide before mounting the product. Unprofessional work activities on electrical installations may result in a threat of danger to the life and health of human beings and livestock!

Under no circumstances the secondary circuit of the CT may be opened when the CT is mounted on a primary current and current is flowing in the primary circuit. High voltages may appear on the secondary leads when this circuit is left open.

RoHS Directive (EU) 2015/863
ELEQ states that they only uses qualified component in their products from manufacturers, whose specifications meet or exceed the requirements of the European Directive for the Restriction of use of certain Hazardous Substances.

WEEE Directive 2012/19/EU
The 'crossed out wheeled bin' symbol indicates that the equipment should not be disposed as unsorted municipal waste. Contact a qualified recycler for disposal.

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RM27 Current Transformer (LPCT)
Installation Guide

RM27	(4R27xxx)
Mounting Clip	(411884)

Read this installation guide before installing the product

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Always avoid working on live parts of an installation.

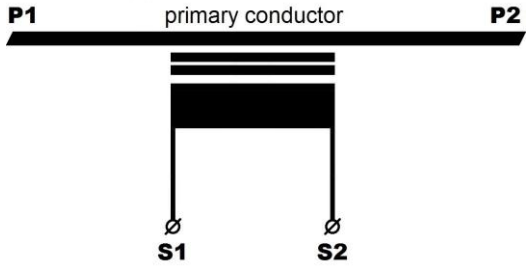
Mounting instruction

Tools are only required connecting the primary cable running through the Current Transformer. To connect the CT to the meter correctly, please consult the installation guide of the meter.

Assembly

1. Ensure a safe working area during assembly, maintenance and inspection of the CT. Disconnect the power of the primary circuit and make sure it can not be enabled unintentionally.
2. Find the power direction of the cable you want to measure. It is recommended to mount P1 side to power source and P2 side to power consumer. If so the arrow on the CT will indicate the direction of power flow.
3. Mount the CT on the cable. The RM27 can be mounted stand-alone and clicked on each other. Optional: screw mounting or mounting on a DIN-rail via the mounting clip (411884).
4. Reinstall the primary conductor.
5. Connect the secondary leads (S1, S2). For more information about the secondary leads, please consult the specifications table under 'Technical Specifications'.
6. Check if the CT is mounted properly. Check if the secondary leads are connected properly and firmly.
7. Enable the primary circuit.

Wiring Diagram



Maintenance and inspection

- Check whether the secondary leads are connected firmly.
- Check whether the CT is mounted firmly.
- Remove severe pollution on the casing.

Attention
Always avoid working on live parts of an installation.

Temporarily disconnecting the CT

If necessary, the LPCT secondary can be disconnected without risk.

Problem solving

e.g. unexpected values, incorrectly values, reversed power

- Check the settings of the meter by using the installation guide of the meter.
- Check whether the CT is mounted on the intended cable in the right direction.

Attention
Always follow the disassembling instructions when reversing the CT.

Disassembly instruction

Tools are only required disconnecting the primary cable running through the RM27. To disconnect the meter from the CT, please consult the installation guide of the meter.

1. Ensure a safe working area during disassembling the CT. Disconnect the power of the primary circuit and make sure it cannot be enabled unintentionally.
2. Dismount the CT from the primary conductor.
3. Disconnect the secondary leads from the measurement instrument.
4. Reinstall the primary conductor.
5. Enable the primary circuit if is necessary.

Recycling

When the product has reached 'end of life', it must be recycled. Do not dispose this product as unsorted municipal waste. Contact a qualified recycler for disposal.