

Panel Meters and Controllers

AC Ammeter and Voltmeter

Type LDI3 AV1/AV5

CARLO GAVAZZI



- 3-dgt μ 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 μ 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

Model _____
 Range code _____
 Power supply _____
 Setpoints _____
 Engineering unit _____
 Option _____

Type Selection

Range code	Power supply	Options
AV1: 1 A/100 V Standard current/voltage	A: 24 VAC, -15% +10%, 50/60 Hz ¹⁾	XX: None (standard)
AV5: 5 A/500 V Standard current/voltage	B: 48 VAC, -15% +10%, 50/60 Hz ¹⁾	IX: Degree of protection IP 65 ¹⁾
	C: 115 VAC, -15% +10%, 50/60 Hz ¹⁾	XT: Tropicalization ¹⁾
	D: 230 VAC, -15% +10%, 50/60 Hz (standard)	

See Range Table

¹⁾ On request

Input Specifications

Rated input	5 A/500 VAC, 45 to 400 Hz (1A/100 VAC on request)
Overload protection	
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
Accuracy (@ 25°C $\pm$ 5°C, R.H. $\leq$ 60%)	$\pm$ 0.5% f.s., $\pm$ 1 dgt
Temperature drift	$\pm$ 350 ppm/°C
Display	7-segment LED, h 14.2 mm, 3 digits
Sampling rate	1 time/s
Indication	
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
Input range selection	DIP-switch selectable
Decimal point position	DIP-switch selectable

General Specifications

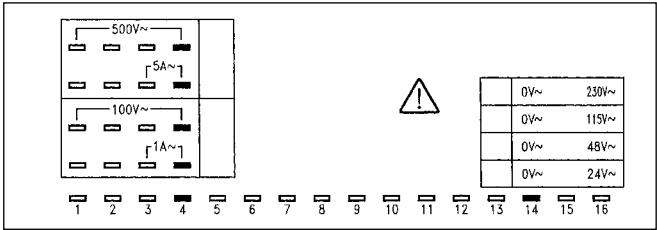
Operating temperature	0 to 50°C (32 to 122°F) (R.H. < 90% non-condensing)
Storage temperature	-10 to 60°C (14 to 140°F) (R.H. < 90% non-condensing)
Insulation reference voltage	300 V _{ms} to ground
Dielectric strength	4000 V _{ms} for 1 m inute
Noise rejection CMRR	100 dB, 40 to 60 Hz
EMC	IEC 60801-2,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



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

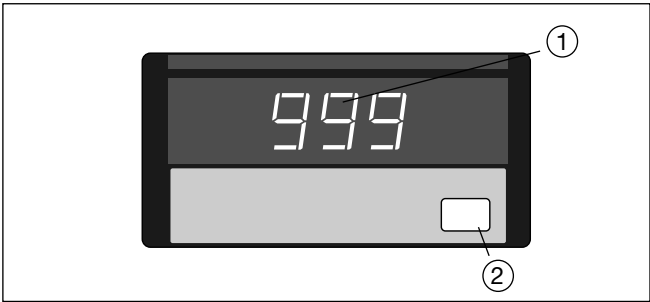
Terminal Board



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 mA/0.1 V	1 V	1 MΩ	AV1
5A/500 V	Direct 5A	Direct 500 V	9.99/999	10 mA/1 V	250 mV	1 MΩ	AV5
10 A	CT10/1 A	CT10/5 A	9.99	10 mA	1 V/250 mV		AV1/AV5
15 A	CT15/1 A	CT15/5 A	99.9	100 mA	1 V/250 mV		AV1/AV5
25 A	CT25/1 A	CT25/5 A	99.9	100 mA	1 V/250 mV		AV1/AV5
40 A	CT40/1 A	CT40/5 A	99.9	100 mA	1 V/250 mV		AV1/AV5
50 A	CT50/1 A	CT50/5 A	99.9	100 mA	1 V/250 mV		AV1/AV5
60 A	CT60/1 A	CT60/5 A	99.9	100 mA	1 V/250 mV		AV1/AV5
100 A	CT100/1 A	CT100/5 A	99.9	100 mA	1 V/250 mV		AV1/AV5
150 A	CT150/1 A	CT150/5 A	999	1 A	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 A	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 A	1 V/250 mV		AV1/AV5
500 A/V	CT500/1 A	VT500/100 V	999	1 A/V	1 V	1 MΩ	AV1
500 A	CT500/5 A		999	1 A	250 mV		AV5
600 A/V	CT600/1 A	VT600/100 V	999	1 A/V	1 V	1 MΩ	AV1
600 A	CT600/5 A		999	1 A	250 mV		AV5
1000 A/V	CT1000/1 A	VT1000/100 V	999	1 A/V	1 V	1 MΩ	AV1
1000 A	CT1000/5 A		999	1 A	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	m³/min = 37	cos φ = 45
A = 06	Ω = 14	°C = 22	kg/cm² = 30	m³/h = 38	m³ = 46
mW = 07	kΩ = 15	°F = 23	mm H₂O = 31	mm = 39	μs = 47

Dimensions

