



ELECTRICAL INSTALLATION CERTIFICATE (SINGLE-SIGNATURE)

For use where design, construction, inspection and testing are the responsibility of one person
(REQUIREMENTS FOR ELECTRICAL INSTALLATIONS — BS 7671 [IET WIRING REGULATIONS])

SELECT
MEMBERSHIP
NUMBER
42105

SSC195604

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This certificate is not valid if the number is defaced or altered

DETAILS OF THE CLIENT

MRS E DOUGLAS HAMILTON

INSTALLATION ADDRESS

AN LONADH CASDALL ISLAND

By ORAN

DESCRIPTION AND EXTENT OF THE INSTALLATION

Description of installation: Full Rewire of House

Extent of installation covered by this Certificate: All Circuits

New installation ☒
Addition ☐
Alteration ☐

FOR DESIGN, CONSTRUCTION, INSPECTION AND TESTING

I being the person responsible for the Design, Construction, Inspection and Testing of the electrical installation (as indicated by my signature), particulars of which are described above, having exercised reasonable skill and care when carrying out the Design, Construction, Inspection and Testing hereby CERTIFY that the work for which I have been responsible is to the best of my knowledge and belief in accordance with BS 7671:2018, amended to 2018 (date) except for the departures, if any, detailed as follows:

Details of departures from BS 7671 (Regulations 120.3, 133.1.3 and 133.5) and comments on existing installation:

Details of permitted exceptions (Regulation 411.3.3):

Where applicable, a suitable risk assessment(s) must be attached to this Certificate. Risk assessment attached ☐

Name (Block Letters) ALAN MAY
For and on behalf of MIM ELECTRICAL

Position ELECTRICIAN
Signature [Signature] Date 13/3/2020

I recommend that this installation is further inspected and tested after an interval of not more than 5 years/months.

The attached schedule of inspections and schedules(s) of test results are part of this document and this Certificate is only valid when they are attached to it.

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Nature of Supply Parameters		Number and Type of Live Conductors		Supply Protective Device Characteristics		Distributor's facility		Earthing arrangements	
Nominal voltage 230 V	Prospective fault current, I_{pf} 8.9 kA	1-phase, 2-wire <input checked="" type="checkbox"/>		BS (EN) 1361		<input type="checkbox"/> TN-S		<input checked="" type="checkbox"/> Installation earth electrode	<input type="checkbox"/>
Nominal frequency 50 Hz	External loop impedance, Z_e 0.34 Ω	2-phase, 3-wire <input type="checkbox"/>		Type IP		<input checked="" type="checkbox"/> TN-C-S		Type (e.g. rod(s), tape etc)	
		3-phase, 3-wire <input type="checkbox"/>		Rated current 100 A		<input type="checkbox"/> TT		Location	
		3-phase, 4-wire <input type="checkbox"/>				<input type="checkbox"/> Other sources of supply		Electrode resistance to earth	Ω

PARTICULARS OF INSTALLATION REFERRED TO IN THE CERTIFICATE

Maximum Demand		Main Switch / Switch-Fuse / Circuit-Breaker / RCD		Main Protective Conductors	
Load 100 kVA/Amps	Location BS @ 100 Landing	Current rating 100 A	If RCD main switch	Earthing conductor: Material COPC csa 16 mm ² Connection / continuity verified <input checked="" type="checkbox"/>	
Polarity and Phase Sequence	BS (EN) 60947-3	Fuse/device rating or setting A	Rated residual operating current ($I_{\Delta n}$) mA	Main protective bonding conductors: Material COPC csa 10 mm ² Connection / continuity verified <input checked="" type="checkbox"/>	
Supply polarity confirmed <input checked="" type="checkbox"/>	No. of poles 2	Voltage rating 230 V	Rated time delay ms	To water installation pipes <input checked="" type="checkbox"/>	To gas installation pipes <input type="checkbox"/>
Phase sequence confirmed <input type="checkbox"/>			Measured operating time (at $I_{\Delta n}$) ms	To structural steel <input type="checkbox"/>	To lightning protection <input type="checkbox"/>
				To other <input type="checkbox"/>	Specify:

ECT

SCHEDULE OF INSPECTIONS

(for new installation work only)

SSC 195604

Items inspected to confirm, as appropriate, compliance with the relevant clauses of the list of items and associated examples, where given, are not exhaustive.

