

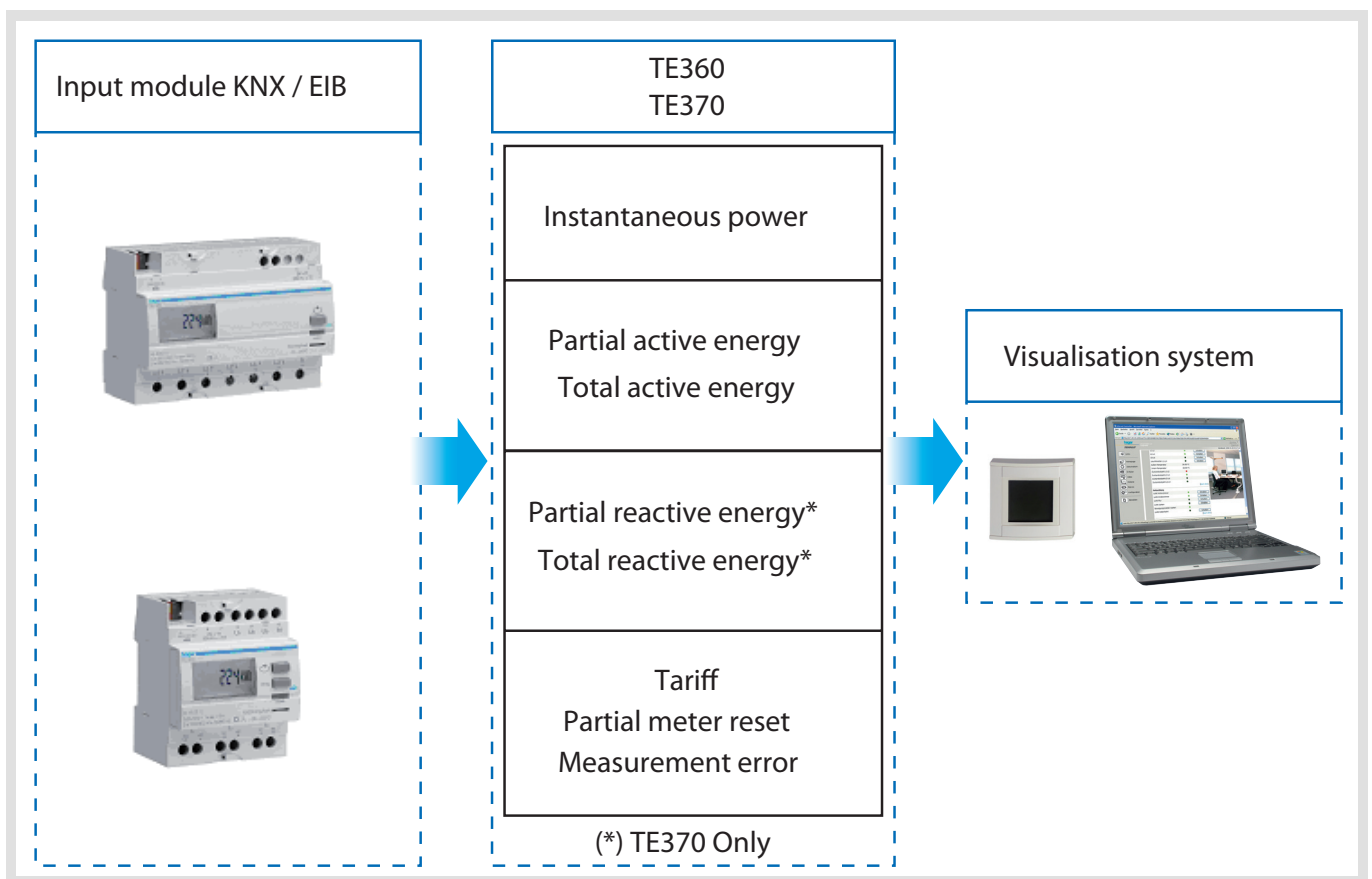


Tebis application software

TL360 Energy meter - Direct 100A
 TL370 Energy meter - Via current transformer

	Product reference	Description
	TE360	Energy meter - Direct 100A
	TE370	Energy meter - Via current transformer



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1. Presentation of the functions of the TL360 - TL370 application

TE360 and TE370 are three-phase energy meters used to measure and transmit the following information on the bus:

- Power:
 - The instantaneous power consumed on each phase.
 - The total instantaneous power.

