

DETAILS OF THE CLIENT

Client	Sample	Address	Bramble House 112 Wickham Road Fareham Hampshire PO16 7JH
Purpose of this report	Periodic Electrical Inspection		

DETAILS OF THE INSTALLATION

Occupier	Intersafe Limited	Description of premises	Domestic <input checked="" type="checkbox"/>	Commercial <input type="checkbox"/>	Industrial <input type="checkbox"/>
Address	Intersafe Bramble House 112 Wickham Road Fareham Hampshire PO16 7JH	Other	N/A		
Date of previous inspection	Not Known	Estimated age of the electrical installation	15 yrs		
Records of installation available	<input checked="" type="checkbox"/>	Evidence of alterations or additions	<input checked="" type="checkbox"/>	If yes estimated age	4 yrs
Records held by	N/A	Electrical Installation Certificate No or previous Periodic Inspection Report No	N/A		

EXTENT AND LIMITATIONS OF THE INSPECTION

Extent of electrical installation covered by this report

Two Storey Portacabin Type Buildings Linked Together.
From Main DB 1, Sub Mains And Final Circuits.

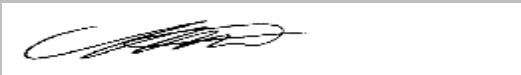

Agreed limitation of the inspection and testing

No Insulation Resistance Testing Between Phase And Neutral Conductors Where Voltage Sensitive Equipment Cannot Be Verifiably Excluded From The Circuit.
No Testing Of Fixed Equipment At Heights Above 3.0 Meters A.F.F.L. Where Suitable Access Equipment Has Not Been Provided.
No Testing Where Safe Access Cannot Be Provided.
DB's 5 And 6 And All Final Circuit's Fed From Them Have Been Excluded From All But Visual Test's As Requested By The Client.

This inspection has been carried out in accordance with BS7671:2008(IEE Wiring Regulations), as amended. Cables concealed within trunking and conduits, or cables and conduits concealed under floors, in roof space and generally within the fabric of the building or underground have not been inspected.

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, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including observations overleaf and the attached schedules, provide 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.

INSPECTION, TESTING AND ASSESSMENT BY:		REPORT REVIEWED AND CONFIRMED BY:	
Signature		Signature	
Name	Craig Yellott	Name	Craig Yellott
Position	Electrical Test Engineer	Date	02/07/2009
Date	02/07/2009		

OBSERVATIONS AND RECOMMENDATIONS FOR ACTIONS TO BE TAKEN

Referring to the attached schedule(s) of Inspection and Test Results, and subject to the limitations specified at the Extent and Limitations section

No Remedial work is required

0

The following observations are made

26

Item No

Code

1	DB 1 - (Main Intake Cupboard - Blackpool Room) - No Circuits Schedule Accompanying Distribution Board	2
2	DB 1 - (Main Intake Cupboard - Blackpool Room) - Penetrations Made In Top Of DB Are Larger Than Recommended (IPXXD or IP4X)	2
3	DB 7 - (Electrical Cupboard - Main Entrance - Ground Floor) - No Circuits Schedule Accompanying Distribution Board	2
4	DB 7 - (Electrical Cupboard - Main Entrance - Ground Floor) - Blank Plates Missing From Add-On Panel Board Above DB 7	1
5	DB 7 - (Electrical Cupboard - Main Entrance - Ground Floor) - Penetrations Made In Top & Bottom Of DB Are Larger Than Recommended (IPXXD or IP4X)	2
6	DB 6 - (UPS Room - Outside) - This DB Has Been Limited At The Request Of The Client	3
7	DB 6 - (UPS Room - Outside) - Due To Being Requested NOT To Turn Off Any Final Circuits Fed From This Board, All Information For The Final Circuit's Have Been Taken From Previous Test Results Or From The Marked Up Front Cover Of The DB (These Circuits Have NOT Been Verified)	3
8	DB 6 - (UPS - Outside) - Identification Of Conductors (REG 514.3.1) For The Main Supply Cables Requires Sleeving Of The Correct Phase Colour Or Marking	4
9	DB 5 - (UPS - Outside) - This DB Has Been Limited At The Request Of The Client	3
10	DB 5 - (UPS - Outside) - Due To Being Requested NOT To Turn Off Any Final Circuits Fed From This Board, All Information For The Final Circuit's Have Been Taken From Previous Test Results Or From The Marked Up Front Cover Of The DB (These Circuits Have NOT Been Verified)	3
11	DB 5 - (UPS - Outside) - Identification Of Conductors (REG 514.3.1) For The Main Supply Cables Requires Sleeving Of The Correct Phase Colour Or Marking	4
12	DB 5 - (UPS - Outside) - Circuit 8TP - Identification Of Conductors (REG 514.3.1) The Supply Cables Requires Sleeving Of The --Recommendations and observations continue on continuation sheet(s)--	4

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' | 2. 'requires improvement' |
| 3. 'requires further investigation' | 4. 'does not comply with BS 7671:2008 (as amended)'
This does not imply that the electrical installation is unsafe. |

Urgent Remedial work recommended for Items: 4

Corrective action(s) recommended for Items: 26 items in total

SUMMARY OF THE INSPECTION

General condition of the installation

PRESENCE & ADEQUACY OF EARTHING & BONDING

Arrangements for earthing and bonding were assessed to be satisfactory.

There is general evidence of Steel Wire Armoured (SWA) cable not being reliably and durably bonded to earth, for instance by the use of earthing collars and strapping cable. Even where a core of the cable is intended to be utilised as the Circuit Protective Conductor (CPC), it is

Date(s) of the inspection

15/06/2009

Overall assessment
of the installation

Unsatisfactory

SCHEDULES AND ADDITIONAL PAGES

Schedule of items inspected and schedules of items tested:	Page 4	Additional pages, including additional source(s) data sheets	Pages 27,28,29
Schedule of Circuit Details for the installation	5 - 25 (odd)	Schedule of Test Results for the installation	6 - 26 (even)

NEXT INSPECTION

I/We recommend that this installation is further inspected and tested after an interval of not more than **3 Years**

Provided that any observations which have been attributed recommendation code 1 (requires urgent attention) are remedied without delay. Observations attributed recommendation code 2 or 3 should be acted on as soon as is practical.

