Reaction Group

Electrical Installation Condition Report

REACTION NURSERY
287 HERBERT AVENUE
POOLE
DORSET
BH12 4HT

12/09/2019

Poundbury House
Poundbury West Trading Estate
Dorchester
Dorset | DT1 2PG

T. 0203 0110 582

2013/665 2013/665

INTRODUCTION

Electrical Installation Condition Report has been carried out on the electrical installation at your premises, as required by the Electricity at Work Regulations 1989. The purpose of the Inspection & Test is to identify faults and non-compliance's within the electrical installation and to notify you of the said faults so that any potential danger can be removed.

The faults recorded within the Inspection & Test Report have been categorised with priority codes from C1 – C3 as required by BS7671, with priority code C1 faults being the most urgent.

The table overleaf provides a description applicable to each recommendation priority code used in this document.

SUMMARY OF INFORMATION

The overall result of your inspection is detailed on *Page 10 - Section 6* of this document, which is the first page of your Electrical Installation Condition Report. The preliminary pages leading up to your report provide explanations of defect codes and abbreviations, and details of the specific tests carried out to assist with your understanding of the report. Please read this document thoroughly to ensure you are informed of our findings, and your responsibilities moving forward. If you have any queries regarding your results, any defects highlighted, or the outcome of the test, please contact our offices and one of our technical officers will be happy to assist you.

DESCRIPTION OF PRIORITY CODES

CODE C1

Where an observation has been given a Recommendation Priority Code C1 (Danger Present), the safety of those using the installation may be at risk.

The person responsible for the maintenance of the installation is advised to take action without delay to remedy the observed deficiency in the installation, or to take other appropriate action (such as switching off and isolating the affected part(s) of the installation) to remove the potential danger. Advice should be given to the client/customer with regards to the severity of the observation.

It is also important to note that the recommendation given in Section 9 of an inspection and test report, “Next Inspection” for the maximum interval until the next inspection, is conditional upon all items being given a Recommendation Priority Code 1, being remedied and rectified without delay.

CODE C2

Recommendation Priority Code C2 (Potentially Dangerous) indicates that, whilst the safety of those using the electrical installation may not be at immediate risk, remedial action should be taken as soon as possible to improve the safety of the electrical installation to the level provided by the national British Standard for the safety of electrical installations, BS7671.

Items that have been attributed with a Recommendation Priority Code 2 should be rectified as soon as possible.

CODE C3

Recommendation Priority Code C3 (Improvement Recommended) will be an observation of non-compliance(s) with the current safety standard, which does not warrant one of the other Recommendation Codes. A Code C3 Recommendation is not intended to imply that the electrical installation inspected is unsafe, but careful consideration should be given to the benefits of improving these aspects of the installation.

Where an installation has been identified in having one or more priority code C1 & C2 faults, BS7671 require that the electrical installation must be classified as unsatisfactory. Additionally, where a significant number of priority code C3 faults have been identified, this may also constitute an unsatisfactory installation.

CODE FI

Where an observation has been given a Recommendation FI (further investigation required) the inspection has revealed an apparent deficiency, which could not, due to the extent of the limitations of this inspection, be fully identified. Items, which have been, attributed a Recommendation Code FI should be investigated as soon as possible.

The person responsible for the maintenance of the installation must be advised to arrange, either for a competent person to under undertake further examination of the electrical installation to determine the nature and extent of the apparent deficiency.

ACHIEVING "SATISFACTORY" STATUS

For your electrical installation to be classified as satisfactory, it will be necessary to rectify all priority code C1 and code C2 faults plus any items marked as FI (Further Investigation Required), as detailed within the observations and recommendations section of this report. It should be noted that during further investigation works it is possible that additional defects or remedial actions may be identified.

It is also very important and essential that documentary evidence of any remedial and/or rectification works is stored safely with the Inspection & Test Report, so that it can be made available to interested parties.

ISSUING A "SATISFACTORY" CERTIFICATE

On completion of the necessary rectification and remedial works, the certificate can be considered to be satisfactory and does not need to be replaced. Table 2.15 in Guidance Note 3 of the current edition of the IEE Wiring Regulations, recommends that the maximum period between the test and inspection ranges from 1 – 5 years depending on the type of premises you occupy. These test intervals must be adjusted further if only a percentage of your installation has been tested. Section I of the Inspection & Test Report documentation within this report has also been dated to expire after the same period.

TESTING PROCEDURE

1. A through visual inspection of the electrical installation will be carried out where practicable and possible with regards to the following:

    - Safety
    - Wear and tear
    - Corrosion
    - Damage
    - Excessive loading (overloading)
    - Age
    - External influences
    - Suitability

2. To supplement the visual inspection with such electrical testing as considered necessary for protection against:

    - Electric shock from direct and indirect contact
    - Electric burns
    - Fires of electrical origin
    - Electrical arcing or explosions initiated or caused by electricity

VISUAL INSPECTION

1. A 100% visual inspection of the fixed electrical installation, including an internal inspection of distribution boards will be carried out where practicable to include the following:

    ### a) Joints & Connections

    Random sampling and inspection to verify integrity of same, e.g. signs of over heating etc.

    A random 10% in total internal inspections of socket outlets, switching devices and luminaries.

    ### b) Conductors (Including Protective Conductors)

    Verify suitability, condition and means of identification etc.

