

# Panel Meters and Controllers

## DC Ammeter and Voltmeter

### Type LDI3 AV6



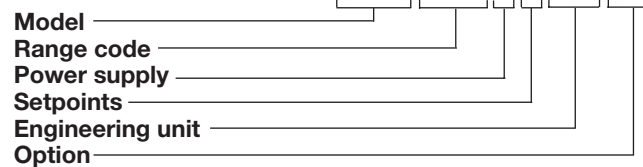
- 3-dgt  $\mu$ P-based indicator for DC currents or voltages
- Selectable input range
- 48 x 96 mm
- Degree of protection (front): IP 50 (IP 65 on request)

### Product Description

3-dgt multi-range  $\mu$ P-based meter for DC current and voltage measurements. With 18 selectable input ranges. Ensures a degree of protection (front) of IP 50 (IP 65 on request).

### Ordering Key

**LDI3AV6D0 XX XX**



### Type Selection

| Power supply   | Options                               |
|--|---------------------------------------|
| <b>A:</b> 24 VAC, -15% +10%, 50/60 Hz <sup>1)</sup>  | <b>XX:</b> None (standard)            |
| <b>B:</b> 48 VAC, -15% +10%, 50/60 Hz <sup>1)</sup>  | <b>IX:</b> Degree of protection IP 65 |
| <b>C:</b> 115 VAC, -15% +10%, 50/60 Hz <sup>1)</sup> | <b>XT:</b> Tropicalization            |
| <b>D:</b> 230 VAC, -15% +10%, 50/60 Hz (standard)    | <sup>1)</sup> Power supply on request |

### Supply Specifications

|                          |  |
|--------------------------|--|
| <b>AC supply</b>         | 230 VAC, -15% +10%, 50/60 Hz (standard)<br>24 VAC, 48 VAC, 115 VAC, -15% +10%, 50/60 Hz (on request) |
| <b>Power consumption</b> | 3.2 VA   |

### Input Specifications

|  |                                    |
|--|------------------------------------|
| <b>Rated input</b>                                     | 1 A/60 mV/100 V/500 VDC            |
| <b>Overload protection</b>                             |                                    |
| Cont. Current:   | 1.2 x rated input                  |
| Voltage:   | 1.2 x rated input                  |
| For 1s Current:  | 5 x rated input                    |
| Voltage:   | 2 x rated input                    |
| <b>Accuracy</b><br>(@ 25°C $\pm$ 5°C, R.H. $\leq$ 60%) | $\pm$ 0.5% f.s., $\pm$ 1 dgt       |
| <b>Temperature drift</b>                               | $\pm$ 350 ppm/°C                   |
| <b>Display</b>   | 7-segment LED, h 14.2 mm, 3 digits |
| <b>Sampling rate</b>                                   | 1 time/s                           |
| <b>Indication</b>                                      |                                    |
| Max.   | 999                                |
| Min.   | -99                                |
| Over range:  | EEE                                |
| Under range:   | -EE                                |
| <b>Input range selection</b>                           | DIP-switch selectable              |
| <b>Decimal point position</b>                          | DIP-switch selectable              |

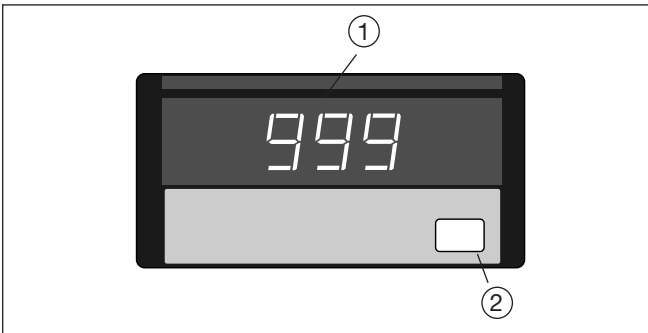
### General Specifications

|                                     |   |
|-------------------------------------|---|
| <b>Operating temperature</b>        | 0° to 50°C (32° to 122°F)<br>(R.H. < 90% non-condensing)                  |
| <b>Storage temperature</b>          | -10° to 60°C (14° to 140°F)<br>(R.H. < 90% non-condensing)                |
| <b>Insulation reference voltage</b> | 300 V <sub>ms</sub> to ground   |
| <b>Dielectric strength</b>          | 4000 V <sub>ms</sub> for 1 minute   |
| <b>Noise rejection</b>              |   |
| NMRR                                | 40 dB, 40 to 60 Hz  |
| CMRR                                | 100 dB, 40 to 60 Hz   |
| <b>EMC</b>                          | IEC 60801-2, IEC 60801-3, IEC 60801-4 (level 2), EN 50 081-1, EN 50 082-1 |
| <b>Safety standards</b>             | EN 61 010-1, IEC 61010-1, VDE 0411  |
| <b>Connector</b>                    | Screw-type  |
| <b>Housing</b>                      |   |
| Dimensions                          | 1/8 DIN, 48 x 96 x 83 mm  |
| Material                            | ABS, self-extinguishing: UL 94 V-0  |
| <b>Degree of protection</b>         | Front: IP 50 (IP 65 on request)   |
| <b>Weight</b>                       | Approx 250 g  |
| <b>Approvals</b>                    | CE, CSA   |

