

**PRESTIGE AIR TECHNOLOGY LTD**  
**RETROSPECTIVE**  
**LOW ENERGY CLEAN AIR BLANKET**  
**O & M MANUAL**  
**DOCUMENTATION**

**AT**

**62 MARLPOOL DRIVE**  
**REDDITCH**  
**WORC**  
**B97 4RX**

**FOR**

**REDDITCH BOROUGH COUNCIL**  
**TOWN HALL**  
**WALTER STRANZ SQUARE**  
**REDDITCH**  
**WORCESTERSHIRE**  
**B98 8AH**

**REF: 2385**

**DATE: 18<sup>TH</sup> OCTOBER 2012.**

**RETROSPECTIVE  
POSITIVE PRESSURE SYSTEM  
INSTALLATION REPORT**

**NAME:**

**ADDRESS:**

**TELEPHONE NO:**

**INSTALLATION NO:**

2385

**INSTALLATION  
DESCRIPTION:**

1 No. Positive Pressure Unit

**SERIAL NO:**

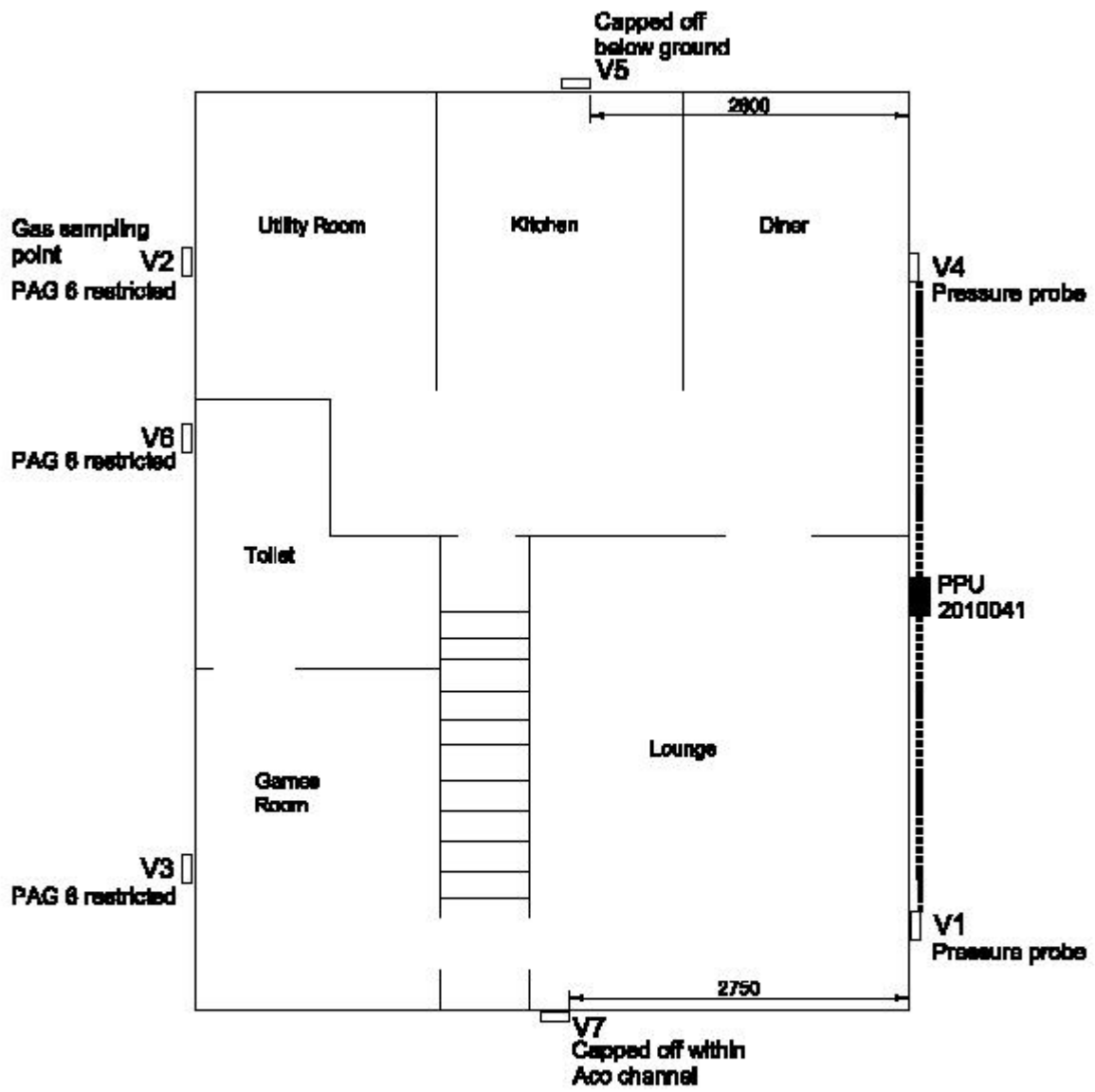
2010041

## AS BUILT

### METHOD STATEMENT

1. Prior to commencing work building to be entered to check for existing levels of methane and carbon dioxide as per appended Safe Working Protocol. Work to continue when all internal ambient levels at or below 1.0% by volume methane 1.5% carbon dioxide.
2. Methane and carbon dioxide levels to be checked at all perimeter vents. If levels detected are above 1.0% methane v/v and 1.5% carbon dioxide v/v internal monitoring as above must be carried out at the middle and at the end of the working day.
3. 2no. existing external vents to be selected as air input points.
4. Prior to commencing work each input point to be checked for existing levels of methane and carbon dioxide as per appended Safe Working Protocol.
5. Prior to forming shallow excavations services to be traced within work area and their disruption avoided.
6. Immediate work area to be cordoned off with temporary fluorescent barrier. Cordoned area to include any excavations and temporary arisings. Access to work area to be agreed and adhered to at all times.
7. 2no. shallow excavations may need to be formed at the input points immediately adjacent to the property, approx dims to be min 1.5m x 1.0m x 0.5m.
8. 2no. existing 75mm horizontal sub-floor vent pipes to be cleared of any debris and utilised as activation air input points. Camera probe to be utilised to confirm visual viability of input points. Clearance to be carried out manually using hand augers.
9. All gas vents not utilised as air input points to be flow restricted with a coiled section of PAG 6 geocomposite voidformer.
