



EU Type Examination Certificate Number: **0120/SGS0453**

LEGRAND SA

128 Avenue du Marechal de Lattre de Tassigny
87045 LIMOGES
Cedex
France

Instrument Identification:
4 120 82 & 4 120 83

Single Phase, Active Import/Export kWh, DIN Rail, Electricity Meter

Instrument Traceable Number
0120/SGS0453

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 3rd December 2029
Issue 1

Certification is based on report number(s) EMA271234/1 dated 7th November 2019
EMA276281

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

	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020

1. Technical Data

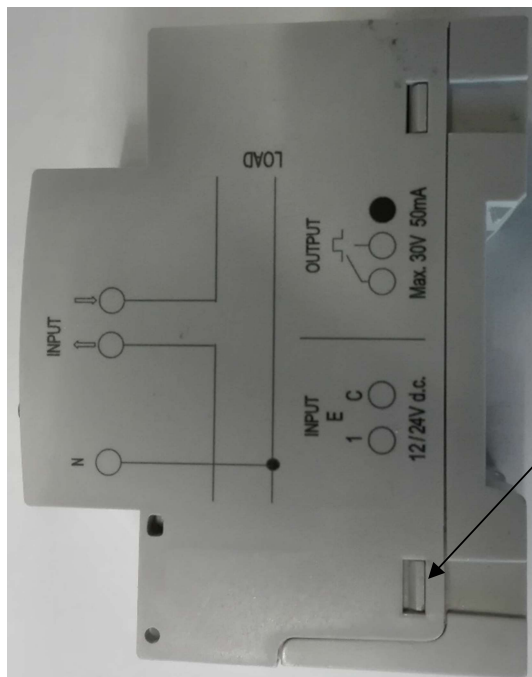
Manufacturer	LEGRAND SA
Meter Type	4 120 82 & 4 120 83
Voltage Rating (U_n)	230V
Current Rating (I_{min} – I_{ref} (I_{max}))	0.5-10(63)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	V1.1
CRC Checksum	58204
Identification Location	LCD
Bill Of Materials Number	B004235AD B004300AB B004429AC B004430AC
IP Rating	Meter to be installed in a suitable IP rated enclosure as described in installation manual
Insulation Protective Class	Class II
LED Pulse Constant	1Wh/imp
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	2 x clips ultrasonically welded
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	DIN
Location of Manufacturers Address	Nameplate & Documentation

