



EU Type Examination Certificate Number: **0120/SGS0295**

ORBIS TECNOLOGIA ELECTRICA S.A.

C/Lerida 61
E-28020 Madrid
Spain

Instrument Identification:
CONTAX D 8041 BUS MID

Instrument Traceable Number
0120/SGS0295

Single Phase, Active Import, Electricity Meter, With RS485 comms

has been assessed and certified as meeting the requirements of

EU Directive 2014/32/EU

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 15th August 2022
Issue 2

Certification is based on report number(s) SHES1203000458MI Issue 15th August 2012
EMA239193

Authorised Signature


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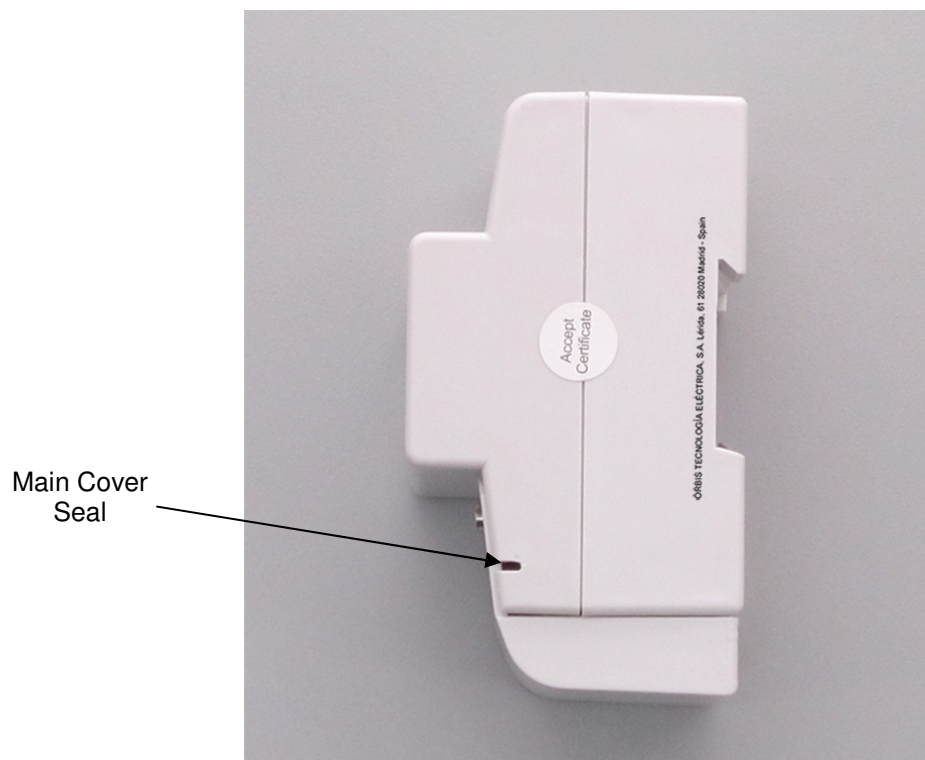
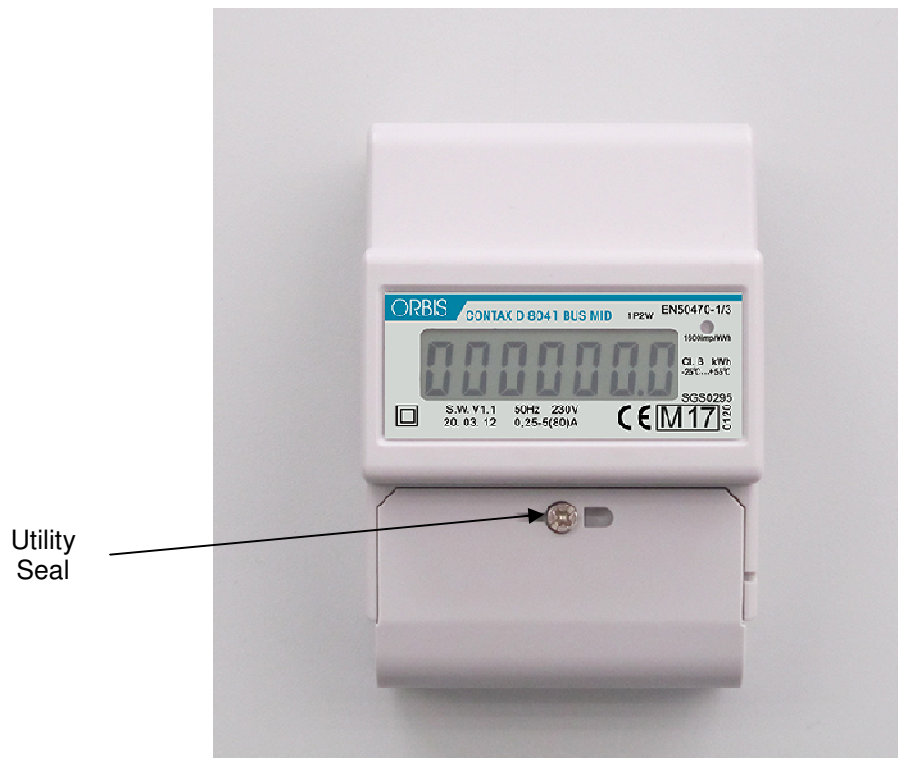
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1. Technical Data

