

# 40A 48 / 40A 96

## AC CURRENT / VOLTAGE CONFIGURABLE INDICATOR - ALARM UNITS



#### Main features

- AC voltage, AC current direct input on instrument terminals
- Protected code configurable from keypad
- 4 to 20mA retransmitted output
- Up to 3 relay outputs
- Configurable by serial link
- Labels to customize measured physical unit

## Main applications

- Extrusion lines
- Electrical panels
- Test equipment
- Food processing plant

#### **GENERAL**

Microprocessor based indicator in both 48x48 (1/16 DIN) and 96x48 (1/8 DIN) formats manifactured with SMT. The instruments have a lexan membrane faceplate (guaranteed to IP65) which has 3 keys, a 3 digit display for the 48x48 format and a 3 / 4 digit display for the 96x48 format, and 3 indicating LED's for the output statuses. The input signal section provides for the visualisation of the sinusoidal effective value corresponding to following signals:

- AC voltage:0 to 2, 0 to 20, 0 to 200 and0 to 500Vac
- AC current:
  0 to 20, 0 to 50, 0 to 200mAac
  0 to 1, 0 to 5Aac

The selection is made using the faceplate keys and correct input terminals.

No external shunt or adapter is required. A digital input (24Vdc/4mA) is available for resetting, hold, flash, peak handling or releasing latch. The instruments have a maximum of 3 outputs that can be mechanical relays (5A/250V) or logic outputs (0 to 11Vdc).

One output of 4 to 20mA (max. 150 $\Omega$ ) is available for retransmitting the measured input signal.

The retransmission output, the digital input and the third output are alternatives in the 48x48 format, all these options are available contemporaneously in the 96x48 format. Finally, a triac can be fitted (as an alternative to the other two relay outputs) to drive resistive loads up to a maximum of 2,5A at 220V.

The programming of the instrument is made easy by grouping the parameters in function blocks (**CFG** for the alarm hysteresis, **Inp** for the inputs, **Out** for the outputs...) and by a simplified data entry menu.

The configuration can be simplified even further using the PC programming kit made up of a connection cable and a menu guide program that runs under Windows (see data sheet cod. 80021). A configurable personal software protection code (password protection) can be used to restrict the levels of editing and displaying the configuration parameters.

## TECHNICAL DATA

## **I**NPUTS

Accuracy:

0,2% f.s. ±1 digit for 2Vac, 20Vac, 20mAac, 50mAac, 1Aac inputs 0,5% f.s. ±1 digit for 200Vac, 500Vac, 200mAac, 5Aac inputs

The measurement of the effective value considers the sinusoidal signal. Sampling time 120msec, resolution 8000 steps.

Configurable decimal point position, scale -1999 to 9999 (4 digit display) or -999 to 999 (3 digit display with sign, only for the 96 format) with over- and under-range indication.

Voltage input for 2Vac, 20Vac, 200Vac, 500Vac with Ri >  $1M\Omega$ . Current input for 20mAac, 50mAac, 200mAac with Ri =  $1,6\Omega$ . Current input for 1Aac, 5Aac with Ri =  $1,5\Omega$ .

#### Digital input

Ri = 5,6K $\Omega$  (24V, 4mA) isolated to 1500V Function is configurable as alarm or memory reset, hold, flash, zero, display of the peak value (max., min. or peak to peak).

#### **O**UTPUTS

#### Relay

with NO (NC) contacts rated at 5A/250V at  $\cos \varphi = 1$ .

**Logic** (only for Out1 and Out2) Output type D 11Vdc, Rout =  $220\Omega$  (6V/20mA).

**Triac** (only 96 format) for Out1, excluded Out2 24 to 240Vac ±10%, 3Amax Snubberless, I²t = 128A²sec

A maximum of three trip points can be set as absolute, deviation or symmetrical deviation alarms.
The hysteresis of each alarm is individually configurable.
Alarm masking with exclusion on power up, memory and configurable delay and minimum intervention time.
The trip point may be set at any point on the scale.

#### Retransmission

4 to 20mA on max. 150 $\Omega$  load.

#### POWER SUPPLY

Standard: 100 to 240Vac/dc  $\pm$  10% optional: 11 to 27Vac/dc  $\pm$  10%

50/60Hz, max. 6VA

protected by an internal replaceable fuse

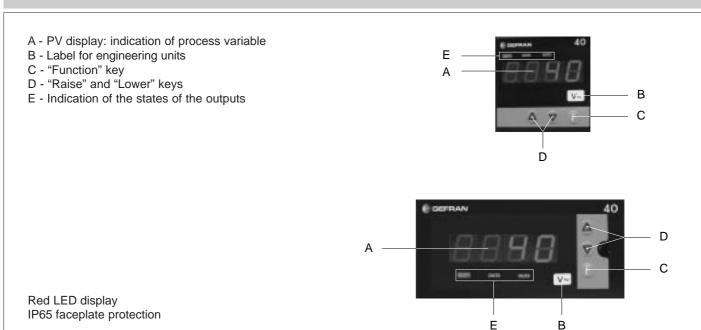
## **AMBIENT CONDITIONS**

Working temperature range: 0 to 50°C Storage temperature range: -20 to 70°C Humidity: 20 to 85%Ur non-condensing

