DOMESTIC ELECTRICAL INSTALLATION CERTIFICATE

1 Cert No: 1

AW Electrical East Devon

2

Business Details

Register No.	
Operative	Adam Wheatley
Company	AW Electrical East Devon
Address	16
	Marcom Close
	Exmouth
	Devon
Postcode	EX8 5PW
Tel No.	07964363148
Email	awelectricaleastdevon@gmail.com

Job Address

Name	
Address	St Catherine's
	New North Road
	Exeter
	Devon
Postcode	EX4 4AG
Tel No.	
Email	

Client/Landlord's Details

Name	Marco Christoforou
Company	
Address	St Catherine's
	New North Road
	Exeter
	Devon
Postcode	EX4 4AG
Tel No.	
Email	

3 DETAILS AND EXTENT OF THE INSTALLATION

Extent of the installation covered by this certificate:	100% of the installation.
The installation is:	An addition

4 COMMENTS ON EXISTING INSTALLATION

Existing installation appears to be satisfactory, partial house rewire and kitchen rewire has taken place

5 NEXT INSPECTION

I RECOMMEND that this installation is further inspected and tested after an interval of not more than : 10 Years or change of tenant/owner

6 TEST INSTRUMENTS

Details of Tests Instruments used (state serial and/or asset numbers):

Multi-functional:	239379	Earth electrode resistance:	N/A
Insulation resistance:	N/A	Earth fault loop impedance:	N/A
Continuity:	N/A	RCD	N/A

7 DESIGN, CONSTRUCTION, INSPECTION AND TESTING

I/We being the person(s) responsible for the design, construction, inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described above, having exercised reasonable skill and care when carrying out the design, construction, inspection and testing, hereby CERTIFY that the design work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2018, except for the departures, if any, detailed as follows.

Details of departures from BS 7671, as amended (Regulations 120.3, 133.5):

N/A

Details of permitted exceptions (Regulations 411.3.3): Risk assessment attached: NA

N/A

The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.

For DESIGN, the CONSTRUCTION, and the INSPECTION AND TESTING of the installation:

Signature: A Wheatley Date: 28/07/2020

8 SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Earthing Arrangements

TN-S

Number and Type of Live Conductors

1-phase (2 wire):	Yes	1-phase (3 wire):	N/A
3-phase (3 wire):	N/A	3-phase (4 wire):	N/A
Other:	N/A		

Confirmation of supply polarity: Yes

Nature of Supply Parameters

Nominal voltage(s): U: 230 V Uo: 230 V

Nominal frequency, f: 50 V

Prospective fault current, Ipf: 1.38 kA

External earth fault loop impedance, Ze: 0.17 Ω

Supply Protective Device

BS(EN): BS EN 3036

Type: -

Rated current: 100 A

Short-circuit capacity: 3 kA

9 PARTICULARS OF INSTALLATION REFERRED TO IN THE CERTIFICATE

Means of Earthing

Distributor's facility: Yes

Installation earth electrode: No

Details of Installation Earth Electrode (where applicable)