A random 10% in total internal inspections of socket outlets, switching devices and luminaries.

c) Flexible Cables & Cords

Verify suitability and condition.

d) Switching Devices

Verify suitability and condition. Carry out a random 10% internal inspection.

e) Protection Against Thermal Effects

Verify presence of fire barriers etc., where accessible and reasonably practicable.

f) Protection Devices

Verify presence, accessibility, labelling and condition of devices for electrical protection, isolation and switching.

Fuses, circuit breaker etc., to be checked for correct type and rating, where reasonably practicable.

g) Enclosures & Mechanical Protection

Verify suitability and integrity of enclosures for mechanical protection of electrical apparatus and equipment.

TEST SCHEDULE

1. **Continuity testing of protective conductors includes:-**

- Earthing Conductors
- Main Equipotential Bonding Conductors
- Supplementary Bonding Conductors
- All Circuit Protective Conductors (sample on lighting circuits)

2. Polarity Testing

- The polarity will be checked at the meter position.
- 100% of distribution boards where reasonably practicable.
- 100% of socket outlets within the installation will be checked to ensure correct connection of conductors, where the location of the socket outlet is readily accessible and reasonably practicable.
- 10% random sampling of all other accessories and equipment.
- Single pole control and protective devices are connected in the phase conductor only (10% random sampling to be taken).
- Centre contacts of Edison screw type lamp holder have correct connections (10% random sampling to be taken).
- Multi pole devices are correctly installed (10% random sampling to be taken).

3. Earth Loop Impedance

Earth loop impedance tests will be carried out at the locations detailed below.

- At the origin of each distribution board.
- All socket outlets, where their location is readily accessible and practicable.
- Any location which is exposed to exceptional damage or deterioration or represents a special hazard.

4. Operating Devices For Isolation & Switching

Operating devices for isolation and switching will be checked for effectiveness and to ensure adequate and correct labelling.

5. Operation Of Residual Current Devices (RCD's)

100% of RCD's will be tested for tripping time @ half rated, full rated and five times, the rated tripping current across positive and negative cycles, where practicable.

6. Prospective Fault Current

Prospective fault current test will be carried out at the origin of each distribution board.

7. Insulation Resistance Testing

Insulation resistance test will be carried out at the discretion of the inspecting engineers, giving due regard to age, condition, circuit destination and equipment being supplied.

EXPLANATION OF CODES AND ABBREVIATIONS

The following defects and recommendations detail non-compliance's that were identified during the test and inspection.

Each defect has been attributed with a priority from C1 to C3.

PRIORITY CODES	
Code	**Action Required**
C1	Danger Present
C2	Potentially Dangerous
C3	Improvement Recommended
FI	Further Investigation Required

ABBREVIATIONS	
B	Bonding
CP	Control Panel
DB	Distribution Board

FAP	Fixed Appliance
GEN	General
LTG	Lighting
RCD	Residual Current Device
SKTS	Socket Outlets
SUB	Sub Mains
SW	Switching Device
ISO	Isolator
CIRC	Circuit

ELECTRICAL INSTALLATION CONDITION REPORT

Issued in accordance with British Standard BS 7671 - Requirements for Electrical Installations

Report Reference: OD22704

1 DETAILS OF THE CLIENT

Client: REACTION DAY NURSERY

Address: 287 HERBERT AVENUE, POOLE, BH12 4HT

2 PURPOSE OF THE REPORT

Purpose for which this report is required:

Safety assessment requested by client.

3 DETAILS OF THE INSTALLATION

Installation Address: Same as Client Address

Description of premises: Domestic N/A Commercial N/A Industrial N/A Other: Educational Building

Estimated age of electrical installation: 18 years

Evidence of alteration or additions: YES if yes, estimated age: 5 years

Date of previous inspection: N/A

Records of installation available: NONE

Electrical Installation Certificate No or previous Periodic Inspection Report No: NONE

4 EXTENT OF THE INSTALLATION AND LIMITATIONS OF THE INSPECTION AND TESTING

Extent of the electrical installation covered by this report:

Distribution equipment and associated circuits as agreed with client and detailed in schedules

Test all the installation apart from the limitations and 10% visual on all the accessories and containment

Agreed and operational limitations of the inspection and testing (include reasons and person agreed with):

Circuits restricted by height. Insulation resistance tests with live & neutral joined together. Loop impedance tests only on essential circuits. R1 & R2 by calculation.

The inspection has been carried out in accordance with BS 7671:2008, as amended to 2013. 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.

5 DECLARATION

I/We, being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my/our signatures below), particulars of which are described on page 1 (see section 2), having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations (see section 7) and the attached schedules (see section 17), provides an accurate assessment of the condition of the electrical installation taking into account the stated extent of the installation and the limitations on the inspection and testing (see section 4).

For the INSPECTION, TESTING AND ASSESSMENT of the report:

Name: Mike Holland-Porter QS Position: Qualified Supervisor Signature: Date: 12/09/2019

6 SUMMARY OF THE CONDITION OF THE INSTALLATION

See page 3 for a summary of the general condition of the installation in terms of electrical safety.

Overall assessment of the installation in terms of it's suitability for continued use*: UNSATISFACTORY

* An unsatisfactory assessment indicates that dangerous (Code C1) and/or potentially dangerous (Code C2) conditions have been identified.

