EU Type Examination Certificate Number: **0120/ SGS0203**

Schneider Electric

dba Power Measurement Ltd.
2195 Keating Cross Road
Saanichton, British Columbia
Canada, V8M 2A5

Instrument Identification:

PM8000

Poly phase, Active Import/ Export (kWh), Transformer Operated, Auxiliary power supply, RS485, Dual Ethernet, 1 digital output, 3 digital inputs

Instrument Traceable Number

0120/ SGS0203

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 September 2025
Issue 8

Certification is based on report number(s)
EMA195810/1 dated 28th January 2015, EMA204099 dated 28th January 2015

Authorised Signature

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SGSPAPER 20295110

1. Technical Data

Manufacturer	Schneider Electric
Meter Type	PM8000
Voltage Rating *(Un)*	3P3W: 3x100V to 3x600V (L-L) 3P4W: 3 x 57.7/100V to 3x400/690V
Current Rating *(Imin – Iref (Imax))*	0.025-5(10)A
Frequency *(Fn)*	50Hz or 60Hz (IEC only)
Active Accuracy Class *(kWh)*	C (kWh)
Type of circuit	3P4W, 3P3W
Temperature Range	-25°C to +70°C
Software/ Firmware Version No's **Identification Location**	Version :001.004.003. CRC: 0x0c2eda9a Version : 002.001.000. CRC: 0x5c9693a1 Version: 002.002.001. CRC: 0xd0467dc0 Version: 003.000.000. CRC: 0xe4bbde55 LCD
Bill Of Materials No's	EAV66596 PCBA, PSU, PM8000 EAV66599 PCBA, CVM, PM8000 EAV66594 PCBA, Comm I/O, PM8000 EAV66601 PCBA, Backplane, INT, PM8000 EAV66597 PCBA, CPU, PM8000
IP Rating	IP51 Front Display Meter body not rated, must be fitted in an IP51 Enclosure
Insulation Protective Class	Class II
LED Pulse Constant	5000 imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Destructible rivet
Integrity of meter	Inaccessible without breaking rivet
Intended Location of the Meter	Indoor
Type of Register	LCD

