ELECTRICAL INSTALLATION CONDITION REPORT

265059 - Master

Lantei Compliance Services

A. Details of the Client/Person Ordering the Report

Client: Derbyshire County Council

Address:
County Hall
Matlock
Derbyshire
DE4 3AG

B. Reason for Producing this Report

Purpose of this report:
Essential information, which the client has requested, in accordance with the Electricity At Work Regulations 1989.
" As maybe necessary to prevent danger all systems
--See Additional Page--

Date(s) on which Inspection: and testing was carried out: 03/08/2018

C. Details of the Installation which is the Subject of this Report

Installation: Briar Close House

Occupier: Briar Close House

Address:
HOP Briar Close
Borrowash
Derbyshire
DE72 3GB

Description of premises:	Domestic	Commercial	Industrial
	N/A	✓	N/A

Other: N/A

Estimated age of wiring system: 35 yrs

Evidence of alterations or additions: ✓ If yes estimated Age 5 yrs

Record of Installation available: ✓ Records held By: On Site H+S Red Box

Date of previous inspection: 10/04/2014

D. Extent and Limitations Inspection and Testing

Extent of Electrical Installation covered by this report:
A fixed wire test of all sub-mains and all lighting and power
--See Additional Page--

Agreed limitations including the reasons (See regulation 634.2)
Unable to access the sealed incoming device. Ze and Ipf was
--See Additional Page--

Agreed with name: Site Supervisor

Operational Limitations including the reasons (See page No N/A)
Critical equipment could not be switched off in agreement with the Client/Site supervisor.

This inspection and testing detailed in this report and accompanying schedules have been carried out in accordance with BS7671:2008 (IET Wiring Regulations) as amended to July 2015

It should be noted that cables concealed within trunking and conduits, under floors, in roof spaces, and generally within the fabric of the building or underground, have NOT been inspected unless specifically agreed between the client and inspector prior to the inspection. An inspection should be made within an accessible roof space housing other electrical equipment.

E. Summary of the Condition of the Installation

General condition of the installations (In terms of electrical safety)
The origin of electrical supply is located in the electrical mains cupboard. This a three phase four wire system with TN-S
--See Additional Page--

Overall assessment of the installation: Unsatisfactory

*An unsatisfactory assessment indicates that dangerous (code C1) and/or potentially dangerous (code C2) conditions have been identified.

F. Recommendations

Where the overall assessment of the suitability of the installation for continued use above is stated as UNSATISFACTORY, recommend that any observations classified as 'Danger present' (code C1) or 'Potentially dangerous' (code C2) are acted upon as a matter of urgency.
Investigation without delay is recommended for observations identified as *'further investigation required' (code FI)*.
Observation classified as 'Improvement recommended' (code C3) should be given due consideration.
Subject to the necessary remedial action being taken recommend that the installation is further inspected and tested by 03/08/2023

G. Declaration

, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by My 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 the observations and attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations in section D of this report.

Trading Title and address:
Lantei Compliance Services
1A Essex Street
Preston
Lancashire
PR1 1QE

NICEIC Enrolment Number: 502303

Branch No. (If Applicable): 000

Inspected and tested by:

Name	Position	Signature	Date
Richard Fearnside	Electrical Engineer		02/09/2018

Report authorised for issue by:

Name	Position	Signature	Date
Rob Walsh	Qualified Supervisor		02/09/2018

H. Schedule(s)

The attached schedule(s) are part of this document and this report is valid only when they are attached to it.

10 Schedule(s) of inspection and 10 Schedule(s) of test results are attached

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

I. Supply Characteristics and Earthing Arrangements

Earthing Arrangements		Number and Type of Live Conductors					
TN-S	✓	a.c.	✓			d.c.	N/A
TN-C-S	N/A	1-Phase (2 wire)	N/A	1-Phase (3 wire)	N/A	2 Wire	N/A
TN-C	N/A	2-Phase (3 wire)	N/A			3 Wire	N/A
TT	N/A	3-Phase (3 wire)	N/A	3-Phase (4 wire)	✓	Other	N/A
IT	N/A	Other	N/A				
		Confirmation of supply polarity	✓				

Nature of Supply Parameters			
Nominal Voltage	U (1)	400	V
Nominal Voltage	U_0 (1)	230	V
Nominal frequency	f (1)	50	Hz
Prospective fault current	Ipf (2)	3.2	kA
External loop impedance	Ze (2)	0.16	Ω
Number of supplies		1	

(Note: (1) by enquiry, (2) by enquiry or by measurement)

Supply protective device		
BS(EN)	SEALED	
Type	N/A	
Nominal current rating	N/A	A
Short circuit capacity	N/A	kA

J. Particulars of Installation Referred to in the Report

Means of earthing		Details of installation Earth Electrode (where applicable)			
Distributor's facility	✓	Type (e.g. rod(s), tape etc.)	N/A	Location	N/A
Installation earth electrode	N/A	Resistance to Earth	N/A Ω	Method of measurement	N/A

Main Protective Conductors

Tick boxes and enter details as applicable

Earthing Conductor	Material	Copper	csa	25	mm^2	Connection and Continuity Verified	LIM
Main protective bonding conductors	Material	Copper	csa	16	mm^2	Connection and Continuity Verified	LIM

Bonding of Incoming Service

Water installation pipes ✓ Gas installation pipes ✓ Structural Steel N/A Lightning protection N/A

Oil installation pipes N/A

Other incoming service(s) N/A Please State N/A

Maximum Demand (Load) N/A **Amps**

Protective measure(s) against electric shock ADS

Main Switch / Switch-Fuse / Circuit-Breaker / RCD

Location	Main switchroom within the section panel	Current rating	250 A	**if RCD main switch**	
Type BS(EN)	60947-3	Fuse/Device rating or setting	160 A	Rated residual operation current, Δn	N/A mA
No of poles	3	Voltage rating	400 V	Rated time delay	N/A ms
Supply Conductors material	Copper			RCD Operating time at, IΔn	N/A ms
Supply Conductors csa	35 mm^2				

K. Observations

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

No remedial action is required. N/A The following observations are made ✓

Item No	Observations	Code
1	Observation: There is no RCD protection for sockets outlets with a rated current not exceeding 20 Amps that	C3
	are for use by ordinary persons and are intended for general use without the supervision of skilled or instructed	
	persons.	
	Location: DB Laundry Circuit 1L1	
	Regulation no: 411.3.3	
	--Observations continue on continuation sheet(s)--	

One of the following codes, as appropriate, has been allocated to each of the observations made above to indicate to the person(s) responsible for the installation the degree of urgency for remedial action.

