



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 99ATEX9063

4 Equipment: Dimension Plus™ (GMPD) Range of Liquid Fuel Dispensers

5 Applicant: Marconi Commerce Systems Limited (formerly Gilbarco Ltd)

6 Address: Crompton Close
Basildon
Essex
SS14 3BA

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number R51X5741A.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

BS 7117: Part 1: 1991
Pas 022: 1997
PrEN 13617-1:1999
VdTÜV 651: 1993

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2G
BS 7117: Part 1: 1991 and/or PrEN 13617-1:1999

M D Shearman
Certification Manager

Project Number 51X5741
Date 12 May 2000
C. Index 09

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Sira Certification Service

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SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The Dimension Plus™ (GMPD) liquid fuel dispenser is a hose cassette, multi-product device rated at single phase 230 V and consists of a fabricated steel frame clad with GRP or steel panels to form an hydraulic housing, hose cassette and display and control unit.

The hydraulic housing contains up to four hydraulic circuits comprising an electrically driven pumping unit, interconnecting pipework, electrically actuated flow control valves, hoses and metering unit. The outlet pipes pass into the integral hose cassette and are connected to outlet hoses suitable for petroleum dispensing. Each hose is fitted with a suitably certified dispenser nozzle and optional dry break coupling. The nozzles are located in suitable boots fitted on either or both sides of the hose cassette and actuate proximity switches as they are removed or replaced. Fuel vapour is isolated and vented from the hydraulic circuit by means of a vapour separator and flame arrestor arrangement. Ventilation is provided by means of spacing around, and slots in, the housing cover panels.

The control and display unit is mounted in a safe area. It is electrically connected to pulsers and switches in the hydraulic housing with the proximity switches located in the hose cassette. The cables pass through a ventilated channel formed between the hydraulic housing and hose cassette. All electrical components are suitably certified apparatus and cabling is suitable for petroleum dispensing, as specified on the schedule drawings. The electrical circuit and enclosure metalwork is suitably earthed.

The dispenser operates at a flow rate of 40 L/min (nominal) and may dispense up to four discrete products with only one product being dispensed from each side at one time. The dispenser may be attendant operated, attended self-service or unattended with remote or local supervision and control.

Design Options

- An alternative rating of electrical circuits up to 400 V 3-phase.
- An alternative High Flow variant (80 L/min nominal) or Ultra-High Flow variant (120 L/min nominal). These variants may also have two speed options (ie. 40/80 or 40/120 L/min)
- The omission of any hydraulic circuits and consequent reduction in the frame and housing size.
- An alternative Satellite dispenser arrangement. This arrangement is used to fuel large vehicles with fuel tanks on either side and consists of a 'satellite' dispenser linked to and fed from a 'host' dispenser via an underground fuel line. The Satellite dispenser is fitted with optional solenoid valves and side select switches. An optional display module is powered from the host dispenser via an underground cable. The host dispenser is fitted with a satellite selection switch in the display head.
- An alternative vapour recovery variant. The vapour recovery system comprises a suitably certified vapour recovery pump and optional motor, internal pipework, suitable twin concentric delivery hose and splitter assembly and a suitable dispenser nozzle with either an electrically or nozzle operated flow control valve. A vapour inlet stop valve is fitted within the nozzle.
- An alternative submersible pump variant, the housing having the pump and associated motor omitted. A suitable shear valve is fitted at each dispenser inlet pipe.

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14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Sheet	Rev.	Date	Title
	BW703901	100	L946	18 Apr 00	General Arrangement and Foundation Drawing
	BW703901	101	L946	12 May 00	General Arrangement and Zoning Drawing
	BW703901	102	L946	11 Feb 00	Typical Wiring Diagram (I.S. Direct Version)
	BW703901	103	L946	18 Apr 00	Typical Assembly
	BW703901	104	L946	18 Apr 00	Hydraulic Schematics
	BW703901	105	L946	11 Feb 00	Hydraulic Joints
	BW703901	106	L946	12 May 00	Safety Critical Components Tabulation
	BW703901	108	L946	18 Apr 00	Hydraulic Schematics
	BW703901	109	L946	18 Apr 00	General Arrangement with Satellite
	BW703901	110	L946	11 Feb 00	Vapour Recovery Hydraulic Schematics

14.2 Report No. R51X5741A

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSR'S)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. R51X5741A.

17 CONDITIONS OF CERTIFICATION

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of SCS Certificates.
- 17.2 The electrical circuit of each unit shall be subjected to the routine electrical tests required by clause 9.1 of prEN 13617-1:1999, and clause 8.1.2 of BS 7117: Part 1: 1991.
- 17.3 The hydraulic circuit of each unit manufactured to prEN 136170-1:1999 shall be subjected to the routine tests required by clause 9.2 of this standard.
- 17.4 The manufacturer shall provide a copy of the equipment instructions with each unit. These instructions shall be in the language of the country in which the equipment is to be used.

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