DETAILS OF THE INSPECTION AND TEST COMPANY

Trading Title: **Intersafe Limited**

Address: **Bramble House
112 Wickham Road
Fareham
Hampshire
PO16 7JH**

Telephone number: **01329 222370**

Fax number: **01329 825678**

NICEIC Enrolment No.: **031903**

Branch No. (if applicable): **N/A**

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

* System Type(s)	* Number and Type of Live Conductors	Nature of Supply Parameters	* Supply protective device characteristics
TN-S <input checked="" type="checkbox"/>	a.c. <input checked="" type="checkbox"/> d.c. <input type="checkbox"/>	Nominal Voltage U 400 V U _o 230 V	BS(EN)
TN-C-S <input checked="" type="checkbox"/>	1-Phase (2 wire) <input checked="" type="checkbox"/> 1-Phase (3 wire) <input type="checkbox"/> 2 Pole <input type="checkbox"/>	Nominal frequency f 50 Hz	LIM
TN-C <input checked="" type="checkbox"/>	2-Phase (3 wire) <input checked="" type="checkbox"/> 3 Pole <input type="checkbox"/>	Prospective fault current I _{pf} 5.60 kA	Type
TT <input checked="" type="checkbox"/>	3-Phase (3 wire) <input checked="" type="checkbox"/> 3-Phase (4 wire) <input type="checkbox"/> Other <input type="checkbox"/>	External loop impedance Z _e 0.08 Ω	N/A
IT <input checked="" type="checkbox"/>	Other N/A	Number of supplies 2	Nominal current rating LIM A
			Short circuit capacity N/A kA

PARTICULARS OF INSTALLATION REFERRED TO IN THE CERTIFICATE

* Means of Earthing	Details of Installation Earth Electrode (where applicable)	
Distributor's facility <input checked="" type="checkbox"/>	Type (eg rod(s), tape etc) N/A	Location N/A
Installation earth electrode <input checked="" type="checkbox"/>	Electrode resistance, R _A N/A Ω	Method of measurement N/A

* Main Switch or Circuit-Breaker	Maximum Demand (load)	Protective measure(s) against electric shock
Type BS(EN) 60947-2 Voltage rating 750 V	N/A KVA	ADS
No of poles 3 Current rating 400 A		
Supply conductors material Copper RCD Operating current, I _{Δn} N/A mA		
Supply conductors csa 95 mm ² RCD Operating time at, I _{Δn} N/A ms		

Earthing and Protective Bonding Conductors		Bonding of extraneous conductive parts	
Earthing Conductor	Main protective bonding conductors	Water	Gas
Material Copper	Material Copper	<input checked="" type="checkbox"/>	N/A
csa 70 mm ²	csa 50 mm ²	Oil N/A	Steel <input checked="" type="checkbox"/>
Continuity check <input checked="" type="checkbox"/>	Continuity check <input checked="" type="checkbox"/>	Lightning <input checked="" type="checkbox"/>	Other <input checked="" type="checkbox"/>

* 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

<input checked="" type="checkbox"/>	SELV
<input type="checkbox"/>	PELV
<input type="checkbox"/>	Double or Reinforced insulation

Basic protection

<input checked="" type="checkbox"/>	Insulation of live parts
<input checked="" type="checkbox"/>	Barriers or enclosures
<input type="checkbox"/>	Obstacles **
<input type="checkbox"/>	Placing out of reach **

Fault protection

Automatic disconnection of supply

<input checked="" type="checkbox"/>	Presence of earthing conductor
<input checked="" type="checkbox"/>	Presence of circuit protective conductors
<input checked="" type="checkbox"/>	Presence of main protective bonding conductors
<input type="checkbox"/>	Presence of earthing arrangements for combined protective and functional purposes
<input checked="" type="checkbox"/>	Presence of adequate arrangements for alternative source(s), where applicable
<input type="checkbox"/>	FELV
<input checked="" type="checkbox"/>	Choice and setting of protective and monitoring devices (for fault protection and/or overcurrent protection)

Non-conducting location **

<input type="checkbox"/>	Absence of protective conductors
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Earth-free equipotential bonding **

<input type="checkbox"/>	Presence of earth-free equipotential bonding
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Electrical separation

<input type="checkbox"/>	For one item of current-using equipment
<input type="checkbox"/>	For more than one item of current-using equipment **

Additional protection

<input checked="" type="checkbox"/>	Presence of residual current device(s)
<input checked="" type="checkbox"/>	Presence of supplementary bonding conductors

** For use in controlled supervised/conditions only

Prevention of mutual detrimental influence

<input checked="" type="checkbox"/>	Proximity of non-electrical services and other influences
<input checked="" type="checkbox"/>	Segregation of Band I and Band II circuits or Band II insulation used.
<input checked="" type="checkbox"/>	Segregation of Safety Circuits

Identification

<input checked="" type="checkbox"/>	Presence of diagrams, instructions, circuit charts and similar information
<input checked="" type="checkbox"/>	Presence of danger notices and other warning notices
<input checked="" type="checkbox"/>	Labelling of protective devices, switches and terminals
<input checked="" type="checkbox"/>	Identification of conductors

Cables and Conductors

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

General

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

SCHEDULE OF ITEMS TESTED

† see note below

<input checked="" type="checkbox"/>	External earth fault loop impedance, Z_e
<input type="checkbox"/>	Installation earth electrode resistance, R_A
<input checked="" type="checkbox"/>	Continuity of protective conductors
<input checked="" type="checkbox"/>	Continuity of ring final circuit conductors
<input checked="" type="checkbox"/>	Insulation resistance between live conductors
<input type="checkbox"/>	LIM
<input type="checkbox"/>	Insulation resistance between live conductors and Earth
<input type="checkbox"/>	N/A
<input type="checkbox"/>	Protection by separation of circuits

<input type="checkbox"/>	N/A	Basic protection by barrier or enclosure provided during erection
<input type="checkbox"/>	N/A	Insulation of non-conducting floors or walls
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Polarity
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Earth fault loop impedance, Z_s
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Verification of phase sequence
<input type="checkbox"/>	LIM	Operation of residual current devices
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Functional testing of assemblies
<input type="checkbox"/>	LIM	Verification of voltage drop

† All boxes must be completed

to indicate an inspection has been carried out and the result was satisfactory
 to indicate an inspection has been carried out and the result is not satisfactory

N/A to indicate the inspection is not applicable to a particular item
 LIM to indicate that exceptionally, a limitation agreed with the person ordering the work prevented the inspection being carried out

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of distribution board	Mains Intake Cupboard Blackpool Meeting Rm Ground Floor West	Supply to distribution board is from	Sub Mains(DB 1, 12/TP)		
Distribution board designation	DB 2	No of phases	3	Nominal Voltage	400 V
		Overcurrent protective device for the distribution circuit	Type BS(EN) 60947-2 MCCB Rating 125 A		
		Associated RCD (if any)	BS(EN) N/A		
		RCD No of poles	N/A		
		RCD rating, $I_{\Delta n}$	N/A mA		

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD $I_{\Delta n}$	Max. permitted Zs Ω	
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA			Op. current $I_{\Delta n}$
1/L1	SKTs - Far South	A	E	13	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
1/L2	Heater Adj. Lift	A	E	1	4	1.5	5	60898 MCB	B	10	10	N/A	4.60	
1/L3	SKTs - Local	A	E	4	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
2/L1	SKTs - Far South FB	A	E	1	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
2/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
2/L3	SKTs - Near South	A	E	10	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
3/L1	SKTs - Far South	A	E	10	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
3/L2	SKTs - Near South	A	E	4	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
3/L3	SKTs - Middle South	A	E	9	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
4/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
4/L2	SKTs - Middle South	A	E	5	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
5/L1	SKTs - Far North	A	E	6	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
5/L2	SKTs - Kitchen Area	A	E	6	2.5	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
5/L3	SKTs - Adj. Lift	A	E	1	2.5	1.5	0.4	60898 MCB	B	16	10	N/A	2.88	
6/L1	Ladies - Hand Dryers	A	E	2	4	1.5	5	60898 MCB	C	20	10	N/A	1.15	
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
6/L3	SKTs - Adj. Stairs	A	E	1	2.5	1.5	0.4	60898 MCB	B	16	10	N/A	2.88	
7/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
7/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
7/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
8/L1	LTS - Local	A	E	3	1.5	1	5	60898 MCB	B	10	10	N/A	4.60	
8/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
8/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED				
Zs	0.09 Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	Earth fault loop impedance	6111-593/050305/1251 RCD	6111-593/050305/1251
Ipf	5.03 kA		5I _{Δn} (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349 Other	N/A
Confirmation of Supply polarity			Ü			Continuity	6111-487/050305/1349 Other	N/A

