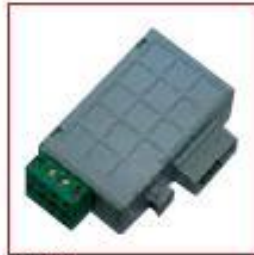


## LOW VOLTAGE NETWORK MONITOR NA96



IMG2-2003



IMG2-2004

### TECHNICAL DATA

- Three-phase line 80...500V (phase - phase)
- Connection with external dedicated CT
- Programmable external CT-VT ratio

### DISPLAY

- Type of display: LCD backlit, automatic backlit reduction off after 20 s that keyboard is not used
- N° of display points: 10.000, 4 digits (high digit 12 mm)
- Energy count: 8 digit counter (high digit 8 mm)
- Engineering units: automatic display according to the set VT and CT ratios
- Resolution: automatic, with the highest possible number of decimals
- Decimal point: automatic, with the highest possible resolution
- Reading update: 1,1 seconds
- Accuracy (of the reading):
  - Voltage:  $\pm 0,5\%$  (80...500V phase - phase)
  - Current:  $\pm 0,5\%$  (10...120% In)
  - Powers:  $\pm 1\%$  (10...120% Pn/Qn/Sn  $\cos \varphi$  0,5 ind...0,5 cap.)
  - Frequency:  $\pm 0,2$  Hz
- Energy count (reference voltage 400 V):
  - Active energy: class 1 (EN62053-21)
  - Reactive energy: class 2 (EN62053-23)

### DISPLAY PAGES

Display is divided into four menus which can be reached with the relevant function keys:  
voltage / current / power three-phase / power factor

The total active or reactive energy (alternatively) is always displayed on all the display pages.

### PROGRAMMING

- Parameters programming: front keyboard, 4 keys
- Programming access: protected by password
- Data and configuration parameters retention: non volatile memory (no battery)

### PROGRAMMABLE PARAMETER

#### INPUT:

- Connection: single-phase and three-phase network, 3 and 4 wire
- Current rating: 1 – 5 A
- External VT ratio: 1...10 (max. VT primary 1200 V)
- External CT ratio: 1...9999 (max. CT primary 50 kA/5A – 10 kA/1A)

#### CURRENT DEMAND – POWER DEMAND:

- Average period: 5/8/10/15/20/30/60 min.

#### DISPLAY:

- Contrast: 4 selectable value
- Backlight: 0 – 30 – 70 – 100%
- Customized page: quantities which can be displayed when switches on

## LOW VOLTAGE NETWORK MONITOR NA96 – continued

### INPUT

- Single-phase network, three-phase network 3- and 4-wire
- Three-phase voltage: 80...500V (phase-phase)
- Single-phase voltage: 50...290V
- Connection with external dedicated current transformers
- Current rating In: 5A – 1A
- Max. current I<sub>max</sub>: 1,2I<sub>n</sub>
- Instantaneous overload: 20I<sub>n</sub>/0,5 seconds
- Frequency rating f<sub>n</sub>: 50Hz
- Tolerance: 47...63Hz
- Type of measurement: true RMS value
- Harmonic content: up to the 16th harmonic
- Voltage rated burden: ≤ 0,5VA (each phase)
- Current rated burden: ≤ 0,5VA (each phase)

### AUXILIARY SUPPLY

- Rated value U<sub>aux</sub> ac: 80...265V
- Rated frequency: 50Hz
- Working frequency: 47...63Hz
- Rated burden: ≤ 4VA (with modules)
- Rated value U<sub>aux</sub> dc: 110...300VDC
- Rated burden: ≤ 3,5W (with modules)
- Protected against incorrect polarity

### INSULATION (EN 61010-1)

- Installation category: III
- Pollution degree: 2
- Insulation voltage rating: 300V (phase neutral)
- Impulse voltage test: 6kV 1,2/50µs 0,5J
- Considered circuits: measure, aux. supply
- A.C. voltage test: 4kV r.m.s. value 50Hz/1min
- Considered circuits: all circuits and earth

### TESTS FOR ELETROMAMAGNETIC COMPATIBILITY

- Emission and Immunity tests according to EN 62052-11

### ENVIRONMENTAL CONDITIONS

- Reference temperature: 23°C ± 2°C
- Specified operating range: -5...55°C
- Limit range for storage and transport: -25...70°C
- Variation to the class index: ≤ 0,1% /°C
- Suitable for tropical climates
- Max. power dissipation <sup>1)</sup>: ≤ 5W  
<sup>1)</sup> For switchboard thermal calculation

### HOUSING

- Housing: flush mounting (panel cutout 92 x 92mm)
- Front frame: 96 x 96 mm
- Depth: 61 mm
- Max. depth: 81 mm (with optional modules)
- Connections: screw terminals (input current) to plug out (input voltage)
- Volumetric terminals range: rigid cable max. 4,5 mm<sup>2</sup>, flexible cable max. 2,4 mm<sup>2</sup>
- Ammetric terminals range: rigid cable max. 6 mm<sup>2</sup>, flexible cable max. 4 mm<sup>2</sup>
- Housing material: self-extinguishing polycarbonate
- Protection degree (EN60529): IP54 front frame, IP20 terminals
- Weight: 285 grams

| DESCRIPTION                   | ORDER NO. |
|-------------------------------|-----------|
| Netanalyser                   | MGF39000  |
| Modul for alarm contacts      | MGF3900A  |
| Modul for impulse contacts    | MGF3900I  |
| Modul for analog contacts     | MGF3900M  |
| Modul with RS485 interface    | MGF3900R  |
| Modul with profibus interface | MGF3900P  |