ELECTRICAL INSTALLATION CONDITION REPORT

23 - Master

A. Details of the Client/Person Ordering the Report

Client: Jon Young

Address: 102 Clifton Road
Aberdeen
AB24 4RJ

B. Reason for Producing this Report

Purpose of this report: Rental

Date(s) on which Inspection: and testing was carried out: 19/07/2017

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

Installation: 102 Clifton Road

Occupier: n/a

Address: 102 Clifton Road
Aberdeen
AB24 4RJ

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

Other: N/A

Estimated age of wiring system: 17 yrs

Evidence of alterations or additions: N/A

If yes estimated Age: N/A yrs

Record of Installation available: N/A

Records held By: N/A

Date of previous inspection: Not Known

D. Extent and Limitations Inspection and Testing

Extent of Electrical Installation covered by this report: Complete

Agreed limitations including the reasons (See regulation 634.2): None

Agreed with name: N/A

Operational Limitations including the reasons (See page No N/A): None

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): Good

Overall assessment of the installation: Satisfactory

*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 SATISFACTORY , I 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 I recommend that the installation is further inspected and tested by 19/07/2022

G. Declaration

I , 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: D Murray Electrical Ltd,
Ashton,
Banff Road,
Turriff,
Aberdeenshire, AB534BZ

NICEIC Enrolment Number: N/A

Branch No. (If Applicable): 1

Inspected and tested by:

Name: Darren Murray Position: Qualified Supervisor Signature: Date: 19/07/2017

Report authorised for issue by:

Name: Darren Murray Position: Qualified Supervisor Signature: Date: 19/07/2017

H. Schedule(s)

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

Page(s): N/A Schedule(s) of inspection and N/A Schedule(s) of test results are attached

I. Supply Characteristics and Earthing Arrangements

Earthing Arrangements		Number and Type of Live Conductors						Nature of Supply Parameters			Supply protective device	
TN-S	N/A	a.c.	✓			d.c.	N/A	Nominal Voltage	$U^{(1)}$	400 V	BS(EN)	5 - BS 1361 Type 2 Fuse
TN-C-S	✓	1-Phase (2 wire)	✓	1-Phase (3 wire)	N/A	2 Wire	N/A	Nominal Voltage	$U_0^{(1)}$	230 V		
TN-C	N/A	2-Phase (3 wire)	N/A			3 Wire	N/A	Nominal frequency	$f^{(1)}$	50 Hz	Type	2
TT	N/A	3-Phase (3 wire)	N/A	3-Phase (4 wire)	N/A	Other	N/A	Prospective fault current	Ipf$^{(2)}$	0.93 kA	Nominal current rating	100 A
IT	N/A	Other	N/A					External loop impedance	$Ze^{(2)}$	0.22 Ω	Short circuit capacity	33 kA
		Confirmation of supply polarity	✓					Number of supplies		1		

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

J. Particulars of Installation Referred to in the Report

Means of earthing

Distributor's facility	✓
Installation earth electrode	N/A

Details of installation Earth Electrode (where applicable)

Type (e.g. rod(s), tape etc.)	N/A	Location	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	16 mm^2	Connection and Continuity Verified	✓
Main protective bonding conductors	Material	Copper	csa	10 mm^2	Connection and Continuity Verified	✓

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): 50 **Amps**

Protective measure(s) against electric shock: ADS

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

Location	Front hallway	Current rating	100 A	**if RCD main switch**	
Type BS(EN)	BS EN 60947-3 Isolater	Fuse/Device rating or setting	100 A	Rated residual operation current, IΔn	N/A mA
No of poles	2	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	25 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. ✓ The following observations are made N/A

Item No	Observations	Code

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	0
C3 - Improvement recommended	0
FI - Further investigation required without delay	0

Outcomes	Acceptable condition	✓	Unacceptable condition	State C1 or C2	Improvement recommended	State C3	Further investigation	FI	Not verified	N/V	Limitation	LIM	Not applicable	N/A

