ELECTRICAL INSTALLATION CERTIFICATE

[BS 7671:2008 as amended]

5180 - Master

Details of the Client

Client/Address: Peldon Rose LTD, Sterling House, 42 Worple Road, London, SW19 4EQ

Details of the Installation

Address: 20 St Dunstans Hill Annex, St Dunstans Hill, London, EC3R 8PP

Extent of the installation covered by this certificate: New Circuit for heater on 1st floor

The installation is:

New	N/A
An Addition	N/A
An Alteration	✓

Design

I being the person(s) responsible for the design of the electrical installation (as indicated by my signature(s) below), particulars of which are described above, have exercised reasonable skill and care when carrying out the design hereby CERTIFY that the design work for which I have been responsible is, to the best of my knowledge and belief in accordance with BS 7671 amended to July 2015 (date) except for the departures, if any detailed as follows:

Details of departures from BS 7671, as amended (Regulations 120.3, 133.5): None

Details of permitted exceptions (Regulations 411.3.3): Yes

Where applicable, a suitable risk assessment(s) must be attached to this Certificate: Yes

Number of pages: 5

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

For the DESIGN of the installation:

Signature		Date	31/01/2017	Name (CAPITALS) Jason Walker	Designer 1
Signature		Date		Name (CAPITALS)	Designer 2 **

**(where there is divided responsibility for the design)

Construction

I being the person(s) responsible for the construction of the electrical installation (as indicated by my signature(s) below), particulars of which are described above, have exercised reasonable skill and care when carrying out the construction hereby CERTIFY that the construction work for which I have been responsible is, to the best of my knowledge and belief in accordance with BS 7671 amended to July 2015 (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 CONSTRUCTION of the installation:

Signature		Date	31/01/2017	Name (CAPITALS) Jason Walker	Constructor

Inspection and Testing

I being the person(s) responsible for the inspection and testing of the electrical installation (as indicated by my signature(s) below), particulars of which are described above, have exercised reasonable skill and care when carrying out the 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 amended to July 2015 (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 INSPECTION AND TESTING of the installation:

Signature		Date	31/01/2017	Reviewed by Signature		Date	31/01/2017
Name (CAPITALS)	Jason Walker	Inspector		Name (CAPITALS)	Jason Tibbitts	Qualified Supervisor	

Particulars of the Organisation(s) Responsible for the Electrical Installation

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DESIGN (1)

Organisation: SSE Commercial Limited

Address: Unit 5, Contractor` s Compound, Long Border Road, Stansted Airport, Essex CM24 1RL

Tel: 01279 661537

NICEIC Enrolment Number: 22914

Branch No.(If Applicable): N/A

DESIGN (2)

Organisation: N/A

Address:

Tel: N/A

Registration Number:

Branch No.(If Applicable):

CONSTRUCTION

Organisation: SSE Commercial Limited

Address: Unit 5, Contractor` s Compound, Long Border Road, Stansted Airport, Essex CM24 1RL

Tel: 01279 661537

NICEIC Enrolment Number: 22914

Branch No.(If Applicable): N/A

INSPECTION AND TESTING

Organisation: SSE Commercial Limited

Address: Unit 5, Contractor` s Compound, Long Border Road, Stansted Airport, Essex CM24 1RL

Tel: 01279 661537

NICEIC Enrolment Number: 22914

Branch No.(If Applicable): N/A

Supply Characteristics and Earthing Arrangements

Tick boxes and enter details, as appropriate

System Type(s)

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

Number and Type of Live Conductors

a.c. ✓ d.c. N/A

1-Phase (2 wire)	N/A	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

Nature of Supply Parameters

Nominal Voltage	U	N/A	V	Uo N/A	V
Nominal frequency	f	N/A	Hz		
Prospective fault current	Ipf	N/A	kA		
External loop impedence	Ze	N/A	Ω		
Number of Sources		1			

Characteristics of primary supply overcurrent protective Device(s)

