

## EMH metering

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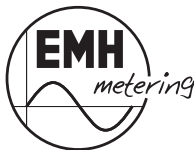
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# LZQJ-XC

## Digital 4-Quadrant/Combi meter

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## Scope of delivery

Please check the content of the package, before starting with the installation and commissioning.

- 1 LZQJ-XC device
- 1 Installation and commissioning instruction

If the content is incomplete or damaged, please contact your source of supply. Store, use and transport the meter such, that it is protected from moisture, dirt and damage.

## Important notes

This instruction is part of the documentation. All versions of the LZQJ-XC are described in this instruction. Therefore characteristic features may be described, which are not valid for your device.



For further information about the LZQJ-XC refer to the product manual. Pay attention to all component accompanying documents when operating the LZQJ-XC.

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## Target group

This instruction is intended for technicians who are responsible for installation, connection and maintenance of the device. The devices have to be installed and put into operation only by qualified electricians in accordance with generally accepted rules of technology and the regulations, which are relevant for the installation of telecommunications equipment and end devices.

## Intended use

The meter has to be used for measuring electrical energy only and has to operate within the specified values (refer to nameplate).

## Maintenance and warranty information

The devices are maintenance-free. In case of damage (e. g. due to transportation, storage) no repairs may be carried out independently.

If a defect is caused by external influences (e.g. lightning, water, fire, extreme temperatures and weather conditions) or by incorrect or negligent use or handling, the warranty claim and Declaration of Conformity become invalid. The same applies if seals are broken.

Only authorised personnel are allowed to break the sealing!

## Care and disposal instructions

### **DANGER!**

#### **Contact with live parts is dangerous to life!**

Before the housing of the meter is cleaned, all conductors that the meter is connected to must be de-energised.

Clean the housing using a dry cloth. Do not use chemical cleaning agents!

The following table lists the components and how to handle them at the end of their life cycle:

Komponents	Waste collection and disposal
PCB's	<b>Electronic waste:</b> dispose in accordance with local regulations
LED's, LC-display	<b>Special waste:</b> dispose in accordance with local regulations
Metal parts	<b>Scrap, recyclable:</b> separate according to type in metal containers
Plastic parts	Separate according to type and recycle (re-granulate). Send for waste incineration if necessary (energy generation by thermal process).
Batteries	When disposing of partially discharged or used batteries you have to take measures to prevent short circuit. Dispose the batterie inside the original package or insulate the terminals of used batteries. Do not throw the batteries into the domestic waste, but dispose of them correctly in accordance with the national waste and environmental regulations.

## Basic safety instructions

Please adhere to the following basic safety instructions:

- Read all the enclosed instructions and information.
- Adhere to the warnings on the device and in the documents.
- Always work on the device in a safety-conscious and threat-aware manner.
- The customary local occupational health and safety regulations for electrical installations must be observed during assembly, installation and removal of the device.
- Make sure that the installation and operating location of the device corresponds to the specifications in the technical data.
- Before assembly, check the devices for any transport or other damage visible from the outside.
- Only use the device if it is in a technically flawless state, and exclusively in line with its intended use.
- The connection cables used to connect a meter must be selected to match the maximum load of the meter and the installation environment in terms of type, cross-section, voltage and temperature.
- Provide flexible wires with ferrules.
- Follow the maintenance and warranty instructions.
- If mains power fails and then returns, no actions on the meter are necessary.

## Notes on correctness of measurements



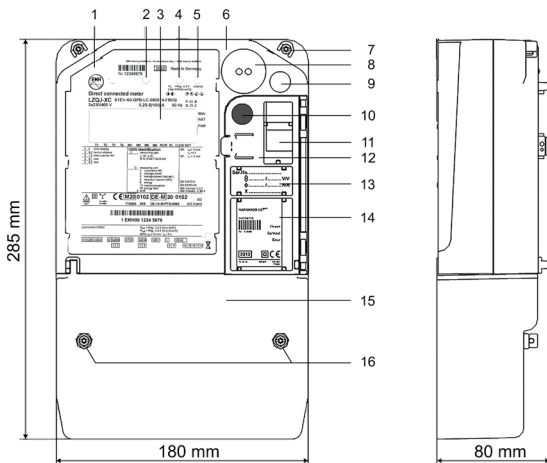
For the notes on correctness of measurements applicable to this meter, please see the enclosed document entitled “Notes on correctness of measurements for LZQJ-XC, DMTZ-XC and XC-RACK”.

