**Universal measuring device UMG 103-CBM / 80-277V AC**

Dimensions: 71.5x98, installation depth: 60 mm, (4 TE) for 3 transformer inputs ../1/5A with continuous scanning of the voltage and current measuring inputs, including 4 MB memory, clock and buffering.

Measuring functions:

- Frequency of the fundamental oscillation from 45Hz ... 65Hz

- Measuring intervals of 10/12 (50/60 Hz) periods (200 ms)

- Sampling with 5.4kHz per channel and calculation of the following measured values:

- Voltage L-N

- Voltage L-L

- Measurement of the positive, negative and zero-sequence system

- frequency

- rotating field

- Current L1 ... L3, current N calculated

- Power of fundamental oscillation (active, reactive and apparent power, cosphi), distortion reactive power

- Sum L1 ... L3 of the above-mentioned power quantities

- Active power (reactive)

- Reactive power (inductive)

- Harmonics 1 ... 40th harmonic of current and voltage, ungrade

- Distortion factor (THD in %) of current and voltage

Acquisition:

- Acquisition of minimum, maximum values

- 2 virtual inputs and outputs via Modbus

- 2 comparator groups with 3 comparators (operator >=<)

Interfaces / protocols:

- RS485, protocol: Modbus RTU/slave

Technical data:

- Overvoltage category: 300V CAT III

- Rated voltage in 4-wire system: max. 277/480 VAC, +10%.

- Frequency of the basic oscillation: 45 - 65Hz,

- Auxiliary voltage: L-N 80..277V AC;

- Power consumption: 4VA

- Current measurement: ../1A/5A

- Response current: 5mA

- Voltage: ± 0.2%

- Current: ± 0.5

- Power: ± 0.5%

- Active energy: Class 0.5S at ../5A

- Active energy: Class 1 at ../1A

- Reactive energy: Class 2 at ../1/5A

- Ambient temperature during operation: -10°..+55°C

- Relative humidity: 5 to 95%

- Protection class: IP20

Delivery includes:

Mounting accessories, documentation, parameterisation, & evaluation software in basic version, tuning of the design to the practical application as well as the measured variables incl. their recording intervals, compatible current transformer set min. Kl. 0.5 all-phase, measuring transformer disconnect terminals with screw connection 0.2 - 10 mm², bridges as well as DIN rail clamp for DIN rail mounting according to DIN VDE 0100 - 557.5.3.1, configuration and parameterisation of the unit (e.g. mains form, transformer ratios, addressing of the communication interfaces), delivery, installation as well as connection.

Primary current at measuring point: '.........'. A.

Make: Janitza electronics GmbH

Type: UMG 103-CBM

Item no. 5228001