

DIGITAL PANEL METERS

Electrical measurements 2000 points **VNE 2**



VNE2 panel meters are well designed for industrial areas: hard housing, connection through a removable screwing connector, high immunity to external noises, several types of power supply Ac current measurement can be performed using an external transformer insuring a good insulation to the instrument in regards to line potentials.

- Dimensions : 72 x 24 mm
- Internal power supply transformer
- LED Display, 14 mm LED

Functions

| Function | Gauge | Resolution | Accuracy (1) | Input impedance | Remarks |
|------------------------------|------------|-------------------------|------------------------|-----------------|--|
| DC Voltage | 200 mV | 100 µV | 0,1 % + 100 µV | > 100 MΩ | Optional decimal point command |
| | 2 V | 1 mV | 0,1 % + 1 mV | 1,1 MΩ | |
| | 20 V | 10 mV | 0,1 % + 10 mV | 1 MΩ | |
| | 200 V | 100 mV | 0,1 % + 0,1 V | 1 MΩ | |
| | 650 V | 1 V | 0,1 % + 1 V | 10 MΩ | |
| DC current | On request | 100 mV / 1000 pts | 0,2 % + 1 mA | Shunt 100 mV | External Shunt 10 - 100 - 1 000 A or internal 2 - 20 - 200 mA |
| AC voltage | 650 V | 1 V | 2 V | 900 kΩ | Band-width 40 Hz to 400 Hz |
| AC current | 2 A | 1 mA | 1 % + 2 mA | | Delivered with transformer (2 - 20 ou 200 A) |
| | 20 A | 10 mA | 1 % + 20 mA | | |
| | 200 A | 100 mA | 1 % + 0,2 A | | |
| | On request | 100 mV / 1000 pts | 0,3 % + 2 | | |
| Process signals with scaling | 0 - 5 V | Display ± 2000 points | 0,1 % of scale end + 1 | 1 MΩ | 2 models, input and scale defined with order, can be modified by user (D51 model is set in factory: 4-20 mA/0-100 %). an analog output is available as option. |
| | 0 - 10 V | | | 1 MΩ | |
| | 4 - 20 mA | For scale begin and end | | 50 Ω | |
| | 0 - 20 mA | | | 50 Ω | |

(1) In ± (% of reading + number of units) at 23 ± 1°C for 1 year.

MEASURE AND CALIBRATION

Main characteristics

Display.....
2000 measurement points (3 ½ digits).
Red LED (green or yellow in option), height: 14 mm.
Overload indication by extinction of the 3 last digits.

Automatic polarity and zero.....

Measurement rate.....
2.5 measurements per second

Temperature coefficient.....
 \leq accuracy / 10°C

Common mode rejection.....
 \geq 110 dB at 50 Hz

Serial mode rejection.....
 \geq 60 dB at 50 Hz

Current transformer.....

Suitable transformer is supplied with I 33, I 34 and I 35 models.
Primary 2 A, 20 A or 200 A.
Secondary 1 A.
200 mV on 0.2 Ω shunt.
Accuracy class 0.5 for 1 VA power.

Frequency 50 / 60 Hz.

Primary connection by plugs for 2 A and 20 A ranges and metal cable gland ($\varnothing < 12\text{mm}$) for 200 A range.

Operating conditions.....

Nominal field of use : 0 to + 50 °C
Limit field of use : -10 to + 50°C

Power supply.....

230 V~ ($\pm 10\%$) 50 to 60 Hz

Other power supplies :
6 V~ $\pm 20\%$ non-insulated,
5 V~ $\pm 10\%$ insulated,
9 to 18 V- insulated,
18 to 36 V- insulated,
36 to 72 V- insulated,
24 V~ $\pm 10\%$ insulated,
48 V~ $\pm 10\%$ insulated,
115 V~ $\pm 10\%$ insulated.

Consumption.....
4 VA max

Presentation.....
ABS Case.
Sealing IP 40
Weight : around 300 g.

Connections.....
Removable screwing connector

Options

Backlight display setting

External decimal dot commutation
command (for V- models).

Non insulated analog output

For process models D50 and D51.
1 mV/digit. Acceptable load $\geq 2\text{k}\Omega$.

Waterproof metal box

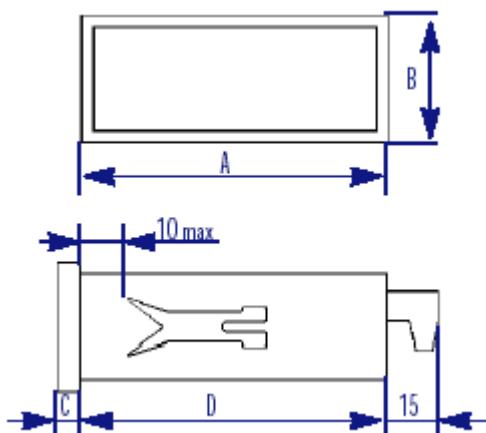
IP 65 Front panel
Dimensions : 99 x 36 x 120 mm

Accessories

Mechanic adaptator.....

Allows adaptation of VNE into slightly larger cutout
Adaptation of 75x25mm panel meters
External dimensions 80x32mm

Dimensions



Case A B C D Panel cut
72 x 24 72 24 5 103 68^{+0.8}₀ x 22.2^{+0.3}

MEASURE AND CALIBRATION

Instructions to order

| Indicator | VNE 2 |
|--|----------|
| | ... |
| | ... |
| | ... |
| | ... |
| | ... |
| Reference to defer above | |
| Direct voltage | |
| 200 mV..... | V12..... |
| 2 V..... | V13..... |
| 20 V..... | V14..... |
| 200 V..... | V15..... |
| 650 V..... | V16..... |
| With precision adjustment..... | V17..... |
| Alternative voltage | |
| 650 V~..... | V76..... |
| Direct current | |
| 100 mV on external shunt..... | I10..... |
| 100 mV on internal shunt..... | I20..... |
| 2 A..... | I26..... |
| Process signals with scaling (4-20 mA, 0-10 V, 0-5 V) | |
| On request..... | D50..... |
| 0-100%..... | D51..... |
| Display | |
| Red..... | R..... |
| Green..... | V..... |
| Yellow..... | J..... |
| Power supply | |
| 6 V-..... | 1..... |
| 5 V-..... | 2..... |
| 9 to 18 V-..... | 3..... |
| 18 to 36 V-..... | 4..... |
| 36 to 72 V-..... | 5..... |
| 24 V~..... | 6..... |
| 115V~..... | 7..... |
| 230 V~..... | 8..... |
| 48V~..... | 9..... |
| Case | |
| Plastic..... | 0..... |
| Impervious & Metallic..... | 1..... |
| Luminosity adjustment | |
| Without..... | 0..... |
| With..... | 1..... |



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