Type: N/A

Resistance to Earth: N/A Ω

Location: N/A

Method of measurement: N/A

Maximum Demand (Load): 100A

Protective measure(s) against electric shock: Automatic disconnection of

Measured Ze: 0.17

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

Type BS (EN): BS EN 60947-3

Number of poles: 2

Current rating: 100 A

Fuse/device rating or setting: 100A A

Voltage rating: 230 V

Supply conductors material: Copper

Supply conductors csa: 25 mm²

If RCD main switch

Rated residual operating current (In): N/A mA

Rated time delay: N/A ms

Measured operating time (In): N/A ms

Earthing and Protective Bonding Conductors

Earthing conductor

Conductor Material: Copper csa: 16 mm² Connection/continuity verified: Yes

Main protective bonding conductors

Conductor material: Copper csa: 10 mm² Connection/continuity verified: Yes

Bonding of extraneous-conductive parts

To water installation pipes: Yes

To oil installation pipes: N/A

To structural steel: N/A

To gas installation pipes: Yes

To lightning protection: N/A

To other service(s): N/A

10 SCHEDULE OF ITEMS INSPECTED

Item	Description	Outcome
1.0	**DISTRIBUTOR'S/SUPPLY INTAKE EQUIPMENT**	
1.1	Condition of service cable	Yes
1.2	Condition of service head	Yes
1.3	Condition of distributor's earthing arrangement	Yes
1.4	Condition of tails - Distributor/Consumer	Yes
1.5	Condition of metering equipment	Yes
1.6	Condition of isolator (where present)	N/A
2.0	**PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY**	
2.1	Adequate arrangements where a generating set operates as a switched alternative to the public supply (551.6)	N/A
2.2	Adequate arrangements where a generating set operates in parallel with the public supply (551.7)	N/A
3.0	**AUTOMATIC DISCONNECTION OF SUPPLY**	
3.1	Presence and adequacy of earthing and protective bonding arrangements:	
3.1.1	Installation earth electrode (where applicable) (542.1.2.3)	N/A
3.1.2	Earthing conductor and connections including accessibility (542.3; 542.3.2)	Yes
3.1.3	Main protective bonding conductors and connections, including accessibility (411.3.1.2; 543.3.3)	Yes
3.1.4	Provision of safety electrical earthing/bonding labels at all appropriate locations (514.13)	Yes
3.1.5	RCD(s) provided for fault protection (411.4.9; 411.5.3)	N/A
4.0	**BASIC PROTECTION**	
4.1	Presence and adequacy of measures to provide basic protection (prevention of contract with live parts) within the installation:	
4.1.1	Insulation of live parts e.g. conductors completely covered with durable insulation materials (416.1)	Yes
4.1.2	Barriers or enclosures e.g. correct IP rating (416.2)	Yes

11 SCHEDULE OF ITEMS INSPECTED

Item	Description	Outcome
5.0	**ADDITIONAL PROTECTION**	
5.1	Presence and effectiveness of additional protection methods:	
5.1.1	RCD(s) not exceeding 30mA operating current (415.1; Part 7), see Item 8.14 of this schedule	Yes
5.1.2	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:	
6.1.1	SELV systems, including the source and associated circuits (Section 414)	N/A
6.1.2	PELV systems, including the source and associated circuits (Section 414)	N/A
6.1.3	Double or reinforced insulation i.e. Class II or equivalent equipment and associated circuits (Section 412)	Yes
6.1.4	Electrical separation for one item or equipment e.g. shaver supply unit (Section 413)	N/A
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)	Yes
7.2	Presence of linked main switch(s) (537.1.4; 5.7.1.5; 537.1.6)	Yes
7.3	Isolators, for every circuit or group of circuits and all items of equipment (537.2)	Yes
7.4	Suitability of enclosure(s) for IP and fire ratings (416.2; 421.1.6; 421.1.201)	Yes
7.5	Protection against mechnical damage where cables enter equipment (522.8.1; 522.8.11)	Yes
7.6	Confirmation that ALL conductor connections are corretly located in terminals and are tight and secure (526.1)	Yes
7.7	Avoidance of heating affects where cables enter ferromagnetic enclosures e.g. steel (521.5)	Yes
7.8	Selection of correct type and rating circuit protective devices for overcurrent and fault protection (411.3.2; 411.4, .5, .6; Section 432, 433)	Yes
7.9	Presence of appropriate circuit charts, warning and other notices;	
7.9.1	Provision of circuit charts/schedules or equivalent forms of information (514.9)	Yes
7.9.2	Warning notice of method of isolation where live parts not capable of being by a single device (514.11)	N/A
7.9.3	Periodic inspection and testing notice (514.12.1)	Yes
7.9.4	RCD six-monthly test notice; where required (514.12.2)	Yes
7.9.5	Warning notice of non-standard (mixed) colours of conductors present (514.14)	Yes
7.10	Presence of labels to indicate the purpose of switchgear and protective devices (514.1.1; 514.8)	Yes
8.0	**CIRCUITS**	
8.1	Adequacy of conductors for currents-carrying capacity with regards to type and nature of the installation (Section 523)	Yes
8.2	Cable installation methods suitable for the location(s) and external influences (Section 522)	Yes
8.3	Segregation/separation of Band I (ELV) and Band II (LV) circuits, and electrical and non-electrical services (528)	Yes
8.4	Cables correctly erected and supported throughout including escape routes, with protection against abrasion (Sections 521, 522)	Yes
8.5	Provision of fire barriers, sealing arrangements where necessary (527.2)	Yes
8.6	Non-sheathed cables enclosed throughout in conduit, ducting or trunking (521.10.1; 526.8)	Yes
8.7	Cables concealed under floors, above ceilings or in wall/partitions, adequately protected against damage (522.6.201, .202, .204)	Yes
8.8	Conductors correctly identified by colour, lettering or numbering (Section 514)	Yes
8.9	Presence, adequacy and correct termination of protective conductors (411.3.1.1; 542.1)	Yes
8.10	Cables and conductors correctly connected, enclosed and with no undue mechanical strain (Section 526)	Yes
8.11	No basic insulation of a conductor visible outside enclosure (526.8)	Yes
8.12	Single-pole devices for switching or protection in line conductors only (132.14.1; 530.3.2)	Yes
8.13	Accessories not damaged, securely fixed, correctly connected, suitable for external influences (134.1.1; 512.2; Section 526)	Yes

