



EU Type Examination Certificate Number: **0120/SGS0358**

Qonnex bvba

Hollestraat 12
9310 Aalst
Belgium

Instrument Identification:
EMM.630CT

Poly Phase, Active Import/ Export , Indoor, Multi-Function, Transformer Operated, Electricity Meter

Instrument Traceable Number
0120/SGS0358

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 9th March 2024
Issue 1

Certification is based on report number(s) EMA174647/1/MID dated 30th January 2014
EMA255538

Authorised Signature


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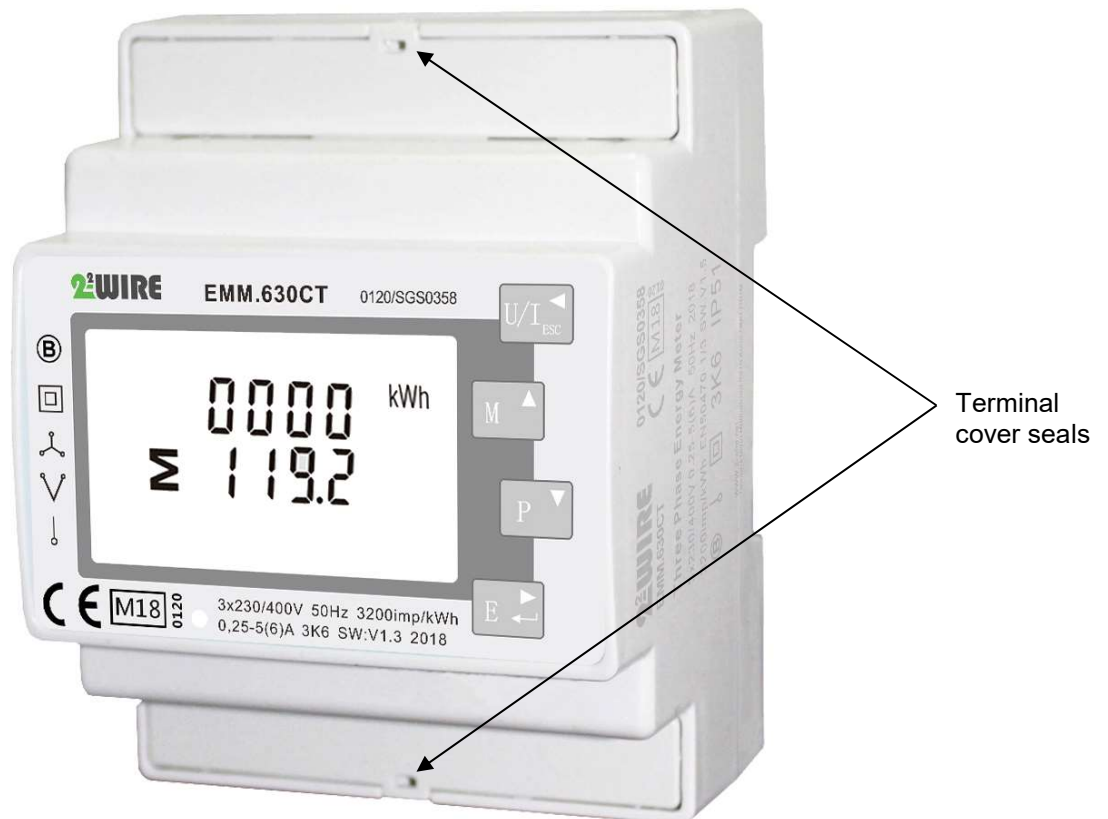
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1. Technical Data

Manufacturer	Qonnex bvba
Meter Type	EMM.630CT
Voltage Rating (U_n)	3x230/400V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0.25-5(6)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	1p2w, 3p3w, 3p4w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	V1.3
Identification Location	LCD
Bill Of Materials Number	DH-JS-150046-1.4
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	3200imp/kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	2 x Wire & Crimp
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 and associated documents

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2. Photograph of Meter and Sealing Plan



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3. Examples of Nameplates




2²WIRE 0120/SGS0358
 EMM.630CT

Three Phase Energy Meter
 3x230/400V 0.25-5(6)A 50Hz 2018
 3200imp/kWh EN50470-1/3 SW:V1.3

(B) ⚡ □ 3K6 IP51

WWW.2-wire.net
 Gonnex bvba Hollestraat 9310 Aalst / BELGIUM

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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	30°C	40°C	55°C
I _{min}	1.0	0.39	0.30	0.71	0.16	0.25	0.39
I _{tr}	1.0	0.33	0.27	0.28	0.18	0.25	0.47
10I _{tr}	1.0	0.35	0.31	0.24	0.22	0.29	0.49
I _{max}	1.0	0.36	0.31	0.25	0.21	0.28	0.47
I _{tr}	0.5ind	0.26	0.25	0.36	0.16	0.23	0.44
10I _{tr}	0.5ind	0.38	0.34	0.29	0.27	0.34	0.52
I _{max}	0.5ind	0.42	0.38	0.32	0.30	0.36	0.52
I _{tr}	0.8cap	0.31	0.42	0.43	0.32	0.37	0.50
10I _{tr}	0.8cap	0.32	0.27	0.21	0.17	0.26	0.45
I _{max}	0.8cap	0.34	0.28	0.21	0.15	0.24	0.43
L1							
I _{tr}	1.0	0.37	0.39	0.44	0.14	0.28	0.35
10I _{tr}	1.0	0.34	0.30	0.24	0.20	0.27	0.47
I _{max}	1.0	0.33	0.30	0.23	0.21	0.28	0.47
I _{tr}	0.5ind	0.41	0.56	0.96	0.14	0.15	0.16
10I _{tr}	0.5ind	0.49	0.46	0.42	0.38	0.43	0.62
I _{max}	0.5ind	0.49	0.46	0.42	0.39	0.44	0.60
L2							
I _{tr}	1.0	0.25	0.20	0.12	0.18	0.31	0.51
10I _{tr}	1.0	0.38	0.32	0.23	0.19	0.28	0.45
I _{max}	1.0	0.38	0.32	0.23	0.21	0.28	0.47
I _{tr}	0.5ind	0.12	0.12	0.13	0.25	0.38	0.59
10I _{tr}	0.5ind	0.36	0.33	0.25	0.25	0.32	0.49
I _{max}	0.5ind	0.39	0.35	0.28	0.27	0.34	0.49
L3							
I _{tr}	1.0	0.32	0.27	0.21	0.19	0.27	0.46
10I _{tr}	1.0	0.32	0.28	0.22	0.21	0.30	0.50
I _{max}	1.0	0.33	0.30	0.23	0.22	0.30	0.50
I _{tr}	0.5ind	0.32	0.32	0.24	0.20	0.29	0.53
10I _{tr}	0.5ind	0.34	0.29	0.23	0.23	0.33	0.54
I _{max}	0.5ind	0.35	0.31	0.25	0.13	0.33	0.53


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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
EMM.630MCT	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated (Terminal 7 and 8 used as power output for next meter in daisy connection)

Modifications to the meter(s) described according to approval No.**0120/SGS0358** 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	19/07/2018	Initial Issue

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END OF CERTIFICATE