	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020

2. Photograph of Meter and Sealing Plan




Terminal Cover
Sealing Points

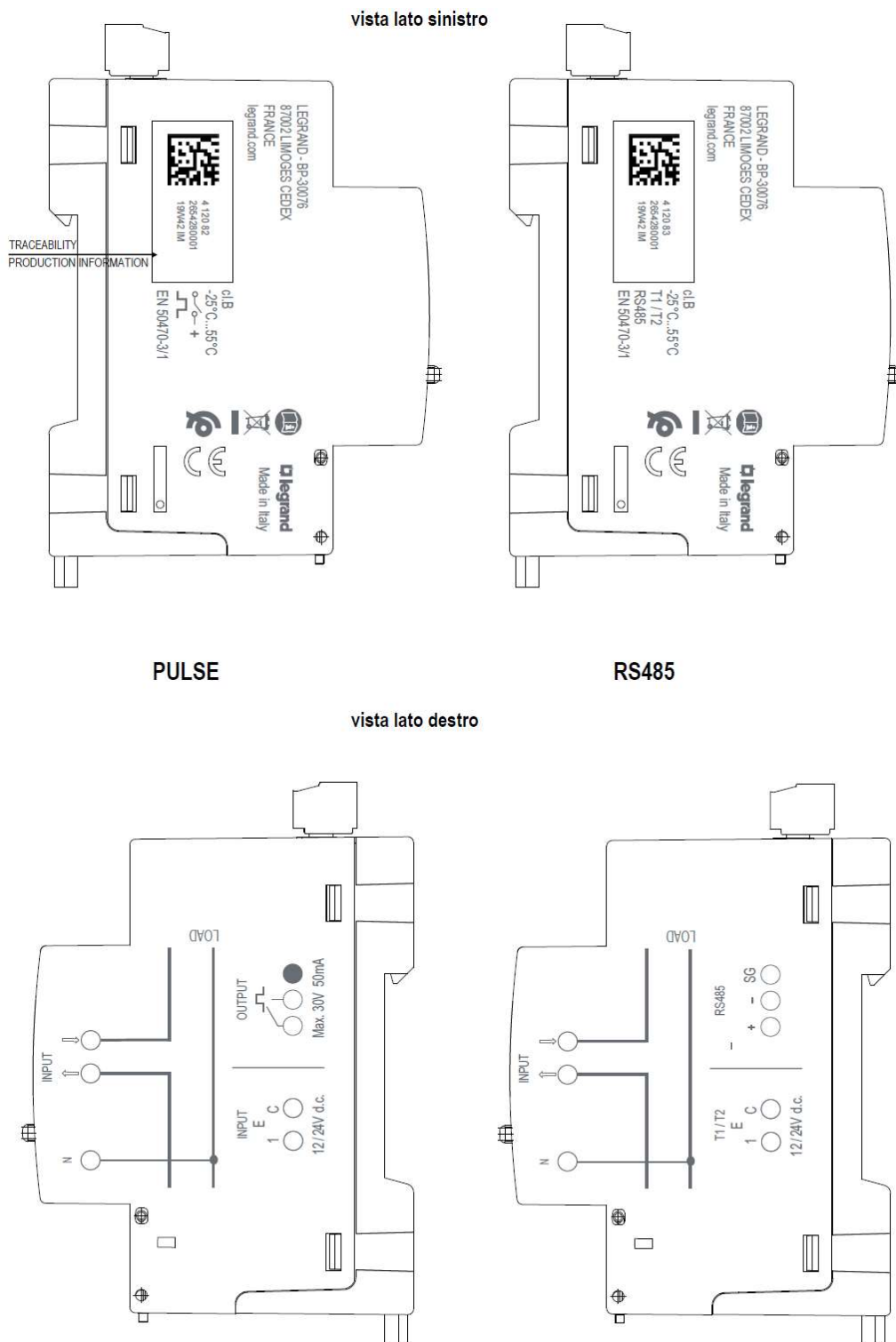



Main Cover
Sealing Points

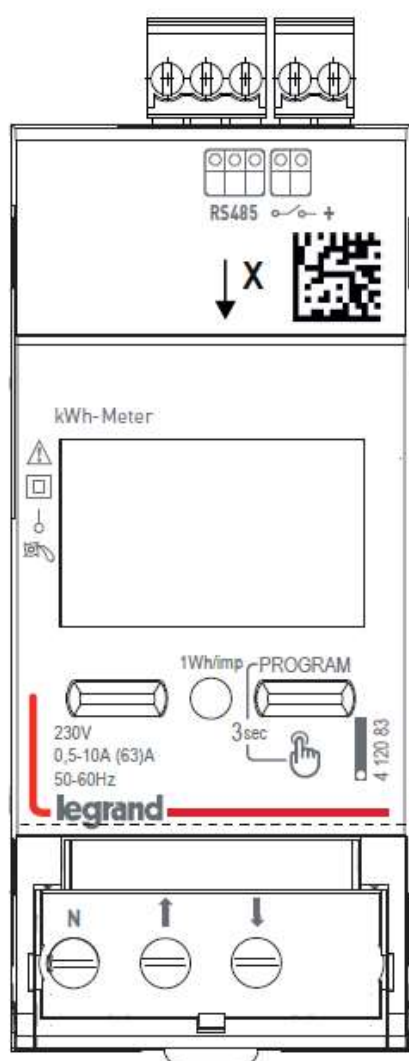


	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020

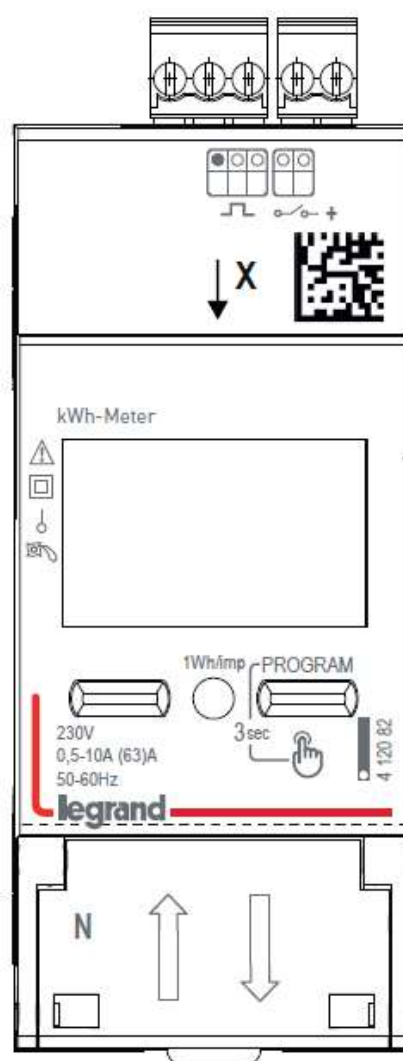
3. Examples of Nameplates



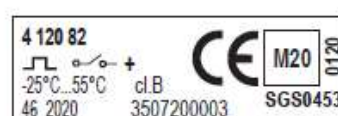
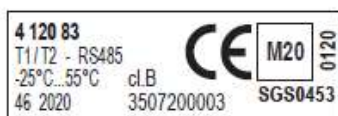
	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020




vista lato frontale



Targhetta prodotto MID vista da sopra X



	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020

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, Voltage & Frequency					
Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
I _{min}	1.0	0.65	0.24	0.18	0.12	0.15	0.18
I _{tr}	1.0	0.51	0.21	0.05	0.15	0.20	0.21
10I _{tr}	1.0	0.50	0.25	0.03	0.15	0.21	0.21
I _{max}	1.0	0.36	0.18	0.09	0.10	0.11	0.10
I _{tr}	0.5ind	0.17	0.20	0.26	0.27	0.27	0.24
10I _{tr}	0.5ind	0.10	0.17	0.24	0.25	0.24	0.12
I _{max}	0.5ind	0.43	0.45	0.49	0.41	0.33	0.33
I _{tr}	0.8cap	0.93	0.58	0.30	0.07	0.08	0.12
10I _{tr}	0.8cap	0.76	0.43	0.17	0.11	0.18	0.24
I _{max}	0.8cap	0.63	0.37	0.20	0.15	0.15	0.16


	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020

5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
4 120 82	Single Phase, 230V, 10(63)A, pulse output
4 120 83	Single Phase 230V, 10(63)A, dual tariff, RS485 Modbus communication

Modifications to the meter(s) described according to approval No.**0120/SGS0453** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

	EU-Type Examination Certificate Number:	
	0120/SGS0453	
	Issue Number: 1	Dated: 14 th February 2020

6. Document Revision History

Issue	Date	Comments
1	14/02/2020	Initial Issue

This document is issued by the Company subject to its General Conditions for Certification Services, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested *and such sample(s) are retained for 28 days only*.

END OF CERTIFICATE