**Module 20CM-CT6**

6-channel active operating and residual current monitoring module

as a modular extension of the manufacturer's 20-channel operating and residual current monitoring device for recording operating and residual current parameters via permanently installed current transformers, e.g. in 6x 1-phase, 2x 3-phase current circuits or 3x 2-phase current systems, etc. Maximum expansion per basic unit by 16 modules with 6 channels each, resulting in up to 96 channels.

Monitoring of sum differential currents (e.g. L1,L2,L3,N) or single differential currents (e.g. PE) of residual current TYPE A according to EN 62020:1998+A1:2005, (VDE 0663):2005 with independent, channel-related 2-stage limit value parameterisation (warning and limit value) with separately parameterisable response delay and switch-back hysteresis, indication of the status of the limit value monitoring via 6 two-colour LEDs as well as output and indication of associated diagnostic variables and the device status via 2 two-colour LEDs and via the interface.

Suitable for measuring TN & TT networks as well as in IT networks for recording and monitoring operating and residual currents, frequency, active, apparent & reactive power and active energy per channel as well as in up to 3 freely definable summing channels (active power & active energy) in the frequency range from 45 to 65 Hz, power factor & cos phi per channel, magnitude and phase angle of the fundamental oscillation current, 4-quadrant measurement, continuous true RMS value measurement, min. and maximum value memory incl. separate time stamps for operating currents and active power parameters.

Analysis channel for targeted investigation of the selected channel of the single harmonic (even / odd) harmonic current up to the 63rd harmonic and percentage output (THD-I), crest factor of the current and Total Demand Disortion (TDD).

Gradual selection of the measuring interval (1 to 60 minutes), storage of the measured values (127 days at 15 min. measuring interval) and forwarding of the data to an evaluation system via the main unit connected via CAN bus.

Top-hat rail mounting, 119 x 47 x 45 mm (WxHxD), 7 TE, protection type: IP 20, protection class: III, net weight: 170 g, heat dissipation: max. 2 W

Measuring accuracy according to EN 61557-12:

Operating and differential current: 0.5% / Active, reactive, apparent power: 2% / Power factor: 1%.

Supply voltage (via CAN bus):

Nominal range: 24 V DC (± 10 %, PELV)

Current measurement:

Version: permanently installed bushing transformers

Quantity: 6x

Inner diameter per transformer core: 9.5 mm

Transmission ratio 700:1

Measuring range operating current: 2 mA to 63 A (AC)

Measuring range differential current: 2 mA to 1 A (AC)

Resolution of operating current measurement: 0.5 mA

Resolution differential current measurement: 35 mA

Current transformer rated voltage AC 250 V

Current transformer rated frequency 50 Hz

Cut-off frequency 3.3 kHz

Monitoring functions:

Response delay range: 0 to 650 s

Range of reset delay: 0 to 650 s

Resolution of delay parameters: 10 ms

Communication interfaces:

Interfaces: 2x CAN / CAN 2.0

Version: 2 x 6-pole IDC connector

Protocol: CANopen

For feeding the supply voltage into the CAN bus as well as the CAN bus termination, one LCAN-RS45 adapter as well as an active power supply (24V DC / 1A) are required for each bus line with a maximum of 16 nodes. (separate procurement)

Delivery includes: Mounting accessories, documentation, parameterisation & evaluation software in basic version with database, manual report generation, visualisation as well as graphical display of measured data.

Manufacturer: Janitza electronics GmbH

Type: Module 20CM-CT6

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