## Product data sheet **ECM310D**





ECM310D

## 3 Phase kWhmeter direct 125A 6M MBUS MID

## **Technical characteristics**

Bus system	M-BUS
Number of poles	4 P
Type of pole	3P+N
Functions	
Precision class	В
Tarif type	T1T2 (230V AC) / T1T2 M-BUS
Configuration	
Number of modules	6
Compatibility	
Suitable for	Purchase / supply
Main electrical features	
Rated operational voltage Ue	92 / 480 V
Type of supply voltage	AC
Frequency	50 Hz
Voltage	
Max operating voltage	300 V
Rated impulse withstand voltage	6 kV
Electric current	
Minimum operating current	0.02 A
Operating current	0.02 / 125 A
Rated current	125 A
Reference current	5 A
Max. measurement circuit current	125 A
Dimensions	
Depth of installed product	60 mm
Height of installed product	92 mm
Width of installed product	107 mm
Power	
Power Power consumed	2 VA

## **Electrical specifications**

Type of measuring instrument       electronical         Principle of measurement       Direct measurement         Power supply       Supply voltage       400 V ± 209         Installation, mounting       Tightening torque       SNr         Mounting type       din-Ra       Connection         Wire cross section of metering entrance wire       50 mm         Wire cross section of metering outgoing wire       50 mm         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counter         Standards       Standards         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive MID (Measuring Instruments Directive Safety         Protection class       isol.class         Halogen free       N         Use conditions	Type of pulse generator	optica
Type of measuring instrument electronical Principle of measurement Direct measurement Power supply Supply voltage 400 V ± 209 Installation, mounting Tightening torque 5Nr Mounting type din-Ra Connection Wire cross section of metering entrance wire 50 mm Equipment Type of metering outgoing wire 50 mm Equipment Type of counter Extern Type of counter Extern Type of counter 4 wires counter Standards Standards Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1 Certified product MID (Measuring Instruments Directive Safety Protection class Isol.class Halogen free N Use conditions Operating temperature -2555 % Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Measurement	
Principle of measurement Direct measurement Principle of measurement Direct measurement Power supply Supply voltage 400 V ± 209 Installation, mounting Tightening torque 5Nr Mounting type din-Ra Connection Wire cross section of metering entrance wire 50 mm Wire cross section of metering outgoing wire 50 mm Equipment Type of display retro illuminated displa Tariff model of kilowatt-hour meter Extern Type of counter 4 wires counte Standards Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1 Certified product MID (Measuring Instruments Directive Safety Protection class isol.class Halogen free N Use conditions Operating temperature -2555 % Degree of pollution according to IEC 60664 / IEC 60947-2 Attitude 2000 r	Frequency measuring range	45 to 65 Hz
Power supply         Supply voltage       400 V ± 209         Installation, mounting         Tightening torque       5Nr         Mounting type       din-Ra         Connection       50 mr         Wire cross section of metering entrance wire       50 mr         Wire cross section of metering outgoing wire       50 mr         Equipment       50 mr         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counter         Standards       50         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive Safety         Protection class       isol.class         Halogen free       N         Use conditions       0         Operating temperature       -2555 °         Degree of pollution according to IEC 60664 / IEC 60947-2       2000 r	Type of measuring instrument	electronica
Supply voltage       400 V ± 203         Installation, mounting       5Mr         Tightening torque       5Mr         Mounting type       din-Ra         Connection       50 mr         Wire cross section of metering entrance wire       50 mr         Wire cross section of metering outgoing wire       50 mr         Equipment       50 mr         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counter         Standards       51         Standard text       EN 50470-1/3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive Safety         Protection class       isol.class         Halogen free       N         Use conditions       0         Operating temperature       -2555 °         Degree of pollution according to IEC 60664 / IEC 60947-2       2000 r	Principle of measurement	Direct measurement
Installation, mounting Tightening torque 5Mr Mounting type din-Ra Connection Wire cross section of metering entrance wire 50 mm Wire cross section of metering outgoing wire 50 mm Equipment Type of display retro illuminated displa Tariff model of kilowatt-hour meter Extern Type of counter Extern Type of counter 4 wires counte Standards Standards Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1 Certified product MID (Measuring Instruments Directive Safety Protection class isol.class Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Power supply	
Tightening torque       5Nr         Mounting type       din-Ra         Connection       50 mm         Wire cross section of metering entrance wire       50 mm         Wire cross section of metering outgoing wire       50 mm         Equipment       50 mm         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counter         Standards       50 mm         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive MID (Measuring Instruments Directive Safety         Protection class       isol.class         Halogen free       N         Operating temperature       -2555 °         Degree of pollution according to IEC 60664 / IEC 60664 / IEC 6097-2       2000 r	Supply voltage	400 V ± 20%