CIRCUIT TESTS

Circuit number and phase	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Ω	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	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	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
1/L1	0.36	0.39	0.81	0.23	N/A	N/A	>299	>299	>299	Ü	0.32	N/A	N/A
1/L2	N/A	N/A	N/A	0.15	N/A	N/A	>299	>299	>299	Ü	0.24	N/A	N/A
1/L3	0.19	0.23	0.38	0.17	N/A	N/A	>299	>299	>299	Ü	0.26	N/A	N/A
2/L1	0.45	0.47	0.89	0.30	N/A	N/A	>299	>299	>299	Ü	0.39	N/A	N/A
2/L2	-	-	-	-	-	-	-	-	-		-	-	-
2/L3	0.22	0.24	0.59	0.12	N/A	N/A	>299	>299	>299	Ü	0.21	N/A	N/A
3/L1	0.40	0.43	0.90	0.12	N/A	N/A	>299	>299	>299	Ü	0.21	N/A	N/A
3/L2	0.27	0.31	0.81	0.22	N/A	N/A	>299	>299	>299	Ü	0.31	N/A	N/A
3/L3	0.31	0.34	0.77	0.16	N/A	N/A	>299	>299	>299	Ü	0.25	N/A	N/A
4/L1	-	-	-	-	-	-	-	-	-		-	-	-
4/L2	0.41	0.37	0.76	0.29	N/A	N/A	>299	>299	>299	Ü	0.38	N/A	N/A
4/L3	-	-	-	-	-	-	-	-	-		-	-	-
5/L1	0.43	0.41	0.87	0.32	N/A	N/A	>299	>299	>299	Ü	0.41	N/A	N/A
5/L2	0.24	0.21	0.56	0.22	N/A	N/A	>299	>299	>299	Ü	0.31	N/A	N/A
5/L3	N/A	N/A	N/A	0.31	N/A	N/A	>299	>299	>299	Ü	0.40	N/A	N/A
6/L1	N/A	N/A	N/A	0.28	N/A	N/A	>299	>299	>299	Ü	0.37	N/A	N/A
6/L2	-	-	-	-	-	-	-	-	-		-	-	-
6/L3	N/A	N/A	N/A	0.20	N/A	N/A	>299	>299	>299	Ü	0.29	N/A	N/A
7/L1	-	-	-	-	-	-	-	-	-		-	-	-
7/L2	-	-	-	-	-	-	-	-	-		-	-	-
7/L3	-	-	-	-	-	-	-	-	-		-	-	-
8/L1	N/A	N/A	N/A	0.42	N/A	N/A	LIM	>299	>299	Ü	0.51	N/A	N/A
8/L2	-	-	-	-	-	-	-	-	-		-	-	-
8/L3	-	-	-	-	-	-	-	-	-		-	-	-

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION		
Location of distribution board	Mains Intake Cupboard Blackpool Meeting Rm Ground Floor West	Supply to distribution board is from	Sub Mains(DB 1, 12/TP)	
Distribution board designation	DB 2	No of phases	3	Nominal Voltage 400 V
		Overcurrent protective device for the distribution circuit		
		Type BS(EN)	60947-2 MCCB	Rating 125 A
		Associated RCD (if any)	BS(EN) N/A	
		RCD No of poles	N/A	
		RCD rating, $I_{\Delta n}$	N/A mA	

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD $I_{\Delta n}$	Max. permitted Zs Ω	
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA			Op. current $I_{\Delta n}$
9/L1	LTS - Contactor	A	E	1	4	1.5	5	60898 MCB	D	6	10	N/A	1.92	
9/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
9/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
10/L1	LTS - Lobby Area	A	E	3	1.5	1	5	60898 MCB	B	6	10	N/A	7.67	
10/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
10/L3	LTS - Staff Kitchen	A	E	5	1.5	1	5	60898 MCB	B	6	10	N/A	7.67	
11/L1	LTS - Office Area	A	E	8	1.5	1	5	60898 MCB	B	6	10	N/A	7.67	
11/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
11/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
12/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
12/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
12/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
13/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
13/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
13/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
14/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
14/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
14/L3	Female - Heaters	A	E	1	4	1.5	5	60898 MCB	B	32	10	N/A	1.44	
15/L1	LTS - Office Area	A	E	10	1.5	1	5	60898 MCB	C	10	10	N/A	2.30	
15/L2	LTS - Office Area	A	E	14	1.5	1	5	60898 MCB	C	10	10	N/A	2.30	
15/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
16/L1	A/C Supply LBA Meeting	G	C	1	2.5	2.5	5	60898 MCB	B	20	10	N/A	2.30	
16/L2	LTS - Ladies Toilets	A	E	13	1.5	1	5	60898 MCB	B	10	10	N/A	4.60	
16/L3	A/C Supply Unit 11	G	C	1	2.5	2.5	5	60898 MCB	C	20	10	N/A	1.15	

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED				
Zs	0.09 Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	Earth fault loop impedance	6111-593/050305/1251 RCD	6111-593/050305/1251
Ipf	5.03 kA		5I _{Δn} (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349 Other	N/A
Confirmation of Supply polarity				Ü		Continuity	6111-487/050305/1349 Other	N/A

CIRCUIT TESTS

Circuit number and phase	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Ω	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	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	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
9/L1	N/A	N/A	N/A	N/A	0.01	N/A	LIM	LIM	LIM	Ü	0.10	N/A	N/A
9/L2	-	-	-	-	-	-	-	-	-		-	-	-
9/L3	-	-	-	-	-	-	-	-	-		-	-	-
10/L1	N/A	N/A	N/A	0.80	N/A	N/A	LIM	>299	>299	Ü	0.89	N/A	N/A
10/L2	-	-	-	-	-	-	-	-	-		-	-	-
10/L3	N/A	N/A	N/A	0.79	N/A	N/A	LIM	>299	>299	Ü	0.68	N/A	N/A
11/L1	N/A	N/A	N/A	0.74	N/A	N/A	LIM	>299	>299	Ü	0.83	N/A	N/A
11/L2	-	-	-	-	-	-	-	-	-		-	-	-
11/L3	-	-	-	-	-	-	-	-	-		-	-	-
12/L1	-	-	-	-	-	-	-	-	-		-	-	-
12/L2	-	-	-	-	-	-	-	-	-		-	-	-
12/L3	-	-	-	-	-	-	-	-	-		-	-	-
13/L1	-	-	-	-	-	-	-	-	-		-	-	-
13/L2	-	-	-	-	-	-	-	-	-		-	-	-
13/L3	-	-	-	-	-	-	-	-	-		-	-	-
14/L1	-	-	-	-	-	-	-	-	-		-	-	-
14/L2	-	-	-	-	-	-	-	-	-		-	-	-
14/L3	N/A	N/A	N/A	0.29	N/A	N/A	>299	>299	>299	Ü	0.38	N/A	N/A
15/L1	N/A	N/A	N/A	0.83	N/A	N/A	LIM	>299	>299	Ü	0.92	N/A	N/A
15/L2	N/A	N/A	N/A	0.75	N/A	N/A	LIM	>299	>299	Ü	0.84	N/A	N/A
15/L3	-	-	-	-	-	-	-	-	-		-	-	-
16/L1	N/A	N/A	N/A	0.25	N/A	N/A	>299	>299	>299	Ü	0.34	N/A	N/A
16/L2	N/A	N/A	N/A	0.70	N/A	N/A	LIM	>299	>299	Ü	0.79	N/A	N/A
16/L3	N/A	N/A	N/A	0.13	N/A	N/A	>299	>299	>299	Ü	0.22	N/A	N/A