BS(EN): N/A

Type: N/A

Rated current: N/A A

Short circuit Capacity: N/A kA

Confirmation of Supply Polarity: N/A

Particulars of Installation at the Origin

Means of Earthing

Distributor's facility: N/A

Installation earth electrode: N/A

Details of Installation Earth Electrode (where applicable)

Type (eg rod(s), tape etc): N/A

Location: N/A

Electrode resistance, R_A: N/A Ω

Method of measurement: N/A

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

Type BS(EN): N/A

Voltage Rating: N/A V

No. of poles: N/A

Rated Current,In: N/A A

Supply Conductors material: N/A

RCD operating current, IΔn: N/A mA

Supply Conductors CSA: N/A mm^2

RCD operating time at, IΔn: N/A ms

Rated time delay: ms

Maximum Demand (Load)

N/A Amps

Protective measure(s) against electric shock

N/A

Earthing and Protective Bonding Conductors

Earthing conductor

Conductor material: N/A

Conductor csa: N/A mm^2

Continuity/ connection verifed: N/A

Main protective bonding conductors

Conductor material: N/A

Conductor csa: N/A mm^2

Continuity/ connection verified: N/A

Bonding of extraneous conductive parts (✓)

Water installation pipes	×
Lightning Protection	×
Oil installation pipes	×
Structural Steel	×
Gas installation pipes	×
Other	

Comments on Existing Installation

In the case of an alteration or additions see Regulation 633: None

Next Inspection

I , the designer(s) RECOMMEND that this installation is further inspected and tested after an interval of not more than N/A or change of tenancy.

Schedule of Items Inspected

Outcomes	Acceptable condition	✓	Not applicable	N/A

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Item No	Description	Outcome
1.0	**CONDITION OF DISTRIBUTOR'S/SUPPLY INTAKE EQUIPMENT (the Distributor should be notified of any unsatisfactory equipment)**	
1.1	Service cable	N/A
1.2	Service head	N/A
1.3	Distributor's earthing arrangement	N/A
1.4	Meter tails - Distributor/Consumer	N/A
1.5	Metering equipment	N/A
1.6	Isolator	N/A
2.0	**PARALLEL OR SWITCHED ALTERNATIVE SOURCES OF SUPPLY**	
2.1	Presence of adequate arrangements where generator to operate as a switched alternative	N/A
2.1 a)	Dedicated earthing arrangement independent of that of the public supply	N/A
2.2	Presence of adequate arrangements where generator to operate in parallel with public supply system	
2.2 a)	Correct connection of generator in parallel	N/A
2.2 b)	Compatibility of characteristics of means of generation	N/A
2.2 c)	Means to provide automatic disconnection of generator in the event of loss of public supply system or voltage or frequency deviation beyond declared values	N/A
2.2 d)	Means to prevent connection of generator in the event of loss of public supply system or voltage or frequency deviation beyond declared values	N/A
2.2 e)	Means to isolate generator from the public supply system	N/A
2.3	Presence of alternative/additional supply warning notices at:	
2.3 a)	The origin	N/A
2.3 b)	The meter position, if remote from origin	N/A
2.3 c)	The consumer unit/distribution board to which the alternative/ additional sources are connected	N/A
2.3 d)	All points of isolation of ALL sources of supply	N/A
3.0	**AUTOMATIC DISCONNECTION OF SUPPLY**	
3.1	Presence and adequacy of protective earthing/bonding arrangements as follows:	
3.1 a)	Distributor's earthing arrangement or installation earth electrode arrangement	N/A
3.1 b)	Earthing conductor and connections	N/A
3.1 c)	Main protective bonding conductors and connections	N/A
3.1 d)	Earthing/bonding labels at all appropriate locations	N/A
3.2	Accessibility of:	
3.2 a)	Earthing conductor connections	N/A
3.2 b)	All protective bonding connections	N/A
3.3	FELV - requirements satisfied	N/A
3.4	Reduced low voltage - requirements satisfied	N/A
4.0	**BASIC PROTECTION**	
4.1	Presence and adequacy of protective measures to provide basic protection	
4.1 a)	Insulation of live parts	N/A
4.1 b)	Barriers or enclosures	N/A
4.1 c)	Obstacles	N/A
4.1 d)	Placing out of reach	N/A
5.0	**ADDITIONAL PROTECTION**	
5.1	The presence and effectiveness of additional protection methods used, as follows:	
5.1 a)	RCDs not exceeding 30mA operating current	N/A
5.1 b)	Supplementary bonding	N/A