- Active energy:
 - Total: This indicator gives the total active energy consumed since the meter was commissioned. This indicator can not be reset.

 - Partial: This indicator gives the total active energy consumed since the last reset. This indicator can be reset locally or via the bus (depending on the configuration).

- Reactive energy (only on TE370):
 - Total: This indicator gives the total reactive energy consumed since the meter was commissioned. This indicator can not be reset.

 - Partial: This indicator gives the total reactive energy consumed since the last reset. This indicator can be reset locally or via the bus (depending on the configuration).

The energy meters can manage 1 or 2 tariffs.

If the meter is configured for 2 tariffs, details of the active energy will be given for each tariff and in total. The information **tariff** can be managed on the product according to the connection or via the bus.

2. Configuration and settings

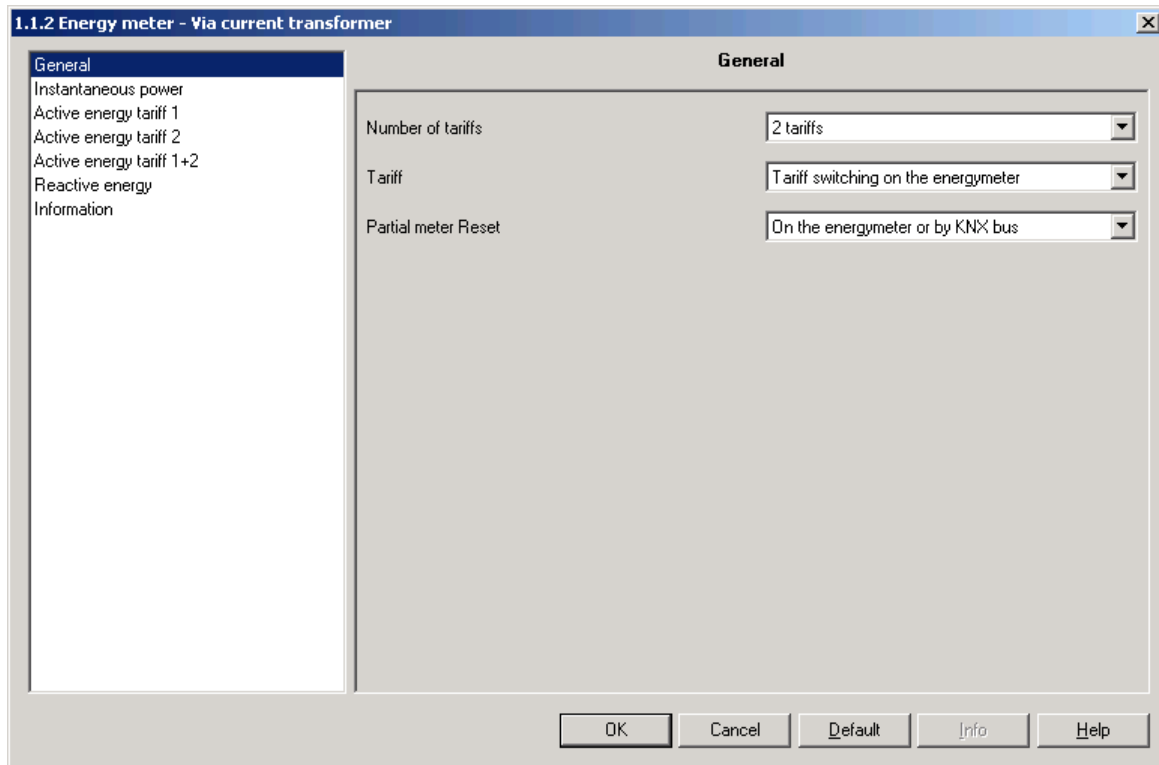
2.1 Objects List

Number	Name	Object Function	Length	C	R	W	T	U	Priority
0	Instantaneous Power L1 (kW)	Value	4 Byte	C	R	-	T	-	Low
1	Instantaneous Power L2 (kW)	Value	4 Byte	C	R	-	T	-	Low
2	Instantaneous Power L3 (kW)	Value	4 Byte	C	R	-	T	-	Low
3	Instantaneous Power L1, L2, L3 (kW)	Value	4 Byte	C	R	-	T	-	Low
4	Partial active energy tariff 1 (Wh)	Value	4 Byte	C	R	-	T	-	Low
5	Total active energy tariff 1 (Wh)	Value	4 Byte	C	R	-	T	-	Low
14	Partial meter reset Information	Information	1 bit	C	-	-	T	-	Low
15	Partial meter reset activation	Control	1 bit	C	-	W	-	-	Low
18	Connection error	Maintenance	2 Byte	C	-	-	T	-	Low