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of distribution board	UPS Room Outside	Supply to distribution board is from	Sub Mains(DB 1, 6/TP)		Associated RCD (if any)
Distribution board designation	DB 5	No of phases	3	Nominal Voltage	400 V
		Overcurrent protective device for the distribution circuit	Type BS(EN) 60947-2 MCCB		Rating 100 A
					RCD No of poles N/A
					RCD rating, I Δ n N/A mA

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD Op. current I Δ n	Max. permitted Zs Ω
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA		
1/L1	LTS - Comms	A	B	N/V	1.5	1.0	N/V	60898 MCB	B	6	10	N/A	7.67
1/L2	SKTS - Ops Room 1	A	B	N/V	4	1.5	N/V	60898 MCB	B	32	10	N/A	1.44
1/L3	LTS - Call Centre 1	A	B	N/V	1.5	1.0	N/V	60898 MCB	C	10	10	N/A	2.30
2/L1	SKTs - Ops Room2	A	B	N/V	4	1.5	N/V	60898 MCB	B	32	10	N/A	1.44
2/L2	LTS - Ground Floor 2	D	B	N/V	2.5	1.5	N/V	60898 MCB	B	6	10	N/A	7.67
2/L3	LTS - Ground Floor 3	D	B	N/V	2.5	1.5	N/V	60898 MCB	B	6	10	N/A	7.67
3/L1	LTS - Ground Floor 4	D	B	N/V	2.5	1.5	N/V	60898 MCB	B	6	10	N/A	7.67
3/L2	LTS - Call Centre 2	A	B	N/V	1.5	1.0	N/V	60898 MCB	C	10	10	N/A	2.30
3/L3	LTS - Ground Floor 6	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
4/L1	A/C Unit - UPS Room	A	B	N/V	2.5	1.5	N/V	60898 MCB	C	20	10	N/A	1.15
4/L2	LTS - End 3 Offices	A	B	N/V	1.5	1.0	N/V	60898 MCB	B	6	10	N/A	7.67
4/L3	LTS - Ops Room 1	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
5/L1	LTS - Ops Room 2	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
5/L2	LTS - Ops Room 3	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
5/L3	LTS - Ops Room 4	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
6/L1	LTS - Ops Room 5	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
6/L2	LTS - Ops Room 6	D	B	N/V	2.5	2.5	N/V	60898 MCB	B	6	10	N/A	7.67
6/L3	A/C Unit Comms Room 3	G	C	N/V	2.5	2.5	N/V	60898 MCB	B	20	10	N/A	2.30
7/L1	LTS - Call Centre 3	A	B	N/V	1.5	1.0	N/V	60898 MCB	C	10	10	N/A	2.30
7/L2	SKTs - Call Centre 1	A	B	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72
7/L3	SKTs - Call Centre 2	A	B	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72
8/TP	Sub Mains(DB 6)	D	B	1	16	16	5	60898 MCB	D	63	10	N/A	0.18

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED				
Zs	0.47 Ω	Operating times of associated RCD (if any)	At I Δn	N/A	ms	Earth fault loop impedance	6111-593/050305/1251 RCD	6111-593/050305/1251
Ipf	5.10 kA		5I Δn (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349 Other	N/A
Confirmation of Supply polarity Ü						Continuity	6111-487/050305/1349 Other	N/A

CIRCUIT TESTS

Circuit number and phase	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Ω	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	Earth/Neutral			At I Δn	At 5I Δn
	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
1/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
1/L2	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
1/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
2/L1	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
2/L2	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
2/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
3/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
3/L2	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
3/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
4/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
4/L2	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
4/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
5/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
5/L2	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
5/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
6/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
6/L2	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
6/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
7/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
7/L2	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
7/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
8/TP	N/A	N/A	N/A	LIM	N/A	LIM	LIM	LIM	LIM		LIM	N/A	N/A

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION		
Location of distribution board	UPS Room Outside	Supply to distribution board is from	Sub Mains(DB 5, 8/TP)	
Distribution board designation	DB 6	No of phases	3	Nominal Voltage 400 V
		Overcurrent protective device for the distribution circuit		
		Type BS(EN)	60898 MCB D	Rating 63 A
		Associated RCD (if any)	BS(EN) N/A	
		RCD No of poles	N/A	
		RCD rating, $I_{\Delta n}$	N/A mA	

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD $I_{\Delta n}$	Max. permitted Zs Ω
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA		
1/L1	SKTs - Power Pole	A	E	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72
1/L2	SKTs - Power Pole	A	E	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72
1/L3	SKTs - Power Pole	A	E	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72
2/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	SKTs - Comms Room 2	A	E	N/V	4	1.5	N/V	60898 MCB	B	32	10	N/A	0.72
3/L1	SKTs - Ops Room 1	A	E	N/V	4	1.5	N/V	60898 MCB	B	32	10	N/A	0.72
3/L2	SKTs - Ops Room 2	A	E	N/V	4	1.5	N/V	60898 MCB	B	32	10	N/A	0.72
3/L3	SKTs - Comms Room 1	A	E	N/V	4	1.5	N/V	60898 MCB	B	32	10	N/A	0.72
4/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	Temp. Alarm Supply UPS	D	B	N/V	1.5	2.5	N/V	60898 MCB	B	2	10	N/A	
5/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L2	SKTs - Call Centre 1	A	E	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72
8/L3	SKTs - Call Centre 2	A	E	N/V	4	1.5	N/V	60898 MCB	C	32	10	N/A	0.72

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION						TEST INSTRUMENTS (SERIAL NUMBERS) USED					
Zs	0.47	Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	Earth fault loop impedance	6111-593/050305/1251	RCD	6111-593/050305/1251	
lpf	0.49	kA		5I _{Δn} (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349	Other	N/A	
Confirmation of Supply polarity						Ü	Continuity	6111-487/050305/1349	Other	N/A	

