



EC Type Examination Certificate Number: **0120/SGS0199**

## **Itron Metering Solutions UK Ltd**

### **Design Centre**

Langer Road  
Felixstowe  
IP11 2ER

### **Manufacturing Centre**

Itron-Ganz Meter Company Ltd  
Tancsics M. u.11  
P.O.B. 396  
H-2101 Gödöllő  
Hungary

Instrument Identification:  
ACE9000 KBD

**Single Phase, Pre payment, Active Import (kWh), Electricity Meter**

Instrument Traceable Number  
**0120/ SGS0199**

has been assessed and certified as meeting the requirements of

## **EC 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 EC 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 for 10 years from 11<sup>th</sup> July 2016 until 10<sup>th</sup> July 2026  
Issue 1

Certification is based on report number(s) EMA194130/1/MID Issued 4<sup>th</sup> July 2016

Authorised Signature


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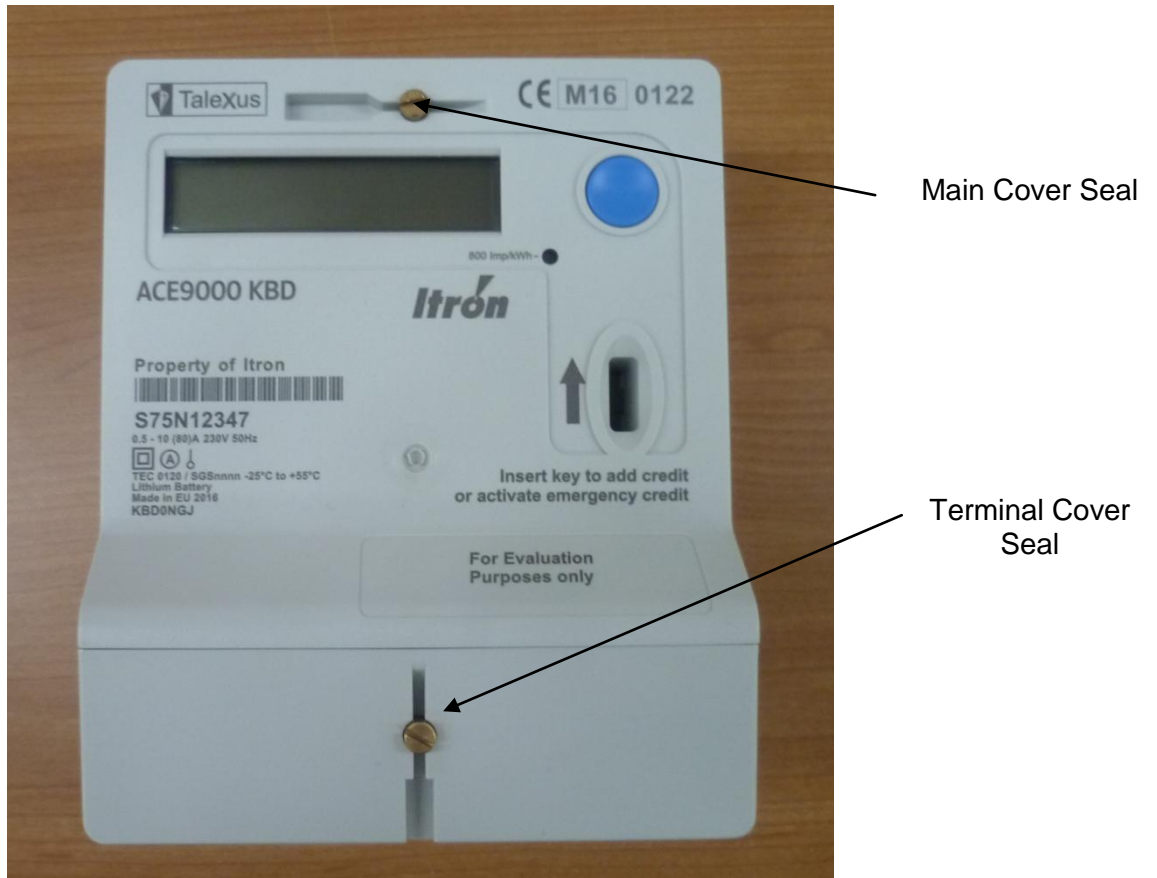
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	Issue Number: 1	Dated: 11 <sup>th</sup> July 2016


## 1. Technical Data

<b>Manufacturer</b>	Itron Metering Solutions UK Ltd
<b>Meter Type(s)</b>	ACE9000 KBD
<b>Voltage Rating (<math>U_n</math>)</b>	230V
<b>Current Rating (<math>I_{min}</math> – <math>I_{ref}</math> (<math>I_{max}</math>))</b>	0,5-10(80)A
<b>Frequency (<math>F_n</math>)</b>	50Hz
<b>Active Accuracy Class (<math>kWh</math>)</b>	B (kWh)
<b>Type of circuit</b>	1p2w
<b>Temperature Range</b>	-25°C to +55°C
<b>Software/ Firmware Version No.</b>	V03.10
<b>CRC Version No.</b>	CRC857C
<b>Software Identification Location</b>	LCD
<b>Bill Of Materials No's</b>	ACE AD KBD BOM 08072016
<b>IP Rating</b>	IP51
<b>Insulation Protective Class</b>	Class II
<b>LED Pulse Constant</b>	800 imp/ kWh
<b>Impulse Voltage Rating</b>	6kV
<b>AC Voltage Rating</b>	4kV
<b>Main Cover Sealing Type</b>	Wire & Crimp
<b>Terminal 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>	LCD

