

Digital Panel Meters AC Ammeters and Voltmeters Type LDM30 AV1/AV5

CARLO GAVAZZI



- 3 dgt LED + dummy zero, μ -based digital indicator, for TRMS AC current and voltage measurements
- Dip-switch-selectable ranges
- Front dimensions: 48 x 96 mm
- Front protection degree: IP 50 (IP 65 on request)

Product Description

3-dgt plus dummy zero μ P-based indicator, double input for AC current or voltage measurements. 112 selectable

primary ranges. Housing for panel mounting and IP 50 front protection degree (IP65 on request).

How to order

LDM30 AV5D0 XX

Model _____
 Range code _____
 Power Supply _____
 Set points _____
 Options _____

Type Selection

Range code

AV1:	1A / 100V AC	See Range table
AV5:	5A / 500V AC	See Range table

Power supply

B:	24/48 VAC, -15% +10%, 50/60 Hz
D:	115/230 VAC, -15% +10%, 50/60 Hz

Options

XX:	None
IX:	IP65 protection degree
XT:	Tropicalization

Specifications

Rated input AV5	5A (I _n) / 500V AC (U _n), 45 to 400 Hz, TRMS	Input range selection	DIP-Switch selectable
AV1	1A (I _n) / 100V AC (U _n), 45 to 400Hz, TRMS	Decimal point position	DIP-Switch selectable
Overload protection		Operating temperature	0° to 50°C (32° to 122°F) (R.H. < 90% non-condensing)
Continuous:	Current: 1.2 x I _n Voltage: 1.2 x U _n	Storage temperature	-10° to 60°C (14° to 140°F) (R.H. < 90% non-condensing)
For 1 s:	Current: 5 x I _n Voltage: 2 x U _n	Insulation reference voltage	300 V _{RMS} to ground
Accuracy (@ 25°C ± 5°C, R.H. ≤ 60%)	± 0.5% F.S., ± 1 DGT (from 5% to 120% F.S.). ± 1% F.S., ± 1 DGT (from 0% to 5% F.S.)	Dielectric strength	4000 V _{RMS} for 1 minute
Temperature drift	± 200 ppm/°C	Noise rejection CMRR	100 dB, from 40 to 60 Hz
Input impedance		EMC	IEC 60801-2, IEC 60801-3, IEC 60801-4 (level 2), EN 50 081-1, EN 50 082-1
AV1	1A: voltage drop 1V 100V: ≥1MΩ	Safety standards	EN 61010-1, IEC 61010-1
AV5	5A: voltage drop 250mV 500V: ≥1MΩ	Connections	Screw-type
Display	7-segment red LED, h 14.2 mm, 4 digits	Housing Dimensions Material	1/8 DIN, 48 x 96 x 83 mm ABS, self-extinguishing: UL 94 V-0
Measurement refresh time	2 measurements/sec @50Hz	Degree of protection	Front: IP 50 (IP 65 on request); Connections: IP20
Display Max./Min. Over range	9990/0000 EEEE Indication >120% I _n /U _n or up to the maximum indication (9990)	Weight	250 g approx.
		Approvals	CE, cURus, CSA