## Range Table

| Measurement | Connection         | Dec. point position | Input impedance/volt. drop | Resolution | Range code |
|-------------|--------------------|---------------------|----------------------------|------------|------------|
| 100 V       | Direct             | 99.9                | 1 MΩ                       | 0.1 V      | <b>AV6</b> |
| 500 V       | Direct             | 999                 | 1 MΩ                       | 1 V        | <b>AV6</b> |
| 1 A         | Direct             | 999                 | 1 V                        | 1 mA       | <b>AV6</b> |
| 1.5 A       | 60 mV/1.5 A shunt  | 9.99                | 13 kΩ                      | 10 mA      | <b>AV6</b> |
| 2.5 A       | 60 mV/2.5 A shunt  | 9.99                | 13 kΩ                      | 10 mA      | <b>AV6</b> |
| 4 A         | 60 mV/4 A shunt    | 9.99                | 13 kΩ                      | 10 mA      | <b>AV6</b> |
| 6 A         | 60 mV/6 A shunt    | 9.99                | 13 kΩ                      | 10 mA      | <b>AV6</b> |
| 10 A        | 60 mV/10 A shunt   | 9.99                | 13 kΩ                      | 10 mA      | <b>AV6</b> |
| 15 A        | 60 mV/15 A shunt   | 99.9                | 13 kΩ                      | 100 mA     | <b>AV6</b> |
| 25 A        | 60 mV/25 A shunt   | 99.9                | 13 kΩ                      | 100 mA     | <b>AV6</b> |
| 40 A        | 60 mV/40 A shunt   | 99.9                | 13 kΩ                      | 100 mA     | <b>AV6</b> |
| 60 A        | 60 mV/60 A shunt   | 99.9                | 13 kΩ                      | 100 mA     | <b>AV6</b> |
| 100 A       | 60 mV/100 A shunt  | 99.9                | 13 kΩ                      | 100 mA     | <b>AV6</b> |
| 150 A       | 60 mV/150 A shunt  | 999                 | 13 kΩ                      | 1A         | <b>AV6</b> |
| 250 A       | 60 mV/250 A shunt  | 999                 | 13 kΩ                      | 1A         | <b>AV6</b> |
| 400 A       | 60 mV/400 A shunt  | 999                 | 13 kΩ                      | 1A         | <b>AV6</b> |
| 600 A       | 60 mV/600 A shunt  | 999                 | 13 kΩ                      | 1A         | <b>AV6</b> |
| 1000 A      | 60 mV/1000 A shunt | 999                 | 13 kΩ                      | 1A         | <b>AV6</b> |

## Front Panel Description



### 1. Display

3-dgt (maximum read-out 999).

Alphanumeric indication by means of 7-segment display for:

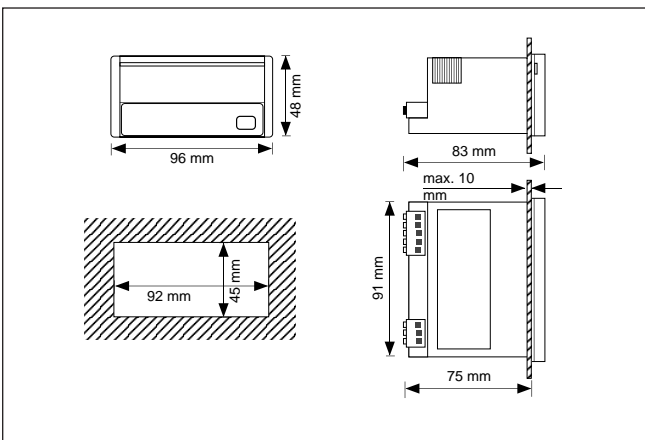
- Displaying of the measured value, over-range.

### 2. Engineering unit

Screen for interchangeable unit label. The symbols in the shaded areas are those available on the set of engineering unit labels supplied with the LDI3 (engineering unit label to be inserted by customer).

|         |           |            |                          |                          |                     |
|---------|-----------|------------|--------------------------|--------------------------|---------------------|
|         | W = 08    | MΩ = 16    | % = 24                   | mm HG = 32               | cm = 40             |
| mV = 01 | kW = 09   | Hz = 17    | mbar = 25                | l/min = 33               | m = 41              |
| V = 02  | MW = 10   | kHz = 18   | bar = 26                 | l/h = 34                 | kg = 42             |
| kV = 03 | var = 11  | RPM = 19   | psi = 27                 | kg/min = 35              | ppm = 43            |
| μA = 04 | kvar = 12 | m/s = 20   | ata = 28                 | ton/h = 36               | kA = 44             |
| mA = 05 | Mvar = 13 | m/min = 21 | atm = 29                 | m <sup>3</sup> /min = 37 | cos φ = 45          |
| A = 06  | Ω = 14    | °C = 22    | kg/cm <sup>2</sup> = 30  | m <sup>3</sup> /h = 38   | m <sup>3</sup> = 46 |
| mW = 07 | kΩ = 15   | °F = 23    | mm H <sub>2</sub> O = 31 | mm = 39                  | μs = 47             |

## Dimensions



## Terminal Board

