ELECSA

This safety certificate is an important and valuable document which should be retained for future reference

This certificate is not valid if the serial number has been defaced or altered DCE1/ 0143572

DOMESTIC ELECTRICAL INSTALLATION CERTIFICATE

Issued in accordance with *British Standard 7671 – Requirements for Electrical Installations* by an ELECSA Registered Domestic Installer, Certsure LLP, Mansfield Business Centre, Ashfield Avenue, MANSFIELD NG18 2AE.

Original (To the person ordering the work)

IRN/ Installer's Reference Number

DETAILS OF THE CLIENT

Client and address: JULIAN GLASGOW
19 WESTGATE St
LONG MELFORD
SUFFOLK

Postcode CO10

ADDRESS OF THE INSTALLATION

Installation address: JULIAN GLASGOW
CRANMORE GREEN HOUSE
LONG MELFORD
SUFFOLK

Postcode CO10 9AG

DETAILS OF THE INSTALLATION

Extent of the installation work covered by this certificate: Test electrical system

The installation is
New N/A
An addition N/A
An alteration N/A

DESIGN, CONSTRUCTION, INSPECTION AND TESTING

I, being the person(s) responsible for the design, construction, inspection and testing of the electrical installation (as indicated by my signature adjacent), 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 said work for which I have been responsible is, to the best of my knowledge and belief, in accordance with BS 7671, 2018 amended to 2020 (date) except for the departures, if any, detailed as follows:

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

None

The extent of liability of the signatory is limited to the work described above as the subject of this certificate.
For the **DESIGN**, the **CONSTRUCTION** and the **INSPECTION AND TESTING** of the installation

Signature [signature] Name (CAPITALS) Y DUPAVE Date 13/10/20

The results of the inspection and testing reviewed by the Qualified Supervisor

Signature [signature] Name (CAPITALS) Y DUPAVE Date 13/10/20

PARTICULARS OF THE REGISTERED DOMESTIC INSTALLER

Trading title: Ace Electrical

Address: 23 Highbury way
Sudbury
Suffolk

Telephone No

Postcode CO10 0NG

ELECSA Registration No (Essential information) E P P 3 4 8 8 7

NEXT INSPECTION

§ *Enter interval in terms of years, months or weeks, as appropriate*

I RECOMMEND that this installation is further inspected and tested after an interval of not more than § 10

COMMENTS ON EXISTING INSTALLATION

Note: Enter 'NONE' or, where appropriate, the page number(s) of additional page(s) of comments on the existing installation

None

In the case of an alteration or additions see Section 633 of BS 7671

SCHEDULE OF ADDITIONAL RECORDS*

See attached schedule

None

** Where the electrical work to which this certificate relates includes the installation of a fire detection/alarm system (or a part of such a system), this electrical safety certificate should be accompanied by the particular certificate for the system.*

Please see the 'Notes for Recipients' on the reverse of this page.

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SUPPLY CHARACTERISTICS

Tick boxes and enter details, as appropriate

Nature of supply parameters Notes: (1) by enquiry (2) by enquiry or by measurement (3) where more than one supply, record the higher or highest values

System type(s): TN-S; TN-C-S ✓; TT

Number and type of live conductors: 1-phase (2-wire) ✓; 1-phase (3-wire); 3-phase (3-wire); 3-phase (4-wire); Other (Please state)

Number of sources: 1

Nominal voltage(s) $U^{(1)}$: V

$U_o^{(1)}$: 241 V

Nominal frequency, $f^{(1)}$: 50 Hz

External earth fault loop impedance, $Z_e^{(1)}$: 0.34 Ω

Single-phase Prospective fault current, $I_{pf}^{(2)(3)}$: 704 kA

3-phase Prospective fault current, $I_{pf}^{(2)(3)}$: 8 kA

Characteristics of primary supply overcurrent protective device(s)

