



3Ph kWhmeter direct 125A 6M MODBUS MID

ECR310D

Architecture

| | |
|-----------------|-------------------------------|
| Bus system | MODBUS |
| Number of poles | 4 P |
| Type of pole | 3P, 3P+N |
| Fixing mode | DIN rail type O (symmetrical) |

Functions

| | |
|-----------------|------------------------------------|
| Precision class | B |
| Tarif type | T1...T2 (230V AC) / T1...T8 Modbus |

Compatibility

| | |
|--------------|-------------------|
| Suitable for | Purchase / supply |
|--------------|-------------------|

Main electrical features

| | |
|------------------------------|----------|
| Frequency | 50 Hz |
| Type of supply voltage | AC |
| Rated operational voltage Ue | 92/480 V |

Voltage

| | |
|----------------------------------|--------------|
| Mesure voltage range P-N | 92/276 V |
| Mesure voltage range Ph-Ph | 160/480 V |
| Max permanent voltage Ph-N | 276 V AC |
| Permanent voltage Ph-Ph | 480 V AC |
| Reference voltage P-N | 230 V AC |
| Reference voltage Ph-Ph | 400 V AC |
| Supply voltage P-N | 92/276 V AC |
| Supply voltage Ph-Ph | 160/480 V AC |
| Max permanent voltage Ph-N (1s) | 300 V AC |
| Max permanent voltage Ph-Ph (1s) | 800 V AC |
| Max operating voltage | 300 V |
| Rated impulse withstand voltage | 6 kV |

Electric current

| | |
|---------------------------|----------------|
| Max permanent current | 125 A |
| Max temporary current | 3750 A (10 ms) |
| Minimum operating current | 0,02 A |
| Operating current | 0,02/125 A |

Technical Properties

| | |
|----------------------------------|-------|
| Reference current | 5 A |
| Max. measurement circuit current | 125 A |

Power

| | |
|---------------------------|-------|
| Power consumed | 2 VA |
| Total power loss under IN | 0,6 W |

Electrical specifications

| | |
|-------------------------|---------|
| Type of pulse generator | optical |
|-------------------------|---------|

Measurement

| | |
|---|--------------------|
| Measurement range of the current (Min, Max) | 0,25/125 A |
| Measurement range of frequency | 45/65 Hz |
| Frequency measuring range | 45 to 65 Hz |
| Type of measuring instrument | electronical |
| Principle of measurement | Direct measurement |

Power supply

| | |
|----------------|-----------------|
| Supply voltage | 400 V \pm 20% |
|----------------|-----------------|

Dimensions

| | |
|-----------------------------|--------|
| Depth of installed product | 60 mm |
| Height of installed product | 92 mm |
| Width of installed product | 107 mm |

Installation, mounting

| | |
|-------------------|----------|
| Tightening torque | 5Nm |
| Mounting type | din-Rail |

Connection

| | |
|--|-------------------------|
| Cross section of bus network | 0,8/2,5 mm ² |
| Cross section of digital input | 0,8/2,5 mm ² |
| Wire cross section of metering entrance wire | 50 mm ² |
| Wire cross section of metering outgoing wire | 50 mm ² |

Settings

| | |
|----------------------------------|----|
| Selection of transformation link | no |
|----------------------------------|----|

Equipment

| | |
|-------------------------------------|---------------------------|
| Type of display | retro illuminated display |
| Tariff model of kilowatt-hour meter | Externa |
| Type of counter | 4 wires counter |

Use

| | |
|---------------------|------------------|
| Network baud rate | 1200/38400 bit/s |
| Reference frequency | 50 Hz |

Standards

| | |
|-------------------------|--|
| Standard text | EN 50470-1 / 3, IEC 62053-21 / 23, IEC 61557-12 |
| Certified product | MID (Measuring Instruments Directive) |
| European directive WEEE | concerned |

Safety

| | |
|---------------------|---------------|
| Protection class | isol.class II |
| Protection index IP | IP20 |
| Class of Insulation | TBTS |

Use conditions

| | |
|---|--------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Operating temperature | -25 55 °C |
| Altitude | 2000 m |
| Storage temperature | -25 to 70 °C |
| Storage/transport temperature | -25 70 °C |