7 OBSERVATIONS AND RECOMMENDATIONS FOR ACTIONS TO BE TAKEN

Referring to the attached Schedule(s) of Inspections and Test Results, and subject to the limitations specified on page 1 of this report under 'Extent of the Installation and Limitations of Inspection and Testing':

N/A There are no items adversely affecting electrical safety

or

✔ The following observations and recommendations are made

Item No	Observations	Classification Code	Further Investigation Required
1	RCD PROTECTION IS REQUIRED FOR ALL SOCKET OUTLETS OF 32AMPS OR LESS UNLESS A SPECIFIC RISK ASSESMENT IS MADE	C3	No
2	RCD PROTECTION REQUIRED FOR CABLES CONCEALED IN WALLS AND PARTITIONS AT A DEPTH OF LESS THAN 50MM	C3	No
3	NO RING CONTINUITY ON CIRCUIT 9 OF DB1	C2	No
4	POOR INSULATION RESISTANCE READING ON CIRCUIT 10 OF DB2	C2	
5	UNABLE TO IDENTIFY CIRCUIT 8 ON DB2 DUE TO LACK OF CIRCUIT IDENTIFICATION	FI	
6			

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

C2 Potentially dangerous
Urgent remedial action required

C3 Improvement recommended

Immediate remedial action required for items:	N/A
Urgent remedial action required for items:	3, 4
Improvement recommended for items:	1, 2
Further investigation required for items:	5

8 RECOMMENDATIONS

Where the overall assessment of the suitability of the installation for continued use on page 1 is stated as 'UNSATISFACTORY', I/We recommend that any observations classified as 'Code 1 - Danger Present' or 'Code 2 - Potentially dangerous' are acted upon as a matter of urgency.
Investigation without delay is recommended for observations identified as 'Further Investigation Required'.
Observations classified as 'Code 3 - Improvement recommended' should be given due consideration.

General condition of the installation in terms of electrical safety:

GENERAL CONDITION OF THE INSTALLATION IS SATISFACTORY

9 NEXT INSPECTION

I/We recommend that this installation is further inspected and tested after an interval of not more than:

5 Years (Enter interval in terms of years, months or weeks, as appropriate)

provided that any items in section 7 which have been attributed a Classification code C1 (danger present) are remedied immediately and that any items which have been attributed a code C2 (potentially dangerous) or require further investigation are remedied or investigated respectively as a matter of urgency. Items which have been attributed a Classification code C3 should be improved as soon as practicable (see section 7).

10 DETAILS OF THE ELECTRICAL CONTRACTOR

Trading Title:	Reaction Group Ltd.
Address:	Unit 1, Poundbury House Poundbury West Trading Estate Dorchester, Dorset Postcode: DT1 2PG
Registration Number:	500091000
Telephone Number:	0203 961 5855

11 SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

System Type(s)

TN-S	N/A
TN-C-S	✔
TNC	N/A
TT	N/A
IT	N/A

Number and Type of Live Conductors

		ac:	✔	dc:	N/A
1-phase (2 wire):	✔	1-phase (3 wire):	N/A	2 pole:	N/A
2-phase (3 wire):	N/A			3 pole:	N/A
3-phase (3 wire):	N/A	3-phase (4 wire):	N/A	Other:	N/A
Other:	N/A				

Confirmation of supply polarity: ✔

Nature of Supply Parameters

Nominal voltage(s): U:	400 V Uo: 230 V
Nominal frequency, f:	50 Hz
Prospective fault current, Ipf:	1.74 kA
External earth fault loop impedance, Ze:	0.13 Ω
Number of supplies:	1

Characteristics of Primary Supply Overcurrent Protective Device(s)

BS(EN):	1361 Fuse HBC
Type:	2
Rated current:	N/V A
Short-circuit capacity:	33 kA

12 PARTICULARS OF INSTALLATION AT THE ORIGIN

Means of Earthing

Distributor's facility:	✔
Installation earth electrode:	N/A

Details of Installation Earth Electrode (where applicable)

Type:	N/A	Location:	N/A
Electrode resistance, RA:	N/A Ω	Method of measurement:	N/A

Maximum Demand (Load): 40 Amps

Protective measure(s) against electric shock: ADS

Main Switch or Circuit-Breaker

Type BS(EN):	5419 Isolator	Voltage rating:	240 V
Number of poles:	2	Rated current, In:	100 A
Supply conductors material:	Copper	RCD operating current:	N/A mA
Supply conductors csa:	25 mm²	RCD rated time delay:	N/A ms
		RCD operating time:	N/A ms

Earthing and Protective Bonding Conductors

Earthing conductor

Conductor material:	Copper	Conductor csa:	16 mm²	Continuity & connection verified: ✔

Main protective bonding conductors

Conductor material:	Copper	Conductor csa:	16 mm²	Continuity & connection verified: ✔

Bonding of extraneous-conductive parts

Water service:	✔	Gas service:	✔	Oil service:	N/A	Lightning protection:	N/A
Structural Steel:	N/A	Other incoming service(s):	N/A				

