



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval No 14/2/7

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

This is to certify that the approval for use for trade granted in respect of the

Enermet Model E2210K-15(100)-BR55 Electricity Meter

submitted by Enermet Pty Ltd
 7 Hi-Tech Court
 Eight Mile Plains QLD 4113

has been cancelled in respect of new instruments as from 1 December 2007.

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

A handwritten signature in black ink, appearing to be 'J. G. T.', written in a cursive style.

14/2/7
7 October 2002



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 14/2/7

Issued 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

Enermet Model E2210K-15(100)-BR55 Electricity Meter

submitted by Enermet Pty Ltd
7 Hi-Tech Court
Eight Mile Plains QLD 4113.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 September 2006, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 14/2/7 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 Commission 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 the Commission's Document NSC P106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

DESCRIPTIVE ADVICE

Pattern: approved 13 August 2001

- An Enermet model E2210K-15(100)-BR55 single phase Class 1 electronic watt hour meter used to measure electrical energy.

Variants: approved 13 August 2001

1. Certain other models of the E200 series and with certain optional features.

Technical Schedule No 14/2/7 describes the pattern and variant 1.

Variants: approved 13 September 2002

2. Certain models of the E200 MK2 series.

Technical Schedule No 14/2/7 Variation No 1 describes variant 2.

FILING ADVICE

Certificate of Approval No 14/2/7 dated 2 November 2001 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 14/2/7 dated 7 October 2002
Technical Schedule No 14/2/7 dated 2 November 2001 (incl. Test Procedure)
Technical Schedule No 14/2/7 Variation No 1 dated 7 October 2002
Figures 1 and 2 dated 2 November 2001

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.



TECHNICAL SCHEDULE No 14/2/7

Pattern: Enermet Model E2210K-15(100)-BR55 Electricity Meter.

Submittor: Enermet Pty Ltd
7 Hi-Tech Court
Eight Mile Plains QLD 4113

1. Description of Pattern

An Enermet model E2210K-15(100)-BR55 single phase Class 1 electronic direct connected multirate watt hour meter (Figures 1 and 2) used to measure electrical energy.

1.1 Field of Operation

- Number of phases 1
- Number of wires 2
- Reference frequency 50 Hz
- Reference ambient temperature ranges:
 - specified range of operation -10 to 60°C
 - limit range of operation -25 to 70°C
- Rated voltage 240 V AC
- Rated currents: Basic current, I_b 15 A
Maximum current, I_{max} 100 A
- Accuracy index 1

1.2 Features/Functions

- 2 elements
- 1 optical port
- liquid crystal display
- 4 LED status indicators
- internal battery-backup option
- ripple receiver option

1.3 Verification/Certification

Provision is made for the application of a verification/certification mark.

1.4 Sealing Provision

Provision is made for the calibration adjustments to be sealed by the application of mechanical seals.

1.5 Markings

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

Manufacturer's name or mark	...
Model designation	...
Serial number	...
Pattern approval mark	NSC No 14/2/7
Number of phases	...
Number of wires	...
Reference frequency	... Hz
Temperature limits (if other than -10 to 60°C)	... to ...°C
Meter constant	...
Rated voltage	... AC
Rated currents:	I_b ... A
	I_{max} ... A
Accuracy index	...

2. Description of Variant 1

Other models of the E200 series, having different features/functions to the pattern. Note that E200 is the basic series number – the full model number has a variety of additional alphanumeric characters, as identified below:

E2@10K-15(100)-#\$55, where

- @ is the number of elements, either 1 or 2
- # internal battery-backup option, either B (if fitted) or 0 (if not fitted)
- \$ ripple receiver option, either R (if fitted) or 0 (if not fitted)
- **** refers to different combinations of non-metrological functions and firmware, and may be any combination of numeric characters.

Instruments may be fitted with a number of optional features/functions, some of which are reflected in the model number as identified above. Options include:

- single element
- changeover relay(s) - one per element - 25 A current rating
- ON/OFF relay(s) - one per element - 40 A current rating
- internal battery-backup
- ripple receiver
- load profile memory
- OM1 option module - 2 signal output pulse output channels and 1 RS232 communications port.

TEST PROCEDURE

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

TESTS

1. AC Voltage Test - at initial verification only.
2. Running With No Load - at subsequent verifications/certifications.
3. Starting.
4. Accuracy.

14/2/7
7 October 2002

TECHNICAL SCHEDULE No 14/2/7
VARIATION No 1

Pattern: Enermet Model E2210K-15(100)-BR55 Electricity Meter.

