Connection and configuration instructions

Power analyser UMG 96RM-E and residual current monitor CT-AC/DC type B+ RCM

These additional instructions describe the connection and configuration of the power analyser *UMG 96RM-E* in conjunction with the residual current monitor *CT-AC/DC type B+ RCM* on the basis of typical connection variants.

Disclaimer
Observing the information products for the devices is the prerequisite for safe operation and in order to obtain the specified performance and product features. Janitza electronics GmbH accepts no liability for injuries to personnel, property damage or financial losses arising due to a failure to comply with the information products.
Ensure that your information products are legible and accessible.

Further documentation is available on our website at www.janitza.com.

Subject to technical changes
- Please ensure that your product complies with the assembly and operating instructions.
- Please read and understand the documents enclosed with the product first.
- Keep the documents enclosed with the product available throughout the entire service life of the product and pass them on to subsequent users if applicable.
- Please inform yourself of any new device versions and the associated updates to the documentation enclosed with the product.

UMG 96RM-E:
Residual current monitoring (RCM) via I5, I6

The *UMG 96RM-E* is for use as a residual current monitoring device (RCM), suitable for monitoring AC, pulsing DC and DC.

The UMG 96RM-E can measure residual currents in accordance with IEC/TR 60755 (2008-01)

of type A and type B.

The connection of suitable external residual current transformers takes place via the residual current transformer inputs I5 (terminals 32/33/34) and I6 (terminals 35/36/37).

Residual current transformer ratio
It is necessary to program the transformation ratios for the residual current transformer inputs in the GridVis software!

Example connections

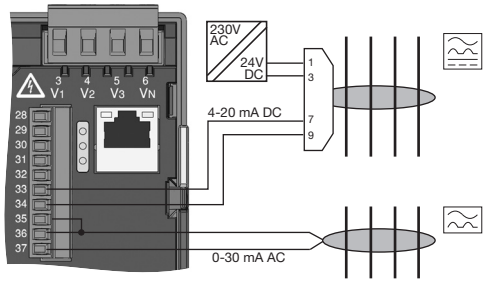

Figure 1: Example connection for measuring residual currents of type B and A. (Mains adapter with U = 24V DC, residual ripple < 5%, power: 24W)

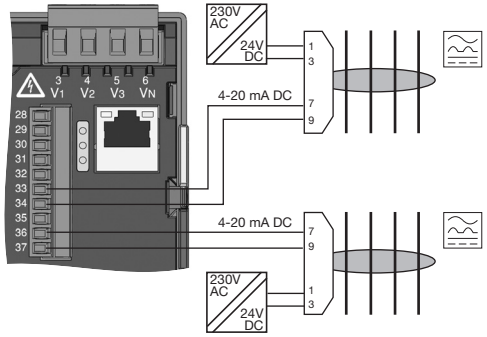

Figure 2: Example connection for measuring residual currents of type B. Every residual current transformer from the series *CT-AC/DC type B+ RCM* requires its own mains adapter (with U = 24V DC, residual ripple < 5%, power: 24W).
The secondary sides of the mains adapters (24V DC) must be galvanically separated from each other!

The residual current measurement inputs must be galvanically separated from each other!

UMG 96RM-E:
Connection configuration of residual current transformer CT-AC/DC type B+ RCM

Residual current transformers of series *CT-AC/DC type B+ RCM* are to be discontinued from operation on the *UMG 96RM-E* in the GridVis software (from version 7.2.4).

- Establish a connection between the GridVis® software (from version 7.2.4) and the power analyser UMG 96RM-E.
  For further information on this, please refer to the document "*GridVis® software interface for the device series UMG 96RM*".
- In the GridVis® software, open the device configuration of the power analyser UMG 96RM-E.
- Inside the configuration window, open the area "*RCM configuration*". Set the measurement mode of the respective measurement input to "*B+ (4-20mA)*". See Figure 3.
- Inside the configuration window, open the area "*Transformer*". Set the transformer ratio for the respective residual current measurement input (L5 and/or L6) to **300 mA** (primary). After this, the secondary side cannot be adjusted. See Figure 4.
- Save the changes to the device configuration on the power analyser *UMG 96RM-E* with the GridVis button "Transfer" .

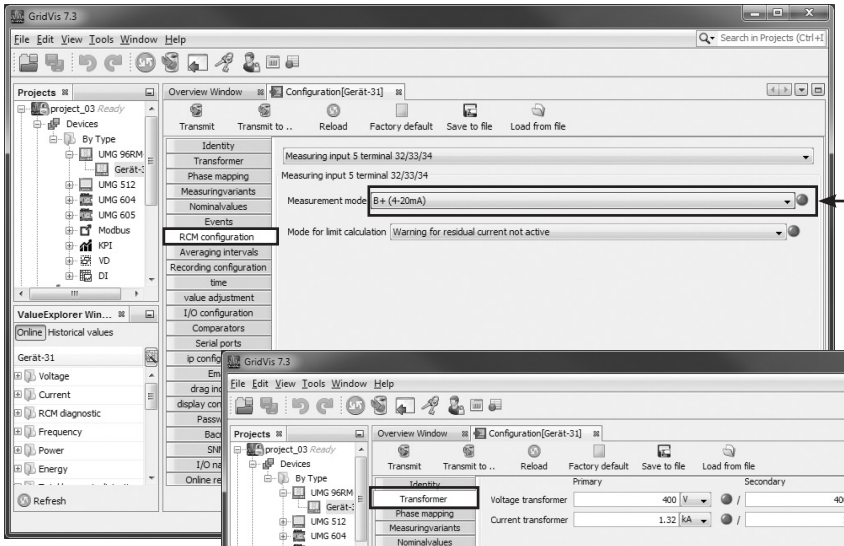

Figure 3:
GridVis® software with "transformer" configuration window

Figure 4: GridVis® software with "transformer" configuration window