Mounting type din-Ra Connection Wire cross section of metering entrance wire 50 mm Wire cross section of metering outgoing wire 50 mm Equipment Type of display retro illuminated displa Tariff model of kilowatt-hour meter Extern Type of counter 4 wires counte Standards Standards Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1 Certified product MID (Measuring Instruments Directive Safety Protection class isol.class Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Installation, mounting	
Connection         Wire cross section of metering entrance wire       50 mm         Wire cross section of metering outgoing wire       50 mm         Equipment       50 mm         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counte         Standards       Standard text         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive Safety         Protection class       isol.class         Halogen free       N         Use conditions       Qperating temperature         Operating temperature       -2555 °         Degree of pollution according to IEC 60664 / IEC 60964 / IEC 6097-2       2000 m	Tightening torque	5Nm
Wire cross section of metering entrance wire       50 mm         Wire cross section of metering outgoing wire       50 mm         Equipment       50 mm         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counte         Standards       Standards         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive         Safety       Protection class       isol.class         Halogen free       N         Use conditions	Mounting type	din-Rai
Wire cross section of metering outgoing wire       50 mm         Equipment       50 mm         Type of display       retro illuminated displa         Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counter         Standards       Standards         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive         Safety       Protection class         Halogen free       N         Use conditions       -2555 °         Degree of pollution according to IEC 60664 / IEC 60947-2       2000 m	Connection	
wire 50 mm Equipment Type of display retro illuminated displa Tariff model of kilowatt-hour meter Extern Type of counter 4 wires counte Standards Standards Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1 Certified product MID (Measuring Instruments Directive Safety Protection class isol.class Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 m		50 mm
Type of display retro illuminated displa Tariff model of kilowatt-hour meter Extern Type of counter 4 wires counte Standards Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1 Certified product MID (Measuring Instruments Directive Safety Protection class isol.class Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r		50 mm
Tariff model of kilowatt-hour meter       Extern         Type of counter       4 wires counter         Standards       Standards         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive         Safety       Protection class         Halogen free       N         Use conditions       Operating temperature         Operating temperature       -2555 °         Degree of pollution according to IEC 60664 / IEC 60947-2       2000 r	Equipment	
Type of counter 4 wires counter  Standards  Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1  Certified product MID (Measuring Instruments Directive  Safety  Protection class isol.class Halogen free N  Use conditions  Operating temperature -2555 °  Degree of pollution according to IEC 60664 / IEC 60947-2  Altitude 2000 r	Type of display	retro illuminated display
Standards         Standard text       EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1         Certified product       MID (Measuring Instruments Directive         Safety       Protection class         Protection class       isol.class         Halogen free       N         Use conditions       -2555 °         Degree of pollution according to IEC 60664 / IEC 60947-2       2000 r	Tariff model of kilowatt-hour meter	Externa
Standard text EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-1   Certified product MID (Measuring Instruments Directive   Safety isol.class   Protection class isol.class   Halogen free N   Use conditions -2555 °   Operating temperature -2555 °   Degree of pollution according to IEC 60664 / IEC 60947-2 2000 r	Type of counter	4 wires counter
Certified product       MID (Measuring Instruments Directive         Safety       Protection class         Protection class       isol.class         Halogen free       N         Use conditions       Operating temperature         Operating temperature       -2555 °         Degree of pollution according to IEC 60664 / IEC 60947-2       2000 r	Standards	
Safety Protection class isol.class Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Standard text	EN 50470-1 / 3 ; IEC 62053-21 / 23 ; IEC 61557-12
Protection class isol.class Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Certified product	MID (Measuring Instruments Directive)
Halogen free N Use conditions Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Safety	
Use conditions Operating temperature Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Protection class	isol.class I
Operating temperature -2555 ° Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Halogen free	Nc
Degree of pollution according to IEC 60664 / IEC 60947-2 Altitude 2000 r	Use conditions	
IEC 60947-2 Altitude 2000 r	Operating temperature	-2555 °C
		2
Storage/transport temperature -2570 °	Altitude	2000 m
	Storage/transport temperature	-2570 °C