BS(EN): 1361

Short-circuit capacity: 33 kA

Type: II

Confirmation of supply polarity: ✓ ✓

Rated current: 60 A

PARTICULARS OF INSTALLATION AT THE ORIGIN

Tick boxes and enter details, as appropriate

Means of earthing: Distributor's facility ✓; Installation earth electrode

Details of installation earth electrode (where applicable): Type (eg rod(s), tape etc); Location; Electrode resistance, R_A Ω; Method of measurement

Measured Z_o: 0.33 Ω

Protective measure(s) for fault protection

Maximum demand (Load): 45 kVA/Amps (Delete as appropriate)

Number of smoke alarms: ‡

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

Type BS(EN): 60947-3

Voltage rating: 230 V

No of poles: 2

Rated current, I_n: A

Supply conductors material: COPPER

RCD operating current, $I_{\Delta n}$: mA

Supply conductors csa: 25 mm²

RCD operating time (at $I_{\Delta n}$): ms

Rated time delay*: ms

* applicable only where an RCD is used as a main circuit-breaker

Earthing conductor

Conductor material: COPPER

Conductor csa: 16 mm²

Continuity/connection verified: ✓ ✓

Main protective bonding conductors and bonding of extraneous-conductive-parts (✓)

Continuity/connection verified: ✓ ✓

Conductor material: COPPER

Conductor csa: 10 mm²

Location (where not obvious)

Water installation pipes ✓; Structural steel; Oil installation pipes; Other; Gas installation pipes ✓

SCHEDULE OF ITEMS INSPECTED

†See note below

1.0 CONDITION/ADEQUACY OF DISTRIBUTOR'S/SUPPLY INTAKE EQUIPMENT (the Distributor should be notified of any unsatisfactory equipment)

- 1.1 Service cable ✓
- 1.2 Service head ✓
- 1.3 Distributor's earthing arrangement ✓
- 1.4 Meter tails - Distributor/Consumer ✓
- 1.5 Metering equipment ✓
- 1.6 Means of main isolation (where present) ✓

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
- 2.2 Adequate arrangements where a generating set operates in parallel with the public supply
- 2.3 Presence of alternative/additional supply warning notice(s)

3.0 AUTOMATIC DISCONNECTION OF SUPPLY

- 3.1 Presence and adequacy of protective earthing/ bonding arrangements as follows:
  - a) Distributor's earthing arrangement or installation earth electrode arrangement ✓
  - b) Earthing conductor and connections ✓
  - c) Main protective bonding conductors and connections ✓
  - d) Earthing/bonding labels at all appropriate locations ✓
- 3.2 Accessibility of:
  - a) Earthing conductor connections ✓
  - b) All protective bonding connections ✓

4.0 BASIC PROTECTION

- 4.1 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 materials ✓
  - b) Barriers or enclosures e.g. correct IP rating ✓

5.0 ADDITIONAL PROTECTION

- 5.1 Presence and effectiveness of additional protection methods
  - a) RCD(s) not exceeding 30 mA operating current ✓
  - b) Supplementary bonding ✓

6.0 OTHER METHODS OF PROTECTION

- 6.1 Basic and fault protection — LOCATION
  - a) SELV
  - b) PELV
  - c) Double insulation/Reinforced insulation
  - d) Electrical separation for one item of equipment

† *All boxes must be completed. '✓' indicates that an inspection was carried out and that the result was satisfactory. 'N/A' indicates that an inspection was not applicable to the particular installation.*

‡ *Where a smoke alarm has been installed, separate certification is required on the appropriate form.*

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SCHEDULE OF ITEMS INSPECTED †See note below

