14/2/29
21 November 2012

Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation

Certificate of Approval

No 14/2/29

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

Actaris Model ACE SL761B070 Electricity Meter

submitted by Actaris Pty Ltd
8 Rosberg Road
WINGFIELD SA 5013

has been cancelled in respect of new instruments as from 1 January 2013.

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

Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

No 14/2/29

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

Actaris Model ACE SL761B070 Electricity Meter

submitted by Actaris Pty Ltd
8 Rosberg Road
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.

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 June 2012, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI 14/2/29’ and only by persons authorised by the submittor.

…./2

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.

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 9 May 2007

- An Actaris model ACE SL761B070 poly phase Class 0.5 transformer (CT/VT) connected static watt hour meter used to measure electrical energy.

Variant: approved 9 May 2007

1. A model ACE SL761E070 Class 1 direct connected watt hour meter.

Technical Schedule No 14/2/29 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/2/29 dated 4 July 2007
Technical Schedule No 14/2/29 dated 4 July 2007 (incl. Test Procedure)
Figures 1 and 2 dated 4 July 2007

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 14/2/29

Pattern: Actaris Model ACE SL761B070 Electricity Meter

Submittor: Actaris Pty Ltd
8 Rosberg Road
WINGFIELD SA 5013.

1. Description of Pattern

An Actaris model ACE SL761B070 poly phase Class 0.5 transformer (CT/VT) connected static watt hour meter (Figure 1) used to measure electrical energy.

1.1 Field of Operation

- Number of phases 3
- Number of wires 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 240/415 V AC
- Rated currents: Basic current, I_n 1 A
  Maximum current, I_{max} 10 A
- Accuracy index 1

1.2 Features/Functions

- 3 elements.
- IEC 61107 optical interface (IEC 62056 communications protocol).
- Liquid crystal digital indicator having a maximum display of 9999999.9 kW h.
- Active energy measurement (Class 0.5).
- Reactive energy measurement (Class 2).
- Auto ranging from 57.7/100 V to 240/415 V.
- Load profiling memory (programmable from 1 to 1440 minutes).
- Super capacitor and replaceable battery.
- Bottom connect rectangular base.

Optional features include;

- Two RS 232 or RS 485 communication ports.
- Four input pulse counters.
- Up to 10 Independent Energy Channels, 32 rate registers.
- Up to 10 Independent Demand Channels, 24 rate registers.
- 2 × 8 load profile channels.
- Six pulse outputs.
- Two control inputs.
- Four control outputs.

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 (Figure 2).

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 14/2/29
Number of phases	...
Number or wires	...
Reference frequency	... Hz
Temperature limits (if other than -10 to 45^{o}C)	... to ...^{o}C
Meter constant	...
Rated voltage	... V AC
Rated currents:	I_n or I_b ... A
	I_{max} ... A
Accuracy index	...

2. Description of Variant 1

A model ACE SL761E070 Class 1 direct connected watt hour meter which has the same specifications as listed in clause **1.1 Field of Operation** and clause **1.2 Features/Functions** for the pattern, except for the following:

- Rated currents: Basic current, I_b 10 A
  Maximum current, I_{max} 120 A
- Active energy measurement Class 1
- Reactive energy measurement Class 2

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.

14/2/29
30 January 2008

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 14/2/29
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

Actaris Model ACE SL761B070 Electricity Meter

submitted by Actaris Pty Ltd
8 Rosberg Road
WINGFIELD SA 5013.

A. In Certificate of Approval No 14/2/29 dated 4 July 2007, the FILING ADVICE should be amended by adding the following:

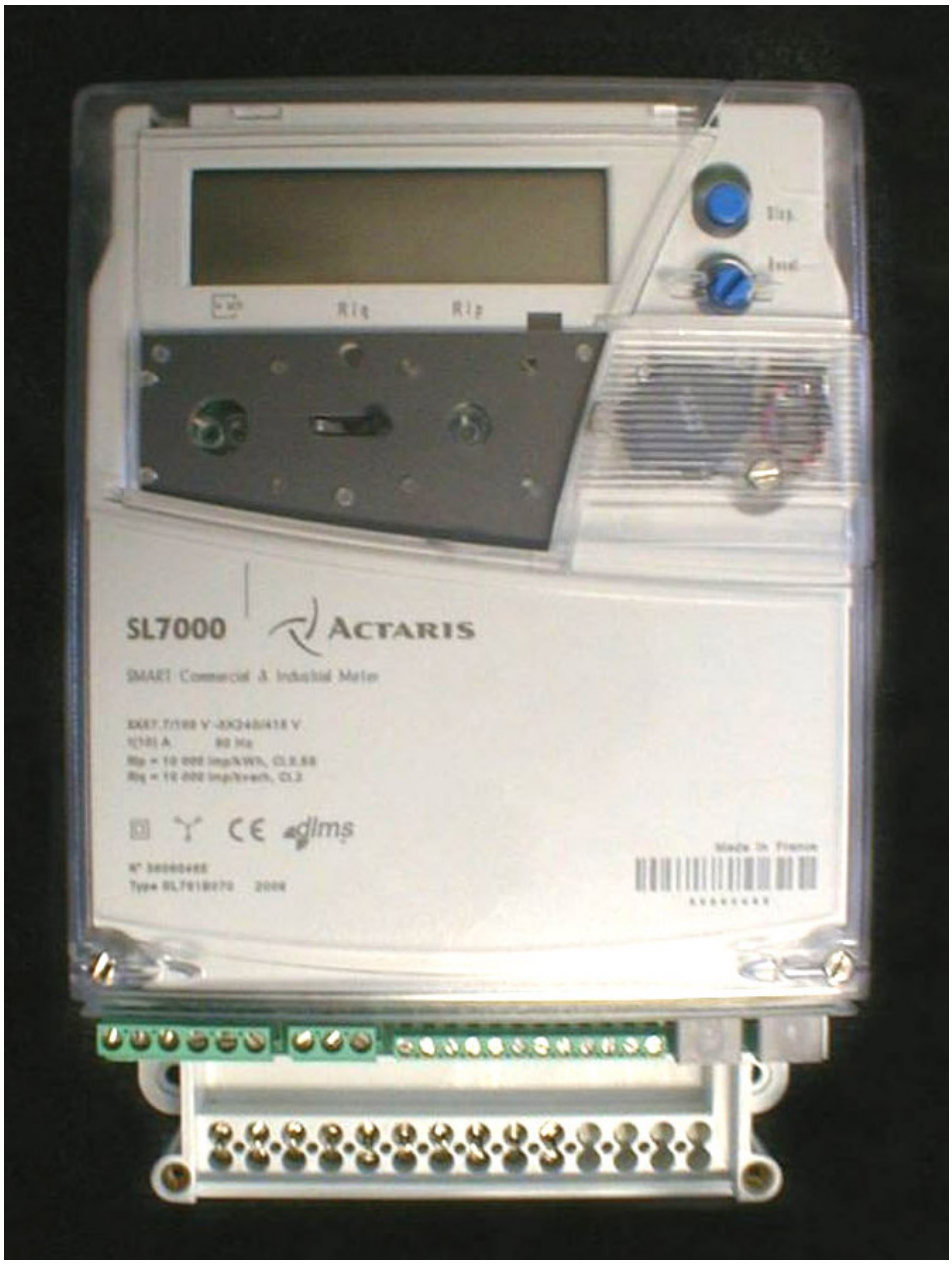
"Notification of Change No 1 dated 30 January 2008