CIRCUIT TESTS

Circuit number and phase	Circuit impedances					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD operating times	
	Ω					Line/Line	Line/Neutral	Line/Earth	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)									
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ +R ₂	R ₂	ms	ms						
1/L1	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
1/L2	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
1/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
2/L1	-	-	-	-	-	-	-	-	-		-	-	-
2/L2	-	-	-	-	-	-	-	-	-		-	-	-
2/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
3/L1	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
3/L2	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
3/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
4/L1	-	-	-	-	-	-	-	-	-		-	-	-
4/L2	-	-	-	-	-	-	-	-	-		-	-	-
4/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
5/L1	-	-	-	-	-	-	-	-	-		-	-	-
5/L2	-	-	-	-	-	-	-	-	-		-	-	-
5/L3	-	-	-	-	-	-	-	-	-		-	-	-
6/L1	-	-	-	-	-	-	-	-	-		-	-	-
6/L2	-	-	-	-	-	-	-	-	-		-	-	-
6/L3	-	-	-	-	-	-	-	-	-		-	-	-
7/L1	-	-	-	-	-	-	-	-	-		-	-	-
7/L2	-	-	-	-	-	-	-	-	-		-	-	-
7/L3	-	-	-	-	-	-	-	-	-		-	-	-
8/L1	-	-	-	-	-	-	-	-	-		-	-	-
8/L2	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
8/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of distribution board	Cleaners Cupboard First Floor West	Supply to distribution board is from	Sub Mains(DB 1, 11/TP)		
Distribution board designation	DB 3	No of phases	3	Nominal Voltage	400 V
		Overcurrent protective device for the distribution circuit	Type BS(EN) 60947-2 MCCB Rating 125 A		
		Associated RCD (if any)	BS(EN) N/A		
		RCD No of poles	N/A		
		RCD rating, $I_{\Delta n}$	mA		

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD Op. current $I_{\Delta n}$	Max. permitted Zs Ω
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA		
1/L1	SKTs - LHS Office & FB	A	B	8	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
1/L2	SKTS - RHS Office & FB	A	B	9	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
1/L3	SKTs - LHS Office & FB	A	B	9	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
2/L1	SKTs - Far LHS Office	A	B	9	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
2/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/L1	SKTs - Far RHS Office	A	B	15	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
3/L2	SKTs - RHS Office & FB	A	B	13	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
3/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	SKTs - RHS Office & FB	A	B	12	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L1	SKTs - Far RHS Office	A	B	9	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
5/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	Not Verified	O	B	N/V	1.5	1.5	N/V	60898 MCB	C	20	10	N/A	1.15
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	FCU - Water Heater DIS	A	B	1	2.5	1.5	5	60898 MCB	B	16	10	N/A	2.88
8/L1	FCU - Wall Heater Stairs	A	B	1	2.5	1.4	5	60898 MCB	B	16	10	N/A	2.88
8/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	FCU - Toilet Fan Heaters	A	B	2	2.5	20	5	60898 MCB	B	20	10	N/A	2.30

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED				
Zs	0.09 Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	Earth fault loop impedance	6111-593/050305/1251 RCD	6111-593/050305/1251
lpf	5.09 kA		5I _{Δn} (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349 Other	N/A
Confirmation of Supply polarity				Ü		Continuity	6111-487/050305/1349 Other	N/A

CIRCUIT TESTS

Circuit number and phase	Circuit impedances					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD operating times		
	Ω					Line/Line M Ω	Line/Neutral M Ω	Line/Earth M Ω	Earth/Neutral M Ω			Ω	At I _{Δn}	At 5I _{Δn}
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)									ms	ms
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ +R ₂	R ₂									
1/L1	0.24	0.23	0.53	0.25	N/A	N/A	>299	>299	>299	Ü	0.34	N/A	N/A	
1/L2	0.25	0.28	0.85	0.19	N/A	N/A	>299	>299	>299	Ü	0.28	N/A	N/A	
1/L3	0.20	0.19	0.51	0.11	N/A	N/A	>299	>299	>299	Ü	0.20	N/A	N/A	
2/L1	0.31	0.28	0.79	0.24	N/A	N/A	>299	>299	>299	Ü	0.33	N/A	N/A	
2/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	
2/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	
3/L1	0.35	0.35	0.66	0.22	N/A	N/A	>299	>299	>299	Ü	0.31	N/A	N/A	
3/L2	0.31	0.32	0.61	0.33	N/A	N/A	>299	>299	>299	Ü	0.42	N/A	N/A	
3/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/L2	0.33	0.29	0.57	0.35	N/A	N/A	>299	>299	>299	Ü	0.44	N/A	N/A	
4/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	
5/L1	0.43	0.44	1.16	0.40	N/A	N/A	>299	>299	>299	Ü	0.49	N/A	N/A	
5/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	
6/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A	
6/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	
7/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	
7/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	
7/L3	N/A	N/A	N/A	0.35	N/A	N/A	>299	>299	>299	Ü	0.44	N/A	N/A	
8/L1	N/A	N/A	N/A	0.27	N/A	N/A	>299	>299	>299	Ü	0.36	N/A	N/A	
8/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	
8/L3	N/A	N/A	N/A	0.30	N/A	N/A	>299	>299	>299	Ü	0.39	N/A	N/A	

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of distribution board	Cleaners Cupboard First Floor West	Supply to distribution board is from	Sub Mains(DB 1, 11/TP)		Associated RCD (if any)
Distribution board designation	DB 3	No of phases	3	Nominal Voltage	400 V
		Overcurrent protective device for the distribution circuit	Type BS(EN) 60947-2 MCCB		Rating 125 A
					RCD No of poles N/A
					RCD rating, I Δ n [] mA

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD Op. current I Δ n	Max. permitted Zs Ω
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA		
9/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	Heating Controls Circuit	A	B	1	1.5	1.0	5	60898 MCB	B	2	10	N/A	
10/L1	LTS - Stores & Stairs	A	B	2	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
10/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	LTS - Kitchen & WC	A	B	1	1.5	20	5	60898 MCB	B	6	10	N/A	7.67
11/L1	LTS - Office No.1	A	B	14	1.5	1.0	5	60898 MCB	B	10	10	N/A	4.60
11/L2	LTS - Office No.2	A	B	14	1.5	1.0	5	60898 MCB	B	10	10	N/A	4.60
11/L3	LTS - Office No.3	A	B	8	1.5	1.0	5	60898 MCB	C	10	10	N/A	2.30
12/L1	LTS - Office No.4	A	B	12	1.5	1.0	5	60898 MCB	C	10	10	N/A	2.30
12/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
12/L3	SKTs - LHS Office & FB	A	B	10	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
13/L1	LTS - Office No.5	A	B	12	1.5	1.0	5	60898 MCB	C	10	10	N/A	2.30
13/L2	LTS - Office No.6	A	B	10	1.5	1.0	5	60898 MCB	C	10	10	N/A	2.30
13/L3	SKTs - Comms Rm Skirting	A	B	4	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
14/L1	Not Verified	A	B	N/V	1.5	1.0	N/V	60898 MCB	B	10	10	N/A	4.60
14/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
14/L3	SKTs - LHS Office & FB	A	B	8	4	2.5	0.4	60898 MCB	B	32	10	N/A	1.44
15/TP	Lift Supply	G	B	1	2.5	20	5	60898 MCB	C	16	10	N/A	1.44
16/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
16/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
16/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED					
Zs	0.09 Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	Earth fault loop impedance	6111-593/050305/1251 RCD	6111-593/050305/1251	
Ipf	5.09 kA		5I _{Δn} (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349	Other	N/A
Confirmation of Supply polarity				Ü		Continuity	6111-487/050305/1349	Other	N/A

