









Appendix 4 - 2011 Cantab Electrical Report

PERIODIC INSPECTION REPORT FOR AN ELECTRICAL INSTALLATION

Issued in accordance with *British Standard 7671 - Requirements for Electrical Installations* by an
Approved Contractor or Conforming Body enrolled with NICEIC, Warwick House, Houghton Hall Park,
Houghton Regis, Dunstable LU5 5ZX

A. DETAILS OF THE CLIENT

Client: Mr R Bailey

Address: James Caravan Park
Ruabon
Wrexham

B. PURPOSE OF THE REPORT

This Periodic Inspection Report must be used only for reporting on the condition of an existing installation.

Purpose for which this report is required: To inspect and test the caravan park only and see if the installation complies current Bs 7671 regulations and is safe to be in use

C. DETAILS OF THE INSTALLATION

Occupier: Mr Ray Baile

Address: James Caravan Park
Ruabon
Wrexham

Postcode:

Description of premises: Domestic Commercial Industrial

Other: Caravan Parks
(Please state)

Estimated age of the electrical installation: 26 years

Evidence of alterations or additions: Yes If yes, estimated age 05 years

Date of previous inspection: 07/06/2005

Electrical Installation Certificate No or previous Periodic Inspection Report No: HP 1290548

Records of installation available: Yes Records held by: Ray Bailey -

D. EXTENT OF THE INSTALLATION AND LIMITATIONS OF THE INSPECTION AND TESTING

Extent of the electrical installation covered by this report:

To inspect and test the electrical installation Hook up boxes 1,2,3,4,5,6,7,8,9,10,11,12,13, on the feilds around the park

Agreed limitations (including the reasons), if any, on the inspection and testing:

Gate supply from hook up box four , House/Barn Drive/Toilet block General electrics .

This inspection has been carried out in accordance with BS 7671, as amended. Cables concealed within trunking and conduits, or cables and conduits concealed under floors, in inaccessible roof spaces and generally within the fabric of the building or underground, have not been visually inspected.

E. DECLARATION

I/We, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above (see C), having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations (see F) and the attached schedules (see H), provides an accurate assessment of the condition of the electrical installation taking into account the stated extent of the installation and the limitations of the inspection and testing (see D).

I/We further declare that in my/our judgement, the said installation was overall in **an unsatisfactory** condition (see G) at the time the inspection was carried out, and that it should be further inspected as recommended (see I).

✱ (Insert 'a satisfactory' or 'an unsatisfactory', as appropriate)

INSPECTION, TESTING AND ASSESSMENT BY:

Signature: 
Name: David Allun Jones
(CAPITALS)
Position: Electrician
Date: 23/03/2011

REPORT REVIEWED AND CONFIRMED BY: † See note below

Signature: 
Name: David Allun Jones
(CAPITALS)
(Registered Qualified Supervisor for the Approved Contractor at J)
Date: 23/03/2011

F. OBSERVATIONS AND RECOMMENDATIONS FOR ACTIONS TO BE TAKEN

Referring to the attached schedules of inspection and test results, and subject to the limitations at D:

There are no items adversely affecting electrical safety.

or

The following observations and recommendations are made.

✓

Item No		Code †
1	Mains (East field rccb)	
2	Main incoming tails conductors to East field rccb poorly terminated	2
3	Red and Blue out going conductors from Rcd terminated in a poor condition -cores cut off	2
4	No identification on Main earthing conductors in main earth block	2
5	Main earthing conductor to Rcd incorrectly sized	2
6	No identification on Blue conductor used as neutral in Rcd	4
7	No identification on yellow conductor used as earth in 4 pole Rcd	4
8	Incorrect Ip protection on incoming side at the top of Rccd	2
10	Consumer unit DB1A	2
11	No two colours identification label at the consumer unit	4
12	Corrosion and poor termination in Metal box Feeding Boxes 11,12,13,By tree (Needs new Ip box and glands)	2
13	Single tail conductor into way 2 terminated in poor condition	2
14	Meters installed above board North feild meter installed in Poor conduition	2
15	No Xlpe swa cable for West feild boxes 9& 10 no Bolt been fitted to earth tag	
22	See additional pages 25,26	

Note: If necessary, continue on additional pages(s), which must be identified by the Periodic Inspection Report serial number and page number(s).

