5/6A/221
17 February 2012

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Withdrawal

of

Instrument Certificate of Approval

No 5/6A/221

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

Gilbarco Model T091B Electroline Fuel Dispenser for Motor Vehicles

submitted by Gilbarco Australia Limited
20 Highgate Street
AUBURN NSW 2144

has been withdrawn in respect of both instruments approved under the Instrument Certificate, as from 1 March 2012, with the effect that the instruments are no longer measuring instruments with an approved pattern and therefore must be removed from use for trade.

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

Instrument Certificate of Approval

No 5/6A/221

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

Gilbarco Model T091B Electroline Fuel Dispenser for Motor Vehicles

submitted by Gilbarco Australia Limited
20 Highgate Street
AUBURN NSW 2144.

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 R 117-1, Measuring Systems for Liquids Other than Water, dated July 2004.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 July 2014, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 5/6A/221' 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.

…./2

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.

Special Condition of Approval:

The approval is limited to two (2) instruments (dispensers), one each of the pattern (model T091B, serial number 803769/70) and variant 1 (model T091G, serial number 302043/44). Each instrument is fitted with two (2) metering systems (meters, hoses and nozzles).

DESCRIPTIVE ADVICE

Pattern: approved 12 June 2009

- A Gilbarco model T091B Electroline fuel dispenser for motor vehicles approved for use to dispense various grades of petrol in attendant-operated mode.

Variant: approved 12 June 2009

1. A Gilbarco model T091G Electroline fuel dispenser which has the same components and capabilities as the pattern.

Technical Schedule No 5/6A/221 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Instrument Certificate of Approval No 5/6A/221 dated 12 November 2009
Technical Schedule No 5/6A/221 dated 12 November 2009 (incl. Test Procedure)

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 5/6A/221

Pattern: Gilbarco Model T091B Electroline Fuel Dispenser for Motor Vehicles

Submittor: Gilbarco Australia Limited
20 Highgate Street
AUBURN NSW 2144

1. Description of Pattern

A Gilbarco model T091B Electroline fuel dispenser for motor vehicles approved to dispense various grades of petrol (*) in attendant-operated mode. Refer to the Special Condition of Approval.

The meter is adjusted to be correct for the liquid for which it is to be verified/ certified.

(*) including up to 85% ethanol (E85).

1.1 Field of Operation

The field of operation of the measuring system is determined by the following characteristics:

- Minimum measured quantity, V_{min} 2 L
- Maximum flow rate, Q_{max} 50 L/min
- Minimum flow rate, Q_{min} 5 L/min
- Maximum pressure of the liquid, P_{max} 350 kPa
- Minimum pressure of the liquid, P_{min} 140 kPa (#1)
- Range of liquids viscosity (at 20°C) 0.5 to 20 mPa.s (#2)
- Maximum temperature of the liquid, T_{max} 50°C
- Minimum temperature of the liquid, T_{min} -10°C
- Ambient temperature range -25 to 55°C
- Accuracy class 0.5

(#1) Minimum pressure required for effective operation of the gas elimination device.

(#2) The flowmeter is adjusted for use with one product viscosity. Fuels are various grades of petrol (which may include up to 85% ethanol).

1.2 Description of the Metering System

The instrument incorporates the following components:

(i) Two Gilbarco model G-Rotor pumping units.

(ii) Two measurement transducers each comprising a Gilbarco model T262 four piston positive displacement flowmeter directly connected to a pulse generator which is integrated in a Calcopac calculator/indicator;

(iii) A hose/nozzle, mounted on each side of the dispenser housing. The nozzle used is a 16 mm ZVA Elaflex nozzle. (*)

(*) Note that the submittor must be consulted regarding the acceptability of any alternative nozzles.

…./2

1.3 Calculator/Indicators

Two Gilbarco model Electroline-type Calcopac calculator/indicators are fitted.

1.4 Checking Facilities

An automatic segment test is performed at the start of each delivery.

1.5 Sealing Provision

The gas separator test valve has provision for sealing. The meter calibration access is sealed.

1.6 Verification/Certification Provision

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

1.7 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location on a data plate:

Pattern approval sign	5/6A/221	
Manufacturer's identification mark or trade mark	.....	
Manufacturer's designation (model number)	.....	
Serial number	.....	
Year of manufacture	.....	
Maximum flow rate (Q_{max})	..... L/min	
Minimum flow rate (Q_{min})	..... L/min	
Minimum measured quantity (V_{min})	 L	(#1)
Maximum operating pressure (P_{max})	..... kPa	
Minimum operating pressure (P_{min})	..... kPa	
Nature of liquids to be measured	.....	(#2)
Maximum temperature of the liquid, T_{max}	50°C	
Minimum temperature of the liquid, T_{min}	-10°C	
Environmental class	class C	

(#1) In addition, the minimum measured quantity (V_{min}) shall be clearly visible on any indicating device visible to the user during measurement, in the form 'Minimum delivery 2 L'.

(#2) e.g. petrol.

2. Description of Variant 1

A Gilbarco model T091G Electroline fuel dispenser which has the same components and capabilities as the pattern.

TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures. Tests should be conducted in conjunction with any tests specified in the approval documentation for any components used.

Maximum Permissible Errors at Verification/Certification

The maximum permissible error applied during a verification test of the fuel dispenser using the liquid for which it is to be verified/certified, and from normal flow rate to the minimum flow rate is:

0.3%.

Note: Adjusting the errors of a meter to values OTHER than as close as practical to zero is forbidden, even when these values are within the maximum permissible errors."

Other applicable maximum permissible errors are:

±0.5% for gas elimination device for petrol; and

±1.0% for gas elimination device for liquids having a dynamic viscosity exceeding 1 mPa.s.

For instruments with a minimum measured quantity of 2 L;

±20 mL for deliveries equal to the minimum measured quantity; and

±20 mL due to hose dilation for instruments without a hose reel.

5/6A/221
7 June 2010

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 5/6A/221
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

Gilbarco Model T091B Electroline Fuel Dispenser for Motor Vehicles

submitted by Gilbarco Australia Limited
20 Highgate Street
AUBURN NSW 2144.

In Certificate of Approval 5/6A/221 dated 12 November 2010;

(i) The **Special Conditions of Approval** should be amended by adding the following:

"The instruments may be relocated to different sites without being reverified but must be verified at least annually."

(ii) The FILING ADVICE should be amended by adding the following:

"Notification of Change No 1 dated 7 June 2010"

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