13 INSPECTION SCHEDULE

Item No	Description	Comment	Outcome	Further Investigation Required
1.0 CONDITION/ADEQUACY OF DISTRIBUTORS/SUPPLY INTAKE EQUIPMENT				
1.1	Service cable	N/A	Pass	No
1.2	Service cut-out/fuse(s)	N/A	Pass	No
1.3	Meter tails - Distributor	N/A	Pass	No
1.4	Meter tails - Consumer	N/A	Pass	No
1.5	Metering equipment	N/A	Pass	No
1.6	Means of main isolation (where present)	N/A	Pass	No
2.0	PRESENCE OF ADEQUATE ARRANGEMENTS FOR PARALLEL OR SWITCHED ALTERNATIVE SOURCES	N/A	N/A	No
3.0 AUTOMATIC DISCONNECTION OF SUPPLY				
3.1 Main earthing and bonding arrangements (411.3; Chapter 54)				
3.1.1	Presence and condition of distributors earthing	N/A	Pass	No
3.1.2	Presence and condition of earth electrode arrangement	N/A	N/A	No
3.1.3	Adequacy of earthing conductor size (542.3; 543.1.1)	N/A	Pass	No
3.1.4	Adequacy of earthing conductor connections (542.3.2)	N/A	Pass	No
3.1.5	Accessibility of earthing conductor connections (543.3.2)	N/A	Pass	No
3.1.6	Adequacy of main protective bonding conductor size(s)	N/A	Pass	No
3.1.7	Adequacy of main protective bonding conductor	N/A	Pass	No
3.1.8	Accessibility of main protective bonding connections	N/A	Pass	No
3.1.9	Provision of earthing/bonding labels at all appropriate	N/A	Pass	No
3.2 FELV				
3.2.1	Source providing at least simple separation	N/A	N/A	No
3.2.2	Plugs, socket-outlets and the like not interchangeable with	N/A	N/A	No
3.3 Reduced low voltage				
3.3.1	Adequacy of source			
3.3.2	Plugs, socket-outlets and the like not interchangeable with			
4.0 OTHER METHODS OF PROTECTION (where the methods of protection listed below are employed, details should be				
4.1	Double insulation (Section 412)	N/A	N/A	No
4.2	Reinforced insulation (Section 412)	N/A	N/A	No
4.3	Use of obstacles (417.2)			
4.4	Placing out of reach (417.3)			
4.5	Non-conducting location (418.1)	N/A	N/A	No
4.6	Earth-free local equipotential bonding (418.2)	N/A	N/A	No
4.7	Electrical separation for more than one item of equipment	N/A	N/A	No
5.0 DISTRIBUTION EQUIPMENT				
5.1	Adequacy of working space/accessibility of equipment	N/A	Pass	No
5.2	Security of fixing (134.1.1)	N/A	Pass	No
5.3	Condition of insulation of live parts (416.1)	N/A	Pass	No
5.4	Adequacy/security of barriers (416.2)	N/A	Pass	No
5.5	Condition of enclosure(s) in terms of IP rating etc (416.2)	N/A	Pass	No

OUTCOMES

Acceptable condition	PASS	Unacceptable condition	C1 or C2	Improvement recommended	C3	Not verified	N/V	Limitation	LIM	Not applicable	N/A

14 INSPECTION SCHEDULE

Item No	Description	Comment	Outcome	Further Investigation Required
5.0 DISTRIBUTION EQUIPMENT (CONTINUED)				
5.6	Condition of enclosure(s) in terms of fire rating etc	N/A	Pass	No
5.7	Enclosure not damaged/deteriorated so as to impair	N/A	Pass	No
5.8	Presence of main switch(es), linked where required	N/A	Pass	No
5.9	Operation of main switch(es) (functional check)	N/A	Pass	No
5.10	Correct identification of circuit protective devices	N/A	Pass	No
5.11	Adequacy of protective devices for prospective fault	N/A	Pass	No
5.12	RCD(s) provided for fault protection - includes RCBOs	N/A	N/A	No
5.13	RCD(s) provided for additional protection - includes	N/A	Pass	No
5.14	RCD(s) provided for protection against fire - includes	N/A	N/A	No
5.15	Manual operation of circuit-breakers and RCDs to prove	N/A	Pass	No
5.16	Presence of RCD retest notice at or near equipment where	N/A	Pass	No
5.17	Presence of diagrams, charts or schedules at or near	N/A	Pass	No
5.18	Presence of non-standard (mixed) cable colour warning notice at or near equipment where required (514.14)	N/A	Pass	No
5.19	Presence of alternative supply arrangement warning notice(s) at or near equipment where required (514.15)	N/A	N/A	No
5.20	Presence of replacement next inspection recommendation	N/A	Pass	No
5.21	Presence of other required labelling (please specify)	N/A	Pass	No
5.22	Examination of protective device(s) and base(s); correct type and rating (no signs of unacceptable thermal	N/A	Pass	No
5.23	Protection against mechanical damage where cables enter	N/A	Pass	No
5.24	Protection against electromagnetic effects where cables	N/A	Pass	No
6.0 DISTRIBUTION/FINAL CIRCUITS				
6.1	Identification of conductors (514.3.1)	N/A	Pass	No
6.2	Cables correctly supported throughout their length	N/A	Pass	No
6.3	Condition of insulation of live parts (416.1)	N/A	C2	No
6.4	Non-sheathed cables protected by enclosure in conduit,	N/A	Pass	No
6.5	Suitability of containment systems for continued use	N/A	Pass	No
6.6	Cables correctly terminated in enclosures (indicate extent	N/A	Pass	No
6.7	Examination of cables for signs of unacceptable thermal	N/A	Pass	No
6.8	Adequacy of cables for current-carrying capacity with	N/A	C2	No
6.9	Adequacy of protective devices; type and rated current for	N/A	Pass	No
6.10	Presence and adequacy of circuit protective conductors	N/A	Pass	No
6.11	Co-ordination between conductors and overload protective	N/A	Pass	No

OUTCOMES

Acceptable condition	PASS	Unacceptable condition	C1 or C2	Improvement recommended	C3	Not verified	N/V	Limitation	LIM	Not applicable	N/A

