

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.

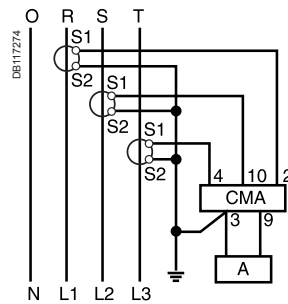
Common technical data

- 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.

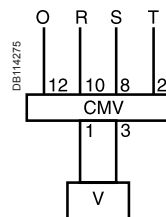
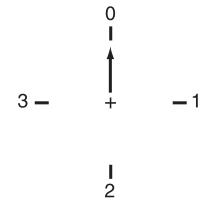
Catalogue numbers

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

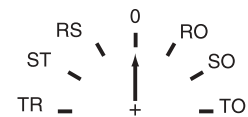
Connection



CMA.



CMV.



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

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