## Technical data

Voltage, current, Frequency, utilisation category	see nameplate
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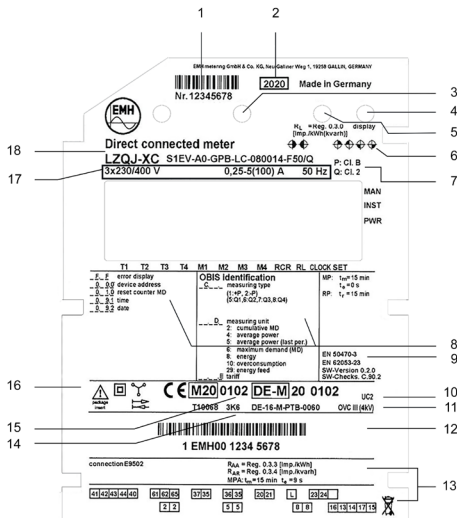
Excess voltage category	OVC III (as per EN 62052-31)
Rated impulse voltage	4kV (as per EN 62052-31) Measuring voltage inputs 3x500V, 3x400/690V, 3x690V: Ulmp = 8kV
Input S0-input Low voltage System voltage	max. 27 V DC, 27 mA, not potential-free 18...40 V DC 58...240 V
Output S0-output Opto-MOSFET relay high load relay	max. 27 V DC, 27 mA max. 250 V AC/DC, 100 mA max. 250 V AC/DC, 100 mA max. 250 V AC/DC, 10 A
Internal cut-off relay	dielectric strength with open cut-off relay is 2 kV AC, 50 Hz, 1 min
Temperature range	specified operating range: -25 °C...+55 °C limit range for operation, storage and transport: -40 °C...+70 °C
Relative humidity	max. 95 %, non-condensing, according to EN 62052-11, EN 50470-1 und EN 60068-2-30
Protection class	II
Type of protection	housing: IP 51 (optionally IP 54) terminal block: IP 31
Fire characteristics	according to EN 62052-11
Environmental conditions	mechanical: M1 according to Measuring Instruments Directive (2014/32/CE) electromagnetic: E2 according to Measuring Instruments Directive (2014/32/CE) intended location: indoor according to EN 50470-1
Weight	approx. 1,4 kg (direct connected meter) approx. 1,8 kg (direct connected meter with load-switching) approx. 1,2 kg (transformer connected meter)

# Housing, display and operating elements



- 1 - Nameplate
- 2 - Test-LED for reactive power (continuously lit up = no energy consumption or incorrect current direction, non-reverse ratchet active)
- 3 - LC-display
- 4 - Test-LED for active power (continuously lit up = no energy consumption or incorrect current direction, non-reverse ratchet active)
- 5 - Optical call-up sensor
- 6 - Meter cover
- 7 - Sealing screws
- 8 - Optical data interface D0
- 9 - Call-up button
- 10 - Reset button
- 11 - Replaceable battery
- 12 - Module cover, sealable
- 13 - Transformer nameplate (for transformer connected meter only)
- 14 - Communication module
- 15 - Terminal cover
- 16 - Sealing screws

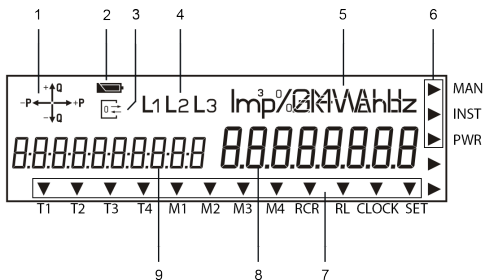
# Nameplate



- 1 - Serial number
- 2 - Year of construction
- 3 - Test-LED for reactive power (only LZQJ-XC)
- 4 - Optical call-up sensor
- 5 - Test-LED for active power
- 6 - Registered quadrants
- 7 - Accuracy class
- 8 - OBIS-index of the most important registers
- 9 - Product standard
- 10 - Utilisation category
- 11 - Excess voltage category
- 12 - Space for ownership inscription
- 13 - Meter connection notes
- 14 - Temperature class according to EN 60721-3-3
- 15 - Conformity and approval mark
- 16 - Safety and instruction notes
- 17 - Voltage, current, frequency
- 18 - Type and type code