15 INSPECTION SCHEDULE

Item No	Description	Comment	Outcome	Further Investigation Required
6.0 DISTRIBUTION/FINAL CIRCUITS (CONTINUED)				
6.12	Cable installation methods/practices appropriate to the type and nature of installation and external influences	N/A	Pass	No
6.13	Cables where exposed to direct sunlight, of a suitable type	N/A	Pass	No
6.14	Concealed cables installed in prescribed zones (see extent	N/A	Pass	No
6.15	Concealed cables incorporating earthed armour or sheath, or run within earthed wiring system, or otherwise protected against mechanical damage caused by nails, screws and the like where not in prescribed zones or not protected by 30 mA RCD (see extent and limitations)	N/A	Pass	No
6.16	Provision of additional protection by 30 mA RCD for cables concealed in walls or partitions (522.6.102; 522.6.103)	N/A	N/A	No
6.17 - Provision of additional protection by 30 mA RCD				
6.17.1	Where reasonably likely to be used to supply mobile	N/A	C3	No
6.17.2	For all socket-outlets of rating 20 A or less provided for	N/A	C3	No
6.18	Provision of fire barriers, sealing arrangements and	N/A	Pass	No
6.19	Band II cables segregated/separated from Band I cables	N/A	Pass	No
6.20	Cables segregated/separated from non-electrical services	N/A	Pass	No
6.21 - Termination of cables at enclosures(identify numbers and locations of items inspected in Section 4) (Section 526)				
6.21.1	Connections under no undue strain (526.6)	N/A	Pass	No
6.21.2	No basic insulation of a conductor visible outside an	N/A	Pass	No
6.21.3	Connections of live conductors adequately enclosed	N/A	Pass	No
6.21.4	Adequacy of connection at point of entry to enclosure	N/A	Pass	No
6.22	General condition of wiring systems (621.2(ii))	N/A	Pass	No
6.23	Temperature rating of cable insulation (522.1.1; Table	N/A	Pass	No
6.24	Condition of accessories including socket-outlets, switches	N/A	Pass	No
6.25	Suitability of accessories for external influences (512.2)	N/A	Pass	No
7.0 ISOLATION AND SWITCHING				
7.1 Isolators (537.2)				
7.1.1	Presence and condition of appropriate devices (537.2.2)	N/A	Pass	No
7.1.2	Acceptable location - state if local or remote from	N/A	Pass	No
7.1.3	Capable of being secured in the OFF position (537.2.1.2)	N/A	Pass	No
7.1.4	Correct operation verified (612.13.2)	N/A	Pass	No
7.1.5	Clearly identified by position and/or durable marking(s)	N/A	N/A	No
7.1.6	Warning label posted in situations where live parts cannot be isolated by the operation of a single device (514.11.1;	N/A	N/A	No
7.2 Switching off for mechanical maintenance (537.3)				
7.2.1	Presence and condition of appropriate devices (537.3.1.1)	N/A	Pass	No
7.2.2	Acceptable location - state if local or remote from	N/A	Pass	No

OUTCOMES

Acceptable condition	PASS	Unacceptable condition	C1 or C2	Improvement recommended	C3	Not verified	N/V	Limitation	LIM	Not applicable	N/A

16 INSPECTION SCHEDULE

Item No	Description	Comment	Outcome	Further Investigation Required
7.0 ISOLATION AND SWITCHING (CONTINUED)				
7.2.3	Capable of being secured in the OFF position (537.3.2.3)	N/A	Pass	No
7.2.4	Correct operation verified (612.13.2)	N/A	Pass	No
7.2.5	Clearly identified by position and/or durable marking(s)	N/A	N/A	No
7.3 Emergency switching/stopping (537.4)				
7.3.1	Presence and condition of appropriate devices (537.4.1.1)	N/A	Pass	No
7.3.2	Readily accessible for operation where danger might occur	N/A	Pass	No
7.3.3	Correct operation verified (537.4.2.6)	N/A	Pass	No
7.3.4	Clearly identified by position and/or durable marking(s)	N/A	N/A	No
7.4 Functional switching (537.5)				
7.4.1	Presence and condition of appropriate devices (537.5.1.1)	N/A	Pass	No
7.4.2	Correct operation verified (537.5.1.3; 537.5.2.2)	N/A	Pass	No
8.0 CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)				
8.1	Condition of equipment in terms of IP rating etc (416.2)	N/A	Pass	No
8.2	Equipment does not constitute a fire hazard (Section 421)	N/A	Pass	No
8.3	Enclosure not damaged/deteriorated so as to impair	N/A	Pass	No
8.4	Suitability for the environment and external influences	N/A	Pass	No
8.5	Security of fixing (134.1.1)	N/A	Pass	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 4 of report)	N/A	Pass	No
8.7 Recessed luminaires (e.g. downlighters)				
8.7.1	Correct type of lamps fitted	N/A	N/A	No
8.7.2	Installed to minimise build-up of heat by use of 'fire rated'	N/A	N/A	No
8.7.3	No signs of overheating to surrounding building fabric	N/A	N/A	No
8.7.4	No signs of overheating to conductors/terminations	N/A	N/A	No
9.0 LOCATION(S) CONTAINING A BATH OR SHOWER				
9.1	Additional protection for all low voltage (LV) circuits by	N/A	N/A	No
9.2	Where used as a protective measure, requirements for	N/A	N/A	No
9.3	Shaver sockets comply with BS EN 61558-2-5 or BS 3535	N/A	N/A	No
9.4	Presence of supplementary bonding conductors unless not	N/A	N/A	No
9.5	Low voltage (e.g. 230 volts) socket-outlets sited at least 3	N/A	N/A	No
9.6	Suitability of equipment for external influences for	N/A	N/A	No
9.7	Suitability of equipment for installation in a particular	N/A	N/A	No
9.8	Suitability of current-using equipment for a particular	N/A	N/A	No
10.0 OTHER SPECIAL INSTALLATIONS OR LOCATIONS List all other special installation or locations present, if any. (Record separately the results of particular inspections applied.)				
10.1	N/A	N/A	N/A	No
10.2	N/A	N/A	N/A	

