



**Australian Government**  
**Department of Industry,  
Science and Resources**

**National  
Measurement  
Institute**

36 Bradfield Road, West Lindfield NSW 2070

**Certificate of Approval**  
**NMI 14/2/180**

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.

CET Electric Technology Inc. model PMC-220-A6 Class 1 Electricity Meter

submitted by           CET Electric Technology Inc.  
Floor 33-35, Building #6  
Shenzhen International Innovation Valley  
Dashi First Road, Nanshan District  
Shenzhen  
Guangdong  
P.R. China - 518055

**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 document NMI M 13-1 *Active-Energy Electricity Meters. Part 1: Metrological and Technical Requirements*, June 2022.

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**

<b>Rev</b>	<b>Reason/Details</b>	<b>Date</b>
0	Pattern approved – certificate issued	09/06/26

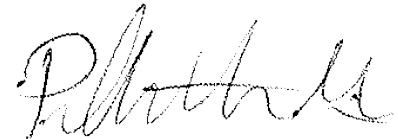
## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/2/180' and only by persons authorised by the submitter.

It is the submitter'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*.



**Phillip Mitchell**  
A/Manager  
Policy and Regulatory Services

TECHNICAL SCHEDULE No 14/2/180

**1. Description of Pattern**

**approved on 09/06/26**

A CET Electric Technology Inc. model PMC-220-A6 single phase Class 1 direct connected 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 1
- Number of wires 2
- 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 240 V AC
- Rated currents: Basic current,  $I_b$  5 A  
Maximum current,  $I_{max}$  80 A
- Meter constant 2000 imp/kWh
- Accuracy class 1

**1.2 Features/Functions**

- DIN-rail mounting
- Liquid crystal digital indicators having a maximum display of 999999.99 kWh.
- Internal crystal clock
- Measurement in both positive and negative directions (import and export).
- Wired communications (RS-485/Modbus).

**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 (Figure 1) 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 right:

Manufacturer's mark, or name written in full	.....
Model designation	.....
Serial number	.....
Pattern approval mark	NMI 14/2/180
Number of phases	.....
Number of wires	.....
Reference frequency	..... Hz
Temperature limits (if other than -10 to 60 °C)	..... °C
Meter constant	.....
Rated voltage	..... AC
Rated currents:	$I_b$ ..... A
	$I_{max}$ ..... A
Accuracy class	.....
Environment	Indoor meter or IM

### 1.6 Harmonics

Instruments purporting to comply with this approval are suitable for use where the harmonics do not exceed those specified in AS 62053.21:2018.

#### TEST PROCEDURE No 14/2/180

Instruments tested for 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).

Electricity meters shall be verified in accordance with the following National Instrument Test Procedures:

- NITP 14.0 – Utility Meters – general requirements
- NITP 14.2 – Utility Meters – electricity meters

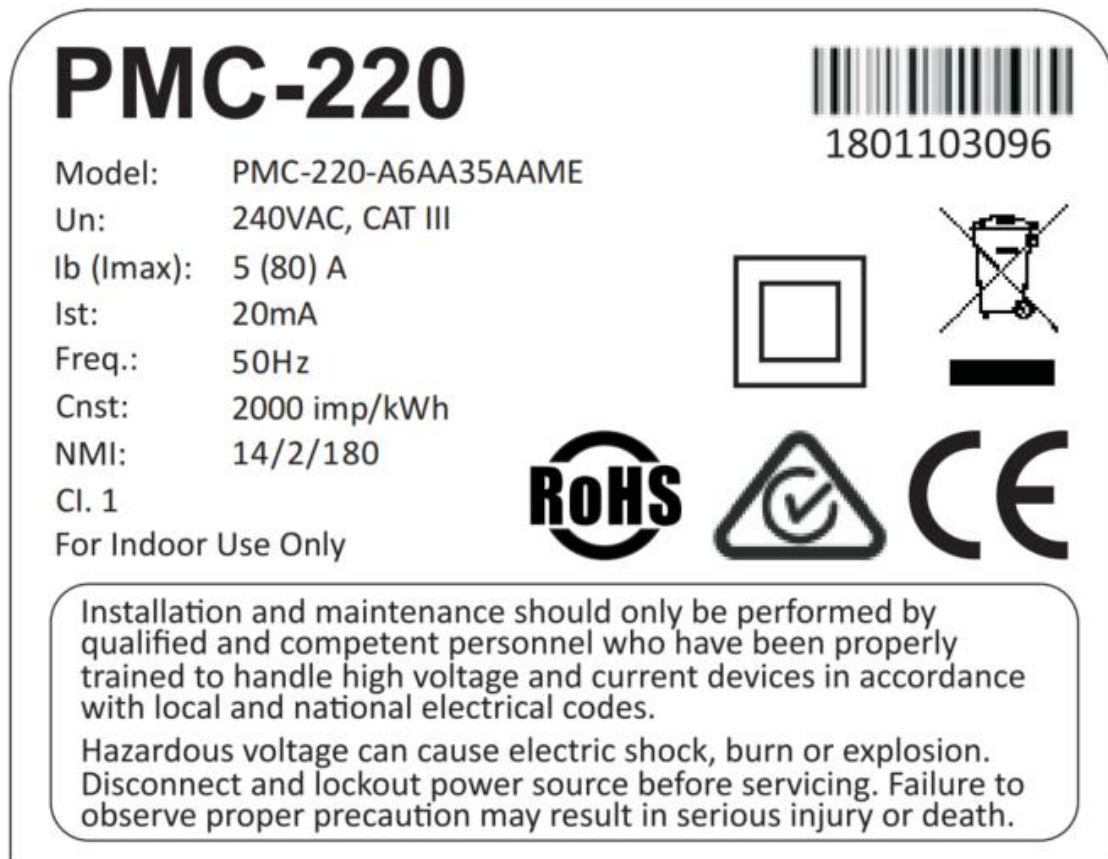
NOTE: NMI reserves the right to vary this procedure. Any such variation shall be notified in writing by NMI.

FIGURE 14/2/180 – 1



CET Electric Technology Inc. model PMC-220-A6 Class 1 Electricity Meter (the pattern, including typical mechanical sealing)

FIGURE 14/2/180 – 2



Example of markings

~ End of Document ~