EU Type Examination Certificate Number: **0120/SGS0455**

B+G E-Tech GmbH

Franz-Mehring Str.36
01979 Lauchhammer
Germany

Instrument Identification:
DRS155AE

Single phase, Active Import (kWh), Electricity Meter, Mechanical Display

Instrument Traceable Number
0120/SGS0455

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 6th June 2026
Issue 1

Certification is based on report number(s) SHES151200784001 dated 3rd June 2016
EMA224514
EMA277852

Authorised Signature

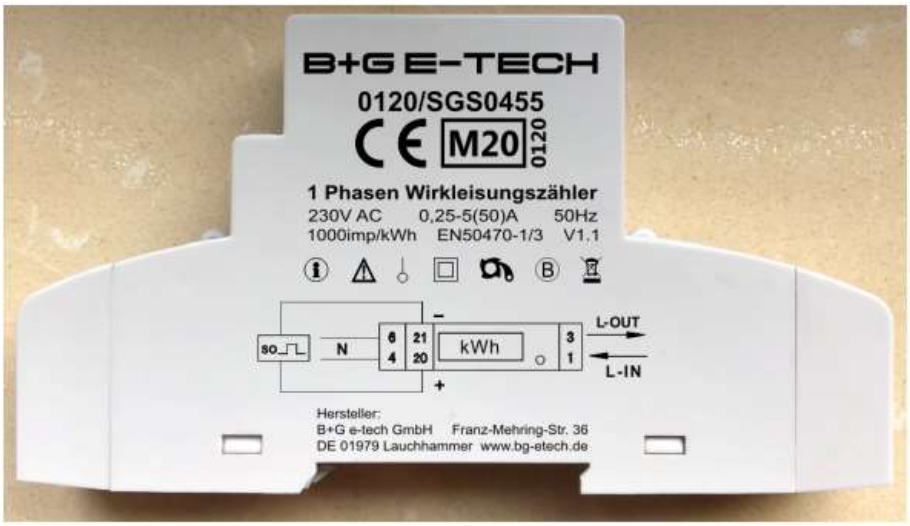
SGS United Kingdom Limited, Notified Body 0120
Unit 202B Worle Parkway, Weston-super-Mare, BS22 6WA, UK
t +44 (0)1934 522917 f +44 (0)1934 522137 www.sgs.com

Contact Address
SGS United Kingdom Limited, Units 12A & 12B, South Industrial Estate, Bowburn, Durham, DH6 5AD, UK
t +44 (0)191 377 2000 f +44 (0)191 377 2020 www.sgs.com