† Where observations are made, the inspector will have entered one of the following codes against each observation to indicate the action (if any) recommended:-

- | | |
|--|----------------------------------|
| 1. 'requires urgent attention' or | 2. 'requires improvement' or |
| 3. 'requires further investigation' or | 4. 'does not comply with BS 7671 |

Please see the reverse of this page for guidance regarding the recommendations.

Urgent remedial work recommended for Items: Codes 1 & 2

Corrective action(s) recommended for Items: Codes 3 & 4

G. SUMMARY OF THE INSPECTION

General condition of the installation:

The electrical installation is 26 years old with a periodic inspection be carried out in 2005. The electrical hook ups require all the breakers in each of the boxes replacing with Rcbo, and the main Rcd replacing with a main switch. Some boxes need replacing as the covers protecting the breakers is missing or broken. 80% of xlpe swa cables in to the hook up boxes need to be glanded into the box and some require more earth rods to obtain a lower earth reading.

Note: If necessary, continue on additional page(s), which must be identified by the Periodic Inspection Report serial number and page number(s).

Date(s) of the inspection: 23/03/2011

24/03/2011

Overall assessment of the installation:

Unsatisfactory

(Entry should read either 'Satisfactory' or 'Unsatisfactory')

H. SCHEDULES AND ADDITIONAL PAGES

Schedule of Items Inspected and Schedules of Items Tested: Page No 4 Additional pages, including additional source(s) data sheets: Page No(s)
 Schedule of Circuit Details for the Installation: Page No(s) 5 23 Schedule of Test Results for the Installation: Page No(s) 6 24
 The pages identified here form an essential part of this report. The report is valid only if accompanied by all the schedules and additional pages identified above.

I. NEXT INSPECTION

I/We recommend that this installation is further inspected and tested after an interval of not more than **unsatisfactory**
 (Enter interval in terms of years, months or weeks, as appropriate)
 provided that any items at F which have been attributed a Recommendation Code 1 and Code 2 (requires urgent attention) are remedied without delay and as soon as possible respectively. Items which have been attributed a Recommendation Code 3 should be actioned as soon as practicable (see F).

J. DETAILS OF NICEIC APPROVED CONTRACTOR

Trading Title: Cantab Electrical Ltd
 Address: Cantab Telephone number: 01978 820026
 Rhos-y-Madoc
 Ruabon Fax number:
 Wrexham
 Postcode: LL14 6LP
 Enrolment number: 03 44 93 0 0 0
 (Essential information)
 Branch number: (if applicable)

K. SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Tick boxes and enter details, as appropriate

System Type(s)	Number and Type of Live Conductors	Nature of Supply Parameters	Characteristics of Primary Supply Overcurrent Protective Device(s)
TN-S	N/A	Nominal voltage(s): U_n 400V U_o 230V	BS(EN) BS1361
TN-C-S	1-phase (2 wire) N/A 1-phase (3 wire) N/A 2 pole N/A	Nominal frequency, f 50Hz	Type #B
TN-C	2-phase (3 wire) N/A 3-pole N/A	Prospective fault current, I_{pf} 1.467kA	Rated current 60A
TT	3-phase (3 wire) N/A 3-phase (4 wire) ☒ other N/A	External earth fault loop impedance, Z_e 0.16 Ω	Short-circuit capacity 33kA
IT	Other Please state N/A	Number of supplies 1	