C1 - Danger present. Risk of injury. Immediate remedial action required	0
C2 - Potentially dangerous - urgent remedial action required	6
C3 - Improvement recommended	5
FI - Further investigation required without delay	2

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Main switchroom adjacent green wing - Schneider	Supply to distribution board is from	N/A	Associated RCD (if any)	
		No of phases	N/A	Nominal Voltage	N/A V	BS(EN)	N/A
Distribution board designation	MAIN SECTION	Overcurrent protective device for the distribution circuit		RCD No of Poles	N/A
		Type BS(EN)	N/A	Rating	N/A A	RCD Rating	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 times	Overcurrent protective device				RCD	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/TP	Sub Mains(DB Kitchen)	D	B	1	25	16	5	60947-2 MCCB		63	25	N/A	
2/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L1	Sub Mains(DB Amber)	F	C	1	25	16	5	60947-2 MCCB		63	12.5	N/A	
4/L2	Sub Mains(DB Blue)	F	C	1	25	16	5	60947-2 MCCB		63	12.5	N/A	
4/L3	Sub Mains(DB Green)	F	C	1	25	16	5	60947-2 MCCB		63	12.5	N/A	
5/L1	Sub Mains(DB Red)	F	C	1	25	16	5	60947-2 MCCB		63	12.5	N/A	
5/L2	Sub Mains(DB General)	F	C	1	25	16	5	60947-2 MCCB		63	12.5	N/A	
5/L3	Sub Mains(DB Matron)	F	C	1	25	16	5	60947-2 MCCB		63	12.5	N/A	
6/L1	Fire Alarm Supply	FP	C	1	2.5	2.5	0.4	60947-2 MCCB		16	12.5	N/A	
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/TP	Sub Mains(DB Laundry)	H	C	1	10	MICC	5	60947-2 MCCB		40	25	N/A	

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	N/A	Ω	Operating times of associated RCD (if any)	At I Δ n	N/A ms
Ipf	N/A	kA		At 5I Δ n	N/A ms
Correct supply polarity confirmed	N/A		Phase sequence confirmed (where appropriate)		N/A

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	6111-749/081108/5668	RCD	6111-749/081108/566
Insulation resistance	6111-749/081108/5668	Other	N/A
Continuity	6111-749/081108/5668	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance Ω	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			At I Δ n ms	At 5I Δ n ms	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)										
1/TP	N/A	N/A	N/A	0.02	N/A	Lim	Lim	>200	>200	✓	0.17	N/A	N/A	N/A	NO
2/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM	✓	0.30	N/A	N/A	N/A	NO
4/L2	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM	✓	0.33	N/A	N/A	N/A	NO
4/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM	✓	0.33	N/A	N/A	N/A	NO
5/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM	✓	0.35	N/A	N/A	N/A	NO
5/L2	N/A	N/A	N/A	0.03	N/A	N/A	LIM	>200	>200	✓	0.17	N/A	N/A	N/A	NO
5/L3	N/A	N/A	N/A	LIM	N/A	N/A	LIM	LIM	LIM	✓	0.30	N/A	N/A	N/A	NO
6/L1	N/A	N/A	N/A	0.29	N/A	N/A	LIM	>200	>200	✓	0.42	N/A	N/A	N/A	NO
6/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/TP	N/A	N/A	N/A	0.10	N/A	Lim	Lim	>200	>200	✓	0.16	N/A	N/A	N/A	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Main electrical switch room - Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 1/TP)	Associated RCD (if any)	
		No of phases	3	Nominal Voltage 400 V	BS(EN) N/A
Distribution board designation	DB Kitchen	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating 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 times	Overcurrent protective device				RCD	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	Sockets Kitchen	A	B	4	2x2.5	2x1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
1/L2	Sockets Kitchen Office / Stores	A	B	3	2x2.5	2x1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
1/L3	FCU Catersense	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
2/L1	Socket Food Mixer	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
2/L2	Socket Cooker	A	B	1	4.0	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
2/L3	FCU's Above Ceiling / Fan Cab Office	A	B	LIM	2x2.5	2x1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
3/L1	Potato Rumbler Socket	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
3/L2	Hot Trolly Socket	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
3/L3	Socket Freezer Store Room	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
4/L1	FCU Hot Water Heater	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
4/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L1	Lights Kitchen Canopy	A	B	2	1.5	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
5/L2	Hot Trolly Socket	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
5/L3	Socket Freezer Store Room	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
6/L1	Lights Office / Side rooms	A	B		1.5	1.0	0.4	61009 RCD/RCBO	C	6	10	30	3.64
6/L2	Socket for Fridge 1	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
6/L3	Socket for Fridge 2	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.17 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	3.25 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		✓	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	6111-749/081108/5668	RCD	6111-749/081108/566
Insulation resistance	6111-749/081108/5668	Other	N/A
Continuity	6111-749/081108/5668	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L1	0.68	0.68	1.12	0.45	N/A	N/A	Lim	>200	>200	✓	0.51	28.7	28.4	✓	NO
1/L2	0.54	0.54	0.93	0.38	N/A	N/A	Lim	>200	>200	✓	0.35	25.6	26.8	✓	NO
1/L3	N/A	N/A	N/A	0.32	N/A	N/A	Lim	>200	>200	✓	0.45	28.9	24.7	✓	NO
2/L1	N/A	N/A	N/A	0.32	N/A	N/A	Lim	>200	>200	✓	0.50	30.4	27.8	✓	NO
2/L2	N/A	N/A	N/A	0.25	N/A	N/A	Lim	>200	>200	✓	0.39	35.6	27.9	✓	NO
2/L3	0.48	0.48	0.82	Lim	N/A	N/A	Lim	>200	>200		Lim	39.6	28.6	✓	NO
3/L1	N/A	N/A	N/A	0.34	N/A	N/A	Lim	>200	>200	✓	0.54	28.7	26.5	✓	NO
3/L2	N/A	N/A	N/A	0.35	N/A	N/A	Lim	>200	>200	✓	0.50	30.6	24.6	✓	NO
3/L3	N/A	N/A	N/A	0.37	N/A	N/A	Lim	>200	>200	✓	0.52	30.5	27.8	✓	NO
4/L1	N/A	N/A	N/A	0.35	N/A	N/A	Lim	>200	>200	✓	0.51	28.7	26.7	✓	NO
4/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L1	N/A	N/A	N/A	0.48	N/A	N/A	Lim	>200	>200	✓	0.76	30.5	26.8	✓	NO
5/L2	N/A	N/A	N/A	0.14	N/A	N/A	Lim	>200	>200	✓	0.32	32.5	28.4	✓	NO
5/L3	N/A	N/A	N/A	0.26	N/A	N/A	Lim	>200	>200	✓	0.45	34.8	>40	✓	NO
6/L1	N/A	N/A	N/A	0.61	N/A	N/A	Lim	>200	>200	✓	0.78	30.2	28.6	✓	NO
6/L2	N/A	N/A	N/A	0.10	N/A	N/A	Lim	>200	>200	✓	0.37	246.0	>40	✓	NO
6/L3	N/A	N/A	N/A	0.15	N/A	N/A	Lim	>200	>200	✓	0.34	43.0	>40	✓	NO
7/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Main electrical switch room - Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 1/TP)	Associated RCD (if any)	
		No of phases	3	Nominal Voltage 400 V	BS(EN) N/A
Distribution board designation	DB Kitchen	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Refe-rence method	No of points served	Circuit conductors csa		Max per-mitted disc-onnec-tion times	Overcurrent protective device				RCD	Max per-mitted Zs Ω
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capa-city kA	Op. current $I\Delta n$	
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/TP	Dishwasher Supply	SY	B	1	4	4	0.4	60898 MCB	C	32	10	N/A	0.68

