



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 19th 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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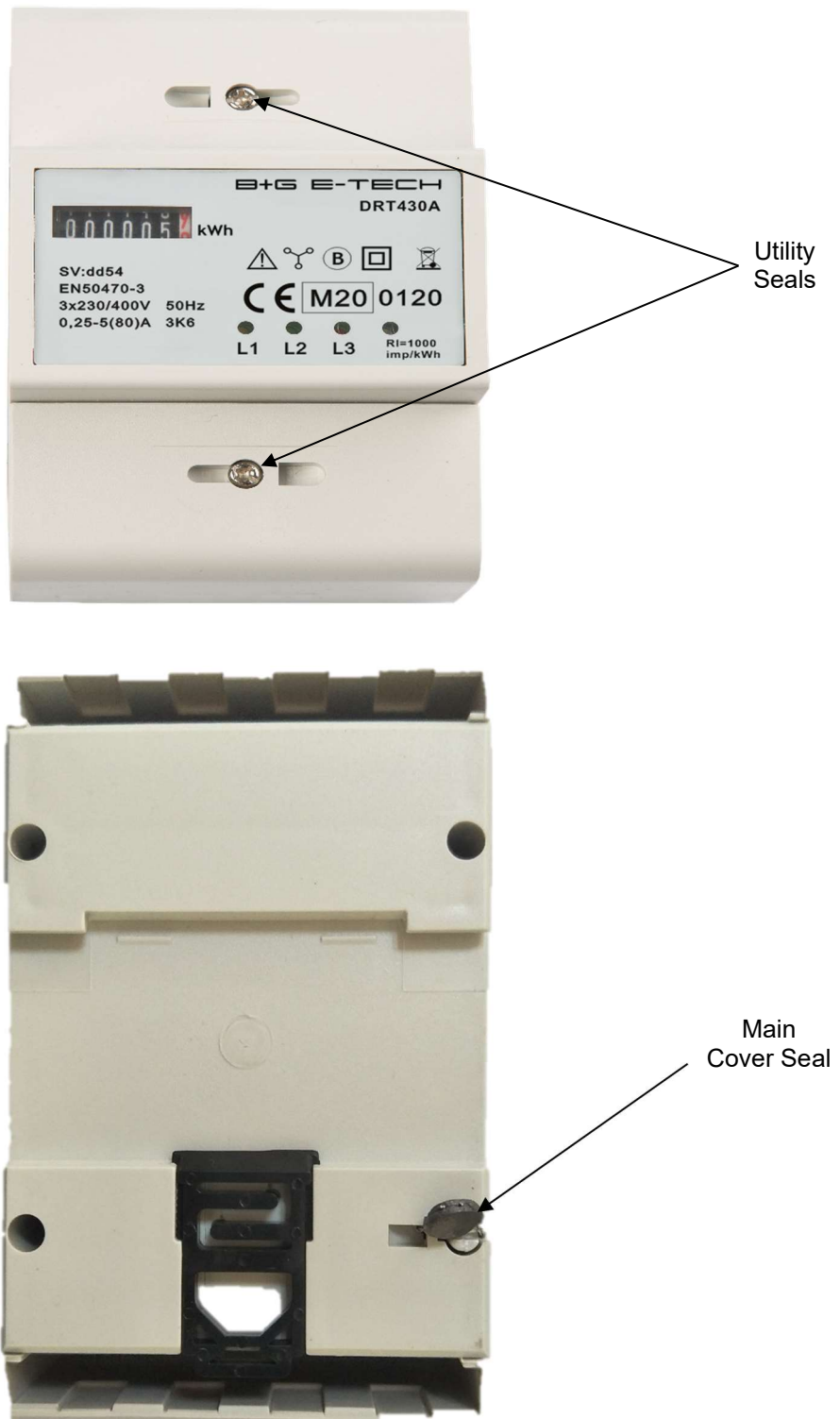
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1. Technical Data