Item No	Description		Outcome
6.0	**OTHER METHODS OF PROTECTION (insert location in box provided)**		
6.1	Basic and fault protection	LOCATION	
a)	SELV		N/A
b)	PELV		N/A
c)	Double insulation/Reinforced insulation		N/A
d)	Electrical separation for one item of equipment		N/A
6.2	Fault protection	LOCATION	
a)	Non-conducting location/Earth-free local equipotential bonding **		N/A
b)	Electrical separation for more than one item of equipment**		N/A
7.0	**DISTRIBUTION EQUIPMENT**		
7.1	Adequacy of working space/accessibility		N/A
7.2	Security of fixing		N/A
7.3	Insulation of live parts not damaged during erection		N/A
7.4	Adequacy / security of barriers		N/A
7.5	Suitability of enclosures for IP and fire ratings		N/A
7.6	Enclosures not damaged during installation		N/A
7.7	Presence and effectiveness of obstacles		N/A
7.8	Presence of main switch(es), linked where required		N/A
7.9	Operation of main switch(es) (functional check)		N/A
7.10	Operation of circuit-breakers and RCDs to prove functionality		N/A
7.11	RCD(s) provided for fault protection, where specified RCD(s) provided for fault protection, where specified		N/A
7.12	RCD(s) provided for protection against fire		N/A
7.13	RCD(s) provided for additional protection, where specified		N/A
7.14	Confirmation overvoltage protection (SPDs) provided where specified		N/A
7.15	Confirmation of indication that SPD is functional		N/A
7.16	Presence of RCD quarterly test notice at or near the origin		N/A
7.17	Presence of diagrams, charts or schedules at or near each distribution board, where required		N/A
7.18	Presence of non-standard (mixed) cable colour warning notice at or near the appropriate distribution board, where required		N/A
7.19	Presence of next inspection recommendation label		N/A
7.20	Presence of other required labelling		N/A
7.21	Selection of protective device(s) and base(s); correct type and rating		N/A
7.22	Single-pole protective devices in line conductor only		N/A
7.23	Protection against mechanical damage where cables enter equipment		N/A
7.24	Protection against electromagnetic effects where cables enter ferromagnetic enclosures		N/A
7.25	Confirmation that ALL conductor connections, including connections to busbars are correctly located in terminals and are tight and secure		N/A