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.17 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	3.25 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		✓	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	6111-749/081108/5668	RCD	6111-749/081108/566
Insulation resistance	6111-749/081108/5668	Other	N/A
Continuity	6111-749/081108/5668	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance Ω	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live MΩ	Live/ Neutral MΩ	Live/ Earth MΩ	Earth/ Neutral MΩ			At I Δ n ms	At 5I Δ n ms	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)										
9/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/TP	N/A	N/A	N/A	0.08	N/A	Lim	Lim	>200	>200	✓	0.25	N/A	N/A	N/A	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

265059 - Master

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	Amber Wing Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 4/L1)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) N/A
Distribution board designation	DB Amber	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating 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 times	Overcurrent protective device				RCD	Max permitted Zs
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capacity kA	Op. current $I\Delta n$	Ω
1/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L1	Lighting, Corridor	A	C	5	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
3/L1	Hoist FCU Adjacent	A	C	1	2.5	1.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
4/L1	Door FCU Adjacent	A	C	1	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
5/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
13/L1	Lighting, Bath/WCs/Servery/EM	A	C	8	1.0	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
14/L1	Lighting, 29-31/Sluice	A	C	7	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
15/L1	Lighting, 25-28	A	C	8	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
16/L1	Lighting, 32-34	A	C	6	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
17/L1	Lighting, 35-36/Sitting Room	A	C	8	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
18/L1	Pump FCU	A	C	1	2.5	1.5	0.4	60898 MCB	B	10	10	N/A	4.37
19/L1	Boiler FCU	A	C	1	2.5	1.5	0.4	60898 MCB	B	20	10	N/A	2.19
20/L1	RFC Sockets, Corridor Far	A	C	3	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
21/L1	RFC Sockets, Servery/Sitting Room	A	C	3	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
22/L1	RFC Sockets, Corridor Near	A	C	3	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
23/L1	RFC Sockets, 32-36	H	C	10	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
24/L1	RFC Sockets, 25-31	H	C	12	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.30 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	1.00 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	3100031	RCD	3100031
Insulation resistance	3100031	Other	N/A
Continuity	3100031	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L1	N/A	N/A	N/A	0.75	N/A	N/A	LIM	>200	>200	✓	1.03	N/A	N/A	N/A	NO
3/L1	N/A	N/A	N/A	0.02	N/A	N/A	LIM	>200	>200	✓	0.32	29.5	18.2	✓	NO
4/L1	N/A	N/A	N/A	0.01	N/A	N/A	LIM	>200	>200	✓	0.32	N/A	N/A	N/A	NO
5/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/L1	N/A	N/A	N/A	0.62	N/A	N/A	LIM	>200	>200	✓	0.82	32.6	21.5	✓	NO
14/L1	N/A	N/A	N/A	0.48	N/A	N/A	LIM	>200	>200	✓	0.78	N/A	N/A	N/A	NO
15/L1	N/A	N/A	N/A	0.55	N/A	N/A	LIM	>200	>200	✓	0.85	N/A	N/A	N/A	NO
16/L1	N/A	N/A	N/A	0.62	N/A	N/A	LIM	>200	>200	✓	0.94	N/A	N/A	N/A	NO
17/L1	N/A	N/A	N/A	0.89	N/A	N/A	LIM	>200	>200	✓	1.29	N/A	N/A	N/A	NO
18/L1	N/A	N/A	N/A	0.26	N/A	N/A	LIM	>200	>200	✓	0.55	N/A	N/A	N/A	NO
19/L1	N/A	N/A	N/A	0.31	N/A	N/A	LIM	>200	>200	✓	0.64	N/A	N/A	N/A	NO
20/L1	0.30	0.32	0.56	0.24	N/A	N/A	LIM	>200	>200	✓	0.69	29.6	20.4	✓	NO
21/L1	0.45	0.45	0.82	0.32	N/A	N/A	LIM	>200	>200	✓	0.58	32.4	14.5	✓	NO
22/L1	0.27	0.28	0.41	0.18	N/A	N/A	LIM	>200	>200	✓	0.38	0.48	19.6	✓	NO
23/L1	0.61	0.61	0.94	0.40	N/A	N/A	LIM	>200	>200	✓	0.42	28.9	18.5	✓	NO
24/L1	0.50	0.47	0.69	0.28	N/A	N/A	LIM	>200	>200	✓	0.39	34.2	16.8	✓	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Blue Wing Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 4/L2)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) N/A
Distribution board designation	DB Blue	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating 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 times	Overcurrent protective device				RCD	Max permitted Zs
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capacity kA	Op. current $I\Delta n$	Ω
1/L2	Lighting, Corridor	A	C	8	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
2/L2	Lighting, Beds 13-17	A	C	10	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
3/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L2	Door FCU Adjacent	A	B	1	2.5	1.5	0.4	60898 MCB	B	10	10	N/A	4.37
12/L2	Bath Lift	H	C	1	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
13/L2	Lighting, Servery/Dining/Bath/WC	A	C	8	1.5	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
14/L2	Lighting, 18-20/Sluice	A	C	9	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
15/L2	Lighting, 23-24/Sitting Room	A	C	8	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
16/L2	Lighting, 21-22/Boiler	A	C	6	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
17/L2	Boiler FCU	A	C	1	2.5	1.5	0.4	60898 MCB	B	20	10	N/A	2.19
18/L2	Pump FCU	A	C	1	2.5	1.5	0.4	60898 MCB	B	20	10	N/A	2.19
19/L2	RFC Sockets, Corridor	A	C	3	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
20/L2	RFC Sockets, Corridor/Boiler/Sluice	A	C	5	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
21/L2	RFC Sockets, Servery/Sitting Room	A	C	5	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
22/L2	RFC Sockets, 20-24	H	C	10	1.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
23/L2	RFC Sockets, 13-19	H	C	12	1.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.33 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	0.789 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	3100031	RCD	3100031
Insulation resistance	3100031	Other	N/A
Continuity	3100031	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L2	N/A	N/A	N/A	0.40	N/A	N/A	LIM	>200	>200	✓	0.75	N/A	N/A	N/A	NO
2/L2	N/A	N/A	N/A	0.65	N/A	N/A	LIM	>200	>200	✓	0.94	N/A	N/A	N/A	NO
3/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L2	N/A	N/A	N/A	0.03	N/A	N/A	LIM	>200	>200	✓	0.35	N/A	N/A	N/A	NO
12/L2	N/A	N/A	N/A	0.24	N/A	N/A	LIM	>200	>200	✓	0.59	32.3	19.2	✓	NO
13/L2	N/A	N/A	N/A	0.62	N/A	N/A	LIM	>200	>200	✓	0.95	25.5	16.0	✓	NO
14/L2	N/A	N/A	N/A	0.34	N/A	N/A	LIM	>200	>200	✓	0.65	N/A	N/A	N/A	NO
15/L2	N/A	N/A	N/A	0.70	N/A	N/A	LIM	>200	>200	✓	1.04	N/A	N/A	N/A	NO
16/L2	N/A	N/A	N/A	0.62	N/A	N/A	LIM	>200	>200	✓	0.96	N/A	N/A	N/A	NO
17/L2	N/A	N/A	N/A	0.23	N/A	N/A	LIM	>200	>200	✓	0.62	N/A	N/A	N/A	NO
18/L2	N/A	N/A	N/A	0.24	N/A	N/A	LIM	>200	>200	✓	0.58	N/A	N/A	N/A	NO
19/L2	0.62	0.61	0.95	0.36	N/A	N/A	LIM	>200	>200	✓	0.56	29.5	13.0	✓	NO
20/L2	0.52	0.51	0.70	0.31	N/A	N/A	LIM	>200	>200	✓	0.53	35.2	16.0	✓	NO
21/L2	0.66	0.66	0.94	0.37	N/A	N/A	LIM	>200	>200	✓	0.58	26.9	15.7	✓	NO
22/L2	0.51	0.52	0.75	0.32	N/A	N/A	LIM	>200	>200	✓	0.45	34.5	19.5	✓	NO
23/L2	0.49	0.49	0.70	0.30	N/A	N/A	LIM	>200	>200	✓	0.44	28.0	16.0	✓	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Green Wing Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 4/L3)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) N/A
Distribution board designation	DB Green	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating 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 times	Overcurrent protective device				RCD	Max permitted Zs
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capacity kA	Op. current $I\Delta n$	Ω
1/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L3	Lighting, 39-41/Hairdressers	A	C	9	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
12/L3	Door FCU Adjacent	A	C	1	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
13/L3	Lighting, Corridor	A	C	8	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
14/L3	Lighting, 48-51/Sitting	A	C	11	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
15/L3	Hoist FCU	H	C	1	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
16/L3	Lighting, 42-44	A	C	8	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
17/L3	Lighting, Bath/Servery/WC	A	C	8	1.0	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
18/L3	Lighting, 45-47/Service	A	C	9	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
