



### Main applications

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

### Main features

- AC voltage, AC current direct input on instrument terminals
- Protected by a personal code
- Configurable by serial link
- Labels to customize measured physical unit

### GENERAL

Microprocessor based indicator in both 48x48 (1/16 DIN) and 96x48 (1/8 DIN) formats manufactured with SMT.

The instruments have a lexan membrane faceplate (guaranteed to IP65) which has 3 keys, a 3-digit display for the 48x48 format or a 3 / 4 digit display for the 96x48 format.

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 and  
0 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.

The programming of the instrument is made easy by grouping the parameters in function blocks 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 code WIN-STRUM).

A configurable personal software protection code (password protection) can be used to restrict the levels of editing and displaying the configuration parameters.

### INPUTS

Accuracy:

0,2% f.s.  $\pm 1$  digit for 2Vac, 20Vac, 20mAac, 50mAac, 1Aac inputs

0,5% f.s.  $\pm 1$  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  $R_i > 1M\Omega$ .

Current input for 20mAac, 50mAac, 200mAac with  $R_i = 1,6\Omega$ .

Current input for 1Aac, 5Aac with  $R_i = 16m\Omega$ .

### POWER SUPPLY

#### 4A 48

Standard: 100 to 240Vac  $\pm 10\%$  max 5,5VA  
optional: 20 to 27Vac/dc  $\pm 10\%$  max 5,5VA

#### 4A 96

Standard: 100 to 240Vac/dc  $\pm 10\%$  max 5VA  
optional: 11...27Vac/dc  $\pm 10\%$  max 3VA

### TECHNICAL DATA

50/60Hz, protected by an internal fuse  
(not replaceable by the operator).

**AMBIENT CONDITIONS**

**Working temperature range:** 0 to 50°C

**Storage temperature range:** -20 to 70°C

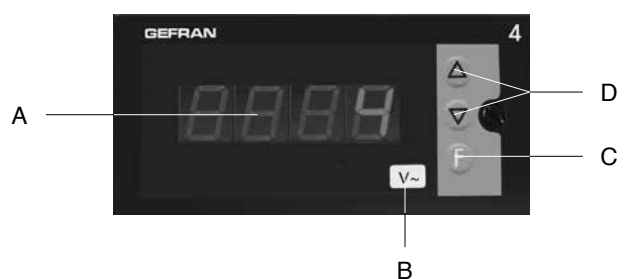
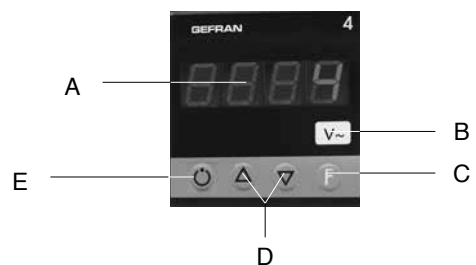
**Humidity:** 20 to 85%Ur non-condensing