Designation	Function	Value
Instantaneous power (W)	Transmit the Power information on the bus in W.	4 bytes.
Active energy	Transmit the Active energy information on the bus in Wh.	4 bytes.
Reactive energy	Transmit the Reactive energy information on the bus in Varh.	4 bytes.
Tariff	<p>Only one of the two objects will be present depending on the settings:</p> <p>The object Tariff information - information is information transmitted by the meter on the bus to indicate the current tariff (information received by external connection).</p> <p>The object Tariff choice - control is a change of tariff command to the meter to inform it of the current tariff to use.</p>	<p>1 byte.</p> <p>0 = No tariff, 1 = Tariff 1, 2 = Tariff 2.</p>
Reset	<p>Only one of the two objects will be present depending on the settings:</p> <p>The object Partial meter reset information - information is information transmitted by the meter on the bus to indicate that a partial meter reset has been performed locally on the product.</p> <p>The object Partial meter reset activation - control is a command to the meter to request reset of the partial meters.</p>	<p>1 Bit.</p> <p>1 = Reset.</p>
Connection error - Maintenance	The purpose of this object is to indicate a connection error / measurement error.	<p>2 bytes.</p> <p>0x00 = No error, Bit 0 = No voltage on L1, Bit 1 = No voltage on L2, Bit 2 = No voltage on L3, Bit 3 = Connection error.</p>