10. Tracer gas introduced to inlet fan and its presence checked for and confirmed at perimeter vents and/or internally around perimeter construction to confirm overall zone of influence of sub-floor area. In the event that the zone of influence cannot be demonstrated from existing vents and or internal monitoring points ground to be excavated externally adjacent to the property to establish zone of influence. In the event that a suitable zone of influence is not achieved subsequent air vents and or a combination of air vents to be selected and checked as suitable air input points to achieve an overall zone of influence.
11. 1no. 110mm outlet PPU to be wall mounted on structure or frame mounted remote from structure and connected to the air input points by a bifocated section of 110mm plastic pressurisation manifold located within ground.

12. Manifold to contain 2no. sub-floor probes connected back to PPU by 8mm probe pipe and to terminate in an externally available sample port. See Prestige Air Drawing No. 5719 AA(57)002. Purpose of probe to be for manifold delivery pressure monitoring. An additional sub-floor probe to be inserted below the structure via another external vent, exact location to be dependent upon local conditions. Purpose of additional probe to be for subsequent ground gas sub-floor monitoring.
13. PPU unit to include 1no. GSM telemetry system to allow for connection to Prestige Air's 24 hour call out and maintenance service.
14. PPU's electricity supply to be connected to 1no. fused spur outlet. Please see attached Wallis's method statement and risk assessments.
15. Where necessary existing external vents to be cleared or blocked off.
16. All excavations to be backfilled and disturbed surfaces reinstated as is reasonably practicable.
17. Internally where possible any major air loss points to be located and sealed, identified by tracer gas being introduced through newly improved vent network. Dependant on size will be sealed with silicone based sealant, close cell foams and or liquid applied membranes.
18. System to be commissioned.
19. Risk assessments 2, 3, 4 and COSHH for sulphur hexafluoride, Safe Working Protocol Entry into a Building and working in shallow excavation for methane and carbon dioxide monitoring to apply.