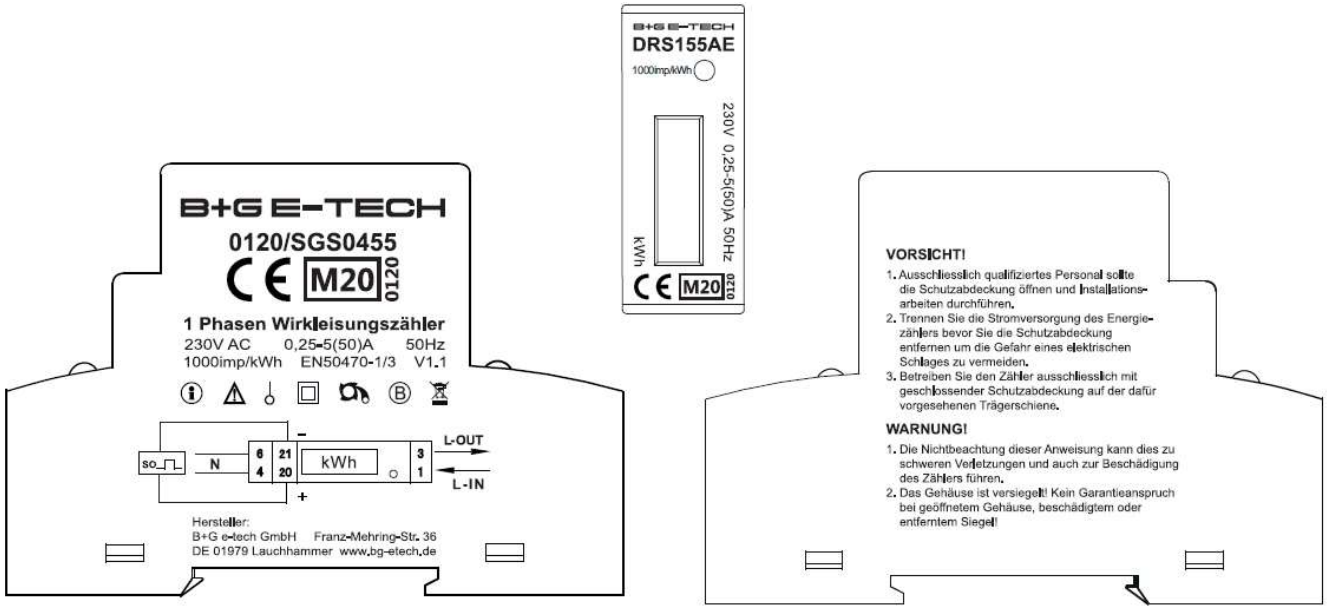
1. Technical Data

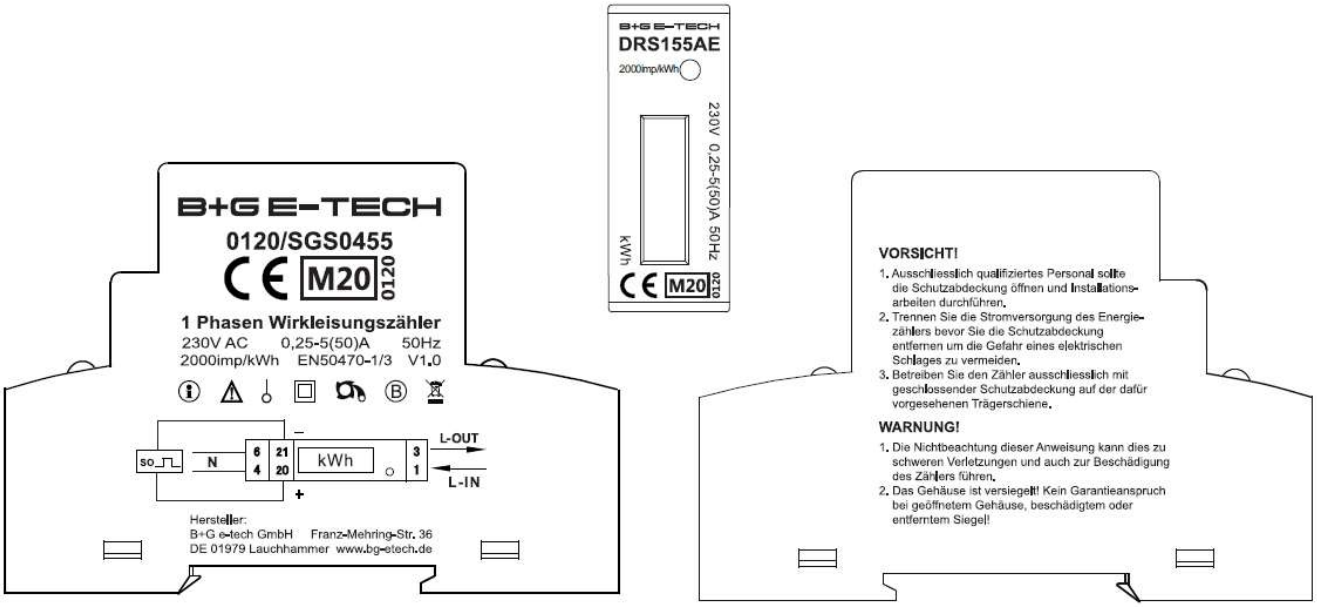
Manufacturer	B+G E-Tech GmbH
Meter Type	DRS155AE
Voltage Rating *(Un)*	230V
Current Rating *(Imin – Iref (Imax))*	0.25-5(30)A, 0.25-5(32)A, 0.25-5(40)A, 0.25-5(45)A, 0.25-5(50)A
Frequency *(Fn)*	50Hz
Active Accuracy Class *(kWh)*	B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No **Identification Location**	F+R Version(2000imp/kWh):V1.0 F+R Version(1000imp/kWh):V1.1 F+R Version(100imp/kWh): V1.2 Nameplate
Bill Of Materials Number	2000imp/kWh, V1.0, F+R: D111042-02 1000imp/kWh, V1.1: D111042; 100imp/kWh, V1.2: D111042-01;
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	2000imp/kWh, 1000imp/kWh, 100imp/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	Nameplate