2. Photographs of Meter

Front View

Rear View

3. 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 presents 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, frequency and voltage							
Current	**PF Cos**	**-40°C**	**-25°C**	**-10°C**	**5°C**	**30°C**	**40°C**	**55°C**	**70°C**
Imin	1.0	***0.15***	***0.20***	***0.14***	***0.12***	***0.11***	***0.12***	***0.13***	***0.13***
Itr	1.0	***0.13***	***0.18***	***0.11***	***0.07***	***0.06***	***0.07***	***0.07***	***0.07***
10Itr	1.0	***0.24***	***0.27***	***0.19***	***0.09***	***0.05***	***0.06***	***0.06***	***0.05***
Imax	1.0	***0.20***	***0.23***	***0.15***	***0.09***	***0.06***	***0.07***	***0.07***	***0.06***
Itr	0.5ind	***0.27***	***0.19***	***0.21***	***0.11***	***0.08***	***0.08***	***0.10***	***0.15***
10Itr	0.5ind	***0.42***	***0.42***	***0.31***	***0.17***	***0.08***	***0.11***	***0.11***	***0.08***
Imax	0.5ind	***0.45***	***0.44***	***0.32***	***0.19***	***0.08***	***0.10***	***0.09***	***0.10***
Itr	0.8cap	***0.10***	***0.09***	***0.22***	***0.13***	***0.09***	***0.09***	***0.09***	***0.09***
10Itr	0.8cap	***0.21***	***0.23***	***0.15***	***0.11***	***0.10***	***0.10***	***0.10***	***0.10***
Imax	0.8cap	***0.15***	***0.17***	***0.11***	***0.10***	***0.09***	***0.09***	***0.09***	***0.09***
L1									
Itr	1.0	***0.26***	***0.22***	***0.15***	***0.11***	***0.09***	***0.10***	***0.12***	***0.10***
10Itr	1.0	***0.19***	***0.20***	***0.13***	***0.08***	***0.04***	***0.05***	***0.06***	***0.04***
Imax	1.0	***0.18***	***0.19***	***0.10***	***0.07***	***0.03***	***0.04***	***0.04***	***0.04***
Itr	0.5ind	***0.29***	***0.33***	***0.24***	***0.17***	***0.14***	***0.17***	***0.23***	***0.31***
10Itr	0.5ind	***0.25***	***0.25***	***0.16***	***0.09***	***0.07***	***0.11***	***0.11***	***0.09***
Imax	0.5ind	***0.21***	***0.22***	***0.14***	***0.09***	***0.07***	***0.08***	***0.06***	***0.20***
L2									
Itr	1.0	***0.19***	***0.20***	***0.17***	***0.15***	***0.15***	***0.15***	***0.15***	***0.15***
10Itr	1.0	***0.38***	***0.36***	***0.26***	***0.17***	***0.14***	***0.14***	***0.14***	***0.14***
Imax	1.0	***0.31***	***0.29***	***0.22***	***0.18***	***0.15***	***0.15***	***0.15***	***0.15***
Itr	0.5ind	***0.72***	***0.54***	***0.47***	***0.25***	***0.16***	***0.16***	***0.16***	***0.17***
10Itr	0.5ind	***0.59***	***0.57***	***0.46***	***0.29***	***0.18***	***0.19***	***0.19***	***0.18***
Imax	0.5ind	***0.65***	***0.64***	***0.50***	***0.33***	***0.21***	***0.23***	***0.22***	***0.22***
L3									
Itr	1.0	***0.16***	***0.16***	***0.07***	***0.04***	***0.04***	***0.04***	***0.04***	***0.04***
10Itr	1.0	***0.26***	***0.29***	***0.17***	***0.10***	***0.03***	***0.04***	***0.04***	***0.03***
Imax	1.0	***0.21***	***0.23***	***0.12***	***0.08***	***0.03***	***0.04***	***0.04***	***0.03***
Itr	0.5ind	***0.41***	***0.28***	***0.28***	***0.15***	***0.06***	***0.06***	***0.06***	***0.06***
10Itr	0.5ind	***0.49***	***0.47***	***0.32***	***0.18***	***0.07***	***0.10***	***0.09***	***0.08***
Imax	0.5ind	***0.47***	***0.47***	***0.31***	***0.19***	***0.02***	***0.09***	***0.08***	***0.07***

4. Annex of Variants

Product Variant Identification Details:

Product	Model (SKU)	Description
PM8000 ,	METSEPM82401	Poly phase, Active Import/ Export (kWh), Transformer Operated, Auxiliary Power Supply, RS485, Dual Ethernet, 1 Digital Output, 3 Digital Inputs
Aux Devices	METSEPM89M2600 METSEPM89M0024	Digital I/O module (6 digital inputs & 2 relay outputs) Analogue I/O module (4 analogue inputs & 2 analogue outputs)

Modifications to the meter(s) described according to approval No.**0120/ SGS0203** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

5. Document Revision History

Issue	Date	Comments
1	07/09/2015	Initial Issue
2	12/10/2016	New BOM and software revision
3	11/04/2018	New firmware version
4	27/05/2018	Auxiliary devices included in product details
5	18/04/2019	New firmware version 002.001.000 & CRC checksum No. 0x5c9693a1 added.
6	03/03/2020	New firmware version 002.002.001 & CRC checksum No. 0xd0467dc0 added. BOM numbers changed to part numbers. Rear label updated to show correct marking 0120/SGS0203
7	14/04/2020	BOM number correction
8	17/09/2020	New firmware version 003.000.000 & CRC checksum No. 0xe4bbde55 added.

END OF CERTIFICATE