



# SGS

EU Type Examination Certificate Number: **0120/SGS0463**

## **B+G E-Tech GmbH**

Franz-Mehring Str.36  
01979 Lauchhammer  
Germany

Instrument Identification:  
**DRT430A**

**Polyphase, active Import, indoor, Electricity Meter**

Instrument Traceable Number  
**0120/SGS0463**

has been assessed and certified as meeting the requirements of

## **EU Directive 2014/32/EU**

**on Measuring Instruments Annex II, Module B**

It is certified that the manufacturer's technical design and specimen for the above instrument has been examined and, based on the evidence submitted, it is considered that the instrument conforms to the requirements of Annex V of EU Directive 2014/32/EU

This certificate must be used in conjunction with a certificate covering the product verification as required in Annex II, Module D or Annex II, Module F

This certificate is valid until 19<sup>th</sup> July 2026  
Issue 1

Certification is based on report number(s): NMI-15200659-03  
2016F00-30-000114  
2016F00-30-000115  
EMA280386

Authorised Signature

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DU CST-ME-002 Rev 2

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EU Type Examination Cert


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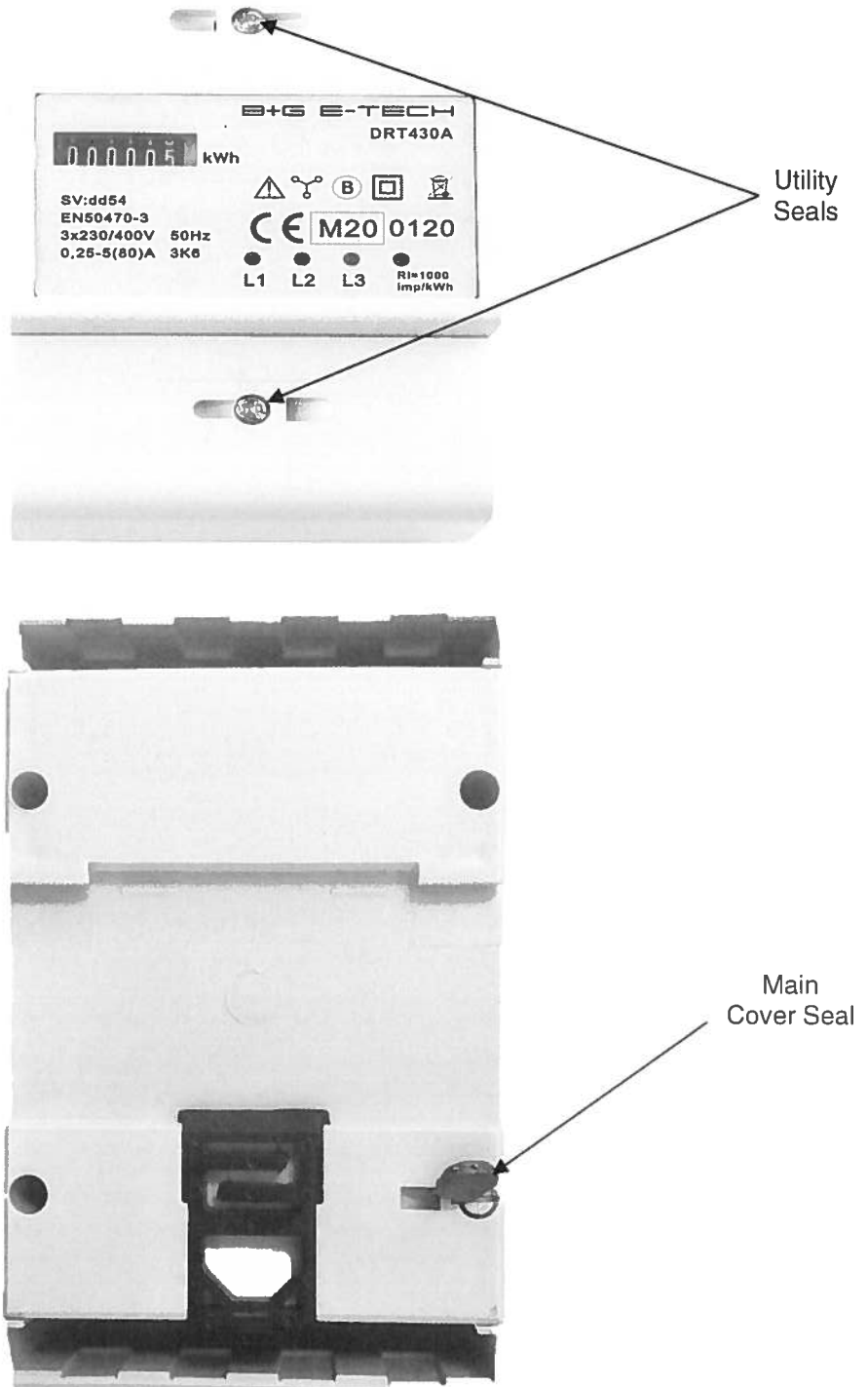
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	Issue Number: 1	Dated: 1 <sup>st</sup> July 2020