No 62 Marpool Drive

## ZONE OF INFLUENCE RECORDS

Location	Levels Recorded
V1 Input Point	N/A
V2	1300
V3	500
V4 Input Point	N/A
V5	1300
V6	1300
V7	1300

Date: 14<sup>th</sup> October 2011

ATM: 1002mb

Machine : PA25

## GAS SAMPLING PORT READINGS

<b>Period</b>	<b>CH<sub>4</sub>%v/v</b>	<b>CO<sub>2</sub> %v/v</b>	<b>O<sub>2</sub> % v/v</b>
<b>Initial</b>	0.0%	0.0%	20.4%
<b>Date:</b> 11.10.11. 1002mb	0.0%	0.0%	20.3%
	0.0%	0.0%	20.4%
	0.0%	0.0%	20.3%
	0.0%	0.0%	20.3%
	0.0%	0.0%	20.3%
	0.0%	0.0%	20.3%
	0.0%	0.0%	20.3%
	0.0%	0.0%	20.3%
	0.0%	0.0%	20.3%
<b>Commissioning</b>	8.9%	9.1%	14.0%
<b>Date:</b> 12.10.11. 1005mb	0.3%	0.2%	20.2%
	6.6%	10.7%	4.9%
<b>Final</b>			
<b>Date:</b> 13.10.11. 1012mb	0.0%	1.2%	19.6%
	0.0%	0.1%	20.3%
	0.0%	1.3%	19.2%





## FINAL INSPECTION CERTIFICATE

**EQUIPMENT DESCRIPTION**

1 No. Positive Pressure Unit

**SERIAL NUMBER**

2010041

**INSPECTION DATE**

7<sup>th</sup> October 2011

	CHECK	ACCEPTABLE	UNACCEPTABLE	ACTION REQUIRED
1.	Physical state and condition of outer casing	√		
2.	Inclusion of 2 No. keys and correct operation of casing lock	√		
3.	Correct application of valve open/close labels	√		
4.	Correct application of speed control label	√		
5.	Correct application of fan unit label	√		
6.	Swarf removal from base of backplate assembly	√		
7.	Correct formation of backplate and placing of fixing holes	√		
8.	General state and condition of assembly	√		
9.	Disconnection of positive wire from back up battery	√		
10.	Running status by temporarily connecting power to unit with speed controller set on 5 and power supply switch on and Positive Pressure Unit switch on	√		
	a) System Run Light On	√		
	b) Fail 1 light Off	√		