2.2 Common settings

→ Parameter Setting screen



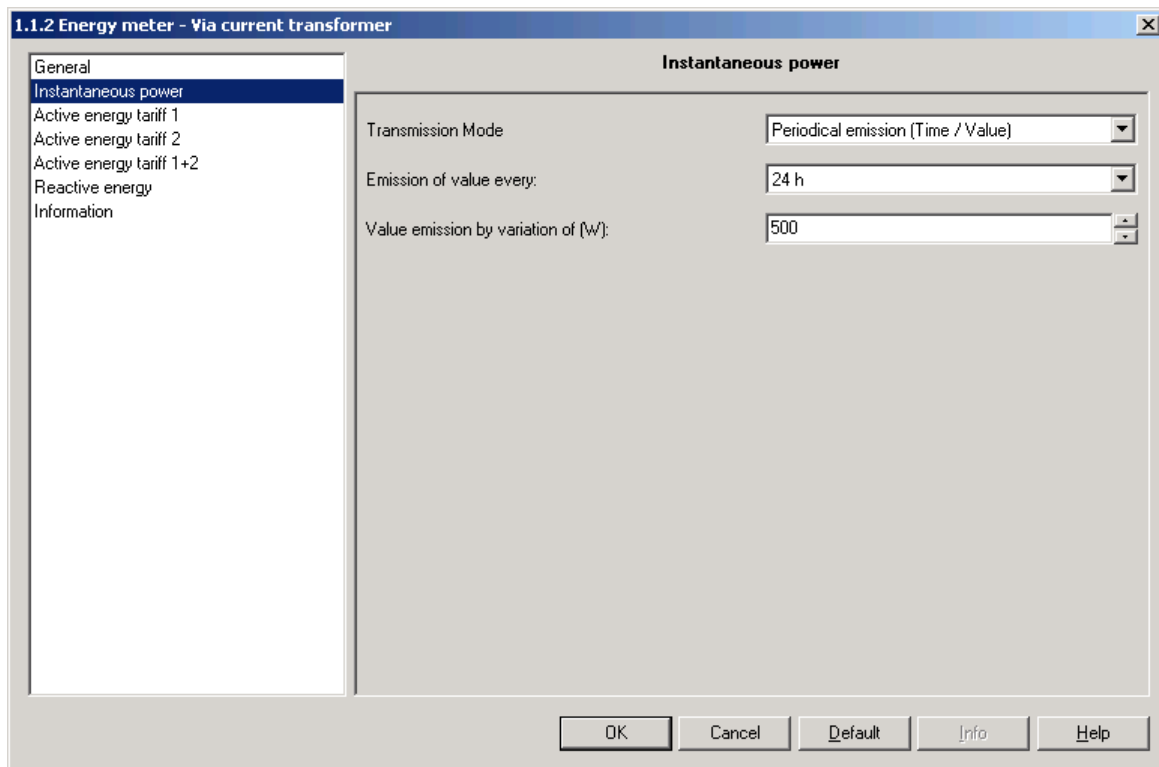
Screen 1

Designation	Function	Value
Number of tariffs	This parameter defines the number of tariffs used in the installation.	1 tariff, 2 tariffs. Default value: 1 tariff.
Tariff *	If the installation has 2 tariffs, this parameter defines the source of the tariff information. - the tariff 1 / tariff 2 information is received by the bus. - the tariff 1 / tariff 2 information is wired on the meter.	Tariff switching by KNX bus, Tariff switching on the energymeter.
Partial meter Reset	This parameter defines the way in which the reset can be activated.	Only on the energymeter, Only by KNX bus, On the energymeter or by KNX bus. Default value: On the energymeter or by KNX bus.

* The **Tariff** parameter is only displayed if the **Number of tariffs** parameter has the value **2 tariffs**.

2.3 Instantaneous power

→ Parameter Setting screen



Screen 3

Designation	Function	Value
Transmission Mode	This parameter defines the conditions for transmission of the objects Power .	Periodical emission (Time / Value), On object request. Default value: Periodical emission (Time / Value).

Remark:

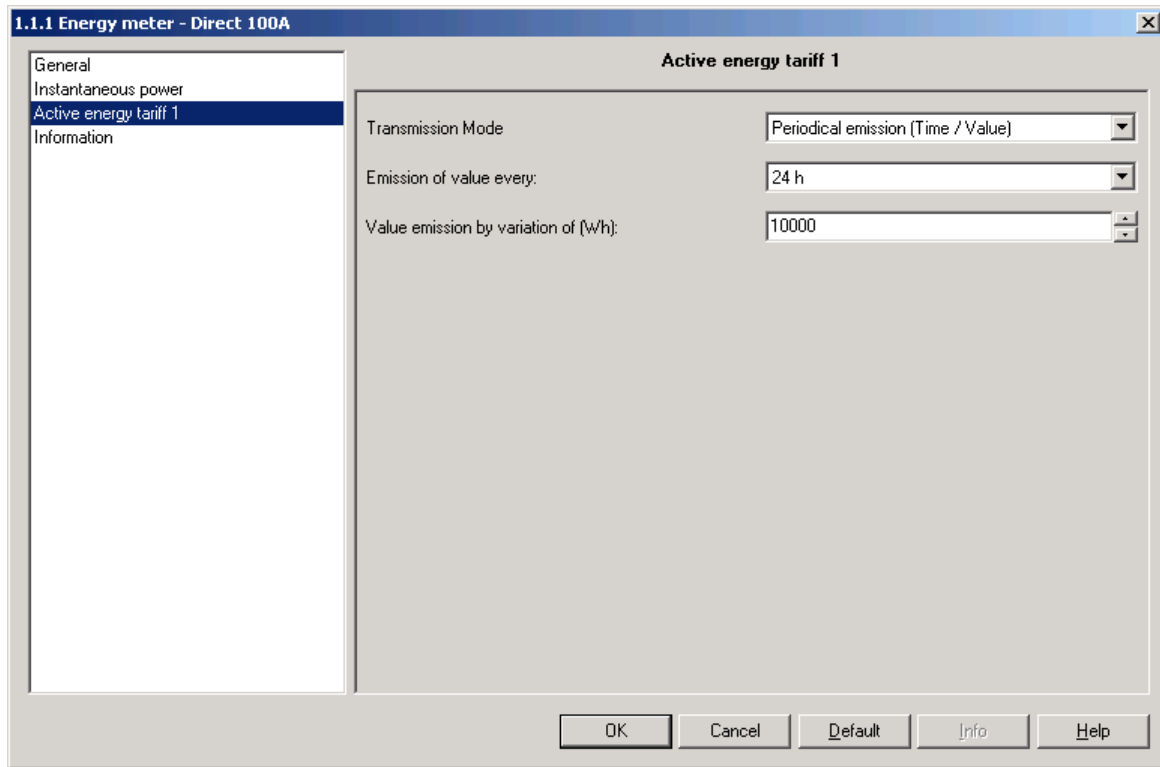
If the **Transmission Mode** parameter has the value **On object request**, the meter only transmits the data after receiving a read request on the corresponding object.

