

# EMG 5


## ELECTRONIC MULTIMETER

### GENERAL FEATURES

EMG 5 is designed to measure current, voltage and frequency parameters in 3-phase systems.

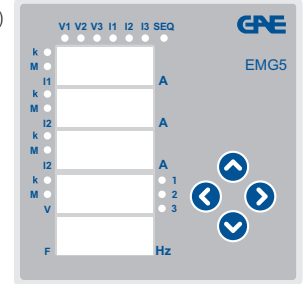
### PROPER USE AND SAFETY CONDITIONS

- Installation and wiring must be performed by authorized technicians in accordance with the instructions in the user manual. Do not commission the device before proper wiring.
- Make sure the device is de-energized before connecting to the mains.
- Short circuit the k-I terminals of the current transformer in another location before disconnecting the current transformers. Failing to do so will cause dangerous high voltages in the secondary terminals of the current transformers.
- Use a dry cloth to clean the device. Do not use alcohol, thinner or any abrasive materials.
- Make sure all wiring is properly made before commissioning the device.
- Do not open the device. There are no serviceable parts by the user.
- Keep the device away from humidity, water, vibrations and dust.

 The manufacturing company may not be kept responsible for unfavorable incidents that arise out of the failure to follow the above cautions.

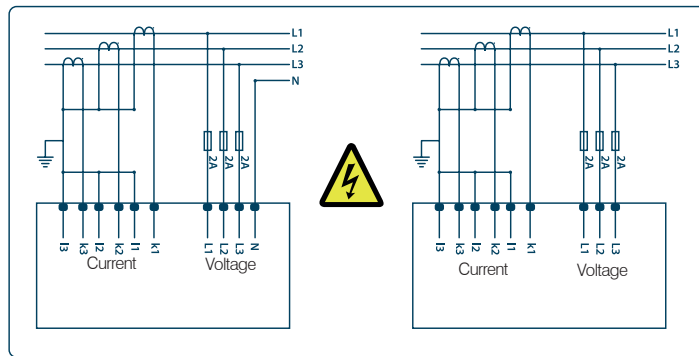
### FRONT PANEL DEFINITIONS

- 1, 2, 3, 4, 5 → Indicators (7 segment displays)
- 6,7,8 → Phase on/off LEDs(V1,V2,V3)
- 9,10,11 → Current on/off LEDs.(I1,I2,I3)
- 12 → Sequence fault (SEQ)
- 13,14,15 → Voltage Indicators
- 16,18,20,22 → Kilo LEDs (k)
- 17,19,21,23 → Mega LEDs (M)
- 24 → Right arrow key
- 25 → Up arrow key
- 26 → Left arrow key
- 27 → Down arrow key



Product Name	Definition	Order No.
EMG 5	Electronic Multimeter	606 244

### CONNECTIONS



### INSTANTANEOUS MEASUREMENTS

Voltage (L-N and L-L), current and frequency values are shown in instantaneous menu. Up / down arrow keys can be used to toggle between voltage monitoring menus.

### SETTINGS MENU (SEt)

EMG 5 settings are made in the SEt menu. Pressing the right arrow key for > 1 sec will access the "SEt" menu. There are 3 submenus in this menu:

- 1) Basic Settings Menu (bSc):** This is the menu item where you make the current transformer ratio, voltage transformer ratio and connection type settings.
  - **Current transformer ratio (Ctr):** The calculated currents are multiplied by the current transformer ratio (Ctr) to be indicated on the displays.(1-5000)
  - **Voltage transformer ratio (Utr):** The calculated voltages are multiplied by the voltage transformer ratio (Utr) to be indicated on the displays.(1.0-5000.0)
  - **Connection (Conn):** This menu is for the network connection settings. The connection type can be selected as "StA" (3-phase 4-wire) or "dEL" (3-phase 3-wire).

### SAVE PROCEDURE

**Changing Value/Setting:** Press the right key to choose and blink the first variable of the mmenu. Press the up/down keys to choose and blink the desired option/number. Then press the left button to complete your choice.

**Saving:** Press the left key until you see the "SAU nO" display to confirm or discard the changes you made. Press the right key to blink the "nO" sign. Use the up/down keys to change the "nO" to "YES". Then, press the left key to store the changes.

**2) Password Settings Menu (Sec):** Use this menu item to turn the password protection on/off, set a password activation time and change password settings editing options.

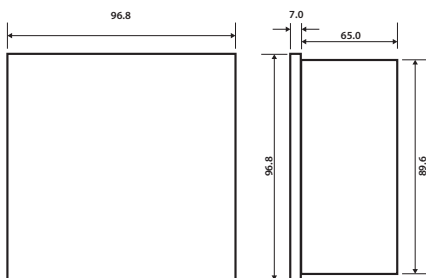
- **Password protection (Act):** Password protection is turned on / off.
  - **Password activation time (P t):** After a successful login, the device will not ask for a password until the "password activation time" has elapsed.
  - **Password value(Pin)**
- 3) Menu scroll setup (Scr):** Menu Navigation is given as a name to command which is moving menu screen to next one at the end of display time.
    - **Act:** If "YES" is selected, automatic menu navigation is activated 15 seconds after the device is turned on or the last key is pressed. When the menu display period expires, the next menu (such as pressing the down arrow key) is displayed on the screen. As long as no key is pressed, navigation is continued. If "NO" is selected, this feature is turned off.
    - **Menu display period (PEr):** Each menu appears in the screen during the period that is adjusted in "PEr" menu.

### CLEAR MENU (CLR)

This menu is used to restore the device settings to factory settings.

- **OFF:** Disables the clear process.
  - **SETTINGS:** Restores all settings to the factory settings.
- UEr:** Version

### DIMENSIONS



### TECHNICAL SPECIFICATIONS

#### SUPPLY

Voltage .....85..300V AC/DC  
 Frequency .....45..65 Hz  
 Power Consumption.....<6VA

#### MEASUREMENT INPUTS

Voltage .....5..300V AC (L - N)  
 ..... 10..500V AC (L - L)  
 Current.....10mA..6A AC  
 Frequency.....45..65Hz  
 Connection Type..... 3 phase 4 wire, 3 phase 3 wire

**OPERATING TEMPERATURE/ STORAGE TEMPERATURE / RELATIVE HUMIDITY**  
 -20°C..+60°C / -30°C..+80°C / maximum 95% No Condensation

#### PROTECTION CLASS

IP20