## 1. Technical Data

<b>Manufacturer</b>	B+G E-Tech GmbH
<b>Meter Type</b>	DRT430A
<b>Voltage Rating (<math>U_n</math>)</b>	3 x 230/400V
<b>Current Rating (<math>I_{min}</math> – <math>I_{ref}</math> (<math>I_{max}</math>))</b>	0,25-5(80)A 0,5-10(100)A
<b>Frequency (<math>F_n</math>)</b>	50Hz
<b>Active Accuracy Class (kWh)</b>	A or B(kWh)
<b>Type of circuit</b>	3p4w
<b>Temperature Range</b>	-25°C to +55°C (3K6)
<b>Software/ Firmware Version No</b>	SV:dd54
<b>Identification Location</b>	Nameplate
<b>Bill Of Materials Number</b>	DRT341A
<b>IP Rating</b>	IP51
<b>Insulation Protective Class</b>	Class II
<b>LED Pulse Constant</b>	1000 imp/kWh 400 imp/kWh
<b>Impulse Voltage Rating</b>	6kV
<b>AC Voltage Rating</b>	4kV
<b>Main Cover Sealing Type</b>	Wire & Crimp
<b>Integrity of meter</b>	Inaccessible without breaking seals
<b>Intended Location of the Meter</b>	Indoor
<b>Type of Register</b>	Mechanical
<b>Terminal Arrangement(s)</b>	DIN
<b>Location of Manufacturers Address</b>	Associated Documents

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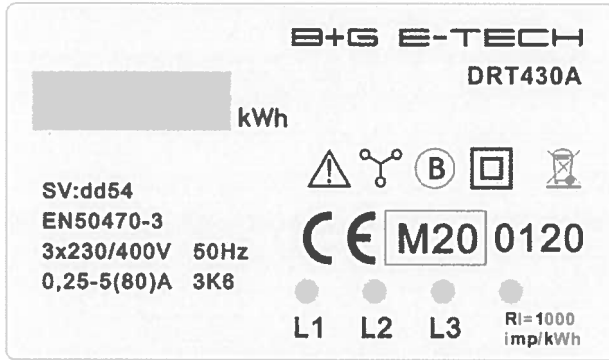
**2. Photograph of Meter and Sealing Plan**



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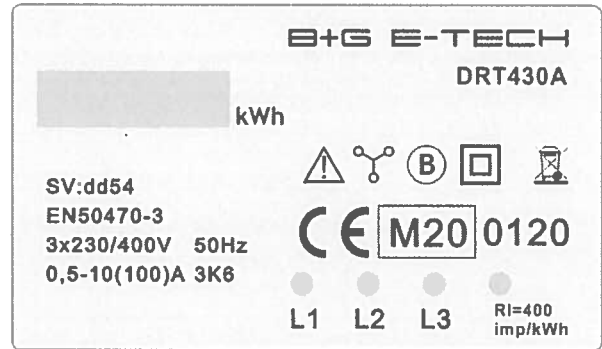
### 3. Examples of Nameplates

MS-2817-76-V1

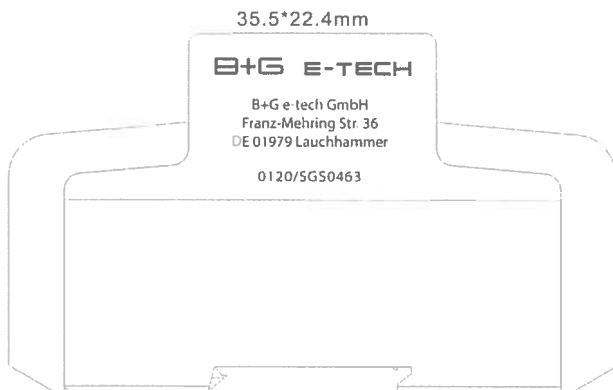



底色通用     无色透明     字体黑色

MS-2817-75-V1    按MS-2817-51-V1改



底色通用     无色透明     字体黑色



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#### 4. Calculation of the composite error/ MPE