Schedule of Items Inspected

Outcomes	Acceptable condition	✓	Not applicable	N/A

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Item No	Description	Outcome	Item No	Description	Outcome
8.0	**CIRCUITS**		9.0	**ISOLATION AND SWITCHING**	
8.1	Identification of conductors	N/A	9.1	Isolators	
8.2	Cables correctly supported throughout their length	N/A	9.1 a)	Presence and location of appropriate devices	N/A
8.3	Examination of cables for signs of mechanical damage during installation	N/A	9.1 b)	Capable of being secured in the OFF position	N/A
8.4	Examination of insulation of live parts, not damaged during erection	N/A	9.1 c)	Correct operation verified (functional check)	N/A
8.5	Non-sheathed cables protected by enclosure in conduit	N/A	9.1 d)	The installation, circuit or part thereof that will be isolated is clearly identified by location and/or durable marking	N/A
8.6	Suitability of containment systems (including flexible conduit)	N/A	9.1 e)	Warning label posted in situations where live parts cannot be isolated by the operation of a single device	N/A
8.7	Correct temperature rating of cable insulation	N/A	9.2	Switching off for mechanical maintenance	
8.8	Adequacy of cables for current carrying capacity with regard to the type and nature of installation	N/A	9.2 a)	Presence of appropriate devices	N/A
8.9	Adequacy of protective devices; type and rated current for fault protection	N/A	9.2 b)	Acceptable location (state if local or remote)	N/A
8.10	Presence and adequacy of cirucit protective conductors	N/A	9.2 c)	Capable of being secured in the OFF position	N/A
8.11	Coordination between conductors and overload protective devices	N/A	9.2 d)	Correct operation verified (functional check)	N/A
8.12	Wiring systems and cable installation methods / practices appropriate to the type and nature of installation and external influences	N/A	9.2 e)	The circuit or part thereof to be disconnected clearly identified by location and/or durable marking	N/A
8.13	Cables installed under floors, above ceilings, in walls/partions, adequately protected against damage		9.3	Emergency switching/stopping	
8.13 a)	Installed in prescribed zones	N/A	9.3 a)	Presence of appropriate devices	N/A
8.13 b)	Incorporating earthed armour or sheath, or installed within earthed wiring system, or otherwise protected against mechanical damage by nails, screws and the like	N/A	9.3 b)	Readily accessible for operation where danger might occur	N/A
8.14	Provision of additional protection by RCDs having rated residual operating current (IΔn) not exceeding 30 mA		9.3 c)	Correct operation verified (functional check)	N/A
8.14 a)	For mobile equipment with a current rating not exceeding 32A for use outdoors	N/A	9.3 d)	The installation, circuit or part thereof to be disconnected, clearly identified by location and/or durable marking	N/A
8.14 b)	For all socket-outlets of rating 20 A or less, unless exempt	N/A	9.4	Functional switching	
8.14 c)	For cables installed in walls/partitions at a depth of less than 50 mm	N/A	9.4 a)	Presence of appropriate devices	N/A
8.14 d)	For cables installed in walls/partitions containing metal parts regardless of depth	N/A	9.4 b)	Correct operation verified (functional check)	N/A
8.15	Provision of fire barriers, sealing arrangements so as to minimize the spread of fire	N/A	10.0	CURRENT-USING EQUIPMENT (PERMANENTLY CONNECTED)	
8.16	Band II cables segregated/separated from Band I cables	N/A	10.1	Suitability of equipment in terms of IP and fire rating	N/A
8.17	Cables segregated/separated from non-electrical services	N/A	10.2	Enclosure not damaged/deteriorated during installation so as to impair safety	N/A
8.18	Termination of cables and enclosures		10.3	Suitability for the environment and external influences	N/A
8.18 a)	Connections under no undue strain	N/A	10.4	Security of fixing	N/A
8.18 b)	No basic insulation of a conductor visible outside enclosure	N/A	10.5	Cable entry holes in ceilings above luminaires, sized or sealed so as to restrict the spread of fire	N/A
8.18 c)	Connections of live conductors adequately enclosed	N/A	10.6	Recessed luminaires (downlighters)	
8.18 d)	Adequately connected at point of entry to enclosure (glands, bushes etc.)	N/A	10.6 a)	Correct type of lamps fitted	N/A
8.19	Suitability of circuit accessories for external influences	N/A	10.6 b)	Installed to minimise build up of heat	N/A
8.20	Circuit accessories not damaged during erection	N/A	10.7	Provision of undervoltage protection, where specified	N/A
8.21	Single-pole devices for switching in line conductor only	N/A	10.8	Provision of overload protection, where specified	N/A
8.22	Adequacy of connections, including cpcs, within accessories and at fixed and stationary equipment	N/A	10.9	Adequacy of working space/accessibility to equipment	N/A
11.0	**SPECIAL INSTALLATIONS OR LOCATIONS**				

Schedule of Items Inspected

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12.0	OTHER	OUTCOME

Inspected By

Name: ~~John Cutmore~~ Jason Walker

Date: 31/01/2017

Signature:

Schedule of Additional Records (See attached schedule)

The attached Schedules are part of this document and this Certificate is valid only when they are attached to it

8 - 12 (even) Schedules of Inspections and 9 - 13 (odd) Schedules of Test Results

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

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Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Location of distribution board: Gnd Floor Riser

