(1828, 1918, 1940, 1958, 1967, 2017, 2162, 2176, 2286, 2461, 2486, 2536, 2616, 2619, 2650, 2780)

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III(5)a

SUPPLEMENT TO CERTIFICATE

Series S028 Revision 1

Certificate No.	Supplement No.	Certificate No.	Supplement No.
1828/40*	57	2286	71
1918	87	2461/26*	38
1940	89	2486/54*	68
1958/53	72	2536	75
1967/66*	79	2616	15
2017	91	2619	57
2162	106	2650	69
2176	94	2780	22

(*) Refers to the dispenser only, the self service device described in these certificates is not part of this approval.

Submitted by:

R&M Technologies Ltd
Cuchulainn Road
Thurles
Co. Tipperary
Ireland

Authorisation is hereby given by the Secretary of State for Business, Innovation & Skills for the following Certificate of approval relating to a pattern of a liquid flowmeter to be modified as described below.
As described in the following Certificates but modified to have an alternative self service device, as detailed in the descriptive annex, and having the following characteristics:-

DISPENSER(s):	Dispensers described in above certification numbers.
FORECOURT CONTROL UNIT:	DOMS PSS 5000 as described in the descriptive annex.
SELF SERVICE DEVICE:	QuickPay24 Unattended Payment Terminal as described in the descriptive annex

This revision replaces previous versions of the certificate.

Signatory: P R Dixon

for Chief Executive
National Weights & Measures Laboratory
(Part of the National Measurement Office)
Department for Business, Innovation & Skills
Stanton Avenue
Teddington
Middlesex TW11 0JZ
United Kingdom

Reference No: T1119/0019

Issue Date: 9 November 2010
Expiry Date: 9 November 2010

(1828, 1918, 1940, 1958, 1967, 2017, 2162, 2176, 2286, 2461, 2486, 2536, 2616, 2619, 2650, 2780)

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CONTENTS

ILLUSTRATIONS

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Descriptive Annex

1 INTRODUCTION

The QuickPay24 is self-service unattended payment terminal. It is a PC based, touch screen & audio system used for the pre pay self service sale of liquid fuel and carwash tickets on a retail forecourt. It uses the DOMS PSS 5000 forecourt controller to control obtain transaction data from the dispensers.

The terminal can authorise one or multiple pumps on a Retail Forecourt Island.

The Terminal accepts payment cards and banknotes as payment from the general public and by means of a transponder tag reader (RFID Wave Key) as payment from registered customers.

2 CONSTRUCTION

The entire system operates on 230 V AC. The terminal links to the forecourt controller via an Ethernet Local Area Network (LAN).

2.1 Forecourt controller DOMS PSS 5000

The DOMS PSS5000 forecourt controller comprises a metal rectangular box (Figure 3) housing the following main components.

- A power supply
- A Central Processing Board (CPU) with 8 serial ports (CPB508).
  This has an LCD 16x2 character alphanumerical display and a keyboard comprising 5 keys for navigating the menu options, an adjacent legend describes the key functions as shown in Figure 4.
- Hardware interface modules.
  Dispensers are connected to the CPU board via an appropriate hardware interface module compatible with the communication protocol of the dispenser.

2.1.1 Software

The DOMS PSS5000 has a legal authority module (LAM) for the UK containing specific parameter values and functions. The LAM version number is 498-06-100 and the checksum number is 0D6C. These can be viewed by selecting the appropriate menu heading using the operator keys on the CPU (Figure3). The LAM version number and checksum are accessed as follows.
When the PSS is powered on, the first line displays the application software version and the current time. The second line displays the W&M Service menu. Pressing the Down Arrow once, displays the W & M menu which comprises 7 sub-menus, W.1 to W.7. Press the right button once to obtain W.1 – LAM INFO and press again to display Version and Checksum information.