Item No	Description	Outcome	Comments
1.0	**Condition/Adequacy of distributor's/supply intake equipment**		
1.1	Service cable	✓	No
1.2	Service head	✓	No
1.3	Distributor's earthing arrangement(s)	✓	No
1.4	Meter tails - Distributor/Consumer	✓	No
1.5	Metering equipment	✓	No
1.6	Means of main isolation (where present)	✓	No
2.0	**Presence of adequate arrangements for parallel or switched alternative sources**		
2.1	Adequate arrangements where a generating set operates as a switched alternative to the public supply	✓	No
2.2	Adequate arrangements where a generating set operates in parallel with the public supply	✓	No
3.0	**Automatic disconnection of supply**		
3.1	**Main earthing and bonding arrangements**		
3.1.1	Presence and condition of distributor's earthing arrangement	✓	No
3.1.2	Presence and condition of earth electrode arrangement	N/A	No
3.1.3	Adequacy of earthing conductor size	✓	No
3.1.4	Adequacy of earthing conductor connections	✓	No
3.1.5	Accessibility of earthing conductor connections	✓	No
3.1.6	Adequacy of main protective bonding conductor size(s)	✓	No
3.1.7	Adequacy of main protective bonding conductor connections	✓	No
3.1.8	Accessibility of main protective bonding connections	✓	No
3.1.9	Accessibility and condition of other protective bonding connections	✓	No
3.1.10	Provision of earthing/bonding labels at all appropriate locations	✓	No
3.2	**FELV**		
3.2.1	Source providing at least simple separation	✓	No
3.2.2	Plugs, socket-outlets and the like not interchangeable with those of other systems within the premises.	✓	No
3.3	**Reduced low voltage**		
3.3.1	Adequacy of source	✓	No
3.3.2	Plugs, socket-outlets and the like not interchangeable with those of other systems within the premises.	✓	No
4.0	**Other methods of protection (where the methods of protection listed below are employed, details should be provided on separate sheets)**		
4.1	Double insulation	✓	No
4.2	Reinforced insulation	✓	No
4.3	Use of obstacles	✓	No
4.4	Placing out of reach	✓	No
4.5	Non-conducting location	✓	No
4.6	Earth-free local equipotential bonding	✓	No
4.7	Electrical separation for more than one item of equipment	✓	No
5.0	**Distribution equipment**		
5.1	Adequacy of working space/accessibility of equipment	✓	No
5.2	Security of fixing	✓	No
5.3	Condition of insulation of live parts	✓	No
5.4	Adequacy/security of barriers	✓	No
5.5	Condition of enclosure(s) in terms of IP rating	✓	
5.6	Condition of enclosure(s) in terms of fire rating	✓	No
5.7	Enclosure not damaged/deteriorated so as to impair safety	✓	No
5.8	Presence of main switch(es), linked where required	✓	No
5.9	Operation of main switch(es) (functional check)	✓	No
5.10	Correct identification of circuit protective devices	✓	No

Outcomes	Acceptable condition	✓	Unacceptable condition	State C1 or C2	Improvement recommended	State C3	Further investigation	FI	Not verified	N/V	Limitation	LIM	Not applicable	N/A

Item No	Description	Outcome	Comments
5.0	**Distribution equipment (Continued)**		
5.11	Adequacy of protective devices for prospective fault current	✓	No
5.12	RCD(s) provided for fault protection - includes RCBOs	✓	No
5.13	RCD(s) provided for additional protection - includes RCBOs	✓	No
5.14	RCD(s) provided for protection against fire - includes RCBOs	✓	No
5.15	Manual operation for circuit-breakers and RCDs to prove disconnection	✓	No
5.16	Presence of RCD retest notice at or near equipment where required	✓	No
5.17	Presence of diagrams, charts or schedules at or near equipment where required	✓	No
5.18	Presence of non-standard (mixed) cable colour warning notice at or near equipment where required	✓	No
5.19	Presence of alternative/additional supply arrangements warning notice(s) at or near equipment where required	✓	No
5.20	Presence of replacement next inspection recommendation label	✓	No
5.21	Presence of other required labelling (specify)	✓	No
5.22	Examination of protective device(s) and base(s); correct type and rating (no signs of unacceptable thermal damage, arcing or overheating)	✓	No
5.23	Single-pole switching or protective devices in line conductors only	✓	No
5.24	Protection against mechanical damage where cables enter equipment	✓	No
5.25	Protection against electromagnetic effects where cables enter metallic enclosures	✓	No
6.0	**Distribution/final circuits**		
6.1	Identification of conductors	✓	No
6.2	Cables correctly supported throughout their length	✓	No
6.3	Condition of insulation of live parts	✓	No
6.4	Non-sheathed cables protected by enclosure in conduit, ducting or trunking	✓	No
6.5	Suitability of containment systems for continued use (including flexible conduit)	✓	No
6.6	Cables correctly terminated in enclosures (indicate extent of sampling in Section D of report)	✓	No
6.7	Confirmation of indication that SPD(s) are functional	✓	No
6.8	Confirmation that ALL conductor connections, including connections to busbars are correctly located in terminals and are tight and secure	✓	No
6.9	Examination of cables for signs of unacceptable thermal and mechanical damage/deterioration	✓	
6.10	Adequacy of cables for current-carrying capacity with regard to the type and nature of installation	✓	No
6.11	Adequacy of protective devices; type and rated current for fault protection	✓	No
6.12	Presence and adequacy of circuit protective conductors	✓	No
6.13	Co-ordination between conductors and overload protective devices	✓	No
6.14	Cable installation methods/practices appropriate to the type and nature of installation and external influences	✓	No
6.15	Cables where exposed to direct sunlight, of a suitable type	✓	No
6.16	**Cables installed under floors, above ceilings, in walls / partitions, adequately protected against damage**		
6.16.1	Installed in prescribed zones (see Section D. Extent and limitations)	✓	No
6.16.2	Incorporating earthed armour or sheath, or installed within earthed wiring system, or otherwise protected against mechanical damage by nails, screws and the like (see Section D. Extent and limitations)	✓	No
6.17	**Provision of additional protection by 30 mA RCD**		
6.17.1	For mobile equipment not exceeding a rating of 32 A for use outdoors	✓	No
6.17.2	For all socket-outlets of rating 20 A or less, unless exempt	✓	No
6.17.3	For cables installed in walls / partitions at a depth of less than 50mm	✓	No
6.17.4	For cables installed in walls / partitions containing metal parts regardless of depth	✓	No
6.18	Provision of fire barriers, sealing arrangements and protection against thermal effects	✓	No
6.19	Band II cables segregated/separated from Band I cables	✓	No
6.20	Cables segregated/separated from non-electrical services	✓	No