19/L3	Boiler Panel	A	C	1	2.5	1.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
20/L3	RFC Sockets, Corridor	A	C	3	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
21/L3	RFC Sockets, Sitting/Service	A	C	4	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
22/L3	RFC Sockets, Corridor	A	C	5	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
23/L3	RFC Sockets, 39-43/Hairdressers	H	C	12	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
24/L3	RFC Sockets, 44-48	H	C	10	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.33 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	0.746 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	3100031	RCD	3100031
Insulation resistance	3100031	Other	N/A
Continuity	3100031	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L3	N/A	N/A	N/A	0.29	N/A	N/A	LIM	>200	>200	✓	0.59	N/A	N/A	N/A	NO
12/L3	N/A	N/A	N/A	0.02	N/A	N/A	LIM	>200	>200	✓	0.34	N/A	N/A	N/A	NO
13/L3	N/A	N/A	N/A	0.20	N/A	N/A	LIM	>200	>200	✓	0.54	N/A	N/A	N/A	NO
14/L3	N/A	N/A	N/A	0.29	N/A	N/A	LIM	>200	>200	✓	0.67	N/A	N/A	N/A	NO
15/L3	N/A	N/A	N/A	0.15	N/A	N/A	LIM	>200	>200	✓	0.46	29.6	15.2	✓	NO
16/L3	N/A	N/A	N/A	0.19	N/A	N/A	LIM	>200	>200	✓	0.51	N/A	N/A	N/A	NO
17/L3	N/A	N/A	N/A	0.48	N/A	N/A	LIM	>200	>200	✓	0.70	28.6	15.0	✓	NO
18/L3	N/A	N/A	N/A	0.38	N/A	N/A	LIM	>200	>200	✓	0.66	N/A	N/A	N/A	NO
19/L3	N/A	N/A	N/A	0.13	N/A	N/A	LIM	>200	>200	✓	0.49	30.5	16.9	✓	NO
20/L3	0.31	0.31	0.53	0.21	N/A	N/A	LIM	>200	>200	✓	0.78	26.8	15.2	✓	NO
21/L3	0.38	0.38	0.60	0.25	N/A	N/A	LIM	>200	>200	✓	1.42	28.0	23.0	✓	NO
22/L3	0.34	0.35	0.58	0.26	N/A	N/A	LIM	>200	>200	✓	0.92	24.5	17.8	✓	NO
23/L3	0.58	0.56	0.69	0.28	N/A	N/A	LIM	>200	>200	✓	0.55	29.6	16.9	✓	NO
24/L3	0.48	0.49	0.65	0.25	N/A	N/A	LIM	>200	>200	✓	0.81	26.3	15.0	✓	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Main electrical switch room - Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 5/L2)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) N/A
Distribution board designation	DB General	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating 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 times	Overcurrent protective device				RCD	Max permitted Zs
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capacity kA	Op. current $I\Delta n$	Ω
1/L2	Sockets Corridor / Battery Charger	A	B	3	2x2.5	2x1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
2/L2	Sub Mains(DB Garage)	A	B	1	4.0	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
3/L2	Emergency Lights	A	B	17	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
4/L2	FCU TV Cab	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
5/L2	Server Socket	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	16	10	30	1.37
6/L2	Boiler Burner	A	B	1	1.5	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
7/L2	Pump Supply 1	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
8/L2	Pump Supply 2	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
9/L2	Mains Room Light	A	B	1	1.5	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
10/L2	Staff Toilet Light	A	B	1	1.5	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
11/L2	Corridor Light	A	B	16	1.5	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
12/L2	Brick Lights	A	B	3	2.5	1.5	0.4	61009 RCD/RCBO	C	6	10	30	3.64
13/L2	Medi Room Saniflow	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
14/L2	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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.17 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	N/A kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	N/A	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	6111-749/081108/5668	RCD	6111-749/081108/566
Insulation resistance	6111-749/081108/5668	Other	N/A
Continuity	6111-749/081108/5668	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L2	0.45	0.45	0.78	0.26	N/A	N/A	Lim	>200	>200	✓	0.41	28.7	23.5	✓	NO
2/L2	N/A	N/A	N/A	LIM	N/A	N/A	Lim	>200	>200	✓	504.00	26.5	24.4	✓	NO
3/L2	N/A	N/A	N/A	0.91	N/A	N/A	Lim	>200	>200	✓	1.20	30.6	28.6	✓	NO
4/L2	N/A	N/A	N/A	0.43	N/A	N/A	Lim	>200	>200	✓	0.34	28.9	23.6	✓	NO
5/L2	N/A	N/A	N/A	Lim	N/A	N/A	Lim	Lim	Lim	✓	0.41	32.6	26.6	✓	NO
6/L2	N/A	N/A	N/A	0.07	N/A	N/A	Lim	>200	>200	✓	0.24	29.8	30.2	✓	NO
7/L2	N/A	N/A	N/A	0.09	N/A	N/A	Lim	>200	>200	✓	0.32	34.7	28.6	✓	NO
8/L2	N/A	N/A	N/A	0.20	N/A	N/A	Lim	>200	>200	✓	0.28	29.6	28.6	✓	NO
9/L2	N/A	N/A	N/A	0.26	N/A	N/A	Lim	>200	>200	✓	0.41	29.8	27.5	✓	NO
10/L2	N/A	N/A	N/A	0.65	N/A	N/A	Lim	>200	>200	✓	0.89	30.2	28,6	✓	NO
11/L2	N/A	N/A	N/A	0.87	N/A	N/A	Lim	>200	>200	✓	1.03	38.0	22.4	✓	NO
12/L2	N/A	N/A	N/A	0.34	N/A	N/A	Lim	>200	>200	✓	0.45	38.5	28.7	✓	NO
13/L2	N/A	N/A	N/A	0.08	N/A	N/A	Lim	>200	>200	✓	0.28	26.6	26.2	✓	NO
14/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	1st Floor Flat Dorman Smith	Supply to distribution board is from	SubMains(MAIN SECTION, 5/L3)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) N/A
Distribution board designation	DB Matron	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating N/A mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Refe-rence method	No of points served	Circuit conductors csa		Max per-mitted disc-onnec-tion times	Overcurrent protective device				RCD	Max per-mitted Zs Ω
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capa-city kA	Op. current $I\Delta n$	
1/L3	Cooker Flat 1	A	C	1	6.0	2.5	5	3871 MCB	4	40	3	N/A	0.10
2/L3	Cooker Flat 2	A	C	1	6.0	2.5	5	3871 MCB	4	40	3	N/A	0.10
3/L3	RFC Sockets, Flat 1	A	C	6	2.5	1.5	0.4	3871 MCB	4	30	3	N/A	0.14
4/L3	RFC Sockets, Flat 2	A	C	4	2.5	1.5	0.4	3871 MCB	4	30	3	N/A	0.14
5/L3	Lighting, Flat 1	A	C	7	1.5	1.0	0.4	3871 MCB	4	10	3	N/A	0.43
6/L3	Lighting, Flat 2	A	C	6	1.5	1.0	0.4	3871 MCB	4	10	3	N/A	0.43
7/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.30 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	0.708 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	3100031	RCD	3100031
Insulation resistance	3100031	Other	N/A
Continuity	3100031	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance Ω	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ			ms	ms		
1/L3	N/A	N/A	N/A	0.10	N/A	N/A	LIM	>200	>200	✓	0.41	N/A	N/A	N/A	NO
2/L3	N/A	N/A	N/A	0.12	N/A	N/A	LIM	>200	>200	✓	0.42	N/A	N/A	N/A	NO
3/L3	0.30	0.32	0.48	0.21	N/A	N/A	LIM	>200	>200	✓	0.39	N/A	N/A	N/A	NO
4/L3	0.35	0.34	0.56	0.22	N/A	N/A	LIM	>200	>200	✓	0.36	N/A	N/A	N/A	NO
5/L3	N/A	N/A	N/A	0.39	N/A	N/A	LIM	>200	>200	✓	0.76	N/A	N/A	N/A	NO
6/L3	N/A	N/A	N/A	0.42	N/A	N/A	LIM	>200	>200	✓	0.82	N/A	N/A	N/A	NO
7/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Laundry Cupboard - Crabtree C50 Type B	Supply to distribution board is from	SubMains(MAIN SECTION, 7/TP)	Associated RCD (if any)	
		No of phases	3	Nominal Voltage	400 V
		Overcurrent protective device for the distribution circuit		BS(EN)	N/A
Distribution board designation	DB Laundry	Type BS(EN)	60947-2 MCCB	RCD No of Poles	N/A
		Rating	40 A	RCD Rating	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 times	Overcurrent protective device				RCD	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	Sockets Laundry & Sitting Room	D	B	6	2x2.5	2x1.0	0.4	3871 MCB	2	20	4.5	N/A	1.56
1/L2	Sockets Staff / Corridor / Laundry	D	B	10	2x2.5	2x1.0	0.4	3871 MCB	2	30	4.5	N/A	1.04
1/L3	Sockets Offices	D	B	6	2x2.5	2x1.0	0.4	3871 MCB	2	30	4.5	N/A	1.04
2/L1	Sockets Sitting Room / Corridor / Laundry	D	B	6	2x2.5	2x1.0	0.4	3871 MCB	2	30	4.5	N/A	1.04
2/L2	Sitting Room Lights	D	B	6	2.5	1.0	0.4	3871 MCB	2	5	4.5	N/A	6.24
2/L3	TIS Call System	H	C	1	1.5	MICC	0.4	3871 MCB	2	5	4.5	N/A	6.24
3/L1	Sitting Area Lights	D	B	6	1.5	1.0	0.4	3871 MCB	2	10	3	N/A	3.12
3/L2	Lights Staff Room & Laundry	D	B	14	1.5	1.0	0.4	3871 MCB	2	10	4.5	N/A	3.12
3/L3	Door Bell Supply & Sitting Heater Cab	D	B	2	1.0	1.0	0.4	3871 MCB	2	10	3	N/A	3.12
4/L1	Washer Supply	H	C	1	4.0	MICC	0.4	3871 MCB	2	30	4.5	N/A	1.04
4/L2	Washer Supply	H	C	1	4.0	MICC	0.4	3871 MCB	2	30	4.5	N/A	1.04
4/L3	Laundry Self Seal Unit	D	B	1	2.5	1.0	0.4	3871 MCB	2	7.5	4.5	N/A	Lim
5/L1	Driveway Lighting	D	B	4	1.5	1.0	0.4	3871 MCB	2	10	4.5	N/A	3.12
5/L2	Lights Corridors	D	B	14	2.5	1.0	0.4	3871 MCB	2	10	4.5	N/A	3.12
5/L3	Dryer Supply	D	B	1	6.0	2.5	0.4	3871 MCB	2	30	4.5	N/A	1.04
6/L1	Dryer Supply	H	C	1	4.0	MICC	0.4	3871 MCB	2	30	4.5	N/A	1.04
6/L2	Staircase & Landing Lights	D	B	3	2.5	1.0	0.4	3871 MCB	2	10	4.5	N/A	3.12
6/L3	Lights Toilet & Office	D	B	4	2.5	1.0	0.4	3871 MCB	2	10	4.5	N/A	3.12