## LC-displays

### a) VDEW-display



1. The **operation indicator** shows the energy direction currently measured by the meter (supply/drawing of active power, inductive/capacitive reactive power). If there is a consumer current flowing, the energy direction arrows show in which quadrant the value is measured. E.g.:



1. quadrant  $+P/+Q$



3. quadrant  $-P/-Q$



2. quadrant  $-P/+Q$



4. quadrant  $+P/-Q$

2. The **battery status display** shows the remaining capacity of the read-out battery resp. of the power reserve of the real-time clock.



= Full voltage, in this case the real-time clock is buffered.



= Power reserve exhausted and no read-out battery present, buffering of the real-time clock not possible.

3. The **communication indicator** lights continuously when there is communication with the meter via the data interface (optical or electrical). The indicator flashes if the parametrisation status is active.
4. The **phase indicator** signals the connection with the individual phase voltages. In case of wrong phase sequence all 3 symbols flash.
5. The **unit** is indicated corresponding to the measured energy type or the displayed measured value.



6. In the **additional cursor field** the operational status of the meter is indicated. The arrows show if a manipulation or an installation error has been registered or if the power threshold has been exceeded.

**MAN** The cursor is active, if a manipulation at the terminal cover, the housing cover or by magnetic influences has been registered.

**INST** The cursor is active, if an entry in the installation check register has been registered.

**PWR** The cursor is active, if the power threshold set in the meter has been exceeded.

7. In the **standard cursor field** the operational status of the meter is indicated. The arrows show which tariff and which maximum demand channels are active and how the meter is controlled (via clock or ripple control receiver).

**T1 - T4** Tariff information for energy. All tariff registers which can be activated are displayed on the nameplate.

**M1 - M4** Tariff information for maximum demand. All maximum demand registers which can be activated are displayed on the nameplate.

**RCR** The cursor flashes, if the internal ripple control receiver is active and ready-to-receive.

The cursor is continuously active, if the internal ripple control receiver receives a telegram.

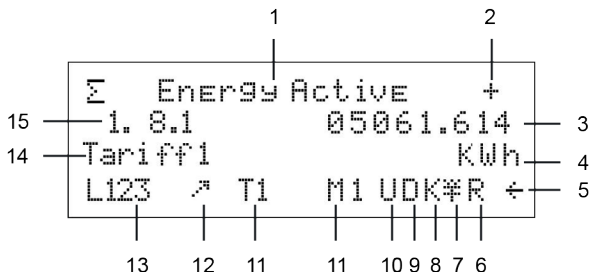
**RL** The cursor flashes while the reset inhibition is activated.

**CLOCK** The cursor is active, if the internal device clock controls the tariff device.

**SET** The cursor is active, if the meter is in the set mode.

8. In the **value area** the measured values are indicated.
9. In the **code area** the measured values are defined according to the OBIS key. The display is able to display all six value groups.

## b) 4-line display



1. In the **comment text** the displayed values are described in clear text.
2. The **energy direction indicator** shows the direction of the measured energy (+ for drawing, - for supply).
3. In the **value area** the measured values are indicated.
4. The **unit** is indicated corresponding to the measured energy type or the displayed measured value.
5. The symbol for the **reset inhibition** flashes if the reset inhibition is active.
6. If the meter is equipped with a **ripple control receiver**, this is indicated by a flashing R. When this symbol is continuously active, the meter receives a ripple control signal.
7. The **DCF status symbol** shows the current status of the DCF77 antenna:

No symbol	<i>no reception</i>
Symbol flashes	<i>reception, but the RTC is not yet synchronised with the DCF77 receiver</i>
Symbol continuously active	<i>reception, but the RTC has been synchronised with the DCF77 receiver</i>