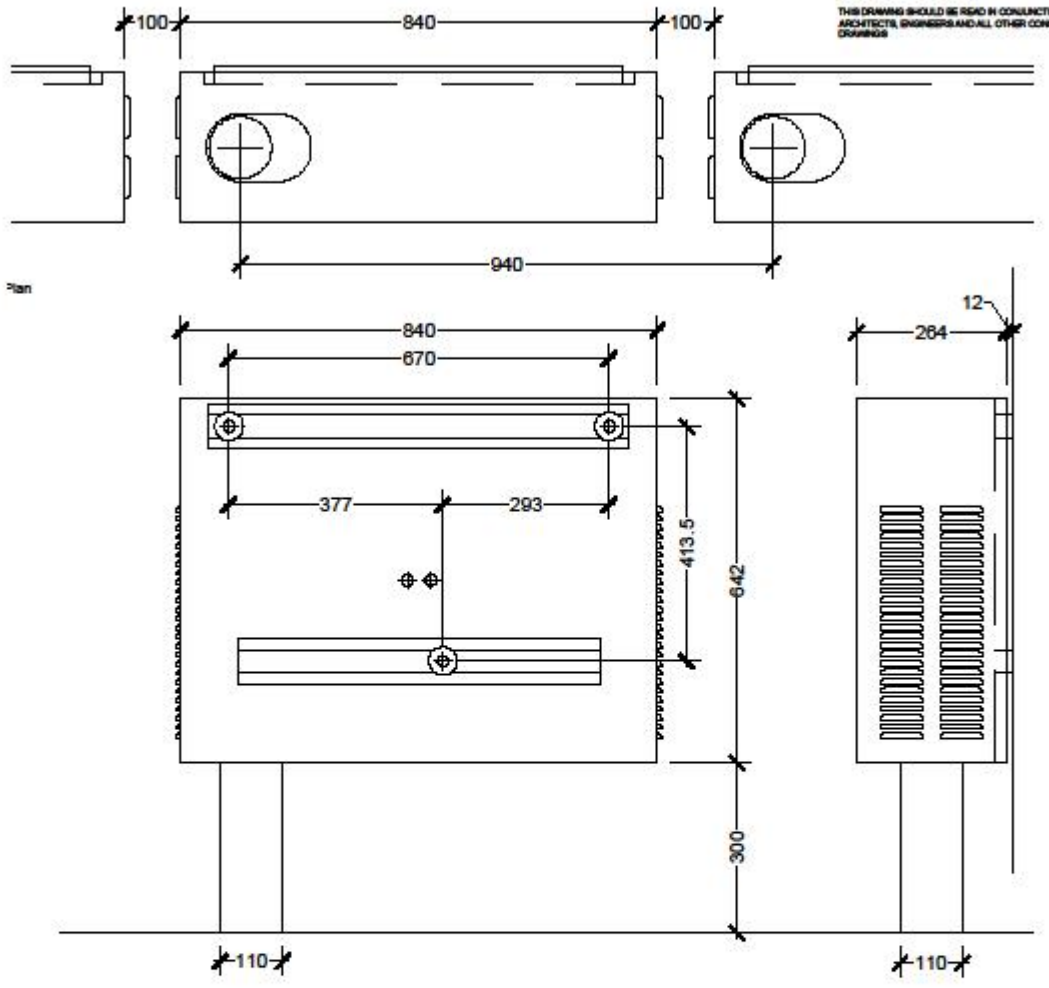
	c) Fail 2 light Off	√		
11.	Running status by temporarily connecting power to unit with speed controller set on 5 and power supply switch off and Positive Pressure Unit switch on	√		
	a) System Run Light Off	√		
	b) Fail 1 light On	√		
	c) Fail 2 light On	√		
12.	Speed controller audibly controlling fan speed	√		