12 SCHEDULE OF ITEMS INSPECTED

Item	Description	Outcome
8.14	Provision of additional protection by RCD not exceeding 30mA:	
8.14.1	Socket-outlet rated at 20 A or less unless exempt (411.3.3)	Yes
8.14.2	Mobile equipment with a current rating not exceeding 32 A for use outdoors (411.3.3)	Yes
8.14.3	Cables concealed in walls at a depth of less than 50 mm (522.6.202, .203)	Yes
8.14.4	Cables concealed in walls/partitions containing metal parts regardless of depth (522.6.202; 522.6.203)	Yes
8.15	Presence of appropriate devices for isolation and switching correctly located including:	
8.15.1	Means of switching off for mechanical maintenance (537.3)	Yes
8.15.2	Emergency switches (537.4)	N/A
8.15.3	Functional switches, for control of parts of the installation and current-using equipment (537.5)	Yes
8.15.4	Firefighter's switches (537.6)	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)	Yes
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)	Yes
9.4	Adequacy of working space. Accessibility to equipment (132.12; 513.1)	Yes
10.0	**LOCATION(S) CONTAINING A BATH OR SHOWER (SECTION 701)**	
10.1	30 mA RCD protection for all LV circuits, equipment suitable for the zones, supplementary bonding (where required) etc.	Yes
10.2	Where used as a protective measure, requirement for SELV or PELV met (701.414.4.5)	N/A
10.3	Shaver sockets comply with BS EN 61558-2-5 formerly BS 3535 (701.512.3)	Yes
10.4	Presence of supplementary bonding conductors, unless not required by BS 7671:2018 (701.415.2)	N/A
10.5	Low voltage (e.g. 230 volt) socket-outlets sited at least 3m from Zone 1 (701.512.3)	Yes
10.6	Suitability of equipment for external influences for installed location in terms of IP rating (701.512.2)	Yes
10.7	Suitability of accessories and control gear etc. for a particular zone (701.512.3)	Yes
10.8	Suitability of current-using equipment for particular position within the location (701.55)	Yes
11.0	**OTHER PART 7 SPECIAL INSTALLATIONS OR LOCATIONS** List all other special installation or locations present, if any. (Record separately the results of particular inspections applied.)	
11.1	N/A	N/A
11.2	N/A	N/A

13 SCHEDULE OF ITEMS INSPECTED

Item	Description	Outcome
12.1	External earth fault loop impedance, Ze	Yes
12.2	Installation earth electrode resistance, Ra	N/A
12.3	Continuity of protective conductors	Yes
12.4	Continuity of ring final circuit conductors	Yes
12.5	Insulation resistance between live conductors	Yes
12.6	Insulation resistance between live conductors and earth	Yes
12.7	Polarity	Yes
12.8	Earth fault loop impedance, Zs	Yes
12.9	Verification of phase sequence	N/A
12.10	Operation of residual current device(s)	Yes
12.11	Functional testing of assemblies	Yes
12.12	Verification of voltage drop	Yes

14 SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Designation of consumer unit: In high level cupboard | Location: Utility | Prospective fault current: 1.38 kA | Type of Wiring O-Other: A - PVC/PVC cables

