

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			Power supply	Options
AV1:	1A / 100V AC	See Range table	B: 24/48 VAC, -15% +10%, 50/60 Hz	XX: None
AV5:	5A / 500V AC	See Range table	D: 115/230 VAC, -15% +10%, 50/60 Hz	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	Storage temperature	-10° to 60°C (14° to 140°F) (R.H. < 90% non-condensing)
	Voltage:	1.2 x U_n	Insulation reference voltage	300 V _{RMS} to ground
For 1 s:	Current:	5 x I_n	Dielectric strength	4000 V _{RMS} for 1 minute
	Voltage:	2 x U_n	Noise rejection CMRR	100 dB, from 40 to 60 Hz
Accuracy (@ 25°C $\pm$ 5°C, R.H. $\leq$ 60%)		$\pm$ 0.5% F.S., $\pm$ 1 DGT (from 5% to 120% F.S.). $\pm$ 1% F.S., $\pm$ 1 DGT (from 0% to 5% F.S.)	EMC	IEC 60801-2, IEC 60801-3, IEC 60801-4 (level 2), EN 50 081-1, EN 50 082-1
Temperature drift		$\pm$ 200 ppm/°C	Safety standards	EN 61010-1, IEC 61010-1
Input impedance			Connections	Screw-type
AV1		1A: voltage drop 1V 100V: $\geq$ 1M Ω	Housing Dimensions Material	1/8 DIN, 48 x 96 x 83 mm ABS, self-extinguishing: UL 94 V-0
AV5		5A: voltage drop 250mV 500V: $\geq$ 1M Ω	Degree of protection	Front: IP 50 (IP 65 on request); Connections: IP20
Display		7-segment red LED, h 14.2 mm, 4 digits	Weight	250 g approx.
Measurement refresh time		2 measurements/sec @50Hz	Approvals	CE, cURus, CSA
Display Max./Min. Over range		9990/0000 EEEE Indication >120% I_n/U_n or up to the maximum indication (9990)		



Power Supply Specifications

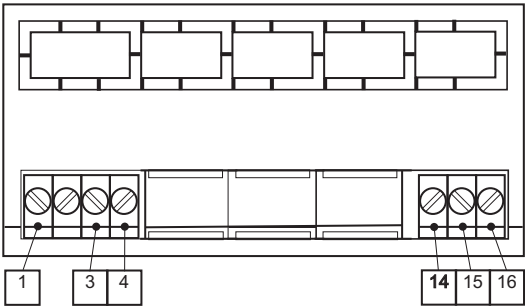
AC power supply	24/48 VAC, 115/230 VAC, -15% +10%,50/60 Hz	Power consumption	3.2 VA
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Range Table

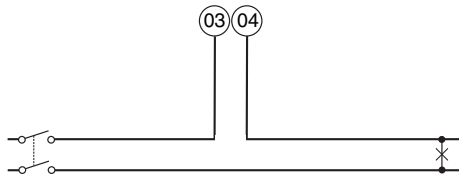
				A (Current)								V (Voltage)							
AV1: In=1A; Un=100V (110V) AV5: In=5A; Un=500V (600V)				In: 1A, 5A AC								Vn: 100V, 500V AC							
Decimal point selection or dummy zero				7	8	7	8	7	8	7	8	7	8	7	8	7	8		
				ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
				“X.XX”		“XX.X”		“XXX”		“XXX0”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

Terminal boards

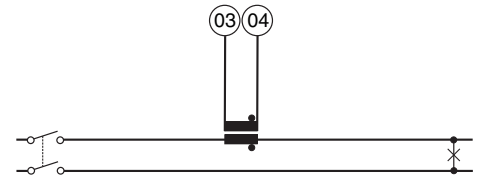
Back view of the instrument



Wiring diagrams, current measurements

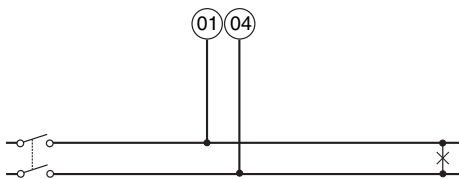


Direct connection

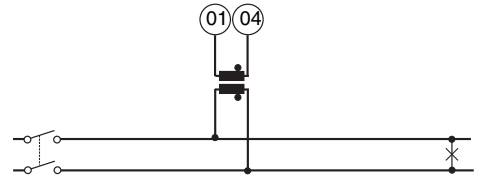


CT connection

Wiring diagrams, voltage measurements

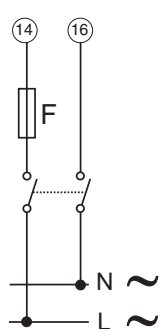
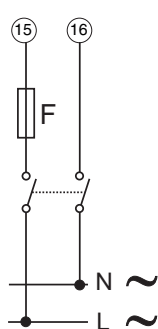
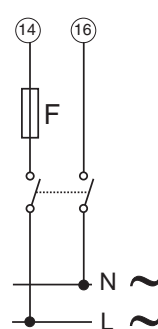


