

# National Measurement Institute

# Certificate of Approval NMI 14/2/98

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.

Ceiec Electric Technology Inc model CET PMC-220-C35AE Electricity Meter

submitted by CETA Australia Pty Ltd

38B Douglas Street Milton QLD 4064

**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 6-1, *Electricity Meters, Part 1: Metrological and Technical Requirements*, **July 2012**.

This approval becomes subject to review on **1/02/22**, and then every 5 years thereafter.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – certificate issued	9/01/17
1	Pattern and variant 1 (Change of model name) approved – certificate issued	13/07/17

#### CONDITIONS OF APPROVAL

#### General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/2/98' 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.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0B.

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

**Dr A Rawlinson** 

#### TECHNICAL SCHEDULE No 14/2/98

#### 1. Description of Pattern

#### approved on 9/01/17

A Ceiec Electric Technology Inc model CET PMC-220-C35AE 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 95 to 240 V AC

Rated currents: Basic current, I<sub>b</sub> 5 A
 Maximum current, I<sub>max</sub> 63 A

Meter constant
 1000 imp/kWh

Accuracy class

#### 1.2 Features/Functions

- Liquid crystal digital indicator having a maximum display of 999999.9 kWh
- DIN-rail mounting

Note: The pattern is NOT fitted with an internal clock.

#### 1.3 Verification Provision

Provision is made for the application of a verification mark.

#### 1.4 Sealing Provision

Provision is made for the calibration adjustments to be sealed by the application of a mechanical seal (Figure 1).

#### 1.5 Descriptive Markings

Instruments are marked with the following data, together in one location:

Manufacturer's mark, or name written in full Model designation . . . . . . . . . . . . Serial number Pattern approval mark NMI 14/2/98 Number of phases Number or wires Reference frequency ..... Hz Temperature limits (if other than -10 to 60<sub>°</sub>C) .... to ....°C Meter constant . . . . . . . . . . . . . Rated voltage ..... AC Rated currents: I<sub>b</sub> ..... A I<sub>max</sub> ..... A Accuracy class

#### 2. Description of Variant 1

approved on 13/07/17

This meter is also known as model IPD -163C. Please see the corresponding labels for IPD-163C (Figures 14/2/98 - 3 and 14/2/98 - 4).

#### TEST PROCEDURE No 14/2/98

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.

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

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

## FIGURE 14/2/98 - 1



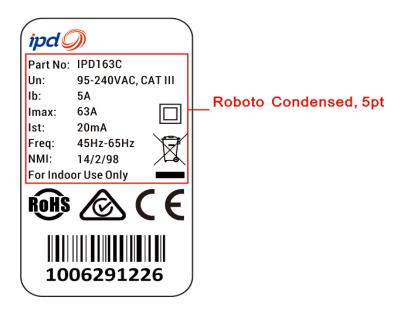
Ceiec Electric Technology Inc model CET PMC-220-C35AE Electricity Meter Including Typical Mechanical Sealing

## FIGURE 14/2/98 - 2



Ceiec Electric Technology Inc model CET PMC-220-C35AE Electricity Meter Showing Markings

#### FIGURE 14/2/98 – 3



Variant 1 - Ceiec Electric Technology Inc model IPD 163C Electricity Meter





Variant 1 - Ceiec Electric Technology Inc model IPD 163C Electricity Meter

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