Distribution board designation: Annex 1

Supply to distribution board is from: N/A

No of phases: N/A

Nominal Voltage: N/A V

Overcurrent protective device for the distribution circuit

Type BS(EN): N/A

Rating: N/A A

Associated RCD (if any)

BS(EN): N/A

RCD No of poles: N/A

RCD rating, $I\Delta n$: N/A mA

Circuit Details

Circuit number and line	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time	Overcurrent protective device				RCD	Max. permitted Zs
					Live mm^2	cpc mm^2	s	BS(EN)	Type	Rating A	Short circuit capacity kA	Op. current $I\Delta n$	Ω
1/L1	Flat 1 Ring	O	C	8	2.5	2.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
1/L2	Flat 23	O	C	8	2.5	2.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
1/L3	Comunial Sockets	O	C	3	2.5	2.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
2/L1	AC Supply Flat 3	F	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
2/L2	AC Supply Flat 4	F	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
2/L3	AC Supply Flat 5	F	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
3/L1	AC Supply Flat 1	F	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
3/L2	AC Supply Flat 2	F	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
3/L3	Fire Alrarm Supply	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
4/L1	Fire Alrarm Spur	O	C	1	2.5	2.5	0.4	60898 MCB	C	10	10	N/A	2.19
4/L2	Door Enrty Supply	O	C	2	2.5	2.5	0.4	60898 MCB	C	20	10	30	1.09
4/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L1	Flat 1 Lighting	O	C	13	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
5/L2	Flat 2Lighting	O	C	14	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
5/L3	Corridor Lighting	O	C	25	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
6/L1	Outside Lighting	O	C	2	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
6/L2	Fire Damper	O	C	1	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	N/A	2.19
6/L3	Hall Heater	O	C	1	1.5	1.5	0.4	60898 MCB	C	10	10	N/A	2.19
7/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/TP	Sub Mains(Annex 2)	G	C	1	16	44	5	60898 MCB	C	63	10	N/A	0.35

Wiring Code

A	B	C	D	E	F	G	H	O
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	Other

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	N/A Ω	Operating times of associated RCD (if any)	At $I_{\Delta n}$	N/A ms	
Ipf	N/A kA		At $5I_{\Delta n}$ (if applicable)	N/A ms	
Confirmation of Supply polarity	✓	Phase sequence confirmed (where appropriate)	N/A		

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	61117516	RCD	61117516
Insulation resistance	61117516	Multi-function	N/A
Continuity	61117516	Other	N/A

Circuit Tests

Circuit number and line	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD		
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/ Line	Line/ Neutral	Line/ Earth	Earth/ Neutral			Operating times		Test button operation
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	MΩ	MΩ	MΩ	MΩ		Ω	At $I_{\Delta n}$ ms	At $5I_{\Delta n}$ ms	
1/L1						N/A	200	200	200	N/A				
1/L2						N/A	200	200	200	N/A				
1/L3						N/A	200	200	200	N/A				
2/L1						N/A	200	200	200	N/A		N/A	N/A	N/A
2/L2						N/A	200	200	200	N/A		N/A	N/A	N/A
2/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
3/L1						N/A	200	200	200	N/A		N/A	N/A	N/A
3/L2						N/A	200	200	200	N/A		N/A	N/A	N/A
3/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
4/L1						N/A	200	200	200	N/A		N/A	N/A	N/A
4/L2						N/A	200	200	200	N/A				
4/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L1						N/A	200	200	200	N/A				
5/L2						N/A	200	200	200	N/A				
5/L3						N/A	200	200	200	N/A				
6/L1						N/A	200	200	200	N/A				
6/L2						N/A	200	200	200	N/A		N/A	N/A	N/A
6/L3				0.15		N/A	200	200	200	✓	0.17	N/A	N/A	N/A
7/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/TP						200	200	200	200	N/A		N/A	N/A	N/A

Tested By

Signature		Position	Electrical Engineer
Name	~~John Cutmore~~ Jason Walker	Date of testing	31/01/2017

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

5180 - Master

Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Location of distribution board: 1st Floor Riser

Distribution board designation: Annex 2

Supply to distribution board is from: SubMains(Annex 1, 8/TP)

