14/2/8
5 November 2007

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval No 14/2/8

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

Centron Model SM1A1L2SEABY Electricity Meter

submitted by ACTARIS Pty Ltd
8 Rosberg Court
Wingfield SA 5013

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*.

14/2/8
3 December 2001

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 14/2/8

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

Centron Model SM1A1L2SEABY Electricity Meter

submitted by ACTARIS Pty Ltd
formerly Schlumberger Measurements and Systems Pty Ltd
8 Rosberg Court
Wingfield SA 5013.

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.

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CONDITIONS OF APPROVAL

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

Instruments purporting to comply with this approval shall be marked NSC No 14/2/8 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 25 September 2001

- A Centron model SM1A1L2SEABY single phase Class 1 electronic watt hour meter used to measure electrical energy.

Variant: approved 25 September 2001

1. Other models of the SM1 series having different non-metrological features.

Technical Schedule No 14/2/8 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/2/8 dated 3 December 2001
Technical Schedule No 14/2/8 dated 3 December 2001 (incl. Test Procedure)
Figure 1 dated 3 December 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 14/2/8

Pattern: Centron Model SM1A1L2SEABY Electricity Meter.

Submittor: ACTARIS Pty Ltd
8 Rosberg Court
Wingfield SA 5013

1. Description of Pattern

A Centron model SM1A1L2SEABY single phase Class 1 electronic direct connected multirate watt hour meter (Figure 1) 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		230 V AC
• Rated currents:	Basic current, I_b	20 A
	Maximum current, I_{max}	100 A
• Accuracy index		1

1.2 Features/Functions

- 1 element
- liquid crystal display
- 1 LED pulse indicator
- 1 pulse/serial output

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 14/2/8
Number of phases		...
Number or wires		...
Reference frequency		... Hz
Temperature limits (if other than -10 to 60^{o}C)		... to ...^{o}C
Meter constant		...
Rated voltage		... AC
Rated currents:	Basic current (I_b)	... A
	Maximum current (I_{max})	... A
Accuracy index		...

2. Description of Variant 1

Other models of the SM1 series, having different features/functions to the pattern. Note that SM1 is the basic series number – the full model number has a suffix of nine (9) additional alphanumeric characters, which refers to different combinations of non-metrological functions, firmware and options.

TEST PROCEDURE

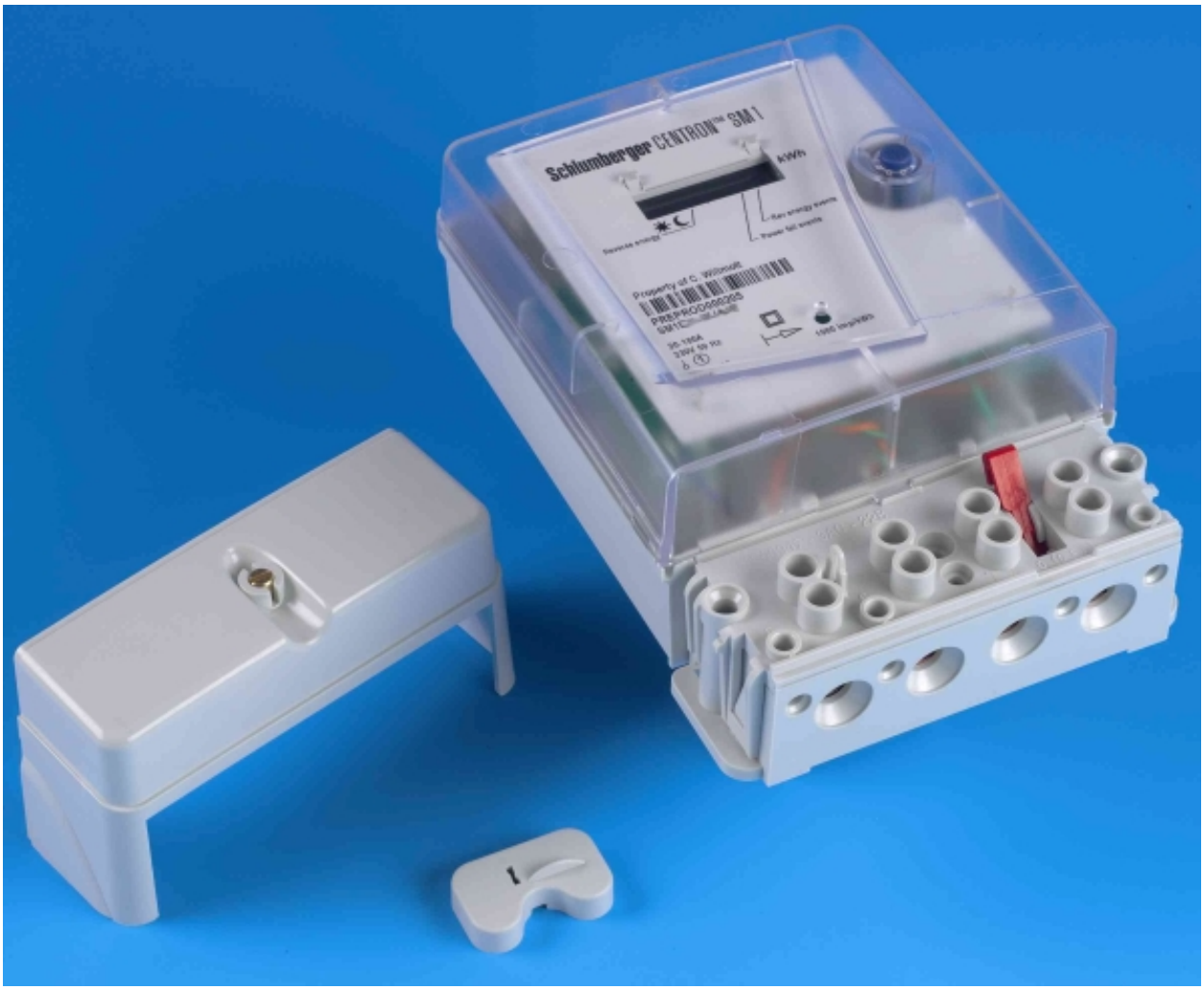
Instruments tested for initial verification shall comply with the certificate of approval and technical schedule, and the maximum permissible errors for initial and subsequent verifications/certifications at the operating conditions in effect at the time of verification.

TESTS

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. Running With No Load - at subsequent verifications/certifications only.
3. Starting.
4. Accuracy.

FIGURE 14/2/8 - 1



Centron Model SM1A1L2SEABY Electricity Meter