B. In Technical Schedule No 14/2/29 dated 4 July 2007, the value to the 'Accuracy index' in clause **1.1 Field of Operation**, should be amended to read:

"0.5"

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

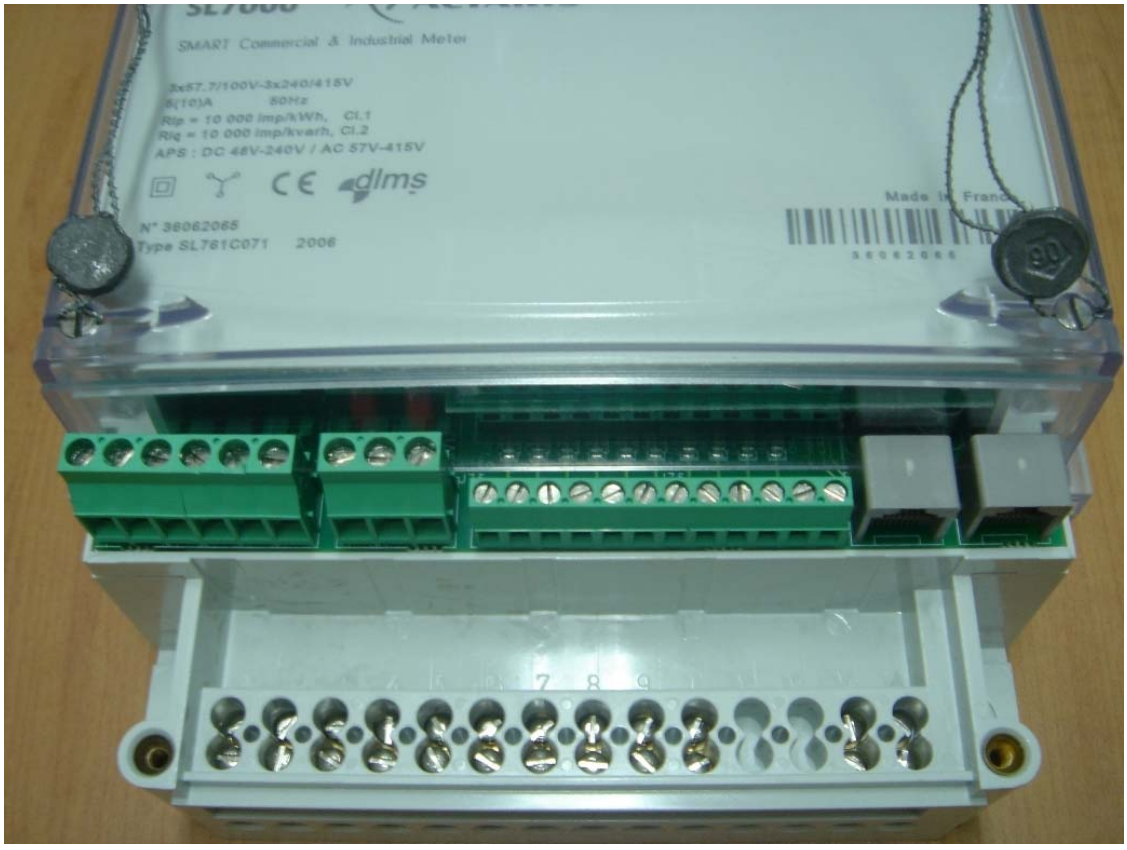
FIGURE 14/2/29 – 1



Actaris Model ACE SL761B070 Electricity Meter

14/2/29
4 July 2007

FIGURE 14/2/29 – 2



Showing Typical Sealing