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

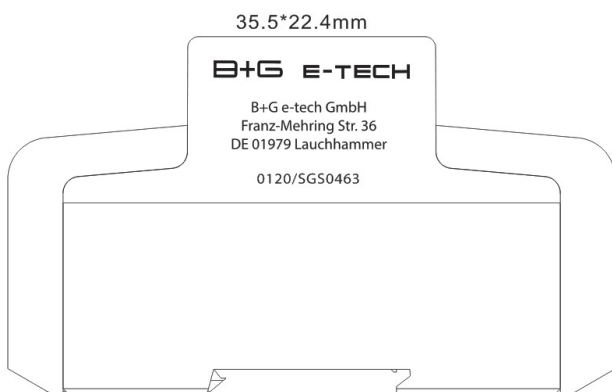
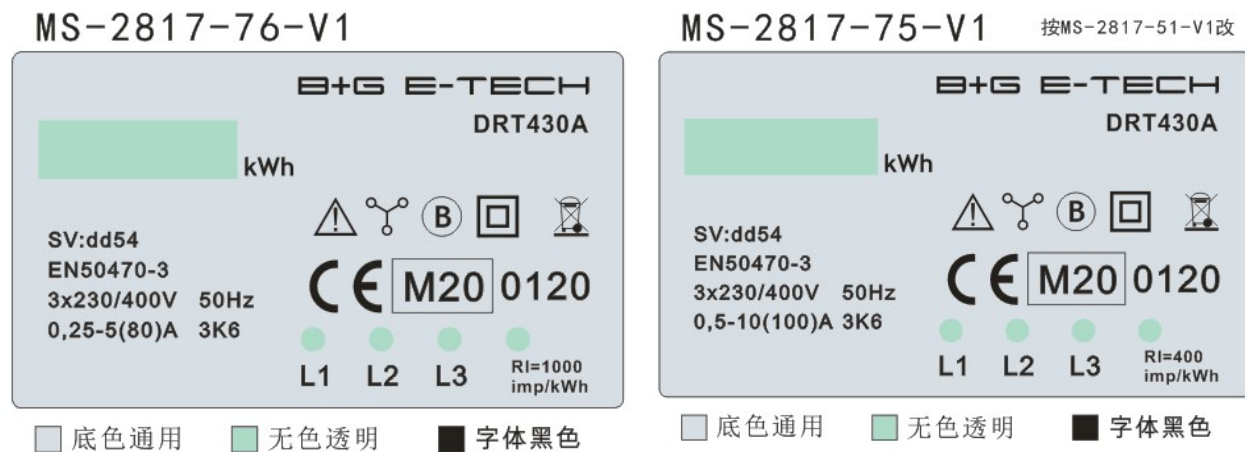
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2. Photograph of Meter and Sealing Plan



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3. Examples of Nameplates



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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




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		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25°C	-10°C	5°C	23°C	40°C	55°C
I _{min}	1.0	0.8	0.8	0.7	0.7	0.7	0.8
I _{tr}	1.0	0.7	0.6	0.5	0.5	0.5	0.6
10I _{tr}	1.0	0.5	0.4	0.4	0.3	0.4	0.5
I _{max}	1.0	0.5	0.5	0.5	0.5	0.5	0.5
I _{tr}	0.5ind	0.6	0.5	0.5	0.4	0.5	0.5
10I _{tr}	0.5ind	0.4	0.3	0.2	0.1	0.2	0.4
I _{max}	0.5ind	0.3	0.3	0.3	0.3	0.3	0.3
I _{tr}	0.8cap	0.8	0.7	0.7	0.7	0.7	0.7
10I _{tr}	0.8cap	0.6	0.5	0.5	0.5	0.5	0.5
I _{max}	0.8cap	0.2	0.2	0.2	0.2	0.2	0.2
L1							
I _{tr}	1.0	0.5	0.4	0.3	0.2	0.3	0.4
10I _{tr}	1.0	0.4	0.3	0.2	0.2	0.2	0.4
I _{max}	1.0	0.3	0.3	0.2	0.2	0.2	0.3
I _{tr}	0.5ind	0.4	0.3	0.2	0.2	0.2	0.3
10I _{tr}	0.5ind	0.4	0.2	0.2	0.2	0.2	0.5
I _{max}	0.5ind	0.6	0.5	0.5	0.5	0.5	0.5
L2							
I _{tr}	1.0	0.7	0.6	0.6	0.5	0.6	0.6
10I _{tr}	1.0	0.4	0.3	0.3	0.2	0.2	0.4
I _{max}	1.0	0.2	0.2	0.2	0.2	0.2	0.2
I _{tr}	0.5ind	0.8	0.6	0.6	0.5	0.6	0.7
10I _{tr}	0.5ind	0.4	0.2	0.2	0.2	0.2	0.5
I _{max}	0.5ind	0.2	0.2	0.2	0.2	0.2	0.2
L3							
I _{tr}	1.0	0.5	0.4	0.3	0.3	0.3	0.5
10I _{tr}	1.0	0.5	0.3	0.3	0.2	0.3	0.4
I _{max}	1.0	0.4	0.3	0.2	0.1	0.2	0.4
I _{tr}	0.5ind	0.5	0.3	0.3	0.2	0.3	0.4
10I _{tr}	0.5ind	0.5	0.5	0.5	0.5	0.5	0.5
I _{max}	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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END OF CERTIFICATE