CIRCUIT TESTS

Circuit number and phase	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Ω	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	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	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
9/L1	-	-	-	-	-	-	-	-	-		-	-	-
9/L2	-	-	-	-	-	-	-	-	-		-	-	-
9/L3	N/A	N/A	N/A	N/A	0.01	N/A	>299	>299	>299	Ü	0.10	N/A	N/A
10/L1	N/A	N/A	N/A	0.70	N/A	N/A	LIM	>299	>299	Ü	0.79	N/A	N/A
10/L2	-	-	-	-	-	-	-	-	-		-	-	-
10/L3	N/A	N/A	N/A	1.03	N/A	N/A	LIM	>299	>299	Ü	1.12	N/A	N/A
11/L1	N/A	N/A	N/A	1.14	N/A	N/A	LIM	>299	>299	Ü	1.23	N/A	N/A
11/L2	N/A	N/A	N/A	0.78	N/A	N/A	LIM	>299	>299	Ü	0.87	N/A	N/A
11/L3	N/A	N/A	N/A	0.71	N/A	N/A	LIM	>299	>299	Ü	0.80	N/A	N/A
12/L1	N/A	N/A	N/A	0.73	N/A	N/A	LIM	>299	>299	Ü	0.82	N/A	N/A
12/L2	-	-	-	-	-	-	-	-	-		-	-	-
12/L3	0.21	0.24	0.68	0.09	N/A	N/A	>299	>299	>299	Ü	0.18	N/A	N/A
13/L1	N/A	N/A	N/A	0.82	N/A	N/A	LIM	>299	>299	Ü	0.91	N/A	N/A
13/L2	N/A	N/A	N/A	0.77	N/A	N/A	LIM	>299	>299	Ü	0.86	N/A	N/A
13/L3	LIM	LIM	LIM	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
14/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM		LIM	N/A	N/A
14/L2	-	-	-	-	-	-	-	-	-		-	-	-
14/L3	0.27	0.25	0.52	0.22	N/A	N/A	>299	>299	>299	Ü	0.31	N/A	N/A
15/TP	N/A	N/A	N/A	0.07	N/A	>299	>299	>299	>299	Ü	0.16	N/A	N/A
16/L1	-	-	-	-	-	-	-	-	-		-	-	-
16/L2	-	-	-	-	-	-	-	-	-		-	-	-
16/L3	-	-	-	-	-	-	-	-	-		-	-	-

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION			
Location of distribution board	Comms Room 2 1st Floor East	Supply to distribution board is from	Sub Mains(DB 1, 5/TP)		Associated RCD (if any)
Distribution board designation	DB 8	No of phases	3	Nominal Voltage	400 V
		Overcurrent protective device for the distribution circuit	Type BS(EN) 60947-2 MCCB		Rating 125 A
					RCD No of poles N/A
					RCD rating, I _{Δn} N/A mA

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD Op. current I _{Δn}	Max. permitted Zs Ω
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA		
1/L1	SKTs - Main Office Dado	A	B	15	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44
1/L2	SKTs - Main Office Dado	A	B	15	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44
1/L3	FCUs - Gents Hand Dryers	A	B	2	4	1.5	5	60898 MCB	B	20	10	N/A	2.30
2/L1	SKTs - Main Office Dado	A	B	15	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44
2/L2	SKTs - Main Office Dado	A	B	17	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44
2/L3	LTS - Main Office 1	A	B	12	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
3/L1	SKTS - Finance Office	A	B	17	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44
3/L2	FCU - Kitchen Heater & WC	A	B	2	4	1.5	5	60898 MCB	B	20	10	N/A	2.30
3/L3	LTS - Main Office 3	A	B	12	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
4/L1	SKTs - Kitchen Area	A	B	8	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44
4/L2	LTS - 3 Small Offices	A	B	14	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
4/L3	LTS - Kitchen & Meeting	A	B	10	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
5/L1	LTS - Office Centre Row	A	B	13	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
5/L2	LTS - Finance Office	A	B	6	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
5/L3	LTS - Main Office 4	A	B	12	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
6/L1	LTS - Main Office 2	A	B	12	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
6/L2	LTS - 3 Meeting Rooms	A	B	12	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
6/L3	LTS - Main Office 5	A	B	9	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
7/L1	SKTs - Main Office Dado	A	B	7	4	1.5	5	60898 MCB	B	32	10	N/A	1.44
7/L2	LTS - Main Office	A	B	12	1.5	1.0	5	60898 MCB	B	6	10	N/A	7.67
7/L3	FCU - Water Heater 1	A	B	1	4	1.5	5	60898 MCB	B	20	10	N/A	2.30
8/L1	LTS - Controls Circuit	A	B	1	1.5	1.0	5	60898 MCB	B	2	10	N/A	
8/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	FCU - Water Heater 2	A	B	1	4	1.5	5	60898 MCB	B	20	10	N/A	2.30

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED				
Zs	0.11 Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	Earth fault loop impedance	6111-593/050305/1251 RCD	6111-593/050305/1251
Ipf	4.30 kA		5I _{Δn} (if applicable)	N/A	ms	Insulation resistance	6111-487/050305/1349 Other	N/A
Confirmation of Supply polarity				Ü		Continuity	6111-487/050305/1349 Other	N/A

CIRCUIT TESTS

Circuit number and phase	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Ω	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	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	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
1/L1	0.23	0.24	0.57	0.22	N/A	N/A	>299	>299	>299	Ü	0.33	N/A	N/A
1/L2	0.53	0.52	1.36	0.50	N/A	N/A	>299	>299	>299	Ü	0.61	N/A	N/A
1/L3	N/A	N/A	N/A	0.20	N/A	N/A	>299	>299	>299	Ü	0.31	N/A	N/A
2/L1	0.30	0.34	0.88	0.25	N/A	N/A	>299	>299	>299	Ü	0.36	N/A	N/A
2/L2	0.43	0.46	1.20	0.38	N/A	N/A	>299	>299	>299	Ü	0.49	N/A	N/A
2/L3	N/A	N/A	N/A	1.51	N/A	N/A	LIM	>299	>299	Ü	1.62	N/A	N/A
3/L1	0.54	0.55	1.42	0.41	N/A	N/A	>299	>299	>299	Ü	0.52	N/A	N/A
3/L2	N/A	N/A	N/A	0.23	N/A	N/A	>299	>299	>299	Ü	0.34	N/A	N/A
3/L3	N/A	N/A	N/A	1.76	N/A	N/A	LIM	>299	>299	Ü	1.87	N/A	N/A
4/L1	0.32	0.33	0.89	0.31	N/A	N/A	>299	>299	>299	Ü	0.42	N/A	N/A
4/L2	N/A	N/A	N/A	1.37	N/A	N/A	LIM	>299	>299	Ü	1.48	N/A	N/A
4/L3	N/A	N/A	N/A	1.38	N/A	N/A	LIM	>299	>299	Ü	1.49	N/A	N/A
5/L1	N/A	N/A	N/A	1.70	N/A	N/A	LIM	>299	>299	Ü	1.81	N/A	N/A
5/L2	N/A	N/A	N/A	1.81	N/A	N/A	LIM	>299	>299	Ü	1.92	N/A	N/A
5/L3	N/A	N/A	N/A	1.47	N/A	N/A	LIM	>299	>299	Ü	1.58	N/A	N/A
6/L1	N/A	N/A	N/A	1.76	N/A	N/A	LIM	>299	>299	Ü	1.87	N/A	N/A
6/L2	N/A	N/A	N/A	1.69	N/A	N/A	LIM	>299	>299	Ü	1.80	N/A	N/A
6/L3	N/A	N/A	N/A	1.56	N/A	N/A	LIM	>299	>299	Ü	1.67	N/A	N/A
7/L1	N/A	N/A	N/A	0.16	N/A	N/A	>299	>299	>299	Ü	0.27	N/A	N/A
7/L2	N/A	N/A	N/A	1.76	N/A	N/A	LIM	>299	>299	Ü	1.87	N/A	N/A
7/L3	N/A	N/A	N/A	0.06	N/A	N/A	>299	>299	>299	Ü	0.17	N/A	N/A
8/L1	N/A	N/A	N/A	0.20	N/A	N/A	LIM	LIM	LIM	Ü	0.31	N/A	N/A
8/L2	-	-	-	-	-	-	-	-	-		-	-	-
8/L3	N/A	N/A	N/A	0.21	N/A	N/A	>299	>299	>299	Ü	0.32	N/A	N/A

