

Installation set MEg40+/S3



PURPOSE AND DESCRIPTION

The installation set MEg40+/S3 is designed for installation of the instrument Universal energy meter MEg40+/S3 into LV switchgears and live working technologies. The instrument MEg40+/S3 is installed on a DIN rail TC35 together with a three-pole disconnect switch of measured voltages and a terminal connecting for the neutral conductor. This set is used for installations into LV boxes without any square hole prepared to install the instrument and they are without installed fixed instrument current transformers and have live collectors whose width is more than 70 mm or they are in a non-standard version.

The set of Universal energy meter MEg40 $^+$ /S3 sensors is available with the nominal values of current 250 A, 500 A, 1000 A, 2000 A. The current measurement overloading is up to 1.5-fold of the nominal current of the set. According to the nominal current range, the version MEg40 $^+$ /S3 with AMOSm sensors can be used for the following power transformers:

- 250 A, power transformer with power from 100 kW to 200 kW,
- 500 A, power transformer with power from 200 kW to 400 kW,
- $1000\,\text{A}$, power transformer with power from $400\,\text{kW}$ to $800\,\text{kW}$,
- 2000 A, power transformer with power from 800 kW to 1 500 kW.

The installation set MEg40⁺/S3 speeds up the installation process and allows possible subsequent handling in DTS voltage measurement circuits without limiting its operation.

TECHNICAL PARAMETERS

Dimensions: $240 \times 122 \times 106 \, \text{mm}$

Weight: 1.20 kg Nominal measured voltage U_{nom} : 230 V

Measuring voltage range: 0V – 290V

Measurement category: IV, ČSN EN61010-1, up to 300 V Nominal values of measured currents I 250 A/500A/1000 A/2000 A

Measuring current range: $0 - 1.2 I_{nom}$ Maximum value of measured currents: $1.5 \times I_{nom}$

Supply voltage: 230 V + 10 %, -30 %, 5 VA, 50 Hz

Pollution degree: 2

Operating temperature: -25 °C to +55 °C

Ingress protection rating: IP00

Relative humidity: 20% - 90% at 40%

Connecting cross-section of VLC 10 3P disconnect switch: $Cu/0.5 - 25 \, mm^2$ Cylindrical fuses in VLC 10 3P disconnect switch: $PV 10 \, 2A \, gG$ Connecting cross-section of RSA 6 terminal: $Cu/0.75 - 8 \, mm^2$ Max. number of wires connected into RSA 6: $3 \times (0.75 - 1.5) \, mm^2$

RSA 6 socket recommenced length: 10 mm

AMOSm flexible sensor parameters

Loop length:30 cmLoop diameter:8 mmDiameter of free part of closure:10 mmMinimum radius of loop curvature:20 mm

Temperature: from -20 °C to +90 °C for measuring loop

Relative humidity: 0% – 90% at 40°C

Nominal voltage of measured

current wire without its own insulation: 230 V Ingress protection rating: IP42 Measurement category for sensor loop: IV Electrical appliance protection class: II

Manufacturer