Australian Government
Department of Industry, Science, Energy and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 14/2/112

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Schneider Electric Australia Pty Ltd PowerLogic PM8000 – METSEPM8240 model Electricity Meter

submitted by Schneider Electric Australia Pty Ltd
Level 10, 2 Banfield Road
MACQUARIE PARK NSW 2113

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to Pathway 1 in the document NMI M 6-1 *Active-Energy Electricity Meters. Part 1: Metrological and Technical Requirements*, July 2020.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variant 1 approved – certificate issued	19/08/21

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 14/2/112' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Darryl Hines
Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 14/2/112

1 Description of Pattern approved on 19/08/21

A Schneider Electric Australia Pty Ltd PowerLogic PM8000 - METSEPM8240 model, polyphase Class 0.2, transformer-operated static watt hour meter (Figure 1) used to measure electrical energy.

1.1 Field of Operation

The field of operation of the measuring system is determined by the following characteristics:

- Number of phases 3
- Number of wires 4
- Reference frequency 50 Hz
- Reference ambient temperature ranges:
  - specified range of operation -25 to 70°C
  - limit range of operation -25 to 70°C
- Rated voltage 3 x 57.7/100 V AC or
  3 x 230/400 V AC or
  3 x 400/690 V AC
- Rated currents: Nominal current, I_n 5 A
  Maximum current, I_{max} 10 A
- Meter constant 1.8 Wh/imp
- Accuracy class 0.2

1.2 Features/Functions

- Panel mounted meter
- Internal crystal clock
- Measurement in both positive and negative directions (export and import)

1.3 Verification Provision

Provision is made for the application of a verification mark.

1.4 Sealing Provision

Provision is made for the sealing devices and parameters that have a metrologically significant effect and that determine the measurement result by the application of mechanical seals (Figures 2, 3 & 4) and solid state sealing.

1.5 Descriptive Markings

Instruments are clearly and permanently marked with the following data, in the vicinity of the indicating device, in the form shown at right:

Manufacturer's name or mark	…
Model designation	...
Serial number	...
Pattern approval mark	NMI 14/2/112
Number of phases	...
Number or wires	...
Reference frequency	... Hz

Temperature limit (if other than -10 to 60 °C)	... to ... °C
Meter constant	...
Rated voltage	... AC
Rated currents:	I_b ... A
	I_{max} ... A
Accuracy class	0.2

1.6 Harmonics

Instruments purporting to comply with this approval are suitable for use where the harmonics do not exceed those specified in pathway 1 of NMI M 6-1:2020.

2 Description of Variant 1 approved on 19/08/21

A Schneider Electric Australia Pty Ltd PowerLogic PM8000 - METSEPM8244 model, polyphase Class 0.2, transformer-operated static watt hour meter (Figure 5) used to measure electrical energy.

This variant has the same Field of Operations and Features/Functions as the pattern, other than the following:

- DIN rail mounted meter transducer (PM8000 - METSEPM8243) together with colour detached display (PM89RD96).

TEST PROCEDURE

Instruments tested for initial verification shall comply with the certificate of approval and technical schedule, and the maximum permissible errors for verifications at the operating conditions in effect at the time of verification.

The maximum permissible errors are specified in the *National Trade Measurement Regulations 2009* (Cth).

Meters shall be verified in accordance with NITP 14 *National Instrument Test Procedures for Utility Meters*.