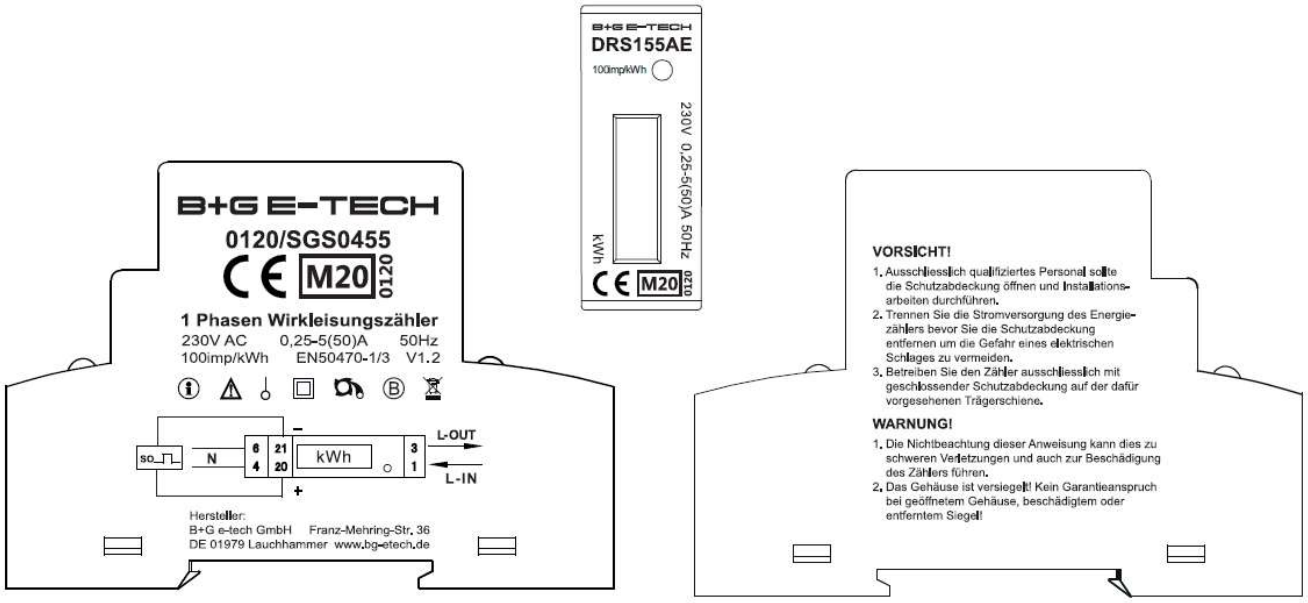
2. Photograph of Meter and Sealing Plan



3. Examples of Nameplates






B+G E-TECH
DRS155AE
100imp/kWh
230V 0.25-5(50)A 50Hz
kWh
M20
0120
B+G E-TECH
0120/SGS0455
M20
0120
1 Phasen Wirkleisungszähler
230V AC 0,25-5(50)A 50Hz
100imp/kWh EN50470-1/3 V1.2
so
N
6
4
21
20
kWh
3
1
L-OUT
L-IN
Hersteller:
B+G e-tech GmbH Franz-Mehring-Str. 36
DE 01979 Lauchhammer www.bg-etech.de
VORSICHT!
1. Ausschliesslich qualifiziertes Personal sollte die Schutzabdeckung öffnen und Installationsarbeiten durchführen.
2. Trennen Sie die Stromversorgung des Energiezählers bevor Sie die Schutzabdeckung entfernen um die Gefahr eines elektrischen Schlages zu vermeiden.
3. Betreiben Sie den Zähler ausschliesslich mit geschlossender Schutzabdeckung auf der dafür vorgesehenen Trägerschiene.
WARNUNG!
1. Die Nichtbeachtung dieser Anweisung kann dies zu schweren Verletzungen und auch zur Beschädigung des Zählers führen.
2. Das Gehäuse ist versiegelt! Kein Garantieanspruch bei geöffnetem Gehäuse, beschädigtem oder entferntem Siegel!

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:-

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

where

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

		Influence Factors for Temperature, Voltage & Frequency					
Current	**PF Cos**	-25°C	-10°C	5°C	30°C	40°C	55°C
Imin	1.0	*0.64*	*0.57*	*0.48*	*0.29*	*0.34*	*0.40*
Itr	1.0	*0.57*	*0.39*	*0.28*	*0.20*	*0.25*	*0.37*
10Itr	1.0	*0.49*	*0.36*	*0.22*	*0.14*	*0.24*	*0.38*
Imax	1.0	*0.49*	*0.40*	*0.29*	*0.14*	*0.18*	*0.29*
Itr	0.5ind	*0.48*	*0.44*	*0.43*	*0.43*	*0.50*	*0.57*
10Itr	0.5ind	*0.34*	*0.26*	*0.21*	*0.26*	*0.32*	*0.45*
Imax	0.5ind	*0.41*	*0.34*	*0.28*	*0.19*	*0.19*	*0.25*
Itr	0.8cap	*0.69*	*0.55*	*0.39*	*0.23*	*0.27*	*0.38*
10Itr	0.8cap	*0.58*	*0.45*	*0.27*	*0.13*	*0.22*	*0.38*
Imax	0.8cap	*0.60*	*0.50*	*0.35*	*0.13*	*0.15*	*0.26*

5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter	
DRS155AE	0.25-5(30)A 0.25-5(32)A 0.25-5(40)A 0.25-5(45)A 0.25-5(50)A	Hardware the same for all currents and impulse constants. The only differences are in software.

Modifications to the meter(s) described according to approval No.**0120/SGS0455** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

6. Document Revision History

Issue	Date	Comments
1	25/03/2020	Initial Issue

END OF CERTIFICATE