8. The symbol for **setting/parameterisation** is active when values are changed in the set mode.

9. The symbol for the **data read-out** appears when data is sent to the meter or when the meter sends data to the PC.
10. The symbol for the **clock control** shows if the tariff control of the meter is controlled by the internal clock.
11. The **tariff information** shows the currently active energy tariff or the maximum tariff.
12. The **quadrant information** shows in which quadrant, depending on the lead, is measured at the moment

	1 <sup>st</sup> quadrant	+P/+Q		+P, no load Q
	2 <sup>nd</sup> quadrant	-P/+Q		-P, no load Q
	3 <sup>rd</sup> quadrant	-P/-Q		no load P, +Q
	4 <sup>th</sup> quadrant	+P/-Q		no load P, -Q
				no load P, Q

13. The **phase indicator** signals the connection with the individual phase voltages. Possible displays are:

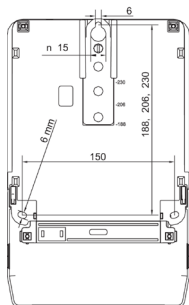
L1	L1 available	L13	L1, L3 available
L2	L2 available	L23	L2, L3 available
L3	L3 available	L123	L1, L2, L3 available
L12	L1, L2 available	L123	flashing: L1, L2, L3 available, rotating field is counter-clockwise

14. The **tab display** indicates which tab the displayed value comes from.
15. In the **code number area** the measured values are defined by reference to the OBIS code.

## Installation and commissioning

Meters of the LZQJ-XC series are suitable for wall mounting according to DIN 43857-2.

When connecting the meter, observe the appropriate wiring diagram, which you can find inside the terminal cover and as a part of the delivery documents. Please note also the information regarding the installation check register.



### **DANGER!**

#### **Contact with live parts is dangerous to life!**

When installing or changing the meter, the conductor to which the meter is connected must be de-energized.

- Remove the relevant back-up fuses and store them in such a way that other people cannot refit the back-up fuses unnoticed.
- If you use selective circuit breakers for disconnection from the mains, secure them against being switched on again unnoticed.
- Before a meter is installed, the consequences of activating the electrical system on immediate dangers to the life and health of persons as well as economic damage must be checked.
- To avoid immediate dangers and damage, suitable countermeasures must be taken prior to activation in order to prevent resulting interference.
- Do not use the internal cut-off relay as a switch-disconnector to disconnect electrical installations from the mains.
- Only use the dedicated screw terminals for installation and connection of the meter.

## **DANGER!**

### **Contact with live parts is dangerous to life!**

S0-inputs are not potential-free. The S0-inputs are, depending on the voltage version, internally electrical connected to the measurement connections or to the auxiliary voltage and therefore potential carrying.

- Observe the device-specific wiring diagram inside the terminal cover.

## **DANGER!**

### **Risk of danger to life due to electric arc and electric shock!**

The voltage taps are not secured internally and directly connected to the measuring-circuit voltage.

- Secure external devices, which are operated via the voltage taps of the meter, with a back-up fuse of  $\leq 0,5 \text{ A}$  in accordance with current technical guidelines.

## **DANGER!**

### **Risk of danger to life due to electric arc and electric shock!**

The in- and outputs of the additional terminals including the external supply inputs are not secured internally

- Secure the inputs/external supply inputs with a back-up fuse of  $\leq 0,5 \text{ A}$  according to current technical guidelines.
- Secure the outputs in accordance with the power specifications on the name plate of the meter and in accordance with the applicable technical regulations.

## **NOTICE!**

### **Damage of the terminals due to excessive torque!**

The appropriate torque depends on the type of the connection line and on the maximum current.

- Tighten the terminals with the required torque according to EN 60999-1.

## a) Transformer connected meter



### **DANGER!**

#### **Contact with live parts is dangerous to life!**

- The voltage taps are not fused within the meter and are directly connected to the mains potential.
- Protect meters with a transformer connection in the voltage circuit with a back-up fuse of  $\leq 6$  A.
- Load the voltage taps with 0.5 A max.