Designation	Function	Value
Emission of value every:	This parameter defines the Power object transmission frequency.	Not used, between 30 s and 24 h. Default value: 24 h.
Value emission by variation of (W)	This parameter defines the Power object transmission threshold.	10 W... 60 000 W. Default value: 500 W.

The parameters **Emission of value every** and **Value emission by variation of (W)** are only visible if the value of the **Transmission Mode** parameter has the value **Periodical emission (Time / Value)**.

2.4 Active energy

→ Parameter Setting screen



Screen 3

- The **Active energy tariff 1** tab is used to define the method and frequency of transmission of the **Total active energy tariff 1** and **Partial active energy tariff 1** objects.

If the energy meter is configured in dual tariff mode, two additional tabs are present:

- Active energy tariff 2
- Active energy tariff 1 + 2

The settings for these tabs are similar to the tab above:

- The **Active energy tariff 2** tab is used to define the method and frequency of transmission of the **Total active energy tariff 2** and **Partial active energy tariff 2** objects.
- The **Active energy tariff 1+2** tab is used to define the method and frequency of transmission of the **Total active energy tariff 1+2** and **Partial active energy tariff 1+2** objects.

Designation	Function	Value
Transmission Mode	This parameter defines the conditions for transmission of the Active energy objects.	Periodical emission (Time / Value), On object request. Default value: Periodical emission (Time / Value).

Remark:

If the **Transmission Mode** parameter has the value **On object request**, the meter only transmits the data after receiving a read request on the corresponding object.

Designation	Function	Value
Emission of value every:	This parameter defines the transmission frequency of the Reactive energy objects.	Not used, between 30 s and 24 h. Default value: 24 h.

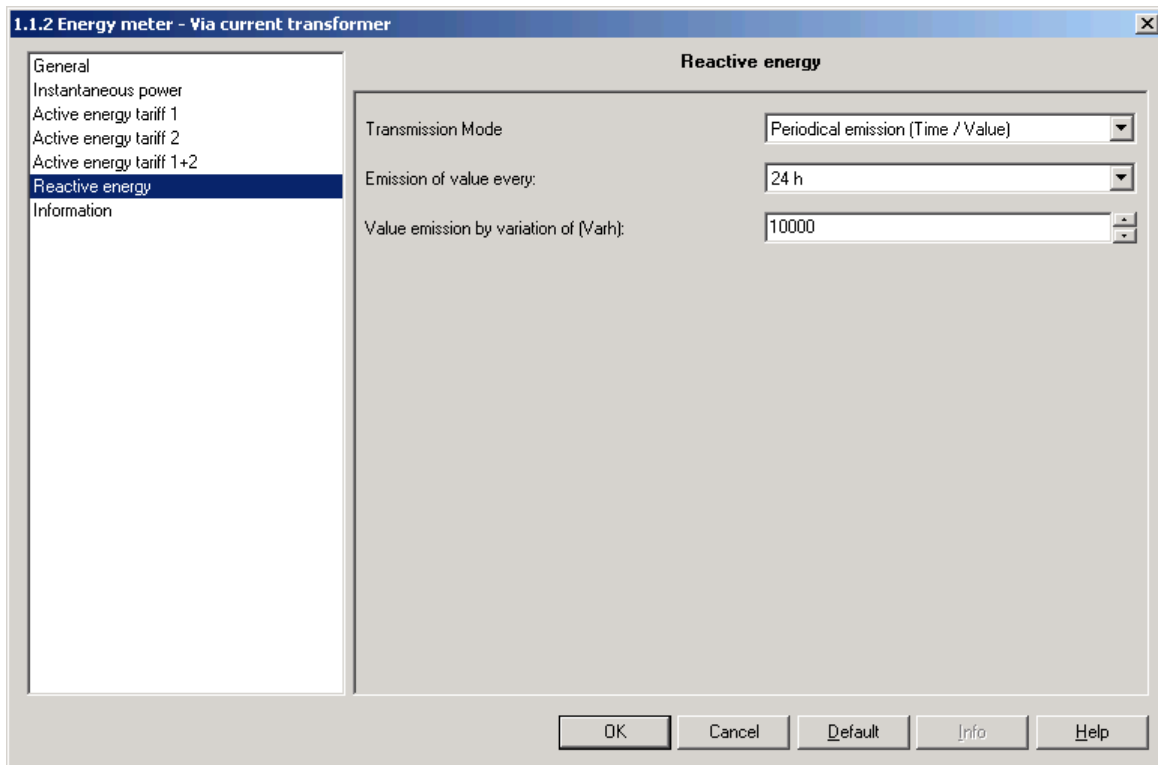
Designation	Function	Value
Value emission by variation of (Wh)	This parameter defines the Active energy object transmission threshold.	1000 Wh... 60 000 Wh. Default value: 10 000 Wh.

