



Australian Government
Department of Industry,
Innovation and Science

**National
Measurement
Institute**

Certificate of Approval

NMI 14/2/60

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.

EDMI Model Genius Mk6E Electricity Meter

submitted by EDM I Pty Ltd
162 South Pine Road
Brendale QLD 4500

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 **01/03/23**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variants 1 & 2 approved – interim certificate issued	12/11/12
1	Pattern and variants 1 & 2 approved – certificate issued	8/02/13
2	Pattern reviewed and updated – certificate issued	15/02/18

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/2/60' 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 S1/0/A or 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*.



Darryl Hines

TECHNICAL SCHEDULE No 14/2/60

1. Description of Pattern

approved on 12/11/12

An EDM1 model Genius Mk6E electronic polyphase Class 0.2 current transformer (CT) operated static watt hour meter (Figure 1) used to measure electrical energy.

1.1 Field of Operation

- Number of phases 3
- Number of wires 3 or 4
- Reference frequency 50 Hz
- Reference ambient temperature ranges:
 - specified range of operation -10 to 60°C
 - limit range of operation -20 to 70°C
- Rated voltage 57-240 V AC
- Rated currents:
 - Rated current, I_n 1 A
 - Maximum current, I_{max} 4 A
- Meter constant 1000 imp/kWh
- Accuracy class 0.2

1.2 Features/Functions

- Three (3) elements
- Electronic (LCD) digital indicator
- 12 time-of-use registers
- Load profiling memory User configurable from 1sec and above
- Internal battery &/or external battery options available
- RS232 or RS485 communications port options
- SCADA option
- Variable I/O options
- Auxiliary supply options

1.3 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 14/2/60
Number of phases	...
Number of wires	...
Reference frequency	... Hz
Temperature limits	... to ...°C (*)
Meter constant	...
Rated voltage	... AC
Rated currents:	I_n ... A
	I_{max} ... A
Accuracy class	Class 0.2

(*) Optional marking.

1.4 Verification Provision

Provision is made for the application of a verification mark.

1.5 Sealing Provision

Provision is made for the instrument to be sealed by the application of one or more mechanical seals (Figure 1).

2. Description of Variant 1

approved on 12/11/12

The EDM I model Genius Mk6E Class 0.5 current transformer (CT) operated static watt hour meter used to measure electrical energy.

This variant the same Field of Operation and Features as the pattern except for the following:

- Accuracy class 0.5

3. Description of Variant 2

approved on 12/11/12

The EDM I model Genius Mk6E Class 0.2 current transformer (CT) operated static watt hour meter used to measure electrical energy.

This variant the same Field of Operation and Features as the pattern except for the following:

- Rated currents: Rated current, I_n 5 A
Maximum current, I_{max} 20 A
- Accuracy class 0.2 or 0.5

TEST PROCEDURE No 14/2/60

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*.

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 14/2/60 – 1



EDMl Model Genius Mk6E Electricity Meter
(including markings and typical sealing)

FIGURE 14/2/60 – 2



EDMI Model Genius Mk6E Variant 2 Electricity Meter

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