Transformer connected meter	Current and voltage terminals	Additional terminals
Terminal dimension W x H or d (mm)	5,0 x 5,5	2,6 x 2,2
Minimum connection cross section (mm <sup>2</sup> )	2,5	1,0
Maximum connection cross section (mm <sup>2</sup> )*	6,0	2,5
Maximum torques for terminals (Nm)	1,2	--
Screw type	Screw and washer assembly with cross recess, Type PZ1 (acc. to ISO 4757)	Spring loaded terminal
Thread size	M5	—
Stripping length (mm)	10,0	5,0

\* Rated connection capacity acc. to EN 60999-1

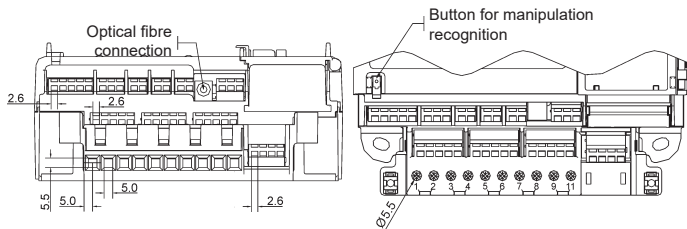


### **DANGER!**

#### **Risk of danger to life due to high voltage when current transformers are interrupted!**

The high voltage on the interrupted current transformer at the transformer connected meter is extremely dangerous and destroys the current transformer.

- Short-circuit the secondary circuits of the current transformer at the testing terminals before disconnecting the current path.



## **DANGER!**

**Danger to life due to excess voltages on the terminals of the current paths!**

The voltages on the terminals of the current paths must not be higher than the rated voltages of the voltage circuits and not be higher than 300 V towards N. Excess voltages can lead to fires or electric shock.

- Use the meter only with suitable current transformers to avoid exceeding the voltage limits. If necessary, the secondary side of the transformers must be earthed.

## b) Meter for direct connection up to 60 A



### **DANGER!**

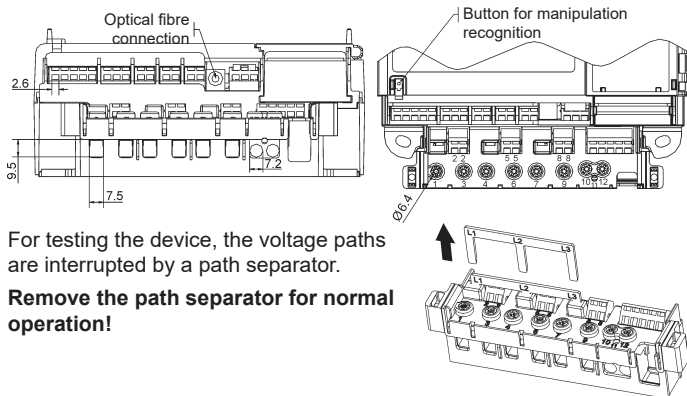
**Inproper installation endangers life and health and carries the risk of malfunction and property damages!**

- Use a selective overcurrent protection for 63 A according to the applicable TAB (e.g. a main circuit breaker) before the meter.
- Secure the connecting paths in accordance with the applicable technical regulations and in accordance with the power specification on the name plate of the meter.
- The installer bears responsibility for coordinating the rated values and parameters of the supply-side overcurrent protection devices with the maximum rated currents as well as the rated consumption category of the meter system for directly connected meters.
- The connection cables used to connect a meter must be selected to match the maximum load of the meter and the installation environment in terms of type, cross-section, voltage and temperature.

<b>Meter up to 60 A</b>	<b>Current terminals 1, 3, 4, 6, 7, 9</b>	<b>N-terminal 10, 12</b>	<b>N-tap 11</b>	<b>Additional terminals</b>
Terminal dimension W x H or d (mm)	7,5 x 9,5	7,2	3,2	2,6 x 2,2
Minimum connection cross section (mm <sup>2</sup> )	10,0	10,0	1,0	1,0
Maximum connection cross section (mm <sup>2</sup> )*	25,0	25,0	2,5	2,5
Minimum torques for terminals (Nm)	4,0	4,0	—	—
Maximum torques for terminals (Nm)	5,0	5,0	0,5	—
Screw type	Screw and washer assembly with cross recess, Type PZ2 (acc. to ISO 4757)		Slotted screw	Spring load- ed terminal
Thread size	M8	M6	M3	—
Stripping length (mm)	14,0	14,0	6,0	5,0

\* Rated connection capacity acc. to EN 60999-1





For testing the device, the voltage paths are interrupted by a path separator.