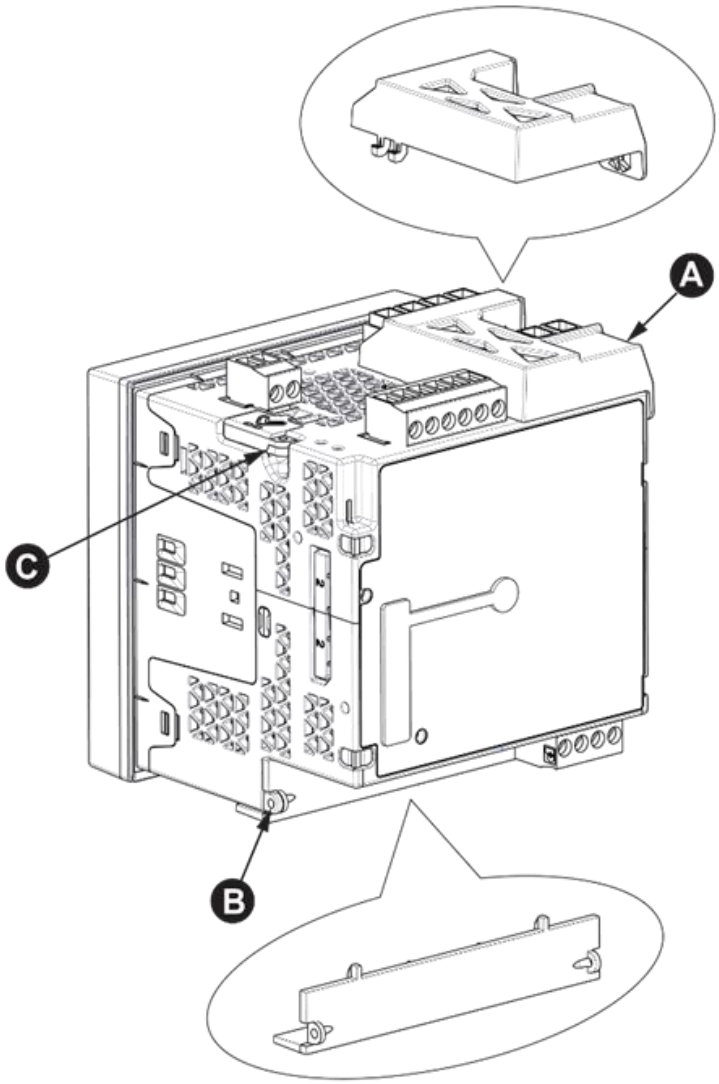
Evidence of verification shall be confirmed via the meter serial number and certificate of verification issued by a utility meter verifier in accordance with NITP 14.

NOTE: NMI reserves the right to vary this procedure. Any such variation shall be notified in writing by NMI.

FIGURE 14/2/112 – 1

Schneider Electric Australia Pty Ltd PowerLogic PM8000 - METSEPM8240 Electricity meter (Front and back)

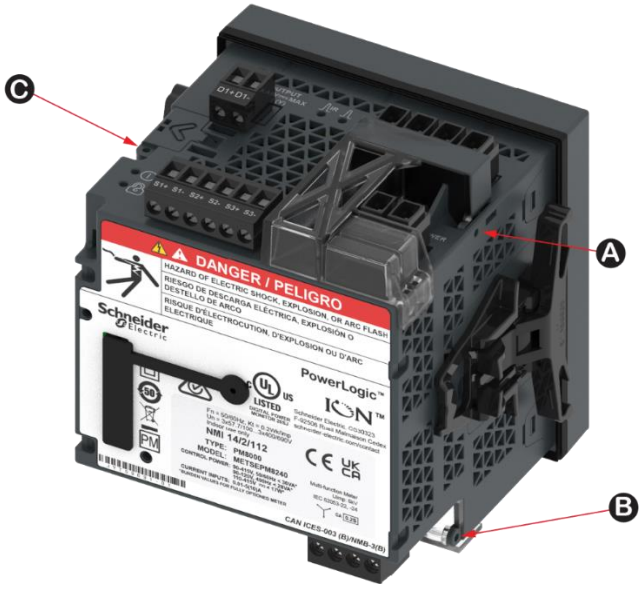
FIGURE 14/2/112 – 2



A	B	C	
Voltage sealing cover	Current sealing cover	Revenue lock switch (sealable)	2 mm (0.08) max sealing wire - customer supplied

Schneider Electric Australia Pty Ltd PowerLogic PM8000 Sealing Points including typical Mechanical Sealing

FIGURE 14/2/112 – 3



A	B	C	
Voltage sealing cover	Current sealing cover	Revenue lock switch (sealable)	2 mm (0.08) max sealing wire - customer supplied

Schneider Electric Australia Pty Ltd PowerLogic PM8000 - METSEPM8240 with revenue-lock switch (Location C)

FIGURE 14/2/112 – 4

Schneider Electric Australia Pty Ltd PowerLogic PM8000 - METSEPM8240 with I/O sealing point

FIGURE 14/2/112 – 5

Schneider Electric Australia Pty Ltd PowerLogic PM8000 - METSEPM8244 (Variant 1)

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