



The UM100 is a digital voltmeter designed to measure AC voltages. It provides front panel readings on switchboards and is not equipped for communication. A single device covers all alternating voltages from 0 to 690 V.

Electrical characteristics

Type of measurement	rms up to the 9th harmonic
Measured voltage without voltage transformer	0 à 690 V
Frequency	47 - 63 Hz
Measurement accuracy (not including sensors)	± 1 % of full scale, ± 1 digit
Digital display	3-digit LED (999 full-scale count)
Display-refresh time	1.5 s
Consumption	3.5 VA max
Input impedance	> 1 MΩ
Overload capacity	continuous 1 second
	1.2 Un 2 Un
Electrical safety	as defined by standard IEC 1010-1
Supply voltage	48 - 115 V DC / AC 220 - 240 V AC 380 - 415 V AC

Mechanical characteristics

Dimensions	DIN 72 x 72 mm
Weight	0.25 kg
Degree of protection (EN50102)	front face other faces
	IP50 IP30 (IP20 for connections)
Front face impact resistance (EN50102)	IK07 (2 joules)
Vibrations (IEC 68-2-6)	Fc test
	2 to 13.2 Hz - 1 mm 13.2 to 100 Hz - 0.7 g

Environment

Operating temperature range	- 20 °C to + 70 °C
Storage temperature range	- 35 °C to + 85 °C
Damp heat (IEC 68-2-30)	6 cycles +25 °C / +55 °C / RH 95 %
Salt mist (IEC 68-2-52)	Kb test, severity level 2
Electromagnetic compatibility:	
■ electrostatic discharges (IEC 1000-4-2)	Level 4
■ radiated susceptibility (IEC 1000-4-3)	Level 3
■ low-energy conducted susceptibility (IEC 1000-4-4)	Level 4
■ high-energy conducted susceptibility (IEC 1000-4-5)	Level 4
■ conducted and radiated emissions (EN50081-2)	Class A

Accessories

Connection

For phase-to-phase or phase-to-neutral measurements on a 3-phase distribution system, the Digipact UM100 voltmeter may be combined with a Telemecanique K1F-027M or Multi 9 7-position CMV voltmeter selector switch (cat. No. 15125).

Installation

- on front plate for Prisma cubicle: cat. No. 07898 or 07891
- on door with cut-outs for Prisma cubicle: cat. No. 09330.

Part numbers

48 to 115 V AC/DC	50831
220 to 240 V AC	50832
380 to 415 V AC	50834



The IM100 is a digital ammeter designed to measure AC currents. It provides front panel readings on switchboards and is not equipped for communication. A single device covers current-transformer ratings from 5 to 8 000 A.

Electrical characteristics

Type of measurement	rms up to the 9th harmonic	
Ratings of associated current transformers	5 to 8000 A (1)	
Frequency	47 - 63 Hz	
Measurement accuracy (not including sensors)	± 1 % of full scale, ± 1 digit	
Digital display	4-digit LED (9999 full-scale count)	
Display-refresh time	1.5 s	
Consumption	on power supply	3.5 VA max
	on current transformer	0.5 VA at I _n
Overload capacity	continuous	2 I _n
	3 seconds	6 I _n
Electrical safety	as defined by standard IEC 1010-1	
Supply voltage	48 - 115 V DC / AC 220 - 240 V AC 380 - 415 V AC	

Mechanical characteristics

Dimensions	DIN 72 x 72 mm	
Weight	0.25 kg	
Degree of protection (EN50102)	front face	IP50
	other faces	IP30 (IP20 for connections)
Front face impact resistance (EN50102)	IK07 (2 joules)	
Vibrations (IEC 68-2-6)	Fc test	2 to 13.2 Hz - 1 mm 13.2 to 100 Hz - 0.7 g

Environment

Operating temperature range	- 20 °C to + 70 °C	
Storage temperature range	- 35 °C to + 85 °C	
Damp heat (IEC 68-2-30)	6 cycles +25 °C / +55 °C / RH 95 %	
Salt mist (IEC 68-2-52)	Kb test, severity level 2	
Electromagnetic compatibility:		
■ electrostatic discharges (IEC 1000-4-2)	Level 4	
■ radiated susceptibility (IEC 1000-4-3)	Level 3	
■ low-energy conducted susceptibility (IEC 1000-4-4)	Level 4	
■ high-energy conducted susceptibility (IEC 1000-4-5)	Level 4	
■ conducted and radiated emissions (EN50081-2)	Class A	

(1) Associated current transformers: secondary output 5 A.