Manufacturer	ORBIS TECNOLOGIA ELECTRICA S.A.
Meter Types	CONTAX D 8041 BUS MID
Voltage Rating (U_n)	230V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0,25-5(80)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software Version No.	V1.1
Identification Location	Nameplate
Bill Of Materials	D119012
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	1600imp/kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp & Sticker
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Location of Distributors Name and Address	Side of the meter and associated documentation

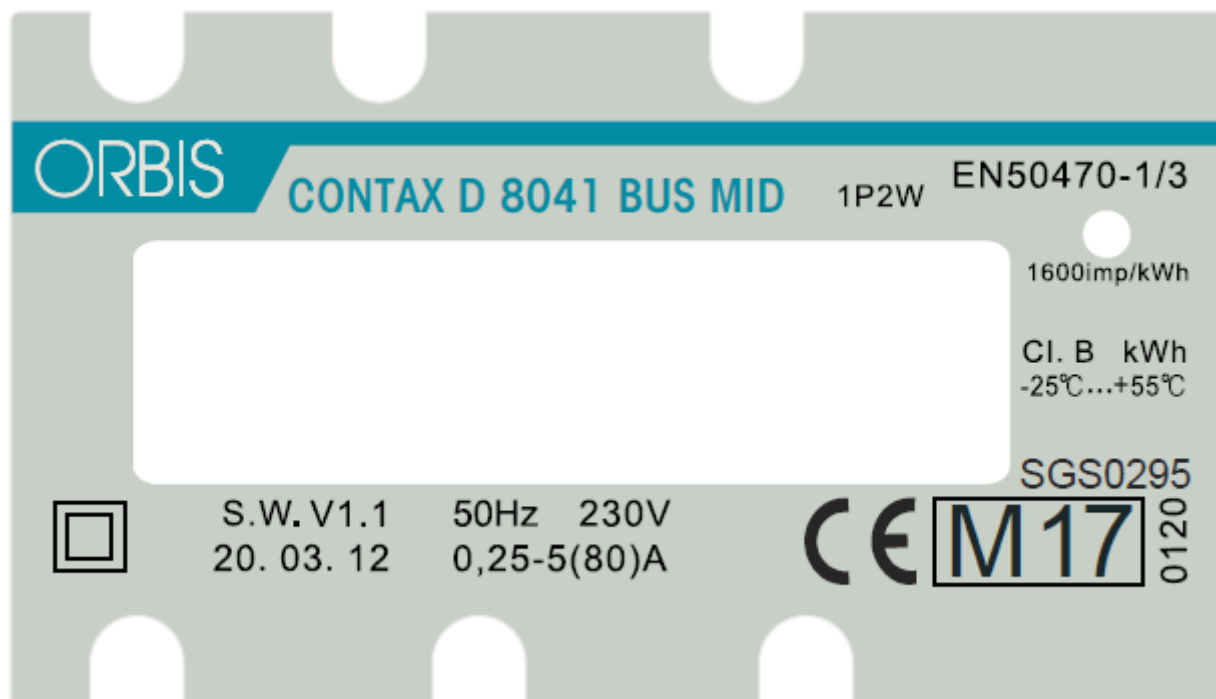
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2. Photograph of Meter and Sealing Plan



