

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change Certificate of Approval No 14/2/6 Change No 1

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

The following changes are made to the approval documentation for the

ISKRA Model E895G2 Electricity Meter

submitted by Formway Metering Services Pty Ltd now of 10 Millenium Circuit GAVEN QLD 4211.

A. In Certificate of Approval No 14/2/6 and its Technical Schedule both dated 9 November 2001, all references to the address of the submittor should be amended to read:

"10 Millenium Circuit GAVEN QLD 4211."

- B. In Certificate of Approval No 14/2/6 dated 9 November 2001;
- 1. The Condition of Approval referring to the review of the approval should be amended to read:

"This approval becomes subject to review on 1 September 20**12**, and then every 5 years thereafter."

2. The FILING ADVICE should be amended by adding the following: "Notification of Change No 1 dated 21 September 2007"

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





National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 14/2/6

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

ISKRA Model E895G2 Electricity Meter

submitted by Formway Metering Services Pty Ltd 2 Barnett Place Ernest QLD 4212.

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.

Certificate of Approval No 14/2/6

Page 2

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 = ked NSC No 14/2/6 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 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 ISKRA model E895G2 single phase general purpose electromechanical watt hour meter used to measure electrical energy.

Variant: approved 13 August 2001

1. Model E895G2-5 which is fitted with a pulse transmitter.

Technical Schedule No 14/2/6 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/2/6 dated 9 November 2001 Technical Schedule No 14/2/6 dated 9 November 2001 (incl. Test Procedure) Figures 1 and 2 dated 9 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.

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TECHNICAL SCHEDULE No 14/2/6

Pattern: ISKRA Model E895G2 Electricity Meter.

Submittor: Formway Metering Services Pty Ltd 2 Barnett Place Ernest QLD 4212

1. Description of Pattern

An ISKRA model E895G2 single phase general purpose electromechanical direct connected 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		General purpose
•	limit range of o Rated voltage Rated currents:	peration	-25 to 70°C 240 V AC 15 A 100 A

1.2 Features

The pattern has a four terminal rectangular base and a mechanical digital indicator having a maximum display of 999999 kW h (Figure 1).

Instruments may be fitted with a device to prevent reverse turning of the rotor disc.

1.3 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 14/2/6
Number of phases	
Number or wires	
Reference frequency	Hz
Temperature limits (if other than-10 to 60°C)	toºC
Meter constant	
Rated voltage	AC
Rated currents:	I _b A
	I _{_max} A
Accuracy index	

Technical Schedule No 14/2/6

1.4 Verification/Certification

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

1.5 Sealing Provision

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

2. Description of Variant 1

The ISKRA model E895G2-5 electricity meter which is the pattern fitted with an ISKRA model -5 inductive pulse transmitter. The pulse transmitters are manufactured to conform to DIN 43 864 standard.

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

- A. The following tests shall be carried out in accordance with the Commission's document NSC M 6, Pattern Approval and Initial Verification of Electricity Meters and Associated Transformers.
 - 1. AC Voltage Test at initial verification only.
 - 2. Starting.
 - 3. Accuracy.
- B. At subsequent verifications/certifications only, conduct either of the following tests:
 - (i) Test for anti-creep function (induction meters):
 - (a) Rotate the disc with a pulse current until a point is found at which the disc creeps slowly forward when voltage is applied.
 - (b) Then rotate the disc again until a point is found where the disc creeps slowly backwards on voltage only.

If these two points can be located the meter has passed the test and will not creep in service.

or

- (ii) Under the following conditions, the rotor may start but shall not complete a revolution:
 - (a) Voltage reference voltage in each voltage circuit.
 - (b) Current 0.001 I_{b} (power factor (p.f.) = 1) in each current circuit, and connected in turn for forward and reverse rotation.

FIGURE 14/2/6 - 1



ISKRA Model E895G2 Electricity Meter

FIGURE 14/2/6 - 2



Model E895G2 Without Covers