L. PARTICULARS OF INSTALLATION AT THE ORIGIN

Tick boxes and enter details, as appropriate

Means of Earthing	Details of Installation Earth Electrode (where applicable)
Distributor's facility: N/A	Type: (eg rod(s), tape etc) Earth Rods or Pipes Location: External, (Under each hook up box)
Installation earth electrode: ☒	Electrode resistance, R_A : 375 (Ω) Method of measurement: Measured
Main Switch or Circuit-Breaker	Protective measures against electric shock: ADOS
Type: BS(EN) BS5419	Maximum Demand (Load): kVA / Amps *Delete as appropriate
No of Poles 3	Earth and Protective Bonding Conductors
Supply conductors material Copper	Earthing conductor Main protective bonding conductors
Supply conductors csa 16 mm ²	Conductor material Copper
Voltage rating 400V	Conductor csa 16 mm ²
Rated current, I_n 63A	Conductor csa 10 mm ²
RCD operating current, $I_{\Delta n}$ N/A	Water service ☒ Gas service N/A
RCD operating time (at $I_{\Delta n}$) N/A	Oil service ☒ Structural steel N/A
	Continuity check ☒ (✓)
	Continuity check ☒ (✓)
	Lightning protection N/A Other incoming service(s) N/A

* Where a number of sources are available to supply the installation, and where the data given for the primary source may differ from other sources, a separate sheet must be provided which identifies the relevant information relating to each additional source.

SCHEDULE OF ITEMS INSPECTED

† See note below

PROTECTIVE MEASURES AGAINST ELECTRIC SHOCK

Basic and fault protection

Extra low voltage

N/A SELV N/A PELV

Double or reinforced insulation

N/A Double or Reinforced Insulation

Basic protection

x Insulation of live parts y Barriers or enclosures
N/A Obstacles ** N/A Placing out of reach **

Fault protection

Automatic disconnection of supply

✓ Presence of earthing conductor
✓ Presence of circuit protective conductors
✓ Presence of main protective bonding conductors
N/A Presence of earthing arrangements for combined protective and functional purposes
N/A Presence of adequate arrangements for alternative source(s), where applicable
N/A FELV
x Choice and setting of protective and monitoring devices (for fault protection and/or overcurrent protection)

Non-conducting location **

N/A Absence of protective conductors

Earth-free equipotential bonding **

N/A Presence of earth-free equipotential bonding

Electrical separation

N/A For one item of current-using equipment
N/A For more than one item of current-using equipment **

Additional protection

✓ Presence of residual current device(s)
N/A Presence of supplementary bonding conductors

** For use in controlled supervised/conditions only

Prevention of mutual detrimental influence

✓ Proximity of non-electrical services and other influences
N/A Segregation of Band I and Band II circuits or Band II insulation used
N/A Segregation of Safety Circuits

Identification

x Presence of diagrams, instructions, circuit charts and similar information
x Presence of danger notices and other warning notices
x Labelling of protective devices, switches and terminals
x Identification of conductors

Cables and Conductors

✓ Selection of conductors for current carrying capacity and voltage drop
x Erection methods
✓ Routing of cables in prescribed zones
✓ Cables incorporating earthed armour or sheath or run in an earthed wiring system, or otherwise protected against nails, screws and the like
N/A Additional protection by 30mA RCD for cables concealed in walls (where required, in premises not under the supervision of skilled or instructed persons)
✓ Connection of conductors
x Presence of fire barriers, suitable seals and protection against thermal effects

General

✓ Presence and correct location of appropriate devices for isolation and switching
✓ Adequacy of access to switchgear and other equipment
✓ Particular protective measures for special installations and locations
✓ Connection of single-pole devices for protection or switching in line conductors only
N/A Correct connection of accessories and equipment
N/A Presence of undervoltage protective devices
x Selection of equipment and protective measures appropriate to external influences
x Selection of appropriate functional switching devices

SCHEDULE OF ITEMS TESTED

† See note below

✓ External earth fault loop impedance, Z_e
✓ Installation earth electrode resistance, R_A
✓ Continuity of protective conductors
N/A Continuity of ring final circuit conductors
✓ Insulation resistance between live conductors
✓ Insulation resistance between live conductors and Earth
N/A Protection by separation of circuits

N/A Basic protection by barrier or enclosure provided during erection
N/A Insulation of non-conducting floors or walls
✓ Polarity
✓ Earth fault loop impedance, Z_s
✓ Verification of phase sequence
✓ Operation of residual current devices
✓ Functional testing of assemblies
✓ Verification of voltage drop

† All boxes must be completed.

✓ indicates that an inspection or a test was carried out and that the result was **satisfactory**
x indicates that an inspection or a test was carried out and that the result was **unsatisfactory**
N/A indicates that an inspection or a test was **not applicable** to the particular installation
LIM indicates that, that exceptionally, a **limitation** agreed with the person ordering the work (as recorded in Section D) **prevented** the inspection or test being carried out.