2.2 QuickPay24 Outside payment terminal (OPT) and banknote acceptor (BNA)

2.2.1 Terminal Construction

The QuickPay24 enclosure is constructed from stainless steel sheet and has the following major components, a schematic of these components is shown in Figure 1 and a typical arrangement of the components in Figure 2.

Processor Board:
The Motherboard used in the terminal is a VIA EPIA ML 800MHZ C3 Motherboard.

Touchscreen display:
This may be any CE marked display

PSU Model No:
Traco TXL 150-12S

Card reader:
The QuickPay24 is equipped with a VeriFone Secura Integration Pin Entry Device (PED) chip and pin card reader.

Transponder tag reader:

The transponder tag reader is used to read contact less identification media. Different technologies like Mifare or proximity tags may be used as an option.

Receipt printer:
The QuickPay24 is equipped with a Custom Printers TG558-S58P

Bank Note Reader:
The QuickPay24 is equipped with a JCM Banknote Acceptor UBA-10-SS 500-00-020F1.

Uninterruptible power supply (UPS):
The QuickPay24 incorporates a Riello Plug DIALOG 350-500 VA UPS within the enclosure. In addition a UPS supplies power to the remaining system equipment.

Alternatively any UPS supplying 230 V AC may be used that is capable of maintaining power for sufficient time to complete a transaction in the event of a power failure, typically 15 minutes or a total of at least 5 minutes in one or several periods controlled manually during one hour after failure.

2.2.2 Interlocks and Security Features

2.2.2.1 Paper insufficient to print receipt

If the terminal printer paper roll is low, a message states that the receipt is unavailable but gives the customer the choice to proceed with transaction.

2.2.2.2 Printer fault

If the terminal identifies a printer fault, a message states that the receipt is unavailable but gives the customer the choice to proceed with transaction.

2.2.2.3 Power Loss

Following a loss of power, credit notes will be printed, all transactions will be terminated and receipts printed if selected. No further cash can be inserted when mains power has been lost.

2.2.2.4 Duplicate receipts

Duplicate receipts are not available. A receipt can be printed only once.

2.2.2.5 Journal log

The Transactions are stored in a SQL Server Express Database, which is stored on an 8GB Flash IDE Hard drive located within the terminal which has a built in Web Server.

The correct username and password is required to gain access to the transactions stored on the journal. Access to these transactions is through a web browser, such as Internet Explorer, the transactions can be viewed from any PC on the same local network as the terminal, providing the PC has Internet Explorer or another such web browser installed on it. A typical transaction report is shown in Figure 4.

2.2.3 Printed information

The following information is printed.

Receipt:	Address of the station Receipt number Date and Time Transaction volume, price to pay and pump number
Credit note:	Address of the station Credit note number Voucher number Date and time Amount of money inserted Transaction volume, price to pay and pump number Credit owing

2.3 Software version and checksum number

The software version number and checksum number can be checked by pressing the manager's button on the Touch-Screen as follows:

1) Press Either Pay by Card, Pay by Cash or Pay by Key on the front screen
2) Next will be the pump selection Screen, in the bottom right of this screen will be a Manager Button, Press this.
3) When the Next screen appears, there will be a button labelled verification, press this and then the software version number and CRC Value will appear on the screen for the legally relevant software module.

This button is available at all times; all other Manager functions will require a password to use them.

Software version number: 1.0.0.8
CRC value: 00E71ECA

3 OPERATION

The Quickfill 24 enables customers, identified either via key or identity cards, to start and record the filling process. The filling process is not started until the authorization of the customer has been confirmed by the outdoor payment terminal. The Terminal uses ADSL broadband to clear credit/debit cards with the bank acquirer.

During a filling process the measurement data is transmitted from the dispenser to the forecourt controller. Upon completion of the filling process, the volume value is stored in the journal log together with the customer identification.

4 RECOMMENDED TESTS

The following tests may be carried out in addition to those specified in the Regulations to determine conformity to the approved pattern.

4.1 Check the software version number and CRC value for the Quickfill 24.

4.2 Verify that for each transaction, there is no discrepancy between the pump indication and the printed receipt values.

