ELECTRICAL INSTALLATION CERTIFICATE

Requirements for Electrical Installations - BS 7671: 2018
(IET Wiring Regulations 18th Edition)

Information for recipients:

This safety Certificate has been issued to confirm that the electrical installation work to which it relates has been designed, constructed, inspected and tested in accordance with BS 7671 (the IET Wiring Regulations).

You should have received an original Certificate and the contractor should have retained a duplicate.

If you were the person ordering this work, but not the owner of the installation, you should pass this Certificate, or a copy of it, immediately to the owner.
The original Certificate is to be retained in a safe place and be shown to any person inspecting or undertaking work on the electrical installation in the future.

If you later vacate the property, this Certificate will demonstrate to the new owner that the electrical installation complied with the requirements of BS 7671 at the time the Certificate was issued.

The Construction (Design and Management) Regulations require that, for a project covered by those regulations, a copy of this certificate, together with schedules, is included in the project health and safety document.

For safety reasons, the electrical installation will need to be re-inspected at appropriate intervals by a skilled person or persons, competent in such work. The maximum time interval recommended before the next inspection is stated on Page 2 under "NEXT INSPECTION".

This Certificate is intended to be issued only for a new electrical installation or for new work associated with an addition or alteration to an existing installation. It should not have been issued for the inspection and testing of an existing electrical installation. An "Electrical installation Condition Report" should be issued for such an inspection.

This Certificate is only valid if accompanied by the schedule of inspections and the schedule(s) of test results.

ELECTRICAL INSTALLATION CERTIFICATE
[BS 7671: 2018 as amended]

for Industrial/Commercial Premises

Requirements for Electrical Installations
BS7671 :2018 (IET Wiring Regulations 18th Edition)

FT/ EIC 3486000001419

Client Details

Client	WESSEX RFCA	Installation	2377 (PLYMPTON) SQUADRON
Address	MOUNT HOUSE MOUNT STREET TAUNTON SOMERSET	Address	PLYMPTON SECONDARY SCHOOL MOORLAND ROAD PLYMPTON DEVON
Postcode	TA1 3QU	Postcode	PL7 2BH

Details of the Installation

Installation is New ☐ Addition ☑ Alteration ☑ Records Available Yes ☑ No ☐ Date of original installation: Not specified

Description of the installation: COMPLETION OF PREVIOUSLY NOTED REMEDIAL WORKS.

Extent of the installation covered by this certificate: INSTALLATION OF NEW DB 1, ADDITION OF DB2 CIRCUITS INTO DB 1 AND COMPLETION OF GENERAL DEVIATIONS PREVIOUSLY NOTED ON WRITTEN REPORT

Details of departures from BS 7671 (regulations 120.3, 133.1.3 and 133.5):

Details of permitted exception. (regulation 411.3.3) where applicable a suitable risk assessment(s) must be attached to this certificate:

RCD Risk assessment attached (Non Dwelling ONLY) ☐

Declaration for Design, Construction, Inspection and Testing (for sole person responsibility)

I being the person responsible for design, construction, inspection and the test of the electrical installation (as indicated by my signature below), particulars of which are described in Section 2, having exercised reasonable skill and care when carrying out the design, construction, inspection and test hereby CERTIFY that the design, construction, inspection and test for which i have been responsible is to the best of my knowledge and belief in accordance with BS 7671:2018, amended to 2015

The extent of liability of the signatory or the signatories is limited to work described in Section 2 as subject of this certificate.