OUTCOMES

Acceptable condition	PASS	Unacceptable condition	C1 or C2	Improvement recommended	C3	Not verified	N/V	Limitation	LIM	Not applicable	N/A

14 SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: D.B.1 Location: OFFICE CUPBOARD

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa		Max disconnect time permitted by BS7671	Overcurrent protective devices				RCD	Maximum Z_s permitted by BS7671	Circuit impedances (Ohms)					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Zs	RCD		
					Live	cpc		BS(EN)	Type No	Rating	Capacity	Operating current, IΔn		Ring final circuits only (measured end to end)			All circuits (one column to be completed)		Line - Line	Line - Neutral	Line - Earth	Neutral - Earth			Disconnection time at IΔn	Disconnection time at 5IΔn	Test button operation
														r_1 (Line)	r_n (Neutral)	r_2 (cpc)	R_1+R_2	R_2									
					mm²	mm²	s			A	kA	mA	Ω						MΩ	MΩ	MΩ	MΩ	✔	Ω	ms	ms	✔
1	DB2 (Supply to D.B.2, D.B.2 - BROOM CUPBOARD)	A	A	1	6	2.5	5	60898	B	40	10	N/A	1.15	N/A	N/A	N/A	0.15	N/A	N/A	>200	>200	>200	✔	0.28	N/A	N/A	N/A
2	COOKER	A	A	1	6	2.5	5	60898	B	40	10	N/A	1.15	N/A	N/A	N/A	0.32	N/A	N/A	LIM	>200	>200	✔	0.45	N/A	N/A	N/A
3	HALL/KITCHEN LIGHTS	A	A	4	2 X 1.5	2 X 1.0	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	0.20	N/A	N/A	LIM	>200	>200	✔	0.33	N/A	N/A	N/A
4	HALL/OFFICE LIGHTS	A	A	6	2 X 1.5	2 X 1.0	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	0.27	N/A	N/A	LIM	>200	>200	✔	0.39	N/A	N/A	N/A
5	SMOKE ALARMS	A	A	4	2 X 1.0	2 X 1.0	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	0.22	N/A	N/A	LIM	>200	>200	✔	0.35	N/A	N/A	N/A
	RCD MODULE FOR CIRCUITS BELOW	-	-	-	-	-	-	-	-	63	-	30		-	-	-	-	-	-	-	-	-	-	-	-	-	-

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
									N/A

18 BOARD CHARACTERISTICS

APPLIES WHEN THE BOARD IS NOT CONNECTED TO THE ORIGIN OF THE INSTALLATION

Supply to this distribution board is from: Origin

No of phases: 1

Confirmation of supply polarity: ✔

Overcurrent protective device for the distribution circuit: BS(EN): N/A

Rating: 100 A

Nominal Voltage: 230 V

Zs: 0.13 Ω

Ipf: 1.74 kA

RCD BS(EN): 61008 RCD

No of poles: 2

Rating: 30 mA

Disconnection time at In: 31 ms

Disconnection time at 5In: 17 ms

19 DETAILS OF TEST INSTRUMENTS

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

Multi-functional: Metrel ML3000 S/No.11480695

Insulation resistance: Metrel ML3000 S/No.11480695

Continuity: Metrel ML3000 S/N0.11480695

Earth electrode resistance: Metrel ML3000 S/No.11480695

Earth fault loop impedance: Metrel ML3000 S/No.11480695

RCD: Metrel ML3000 11480695

20 TESTED BY

Name: Mike Holland-Porter QS Position: Qualified Supervisor Signature:  Date: 12/09/2019

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: D.B.1 Location: OFFICE CUPBOARD

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa		Max disconnect time permitted by BS7671	Overcurrent protective devices				RCD	Maximum Z_s permitted by BS7671	Circuit impedances (Ohms)					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Zs	RCD		
					Live	cpc		BS(EN)	Type No	Rating	Capacity	Operating current, IΔn		Ring final circuits only (measured end to end)			All circuits (one column to be completed)		Line - Line	Line - Neutral	Line - Earth	Neutral - Earth			Disconnection time at IΔn	Disconnection time at 5IΔn	Test button operation
														r_1	r_n	r_2	R_1+R_2	R_2									
					mm^2	mm^2	s			A	kA	mA	Ω	(Line)	(Neutral)	(cpc)			MΩ	MΩ	MΩ	MΩ	✔	Ω	ms	ms	✔
6	KITCHEN SOCKETS	A	A	N/V	2 X 2.5	2 X 1.5	0.4	60898	B	32	10	30	1.44	0.13	0.13	0.22	0.17	N/A	N/A	LIM	>200	>200	✔	0.30	31	17	✔
7	SOCKETS	A	A	N/V	2 X 2.5	2 X 1.5	0.4	60898	B	32	10	30	1.44	0.46	0.45	0.58	0.32	N/A	N/A	LIM	>200	>200	✔	0.45	31	17	✔
8	SOCKETS OFFICE	A	A	N/V	2 X 2.5	2 X 1.5	0.4	60898	B	32	10	30	1.44	X	0.24	0.34	0.30	N/A	N/A	LIM	>200	>200	✔	0.43	31	17	✔
9	KITCHEN SOCKETS	A	A	N/V	2.5	1.5	0.4	60898	B	20	10	30	2.30	N/A	N/A	N/A	0.18	N/A	N/A	LIM	>200	>200	✔	0.31	31	17	✔
10	DISH WASHER SOCKET IN CUPBOARD	A	A	1	2.5	1.5	0.4	60898	B	16	10	30	2.87	N/A	N/A	N/A	0.17	N/A	N/A	LIM	>200	>200	✔	0.30	31	17	✔