**WEIGHT**

150g. (48 format), 280g. (96 format) in  
the complete version

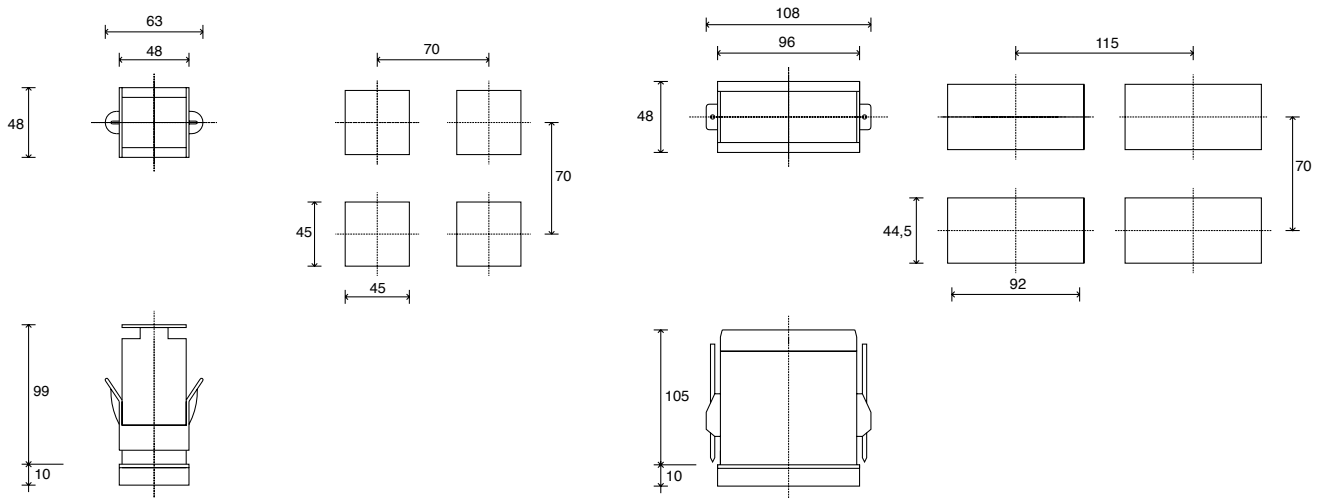
**FACEPLATE DESCRIPTION**

- A** - Indication of process variable  
[for 48 format digit height 10mm;  
for 96 format digit height 20mm (3 digit), 14mm (4 digit);  
red display]
- B** - Label for engineering units
- C** - "Function" key
- D** - "Raise" and "Lower" keys
- E** - key not used



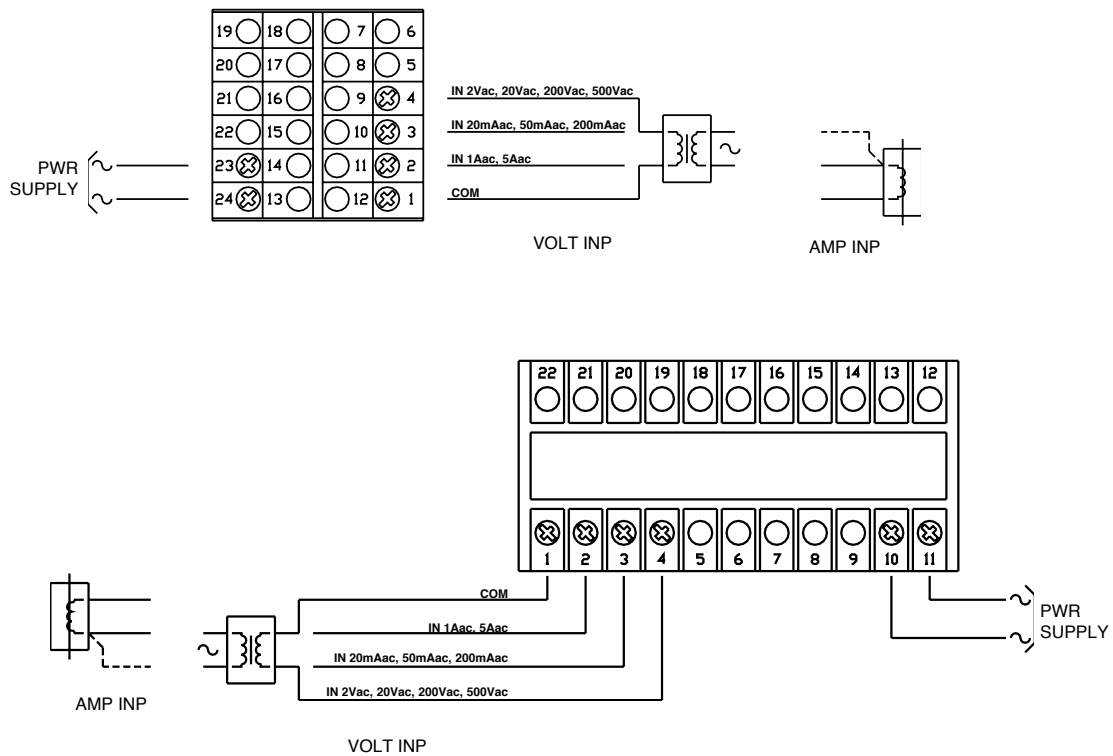
IP65 faceplate protection


## DIMENSIONS and CUT-OUT



Dimensions: 48x48mm - 96x48mm (1/16DIN - 1/8DIN) depth 99mm - 105mm

## CONNECTION DIAGRAM



 Apply user's manual warnings for a correct installation

## ORDER CODE

4A 48 4 0 0

NR. DIGITS	
4	4

POWER SUPPLY	
0	20 to 27Vac/dc
1	100 to 240Vac

4A 96 0 0

NR. DIGITS	
3 + sign	3
4	4

POWER SUPPLY	
0	11to 27Vac/dc
1	100 to 240Vac/dc

Please, contact GEFRAN sales people for the codes availability.

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



Conformity C/UL/US File no. E216851 for model 4A-96



The instrument conforms to the European Directives 2004/108/CE and 2006/95/CE with reference to the generic standards: **EN 61000-6-2** (immunity in industrial environment) **EN 61000-6-3** (emission in residential environment) **EN 61010-1** (safety)

# GEFRAN

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