For the DESIGN / CONSTRUCTION / INSPECTION & TEST of the installation:

Company	Technical Electrical Engineering Ltd t/a Mr Electric	Position	Qualified Supervisor
Inspector Name	Steve Creese	Date	21/02/2022
Address	Wheal Kitty Studios Wheal Kitty St Agnes	Scheme No.	019875 Branch No.
		Signature	
Reviewed By	Steve Creese	Reviewed By Signature	
Reviewed By Date	10/03/2022		

Next inspection I the designer recommend that this installation is further inspected after an interval of not more than 5 years

Supply Characteristics and Earthing Arrangements

Earthing Arrangements TN-S ☐ TN-C-S ☐ TT ☐ Other ☐ If Other please specify: N/A

Number & Type of live conductors AC ☑ DC ☐ No. of phases: 1 No. of wires: 2

Nature of Supply Parameters (Note: (1) by enquiry, (2) by enquiry or by measurement)

Nominal voltage, U/U_0 (1): 230 v
Nominal frequency, f(1): 50 Hz
Confirmation of polarity ☑
Prospective fault current, I_{pf} (2): 1.93 kA
External loop impedance, Z_e (2): 119 Ω
Supply Protective Device BS (EN): 1361 Fuse HBC 1
Type: 1 Rated Current: 100 A
No. of Additional Supplies: 0

Particulars of Installation at the Origin

Means of Earthing

Details of installation Earth Electrode (where applicable) Type (e.g. rod(s), tape etc): Rod
Distributors facility ☐ Installation Earth Electrode ☑
Location: FRONT ENTRANCE Electrode resistance to earth: 119 Ω
Maximum Demand (load): 50 Amps ☑ KVA ☐

Main Protective Conductors	Material	csa	(✓)	or Value		(✓)	or Value	
Earthing Conductor	Copper	16	Continuity Verified ☑		Ω	Connection Verified ☐		Ω
Protective Bonding Conductor (to extraneous-conductive-parts)	Copper	10	Continuity Verified ☑	LIM	Ω	Connection Verified ☐	LIM	Ω

Main Supply Conductor Copper 25

Main Switch Location: HIGH LEVEL NEXT TO FRONT DOOR

(connection / continuity)

	(✓)	or Value			(✓)	or Value	
Water installation	☑		Ω	To structural steel	NA		Ω
Gas installation pipes	NA		Ω	To lightning protection	NA		Ω
Oil installation pipes	NA		Ω	Other			Ω

Fuse/device rating or setting 100 A Voltage rating 230 V
BS(EN) 61008 RCD No. of Poles 2 Current Rating 100 A
If RCD main switch: Rated residual operating current I Δn 30 mA
Rated time delay N/A ms Measured operating trip time 10.1 ms

Comments on existing installation (in case of addition or alteration see section 644.1.2) use continuation sheet if needed

(For additions or alterations) cables concealed within trunking and conduits, or cables or conduits concealed under floors, in roof spaces and generally within the fabric of the building or underground may not have been inspected.

ELECTRICAL INSTALLATION CERTIFICATE - Schedule of Tests

for Industrial/Commercial Premises

FT/EIC 3486000001419

Requirements for Electrical Installations
BS 7671: 2018 (IET Wiring Regulations 18th Edition)

Company Name	Technical Electrical Engineering Ltd t/a Mr Electric	**Company Address**	Wheal Kitty Studios	**Postcode**	TR5 0RD	**Branch No.**	**Scheme No.** 019875
Client	WESSEX RFCA	**Installation Address**	2377 (PLYMPTON) SQUADRON, PLYMPTON SECONDARY SCHOOL, MOORLAND ROAD, PLYMPTON, DEVON	**Postcode**	PL7 2BH		

Distribution board details - Complete in every case

Location: HIGH LEVEL NEXT TO FRONT DOOR
Designation: DB 1 [Including existing DB 2]
Num. of ways: 20 Num. of phases: 1
Supply polarity confirmed: ☑ Phase sequence confirmed: ☐

Complete only if the distribution board is not connected directly to the origin of the installation

Supply to distribution board is from:
Overcurrent protective device for the distribution circuit: BS(EN) NA Type NA Rating NA A Voltage NA V

Characteristics at this distribution board

Associated RCD(if any): BS (EN) 61008
Z_d 119 Ω I_{pf} 1.93 kA
No. of poles 2 IΔn 30
Time delay (if applicable) N/A
Above 30mA Operating at 1 IΔn 18.6 ms
30mA or below Operating at 5 IΔn 10.1 ms
(if applicable)