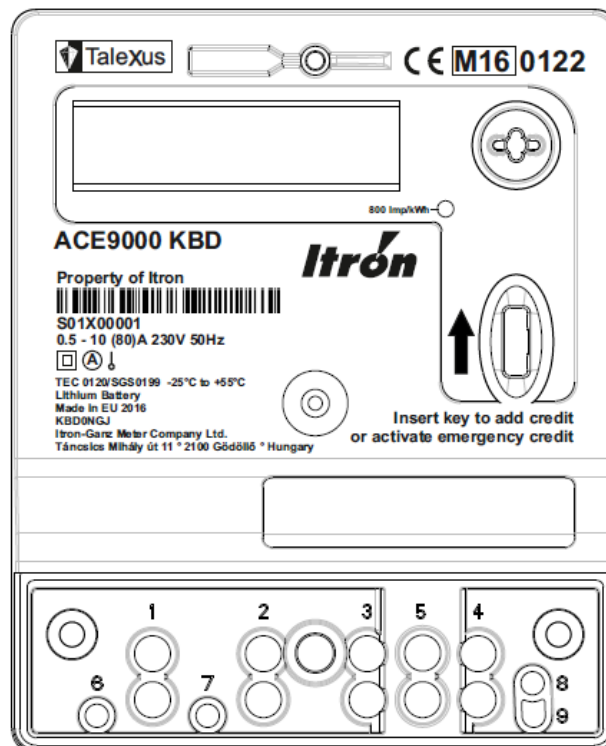
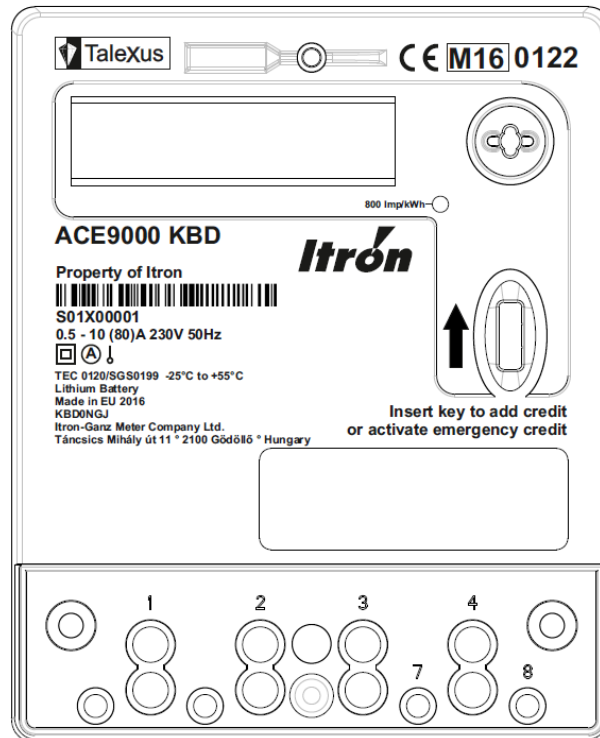
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**2. Photograph of Meter and Sealing Plan**



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### 3. Nameplate Drawings



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#### 4. Influence factors for temperature, frequency and voltage

Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
I <sub>min</sub>	1.0	<b>0.49</b>	<b>0.33</b>	<b>0.24</b>	<b>0.06</b>	<b>0.14</b>	<b>0.33</b>
I <sub>tr</sub>	1.0	<b>0.53</b>	<b>0.36</b>	<b>0.22</b>	<b>0.05</b>	<b>0.14</b>	<b>0.27</b>
10I <sub>tr</sub>	1.0	<b>0.49</b>	<b>0.34</b>	<b>0.19</b>	<b>0.05</b>	<b>0.14</b>	<b>0.27</b>
I <sub>max</sub>	1.0	<b>0.43</b>	<b>0.33</b>	<b>0.21</b>	<b>0.10</b>	<b>0.12</b>	<b>0.21</b>
I <sub>tr</sub>	0.5ind	<b>0.48</b>	<b>0.34</b>	<b>0.22</b>	<b>0.13</b>	<b>0.20</b>	<b>0.35</b>
10I <sub>tr</sub>	0.5ind	<b>0.46</b>	<b>0.33</b>	<b>0.19</b>	<b>0.07</b>	<b>0.18</b>	<b>0.32</b>
I <sub>max</sub>	0.5ind	<b>0.42</b>	<b>0.33</b>	<b>0.21</b>	<b>0.04</b>	<b>0.11</b>	<b>0.24</b>
I <sub>tr</sub>	0.8cap	<b>0.53</b>	<b>0.36</b>	<b>0.21</b>	<b>0.08</b>	<b>0.13</b>	<b>0.24</b>
10I <sub>tr</sub>	0.8cap	<b>0.48</b>	<b>0.32</b>	<b>0.17</b>	<b>0.06</b>	<b>0.14</b>	<b>0.24</b>
I <sub>max</sub>	0.8cap	<b>0.39</b>	<b>0.28</b>	<b>0.18</b>	<b>0.04</b>	<b>0.09</b>	<b>0.18</b>

During the type approval examination the influence factors for temperature, frequency and voltage are determined per load point. The table above 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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## 5. Annex of Variants


Product Variant Identification Details:

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Type Designation	Description of meter
ACE9000 KBD	Single Phase, Pre payment, Active Import (kWh) 230V, 0.5-10(80)A, 50 Hz

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Modifications to the meter(s) described according to approval No. **0120/ SGS0199** 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	11/07/2016	Initial Issue