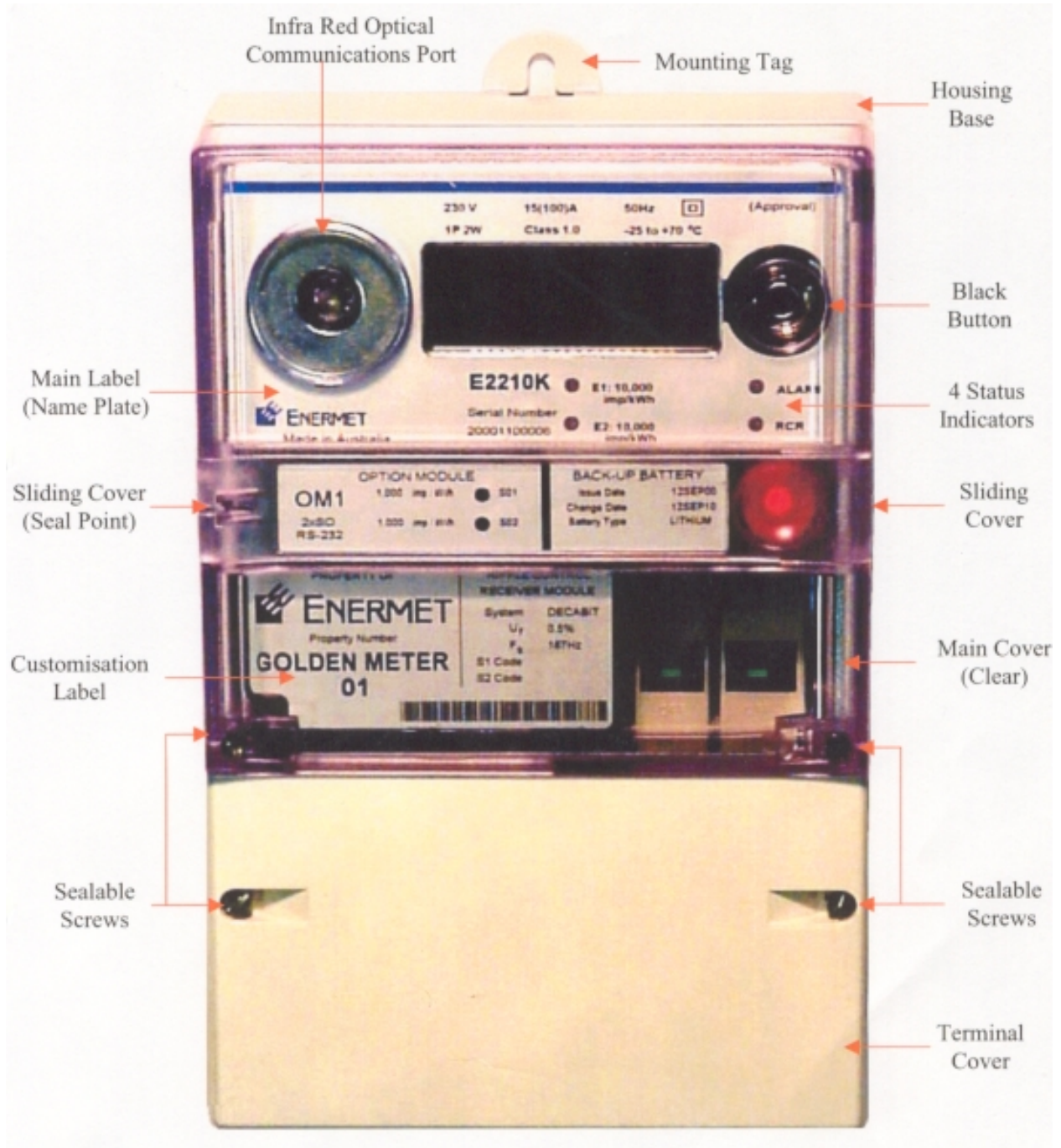
Submittor: Enermet Pty Ltd
7 Hi-Tech Court
Eight Mile Plains QLD 4113

1. Description of Variant 2

Various models of the E200 MK2 series which have the same specifications, features and functions as described in Technical Schedule No 14/2/7 dated 2 November 2001 for the pattern and variant 1 (now known as E200 MK1).

Certain minor changes have been made to the external casing and to the internal electrical circuitry, replacing connectors with ribbon cable.

FIGURE 14/2/7 - 1



Enermet Model E2110K-15(100)-BR55 Electricity Meter

14/2/7
2 November 2001

FIGURE 14/2/7 - 2



Enermet Model E2110K-15(100)-BR55 Electricity Meter