IPB2/10

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED IN EVERY CASE		TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*					
Location of distribution board:	Bottom of EAST FEILD	Supply to distribution board is from:	House Garage Mk RCCB	No of phases:	1	Nominal voltage:	230V
Distribution board designation:	BOX 5 .6.7,EAST	Overcurrent protective device for the distribution circuit:	Associated RCD (if any): BS(EN) BS4293 RCD				
		Type: BS(EN)	BS4293 RCD	Rating:	60 A	RCD No of poles:	2
						I _{Δn}	300 mA

CIRCUIT DETAILS													
Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method	Number of points served	Circuit conductors: csa			Overcurrent protective devices				RCD	
					Live	cpc	Max. disconnection time permitted by BS 7671 (s)	BS (EN)	Type No	Rating (A)	Short-circuit capacity (kA)	Operating current (mA)	Maximum Z _s permitted by BS 7671 (Ω)
	BOX FIVE (Zs104.6 ,kva 0.02035)												
BX5 1	Socket Hook up 1	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX5 2	Socket Hook up 2	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX5 3	Socket Hook up 3	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX5 4	Socket Hook up 4	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX5 5	Socket Hook up 5	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX5 6	Socket Hook up 6	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
	BOX SIX (Zs101.3 ,kva 0.0241)												
BX6 1	Socket Hook up 1	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX6 2	Socket Hook up 2	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX6 3	Socket Hook up 3	O	B	1	1.5	1.5	0.4	EN60898	B	20	6	30	1.84
BX6 4	Socket Hook up 4	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX6 5	Socket Hook up 5	O	B	1	1.5	1.5	0.4	EN60898	B	20	6	30	1.84
BX6 6	Socket Hook up 6	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
	BOX 7(Zs126.7 ,kva 0.00192)												
BX7 1	Socket Hook up 1	O	B	1	1.5	1.5	0.4	EN60898	B	32	6	30	1.152
BX7 4	Socket Hook up 4	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX7 5	Socket Hook up 5	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX7 6	Socket Hook up 6	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX7 7	Socket Hook up 7	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX7 8	Socket Hook up 8	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136

Duplicate (To be retained by the contractor)

↑ See Table 4A2 of Appendix 4 of BS 7671

CODES FOR TYPE OF WIRING								
A	B	C	D	E	F	G	H	O (Other - please state)
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral-insulated cables	Cables in enclosure

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* In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided on continuation schedules.

This form is based on the model shown in Appendix 6 of BS 7671

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See next page for
Schedule of Test Results

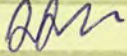
SCHEDULE OF TEST RESULTS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				Test instruments (serial numbers) used:			
Characteristics at this distribution board Confirmation of supply polarity yes				Earth fault loop impedance 15067896 RCD 15067896			
* See note below Z_s 126.01 Ω Operating times of associated RCD (if any) At $I_{\Delta n}$ 36 ms				Insulation resistance 15067896 Other N/A			
I_{pf} 0.0019 kA At $5I_{\Delta n}$ (if applicable) 28 ms				Continuity 15067896 Other N/A			