**Remove the path separator for normal operation!**

### c) Meter for direct connection up to 100 A



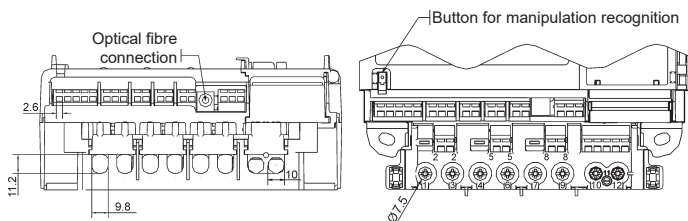
#### **DANGER!**

**Inproper installation endangers life and health and carries the risk of malfunction and property damages!**

- Use a selective overcurrent protection for 100 A gemäß gültiger TAB (e. g. a main circuit breaker) before the meter.
- Secure the connecting paths in accordance with the applicable technical regulations and in accordance with the power specification on the name plate of the meter.
- The installer bears responsibility for coordinating the rated values and parameters of the supply-side overcurrent protection devices with the maximum rated currents as well as the rated consumption category of the meter system for directly connected meters.
- The connection cables used to connect a meter must be selected to match the maximum load of the meter and the installation environment in terms of type, cross-section, voltage and temperature.

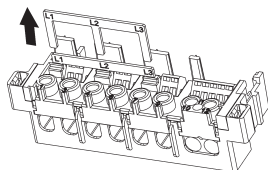
Meter up to 100 A	Current terminals 1, 3, 4, 6, 7, 9	N-terminal 10, 12	N-tap 11	Additional terminals
Terminal dimension W x H or d (mm)	9,8 x 11,2	10,0	3,2	2,6 x 2,2
Minimum connection cross section (mm <sup>2</sup> )	16,0	16,0	1,0	1,0
Maximum connection cross section (mm <sup>2</sup> )*	35,0	35,0	2,5	2,5
Minimum torques for terminals (Nm)	4,0	4,0	—	—
Maximum torques for terminals (Nm)	5,0	5,0	0,5	—
Screw type	Screw and washer assembly with cross recess, Type PZ2 (nach ISO 4757)		Slotted screw	Spring load- ed terminal
Thread size	M10	M8	M3	—
Stripping length (mm)	18,0	18,0	6,0	5,0

\* Rated connection capacity acc. to EN 60999-1



For testing the device, the voltage paths are interrupted by a path separator.

**Remove the path separator for normal operation!**



## Terminal cover

To prevent unauthorized access to the terminals, the terminal cover is mounted with sealing screws, which you can secure with seals.

### NOTICE!

#### Property damage due to excessive torque!

- Tighten the sealing screws with a torque of 0,5 Nm.

## Readout battery (optional)

The exchangeable readout battery enables the reading of the display and the readout of the meter via the optical data interface D0 when the meter is not connected to the main voltage. Furthermore the battery buffers the real-time clock. Therefore a Lithium battery (CR-P2, 6 V) is used.



### CAUTION!

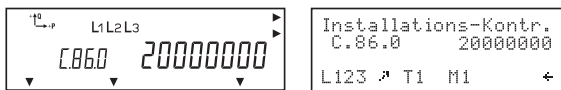
#### Danger of explosion due to improper handling of the exchangeable battery!

- Only authorised personnel are permitted to insert or replace the battery. Batteries may leak or ignite.
- Do not short-circuit, damage, heat or open force batteries.
- Dispose of the battery in the original packaging or insulate the terminals of used batteries.

