ETHOS

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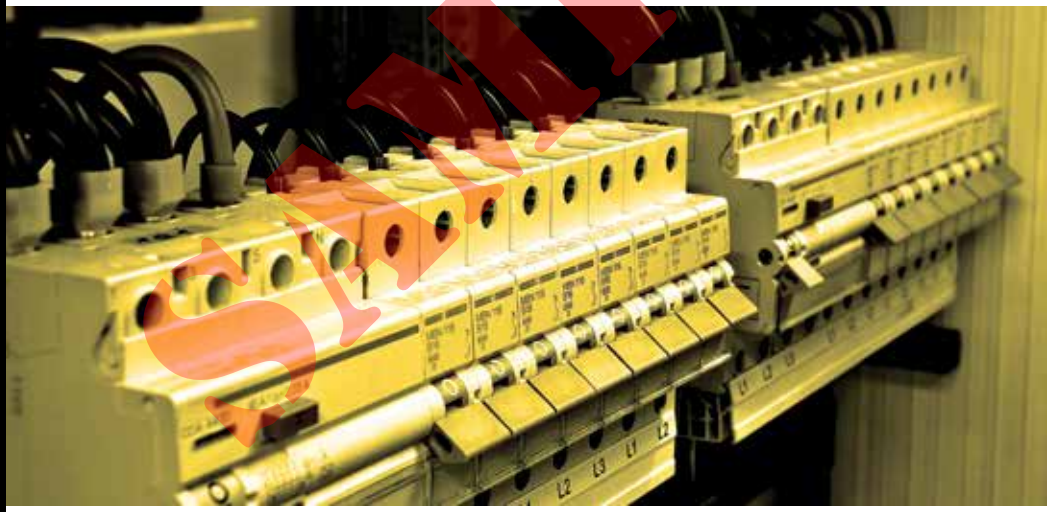
DOMESTIC ELECTRICAL INSTALLATION CERTIFICATES (PART P)

Conforms to the Wiring Regulations 17th Edition
BS 7671:2008 incorporating amendment 3:2015

ETHOS 7977

FOR CERTIFYING A NEW ELECTRICAL INSTALLATION IN A SINGLE DWELLING DESIGNED, CONSTRUCTED AND INSPECTED & TESTED BY ONE PERSON

THIS PAD OF CERTIFICATES INCLUDES SCHEDULES OF INSPECTIONS AND SCHEDULES OF CIRCUIT DETAILS/TEST RESULTS.



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PART P - DOMESTIC ELECTRICAL INSTALLATION CERTIFICATE
For a single dwelling

Page 1 of ☐ | CERT No.

CLIENT NAME .....

CLIENT ADDRESS

.....

..... Postcode: .....

INSTALLATION ADDRESS

.....

..... Postcode: .....

DESCRIPTION AND EXTENT OF THE INSTALLATION ✔ tick box(es) as appropriate — New installation ☐ Addition to an existing installation ☐ Alteration to an existing installation ☐

Extent of installation covered by this certificate: .....

FOR THE DESIGN, CONSTRUCTION, AND INSPECTION AND TESTING

I being the person responsible for the Design, Construction and Inspection and Testing of this electrical installation (as indicated by my signature below), particulars of which are described above, having exercised reasonable skill and care when carrying out the Design, Construction and 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: 2008 as amended ..... (date) except for the departure(s), if any, details as follows:

Details of departure(s) from BS 7671 (see Regulations 120.3 and 133.5): .....

.....

The extent of liability of the signatory is limited to the work described above as the subect of this certificate. For the design, construction and inspection and testing of the installation:

SIGNATURE | Name (BLOCK LETTERS) | DATE / /

SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS 1/2/3* Phase(s) 2/3/4* Wire No. of Supplies: ... Freq.: .... Hz U_0: ..... V U: ..... V Polarity Con.: ☐

Fault current - measured (earth fault/short-circuit) ..... kA

System Type: TN-S ☐ TN-C-S ☐ TT ☐ Means of Earthing: Installation earth electrode ☐ Distributor's facility ☐ Measured Z_e: Ω

Type of installation earth electrode, where applicable, (eg: rod): Electrode resistance (R_A): Ω

Location: Method of measurement:

MAIN PROTECTIVE CONDUCTORS Earthing Conductor: Material: ..... csa: ..... mm² Continuity and connection verified: ☐

Main protective bonding conductor(s): Material: ..... csa: ..... mm² Continuity and connection verified: ☐

Bonding of extraneous-conductive-parts (✔): Water installation pipes ☐ Gas installation pipes ☐ Other installation pipework and ducting (state): .....