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3. Example of Nameplate



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4. Influence factors for temperature, frequency and voltage

In addition to the accuracy requirements the composite error e_c of the meter is shown below

The composite error at a certain load is calculated from the following formula:


$$e_c = \sqrt{e^2(I.\cos\theta) + e^2(T.I.\cos\theta) + e^2(U.I.\cos\theta) + e^2(f.I.\cos\theta)}$$

where


$e^2(I.\cos\theta)$	=	Intrinsic error of meter at a certain load
$e^2(T.I.\cos\theta)$	=	Additional error due to variation of the temperature at the same load
$e^2(U.I.\cos\theta)$	=	Additional error due to variation of the voltage at the same load
$e^2(f.I.\cos\theta)$	=	Additional error due to variation of the frequency at the same load

Ambient Temperature Range 5 to 30 Degrees C						
Current	PF Cos	e(Icos)	e(TIcos)	e(UIcos)	e(fIcos)	%MPE
Imin	1.0	0.00	0.46	0.02	0.01	0.46
Itr	1.0	0.03	0.33	0.02	0.09	0.34
10Itr	1.0	0.09	0.29	-0.02	-0.08	0.31
Imax	1.0	0.07	0.33	-0.03	-0.07	0.35
Itr	0.5ind	0.32	-0.03	-0.11	-0.13	0.36
10Itr	0.5ind	0.39	-0.05	0.01	-0.09	0.40
Imax	0.5ind	0.26	0.09	0.02	-0.10	0.29
Itr	0.8cap	-0.03	0.45	0.01	-0.06	0.46
10Itr	0.8cap	0.03	0.34	-0.02	-0.06	0.35
Imax	0.8cap	-0.10	0.34	-0.01	-0.05	0.36

Ambient Temperature Range -10 to 40 Degrees C						
Current	PF Cos	e(Icos)	e(TIcos)	e(UIcos)	e(fIcos)	%MPE
Imin	1.0	0.00	0.46	0.02	0.01	0.46
Itr	1.0	0.03	0.33	0.02	0.09	0.34
10Itr	1.0	0.09	0.34	-0.02	-0.08	0.36
Imax	1.0	0.07	0.34	-0.03	-0.07	0.36
Itr	0.5ind	0.32	-0.37	-0.11	-0.13	0.52
10Itr	0.5ind	0.39	-0.29	0.01	-0.09	0.49
Imax	0.5ind	0.26	-0.19	0.02	-0.10	0.34
Itr	0.8cap	-0.03	0.45	0.01	-0.06	0.46
10Itr	0.8cap	0.03	0.40	-0.02	-0.06	0.41
Imax	0.8cap	-0.10	0.45	-0.01	-0.05	0.46

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Ambient Temperature Range -25 to 55 Degrees C						
Current	PF Cos	e(lcos)	e(Tlcos)	e(Ulcos)	e(flcos)	%MPE
I _{min}	1.0	0.00	0.48	0.02	0.01	0.48
I _{tr}	1.0	0.03	0.32	0.02	0.09	0.33
10I _{tr}	1.0	0.09	0.34	-0.02	-0.08	0.36
I _{max}	1.0	0.07	0.34	-0.03	-0.07	0.36
I _{tr}	0.5ind	0.32	-0.51	-0.11	-0.13	0.63
10I _{tr}	0.5ind	0.39	-0.37	0.01	-0.09	0.55
I _{max}	0.5ind	0.26	-0.19	0.02	-0.10	0.34
I _{tr}	0.8cap	-0.03	0.46	0.01	-0.06	0.46
10I _{tr}	0.8cap	0.03	0.4	-0.02	-0.06	0.41
I _{max}	0.8cap	-0.10	0.45	-0.01	-0.05	0.46

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5. Annex of Variants


Product Variant Identification Details:

Type Designation

Description of meter

CONTAX D 8041 BUS MID: Single Phase, Active Import, Electricity Meter, with RS485 comms

Modifications to the meter(s) described according to approval No.**0120/SGS0295** 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	17/05/2017	Initial Issue
2	30/06/2017	Amendment to manufacturers name

END OF TEST CERTIFICATE