Available primary ratings:

5-20-25-30-40-50-60-70-75-80-100-120-125-150-200-250-300-400-500-600-700-750-800-1000-1200-1250-1500-2000-2500-3000-4000-5000-6000-7000-7500-8000.

Recommended accuracy class: 1 (as defined by IEC 60044-1).

Accessories

Connection

For measurements on a 3-phase distribution system, the Digipact IM100 ammeter may be combined with a Telemecanique K1F-003M or Multi 9 4-position CMA ammeter selector switch (cat. No. 15126).

Installation

- on front plate for Prisma cubicle: cat. No. 07898 or 07891
- on door with cut-outs for Prisma cubicle: cat. No. 09330.

Part numbers

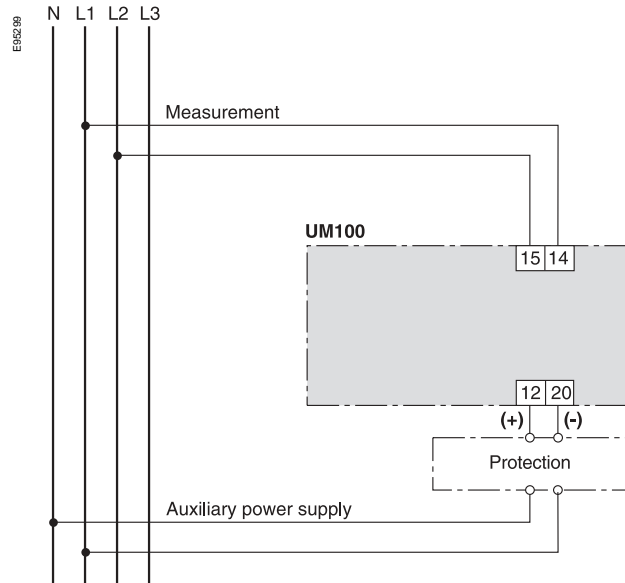
48 to 115 V AC/DC	50835
220 to 240 V AC	50836
380 to 415 V AC	50837

Panel instrumentation

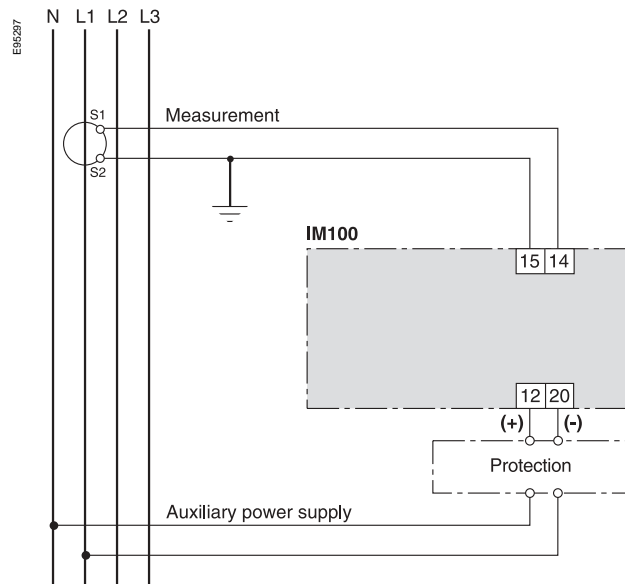
UM100 voltmeter

IM100 ammeter

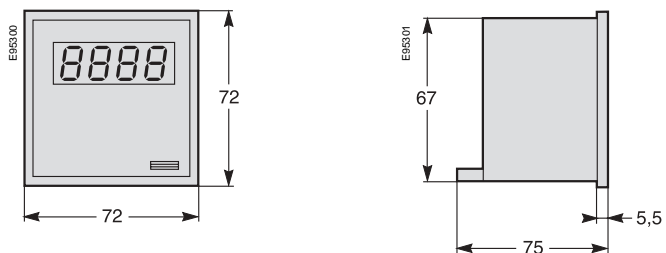
UM100 connection



IM100 connection



UM100/IM100 dimensions



Front-panel mounting