Test instrument serial number(s)

Loop impedance 44-0694
Insulation resistance 44-0694
Continuity 44-0694
RCD 44-0694

CIRCUIT DETAILS / TEST RESULTS

Circuit No. and Line No.	Circuit designation	Type of wiring	Ref. method	No. of points	Circuit conductors csa (mm²) L / N	Circuit conductors csa (mm²) CPC	Maximum disconnection	Overcurrent protective devices BS EN Number	Type No.	Rating (A)	Breaking capacity (KA)	RCD operating (mA)	BS 7671 Max. permitted Zs Other 100% (Ω)	Circuit impedance Ω Ring final circuits only (measured end-to-end) r1	rn	r2	Fig 8 check (✓)	All circuits to be completed using R1R2 or R2, not both R1 + R2	R2	Insulation resistance (Record lower reading) Test voltage V	L/L, L/N M(Ω)	L/E, N/E M(Ω)	Polarity (✓)	Max. Measured Zs (Ω)	RCD testing Above 30mA IΔn ms	30mA or below 5 IΔn ms	Manual test button operation RCD (✓)	AFDD (✓)
1/S	Lights ENTRANCE OUTSIDE	A	C	fi	1	1	0.2	61009 RCD/	B	6	6	30	7.28	NA	NA	NA	N/A	0.67	N/A	250	LIM	100	✓	137	29	11	✓	N/A
2/S	Lights ENTRANCE,STORE,KITCHEN,OFFICE	A	C	7	1	1	0.2	61009 RCD/RCBO	B	6	6	30	7.28	NA	NA	NA	N/A	0.41	N/A	250	LIM	100	✓	135	34	11	✓	N/A
3/S	Lights DRILL HALL + OUTSIDE FAR	A	C	2	1	1	0.2	61009 RCD/RCBO	B	6	6	30	7.28	NA	NA	NA	N/A	0.39	N/A	250	LIM	100	✓	138	29	29	✓	N/A
4/S	Lights DRILL HALL,RADIO LOT NEAR	A	C	5	1	1	0.2	61009 RCD/RCBO	B	6	6	30	7.28	NA	NA	NA	N/A	0.14	N/A	250	LIM	100	✓	138	29	29	✓	N/A
5/S	COMMS ROOM TUBULAR HEATER	A	C	1	2.5	1.5	0.2	61009 RCD/RCBO	B	6	6	30	7.28	NA	NA	NA	N/A	0.19	N/A	250	LIM	100	✓	137	31	29	✓	N/A
6/S	MAIN HALL HEATER RHS	A	C	1	2.5	1.5	0.2	61009 RCD/	B	16	6	30	2.73	NA	NA	NA	N/A	0.21	N/A	250	LIM	100	✓	137	29	11	✓	N/A
7/S	MAIN HALL HEATER LHS	A	C	1	2.5	1.5	0.2	61009 RCD/	B	16	6	30	2.73	NA	NA	NA	N/A	0.18	N/A	250	LIM	100	✓	137	29	11	✓	N/A
8/S	STORE HEATER (BAND)	A	C	1	2.5	1.5	0.2	61009 RCD/	B	16	6	30	2.73	NA	NA	NA	N/A	0.21	N/A	250	LIM	100	✓	137	29	29	✓	N/A
9/S	STORE HEATER	A	C	1	2.5	1.5	0.2	61009 RCD/	B	16	6	30	2.73	NA	NA	NA	N/A	0.18	N/A	250	LIM	100	✓	138	29	29	✓	N/A
10/S	SOCKETS OFFICE + KITCHEN	A	C	5	2.5	1.5	0.2	61009 RCD/RCBO	B	32	6	30	1.37	0.2	0.19	0.33	N/A	0.19	N/A	250	LIM	100	✓	138	29	28	✓	N/A
11/S	DRILL HALL SOCKETS + SPUR NEAR	A	C	4	2.5	1.5	0.2	61009 RCD/RCBO	B	32	6	30	1.37	0.24	0.25	0.41	N/A	0.12	N/A	250	LIM	100	✓	137	31	30	✓	N/A
12/S	DRILL HALL SOCKETS + SPUR FAR	A	C	3	2.5	1.5	0.2	61009 RCD/RCBO	B	32	6	30	1.37	0.26	0.26	0.43	N/A	0.13	N/A	250	LIM	100	✓	137	37	33	✓	N/A
13/S	RADIO SOCKETS	A	C	5	6	4	0.2	60898 MCB T	B	32	6	30	1.37	NA	NA	NA	N/A	0.14	N/A	250	LIM	100	✓	136	37	33	✓	N/A
14/S	Sub Mains(DB 3)	A	C	1	6	4	0.2	60898 MCB T	B	32	6	30	1.37	NA	NA	NA	N/A	0.09	N/A	250	LIM	100	✓	136	32	30	✓	N/A

