

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



Power Supply Specifications

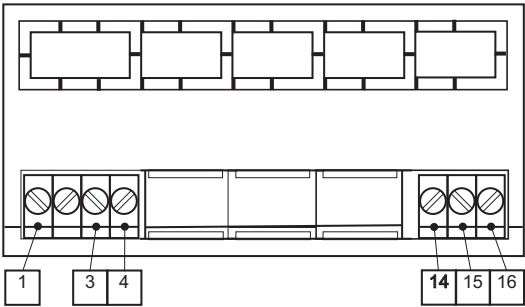
AC power supply	24/48 VAC, 115/230 VAC, -15% +10%,50/60 Hz	Power consumption	3.2 VA
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Range Table

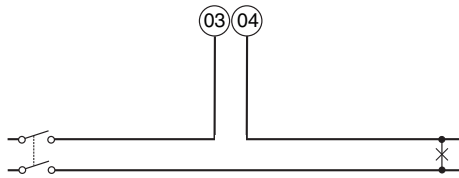
				A (Current)								V (Voltage)								
AV1: In=1A; Un=100V (110V) AV5: In=5A; Un=500V (600V)				In: 1A, 5A AC								Vn: 100V, 500V AC								
Decimal point selection or dummy zero				7	8	7	8	7	8	7	8	7	8	7	8	7	8			
				ON	ON	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	
				“X.XX”		“XX.X”		“XXX”		“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

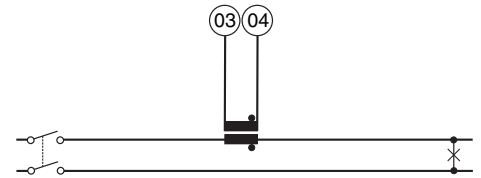
Back view of the instrument



Wiring diagrams, current measurements

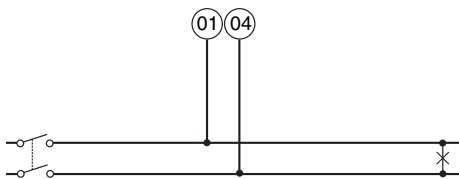


Direct connection

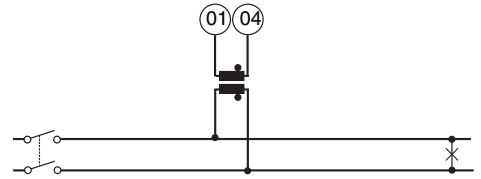


CT connection

Wiring diagrams, voltage measurements

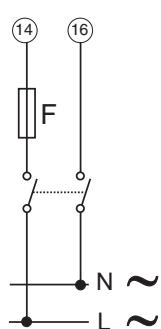
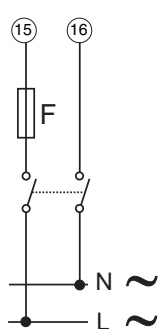
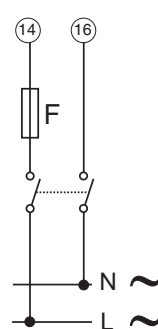


Direct connection

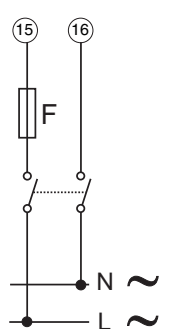


VT connection

Wiring diagrams, power supply

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

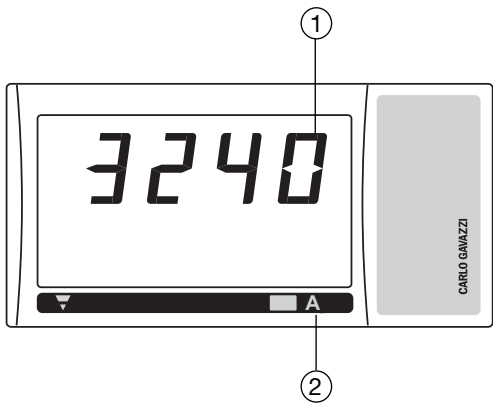
F= 1A 250V T

**24VAC**

F= 1A 250V T

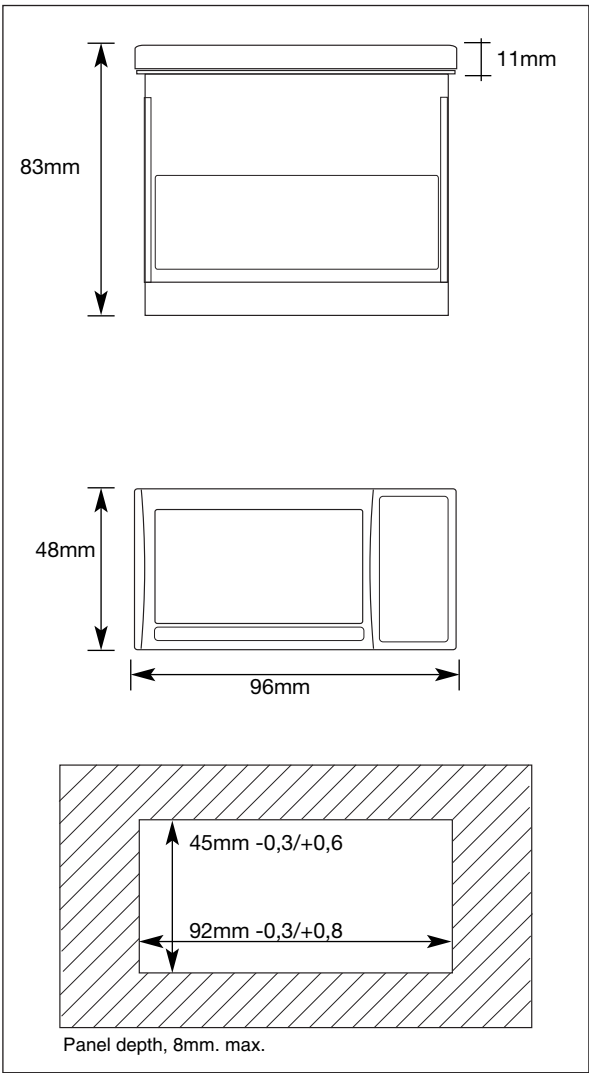


Front panel description



- 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