TEST RESULTS													
Circuit number and phase	Circuit impedances (Ω)					Insulation resistance † Record lower or lowest value				Polarity (✓)	Maximum measured earth fault loop impedance, Z _s ★ See note below (Ω)	RCD operating times	
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/Line † (MΩ)	Line/Neutral † (MΩ)	Line/Earth † (MΩ)	Neutral/Earth (MΩ)			at I _{Δn} (ms)	at 5I _{Δn} (if applicable) (ms)
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ + R ₂	R ₂								
											Zs104.6		
BX5 1				0.01			1000	1000	1000	✓	104.7	18	14
BX5 2				0.01			1000	1000	1000	✓	104.7	18	14
BX5 3				0.01			1000	1000	1000	✓	104.7	18	14
BX5 4				0.01			1000	1000	1000	✓	104.7	18	14
BX5 5				0.01			1000	1000	1000	✓	104.7	18	14
BX5 6				0.01			1000	1000	1000	✓	104.7	18	14
											Zs101.3		
BX6 1				0.01			1000	1000	1000	✓	101.4	23	11
BX6 2				0.01			1000	1000	1000	✓	101.4	23	11
BX6 3				0.01			1000	1000	1000	✓	101.4	23	11
BX6 4				0.01			1000	1000	1000	✓	101.4	23	11
BX6 5				0.01			1000	1000	1000	✓	101.4	23	11
BX6 6				0.01			1000	1000	1000	✓	101.4	23	11
											Zs126		
BX7 1				0.01			1000	1000	1000	✓	126.01	28	26
BX7 4				0.01			1000	1000	1000	✓	126.01	28	26
BX7 5				0.01			1000	1000	1000	✓	126.01	28	26
BX7 6				0.01			1000	1000	1000	✓	126.01	28	26
BX7 7				0.01			1000	1000	1000	✓	126.01	28	26
BX7 8				0.01			1000	1000	1000	✓	126.01	28	26

* Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.

TESTED BY

Signature:		Position:	Electrician
Name: (CAPITALS)	David Allun Jones	Date of testing:	23/03/2011

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SCHEDULE OF TEST RESULTS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
yes Characteristics at this distribution board			
Confirmation of supply polarity			
☆ See note below ☆ 0.68		N/A	
Z_s ☆ 0.314	Ω	Operating times of associated RCD (if any)	ms
I_{pf} ☆	kA	At I _{Δn}	ms
		At 5I _{Δn} (if applicable)	ms

Test instruments (serial numbers) used:			
	15067896		15067896
Earth fault loop impedance	15067896	RCD	N/A
Insulation resistance	15067896	Other	N/A
Continuity		Other	

TEST RESULTS

[illegible]

* Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.

TESTED BY

Signature: _____

David Allun Jones

Position:

Electrician

23/03/2011

Date of testing:

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Duplicate (To be retained by the contractor)

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED IN EVERY CASE		TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*					
Location of distribution board:	North Feild (Entrance) Hook up box 2 AND 3	Supply to distribution board is from:	CONSUMER UNIT BOX 1 WAY 1	No of phases:	1	Nominal voltage:	230V
Distribution board designation:	Hook up box 2 & 3	Overcurrent protective device for the distribution circuit:	Type: EN60898 B	Rating:	40 A	Associated RCD (if any): BS(EN)	N/A
				RCD No of poles:	N/A	I _{Δn}	N/A mA

CIRCUIT DETAILS													
Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method	Number of points served	Circuit conductors: csa			Overcurrent protective devices				RCD	
					Live	cpc	Max. disconnection time permitted by BS 7671 (s)	BS (EN)	Type No	Rating (A)	Short-circuit capacity (kA)	Operating current (mA)	Maximum Z _s permitted by BS 7671 (Ω)
	Hook up box two												
	(Z _s = 380 Kva= 0.00064)												
BX2 1	Hook up socket 1	O	B	1	1.5	1.5	0.4	EN60898	B	10	6	30	3.68
BX2 2	Hook up socket 2	O	B	1	1.5	1.5	0.4	EN60898	B	10	6	30	3.68
BX2 3	Hook up socket 3	O	B	1	1.5	1.5	0.4	EN60898	B	10	6	30	3.68
BX2 4	Hook up socket 4	O	B	1	1.5	1.5	0.4	EN60898	B	10	6	30	3.68
BX2 5	Hook up socket 5	O	B	1	1.5	1.5	0.4	EN60898	B	10	6	30	3.68
BX2 6	Hook up socket 6	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
	Hook up box three												
	(Z _s = 729 Kva= 0.00033)												
BX3 1	Hook up socket 1	O	B	1	1.5	1.5	0.4	EN60898	C	10	6	30	1.84
BX3 2	Hook up socket 2	O	B	1	1.5	1.5	0.4	EN60898	C	10	6	30	1.84
BX3 3	Hook up socket 3	O	B	1	1.5	1.5	0.4	EN60898	C	10	6	30	1.84
BX3 4	Hook up socket 4	O	B	1	1.5	1.5	0.4	EN60898	C	10	6	30	1.84
ΔX3 5	Hook up socket 5	O	B	1	1.5	1.5	0.4	EN60898	C	10	6	30	1.84
ΔX3 6	Hook up socket 6	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136

Duplicate (To be retained by the contractor)

↑ See Table 4A2 of Appendix 4 of BS 7671

CODES FOR TYPE OF WIRING								
A	B	C	D	E	F	G	H	O (Other - please state)
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral-insulated cables	Cables in enclosure

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* In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided on continuation schedules.