The parameters **Emission of value every** and **Value emission by variation of (Wh)** are only visible if the value of the **Transmission Mode** parameter has the value **Periodical emission (Time / Value)**.

2.5 Reactive energy *

* (only on TE370)

→ Parameter Setting screen



Screen 4

- The **Reactive energy** tab is used to define the method and frequency of transmission of the **Total reactive energy** and **Partial reactive energy** objects.

Designation	Function	Value
Transmission Mode	This parameter defines the conditions for transmission of the Reactive energy objects.	Periodical emission (Time / Value), On object request. Default value: Periodical emission (Time / Value).

Remark:

If the **Transmission Mode** parameter has the value **On object request**, the meter only transmits the data after receiving a read request on the corresponding object.

Designation	Function	Value
Emission of value every:	This parameter defines the transmission frequency of the Reactive energy objects.	Not used, between 30 s and 24 h. Default value: 24 h.

Designation	Function	Value
Value emission by variation of (Varh)	This parameter defines the Reactive energy object transmission threshold.	1000 Varh... 60 000 Varh. Default value: 10 000 Varh.

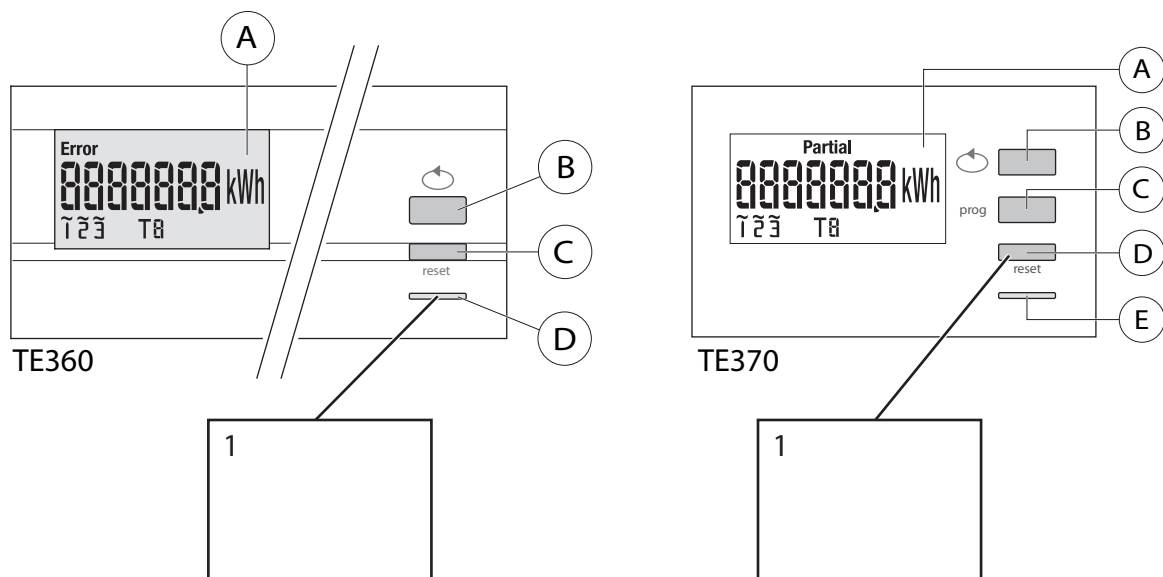
The parameters **Emission of value every** and **Value emission by variation of (Varh)** are only visible if the value of the **Transmission Mode** parameter has the value **Periodical emission (Time / Value)**.

3. Main characteristics

Max. number of group addresses	252
Max. number of links	254
Objects	17

4. Physical addressing

To perform physical addressing, give a short press on pushbutton 1.



Adr displayed on the screen = product is in programming mode.
The product remains in programming mode until the physical address has been transmitted by ETS.
Press again to exit programming mode.

