



# Certification of

## EXPLOSION PROTECTED ELECTRICAL EQUIPMENT

Administered by: Standards Australia Quality Assurance Services

*This certificate is granted subject to the conditions as set out in Standards Australia Miscellaneous Publication MP 69 and the Procedures (Doc Q7134) of the scheme.*

*The electrical equipment and any acceptable variation to it specified in the schedule to this certificate and the identified documents, was found to comply with the following standards:*

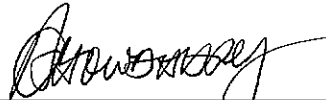
**AS 2229.1 - 1982      Electrical equipment for explosive atmospheres - Electrical systems of dispensing equipment - Part 1 : Flammable liquid dispensing equipment**

*This certificate does not ensure compliance with electrical safety and performance requirements other than those included in the standard listed above.*

*The equipment listed has successfully met the examination and test requirements as recorded in*

*Test Report No:* **NE01/0027**

*File Reference:* **00/0219      (P80943)**



*Signed for and on behalf of issuing authority*

**A/Senior Engineer - Certification  
Engineering, Testing and Certification Centre**

*Position*

**18 June 2001**

*Date of issue*

*This certificate and schedule may not be reproduced except in full.*

*This certificate is not transferable and remains the property of Standards Australia Quality Assurance Services and must be returned in the event of its being revoked or not renewed.*

**Certificate No.: Ex 2489X      Issue: 1**

*Issued by:*



### Engineering, Testing and Certification Centre

**2 Smith Street, REDBANK, QLD 4301, Australia  
Postal Address: PO Box 467, GOODNA, QLD 4300, Australia  
Phone: + 61 7 3810 6381      Fax: + 61 7 3810 6366**



**Quality System Certified to  
AS/NZS ISO 9001  
Certification No 6039**

## STANDARDS AUSTRALIA



Standards Australia Quality Assurance Services Pty Limited A.B.N. 67 050 611 642

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## Schedule

### Equipment:

The Laser series of fuel dispensers covered by this supplementary certificate is listed in Table 1. The housing for the equipment is constructed from sheet metal (mild steel or stainless steel). This supplementary certificate covers the inclusion of models incorporating vapour barriers. These models are identified by the suffix 'V' in the model number.

The internal equipment comprises the following:

- **C4000 Fuel Dispenser Control Unit:** A separately certified microprocessor based device which controls all the electrical functions associated with the fuel dispenser.
- **Separately certified flameproof (Ex d ) enclosure:** This enclosure houses equipment associated with the C4000 Fuel Dispenser Control Unit.
- **Separately certified solenoids.**
- **Separately certified motors (flammable liquid units with internal pumps only).**

Certificate No.: Ex 2489X Issue: 1 Date of Issue: 18 June 2001

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Administered by: Standards Australia Quality Assurance Services

Addendum to Certificate No..... : **Ex 2489X**

Issue: **1**

Date of Issue: **18 June 2001**

**Table 1. Range of LASER Series Non-LPG Fuel Dispensers**

Model	Description of Dispenser
L40S-V	Single non-LPG, 40 lpm, external pump
L40P-V	Single non-LPG, 40 lpm, internal pump
L80S-V	Single non-LPG, 80 lpm, external pump
L80P-V	Single non-LPG, 80 lpm, internal pump
L160S-V	Single non-LPG, 160 lpm, external pump
L160P-V	Single non-LPG, 160 lpm, internal pumps
L40SD-V	Dual non-LPG, 40 lpm each, external pump(s)
L40PD-V	Dual non-LPG, 40 lpm each, internal pump
L80SD-V	Dual non-LPG, 80 lpm each, external pump(s)
LL40S-V	2 x Single non-LPG, 40 lpm each, external pumps
LL40P-V	2 x Single non-LPG, 40 lpm each, internal pumps
LL80S-V	2 x Single non-LPG, 80 lpm each, external pumps
LL80P-V	2 x Single non-LPG, 80 lpm each, internal pumps
LL160S-V	2 x Single non-LPG, 160 lpm, external pumps
LL160S/40S-V	2 x Single non-LPG, 1 x 160 lpm, 1 x 40 lpm, external pumps
LL160S/80S-V	2 x Single non-LPG, 1 x 160 lpm, 1 x 80 lpm, external pumps
LL40SQ-V	2 x Dual non-LPG, 40 lpm each, external pumps
LL40PQ-V	2 x Dual non-LPG, 40 lpm each, internal pumps
LL80SQ-V	2 x Dual non-LPG, 80 lpm each, external pumps