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.16 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	4.2 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		✓	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	6111-749/081108/5668	RCD	6111-749/081108/566
Insulation resistance	6111-749/081108/5668	Other	N/A
Continuity	6111-749/081108/5668	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L1	0.34	0.35	0.56	0.42	N/A	N/A	Lim	>200	>200	✓	0.57	N/A	N/A	N/A	NO
1/L2	0.45	0.43	0.70	0.35	N/A	N/A	Lim	>200	>200	✓	0.66	N/A	N/A	N/A	NO
1/L3	0.47	0.47	0.67	0.27	N/A	N/A	Lim	>200	>200	✓	0.56	N/A	N/A	N/A	NO
2/L1	0.54	0.53	0.89	0.40	N/A	N/A	Lim	>200	>200	✓	0.45	N/A	N/A	N/A	NO
2/L2	N/A	N/A	N/A	1.31	N/A	N/A	Lim	>200	>200	✓	1.21	N/A	N/A	N/A	NO
2/L3	N/A	N/A	N/A	Lim	N/A	N/A	Lim	>200	>200		Lim	N/A	N/A	N/A	NO
3/L1	N/A	N/A	N/A	0.84	N/A	N/A	Lim	>200	>200	✓	0.96	N/A	N/A	N/A	NO
3/L2	N/A	N/A	N/A	0.79	N/A	N/A	Lim	>200	>200	✓	1.01	N/A	N/A	N/A	NO
3/L3	N/A	N/A	N/A	0.51	N/A	N/A	Lim	>200	>200	✓	0.65	N/A	N/A	N/A	NO
4/L1	N/A	N/A	N/A	0.21	N/A	N/A	Lim	>200	>200	✓	0.36	N/A	N/A	N/A	NO
4/L2	N/A	N/A	N/A	0.19	N/A	N/A	Lim	>200	>200	✓	0.38	N/A	N/A	N/A	NO
4/L3	N/A	N/A	N/A	0.24	N/A	N/A	Lim	>200	>200	✓	0.41	N/A	N/A	N/A	NO
5/L1	N/A	N/A	N/A	Lim	N/A	N/A	Lim	>200	>200		Lim	N/A	N/A	N/A	NO
5/L2	N/A	N/A	N/A	1.21	N/A	N/A	Lim	>200	>200	✓	1.34	N/A	N/A	N/A	NO
5/L3	N/A	N/A	N/A	0.31	N/A	N/A	Lim	>200	>200	✓	0.45	N/A	N/A	N/A	NO
6/L1	N/A	N/A	N/A	0.29	N/A	N/A	Lim	>200	>200	✓	0.35	N/A	N/A	N/A	NO
6/L2	N/A	N/A	N/A	0.68	N/A	N/A	Lim	>200	>200	✓	0.89	N/A	N/A	N/A	NO
6/L3	N/A	N/A	N/A	0.84	N/A	N/A	Lim	>200	>200	✓	0.76	N/A	N/A	N/A	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Garage / Gas House - Newlec	Supply to distribution board is from	SubMains(DB General, 2/L2)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) 61008 RCD
Distribution board designation	DB Garage	Overcurrent protective device for the distribution circuit			RCD No of Poles 2
		Type BS(EN) 61009	Rating 32 A		RCD Rating 30 mA