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

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: D.B.2 - BROOM CUPBOARD Location: BROOM CUPBOARD

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa		Max disconnect time permitted by BS7671	Overcurrent protective devices				RCD	Maximum Z_s permitted by BS7671	Circuit impedances (Ohms)					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Zs	RCD		
					Live	cpc		BS(EN)	Type No	Rating	Capacity	Operating current, IΔn		Ring final circuits only (measured end to end)			All circuits (one column to be completed)		Line - Line	Line - Neutral	Line - Earth	Neutral - Earth			Disconnection time at IΔn	Disconnection time at 5IΔn	Test button operation
														r_1 (Line)	r_n (Neutral)	r_2 (cpc)	R_1+R_2	R_2									
					mm²	mm²	s			A	kA	mA	Ω	Ω	Ω	Ω	Ω	Ω	MΩ	MΩ	MΩ	MΩ	✔	Ω	ms	ms	✔
1	SOCKETS	A	A	N/V	2 X 2.5	2 X 1.5	0.4	60898	B	32	10	N/A	1.44	0.07	0.08	0.14	0.11	N/A	N/A	LIM	>200	>200	✔	0.34	N/A	N/A	N/A
2	WATER HEATER	A	A	1	2.5	1.5	0.4	60898	B	16	10	N/A	2.87	N/A	N/A	N/A	0.01	N/A	N/A	LIM	>200	>200	✔	0.23	N/A	N/A	N/A
3	DISABLED TOILET/BROOM CUPBOARD LIGHTS	A	A	4	2.5	1.5	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	0.27	N/A	N/A	LIM	>200	>200	✔	0.50	N/A	N/A	N/A
4	KIDS TOILET/ HALLWAY LIGHTS	A	A	2	2 X 1.5	2 X 1.0	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	0.01	N/A	N/A	LIM	>200	>200	✔	0.23	N/A	N/A	N/A
5	OUT BUILDING LIGHTS	A	A	LIM	1.5	1.0	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	LIM	LIM	N/A	LIM	>200	>200	✔	LIM	N/A	N/A	N/A
6	ALARM	A	A	1	2.5	1.5	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	0.11	N/A	N/A	LIM	>200	>200	✔	0.34	N/A	N/A	N/A

CODES FOR TYPE OF WIRING	A Thermoplastic insulated/sheathed cables	B Thermoplastic cables in metallic conduit	C Thermoplastic cables in nonmetallic conduit	D Thermoplastic cables in metallic trunking	E Thermoplastic cables in nonmetallic trunking	F Thermoplastic /SWA cables	G Thermosetting /SWA cables	H Mineral insulated cables	O - Other
									N/A

BOARD CHARACTERISTICS

APPLIES WHEN THE BOARD IS NOT CONNECTED TO THE ORIGIN OF THE INSTALLATION

Supply to this distribution board is from: D.B.1 - 1 No of phases: 1 Confirmation of supply polarity: ✔

Overcurrent protective device for the distribution circuit: BS(EN): 60898 - Type B Rating: 40 A Nominal Voltage: 230 V Zs: 0.28 Ω Ipf: 0.82 kA

RCD BS(EN): N/A No of poles: N/A Rating: N/A mA Disconnection time at In: N/A ms Disconnection time at 5In: N/A ms

DETAILS OF TEST INSTRUMENTS

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

Multi-functional: Metrel ML3000 S/No.11480695 Insulation resistance: Metrel ML3000 S/No.11480695 Continuity: Metrel ML3000 S/N0.11480695

Earth electrode resistance: Metrel ML3000 S/No.11480695 Earth fault loop impedance: Metrel ML3000 S/No.11480695 RCD: Metrel ML3000 11480695

