

# Panel Meters and Controllers

## AC Ammeter and Voltmeter

### Type LDI3 AV1/AV5



- 3-dgt  $\mu$ P-based indicator for AC currents and voltages
- Selectable CT/VT primary ranges
- 48 x 96 mm
- Degree of protection: IP 50 (IP 65 on request)

### Product Description

3-dgt  $\mu$ P-based meter for AC current and voltage measurements. With 20 selectable CT/VT input ranges. The housing is for panel mounting and ensures a degree of protection (front) of IP 50 (IP 65 on request).

### Ordering Key

**LDI3 AV5D0 XX XX**



### Type Selection

Range code	Power supply
<b>AV1:</b> 1 A/100 V Standard current/voltage	<b>A:</b> 24 VAC, -15% +10%, 50/60 Hz <sup>1)</sup>
<b>AV5:</b> 5 A/500 V Standard current/voltage	<b>B:</b> 48 VAC, -15% +10%, 50/60 Hz <sup>1)</sup>
	<b>C:</b> 115 VAC, -15% +10%, 50/60 Hz <sup>1)</sup>
	<b>D:</b> 230 VAC, -15% +10%, 50/60 Hz (standard)

See Range Table

Options
<b>XX:</b> None (standard)
<b>IX:</b> Degree of protection IP 65
<b>XT:</b> Tropicalization

<sup>1)</sup> Power supply on request

### Input Specifications

<b>Rated input</b>	5 A/500 VAC, 45 to 400 Hz (1A/100 VAC on request)
<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> (@ 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.	000
500 VAC range	Scale suppression up to 5% f.s.
Other ranges	Scale suppression up to 3% f.s.
Over range:	EEE
<b>Input range selection</b>	DIP-switch selectable
<b>Decimal point position</b>	DIP-switch selectable

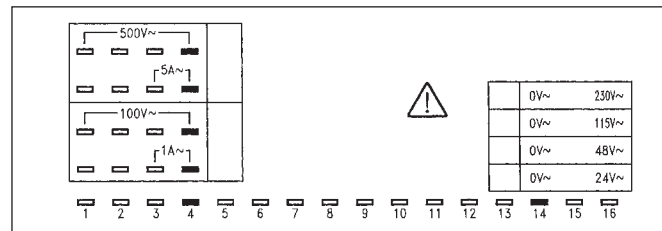
### General Specifications

<b>Operating temperature</b>	0 to 50°C (32 to 122°F) (R.H. < 90% non-condensing)
<b>Storage temperature</b>	-10 to 60°C (14 to 140°F) (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 m inute
<b>Noise rejection</b> 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 61010-1, IEC 61010-1, VDE 0411
<b>Connector</b>	Screw-type
<b>Housing</b> Dimensions Material	1/8 DIN, 48 x 96 x 83 mm 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>Approval</b>	CE, CSA

## Supply Specifications

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

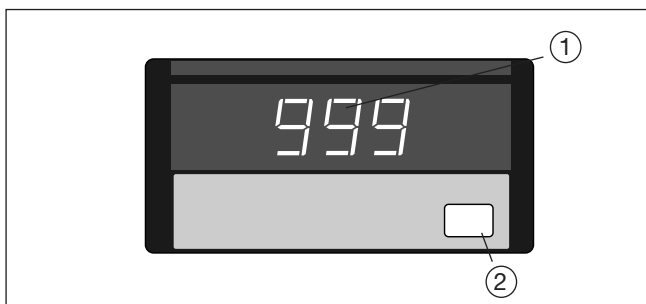
## Terminal Board



## Range Table

Range	Connection	Decimal point position	Resolution	Voltage drop ammeters	Input imp. voltmeters	Range code
1A/100 V	Direct 1A	Direct 100 V	999/99.9	1 V	1 MΩ	AV1
5A/500 V	Direct 5A	Direct 500 V	9.99/999	250 mV	1 MΩ	AV5
10 A	CT10/1 A	CT10/5 A	9.99	1 V/250 mV		AV1/AV5
15 A	CT15/1 A	CT15/5 A	99.9	1 V/250 mV		AV1/AV5
25 A	CT25/1 A	CT25/5 A	99.9	1 V/250 mV		AV1/AV5
40 A	CT40/1 A	CT40/5 A	99.9	1 V/250 mV		AV1/AV5
50 A	CT50/1 A	CT50/5 A	99.9	1 V/250 mV		AV1/AV5
60 A	CT60/1 A	CT60/5 A	99.9	1 V/250 mV		AV1/AV5
100 A	CT100/1 A	CT100/5 A	99.9	1 V/250 mV		AV1/AV5
150 A	CT150/1 A	CT150/5 A	999	1 V/250 mV		AV1/AV5
220 V		VT220/100 V	999	1 V	1 MΩ	AV1
250 A	CT250/1 A	CT250/5 A	999	1 V/250 mV		AV1/AV5
380 V		VT380/100 V	999	1 V	1 MΩ	AV1
400 A	CT400/1 A	CT400/5 A	999	1 V/250 mV		AV1/AV5
500 A/V	CT500/1 A		999	1 V	1 MΩ	AV1
500 A	CT500/5 A		999	250 mV		AV5
600 A/V	CT600/1 A		999	1 V	1 MΩ	AV1
600 A	CT600/5 A		999	250 mV		AV5
1000 A/V	CT1000/1 A		999	1 V	1 MΩ	AV1
1000 A	CT1000/5 A		999	250 mV		AV5

## 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	ate = 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

