

Electrical network management

PowerLogic

Energy management, revenue metering and power quality monitoring

Catalogue



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DIN rail analogue ammeters and voltmeters



iAMP.



iVLT.

Function

iAMP

Ammeters measure the current flowing through an electric circuit in amps.

iVLT

Voltmeters measure the potential (voltage) difference of an electric circuit in volts.

Common technical data

- Accuracy: class 1.5.
- Complies with standards IEC 60051-1, IEC 61010-1 and IEC 61000-4.
- Ferromagnetic device.
- Pseudo-linear scale over 90°.
- Ammeters (except catalogue number 16029):
 - connection on CT, ratio In/5, to be ordered separately
 - interchangeable dials.
- Temperature:
 - operating temperature: -25 °C to +55 °C.
 - reference temperature: 23 °C.
- Influence of temperature on accuracy: ±0.03 % / °C.
- Utilisation frequency: 50/60 Hz.
- Consumption:
 - AMP: 1.1 VA
 - VLT catalogue number 15060: 2.5 VA
 - VLT catalogue number 16061: 3.5 VA.
- Permanent overload:
 - AMP: 1.2 In
 - VLT: 1.2 Un.
- Maximum overload for 5 s:
 - AMP: 10 In
 - VLT: 2 Un.
- Connection: tunnel terminals for 1.5 to 6 mm² rigid cables.

Catalogue numbers

Type	Scale	Connection with CT	Width in mod. of 9 mm	Cat. no.
iAMP with direct connection				
	0-30 A	no	8	16029
iAMP with connection on CT				
Basic device (delivered without dial)		X/5	8	16030
Dial	0-5 A			16031
	0-50 A	50/5		16032
	0-75 A	75/5		16033
	0-100 A	100/5		16034
	0-150 A	150/5		16035
	0-200 A	200/5		16036
	0-250 A	250/5		16037
	0-300 A	300/5		16038
	0-400 A	400/5		16039
	0-500 A	500/5		16040
	0-600 A	600/5		16041
	0-800 A	800/5		16042
	0-1000 A	1000/5		16043
	0-1500 A	1500/5		16044
	0-2000 A	2000/5		16045
iVLT				
	0-300 V		8	16060
	0-500 V		8	16061

DIN rail digital ammeters, voltmeter and frequency meter

PB112024



iAMP.

PB112023



iVLT.

PB112025



iFRE.

Function

iAMP

Ammeters measure in amps the current flowing through an electric circuit.

iVLT

Voltmeters measure in volts the potential (voltage) difference of an electric circuit.

iFRE

The frequency meter measures in hertz the frequency of an electric circuit from 20 to 600 V AC.

Common technical data

- Supply voltage: 230 V.
- Operating frequency: 50/60 Hz.
- Display by red LED: 3 digits, h = 8 mm.
- Accuracy at full-scale : 0.5 % ±1 digit.
- Consumption: max. 5 VA or rated 2.5 VA.
- Degree of protection:
 - IP40 on front face
 - IP20 at terminal level.
- Connection: tunnel terminals for 2.5 mm² cables.

Specific data

10 A direct reading ammeter

- Minimum value measured: 4 % of rating.
- Measurement input consumption: 1 VA.

Multi-rating ammeter

- Ratings:
 - in direct reading: 5 A
 - by CT (not supplied) configurable on the front face of the ammeter: 10, 15, 20, 25, 40, 50, 60, 100, 150, 200, 250, 400, 500, 600, 800, 1000, 1500, 2000, 2500, 4000, 5000 A.
- Minimum value measured: 4% of rating.
- Measurement input consumption: 0.55 VA.

Voltmeter

- Direct measurement: 0...600 V.
- Input impedance: 2 MΩ.
- Minimum value measured: 4 % of rating.

Frequency meter

- Minimum value measured: 20 Hz.
- Maximum value measured: 100 Hz.
- Full-scale display: 99.9 Hz.

Compliance with standards

- Safety: IEC/EN 61010-1.
- EMC electromagnetic compatibility: IEC/EN 65081-1 and IEC/EN 65082-2.

Catalogue numbers

Type	Scale	Connection with CT	Width in mod. of 9 mm	Cat. no.
Direct reading iAMP	0-10 A	No	4	15202
	0-5000 A	As per rating	4	15209
iVLT	0-600 V		4	15201
	20-100 Hz		4	15208

72 x 72 analogue ammeters and voltmeter



AMP for standard feeder.



AMP for motor feeder.



VLT.

Function

The 72 x 72 measurement devices are designed for flush-mounted installation on doors, wicket doors and front plates of enclosures and cubicles.

AMP

The ammeters measure in amps the current flowing through an electrical circuit.

VLT

The voltmeter measure in volts the potential difference (voltage) of an electrical circuit.