Report Outcome for each item as follows:

That an inspection has been carried out and the result is **satisfactory**: ✓
That the inspection is **not applicable** to a particular item: N/A

DESCRIPTION	Outcome (Note 2)
EXTERNAL CONDITION OF INTAKE EQUIPMENT (VISUAL INSPECTION ONLY)	
Service cable	✓
Service head	✓
Earthing arrangement	✓
Water tails	✓
Metering equipment	✓
Isolator (where present)	N/A
PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY	
Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A
Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A
AUTOMATIC DISCONNECTION OF SUPPLY	
Presence & adequacy of earthing & protective bonding arrangements:	
a) Distributor's earthing arrangement (542.1.2.1; 542.1.2.2)	✓
b) Installation earth electrode where applicable (542.1.2.3; 542.2)	N/A
c) Earthing conductor and connections, including accessibility (542.3; 543.1.1; 543.3.2)	✓
d) Main protective bonding conductors and connections including accessibility (411.3.1.2; 543.3.2; 544.1)	✓
e) Provision of safety electrical earthing/bonding labels at all appropriate locations (514.13)	✓
2 RCD(s) provided for fault protection (411.4.204; 411.5; 531.3)	✓
0 BASIC PROTECTION	
0.1 Presence and adequacy of measures to provide basic protection (prevention of contact with live parts) within the installation:	
a) Insulation of live parts e.g. conductors completely covered with durable insulating material (416.1)	N/A
b) Barriers or enclosures e.g. correct IP rating (416.2)	✓
5.0 ADDITIONAL PROTECTION	
5.1 Presence and effectiveness of additional protection methods:	
a) RCD(s) not exceeding 30 mA operating current (415.1; Part 7) See item 8.14 of this schedule	✓
b) Supplementary bonding (415.2; Part 7)	N/A
6.0 OTHER METHODS OF PROTECTION	
6.1 Presence and effectiveness of methods which give both basic and fault protection:	
a) SELV systems including the source & associated circuits (Section 414)	N/A
b) PELV systems including the source & associated circuits (Section 414)	N/A
c) Double or reinforced insulation i.e. Class II or equivalent equipment and associated circuits (Section 412)	N/A
d) Electrical separation for one item of equipment e.g. shaver supply unit (Section 413)	✓

Item No	DESCRIPTION	Outcome (Note 2)
7.0 CONSUMER UNIT(S) / DISTRIBUTION BOARD(S)		
7.1	Adequacy of access and working space for items of electrical equipment including switchgear (132.12; 513.1)	✓
7.2	Components are suitable according to assembly manufacturer's instructions or literature (536.4.203)	✓
7.3	Presence of linked main switch(es) (462.1.201)	✓
7.4	Isolators, for every circuit or group of circuits and all items of equipment (462.2; Section 537)	✓
7.5	Suitability of enclosure(s) for IP and fire ratings (416.2; 421.1.6; 421.1.201; 526.5)	✓
7.6	Protection against mechanical damage where cables enter equipment (522.8.1; 522.8.5; 522.8.11)	✓
7.7	Confirmation that ALL conductor connections are correctly located in terminals and are tight and secure (526.1)	✓
7.8	Avoidance of heating effects where cables enter ferromagnetic enclosures e.g. steel (521.5)	✓
7.9	Selection of correct type & rating of protective devices for overcurrent & fault protection (Sections 411, 432, 433)	✓
7.10	Presence of appropriate circuit charts, warning and other notices:	
a)	Provision of circuit charts/schedules or equivalent forms of information (514.9)	✓
b)	Warning notice of method of isolation where live parts not capable of being isolated by a single device (514.11)	✓
c)	Periodic inspection and testing notice (514.12.1)	✓
d)	RCD six-monthly test notice, where required (514.12.2)	✓
e)	AFDD six-monthly test notice, where required (421.1.7; 532.6; 643.10)	N/A
f)	Warning notice of non-standard (mixed) colours of conductors present (514.14)	N/A
7.11	Presence of labels to indicate the purpose of switchgear and protective devices (514.1.1; 514.8)	✓
8.0 CIRCUITS		
8.1	Adequacy of conductors for current-carrying capacity with regard to type and nature of the installation (Section 523)	✓
8.2	Cable installation methods suitable for the location(s) and external influences (Section 522)	✓
8.3	Segregation/separation of Band I (ELV) & Band II (LV) circuits, & electrical & non-electrical services (Section 528)	✓
8.4	Cables correctly erected and supported throughout, with protection against abrasion (Sections 521, 522)	✓
8.5	Provision of fire barriers, sealing arrangements where necessary (527.2)	✓
8.6	Non-sheathed cables enclosed throughout in conduit, ducting or trunking (521.10.1; 526.8)	N/A
8.7	Cables concealed under floors, above ceilings or in walls/partitions, adequately protected against damage (522.6)	✓
8.8	Conductors correctly identified by colour, lettering or numbering (Section 514)	✓
8.9	Presence, adequacy and correct termination of protective conductors (411.3.1.1; 543.1)	✓
8.10	Cables and conductors correctly connected, enclosed and with no undue mechanical strain (Section 526)	✓
8.11	No basic insulation of a conductor visible outside enclosure (526.8)	✓
8.12	Single-pole devices for switching or protection in line conductors only (132.14.1; 530.3.3; 643.6)	✓
8.13	Accessories not damaged, securely fixed, correctly connected, suitable for external influences (134.1.1; 512.2; Section 526)	✓
8.14	Provision of additional protection/requirements by RCD not exceeding 30 mA (415.1):	
a)	Socket-outlets rated at 32 A or less, unless exempt (411.3.3)	✓
b)	Supplies for mobile equipment with a current rating not exceeding 32 A for use outdoors (411.3.3)	N/A
c)	Cables concealed in walls at a depth of less than 50 mm (522.6.202; 522.6.203)	✓
d)	Cables concealed in walls/partitions containing metal parts regardless of depth (522.6.202; 522.6.203)	N/A
e)	Final circuits supplying luminaires within domestic (household) premises (411.3.4)	✓
8.15	Presence of appropriate devices for isolation and switching correctly located including:	
a)	Means of switching off for mechanical maintenance (Section 464, 537.3.2)	✓
b)	Emergency switching off (Section 465, 537.3.3)	N/A
c)	Functional switching, for control of parts of the installation and current-using equipment (463.1; 537.3.1)	✓
d)	Firefighter's switches (537.4)	N/A
9.0 CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)		
9.1	Equipment not damaged, securely fixed and suitable for external influences (134.1.1; 416.2; 512.2)	✓
9.2	Provision of overload and/or undervoltage protection e.g. for rotating machines, if required (Sections 445, 552)	N/A
9.3	Installed to minimise the build-up of heat and restrict the spread of fire (421.1.4; 559.4.1)	N/A
9.4	Adequacy of working space / accessibility to equipment (132.12; 513.1)	N/A
10.0 LOCATION(S) CONTAINING A BATH OR SHOWER (SECTION 701)		
10.1	30 mA RCD protection for all LV circuits, equipment suitable for zones, supplementary bonding (where required) etc.	✓
11.0 OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS		
11.1	List all other special installations or locations present, if any (Record separately the results of particular inspections applied)	N/A

