

## N24

Universal input digital panel meter for measurement of d.c. voltage or d.c. current, temperature from Pt100 sensors and J, K thermocouples, a.c. voltage and a.c. current.

N24S24XX

4 Digit Panel Meter, 4-20mA input, 85-230V ac, 24V output



- Universal input (Programmable)
- Wide voltage, AC/DC control
- 4 Digit LED display

## PRODUCT DESCRIPTION

Please refer to the image below for ordering information.

\*\*Part numbers have changed from ending with E0 to M0, please be advised any part numbers below that end in E0 may say M0 in the datasheet. The product is the same.\*\*

**ORDERING**

| TABLE 1. ORDERING CODES:                            |     |   |   |   |    |    |    |   |
|-----------------------------------------------------|-----|---|---|---|----|----|----|---|
|                                                     | N24 | X | X | X | XX | XX | X  | X |
| <b>Input kind:</b>                                  |     |   |   |   |    |    |    |   |
| standard: voltage, current                          |     | S |   |   |    |    |    |   |
| temperature: thermocouples, resistance thermometers |     | T |   |   |    |    |    |   |
| a.c. signals                                        |     | Z |   |   |    |    |    |   |
| d.c. signals: high voltage and high current         |     | H |   |   |    |    |    |   |
| <b>Input:</b>                                       |     |   |   |   |    |    |    |   |
| see table 2                                         |     |   | X |   |    |    |    |   |
| <b>Supply:</b>                                      |     |   |   |   |    |    |    |   |
| 230 V a.c.                                          |     |   |   |   |    | 1  |    |   |
| 85...253 V a.c./d.c. with supply output 24 V/30 mA* |     |   |   |   |    | 4  |    |   |
| 20...40 V a.c./d.c. with supply output 24 V/30 mA*  |     |   |   |   |    | 5  |    |   |
| <b>Unit:</b>                                        |     |   |   |   |    |    |    |   |
| see table 3                                         |     |   |   |   | XX |    |    |   |
| <b>Version:</b>                                     |     |   |   |   |    |    |    |   |
| standard                                            |     |   |   |   |    |    | 00 |   |
| non-standard settings                               |     |   |   |   |    |    | NS |   |
| custom-made**                                       |     |   |   |   |    |    | XX |   |
| <b>Language:</b>                                    |     |   |   |   |    |    |    |   |
| Multilingual (polish-english)                       |     |   |   |   |    |    |    | M |
| other**                                             |     |   |   |   |    |    |    | X |
| <b>Acceptance tests:</b>                            |     |   |   |   |    |    |    |   |
| with test certificate                               |     |   |   |   |    |    |    | 1 |
| acc. to customer's request**                        |     |   |   |   |    |    |    | X |

| TABLE 2. INPUT SIGNALS |           |                    |             |                |
|------------------------|-----------|--------------------|-------------|----------------|
| Nr                     | N24S      | N24T               | N24Z        | N24H           |
| 1                      | 0...20 mA | Pt100: -50...150°C | 100 V a.c.  | ±100 V d.c.    |
| 2                      | 4...20 mA | Pt100: -50...400°C | 250 V a.c.  | ±250 V d.c.    |
| 3                      | 0...60 mV | Thermocouple J     | 400 V a.c.  | ±400 V d.c.    |
| 4                      | 0...10 V  | Thermocouple K     | 1 A a.c.    | ±1 A d.c.      |
| 5                      | ± 60 mV   |                    | 5 A a.c.    | ±5 A d.c.      |
| 6                      | ± 10 V    |                    | 20...500 Hz | 0...100 V d.c. |
| 7                      |           |                    |             | 0...250 V d.c. |

  

| TABLE 3. CODES OF PRINTED UNITS: |              |      |       |      |          |
|----------------------------------|--------------|------|-------|------|----------|
| Code                             | Unit         | Code | Unit  | Code | Unit     |
| 00                               | without unit | 06   | mA    | 12   | bar      |
| 01                               | °C           | 07   | kA    | 13   | kPa      |
| 02                               | %            | 08   | kV    | 14   | MPa      |
| 03                               | A            | 09   | Hz    |      |          |
| 04                               | V            | 10   | turns | XX   | on order |
| 05                               | mV           | 11   | rpm   |      |          |

  

| TABLE 4. EXAMPLE OF NON-STANDARD SETTINGS:   |                |
|----------------------------------------------|----------------|
| Parameter                                    | Range/Value    |
| Decimal point                                | 000,0 for I, U |
| Averaging time                               | 1 s            |
| Upper measurement overflow                   | 9999           |
| Lower measurement overflow                   | -1999          |
| Individual characteristic                    | enabled        |
| Parameter a of the individual characteristic | 5              |
| Parameter b of the individual characteristic | 0              |

**Order example 1 :**  
The code **N24Z-2 1 04 00 M 1** means  
**N24Z** - digital meter for a.c. signals  
**2** - input: 250 V a.c.  
**1** - supply: 230 V a.c.  
**04** - unit: V  
**00** - standard version  
**M** - multilingual  
**1** - with test certificate

**Order example 2 :**  
The code **N24S-1 4 02 NS M 1** means:  
**N24S** - digital meter for d.c. signals  
**1** - input: 0...20mA  
**4** - supply: 85...253 V a.c. with supply output: 24V/30mA  
**02** - unit: %  
**NS** - non-standard settings, display range: 0...100.0  
**M** - multilingual  
**1** - with test certificate

\* - The output is only in N24S and N24T meters  
\*\* - After agreeing with the manufacturer

## TECHNICAL DATA

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Additional functions | Rescaling                                       |
| Digit height         | 20 mm                                           |
| Dimensions           | 96 x 48 x 64 mm Panel cut-out: 92+0,6 45+0,6 mm |

|                             |             |
|-----------------------------|-------------|
| Display                     | Yes         |
| Input type                  | 4-20mA      |
| IP class                    | IP65        |
| Mounting                    | Panel mount |
| Number of digits            | 4           |
| Supply voltage              | 85-230V ac  |
| Temperature operational max | 55 °C       |
| Temperature operational min | -10 °C      |
| Weight                      | 0.25 kg     |