At delivery the battery function is inactive. To activate the function, open the module cover. Pull out the battery holder. Remove the battery from the holder, turn the battery and reinsert it. Then insert the battery holder into the battery compartment (contacts facing left!) and close the module cover.

## Installation check register C.86.0

The installation check register C.86.0 registrates installation errors. Normally, it is shown in the scrolling list or can be called up via the call-up list.



C.86.0 (0 0 0 0 0 0 0)

Manipulation recognition	0
Wrong phase sequence	0
Phase failure	0
Negative energy direction	0
Current interruption	0
Max. current exceeded	0
Undervoltage	0
Overvoltage	0

Event	Value	Meaning
<b>Manipulation recognition</b>	1	Manipulation of the meter cover
	2	Manipulation of the terminal cover
	4	Manipulation by magnetic fields
	8	Manipulation input
<b>Wrong phase sequence</b>	1	Loss of neutral
	2	Wrong phase sequence
	4	Assymetric current, z. B. 30 %
	8	Assymetric current, z. B. 18 %
<b>Phase failure</b>	1	Phase failure L1
	2	Phase failure L2
	4	Phase failure L3
	8	Failure of external power supply
<b>Negative energy direction</b>	1	Negative energy direction L1 (P)
	2	Negative energy direction L2 (P)
	4	Negative energy direction L3 (P)
<b>Current interruption</b>	1	Current interruption L1
	2	Current interruption L2
	4	Current interruption L3
<b>Maximum current exceeded (<math>I &gt; I_{max}</math>)</b>	1	Maximum current exceeded L1
	2	Maximum current exceeded L2
	4	Maximum current exceeded L3
<b>Undervoltage (<math>U &lt; 80 \%</math>)</b>	1	Undervoltage L1
	2	Undervoltage L2
	4	Undervoltage L3
<b>Overvoltage (<math>U &gt; 115 \%</math>)</b>	1	Overvoltage L1
	2	Overvoltage L2
	4	Overvoltage L3

## Error register F.F

The meter has an error register with 32 error flags (eight-digit hexadecimal value), which registers the functional errors of the meter.

The output of the error tab is performed via the display and one of the read-out lists.



Error Code	
F.F	00000200
L123 ↗ T1	M1    ⌘ ←

### Meaning of the error flags:

F.F(00000000)	No error
F.F(00000001)	Incomplete data backup
F.F(00000002)	Incomplete cumulation
F.F(00000003)	Incomplete data backup + Incomplete cumulation
F.F(00000004)	Invalid flash-data (no valid data backup found)
F.F(00000005)	Incomplete data backup + Invalid flash-data
F.F(00000006)	Incomplete data backup + Incomplete cumulation
F.F(00000007)	Incomplete data backup + Incomplete cumulation + Invalid flash-data
F.F(00000100)	Error in par-checksum
F.F(00000200)	Error in set-checksum
F.F(00000300)	Error in par-checksum + Error in set-checksum
F.F(00000400)	Error in code-checksum
F.F(00000500)	Error in par-checksum + Error in code-checksum

F.F(00000 <b>6</b> 00)	Error in set-checksum + Error in code-checksum
F.F(00000 <b>7</b> 00)	Error in par-checksum + Error in set-checksum + Error in code-checksum
F.F(00000 <b>8</b> 00)	Error in system-checksum
F.F(00000 <b>9</b> 00)	Error in par-checksum + Error in system-checksum
F.F(00000 <b>A</b> 00)	Error in set-checksum + Error in system-checksum
F.F(00000 <b>B</b> 00)	Error in par-checksum + Error in set-checksum + Error in system-checksum
F.F(00000 <b>C</b> 00)	Error in code-checksum + Error in system-checksum
F.F(00000 <b>D</b> 00)	Error in par-checksum + Error in code-checksum + Error in system-checksum
F.F(00000 <b>E</b> 00)	Error in set-checksum + Error in code-checksum + Error in system-checksum
F.F(00000 <b>F</b> 00)	Error in par-checksum + Error in set-checksum + Error in code-checksum + Error in system-checksum
F.F(0000 <b>4</b> 000)	Error in the metrological logbook
F.F(0000 <b>8</b> 000)	Error in calibration-checksum
F.F(0000 <b>C</b> 000)	Error in the metrological logbook + Error in calibration-checksum
F.F( <b>08</b> 000000)	Time basis error

## Communication module



For further information about the communication module please refer to the documentation of the VARIOMOD XC.