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION		
Location of distribution board	Comms Room 2 1st Floor East	Supply to distribution board is from	Sub Mains(DB 1, 5/TP)	
Distribution board designation	DB 8	No of phases	3	Nominal Voltage 400 V
		Overcurrent protective device for the distribution circuit		
		Type BS(EN)	60947-2 MCCB	Rating 125 A
		Associated RCD (if any)	BS(EN) N/A	
		RCD No of poles	N/A	
		RCD rating, I Δ n	N/A mA	

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD Op. current I Δ n	Max. permitted Zs Ω
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA		
9/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
12/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
12/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
13/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
13/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
13/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
14/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
14/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
14/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
15/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
15/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
15/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
16/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
16/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
16/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other


BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED			
Zs	0.11	Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	
lpf	4.30	kA		5I _{Δn} (if applicable)	N/A	ms	
Confirmation of Supply polarity				U <input checked="" type="checkbox"/>			
			Earth fault loop impedance: 6111-593/050305/1251 RCD 6111-593/050305/1251				
			Insulation resistance: 6111-487/050305/1349 Other N/A				
			Continuity: 6111-487/050305/1349 Other N/A				

CIRCUIT TESTS

Circuit number and phase	Circuit impedances					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD operating times	
	Ω					Line/Line	Line/Neutral	Line/Earth	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)									
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ +R ₂	R ₂	ms	ms						
9/L1	-	-	-	-	-	-	-	-	-	-	-	-	
9/L2	-	-	-	-	-	-	-	-	-	-	-	-	
9/L3	-	-	-	-	-	-	-	-	-	-	-	-	
10/L1	-	-	-	-	-	-	-	-	-	-	-	-	
10/L2	-	-	-	-	-	-	-	-	-	-	-	-	
10/L3	-	-	-	-	-	-	-	-	-	-	-	-	
11/L1	-	-	-	-	-	-	-	-	-	-	-	-	
11/L2	-	-	-	-	-	-	-	-	-	-	-	-	
11/L3	-	-	-	-	-	-	-	-	-	-	-	-	
12/L1	-	-	-	-	-	-	-	-	-	-	-	-	
12/L2	-	-	-	-	-	-	-	-	-	-	-	-	
12/L3	-	-	-	-	-	-	-	-	-	-	-	-	
13/L1	-	-	-	-	-	-	-	-	-	-	-	-	
13/L2	-	-	-	-	-	-	-	-	-	-	-	-	
13/L3	-	-	-	-	-	-	-	-	-	-	-	-	
14/L1	-	-	-	-	-	-	-	-	-	-	-	-	
14/L2	-	-	-	-	-	-	-	-	-	-	-	-	
14/L3	-	-	-	-	-	-	-	-	-	-	-	-	
15/L1	-	-	-	-	-	-	-	-	-	-	-	-	
15/L2	-	-	-	-	-	-	-	-	-	-	-	-	
15/L3	-	-	-	-	-	-	-	-	-	-	-	-	
16/L1	-	-	-	-	-	-	-	-	-	-	-	-	
16/L2	-	-	-	-	-	-	-	-	-	-	-	-	
16/L3	-	-	-	-	-	-	-	-	-	-	-	-	

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

BOARD DETAILS

TO BE COMPLETED IN EVERY CASE		ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION		
Location of distribution board	Electrical Cupboard Main Entrance Ground Floor East	Supply to distribution board is from	Sub Mains(DB 1, 10/TP)	
Distribution board designation	DB 7	No of phases	3	Nominal Voltage 400 V
		Overcurrent protective device for the distribution circuit		
		Type BS(EN)	60947-2 MCCB	Rating 63 A
		Associated RCD (if any)	BS(EN) N/A	
		RCD No of poles	N/A	
		RCD rating, $I_{\Delta n}$	N/A mA	

CIRCUIT DETAILS

Circuit number and phase	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time s	Overcurrent protective device				RCD $I_{\Delta n}$	Max. permitted Zs Ω	
					Live mm ²	cpc mm ²		BS(EN)	Type No	Rating A	Short circuit capacity kA			Op. current $I_{\Delta n}$
1/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
1/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
1/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
2/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
2/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
2/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
3/L1	SKTs - Main Office Dado	A	E	15	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
3/L2	SKTs - Main Office Dado	A	E	13	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
3/L3	SKTs - Main Office Dado	A	E	6	4	1.5	0.4	60898 MCB	B	16	10	N/A	2.88	
4/L1	SKTs - Main Office Dado	A	E	13	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
4/L2	SKTs - Main Office Dado	A	E	12	2.5	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
4/L3	LTS - Corridor & Meeting	A	E	9	1.5	1.0	5	60898 MCB	D	6	10	N/A	1.92	
5/L1	SKTs - Main Office Dado	A	E	12	4	1.5	0.4	60898 MCB	B	32	10	N/A	1.44	
5/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
6/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
7/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
7/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
7/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
8/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
8/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	
8/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-	

WIRING CODE

A	B	C	D	E	F	G	H	O
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	Other

BOARD TESTS

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION				TEST INSTRUMENTS (SERIAL NUMBERS) USED			
Zs	0.12	Ω	Operating times of associated RCD (if any)	At I _{Δn}	N/A	ms	
lpf	3.80	kA		5I _{Δn} (if applicable)	N/A	ms	
Confirmation of Supply polarity				ü			
Earth fault loop impedance			6111-593/050305/1251		RCD	6111-593/050305/1251	
Insulation resistance			6111-487/050305/1349		Other	N/A	
Continuity			6111-487/050305/1349		Other	N/A	

CIRCUIT TESTS

Circuit number and phase	Circuit impedances					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD operating times	
	Ω					Line/Line	Line/Neutral	Line/Earth	Earth/Neutral			At I _{Δn}	At 5I _{Δn}
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)									
	r ₁ (Line)	r _n (Neutral)	r ₂ (cpc)	R ₁ +R ₂	R ₂	ms	ms						
1/L1	-	-	-	-	-	-	-	-	-	-	-	-	-
1/L2	-	-	-	-	-	-	-	-	-	-	-	-	-
1/L3	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L1	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L2	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L1	0.37	0.39	0.98	0.39	N/A	N/A	>299	>299	>299	ü	0.51	N/A	N/A
3/L2	0.44	0.47	1.20	0.60	N/A	N/A	>299	>299	>299	ü	0.72	N/A	N/A
3/L3	N/A	N/A	N/A	0.25	N/A	N/A	>299	>299	>299	ü	0.37	N/A	N/A
4/L1	0.53	0.55	1.30	0.36	N/A	N/A	>299	>299	>299	ü	0.48	N/A	N/A
4/L2	0.22	0.24	0.40	0.20	N/A	N/A	>299	>299	>299	ü	0.32	N/A	N/A
4/L3	N/A	N/A	N/A	0.93	N/A	N/A	LIM	>299	>299	ü	1.05	N/A	N/A
5/L1	0.18	0.19	0.41	0.16	N/A	N/A	>299	>299	>299	ü	0.28	N/A	N/A
5/L2	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L1	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L2	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L2	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	-	-	-	-	-	-	-	-	-	-	-	-	-