Outcomes	Acceptable condition	✓	Unacceptable condition	State C1 or C2	Improvement recommended	State C3	Further investigation	FI	Not verified	N/V	Limitation	LIM	Not applicable	N/A

Item No	Description	Outcome	Comments
6.21	**Termination of cables at enclosures (identify numbers and locations of items inspected in Section D)**		
6.21.1	Connections under no undue strain	✓	No
6.21.2	No basic insulation of a conductor visible outside an enclosure	✓	No
6.21.3	Connections of live conductors adequately enclosed	✓	No
6.21.4	Adequacy of connection at point of entry to enclosure (gland, bush or similar)	✓	No
6.22	General condition of wiring systems	✓	No
6.23	Temperature rating of cable insulation	✓	No
6.24	Condition of accessories including socket-outlets, switches and joint boxes	✓	No
6.25	Suitability of accessories for external influences	✓	No
6.26	Single-pole switching or protective devices in line conductors only	✓	No
6.27	Adequacy of connections, including cpcs, within accessories and to fixed and stationary equipment - identify / record numbers and locations of items inspected	✓	No
7.0	**Isolation and switching**		
7.1	**Isolators**		
7.1.1	Presence and condition of appropriate devices	✓	No
7.1.2	Acceptable location (state if local or remote)	✓	No
7.1.3	Capable of being secured in the OFF position	✓	No
7.1.4	Correct operation verified	✓	No
7.1.5	Clearly identified by position and/or durable marking(s)	✓	No
7.1.6	Warning label posted in situations where live parts cannot be isolated by the operation of a single device	✓	No
7.2	**Switching off for mechanical maintenance**		
7.2.1	Presence and condition of appropriate devices	✓	No
7.2.2	Acceptable location	✓	No
7.2.3	Capable of being secured in the OFF position	✓	No
7.2.4	Correct operation verified	✓	No
7.2.5	Clearly identified by position and/or durable marking(s)	✓	No
7.3	**Emergency switching/stopping**		
7.3.1	Presence and condition of appropriate devices	✓	No
7.3.2	Readily accessible for operation where danger might occur	✓	No
7.3.3	Correct operation verified	✓	No
7.3.4	Clearly identified by position and/or durable marking(s)	✓	No
7.4	**Functional switching**		
7.4.1	Presence and condition of appropriate devices	✓	No
7.4.2	Correct operation verified	✓	No
8.0	**Current-using equipment (permanently connected)**		
8.1	Condition of equipment in terms of IP rating	✓	No
8.2	Equipment does not constitute a fire hazard	✓	No
8.3	Enclosure not damaged/deteriorated so as to impair safety	✓	No
8.4	Suitability for the environment and external influences	✓	No
8.5	Security of fixing	✓	No
8.6	Cable entry holes in ceiling above luminaires, sized or sealed so as to restrict the spread of fire (indicate extent of sampling in Section D of report)	✓	No
8.7	**Recessed luminaires (e.g. downlighters)**		
8.7.1	Correct type of lamps fitted	✓	No
8.7.2	installed to minimise build-up of heat by use of "fire rated" fittings, insulation displacement box or similar	✓	No
8.7.3	no signs of overheating to surrounding building fabric	✓	No
8.7.4	no signs of overheating to conductors/terminations	✓	No

Outcomes	Acceptable condition ✓	Unacceptable condition	State C1 or C2	Improvement recommended	State C3	Further investigation	FI	Not verified	N/V	Limitation	LIM	Not applicable	N/A