Power Supply Specifications

AC power supply

24/48 VAC, 115/230 VAC,
-15% +10%, 50/60 Hz

Power consumption

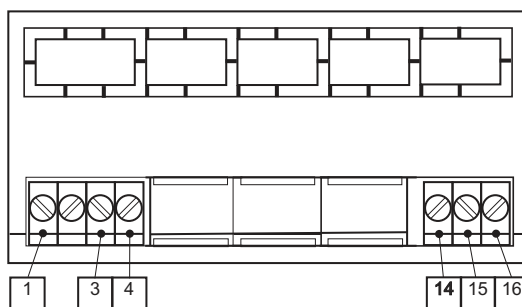
3.2 VA

Range Table

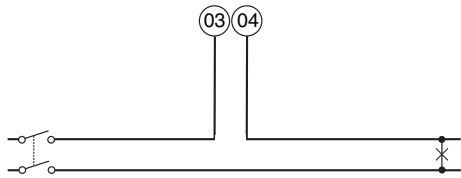
				A (Current)								V (Voltage)															
AV1: In=1A; Un=100V (110V) AV5: In=5A; Un=500V (600V)				In: 1A, 5A AC								Vn: 100V, 500V AC															
				ON				DIP																			
				1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Decimal point selection or dummy zero				7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8	7	8
				ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
				"X.XX"		"XX.X"		"XXX"		"XXX0"		"X.XX"		"XX.X"		"XXX"		"XXX0"									
6																				ON (110V F.S.)				ON (110V F.S.)			
				OFF				OFF				OFF				OFF				OFF				OFF (100V F.S.)			
2	3	4	5																								
OFF	OFF	OFF	OFF	1.20A	12.0A	120A	1200A									11.0V				110V				1100V			
ON	OFF	OFF	OFF	1.25A	12.5A	125A	1250A									11.5V				115V				1150V			
OFF	ON	OFF	OFF	1.50A	15.0A	150A	1500A									22.0V				220V				2200V			
ON	ON	OFF	OFF	1.60A	16.0A	160A	1600A									23.0V				230V				2300V			
OFF	OFF	ON	OFF	1.75A	17.5A	175A	1750A									24.0V				240V				2400V			
ON	OFF	ON	OFF	2.00A	20.0A	200A	2000A									38.0V				380V				3800V			
OFF	ON	ON	OFF	2.50A	25.0A	250A	2500A									40.0V				400V				4000V			
ON	ON	ON	OFF	3.00A	30.0A	300A	3000A									44.0V				440V				4400V			
OFF	OFF	OFF	ON	3.50A	35.0A	350A	3500A									45.0V				450V				4500V			
ON	OFF	OFF	ON	4.00A	40.0A	400A	4000A									50.0V				500V				5000V			
OFF	ON	OFF	ON	5.00A	50.0A	500A	5000A									60.0V				600V				6000V			
ON	ON	OFF	ON	6.00A	60.0A	600A	6000A									66.0V				660V				6600V			
OFF	OFF	ON	ON	7.00A	70.0A	700A	7000A									69.0V				690V				6900V			
ON	OFF	ON	ON	7.50A	75.0A	750A	7500A									70.0V				700V				7000V			
OFF	ON	ON	ON	8.00A	80.0A	800A	8000A									80.0V				800V				8000V			
ON	ON	ON	ON	9.99A	99.9A	999A	9990A									99.9V				999V				9990V			
1				ON								V, voltage measurement															
				OFF								A, Current measurement															