PARTICULARS OF THE INSTALLATION Supply conductors material: ..... Supply conductors csa: mm² Maximum demand (load): ..... kVA/A*

MAIN SWITCH ARRANGEMENT Location: ..... Make: ..... Type BS (EN): ..... Voltage rating: ..... V Current rating I_n: ..... A

If RCD main switch: RCD operating current $I_{\Delta n}$: ..... mA Rated time delay: ..... ms Measured operating time $I_{\Delta n}$: ..... ms

Number of smoke alarms..... *(Where a smoke alarm has been installed, separate certification is required on an appropriate form.)*

PARTICULARS OF THE ELECTRICAL CONTRACTOR

TRADING TITLE ..... Scheme/Part P Registration No.: .....

ADDRESS .....

..... Postcode: .....

COMMENTS ON EXISTING INSTALLATION — In the case of an alteration or addition see Section 633

SHEDULES OF INSPECTIONS & TEST RESULTS — The attached ..... Schedule(s) of Inspections and ..... Schedule(s) of Test Results are part of this document and this CERTIFICATE is valid only when they are attached to it.

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

DETAILS AT DISTRIBUTION BOARD (DB)/CONSUMER UNIT (CU)

CERT./REPORT No.* | Page ____ of ____

Designation/Ref No.: .....

Location: ..... Suppled from: .....

Tested by:

Name (CAPITALS): .....

Signature: ..... Date: .....

System Characteristics

System type:

TN-C-S ☐ TN-S ☐ TT ☐

(Tick relevant box(es))

Supply polarity confirmed: ☐

Phase sequence confirmed: ☐

Fault level(s):

1 ϕ ..... kA

3 ϕ ..... kA

Measured impedance at dis.board/consumer unit Z_e/Z_s *: ..... Ω

Main Switch/Switch Fuse/ Fuse Switch/Circuit-breaker/RCD

Make: ..... BS (EN): .....

Type: ..... Number of poles: .....

Voltage rating: ..... V Rated current (I_n): .....A

(If) RCD

Rated operating current ($I_{\Delta n}$): .....mA

Operation time (at $I_{\Delta n}$): ..... ms

Rated time delay: ..... ms

Circuit(s)/installed equipment vulnerable to damage when testing

.....

.....

.....

.....

.....

CIRCUIT DETAILS

TEST RESULTS

Circuit number	Circuit description	Number of points served	Overcurrent protective device: BS (EN)	Overcurrent protective device: Type	Overcurrent protective device: Rating (A)	Overcurrent protective device: Short-circuit capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm^2)	Conductor details: cpc (mm^2)	RCD (mA): Operating current, $I_{\Delta n}$	Ring final circuit continuity (Ω): r_1 (line)	Ring final circuit continuity (Ω): r_n (neutral)	Ring final circuit continuity (Ω): r_2 (cpc)	Continuity (Ω) (At least one column to be completed): $(R_1 + R_2)$	Continuity (Ω): R_2	Insulation Resistance (MΩ): Live - Live	Insulation Resistance (MΩ): Live - Earth	Polarity: ✗ # or ✓	Max measured Z_s (Ω)	RCD (ms): @ $I_{\Delta n}$	RCD (ms): @ $5I_{\Delta n}$	RCD (ms): Test Button operation ✓	Remarks (continue on a separate sheet if necessary)

TEST INSTRUMENTS USED Make / Model / Serial Number

Multi-function: .....

Continuity: .....

Insulation resistance: .....

Earth fault loop impedance/PFC: .....

RCD: .....

Earth electrode resistance: .....

Deviations from BS 7671: .....

Further comments: .....

SCHEDULE OF INSPECTIONS (for NEW Work only)

Certificate No.

All boxes must be completed. A '✓' indicates that an inspection was carried out and that the result was satisfactory.
An 'N/A' indicates that an inspection was not applicable to the particular installation or an item of equipment.
For use in controlled/supervised conditions only; so not for general use.