During the type approval examination the influence factors for temperature, frequency and voltage are determined per load point. The table below represents the sum of the square values per load, determined via the following formula:-

$$\delta e(T, U, f) = \sqrt{(\delta e^2(T, I, \cos\phi) + \delta e^2(U, I, \cos\phi) + \delta e^2(f, I, \cos\phi))}$$

where

- $\delta e(T, I, \cos\phi)$  = Additional error due to variation of the temperature at the same load
- $\delta e(U, I, \cos\phi)$  = Additional error due to variation of the voltage at the same load
- $\delta e(f, I, \cos\phi)$  = Additional error due to variation of the frequency at the same load

		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25°C	-10°C	5°C	23°C	40°C	55°C
I <sub>min</sub>	1.0	0.8	0.8	0.7	0.7	0.7	0.8
I <sub>tr</sub>	1.0	0.7	0.6	0.5	0.5	0.5	0.6
10I <sub>tr</sub>	1.0	0.5	0.4	0.4	0.3	0.4	0.5
I <sub>max</sub>	1.0	0.5	0.5	0.5	0.5	0.5	0.5
I <sub>tr</sub>	0.5ind	0.6	0.5	0.5	0.4	0.5	0.5
10I <sub>tr</sub>	0.5ind	0.4	0.3	0.2	0.1	0.2	0.4
I <sub>max</sub>	0.5ind	0.3	0.3	0.3	0.3	0.3	0.3
I <sub>tr</sub>	0.8cap	0.8	0.7	0.7	0.7	0.7	0.7
10I <sub>tr</sub>	0.8cap	0.6	0.5	0.5	0.5	0.5	0.5
I <sub>max</sub>	0.8cap	0.2	0.2	0.2	0.2	0.2	0.2
L1							
I <sub>tr</sub>	1.0	0.5	0.4	0.3	0.2	0.3	0.4
10I <sub>tr</sub>	1.0	0.4	0.3	0.2	0.2	0.2	0.4
I <sub>max</sub>	1.0	0.3	0.3	0.2	0.2	0.2	0.3
I <sub>tr</sub>	0.5ind	0.4	0.3	0.2	0.2	0.2	0.3
10I <sub>tr</sub>	0.5ind	0.4	0.2	0.2	0.2	0.2	0.5
I <sub>max</sub>	0.5ind	0.6	0.5	0.5	0.5	0.5	0.5
L2							
I <sub>tr</sub>	1.0	0.7	0.6	0.6	0.5	0.6	0.6
10I <sub>tr</sub>	1.0	0.4	0.3	0.3	0.2	0.2	0.4
I <sub>max</sub>	1.0	0.2	0.2	0.2	0.2	0.2	0.2
I <sub>tr</sub>	0.5ind	0.8	0.6	0.6	0.5	0.6	0.7
10I <sub>tr</sub>	0.5ind	0.4	0.2	0.2	0.2	0.2	0.5
I <sub>max</sub>	0.5ind	0.2	0.2	0.2	0.2	0.2	0.2
L3							
I <sub>tr</sub>	1.0	0.5	0.4	0.3	0.3	0.3	0.5
10I <sub>tr</sub>	1.0	0.5	0.3	0.3	0.2	0.3	0.4
I <sub>max</sub>	1.0	0.4	0.3	0.2	0.1	0.2	0.4
I <sub>tr</sub>	0.5ind	0.5	0.3	0.3	0.2	0.3	0.4
10I <sub>tr</sub>	0.5ind	0.5	0.5	0.5	0.5	0.5	0.5
I <sub>max</sub>	0.5ind	0.2	0.2	0.2	0.2	0.2	0.2


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## 5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
DRT430A	3 x 230/400V, 0,25-5(80)A polyphase kWh energy meter 3 x 230/400V, 0,5-10(100)A polyphase kWh energy meter

Modifications to the meter(s) described according to approval No.**0120/SGS0463** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

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## 6. Document Revision History

Issue	Date	Comments
1	01/07/2020	Initial Issue

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