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See next page for
Schedule of Test Results

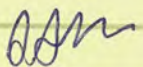
SCHEDULE OF TEST RESULTS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				Test instruments (serial numbers) used:			
Characteristics at this distribution board Confirmation of supply polarity yes				Earth fault loop impedance 15067896		RCD 15067896	
Operating times of associated RCD (if any) At $I_{\Delta n}$ N/A ms At $5I_{\Delta n}$ (if applicable) N/A ms				Insulation resistance 15067896		Other N/A	
Continuity 15067896				Other N/A			

TEST RESULTS													
Circuit number and phase	Circuit impedances (Ω)					Insulation resistance † Record lower or lowest value				Polarity (✓)	Maximum measured earth fault loop impedance, Z_s ★ See note below	RCD operating times	
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/Line †	Line/Neutral †	Line/Earth †	Neutral/Earth			at $I_{\Delta n}$	at $5I_{\Delta n}$ (if applicable)
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	(M Ω)	(M Ω)	(M Ω)	(M Ω)			(ms)	(ms)
BX2 1				0.01			1000	1000	1000	✓	380.01	18	15
BX2 2				0.01			1000	1000	1000	✓	380.01	18	15
BX2 3				0.01			1000	1000	1000	✓	380.01	18	15
9X2 4				0.01			1000	1000	1000	✓	380.01	18	15
BX2 5				0.01			1000	1000	1000	✓	380.01	18	15
BX2 6				0.01			1000	1000	1000	✓	380.01	18	15
9X3 1				0.01			1000	1000	1000	✓	729.01	17	16
9X3 2				0.01			1000	1000	1000	✓	729.01	17	16
BX3 3				0.01			1000	1000	1000	✓	729.01	17	16
BX3 4				0.01			1000	1000	1000	✓	729.01	17	16
BX3 5				0.01			1000	1000	1000	✓	729.01	17	16
BX3 6				0.01			1000	1000	1000	✓	729.01	17	16

* Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.

TESTED BY

Signature:		Position:	Electrician
Name: (CAPITALS)	David Allun Jones	Date of testing:	24/03/2011

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SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED IN EVERY CASE		TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*							
Location of distribution board:	In Bar across Yard	Supply to distribution board is from:	Main switched fused isolator	Garage	No of phases:	3	Nominal voltage:	400V	
Distribution board designation:	DB1A	Overcurrent protective device for the distribution circuit:	Type: BS88	Rating:	63 A	Associated RCD (if any): BS(EN)	N/A	RCD No of poles:	N/A
			BS(EN)					I _{Δn}	N/A mA

CIRCUIT DETAILS													
Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method	Number of points served	Circuit conductors: csa		Max. disconnection time permitted by BS 7671 (s)	Overcurrent protective devices				RCD	
					Live (mm ²)	cpc (mm ²)		BS (EN)	Type No	Rating (A)	Short-circuit capacity (kA)	Operating current, I _{Δn} (mA)	Maximum Z _s permitted by BS 7671 (Ω)
	(DB1A Way 25 (9.1))												
DB1- 25	Supply to Hook up box 8	A	B	1	6.0	2.5	0.4	EN60898	2	30	6		0.872
	Hook Up box 8 Outside barn Wall												
	Zs 37ε												
BX8 1	Socket hook up 1	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.13ε
BX8 2	Socket hook up 2	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.13ε
BX8 3	Socket hook up 3	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.13ε
BX8 4	Socket hook up 4	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.13ε
BX8 5	Socket hook up 5	O	B	1	1.0	1.0	0.4	EN60898	B	10	6	30	3.6ε
BX8 6	Socket hook up 6	O	B	1	1.0	1.0	0.4	EN60898	B	10	6	30	3.6ε

↑ See Table 4A2 of Appendix 4 of BS 7671

CODES FOR TYPE OF WIRING								
A	B	C	D	E	F	G	H	0 (Other - please state)
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral-insulated cables	Cables in enclosure

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* In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided on continuation schedules.