Direct connection

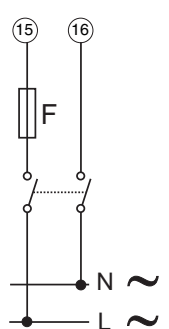


VT connection

Wiring diagrams, power supply

**230VAC**F= 500mA
250V T**115VAC**F= 500mA
250V T**48VAC**

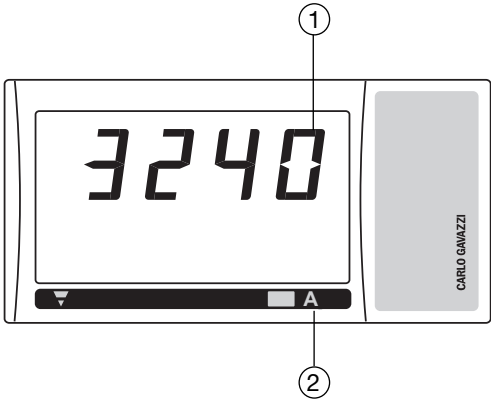
F= 1A 250V T

**24VAC**

F= 1A 250V T

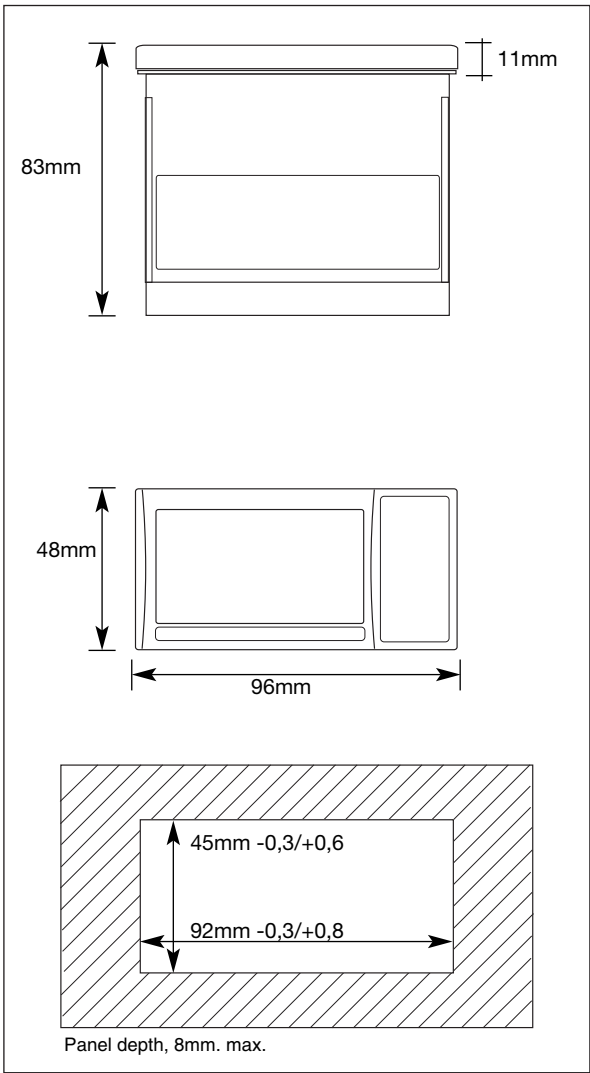


Front panel description

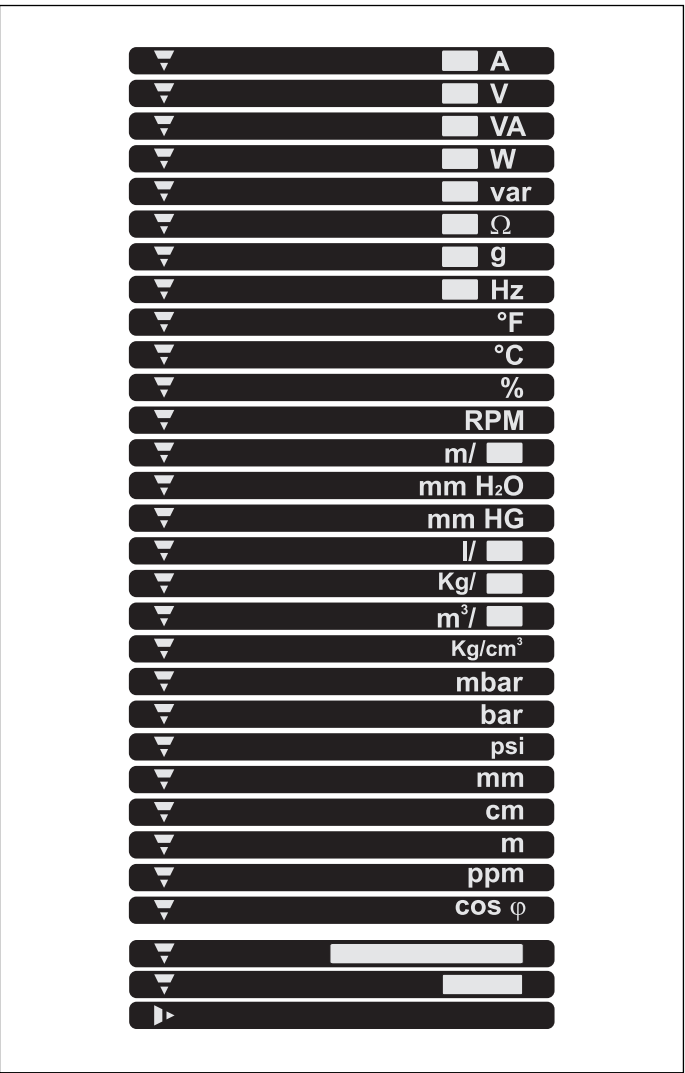


- 1. **Display**
3 dgts + dummy zero (maximum indications 9990).
Alpha-numerical indication with 7-segment LCD to display measurement values and over range indication
- 2. **Engineering unit**
The instrument is supplied with a complete set of labels with the main engineering units.

Dimensions



Engineering units



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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[LDM30AV5D0IX](#) [LDM30AV1D0XX](#) [LDM30AV5B0XX](#) [LDM30AV5D0XX](#) [LDM30AV1B0XX](#)