Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

No 14/2/35

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

Iskraemeco Model ME371 Electricity Meter

submitted by Formway Metering Services Pty Ltd
10 Millenium Circuit
Gaven QLD 4211.

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, *Pattern Approval and Initial Verification of Electricity Meter and Associated Transformers: Definitions, Metrological and Technical Requirements*, July 2004.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 March 2014, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI 14/2/35’ 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.

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

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

DESCRIPTIVE ADVICE

Pattern: approved 24 February 2009

- An Iskraemeco model ME371 electronic single phase Class 1 direct connect static watt hour meter used to measure electrical energy.

Variant: approved 24 February 2009

1. A model ME372 meter

Technical Schedule No 14/2/35 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/2/35 dated 22 March 2010
Technical Schedule No 14/2/35 dated 22 March 2010 (incl. Test Procedure)
Figure 1 dated 22 March 2010

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

TECHNICAL SCHEDULE No 14/2/35

Pattern: Iskraemeco Model ME371 Electricity Meter

Submittor: Formway Metering Services Pty Ltd
10 Millenium Circuit
Gaven QLD 4211

1. Description of Pattern

An Iskraemeco model ME371 electronic single phase Class 1 direct connect 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 -40 to 60°C
  - limit range of operation -40 to 70°C
- Rated voltage 230 V AC
- Rated currents: Basic current, I_b 10 A
  Maximum current, I_{max} 100 A
- Accuracy index 1

1.2 Features/Functions

- One (1) element.
- Liquid crystal digital indicator having eight (8) digits.
- Active energy measurement (Class 1).
- Communications ports.
- Optical port (IEC 62056-21).
- DLC modem.
- Internal clock.
- M-bus (optional).
- Bottom connect rectangular base.

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 one or more mechanical seals (Figure 1).

1.5 Descriptive Markings

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's name or mark	...
Model designation	...
Serial number	...
Pattern approval mark	NMI 14/2/35
Number of phases	...
Number or wires	...
Reference frequency	... Hz
Temperature limits	-40 to 60°C
Meter constant	...
Rated voltage	... AC
Rated currents:	I_b ... A
	I_{max} ... A
Accuracy index	Class 1

2. Description of Variant 1

An Iskraemeco model ME372 electricity meter which has the same features/functions as the pattern (model ME371) but with communications via RS485 or a GSM/GPRS modem.

TEST PROCEDURE

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.

TESTS

1. AC Voltage Test
2. Running With No Load
3. Starting
4. Accuracy

FIGURE 14/2/35 – 1

NOTE: Instruments MUST be marked in accordance with the Technical Schedule.

Iskraemeco ME371/ME372 Series Electricity Meter