Common technical data

- Accuracy: class 1.5.
- Compliance with standard IEC 60051-1, IEC 61010-1 and IEC 61000-4.
- Ferromagnetic device.
- Scale length: 62 mm over 90°.
- Mounting in enclosure or in cubicle.
- Degree of protection: IP52.
- Maximum operating position: 30° / vertical.
- Temperature:
 - operation: -25 °C to +50 °C
 - reference: 23 °C.
- Influence of temperature on accuracy: ±0.003 % / °C.
- Utilisation frequency: 50/60 Hz.

AMP specific technical data

- Needs a In/5 CT to be ordered separately.
- Interchangeable dials to be ordered separately.
- Consumption: 1.1 VA.
- Permanent overload: 1.2 In.
- Maximum overload for 5 s: 10 In.

VLT specific technical data

- Consumption: 3 VA.
- Permanent overload: 1.2 Un.
- Maximum overload for 5 s: 2 Un.

Catalogue numbers

Type	Scale	Connection on CT	Cat. no.
AMP for standard feeder			
Basic device (delivered without dial)		X/5	16004
1.3 In dial	0-50 A	50/5	16009
	0-100 A	100/5	16010
	0-200 A	200/5	16011
	0-400 A	400/5	16012
	0-600 A	600/5	16013
	0-1000 A	1000/5	16014
	0-1250 A	1250/5	16015
	0-1500 A	1500/5	16016
	0-2000 A	2000/5	16019
AMP for motor feeder			
Basic device (delivered without dial)		X/5	16003
3 In dial	0-30-90 A	30/5	16006
	0-75-225 A	75/5	16007
	0-200-600 A	200/5	16008
VLT			
	0-500 V		16005

96 x 96 analogue ammeters and voltmeter



AMP for standard feeder.



AMP for motor feeder.



VLT.

Function

The 96 x 96 measurement devices are designed for flush-mounted installation on doors, wicket doors and front plates of enclosures and cubicles.

AMP

The ammeters measure in amps the current flowing through an electrical circuit.

VLT

The voltmeter measure in volts the potential difference (voltage) of an electrical circuit.

Common technical data

- Accuracy: class 1.5.
- Compliance with standard IEC 60051-1, IEC 61010-1 and IEC 61000-4.
- Ferromagnetic device.
- Scale length: 80 mm over 90°.
- Mounting in enclosure or in cubicle.
- Degree of protection: IP52.
- Maximum operating position: 30° / vertical.
- Temperature:
 - operation: -25 °C to +50 °C
 - reference: 23 °C.
- Influence of temperature on accuracy: ±0.003 % / °C.
- Utilisation frequency: 50/60 Hz.

AMP specific technical data

- Needs a In/5 CT to be ordered separately.
- Interchangeable dials to be ordered separately.
- Consumption: 1.1 VA.
- Permanent overload: 1.2 In.
- Maximum overload for 5 s: 10 In.

VLT specific technical data

- Consumption: 3 VA.
- Permanent overload: 1.2 Un.
- Maximum overload for 5 s: 2 Un.

Catalogue numbers

Type	Scale	Connection on CT	Cat. no.
AMP for standard feeder			
Basic device (delivered without dial)		X/5	16074
1.3 In dial	0-50 A	50/5	16079
	0-100 A	100/5	16080
	0-200 A	200/5	16081
	0-400 A	400/5	16082
	0-600 A	600/5	16083
	0-1000 A	1000/5	16084
	0-1250 A	1250/5	16085
	0-1500 A	1500/5	16086
	0-2000 A	2000/5	16087
	0-2500 A	2500/5	16088
	0-3000 A	3000/5	16089
	0-4000 A	4000/5	16090
0-5000 A	5000/5	16091	
0-6000 A	6000/5	16092	
AMP for motor feeder			
Basic device (delivered without dial)		X/5	16073
3 In dial	0-30-90 A	30/5	16076
	0-75-225 A	75/5	16077
	0-200-600 A	200/5	16078
VLT			
	0-500 V		16075

48 x 48 CMA and CMV selector switches



CMA.



CMV.

Function

The 48 x 48 selector switches are designed for flush-mounted installation on doors, wicket doors and front plates of enclosures and cubicles.

CMA

The ammeter selector switch uses a single ammeter (by means of current transformers) for successive measurement of the currents of a three-phase circuit.

CMV

The voltmeter selector switch uses a single voltmeter for successive measurement of the voltages (phase-to-phase and phase-to-neutral) of a three-phase circuit.

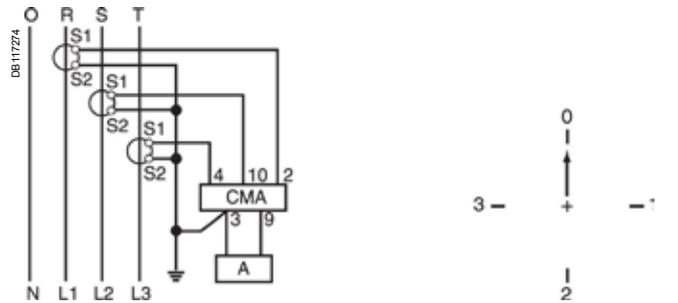
Common technical data

- Durability:
 - electrical: 100 000 operations
 - mechanical: 2 000 000 operations.
- AgNi contact.
- Operating temperature: -25 °C to +50 °C.
- Compliance with standards IEC/EN 60947-3.
- Degree of protection:
 - IP65 on front face
 - IP20 at terminal level.

