Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation

Certificate of Approval

No 14/2/4

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

Landis & Gyr Model CM170xf6 Electricity Meter

submitted by Landis & Gyr Pty Ltd
(formerly submitted by Siemens Metering)
65 Mills Road
Braeside VIC 3195

has been cancelled in respect of new instruments as from 1 October 2012.

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

14/2/4
4 September 2001

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 14/2/4

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

Landis & Gyr Model CM170xf6 Electricity Meter

submitted by Siemens Metering
411 Ferntree Gully Road
Mount Waverley VIC 3149.

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 July 2006, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 14/2/4 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 8 June 2001

- A Landis & Gyr model CM170xf6 single phase general purpose electromechanical watt hour meter used to measure electrical energy.

Variants: approved 8 June 2001

1. With a plug in type base.
2. With dual displays.

Technical Schedule No 14/2/4 describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/2/4 dated 4 September 2001
Technical Schedule No 14/2/4 dated 4 September 2001 (incl. Test Procedure)
Figures 1 to 3 dated 4 September 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 14/2/4

Pattern: Landis & Gyr Model CM170xf6 Electricity Meter.

Submittor: Siemens Metering
411 Ferntree Gully Road
Mount Waverley VIC 3149.

1. Description of Pattern

A Landis & Gyr model CM170xf6 single phase general purpose electromechanical direct connected 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		240 V AC
• Rated currents:	Basic current, I_b	15 A
	Maximum current, I_{max}	100 A
• Accuracy index		General purpose

1.2 Features

The pattern has a four terminal bottom connected base and a mechanical digital indicator having a maximum display of 999999 kWh (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 14/2/4
Number of phases		...
Number or wires		...
Reference frequency		... Hz
Temperature limits (if other than -10 to 60°C)		... to ...°C
Meter constant		...
Rated voltage		... AC
Rated currents:	Basic current (I_b)	... A
	Maximum current (I_{max})	... A
Accuracy index		...

1.4 Verification/Certification

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

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1.5 Sealing Provision

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

2. Description of Variants

2.1 Variant 1

With a plug in type base (Figure 2) in which case the model number has a ‘15’ rather than a ‘6’ suffix, e.g. the pattern becomes a model CM170xf15.

2.2 Variant 2

The pattern or variant 1 fitted with dual indicators and a relay, in which case the model number includes a ‘d’ as the 7th character, e.g. the pattern becomes a model CM170xdf6 (Figure 3).

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.

14/2/4
27 August 2007

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 14/2/4
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

Landis & Gyr Model CM170xf6 Electricity Meter

submitted by Siemens Metering
(now Landis & Gyr Pty Ltd)
now of 65 Mills Road
Braeside VIC 3195.

A. In Certificate of Approval No 14/2/4 and its Technical Schedule both dated 4 September 2001, all references to the name and address of the submittor should be amended to read:

"Landis & Gyr Pty Ltd
65 Mills Road
Braeside VIC 3195."

B. In Certificate of Approval No 14/2/4 dated 4 September 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 July 20**12**, and then every 5 years thereafter."

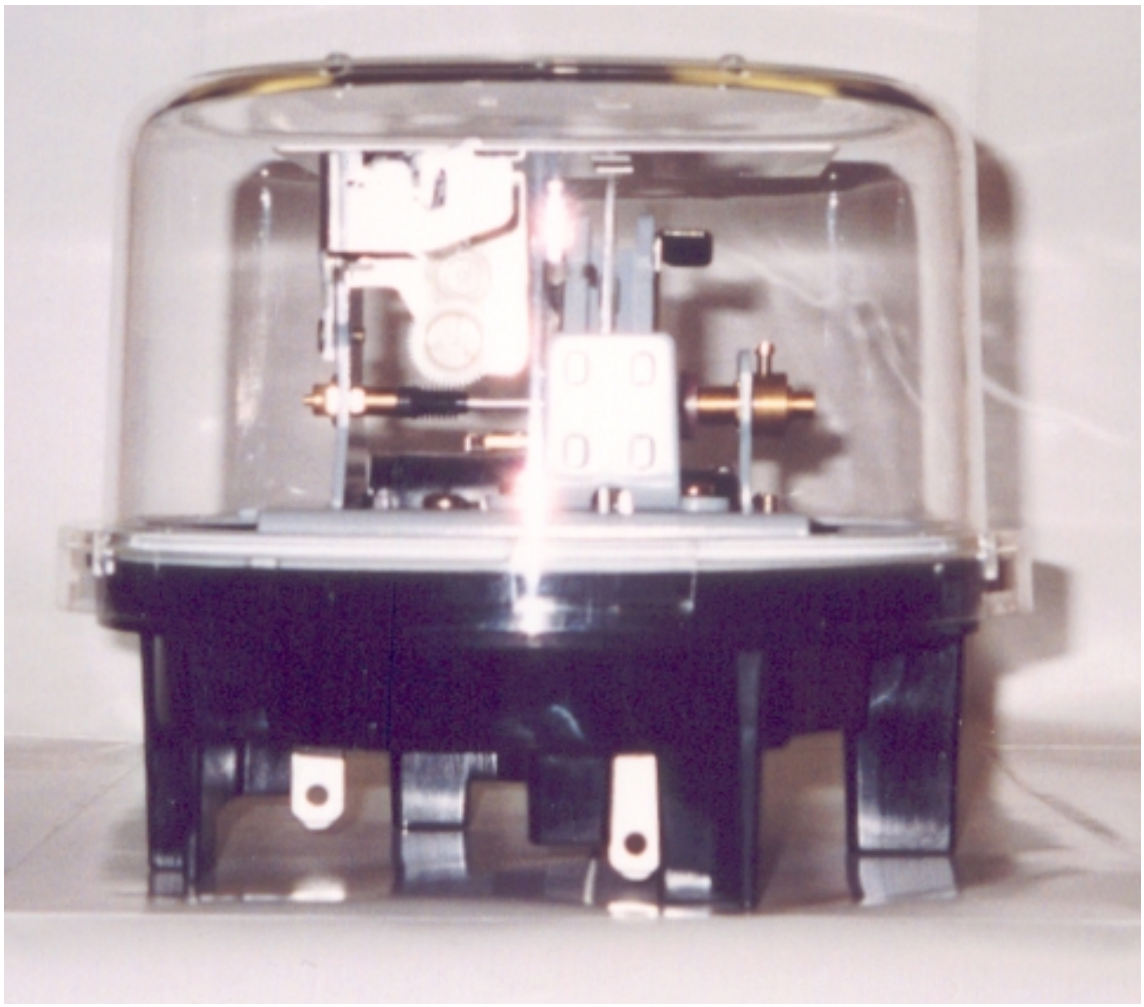
2. The FILING ADVICE should be amended by adding the following:
"Notification of Change No 1 dated 27 August 2007