Circuit Details

Circuit number and phase	Circuit designation	Type of wiring	Refe-rence method	No of points served	Circuit conductors csa		Max per-mitted disc-onnec-tion times	Overcurrent protective device				RCD	Max per-mitted Zs Ω
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capa-city kA	Op. current $I\Delta_n$	
1/L2	Lights Garage	A	B	2	1.5	1.0	0.4	60898 MCB	B	6	6	N/A	7.28
2/L2	Sockets Garage	A	B	2	2.5	1.5	0.4	60898 MCB	B	16	6	N/A	2.73
3/L2	External Lights	A	B	3	1.5	1.0	0.4	60898 MCB	B	6	6	N/A	7.28
4/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	504.00 Ω	Operating times of associated RCD (if any)	At I Δ n	LIM	ms
Ipf	LIM kA		At 5I Δ n	LIM	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	6111-749/081108/5668	RCD	6111-749/081108/566
Insulation resistance	6111-749/081108/5668	Other	N/A
Continuity	6111-749/081108/5668	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance Ω	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ			ms	ms		
1/L2	N/A	N/A	N/A	Lim	N/A	N/A	Lim	>200	>200		Lim	N/A	N/A	N/A	NO
2/L2	N/A	N/A	N/A	Lim	N/A	N/A	Lim	>200	>200		Lim	N/A	N/A	N/A	NO
3/L2	N/A	N/A	N/A	Lim	N/A	N/A	Lim	>200	>200		Lim	N/A	N/A	N/A	NO
4/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