This form is based on the model shown in Appendix 6 of BS 7671

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See next page for
Schedule of Test Results

SCHEDULE OF TEST RESULTS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION					
Characteristics at this distribution board					
	YES	Confirmation of supply polarity			
★ See note below					
Z _s	0.52	Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A ms
I _{pf}	0.462	kA		At 5I _{Δn} (if applicable)	N/A ms
Test instruments (serial numbers) used:					
Earth fault loop impedance	15067896		RCD	15067896	
Insulation resistance	15067896		Other	N/A	
Continuity	15067896		Other	N/A	

TEST RESULTS

[illegible]

* Note: Where the installation can be supplied by more than one source, such as a primary source (eg public supply) and a secondary source (eg standby generator), the higher or highest values must be recorded.

TESTED BY

Signature: _____

AS

Position:

Electrician

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$$\boxed{18 \quad 26}$$

Name:
(CAPITALS)

David Allun Jones

Date of testing:

23/03/2011

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**See previous page
for Circuit Details**

Duplicate (To be retained by the contractor)

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION - CONTINUATION

TO BE COMPLETED IN EVERY CASE		TO BE COMPLETED ONLY IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION*							
Location of distribution board:	In Barn Across Yard	Supply to distribution board is from:	Main switched fused isolator	Garage	No of phases:	3	Nominal voltage:	400V	
Distribution board designation:	DB1A	Overcurrent protective device for the distribution circuit:	Type: BS88-2	Rating:	63 A	Associated RCD (if any): BS(EN)	N/A	RCD No of poles:	N/A
								I _{Δn}	N/A mA

CIRCUIT DETAILS													
Circuit number and phase	Circuit designation	Type of wiring (see code below)	Reference method	Number of points served	Circuit conductors: csa			Overcurrent protective devices				RCD	
					Live	cpc	Max. disconnection time permitted by BS 7671 (s)	BS (EN)	Type No	Rating (A)	Short-circuit capacity (kA)	Operating current, I _{Δn} (mA)	Maximum Z _s permitted by BS 7671 (Ω)
	(Z _s = 1.02 Kva= 0.237 at end point)												
DB1- 4	Supply to Hook up box 9&10 West feild	G	D	2	16	Swa	0.4	BS3871	2	30	6		0.872
	West feild (Way 2.1)												
	HOOK UP BOX 9WEST FEILD												
	(Z _e = 137.7 Kva= 0.00182												
BX9 1	Socket hook up 1	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.136
BX9 2	Socket hook up 2	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.136
BX9 3	Socket hook up 3	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.136
BX9 4	Socket hook up 4	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.136
BX9 5	Socket hook up 5	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.136
BX9 6	Socket hook up 6	O	B	1	1.0	1.0	0.4	EN60898	B	6	6	30	6.136
	HOOK UP BOX 10 WEST FEILD												
	Z _e =171.4 Kva= 0.00142												
BX10 1	Socket hook up	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX10 2	Socket hook up	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX10 3	Socket hook up	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX10 4	Socket hook up	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX10 5	Socket hook up	O	B	1	1.5	1.5	0.4	EN60898	B	6	6	30	6.136
BX10 6	Socket hook up	O	B	1	1.5	1.5	0.4	EN60898	C	6	6	30	3.064

↑ See Table 4A2 of Appendix 4 of BS 7671

CODES FOR TYPE OF WIRING								
A	B	C	D	E	F	G	H	0 (Other - please state)
PVC/PVC cables	PVC cables in metallic conduit	PVC cables in non-metallic conduit	PVC cables in metallic trunking	PVC cables in non-metallic trunking	PVC/SWA cables	XLPE/SWA cables	Mineral-insulated cables	Cables in enclosure

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* In such cases, details of the distribution (sub-main) circuit(s), together with the test results for the circuit(s), must also be provided on continuation schedules.