2018 Inspected by: NAME (CAPITALS) A.M. M.M.

Signature

Date

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CIRCUIT CHART AND SCHEDULE OF TEST RESULTS (18 CIRCUITS)



Reference No.
Location & Type

Details of circuits and/or installed equipment vulnerable to damage when testing

Z_n at DB 0.34 Ω
 I_{ph} at DB 0.89 kA

Phase sequence confirmed (where appropriate) ☒

Correct supply polarity confirmed ☒

CIRCUIT DETAILS										TEST RESULTS											
Circuit No.	Circuit Description	No. of Points	Wiring Details				Protective Device (Lowest breaking capacity kA)		Continuity				#Insulation Resistance (Lowest values measured)		Polarity	Z _s (Max. measured values)	RCD Protection (500% test for RCDs rated at 30 mA or less only)			Functional tests of switch-gear etc.*	Remarks Indicate points of note e.g.: • Additional outlets or equipment supplied • Provision of AFDD for circuit • Reduced IR test voltage
			Type (see code below)	Ref. Method †	Conductor csa				(R ₁ +R ₂) or R ₂		Ring Final Circuit		MΩ				I _{Δn} mA	Time (ms)			
					mm ²	Type			Amps	L-L	N-N	cpc-cpc	L-L	L-E				100%	500%		
							Live	cpc													
1	SHOWER	1	A	B	10	4	B	40	—	0.03	—	—	—	✓	0.42	30			✓		
2	SOCKETS - UTILITY	3	A	B	2.5	1.5	B	32	0.19	—	0.16	0.17	0.34	✓	0.52	30			✓		
3	SOCKETS - DOWNSTAIRS	25	A	B	2.5	1.5	B	32	0.55	—	0.84	0.85	1.49	✓	1.02	30			✓		
4	WATER HEATER	2	A	B	2.5	1.5	B	16	—	0.1	—	—	—	✓	0.45	30			✓		
5	LIGHTS - UPSTAIRS	11	A	B	1.5	1	B	6	—	0.89	—	—	—	✓	1.03	30			✓	250V IL	
6																					
7	-																				
8	COOKER	2	A	B	6	2.5	B	32	—	0.06	—	—	—	✓	0.45	30	25	12	✓		
9	SOCKETS - UPSTAIRS	12	A	B	2.5	1.5	B	32	0.41	—	0.46	0.47	0.83	✓	0.64	30	25	12	✓	250V IR	
10	SOCKETS - UPSTAIRS KITCHEN	8	A	B	2.5	1.5	B	32	0.20	—	0.27	0.27	0.49	✓	0.62	30	25	12	✓		
11	LIGHTS - DOWNSTAIRS		A	B	1.5	1	B	36	—	1.11	—	—	—	✓	1.02	30					

† Insert Reference Method (see Table 4A2 from BS 7671 Appendix 4)

#IR test voltage 500 V DC unless stated in 'Remarks'

*Includes RCD and/or AFDD test button

Code for Wiring Type	A		B		C		D		E		F		G		H		O (Other - please specify)	
	PVC/PVC		PVC in Metal Conduit		PVC in Plastic Conduit		PVC in Metal Trunking		PVC in Plastic Trunking		PVC/SWA		XLPE/SWA		Mineral Insulated			

TEST INSTRUMENTS USED

Manufacturer	Type	Serial No.	Date Accuracy Verified	Manufacturer	Type	Serial No.	Date Accuracy Verified	Manufacturer	Type	Serial No.	Date Accuracy Verified
FLUXE	16546	171005	3-9-19	PLANMAN							

2018 Tested by: NAME (CAPITALS)

Signature

Date 13/3/2020

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