No of phases: 3 — Nominal Voltage: 400 V

Overcurrent protective device for the distribution circuit

Type BS(EN): 60898 MCB C — Rating: 63 A

Associated RCD (if any)

BS(EN): N/A

RCD No of poles: N/A

RCD rating, $I\Delta n$: N/A mA

Circuit Details

Circuit number and line	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time	Overcurrent protective device				RCD	Max. permitted Zs
					Live mm^2	cpc mm^2	s	BS(EN)	Type	Rating A	Short circuit capacity kA	Op. current $I_{\Delta n}$	Ω
1/L1	Flat 3 Ring	O	C	8	2.5	2.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
1/L2	Flat 4 Ring	O	C	8	2.5	2.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
1/L3	Flat 5 Ring	O	C	9	2.5	2.5	0.4	61009 RCD/RCBO	C	32	10	30	0.68
2/L1	Comunial Sockets	O	C	2	2.5	2.5	0.4	61009 RCD/RCBO	C	20	10	30	1.09
2/L2	Hall Heaters	O	C	1	1.5	1.5	0.4	60898 MCB	C	10	10	N/A	2.19
2/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L1	Flat 3 Lighting	O	C	13	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
4/L2	Flat 4Lighting	O	C	12	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
4/L3	Flat 5Lighting	O	C	12	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
5/L1	Corridor Lighting	O	C	14	1.5	1.5	0.4	61009 RCD/RCBO	C	10	10	30	2.19
5/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/TP	SPARE	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
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	Other

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

5180 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	N/A Ω	Operating times of associated RCD (if any)	At $I_{\Delta n}$	N/A ms	
Ipf	N/A kA		At $5I_{\Delta n}$ (if applicable)	N/A ms	
Confirmation of Supply polarity	✓	Phase sequence confirmed (where appropriate)	N/A		

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	61117516	RCD	61117516
Insulation resistance	61117516	Multi-function	N/A
Continuity	61117516	Other	N/A

Circuit Tests

Circuit number and line	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD		
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/ Line	Line/ Neutral	Line/ Earth	Earth/ Neutral			Operating times		Test button operation
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	MΩ	MΩ	MΩ	MΩ		Ω	At $I_{\Delta n}$ ms	At $5I_{\Delta n}$ ms	
1/L1						N/A	200	200	200	N/A				
1/L2						N/A	200	200	200	N/A				
1/L3						N/A	200	200	200	N/A				
2/L1						N/A	200	200	200	N/A				
2/L2				0.27		N/A	200	200	200	✓	0.30	N/A	N/A	N/A
2/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L1						N/A	200	200	200	N/A				
4/L2						N/A	200	200	200	N/A				
4/L3						N/A	200	200	200	N/A				
5/L1						N/A	200	200	200	N/A				
5/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/TP	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature	JW	Position	Electrical Engineer
Name	~~John Cutmore~~ Jason Walker	Date of testing	31/01/2017

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

5180 - Master

Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Location of distribution board: Boilder House

Distribution board designation: DB E/SP/B/4L3

Supply to distribution board is from: SubMains(DB E/SP/B, 4/L3)

No of phases: 1 — Nominal Voltage: 230 V

Overcurrent protective device for the distribution circuit

Type BS(EN): 60898 MCB C — Rating: 63 A

Associated RCD (if any)

BS(EN): N/A

RCD No of poles: N/A

RCD rating, $I\Delta n$: N/A mA

Circuit Details

Circuit number and line	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time	Overcurrent protective device				RCD	Max. permitted Zs
					Live	cpc		BS(EN)	Type	Rating	Short circuit capacity	Op. current	
					mm^2	mm^2	s			A	kA	$I\Delta n$	Ω
1/L3	Water Heater	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
2/L3	Water Heater	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
3/L3	Water Heater	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
4/L3	Water Heater	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
5/L3	Pump	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37
6/L3	Water Treatment	O	C	1	2.5	2.5	0.4	60898 MCB	C	16	10	N/A	1.37