Terminal boards

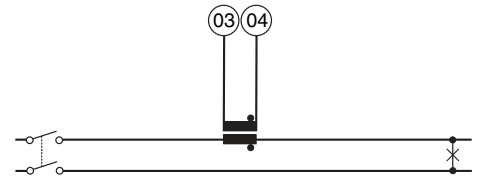
Back view of the instrument



Wiring diagrams, current measurements

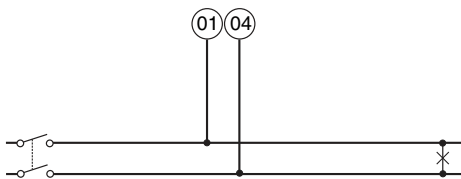


Direct connection

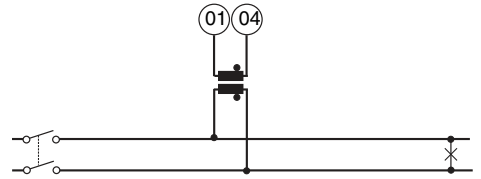


CT connection

Wiring diagrams, voltage measurements

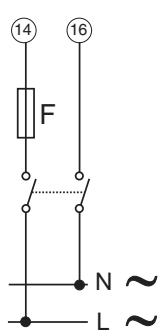


Direct connection



VT connection

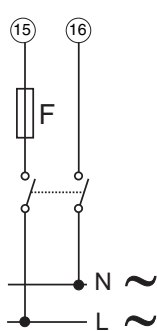
Wiring diagrams, power supply



230VAC

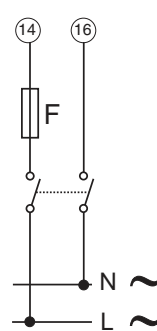
F= 500mA
250V T

“D” power supply



115VAC

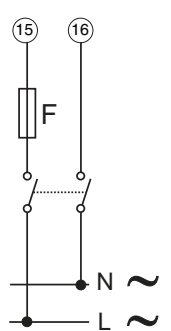
F= 500mA
250V T



48VAC

F= 1A 250V T

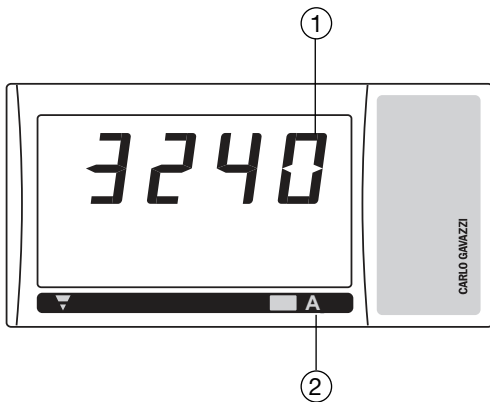
“B” power supply



24VAC

F= 1A 250V T

Front panel description



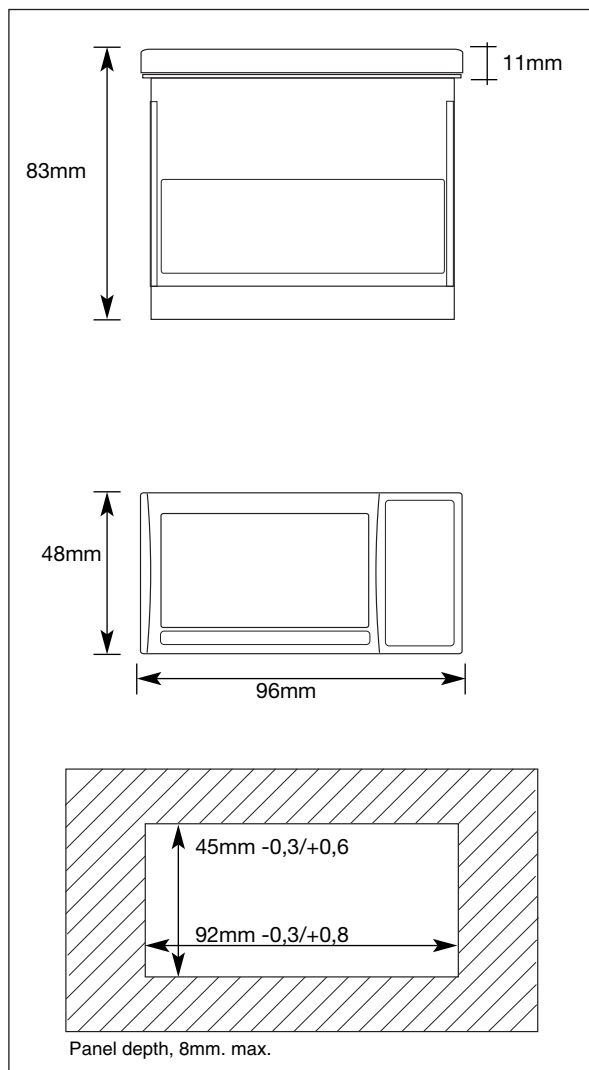
1. Display

3 dgts + dummy zero (maximum indications 9990).
Alpha-numerical indication with 7-segment LCD to display measurement values and over range indication

2. Engineering unit

The instrument is supplied with a complete set of labels with the main engineering units.

Dimensions



Engineering units