5 CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
S028	22 May 2009	Type examination certificate first issued.
S028 Revision 1	9 November 2010	Front Page - expiry date added to withdraw (revoke) certificate.

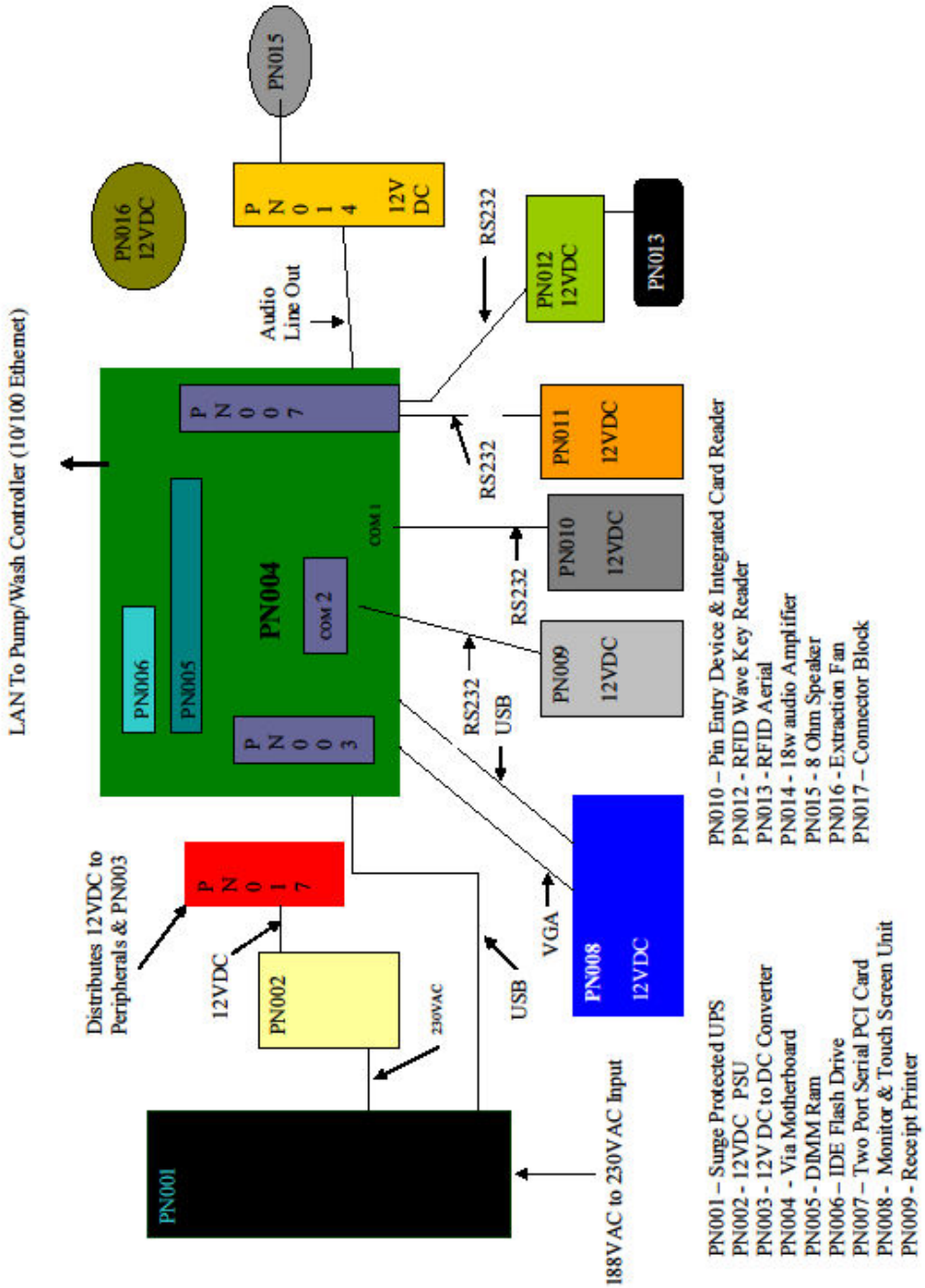

Figure 1 Schematic diagram of QuickPay24 System

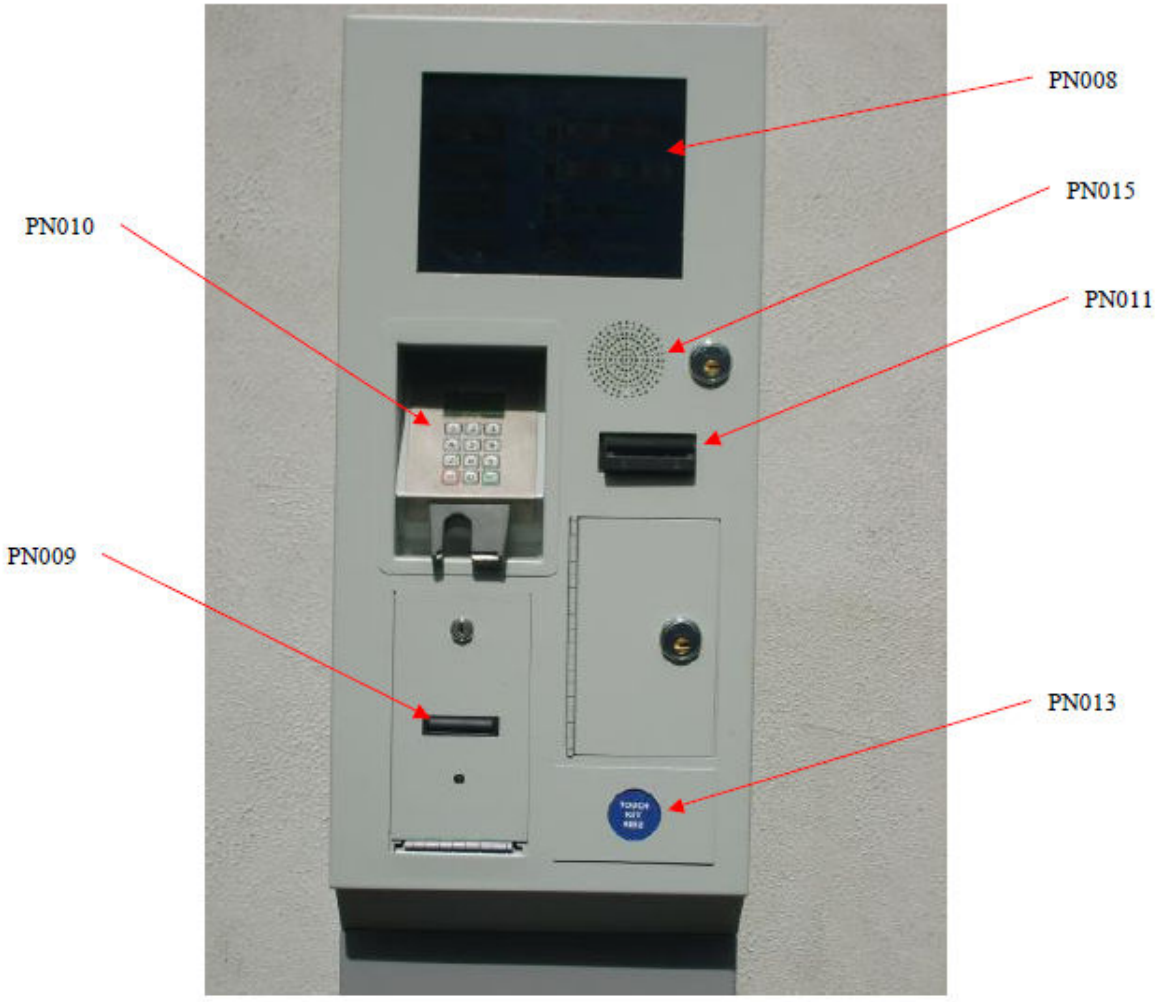

Figure 2 Typical arrangement of system components