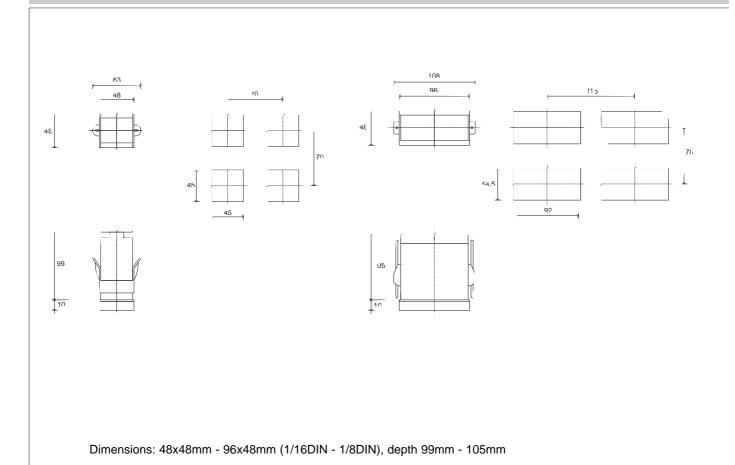
## **W**EIGHT

160g. (48 format), 320g. (96 format) in the complete version

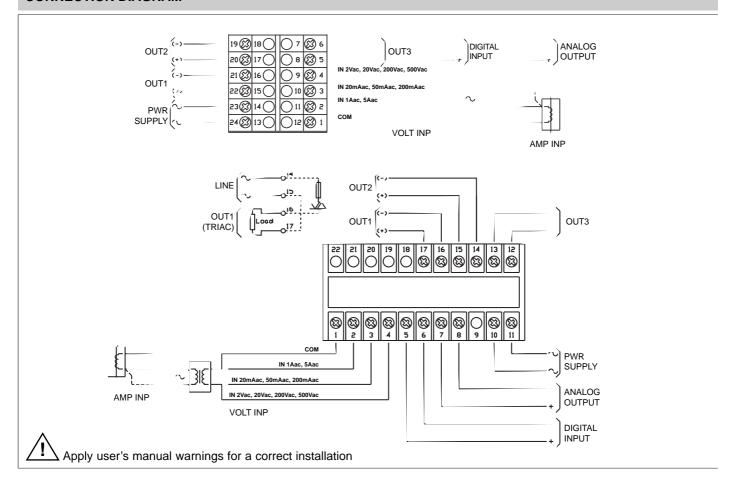
## **FACEPLATE DESCRIPTION**



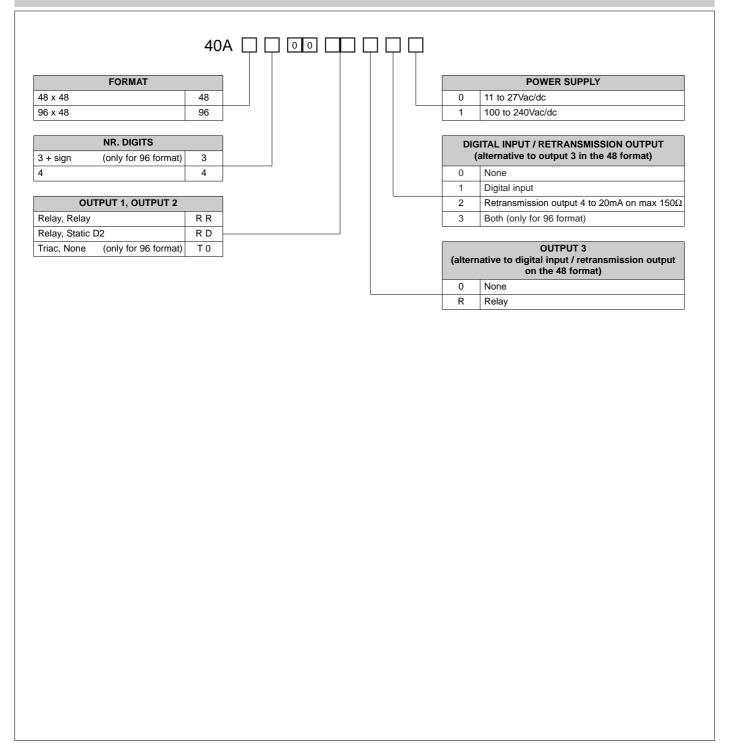
## **DIMENSIONS and CUT-OUT**



## **CONNECTION DIAGRAM**



#### ORDER CODE



GEFRAN spa reserves the right to make any modification of the design or function, at any moment without prior notice



The instrument conforms to the European Directives 89/336/CEE and 73/23/CEE with reference to the generic standards: - EN 50082-2 (immunity in industrial environments) - EN 50081-1 (emission in residential environments) - EN 61010-1 (safety)