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	Red Wing Schneider	Supply to distribution board is from	SubMains(MAIN SECTION, 5/L1)	Associated RCD (if any)	
		No of phases	1	Nominal Voltage 230 V	BS(EN) N/A
Distribution board designation	DB Red	Overcurrent protective device for the distribution circuit			RCD No of Poles N/A
		Type BS(EN)	60947-2 MCCB	Rating 63 A	RCD Rating 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 times	Overcurrent protective device				RCD	Max permitted Zs
					Live mm^2	cpc mm^2		BS(EN)	Type No	Rating A	Short circuit capacity kA	Op. current $I\Delta n$	Ω
1/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L1	RFC Socket, Boiler Room	A	C	1	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
3/L1	Bath Supply	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
4/L1	Lighting, Bath/Beds3-5	A	C	8	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
5/L1	Door FCU Adjacent	A	C	1	1.5	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
6/L1	Untraced	A	C	LIM	2.5	1.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
7/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
9/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
10/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
13/L1	Sockets, Bed 4	A	B	2	2.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
14/L1	RFC Sockets, Dining/Kitchen	A	C	5	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
15/L1	Lighting, 11-12/Sitting Room	A	C	9	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
16/L1	Boiler Pump	A	C	1	2.5	1.5	0.4	60898 MCB	B	20	10	N/A	2.19
17/L1	Lighting, Dining/Kit/WC/Bath	A	C	8	1.0	1.0	0.4	61009 RCD/RCBO	C	10	10	30	2.19
18/L1	Lighting, Corridor	A	C	5	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
19/L1	Lighting, Sluice	A	C	1	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
20/L1	Lighting, 6/8/Store	A	C	4	1.0	1.0	0.4	60898 MCB	B	10	10	N/A	4.37
21/L1	Boiler FCU	A	C	1	2.5	1.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
22/L1	RFC Sockets, Corridor	A	C	3	2.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
23/L1	RFC Sockets, Far Bed Corridor	H	C	9	1.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
24/L1	RFC Sockets, Near Bed Corridor	H	C	8	1.5	1.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68

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

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

265059 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	0.35 Ω	Operating times of associated RCD (if any)	At I Δ n	N/A	ms
Ipf	0.750 kA		At 5I Δ n	N/A	ms
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		N/A	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	3100031	RCD	3100031
Insulation resistance	3100031	Other	N/A
Continuity	3100031	Other	N/A

Details of circuits and/or equipment vulnerable to damage

N/A

Circuit Tests

Circuit number and phase	Circuit Impedances Ω					Insulation resistance				polarity	Maximum measured earth fault loop impedance	RCD operating times			Remarks see continuation sheet
	Ring final circuits only (measure end to end)			All circuits (At least one column to be completed)		Live/ Live	Live/ Neutral	Live/ Earth	Earth/ Neutral			At I Δ n	At 5I Δ n	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)	MΩ	MΩ	MΩ	MΩ		Ω	ms	ms		
1/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L1	0.41	0.41	0.80	0.30	N/A	N/A	LIM	>200	>200	✓	0.52	26.5	18.0	✓	NO
3/L1	N/A	N/A	N/A	0.25	N/A	N/A	LIM	>200	>200	✓	0.59	29.5	16.5	✓	NO
4/L1	N/A	N/A	N/A	0.56	N/A	N/A	LIM	>200	>200	✓	0.91	N/A	N/A	N/A	NO
5/L1	N/A	N/A	N/A	0.02	N/A	N/A	LIM	>200	>200	✓	0.38	N/A	N/A	N/A	NO
6/L1	N/A	N/A	N/A	LIM	N/A	N/A	LIM	>200	>200		LIM	16.2	12.3	✓	NO
7/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13/L1	N/A	N/A	N/A	0.23	N/A	N/A	LIM	>200	>200	✓	0.59	32.6	21.5	✓	NO
14/L1	0.36	0.38	0.52	0.20	N/A	N/A	LIM	>200	>200	✓	0.52	25.5	16.0	✓	NO
15/L1	N/A	N/A	N/A	0.52	N/A	N/A	LIM	>200	>200	✓	0.86	N/A	N/A	N/A	NO
16/L1	N/A	N/A	N/A	0.21	N/A	N/A	LIM	>200	>200	✓	0.58	N/A	N/A	N/A	NO
17/L1	N/A	N/A	N/A	0.62	N/A	N/A	LIM	>200	>200	✓	0.99	25.6	12.5	✓	NO
18/L1	N/A	N/A	N/A	0.78	N/A	N/A	LIM	>200	>200	✓	1.03	N/A	N/A	N/A	NO
19/L1	N/A	N/A	N/A	0.39	N/A	N/A	LIM	>200	>200	✓	0.65	N/A	N/A	N/A	NO
20/L1	N/A	N/A	N/A	0.71	N/A	N/A	LIM	>200	>200	✓	1.09	N/A	N/A	N/A	NO
21/L1	N/A	N/A	N/A	0.29	N/A	N/A	LIM	>200	>200	✓	0.60	25.2	16.0	✓	NO
22/L1	>2000	>2000	>2000	0.25	N/A	N/A	LIM	>200	>200	✓	0.52	26.9	18.0	✓	NO
23/L1	0.49	0.49	0.86	0.32	N/A	N/A	LIM	>200	>200	✓	0.58	28.9	16.8	✓	NO
24/L1	0.56	0.51	0.74	0.31	N/A	N/A	LIM	>200	>200	✓	0.53	23.6	15.0	✓	NO

Tested By

Signature		Position	Electrical Engineer
Name	Richard Fearnside	Date of testing	03/08/2018

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Purpose of this report, Continued. from page 1

shall be maintained so as to prevent, so as far reasonably practical such danger. "

Agreed limitations including the reasons, Continued. from page 1

taken at the nearest accessible live point to the origin of the supply.
Where an electrical installation can't be isolated from the supply, the protective and main bonding conductors must NOT be disconnected as under fault conditions the exposed and extraneous conductive parts could be raised to a dangerous level above earth potential.
Circuits not located within a reasonable amount of time designated as " Circuit not found " with limitations of any live testing and R1+R2.
Not every circuit final termination was accessible. Therefore some readings were ascertained at next most practical point in the circuit.
Insulation resistance of circuits was tested in accordance with regulation 612.3.3 on circuits where it was impracticable to disconnect the load.

General condition of the installations (In terms of electrical safety), Continued. from page 1

configuration. Wired from the cut out are the 35mm csa copper conductors, which feed the main section panel. The main section panel is a Schneider, with MCCB's used as over current protection. Wired from the section panel are all the distribution circuits throughout the installation. Ze and Ipf where ascertained from the load side of the main switch within the section panel.