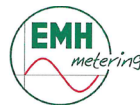
# Abbreviations

Cl.	Accuracy class
D0	optical Interface acc. to EN 62056-21
DIN	Deutsches Institut für Normung e.V. (German Institute for Standard)
EN	European standards
EVU	Utility
I	Current
IEC	International Electrotechnical Commission
IP	Ingress Protection
IR	Infrared
L1, L2, L3	External conductor
LC	Liquid Crystal
LCD	Liquid Crystal Display
LED	Light Emitting Diode
N	Neutral conductor
OBIS	Object-Identifikation-System
OVC	Overcoltage Category
P	Active Power
+P	Positive Active Power (customer imports from utility)
-P	Negative Active Power (customer exports to utility)
PTB	Physikalisch-Technische Bundesanstalt (German certified body)
Q	Reactive Power
+Q	Positive Reactive Power
-Q	Negative Reactive Power
RTC	Real Time Clock
S0	Interface acc. to EN 62053-31
SH	Selective main line protection
TAB	Technical connection specifications
U	Voltage
UC	Utilisation category
VDEW	Verband der Elektrizitätswirtschaft e.V.





# EU Declaration of Conformity for the LZQJ-XC



## EU-Konformitätserklärung

EU Declaration of Conformity

### Der Hersteller

The manufacturer

EMH metering GmbH & Co. KG  
Neu-Galliner Weg 1  
19258 Gallin  
GERMANY

erklärt hiermit in alleiniger Verantwortung, dass folgendes Produkt  
declares under his sole responsibility that the following product

Produktbezeichnung: Product designation:	Elektrizitätszähler Electricity meter
Typenbezeichnung: Type designation:	LZQJ-XC-...

übereinstimmt mit den grundlegenden Anforderungen folgender EU-Richtlinien:  
conforms to the essential requirements of the following EU directives:

2014/32/EU	Messgeräte (MID)	EU Amtsblatt L 96
2014/32/EU	Measuring instruments (MID)	Official Journal of the EU L 96
2014/30/EU	Elektromagnetische Verträglichkeit (EMV)	EU Amtsblatt L 96
2014/30/EU	Electromagnetic compatibility (EMC)	Official Journal of the EU L 96
2011/65/EU	Beschränkung der Verwendung bestimmter gefährlicher Stoffe (RoHS)	EU Amtsblatt L 174
2011/65/EU	Restriction of the use of certain hazardous substances (RoHS)	Official Journal of the EU L 174

Im Rahmen der MID wurde die Konformität des Baumusters (Modul B) festgestellt und

Within the MID the conformity of the type (annex B) was attested and

die Konformitätsbewertung wurde nach Modul D durch den Hersteller vorgenommen:

the conformity assessment was performed by manufacturer according to annex D:

	Modul B (annex B)	Modul D (annex D)
Benannte Stelle (Name/Nummer): Notified body (name/number):	NMI/0122	PTB/0102
Zertifikats-Nummer: Certificate number:	T10068	DE-M-AQ-PTB026

Es wurden die folgenden harmonisierten Normen angewendet:

The following harmonized standards were applied:

MID:	EMV (EMC):	RoHS:
EN 50470-1:2006	EN 62052-11:2003+A1:2017	EN IEC 63000:2018
EN 50470-3:2006	EN 62053-21:2003+A1:2017	
	EN 62053-22:2003+A1:2017	
	EN 62053-23:2003+A1:2017	
	EN 62053-24:2015+A1:2017	
	EN 55032:2012/AC:2013	

Ort, Datum: Gallin, 17 NOV 2020  
Place, Date:

Dipl.-Ing. Norbert Malek  
Geschäftsführer  
Managing director



You will find the current EU Declaration of Conformity on the internet site [www.emh-metering.com](http://www.emh-metering.com) in the "Products" area in the product description of the meter.