Figure 3 DOMS PSS 5000

Figure 4 Central Processing Board (CPB508) display and menu navigation keys

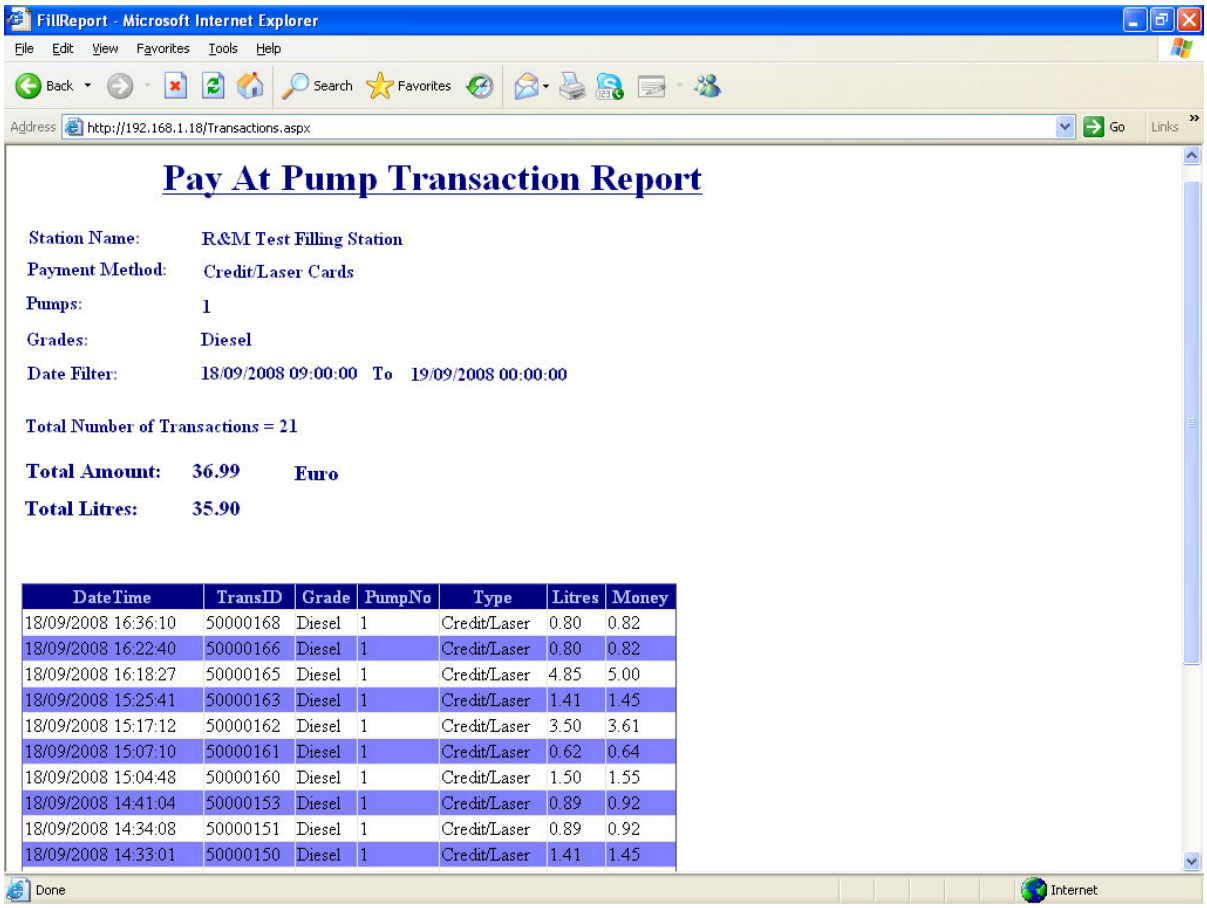

Figure 5 Typical transaction report