Signed



Print Name Richard Stevens

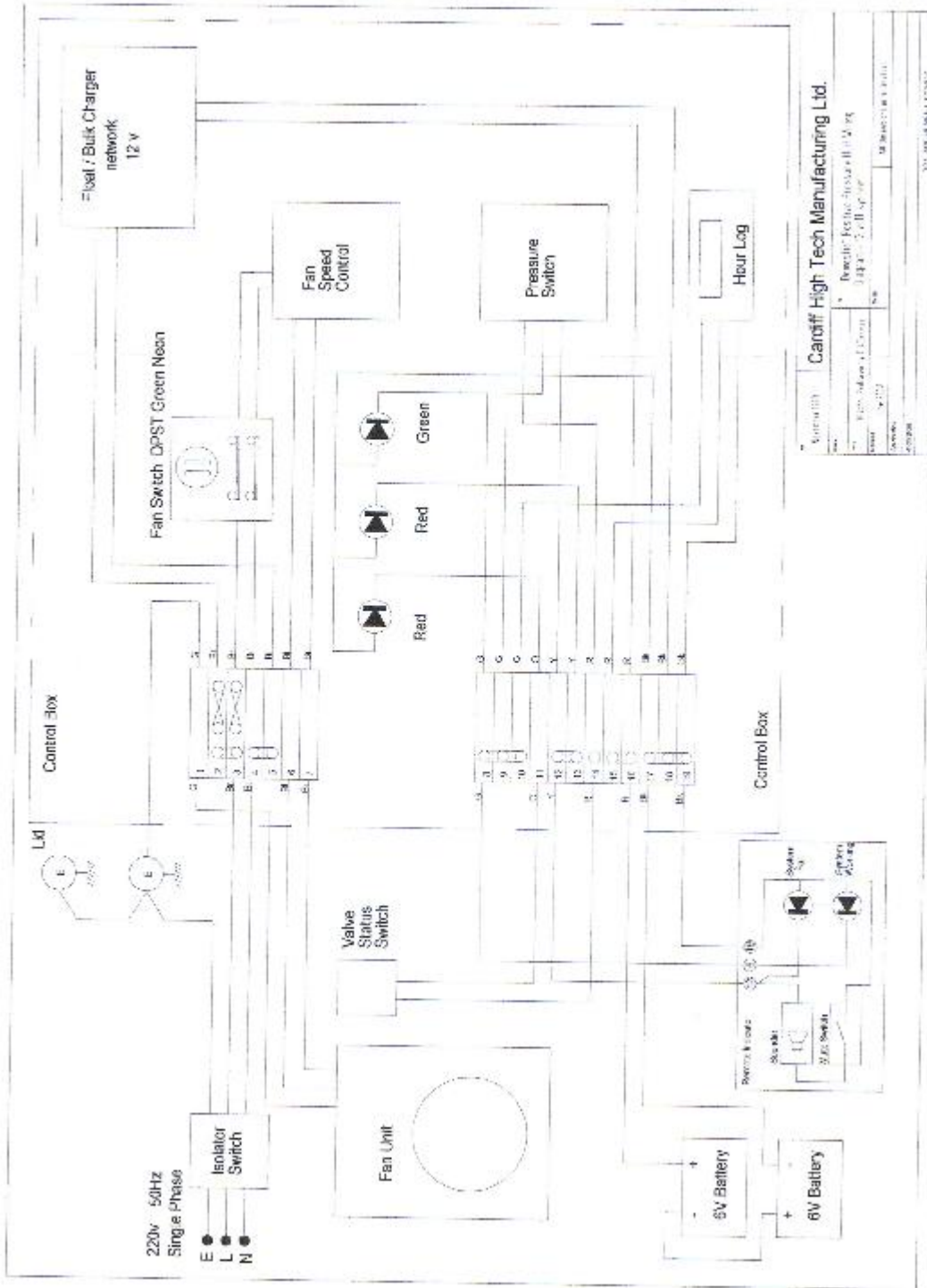
NOTE:  
 SUBJECT TO STATUTORY COMMENTS  
 SUBJECT TO SURVEY  
 BASED ON OS MAP REPRODUCED BY PERMISSION OF  
 CONTROLLER OF HM STATIONARY OFFICE (S) CROWN  
 COPYRIGHT  
 DO NOT SCALE THIS DRAWING  
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH  
 ARCHITECTS, ENGINEERS AND ALL OTHER CONSULTANTS  
 DRAWINGS



Rear Elevation

Side Elevation

		Project: Green Spaces Initiative Client: Green Spaces Initiative Address: 1234 St. Street, London, UK Tel: 020 7123 4567 Fax: 020 7123 4568
<b>PRESTIGE</b> AIR TECHNOLOGY		
Standard detail Component Elevations Low energy P.P.U Elevations Prestige Air-Technology Ltd		
Date: October 2001	Scale: 1:10	Drawn: JK
For information:		Rev:
5716 AA(57) 012		PS



Company		Carroll High Tech Manufacturing Ltd.	
Address		Newcastle, Newcastle, Australia 2300	
Phone		081 438 1111	
Fax		081 438 1111	
E-mail		sales@carroll.com.au	
Website		www.carroll.com.au	
Drawing No.		10000000000000000000	
Revision		1	
Date		20/08/2000	
Author		J. Smith	
Checked		M. Jones	
Approved		K. Brown	



**AMTECH**  
Fas:Test V2011 0.1

This certificate is not valid if the serial number has been deleted or altered

IMR2/ 0375444

## MINOR ELECTRICAL INSTALLATION WORKS CERTIFICATE

Issued in accordance with BS7671 - Requirements for Electrical Installations by an Approved Contractor conforming fully with BS7671, Wiring Regulations Part 1, 17th Edition, 2002, published by BSI.