7.0 CONSUMER UNIT(S)	
7.1 Adequacy of working space/accessibility	✓
7.2 Security of fixing	✓
7.3 Adequacy / security of barriers	✓
7.4 Insulation of live parts not damaged during erection	✓
7.5 Enclosures not damaged during installation	✓
7.6 Suitability of enclosures for IP and fire ratings	✓
7.7 Presence and operation of main switch(es), linked, where appropriate	✓
7.8 Operation of circuit-breakers and RCDs to prove functionality	✓
7.9 Correct identification of circuit protective devices	✓
7.10 RCD(s) provided for fault protection, where specified	✓
7.11 RCD(s) provided for additional protection, where specified	✓
7.12 Confirmation overvoltage protection (SPDs) provided and functional where specified	✓
7.13 Presence of RCD quarterly test notice at or near the origin	✓
7.14 Presence of diagrams, charts or schedules at or near each Consumer unit(s)	✓
7.15 Presence of non-standard (mixed) cable colour warning notice at or near the appropriate distribution board, where required	
7.16 Presence of next inspection recommendation label	✓
7.17 Presence of other required labelling	✓
7.18 Selection of protective device(s) and base(s); correct type and rating	✓
7.19 Single-pole protective devices in line conductor only	✓
7.20 Protection against mechanical damage where cables enter equipment	✓
7.21 Protection against electromagnetic effects where cables enter ferromagnetic enclosures	✓
7.22 Confirmation that ALL conductor connections, including connections to busbars are correctly located in terminals and are tight and secure	✓
8.0 CIRCUITS	
8.1 Identification of conductors	✓
8.2 Cables adequately supported throughout their length	✓
8.3 Examination of cables for signs of mechanical damage during installation	✓
8.4 Adequacy of cables for current-carrying capacity with regard to the type and nature of installation	✓
8.5 Adequacy of protective devices: type and rated current for fault protection	✓
8.6 Presence and adequacy of circuit protective conductors	✓
8.7 Coordination between conductors and overload protective devices	✓
8.8 Non-sheathed cables enclosed throughout (e.g. in conduit/trunking)	
8.9 Cables installed under floors, above ceilings, in walls / partitions, adequately protected against damage	
a) Installed in prescribed zones	
b) Incorporating earthed armour or sheath, or installed within earthed wiring system, or otherwise protected against mechanical damage by nails, screws and the like	
8.10 Provision of additional protection by RCDs having rated residual operating current ($I_{\Delta n}$) not exceeding 30 mA	
a) For mobile equipment with a current rating not exceeding 32 A for use outdoors	
b) For all socket-outlets of rating 20 A or less, unless exempt	
c) For cables installed in walls/partitions at a depth of less than 50 mm	
d) For cables installed in walls/partitions containing metal parts regardless of depth	
8.11 Provision of fire barriers, sealing arrangements so as to minimize the spread of fire	
8.12 Band II cables segregated/separated from Band I cables	
8.13 Cables segregated/separated from non-electrical services	
8.14 Termination of cables at enclosures	
a) Connections under no undue strain	
b) No basic insulation of a conductor visible outside enclosure	
8.15 Circuit accessories not damaged during erection	
8.16 Single-pole devices for switching or protection in the line conductors only	
8.17 Adequacy of connections, including cpcs, within accessories and at fixed and stationary equipment	
8.18 Presence of appropriate devices for isolation and switching correctly located	
a) Accessible means of switching off for mechanical maintenance	
b) Correct operation verified (functional check)	
9.0 CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)	
9.1 Adequacy of working space/accessibility	
9.2 Suitability of equipment in terms of IP and fire ratings	
9.3 Enclosure not damaged/deteriorated during installation so as to impair safety	
9.4 Cable entry holes in ceilings above luminaires, sized or sealed so as to restrict the spread of fire	
9.5 Recessed luminaires (downlighters)	
a) Correct type of lamps fitted	
b) Installed to minimise build-up of heat	
10.0 LOCATION(S) CONTAINING A BATH OR SHOWER	
10.1 Additional protection by RCD not exceeding 30 mA	
a) For low voltage circuits serving the location	
b) For low voltage circuits passing through Zone 1 and/or Zone 2 not serving the location	
10.2 Where used as a protective measure, requirements for SELV or PELV are met	
10.3 Shaver sockets comply with BS EN 61558-2-5 formerly BS 3535	
10.4 Presence of supplementary bonding conductors unless not required by BS 7671: 2008	
10.5 Low voltage (e.g. 230 volts) socket-outlets sited at least 3 m from zone 1	
10.6 Suitability of equipment for external influences for installed location in terms of IP rating	
10.7 Suitability of electrical equipment for installation in a particular zone	
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 separately)	