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Addendum to Certificate No..... : **Ex 2489X**

Issue: **1**

Date of Issue: **18 June 2001**

Drawings:

The following drawings are associated with this issue of the certificate:

DRAWING NO.	DRAWING TITLE	REVISION NO.	DRAWN/ REVISION DATE
AP315 Sheet 4	Laser Approval Drawings Pump Hydraulics	F	15-03-01
AP315 Sheet 5	Laser Approval Drawings Configuration	C	15/3/01
AP315 Sheet 6	Laser Approval Drawings Vapour Barrier Unit	B	15-03-01
AP-316 Sheet 2 of 2	Laser Type B Label	D	21-Nov-00

The following drawings are associated with the original issue of the certificate:

DRAWING NO.	DRAWING TITLE	REVISION NO.	DRAWN/ REVISION DATE
AP312 Sheet 1	Hydraulic Modules Dispenser 40 or 80 lpm	A	16/2/99
AP312 Sheet 2	Hydraulic Modules Dispenser 2x40, 2x80 or 40/80 lpm	B	14/2/00
AP312 Sheet 3	Hydraulic Modules Dispenser 160 lpm	A	16/2/99
AP312 Sheet 5	Hydraulic Modules Pump 40 or 80 lpm	B	29/6/99
AP312 Sheet 6	Hydraulic Modules Pump 2x40 lpm	C	14/2/00

DRAWINGS CONTINUED NEXT PAGE

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DRAWING NO.	DRAWING TITLE	REVISION NO.	DRAWN/ REVISION DATE
AP312 Sheet 7	Hydraulic Modules Pump 160 lpm	B	29/6/99
AP312 Sheet 8	Hydraulic Modules LPG Single	A	16/2/99
AP312 Sheet 9	Hydraulic Modules LPG Dual	A	16/2/99
AP315 Sheet 1	Laser Approval Drawings Standard Layout	C	7/4/00
AP315 Sheet 2	Laser Approval Drawings Side Panels	C	5/4/00
AP315 Sheet 3	Laser Approval Drawings Display Cabinet	B	3/4/00
AP315 Sheet 4	Laser Approval Drawings Pump Hydraulics	D	7/4/00
AP315 Sheet 5	Laser Approval Drawings	B	3/4/00
AP-316	Laser Label	D	10-Apr-00
MP-112 Sheet 1	L.P.G. BREAK-AWAY GENERAL CONCEPT	G	3/4/97
LLPGD	INSTALLATION AND SETUP INSTRUCTIONS	B	4/4/00

**Conditions of Certification:**

A remote control switch shall be provided in the building functioning as the attendant station to enable the operation of a shut-off valve located adjacent to the pump for the LPG dispensing units. This switch shall be capable of activating the shut-off valve in the event of the energising medium failing.

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## Additional Information:

Details of the separately certified equipment comprising the dispenser supplied for testing is provided in Table 2.

**Table 2. Certification of Internal Equipment**

Component Description	Certificate No.	Explosion Protection Details
C4000 Fuel Dispenser Control Unit	AUS Ex 3595X	Boards CI143, CI138, CI139: Ex d (ib) IIA T3 Boards CI125, CI059: Ex (ib) IIA T3 CWIT Aerial, Con 2 of CLAN Board (CI066): Ex ia IIA T3 Remainder of System: Ex ib IIA T3
Solenoid Enclosure Type XU01	AUS Ex 3068X	Ex d IIC T3 IP65
B56 Series Minor Motors	AUS Ex 946	Ex d IIB T4
LUCIFER Explosion Proof Coil/Housing Assemblies	AUS Ex 321	Ex m IIC T3/T4/T5 IP65/IP67 Ex m e IIC T3/T4/T5 IP65/IP67 DIP T3/T4/T5 IP65/IP67
Goyen Flameproof Solenoid Cat 604578	AUS Ex 1274	Ex d IIB T4 IP44
Flameproof enclosure Type C4000	AUS Ex 3556	Ex d IIA T3 IP66
Fuel Dispensers (for nozzles and hoses)	AUS Ex 3113X	Ex d ib IIA T3 Type A

Where the Laser fuel dispensers are fitted with separately certified solenoids and motors which vary from those fitted when tested, refer Table 2 above, they shall be tested fully assembled in accordance with clause 5.2 of both AS 2229.1 and AS 2229.2 as appropriate.

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