Item No	Description	Outcome	Comments
9.0	**Location(s) containing a bath or shower**		
9.1	**Additional protection by RCD not exceeding 30 mA**		
9.1.1	For low voltage circuits serving the location	✓	No
9.1.2	For low voltage circuits passing through Zone 1 and Zone 2 not serving the location	✓	No
9.2	Where used as a protective measure, requirements for SELV or PELV are met	✓	No
9.3	Shaver sockets comply with BS 61558-2-5 or BS 3535	✓	No
9.4	Presence of supplementary bonding conductors unless not required by BS 7671:2008	✓	No
9.5	Low voltage (e.g. 230 volts) socket-outlets sited at least 3 m from zone 1	✓	No
9.6	Suitability of equipment for external influences for installed location in terms of IP rating	✓	No
9.7	Suitability of equipment for installation in a particluar zone	✓	No
9.8	Suitability of current-using equipment for a particluar position within the location	✓	No
10.0	**Other special installations or locations** List special locations present, if any. (Record separately the results of particular inspections applied).		

Inspected By

Name: Darren Murray

Date: 19/07/2017

Signature:

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

23 - Master

Board Details

TO BE COMPLETED IN EVERY CASE

Location of Distribution Board: Front hallway

Distribution board designation: DB 1

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

Supply to distribution board is from: N/A

No of phases: N/A

Nominal Voltage: N/A V

Overcurrent protective device for the distribution circuit

Type BS(EN): N/A

Rating: N/A A

Associated RCD (if any)

BS(EN): N/A

RCD No of Poles: N/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/S	Cooker	A	B	1	6	4	0.4	61009 RCD/RCBO	B	32	6	30	1.37
2/S	Shower	A	B	1	6	4	0.4	61009 RCD/RCBO	B	32	6	30	1.37
3/S	Sockets	A	B	10	2.5	1.5	0.4	61009 RCD/RCBO	B	32	6	30	1.37
4/S	Sockets	A	B	9	2.5	1.5	0.4	61009 RCD/RCBO	B	32	6	30	1.37
5/S	Sockets	A	B	10	2.5	1.5	0.4	61009 RCD/RCBO	B	20	6	30	2.19
6/S	Sockets	A	B	2	2.5	1.5	0.4	61009 RCD/RCBO	B	20	6	30	2.19
7/S	Spur	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	B	20	6	30	2.19
8/S	Spur	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	B	16	6	30	2.73
9/S	Spur	A	B	1	2.5	1.5	0.4	61009 RCD/RCBO	B	16	6	30	2.73
10/S	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
11/S	Smoke Alarms	A	B	17	1	1	0.4	61009 RCD/RCBO	B	6	6	30	7.28
12/S	Lights	A	B	19	1	1	5	60898 MCB	B	6	6	N/A	7.28
13/S	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
14/S	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

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

23 - 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 $I_{\Delta n}$	N/A ms	
Ipf	N/A kA		At $5I_{\Delta n}$	N/A ms	
Correct supply polarity confirmed	✓	Phase sequence confirmed (where appropriate)		✓	

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	800328	RCD	800328
Insulation resistance	800328	Other	N/A
Continuity	800328	Other	N/A

Details of circuits and/or equipment vulnerable to damage

None

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 $I_{\Delta n}$ ms	At $5I_{\Delta n}$ ms	Test button operation	
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$(R_1 + R_2)$	(R_2)										
1/S	N/A	N/A	N/A	0.21	N/A	N/A	200	200	200	✓	0.52	19.2	9.2	✓	NO
2/S	N/A	N/A	N/A	0.13	N/A	N/A	200	200	200	✓	0.44	19	9.2	✓	NO
3/S	0.76	0.76	0.81	N/A	0.69	N/A	200	200	200	✓	0.93	19.2	8.6	✓	NO
4/S	0.83	0.83	0.88	N/A	0.71	N/A	200	200	200	✓	0.96	19.2	9	✓	NO
5/S	0.65	0.65	0.68	N/A	0.66	N/A	200	200	200	✓	0.72	19.4	9.2	✓	NO
6/S	0.58	0.58	0.63	N/A	0.48	N/A	200	200	200	✓	0.59	19.2	9	✓	NO
7/S	N/A	N/A	N/A	0.62	N/A	N/A	200	200	200	✓	0.76	19.2	9.2	✓	NO
8/S	N/A	N/A	N/A	0.39	N/A	N/A	200	200	200	✓	0.59	19	8.6	✓	NO
9/S	N/A	N/A	N/A	0.59	N/A	N/A	200	200	200	✓	0.77	19.2	9	✓	NO
10/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/S	N/A	N/A	N/A	0.73	N/A	N/A	200	200	200	✓	0.82	19	9.2	✓	NO
12/S	N/A	N/A	N/A	0.89	N/A	N/A	200	200	200	✓	0.99	N/A	N/A	N/A	NO
13/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature		Position	Qualified Supervisor
Name	Darren Murray	Date of testing	19/07/2017