SCHEDULE OF ITEMS INSPECTED BY:

Signature: [signature] Name (Capitals): [signature] Date: 13/10/2020

† *All boxes must be completed. '✓' indicates that an inspection was carried out and that the result was satisfactory. 'N/A' indicates that an inspection was not applicable to the particular installation.*

‡ *Where a smoke alarm has been installed, separate certification is required on the appropriate form.*

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CIRCUIT DETAILS

TEST RESULTS

Circuit number	Circuit designation (* To be completed only where this consumer unit is remote from the origin of the installation. Record details of the circuit supplying this consumer unit in the bold box.)	Type of wiring (see code)	Reference method (see Appendix 4 of BS 7671)	Number of points served	Circuit conductors: csa Live (mm^2)	Circuit conductors: csa cpc (mm^2)	Max. disconnection time permitted by BS 7671 (s)	Overcurrent protective devices BS (EN)	Overcurrent protective devices Type	Overcurrent protective devices Rating (A)	Overcurrent protective devices Short-circuit capacity	RCD Operating current $I_{\Delta n}$ (mA)	Maximum Z_s permitted by BS 7671 (Ω)	Circuit impedances (Ω) Ring final circuits only (measured end to end) r_1 (Line)	r_n (Neutral)	r_2 (cpc)	All circuits (At least one column to be completed) $(R_1 + R_2)$	R_2	Insulation resistance Line/Line (MΩ)	Line/Neutral (MΩ)	Line/Earth (MΩ)	Neutral/Earth (MΩ)	Polarity (✓)	Maximum measured earth fault loop impedance, Z_s (Ω)	RCD operating times at $I_{\Delta n}$ (ms)	RCD operating times at 5 $I_{\Delta n}$ (if applicable) (ms)	Test button operation (✓)
*																											
1	kitchen Sockets	A	B	4	2.5	1.5	0.4	60898	B	32	6	30	1.08	0.27	0.28	0.48	0.23	—	—	500	500	500	✓	0.55	48.3	18.2	✓
2	COOKER	A	B	1	6	2.5	0.4	60898	B	32	6	30	1.08	—	—	—	0.09	—	—	"	"	"	✓	0.45	48.3	18.2	✓
3	Shower	A	B	1	6	2.5	0.4	60898	B	32	6	30	1.09	—	—	—	0.10	—	—	"	"	"	✓	0.47	48.2	18.2	✓
4	Water heater	A	B	1	2.5	1.5	0.4	60898	B	16	6	30	2.15	—	—	—	0.15	—	—	"	"	"	✓	0.52	48.1	18.3	✓
5	Sockets	A	B	7	2.5	1.5	0.4	60898	B	32	6	30	1.08	0.36	0.36	0.62	0.28	—	—	"	"	"	✓	0.61	48.3	18.5	✓
6	Lighting First floor	A	B	4	1	1	0.4	60898	B	6	6	30	5.82	—	—	—	0.89	—	—	"	"	"	✓	1.29	48.3	18.1	✓
7	Lighting Ground floor	A	B	6	1	1	0.4	60898	B	6	6	30	5.82	—	—	—	0.81	—	—	"	"	"	✓	1.15	48.2	18.1	✓

CODES FOR TYPE OF WIRING: A Thermoplastic insulated/sheathed cables; B Thermoplastic cables in metallic conduit; C Thermoplastic cables in non-metallic conduit; D Thermoplastic cables in metallic trunking; E Thermoplastic cables in non-metallic trunking; F Thermoplastic/SWA cables; G Thermosetting/SWA cables; H Mineral-insulated cables; O (Other - please state)

Location of consumer unit: Living room

Designation of consumer unit: N/A

Prospective fault current at consumer unit: 704 kA

TEST INSTRUMENTS

Test instruments (serial numbers) used

Multi-function: 8860084 | Insulation resistance: " | Continuity: " | Earth electrode resistance: " | Earth fault loop impedance: " | RCD: "