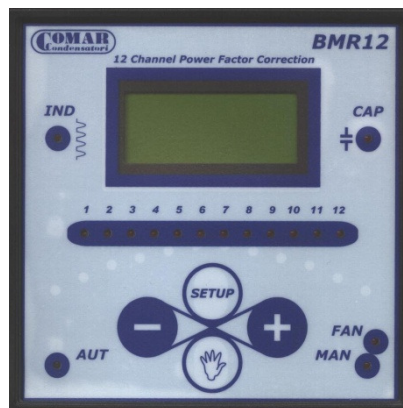




### ***AUTOMATIC – MANUAL MODE :***

Press different times on the button  until you can read on the display “ cos ρ ” .

You can switch between the manual and automatic mode by pressing 3 sec on the button .

### **SETUP:**

The parameters can be set by two menus :

- ☐ BASIC = PAR SETUP
- ☐ ADVANCED = MAIN SETUP

### **PAR SETUP:**

To access this menu :

1. Set the regulator on MANUAL mode
2. Press +/- 4 sec. on 
3. You are now in the menu PAR SETUP
4. By pressing short on the button  you can select the parameters that you want to change.
5. The values can be changed by pressing on  and .

## PARAMETERS:

- ☐ **PAR TA** : Current transformer ratio.
- ☐ **SENS** : tolerance sensibility to the cosφ regulation (The smaller this value, the faster the regulation).
- ☐ **OVER TEMP** : maximum operating temperature (°C).
- ☐ **THERM THD I%** : THD I% alarm value.
- ☐ **OVER THD I%** : instantaneous THD I% peak alarm value.
- ☐ **SENS THD I%** : THD I% alarm value time (sec).
- ☐ **SENS DOWN** : alarm reset time delay :
  - ON : resume instantaneously the normal operations when the alarm ends.
  - OFF : resume the normal operations with a delay time equals to the SENS THD I% value.
  - To modify these parameters press and hold the  button and change using the  and  buttons.

## MAIN SETUP:

To access this menu :

1. Set the regulator on MANUAL mode.
2. Press +/- 4 sec. on .
3. You are now in the menu PAR SETUP.
4. By holding the button  again, the "MAIN SETUP" appears on the display.
5. By pressing short on the button  you can select the parameters that you want to change.
6. The values can be changed by pressing on  and .

## PARAMETERS:

- ☐ kVAr power banks
- ☐ capacitors rating voltage
- ☐ switching delay
- ☐ network rating frequency
- ☐ type of network (single or 3-phase)
- ☐ alarm mode relays (NO, NC or FAN (ventilator)).

## USER OPERATION

In AUTOMATIC mode, pressing the  button you can navigate between the pages in the sequence below :

MAIN – THD – FAN – SET cos phi – POWER – MAX(line) – MAX(power)

- ☐ **MAIN** : cos phi, true RMS voltage, true RMS current, Delta Power (= means the reactive power gap to target the SET cos phi).
- ☐ **THD** : total THD% current value, fundamental current and harmonic current value measurement.
- ☐ **FAN** : real time temperature measured by the probe in °C.
- ☐ **SET cos phi** : target cos phi (value can be set in MANUAL mode).
- ☐ **POWER** : active and reactive power measurements.
- ☐ **MAX(line)** : max values of network parameter measured.
- ☐ **MAX(power)** : network energy values measured.

All the history measurements can be reset by pressing the  and  buttons at the same time.

A bank can be switched on continuously :

1 – Set the regulator on MANUAL mode.

2 – select the wanted bank with  or 

3 – switch the bank on or off by pressing the  button.

4 – Set the regulator on AUTOMATIC mode.

### ALARMS :

| Alarm              | Reason                                                                                 | Alarm contact |
|--------------------|----------------------------------------------------------------------------------------|---------------|
| HIGH VOLTAGE       | $U > 110\%$ U condensator 15 min                                                       | Yes           |
| LOW VOLTAGE        | $U < 85\%$ U condensator 5 sec                                                         | Yes           |
| HIGH CURRENT       | $I > 110\%$ I TI 2 min                                                                 | No            |
| LOW CURRENT        | $I < 6\%$ I TI<br><br><b>After 2 min: switching off capacitor banks</b>                | No            |
| UNDER COMPENSATION | cos phi too low during 15 min                                                          | Yes           |
| OVER COMPENSATION  | cos phi too high during 2 min<br><br><b>After 2 min: switching off capacitor banks</b> | Yes           |
| HIGH THD%          | $THD\% > THERM THD\%$<br><br><b>Switching off capacitor banks</b>                      | Yes           |
| OVER THD%          | $THD\% > OVER THD\%$<br><br><b>Switching off capacitor banks</b>                       | Yes           |
| OVER TEMPERATURE   | temp > OVER TEMP<br><br><b>Switching off capacitor banks</b>                           | Yes           |

The normal functions resume when the alarm condition ends and the alarm relay is reset.

### Remark :

#### **EXTRA ALARM CONTACT**

There is a possibility of a **second** contact alarm, when there are maximal 11 banks driven by the regulator. Between bank 12 and C there is an alarm NO/NG adjustable in 'Main Setup'.

When a commun alarm contact is programmed for the guiding of the ventilation, there is only a contact alarm on bank 12.