

Current measurement

AMP

Multi 9 Merlin Gerin



AMP: 16009



AMP: 16029



AMP: 15209

The **AMP Ammeters** are modular or flush-mounting devices designed to measure the strength of a current flowing through all types of low voltage electrical circuits.

Operation

Flush-mounting ammeters:

■ Analog AMP:

□ the measurement is read on an interchangeable dial, 72 mm high and 72 mm wide with a scale of 90°.

Modular ammeters:

■ Analog AMP:

□ the measurement is read directly on an interchangeable dial graduated in true values by means of a needle covering a 90° range.

■ Digital AMP:

□ the measurement is read on a 3-digit display with red LED.

□ the AMP can be either connected directly to the electrical circuit or connected by means of a current transformer (TI) with separate control.

Advantages

A product range designed to adapt to all kinds of electrical installations:

■ Comfort:

- clear, accurate measurements,
- immediate display of current level,
- direct reading of current value without calculation,
- interchangeable dials.

■ Attractive design:

- compact dimensions,
- modern.

■ Installation:

- ease of mounting and connection,
- optional connection with an ammeter selector switch.

■ Modular AMP consistent with the entire Multi 9 offer:

- same profile,
- same connections.

The range

Modular layout

multimeter PM9 (product datasheet M9FP256.en)



AMP digital



AMP analog



CMA



TI (product datasheet M9FP212.en)



VLT digital



VLT analog (product datasheet M9FP190.en)



CMV

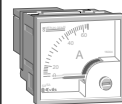


FRE digital (product datasheet M9FP190.en)

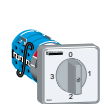


Flush-mounting layout

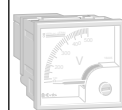
AMP 72x72



CMA



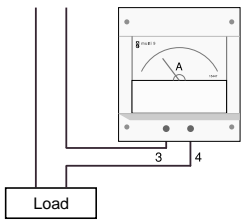
VLT 72x72 (product datasheet M9FP190.en)



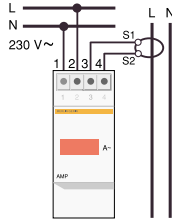
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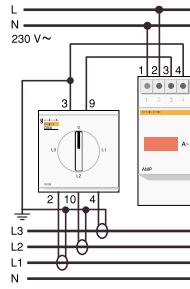
Schematic diagrams



Analog AMP



Digital AMP + TI



Digital AMP + CMA

Choice table

Type	Scale (A)	Rating (A)	Connection on TI	Frequency (Hz)	Cat. no.
Modular devices:					
Analog AMP (direct connection)					
	0... 30	30	no	50...60	16029
Analog AMP (connection on TI)					
Basic device					
(delivered without dial)	5		X/5A	50...60	16030
Dial	0... 5	5	no		16031
	0... 50	50	50/5A		16032
	0... 75	75	75/5A		16033
	0... 100	100	100/5A		16034
	0... 150	150	150/5A		16035
	0... 200	200	200/5A		16036
	0... 250	250	250/5A		16037
	0... 300	300	300/5A		16038
	0... 400	400	400/5A		16039
	0... 500	500	500/5A		16040
	0... 600	600	600/5A		16041
	0... 800	800	800/5A		16042
	0... 1000	1000	1000/5A		16043
	0... 1500	1500	1500/5A		16044
	0... 2000	2000	2000/5A		16045
Digital AMP (direct connection)					
	0... 10	10	no	50...60	15202
Digital AMP multi-rating					
	0... 5	5	no	50...60	15209
	0... 5000	5000	as per rating	50...60	15209
Ammeter selector switch					
CMA	4 positions	10 (415 VAC)			15126
Flush-mounting devices:					
Analog AMP for direct outgoer					
Basic device					
(delivered without dial)	5		X/5A	50...60	16004
Dial	0... 65	50	50/5A		16009
	0... 130	100	100/5A		16010
	0... 260	200	200/5A		16011
	0... 520	400	400/5A		16012
	0... 780	600	600/5A		16013
	0... 1300	1000	1000/5A		16014
	0... 1625	1250	1250/5A		16015
	0... 1950	1500	1500/5A		16016
	0... 2600	2000	2000/5A		16019
Analog AMP for motor outgoer					
Basic device					
(delivered without dial)	5		X/5A	50...60	16003
Dial	0. 30. 90	30	30/5A		16006
	0. 75. 225	75	75/5A		16007
	0. 200. 600	200	200/5A		16008
Ammeter selector switch					
CMA	4 positions	20 (500 VCA)			16017

Implementation

- Installation:
 - adapted to all types of modular electrical switchboards and enclosures,
 - ease of installation on symmetrical rail.
- Installation of the flush-mounting AMP:
 - requires a square cut-out in the wall.

Technical data

Electrical data:

Analog modular and flush-mounting AMP

- Overload:
 - maximum for 5 seconds: 10 In,
 - permanent: 1.2 In.
- Consumption: 1.1 VA.
- Accuracy class: 1.5.

Digital modular AMP

- Overload:
 - maximum for 5 seconds: 10 In,
 - permanent: 2 In.
- Consumption: 0.3 VA.
- Power supply by auxiliary source:
 - 230 V; -15...+10 %; 50...60 Hz.
- Full-scale accuracy: 0.5 % ±1digit.

Mechanical data:

Flush-mounting AMP

- Operating position: 30°/vertical.
- Scale length in 90°: 62 mm.
- Ferromagnetic device.
- Connection by 4 mm Ø lugs.
- Overall dimensions: h = 72 ; w = 72 mm.
- Weight (g): 155.
- Connection:
 - tunnel terminals for 1.5 to 6 mm² rigid cable.
- Pseudo-linear scale over 90°.
- Overall dimensions: h = 79 ; w = 72 ; d = 66 mm.
- Weight (g): 170.

Digital modular AMP

- Display: 3-digit display with red LED, h: 8 mm.
- Connection:
 - tunnel terminals for two 2.5 mm² cables.
- Overall dimensions: h = 87 ; w = 36 ; d = 61 mm.
- Weight (g): 170.

Environment

Flush-mounting AMP

- Complies with standards: IEC 414 - IEC 61010.
- Degree of protection on front face: IP 520.
- Installation temperature: -25°C to +50°C.
- Storage temperature: -40°C to +80°C.

Analog modular AMP

- Complies with standards: IEC 51 - IEC 414.
- Degree of protection:
 - of terminal block IP 40,
 - of terminals IP 20.
- Installation temperature: -25°C to +55°C.
- Storage temperature: -40°C to +80°C.
- Reference temperature: 23°C.
- Effect of temperature on accuracy: ±0.03%/°C.

Digital modular AMP

- Complies with standards: IEC 61010.
- Degree of protection:
 - of terminal block IP 40,
 - of terminals IP 20.
- Installation temperature: -25°C to +55°C.
- Storage temperature: -40°C to +80°C.

Schneider Electric

Merlin Gerin
F-38050 Grenoble cedex 9
tel. +33 (0)4 76 57 60 60
telex: merge 320 842 F

As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication.

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