The MET is located below the meter head and is in the form of a copper bar with a removable link for testing purposes. All conductors have been checked for tightness and have been adequately terminated. The main earth is present here and adequately bonded with a 25mm earthing conductor. The main water intake is located in the boiler room to the RHS of the intake room and has been adequately bonded with a 16mm conductor. The main gas intake is located within the boiler room and has been adequately bonded with a 16mm conductor.

The building is used for commercial purposes and should be subject to an Inspection and Test every 5 years in accordance with table 3.2 in guidance note 3.

The inspection comprised of looking for any breakages in cables. Identifying any wear and tear or deterioration. Identification of any signs of overheating on switch gear. Accessories and wiring systems were inspected to see if there were any missing parts i.e. covers or screws. Where possible any loose connections or fixings have been tightened or re terminated. I can confirm that access to switch gear was adequate. All Distribution Boards and switch gear where inspected and all doors and enclosures where checked to make sure they were secure.

Extent of Electrical Installation covered by this report, Continued. from page 1

final circuits. With a visual inspection within the constraints of the limitations.

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Observations Continued from Page 2

Item No	Description	Code
2	Observation: There is no RCD protection for sockets outlets with a rated current not exceeding 20 Amps that are for use by ordinary persons and are intended for general use without the supervision of skilled or instructed persons. Location: DB Laundry Circuit 1L2 Regulation no: 411.3.3	C3
3	Observation: There is no RCD protection for sockets outlets with a rated current not exceeding 20 Amps that are for use by ordinary persons and are intended for general use without the supervision of skilled or instructed persons. Location: DB Laundry Circuit 1L3 Regulation no: 411.3.3	C3
4	Observation: There is no RCD protection for sockets outlets with a rated current not exceeding 20 Amps that are for use by ordinary persons and are intended for general use without the supervision of skilled or instructed persons. Location: DB Laundry Circuit 2L1 Regulation no: 411.3.3	C3
5	Observation: The RCD used for supplementary protection does not operate within the required time on the 5x test. Location: DB Kitchen Circuit 5L3 Regulation no: 415.1.1	C2
6	Observation: The RCD used for supplementary protection does not operate within the required time on the 5x test. Location: DB Kitchen circuit 6L2 Regulation no: 415.1.1	C2
7	Observation: The RCD used for supplementary protection does not operate within the required time on the 5x test. Location: DB Kitchen circuit 6L3 Regulation no: 415.1.1	C2
8	Observation: There is a Zs reading higher than that tabulated in table 41.3 (0.4 + 5 seconds) for the M.C.B.	C2

Code Key

C1 - Danger present. Risk of injury. Immediate remedial action required

C2 - Potentially dangerous - urgent remedial action required

C3 - Improvement recommended

FI - Further investigation required without delay

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

Observations Continued from Page 2

Item No	Description	Code
	Location: DB Garage - Outbuilding. There appears to be no main earth to the garage DB as the Zs at the DB is 504 ohms. Regulation no: 413.4.7	
9	Observation: Zs reading higher than that calculated from the instantaneous tripping current given in the On Site Guide Table 7.2.7 (ii). (BS 3871 Type 4). The manufacture may be able to provide different max Zs values Location: DB Matron - Circuits 1-6 Regulation: 411.4.5	C2
10	Observation: There is no RCD protection for sockets outlets with a rated current not exceeding 20 Amps that are for use by ordinary persons and are intended for general use without the supervision of skilled or instructed persons. Location: DB Matron - Circuits 3 & 4	C3
11	Observation: Damaged lighting pendant (x2) Location: Matrons Flats 1 & 2 Regulation: 416.2	C2
12	Observation: All untraced circuits must have their circuit designations verified Location: DB Red - 6L1 Regulation: 514.8.1	FI
13	Observation: No continuity of conductors on ring final circuit Location: DB Red - Circuit 22L1 Regulation: 433.1.204 & 612.2.2	FI

Code Key

C1 - Danger present. Risk of injury. Immediate remedial action required

C2 - Potentially dangerous - urgent remedial action required

C3 - Improvement recommended

FI - Further investigation required without delay

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd

CONDITION REPORT
GUIDANCE NOTES FOR RECIPIENTS

This report is an important and valuable document which should be retained for future reference.

1. The purpose of this Condition Report is to confirm, so far as reasonably practicable, whether or not the electrical installation is in a satisfactory condition for continued service (see Section E). The Report should identify any damage, deterioration, defects and/or conditions which may give rise to danger (see Section K).

2. The person ordering the Report should have received the “original” Report and the inspector should have retained a duplicate.

3. The “original” Report should be retained in a safe place and be made available to any person inspecting or undertaking work on the electrical installation in the future. If the property is vacated, this Report will provide the new owner /occupier with details of the condition of the electrical installation at the time the Report was issued.

4. Where the installation incorporates residual current devices (RCD) there should be a notice at or near the device stating that it should be tested quarterly. **For safety reasons it is important that this instruction is followed.**

5. Section D (Extent and Limitations) should identify fully the extent of the installation covered by this Report and any limitations on the inspection and testing. The inspector should have agreed these aspects with the person ordering the Report and with other interested parties (licensing authority, insurance company, mortgage provider and the like) before the inspection was carried out.

6. Some operational limitations such as such as inability to gain access to parts of the installation or an item of equipment may have been encountered during the inspection. The inspector should have noted these in Section D.

7. For items classified in Section K as C1 (“Danger Present”), **the safety of those using the installation is at risk,** and it is recommended that a skilled person competent in electrical installation work undertakes the necessary remedial work immediately.

8. For items classified in Section K as C2 (“Potentially Dangerous”), the safety of those using the installation may be at risk and it is recommended that a competent person undertakes the necessary remedial work as a matter of urgency.

9. Where it has been stated in Section K that an observation requires further investigation (code FI) the inspection has revealed an apparent deficiency which may result in a code C1 or C2, and could not, due to the extent or limitations of the inspection, be fully identified could not, due to the extent or limitations of this inspection, be fully identified. Such observations should be investigated without delay. A further examination of the installation will be necessary, to determine the nature and extent of the apparent deficiency (see Section F).

10. For safety reasons, the electrical installation should be re-inspected at appropriate intervals by a skilled person or persons, competent in such work. The recommended date by which the next inspection is due is stated in Section F of the Report under ‘Recommendations’ and on a label at or near to the consumer unit / distribution board.

Copyright © Amtech Group Ltd 2016, FastTest v2016.1.3, Lantei Ltd