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

FIGURE 14/2/4 - 1

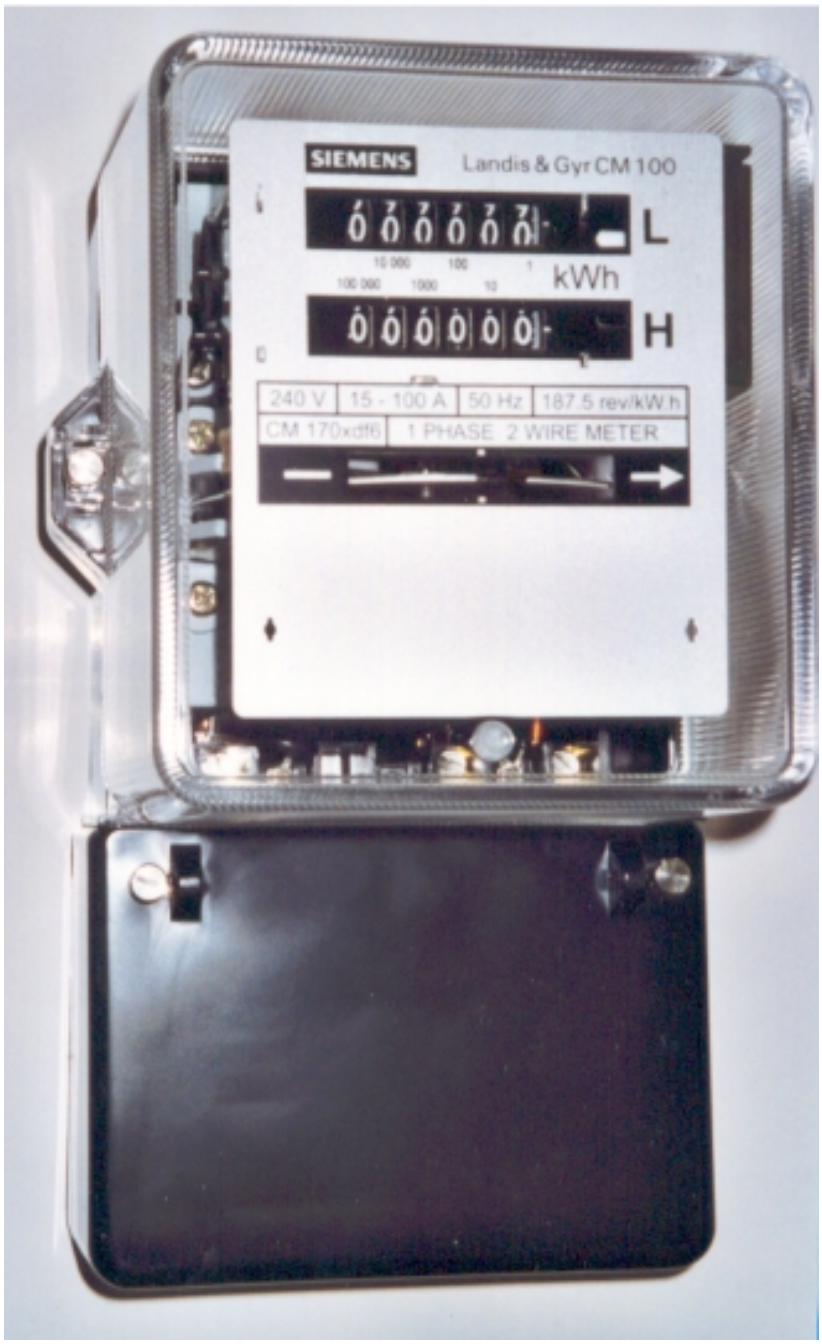
Landis & Gyr Model CM170xf6 Electricity Meter

FIGURE 14/2/4 - 2



Showing Plug In Type Base

FIGURE 14/2/4 - 3



Showing Dual Indicators