Wiring Code

A	B	C	D	E	F	G	H	O
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	Other

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

5180 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	N/A Ω	Operating times of associated RCD (if any)	At $I_{\Delta n}$	N/A ms	
Ipf	N/A kA		At $5I_{\Delta n}$ (if applicable)	N/A ms	
Confirmation of Supply polarity	N/A	Phase sequence confirmed (where appropriate)	N/A		

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	61117516	RCD	61117516
Insulation resistance	61117516	Multi-function	N/A
Continuity	61117516	Other	N/A

Circuit Tests

Circuit number and line	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD		
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/ Line	Line/ Neutral	Line/ Earth	Earth/ Neutral			Operating times		Test button operation
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	MΩ	MΩ	MΩ	MΩ		Ω	At $I_{\Delta n}$ ms	At $5I_{\Delta n}$ ms	
1/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
2/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
3/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
4/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
5/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
6/L3						N/A	200	200	200	N/A		N/A	N/A	N/A

Tested By

Signature		Position	Electrical Engineer
Name	~~John Cutmore~~ Jason Walk	Date of testing	31/1/17

SCHEDULE OF CIRCUIT DETAILS FOR THE INSTALLATION

5180 - Master

Board Details

TO BE COMPLETED IN EVERY CASE	ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION	
Location of distribution board: Boiler House	Supply to distribution board is from: N/A	Associated RCD (if any) BS(EN): N/A
Distribution board designation: DB E/SP/B	No of phases: 1 — Nominal Voltage: 400 V	RCD No of poles: N/A
	Overcurrent protective device for the distribution circuit	
	Type BS(EN): N/A — Rating: N/A A	RCD rating, I Δ n: N/A mA

Circuit Details

Circuit number and line	Circuit designation	Type of wiring	Reference method	No of points served	Circuit conductors csa		Max. permitted disconnection time	Overcurrent protective device				RCD	Max. permitted Zs
					Live mm 2	cpc mm2	s	BS(EN)	Type	Rating A	Short circuit capacity kA	Op. current $I_{\Delta n}$	Ω
1/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
4/L3	Sub Mains(DB E/SP/B/4L3)	G	C	1	16	16	5	60898 MCB	C	63	10	N/A	0.35
5/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	SPARE	-	-	-	-	-	-	-	-	-	-	-	-

Wiring Code

A	B	C	D	E	F	G	H	O
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	Other

SCHEDULE OF CIRCUIT TESTS FOR THE INSTALLATION

5180 - Master

Board Tests

ONLY TO BE COMPLETED IF THE DISTRIBUTION BOARD IS NOT CONNECTED DIRECTLY TO THE ORIGIN OF THE INSTALLATION

Zs	N/A Ω	Operating times of associated RCD (if any)	At $I_{\Delta n}$	N/A ms	
Ipf	N/A kA		At $5I_{\Delta n}$ (if applicable)	N/A ms	
Confirmation of Supply polarity	N/A	Phase sequence confirmed (where appropriate)	N/A		

TEST INSTRUMENTS (SERIAL NUMBERS) USED

Earth fault loop impedance	61117516	RCD	61117516
Insulation resistance	61117516	Multi-function	N/A
Continuity	61117516	Other	N/A

Circuit Tests

Circuit number and line	Circuit impedances Ω					Insulation resistance				Polarity	Maximum measured earth fault loop impedance	RCD		
	Ring final circuits only (measured end to end)			All circuits (At least one column to be completed)		Line/ Line	Line/ Neutral	Line/ Earth	Earth/ Neutral			Operating times		Test button operation
	r_1 (Line)	r_n (Neutral)	r_2 (cpc)	$R_1 + R_2$	R_2	MΩ	MΩ	MΩ	MΩ		Ω	At $I_{\Delta n}$ ms	At $5I_{\Delta n}$ ms	
1/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/L3						N/A	200	200	200	N/A		N/A	N/A	N/A
5/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/L3	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Tested By

Signature	JCe	Position	Electrical Engineer
Name	~~John Cutmore~~ Jason Walker	Date of testing	31/1/17