TESTED BY

Signature		Position	Electrical Test Engineer
Name	Craig Yellott	Date of testing	02/07/2009

Observations and Recommendations continued from page 2

Item No.		Code
13	DB 8 - (Comms Room 2 - 1st Floor) - Penetrations Made In Top & Bottom Of DB Are Larger Than Recommended (IPXXD or IP4X)	2
14	DB 8 - (Comms Room 2 - 1st Floor) - No Circuits Schedule Accompanying Distribution Board	2
15	DB AC3 (DB4) - (Staff Kitchen - Ground Floor) - Circuits 3L1, 3L2 & 4L3 Have Been Limited Due To Lack Of Information About Location And Type's Of Equipment Being Supplied	3
16	DB 1 - (Main Intake Cupboard - Blackpool Room) - No Dead Test's Were Carried Out On Circuit 6TP At The Request Of The Client	3
17	DB 3 - (Cleaners Cupboard - 1st Floor) - No Voltage Warning Label On Front Cover Of DB	2
18	DB 3 - (Cleaners Cupboard - 1st Floor) - Un-used Cable Hanging From Plastic Trunking Within The Cleaners Cupboard	2
19	DB 3 - (Cleaners Cupboard - 1st Floor) - Screw Missing From Front Cover Of DB	2
20	DB 3 - (Cleaners Cupboard - 1st Floor) - Circuit 1L2 Has A Broken Floor Box In The Office Area	2
21	DB 3 - (Cleaners Cupboard - 1st Floor) - Circuit 6L1 Has Been Limited Due To Lack Of Information About Location And Type Of Equipment Being Supplied	3
22	DB 3 - (Cleaners Cupboard - 1st Floor) - Circuit 3L1 - Has Broken Earth Sleeving Within A Socket Outlet Next To The Belfast Office	2
23	DB 3 - (Cleaners Cupboard - 1st Floor) - Office Areas - Dado Trunking Has Some Missing Parts (I.E. Missing Corners And Joiners)	2
24	DB 3 - (Cleaners Cupboard - 1st Floor) - Circuit 13L3 - This Circuit Has Been Limited At The Request Of The Client (Socket Outlets Within Comms Room 1 - Dado Trunking Suppling Telephone And Data Equipment)	3
25	DB 3 - (Cleaners Cupboard - 1st Floor) - Circuit 14L1 - Has Been Limited Due To Lack Of Information About Location And Type Of Equipment Being Supplied	3
26	DB 2 - (Main Intake Cupboard - Blackpool Room) - No Circuits Schedule Accompanying Distribution Board	2
27	DB 2 - (Main Intake Cupboard - Blackpool Room) - Penetrations Made In Side Of DB Are Larger Than Recommended (IPXXD or IP4X)	2

Code Key

1 - 'requires urgent attention' 2 - 'requires improvement'
 3 - 'requires further investigation' 4 - 'does not comply with BS7671:2001 (as amended)'

Summary of Inspection continued from page 2 section G.

important to ensure that earthing of the armour is reliable and durable as the armour could become live under fault conditions.

SUITABILITY OF SWITCHGEAR & CONTROL GEAR

Switchgear and Control Gear were assessed to be generally satisfactory for the uses employed.

Revisions in the new edition of the Wiring Regulations which came into effect in July '08 impose various additional requirements for Residual Current Devices (RCDs), the implications of which are discussed below.

TYPES OF WIRING SYSTEM & CONDITION

Submains from the main intake to destination distribution boards are in a mixture of PVC/XLPE Steel Wire Armour (SWA) cable and single conductors in metallic/non-metallic trunking noted to be in good condition.

Final circuits are in a mixture of PVC/XLPE Steel Wire Armour (SWA) cable and single conductors in metallic/non-metallic trunking and metallic/non-metallic conduit observed to be in good condition.

Final circuits are PVC/PVC 'Twin & Earth' cable in a mixture of in metallic/non-metallic trunking and metallic/non-metallic conduit observed to be in good condition.

Several sections of dado trunking are noted to have missing parts / lids.

Final circuits are in PVC/PVC sheathed 'Twin & Earth' cable concealed within the fabric of the building. It has not been possible to assess whether all such cables have been routed in prescribed zones. Most are assessed to be likely to lie within 50mm of the surface of the plaster. In any event, such arrangements do not comply with the newly revised Wiring Regulations which would require additional protection with a 30mA RCD. A non-compliance of this type does not necessarily imply that the circuits are dangerous.

SERVICEABILITY OF EQUIPMENT INCLUDING ACCESSORIES

The revisions of the Wiring Regulations referred to above also introduce new requirements for additional 30mA RCD protection for socket-outlets of the types installed here when they are provided for the use of ordinary persons not under the supervision of skilled or instructed persons. As before, the lack of RCDs does not necessarily mean that the use of the socket-outlets in this installation is dangerous, but attention is drawn to non-compliance with the Regulations.

This installation does not meet the requirement to have sufficient numbers of socket-outlets, suitably placed, to meet the needs of the users and consequently there is a hazardous over-reliance on the use of extension leads.

Floor-mounted socket-outlets contained in flush-fitting boxes are becoming full of dirt, fluff, paper and other rubbish causing a potential fire hazard.

Some enclosures are noted to have larger than permissible penetrations allowing access to live parts or allowing the possibility of foreign objects into the enclosure itself.

Plant equipment situated outside are suffering from internal corrosion ranging from minor to extensive. The greatest concerns are isolators in circuits relying upon the SWA armour as circuit protective conductor and this is corroding away from connections inside the enclosure.

PRESENCE OF ADEQUATE ID & NOTICES

Identification of circuits within the DBs is generally poor.

Copies of the Schedules of Circuit Details included with this report placed near the DBs may go some way to rectifying the lack of accurate information.

There are a number of unverified circuits which may benefit from further investigation.

There are no accurate schedules of circuit details. There are no charts, schematics or other information. Points of utilisation are not well marked with the designation of the circuit that feeds them.

The Following Required Warning Notices Are NOT In Place:-

Harmonised cable colours have been used in conjunction with non-harmonised colours, without warning signs being positioned.

Live parts not being capable of isolation by a single device have no warning notice.

EXTENT OF ANY WEAR & TEAR, DAMAGE OR OTHER DETERIORATION

Some accessories, such as socket-outlets and switch-plates are cracked, broken or loose.

CHANGES IN USE OF BUILDING LEADING TO, OR WHICH MIGHT LEAD TO DEFICIENCIES IN THE INSTALLATION

In a managed environment subject to continual remodelling or refurbishment, it is important to note that careful record keeping of changes to the electrical installation is required in order to manage the risk of electrical hazards.

Details of additional sources continued from page 3.