1.0 DISTRIBUTOR'S * / SUPPLY INTAKE EQUIPMENT

- Condition of service cable
- Condition of service head
- Condition of distributor's earthing arrangement
- Condition of meter tails - distributor's and consumer's
- Condition of metering equipment
- Condition of isolator (where present)

* *The Distributor should be notified of any unsatisfactory equipment*

2.0 PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY

- Presence of adequate arrangements where generator to operate as a switched alternative (551.6)
  - i) Dedicated earthing arrangement that is independent of the public supply
- Presence of adequate arrangements where generator to operate in parallel with the public supply system (551.7)
  - i) Correct connection of generator in parallel
  - ii) Compatibility of characteristics of means of generation
  - iii) Means to provide automatic disconnection of generator in the event of loss of public supply system or voltage or frequency deviation beyond declared values
  - iv) Means to prevent connection of generator in the event of loss of public supply system or voltage or frequency deviation beyond declared values
  - v) Means to isolate generator from the public supply system
- Presence of warning notices for alternative/additional sources of supply at:
  - i) The origin of the installation
  - ii) The meter position, where remote from the origin
  - iii) The consumer unit/distribution board to which the alternative/additional sources of supply are connected
  - iv) **All** points of isolation of **all** sources of supply

3.0 AUTOMATIC DISCONNECTION OF SUPPLY

- Presence and adequacy of protective earthing and protective bonding arrangements (411.3; Chap 54)
  - i) Distributor's earthing arrangement, or installation earth electrode arrangement
  - ii) Earthing conductor and connections
  - iii) Main protective bonding conductor(s) and connection(s)
  - iv) Earthing/bonding labels are correct and present at all appropriate locations
- Accessibility of:
  - i) Earthing conductor connections
  - ii) All protective bonding connections
- Functional extra-low voltage (FELV) – requirements satisfied (411.7)
- Reduced low voltage (RLV) – requirements satisfied(411.8)

4.0 BASIC PROTECTION

- Presence and adequacy of protective measures to provide basic protection - for prevention of contact with live parts (Sec 416 & 417)
  - i) Insulation of live parts
  - ii) Barriers or enclosures
  - iii) Obstacles#
  - iv) Placing out of reach#

5.0 ADDITIONAL PROTECTION

- The presence and effectiveness of additional protection methods (Sec 415)
  - i) Residual current device(s) not exceeding 30 mA operating current - see information in item 8 of this schedule for more detail
  - ii) Supplementary equipotential bonding

6.0 OTHER METHODS OF PROTECTION

Where used, indicate presence and effectiveness of other methods of protection against electric shock, stating location:

- Basic and fault protection
  - i) SELV .....
  - ii) PELV .....
  - iii) Double insulation/ Reinforced insulation .....
- Fault protection
  - i) Electrical separation for **one** item of equipment .....
  - ii) Non-conducting location#/Earth-free local equipotential bonding# .....
  - iii) Electrical separation for **more** than one item of equipment# .....

7.0 DISTRIBUTION EQUIPMENT

- Adequacy of working space and accessibility
- Securely fixed
- Insulation of live parts not damaged during erection
- Adequacy and security of barriers
- Suitability of enclosures for IP and fire ratings
- Enclosures not damaged during installation
- Presence and effectiveness of obstacles
- Presence of main switch(es), linked where required
- Operation of main switch(es) (functional check)
- Operation of circuit-breakers and RCDs, inc. test button (functional check)
- RCD(s) provided for fault protection, where specified
- RCD(s) provided for additional protection, where specified
- RCD(s) provided for protection against fire,where specified
- Confirmation overvoltage protection (SPDs) provided, where specified
- Confirmation of indication that SPD is functional
- Presence of legible diagrams, charts or equivalent forms of information (e.g. schedules) at or near each distribution board, where required
- Presence of RCD quarterly test notice at or near the origin
- Presence of non-standard (mixed) cable colour warning notice at or near the appropriate distribution board, where required
- Presence of periodic/next inspection and test recommendation label
- Presence of other required labelling (e.g. purpose of switchgear)
- Selection of protective device(s) and base(s); correct type and rating
- Single-pole control and protective device(s) in line conductor only
- Protection against mechanical damage where cables enter equipment
- Protection against electromagnetic (heating) effects where cables enter ferromagnetic enclosure(s)
- Confirmation that **all** conductor connections, including connections to busbars, are correctly located in terminals and are tight and secure

8.0 CIRCUITS

- Conductors correctly identified by colour, lettering or numbering
- Cable(s) correctly erected and supported throughout their length, including escape routes - with protection against abrasion
- Examination of cables for signs of mechanical damage during installation
- Examination of insulation of live parts, not damaged during erection

SCHEDULE OF INSPECTIONS (for NEW Work only)

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