Details of circuits and/or installed equipment vulnerable to damage when testing: ANY ELECTRONIC DEVICES.

Date(s) dead testing: 21/02/2022 To 21/02/2022

Date(s) live testing: 21/02/2022 To 21/02/2022

Signature:

Tested by: Name (capital letters): STEVE CREESE Position: Qualified Supervisor Date: 21/02/2022

Wiring Types. **A** PVC/PVC, **B** PVC cables in metallic Conduit, **C** PVC cables in non-metallic Conduit, **D** PVC cables in metallic trunking, **E** PVC cables in non-metallic trunking, **F** PVC/SWA cables, **G** SWA/XPLE cables, **H** Mineral Insulated, **MW** Metal Work, **FM** Ferrous Metal, **O** Other

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NICEIC APPROVED CONTRACTOR

Mr. Electric™

CIRCUIT DETAILS / TEST RESULTS

Circuit No. and Line No.	Distribution board Designation / Circuit designation	Type of wiring	Ref. method	No. of points	Circuit conductors csa (mm²) L / N	Circuit conductors csa (mm²) CPC	Maximum disconnection	Overcurrent protective devices BS EN Number	Type No.	Rating (A)	Breaking capacity (KA)	RCD operating (mA)	BS 7671 Max. permitted Zs Other 100% (Ω)	Circuit impedance Ω Ring final circuits only (measured end-to-end) r1	rn	r2	Fig 8 check (✓)	All circuits to be completed using R1R2 or R2, not both R1 + R2	R2	Insulation resistance (Record lower reading) Test voltage V	L/L, L/N M(Ω)	L/E, N/E M(Ω)	Polarity (✓)	Max. Measured Zs (Ω)	RCD testing Above 30mA IΔn ms	30mA or below 5 IΔn ms	Manual test button operation RCD (✓)	AFDD (✓)
15/S	SPARE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16/S	SPARE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17/S	SPARE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18/S	SPARE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19/S	SURGE ARRESTOR SUPPLY	A	C	1	10	10	N/A	60898 MCB	B	40	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	>99.9	✓	N/A	N/A	N/A	N/A	N/A
20/S	SURGE ARRESTOR MODULE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Date(s) dead testing: 21/02/2022 To 21/02/2022

Date(s) live testing: 21/02/2022 To 21/02/2022

Tested by: Name (capital letters): STEVE CREESE

Position: Qualified Supervisor

Date: 21/02/2022

Signature:

Wiring Types. **A** PVC/PVC, **B** PVC cables in metallic Conduit, **C** PVC cables in non-metallic Conduit, **D** PVC cables in metallic trunking, **E** PVC cables in non-metallic trunking, **F** PVC/SWA cables, **G** SWA/XPLE cables, **H** Mineral Insulated, **MW** Metal Work, **FM** Ferrous Metal, **O** Other