Catalogue numbers

Type	Rating (A)	Voltage (V)	Number of positions	Cat. no.
CMA	20		4	16017
CMV		500	7	16018

Connection



CMA.



CMV.

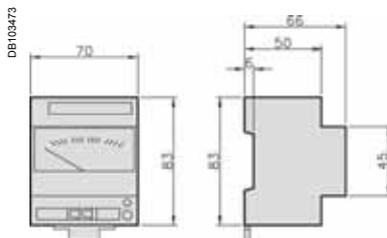
Reading 3 phase-to-earth voltages + 3 phase-to-phase voltages.

Note: when connecting do not remove the pre-cabling.

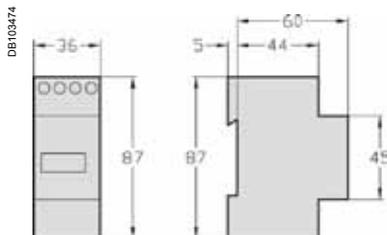
Dimensions

Ammeters, voltmeters, selector switches, impulse counter, hour counters

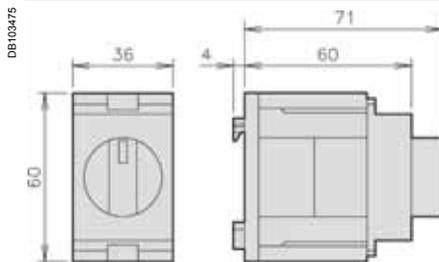
Analogue ammeters and voltmeters iAMP, iVLT



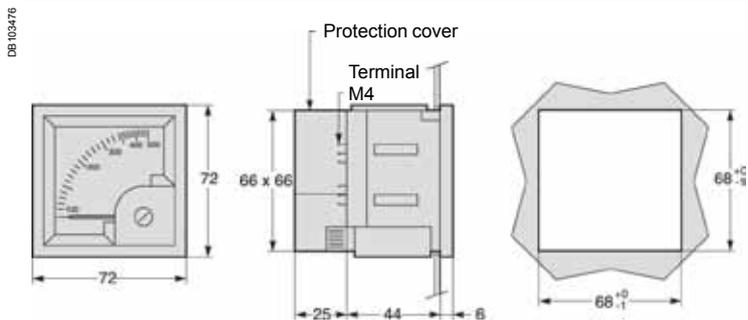
Digital ammeters, voltmeter and frequency meter iAMP, iVLT



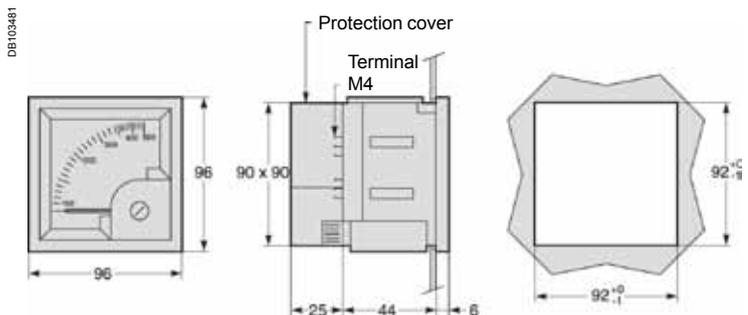
iCMA and iCMV selector switches



72 x 72 analogue ammeters and voltmeter



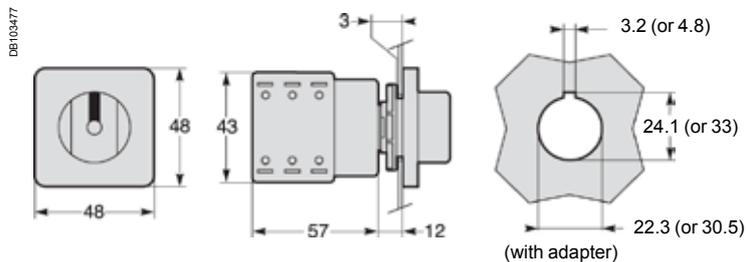
96 x 96 analogue ammeters and voltmeter



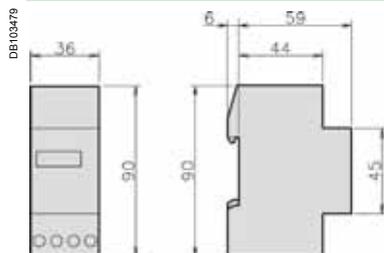
Dimensions (cont.)

Ammeters, voltmeters, selector switches, impulse counter, hour counters

48 x 48 CMA and CMV selector switches



iCI impulse counter and iCH hour counter



48 x 48 CH hour counters