Circuit number	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: css		Max disconnect time permitted by BS7671	Overcurrent protective devices				RCD	Maximum Zs permitted by BS7671	Circuit impedances (Ohms)					Insulation resistance		Polarity	Maximum measured earth fault loop impedance Zs	RCD			AFDD
														Ring final circuit only (measured end to end)			All circuits (one column to be completed)						Disconnection time at IΔn	Disconnection time at 5IΔn	Test button Operation	Manual AFDD test button operation
					Live	cpc		BS (EN)	Type No	Rating	Capacity	Operating current		r_1	r_n	r_2	R_1+R_2	R_2	Live - Live	Live - Earth						
					mm²	mm²	s			A	kA	mA	Ω	(Line)	(Neutral)	(cpc)			MΩ	MΩ		Ω	ms	ms		
1	Garage Supply	A -	E	1	4	2.5	5	BS EN 60898	B	32	6	N/A	1.1	N/A	N/A	N/A	0.13	N/A	>200	>200	Yes	0.30	N/A	N/A	N/A	N/A
2	Hob	A -	101	1	6	2.5	0.4	BS EN 61009	B	32	6	30	1.1	N/A	N/A	N/A	0.12	N/A	>200	>200	Yes	0.29	24	24	Yes	N/A
3	Cooker	A -	101	1	6	2.5	0.4	BS EN 61009	B	32	6	30	1.1	N/A	N/A	N/A	0.13	N/A	>200	>200	Yes	0.30	24	29	Yes	N/A
4	Kitchen Ring	A -	101	11	2.5	1.5	0.4	BS EN 61009	B	32	6	30	1.1	0.49	0.50	0.76	0.27	N/A	>200	>200	Yes	0.44	24	24	Yes	N/A
13	Lights	A -	101	-	1	1	0.4	BS EN 61009	B	6	6	30	5.82	N/A	N/A	N/A	1.45	N/A	Lim	>200	Yes	1.62	29	29	Yes	N/A
14	Lights	A -	101	-	1	1	0.4	BS EN 61009	B	6	6	30	5.82	N/A	N/A	N/A	0.48	N/A	Lim	>200	Yes	0.65	29	29	Yes	N/A
15	Kitchen Lights	A -	101	21	1	1	0.4	BS EN 61009	B	6	6	30	5.82	N/A	N/A	N/A	0.43	N/A	Lim	>200	Yes	0.59	29	29	Yes	N/A
12	Cannot Trace	A -	-	-	1	1	0.4	BS EN 61009	B	6	6	30	5.82	N/A	N/A	N/A	-	N/A	-	-	-	-	29	29	Yes	N/A
11	Immersion Heater	A -	101	1	2.5	1.5	0.4	BS EN 61009	B	6	6	30	5.82	N/A	N/A	N/A	0.27	N/A	Lim	>200	Yes	0.44	29	29	Yes	N/A
10	Sockets	A -	101	-	2.5	1.5	0.4	BS EN 61009	B	16	6	30	2.15	N/A	N/A	N/A	0.14	N/A	>200	>200	Yes	0.22	24	24	Yes	N/A
9	Boiler	A -	101	1	2.5	1.5	0.4	BS EN 61009	B	16	6	30	2.15	N/A	N/A	N/A	0.58	N/A	Lim	>200	Yes	0.71	29	29	Yes	N/A
8	Outside gate	A -	E	1	2.5	1.5	0.4	BS EN 61009	B	16	6	30	2.15	N/A	N/A	N/A	0.07	N/A	Lim	>200	Yes	0.24	29	29	Yes	N/A
7	Sockets	A -	101	-	2.5	1.5	0.4	BS EN 61009	B	32	6	30	1.1	0.90	0.92	1.80	0.62	N/A	Lim	>200	Yes	0.92	30	30	Yes	N/A
6	Sockets	A -	101	-	2.5	1.5	0.4	BS EN 61009	B	32	6	30	1.1	0.74	0.73	1.47	0.67	N/A	Lim	>200	Yes	0.88	28	29	Yes	N/A
5	Sockets	A -	101	-	2.5	1.5	0.4	BS EN 61009	B	32	6	30	1.1	0.55	0.53	0.70	0.22	N/A	Lim	>200	Yes	0.69	30	29	Yes	N/A