To be used only for minor electrical work which does not include the provision of a new circuit

PART 1: DETAILS OF THE MINOR WORKS		Details of the person(s) carrying out the work (as amended)	
Client: <b>Prestige Air Technologies</b>	Contract reference: <b>None</b>	Name: <b>None</b>	
Date when works completed: <b>13/10/2011</b>	Location: <b>None</b>	Location: <b>None</b>	
Description of the minor works: <b>Replace outside spur and connect air handling unit</b>		Description of the minor works: <b>Replace Spur, Connect Air Handling Unit 62 Marlpool Drive</b>	
		<b>Reddlich</b>	<b>B87 4RX</b>

PART 2: DETAILS OF THE MODIFIED CIRCUIT		Essential inspections and tests								
System type and rating (as amended)	DB-05	✓	TS-3	N/A	TS-4	N/A	TS-5	N/A	TS-6	N/A
Protective measures against electric shock	ADS									
Overcurrent protective device for the modification	BS1891	<b>60008 MCB</b>	Type	<b>B</b>	Rating	<b>32</b>	A			
Residual current device (if applicable)	BS1891	<b>61008 RCD</b>	Type	<b>NA</b>	Rating	<b>30</b>	mA			
Details of wiring system used to modify the circuit	Type: <b>PVC/PVC cables</b>	Part used	<b>C</b>	Use of cable	<b>2.0</b>	mm <sup>2</sup>	Use of copper	<b>1.5</b>	mm <sup>2</sup>	
When the markings for protection against electric shock in ADS, insert maximum circuit ampere per phase by BS 7671		<b>0.4</b>		<b>1.5</b>	<b>1.15</b>		<b>0.2</b>			
Comments: <b>None</b>										

PART 3: INSPECTION AND TESTING OF THE MODIFIED CIRCUIT AND RELATED PARTS		Essential inspections and tests	
Confirmation that the necessary inspections have been undertaken	✓	✓	✓
Circuit resistance R <sub>1</sub> , R <sub>2</sub>	<b>0.47</b>	Ω	✓
Insulation resistance (if applicable) between live conductors	<b>N/A</b>	MΩ	✓
Insulation resistance (if applicable) between live conductors and earth	<b>200</b>	MΩ	✓
Insulation resistance (if applicable) between live conductors and neutral	<b>200</b>	MΩ	✓
Insulation resistance (if applicable) between live conductors and earth/neutral	<b>200</b>	MΩ	✓
Continuity of protective bonding	<b>0.01</b>	Ω	✓
Maximum measured earth-fault loop impedance, Z <sub>s</sub>	<b>55.1</b>	mΩ	✓
100 operating time of 100 mA RCD fitted	<b>21.4</b>	ms	✓
RCD operating time at 5 mA RFL appliance			
Agreed limitations, if any, on the inspection and testing	<b>None</b>		

PART 4: DECLARATION		Essential inspections and tests	
I/we confirm that the electrical installation works described in Part 1 of this certificate were carried out in accordance with the requirements of BS 7671, Requirements for Electrical Installations by an Approved Contractor conforming fully with BS 7671, Wiring Regulations Part 1, 17th Edition, 2002, published by BSI.			
Name of contractor: <b>CLIVE BEST</b>	Person(s) who carried out the work: <b>Wallis Electrical Services Ltd</b>		
Signature:	Address: <b>Unit 1 Weycroft Avenue Axminster Devon EX13 5HU</b>		
Position: <b>Electrician</b>			
Date: <b>13/10/11</b>			
Environment Number: <b>0 3 2 2 3</b>	System Number (if applicable): <b>0 0 0</b>		

This form is based on the rules set out in Appendix 5 of BS 7671  
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Please see the 'Notes for Recipients' on the reverse of this page.

Original to be kept by the recipient

SUPERNOVA TNST CERTIFICATE

APPLIANCE: PPU2010041

DATE: 11/11/2010 10:19


SITE: SITE CHY R4MSYS  
LOCATION: LOC. PRODUCTION  
USER: ANDY

TEST SETTINGS:  
I1C700AD21  
S131111111

VISUAL P | BARTH 0.07 Ohm P | INS >99.99MOhm P

LRGE <0.10 mA P | LOAD <0.05 kVA P |

OVERALL STATUS: PASS

SIGNATURE 





### Test Certificate

Site: SITE CHT REMSYS  
Location: LOC. PRODUCTION

Asset: P-U2010041      Description: P-U2010041

Test	Result	Unit	Status
Visual			Pass
Earth Current	25	A	Information
Earth	1.17	Ohm	Pass
Insulation	999.99	MOhm	Pass
Leakage	<0.1	mA	Pass
Load	0.07	kVA	Information

Comments:

Overall Status: Pass

Date Of Test: 11/11/2010

Signed By: 