TESTED BY

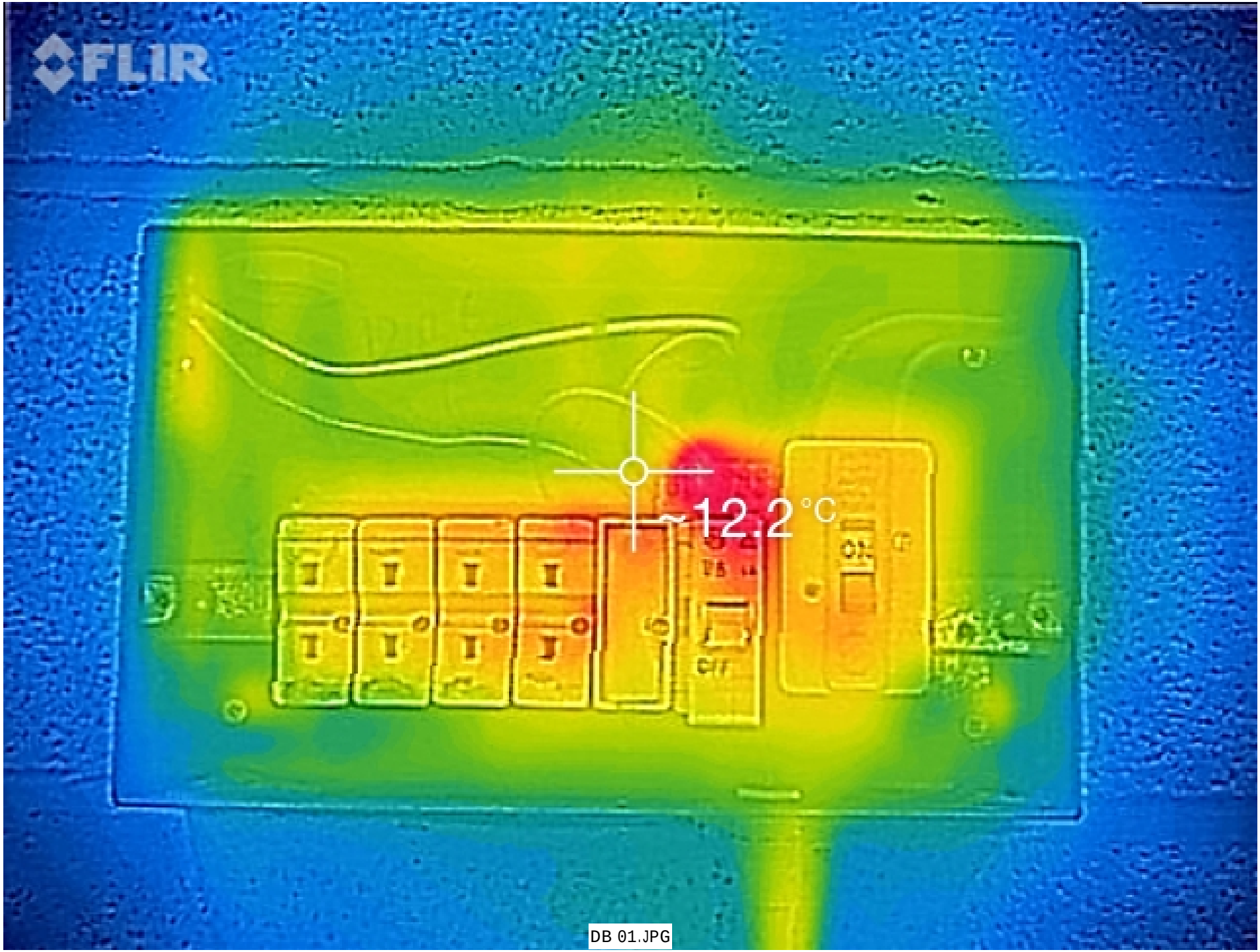
Name: Mike Holland-Porter QS Position: Qualified Supervisor Signature:  Date: 12/09/2019

SCHEDULE OF CIRCUIT DETAILS AND TEST RESULTS

Distribution board designation: D.B.2 - BROOM CUPBOARD Location: BROOM CUPBOARD

Circuit number and phase	Circuit designation	Type of wiring	Reference Method	Number of points served	Circuit conductors: csa		Max disconnect time permitted by BS7671	Overcurrent protective devices				RCD	Maximum Z_s permitted by BS7671	Circuit impedances (Ohms)					Insulation resistance				Polarity	Maximum measured earth fault loop impedance Zs	RCD		
														Ring final circuits only (measured end to end)			All circuits (one column to be completed)								Disconnection time at IΔn	Disconnection time at 5IΔn	Test button operation
					Live mm²	cpc mm²	s	BS(EN)	Type No	Rating A	Capacity kA	Operating current, IΔn mA	Ω	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	R_1+R_2	R_2	Line - Line MΩ	Line - Neutral MΩ	Line - Earth MΩ	Neutral - Earth MΩ	✔	Ω	ms	ms	✔
7	FIRE ALARM	A	A	1	2.5	1.5	0.4	60898	B	6	10	N/A	7.67	N/A	N/A	N/A	N/A	0.11	N/A	LIM	>200	>200	✔	LIM	N/A	N/A	N/A
8	UNKNOWN UNIDENTIFIED	A	A	N/V	6	2.5	0.4	60898	B	20	10	N/V	2.19	N/V	N/V	N/V	N/V	N/V	N/V	LIM	>200	>200	N/V	N/V	N/A	N/A	N/A
9	CURTAIN HEATER	A	A	1	2.5	1.5	0.4	60898	B	16	10	N/A	2.87	N/A	N/A	N/A	0.06	N/A	N/A	LIM	>200	>200	✔	0.29	N/A	N/A	N/A
10	SECURITY LIGHTS	A	A	3	1.5	1.0	0.4	60898	B	10	10	N/A	4.60	N/A	N/A	N/A	0.37	LIM	N/A	LIM	0.14	0.14	✔	0.65	N/A	N/A	N/A

CODES FOR TYPE OF WIRING	A	B	C	D	E	F	G	H	O - Other
	Thermoplastic insulated/sheathed cables	Thermoplastic cables in metallic conduit	Thermoplastic cables in nonmetallic conduit	Thermoplastic cables in metallic trunking	Thermoplastic cables in nonmetallic trunking	Thermoplastic /SWA cables	Thermosetting /SWA cables	Mineral insulated cables	N/A



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