Switch Electrics

68 Olive Road, Costessey, Norwich, NR5 0AP
07919513891 email: enquiries@switchelectrics.co.uk

Date: feb 2014

Elecsa condition report no. 323

Recommendations for works requied after test and inspection at Mervyn Lambert Plant;

Observation	classification code
General; stickers and warning labels required throughout.	C3
Screws missing on distribution board covers.	C2
Some metallic buildings not earthed or bonded.	C2
Blanks missing from some dbs ip 22 not achieved.	C2
Voltage drop throughout site 248 – 221 volts	C3
Some buildings or equipment require emergency stops.	C2
Lots of flo tubes out	C3
Air con units in offices all off one supply	C3
Distribution board 1:	
Socket near fire door broken, terminal arching	C1
Emergency light requires replacing	C3
DB 2;	
Socket cover missing	C2
Faulty socket by roller door (circuit 14)	C3
Socket and plug covered in oil by db room	C1
No earth continuity on sockets (circuit 14)	C2
DB 3;	
Socket behind oil hoses require blanking off	C2
2 x damaged lenses on pitt lights 5ft	C2
230 volt socket outlets in pitt	C2
DB 4;	
3phase mcb for compressor – 1 phase circuit	C3
Supply to cabin DB fed off main switch – no protection	C1
DB 5;	
Socket very close to kitchen sink	C3
No rcd protection to first 4 circuits	C3
DB 6;	
Sub board for diesel pump has no ip protection – outside	C2
DB 8;	
Db housing broken so no ip rating	C2
DB 9;	

CONDITION REPORT
GUIDANCE FOR RECIPIENTS
(to be appended to the Report)

This report is an important and valuable document which should be retained for future reference.

1 The purpose of this Condition Report is to confirm, so far as reasonably practicable, whether or not the electrical installation is in a satisfactory condition for continued service (see Section E). The Report should identify any damage, deterioration, defects and/or conditions which may give rise to danger (see Section M).

2 The person ordering the Report should have received the original Report and the inspector should have retained a duplicate.

3 The original Report should be retained in a safe place and be made available to any person inspecting or undertaking work on the electrical installation in the future. If the property is vacated, this Report will provide the new owner/occupier with details of the condition of the electrical installation at the time the Report was issued.

4 Where the installation incorporates residual current devices (RCDs) there should be a notice at or near the devices stating that they should be tested regularly. **For safety reasons it is important that these instructions are followed.**

5 Section D (Extent and Limitations) should identify fully the extent of the installation covered by this Report and any limitations on the inspection and testing. The inspector should have agreed these aspects with the person ordering the Report and with other interested parties (licensing authority, insurance company, mortgage provider and the like) before the inspection was carried out.

6 Some operational limitations such as inability to gain access to parts of the installation or an item of equipment may have been encountered during the inspection. The inspector should have noted these in Section D.

7 For items classified in Section K as C1 ('Danger present'), **the safety of those using the installation is at risk,** and it is recommended that a competent person undertakes the necessary remedial work immediately.

8 For items classified in Section K as C2 ('Potentially dangerous'), **the safety of those using the installation may be at risk,** and it is recommended that a competent person undertakes the necessary remedial work as a matter of urgency.

9 Where it has been stated in Section K that an observation requires further investigation, the inspection has revealed an apparent deficiency which could not, due to the extent or limitations of this inspection, be fully identified. Such observations should be investigated as soon as possible. A further examination of the installation will be necessary, to determine the nature and extent of the apparent deficiency (see Section F).

10 For safety reasons, the electrical installation should be re-inspected at appropriate intervals by a competent person. The recommended date by which the next inspection is due is stated in Section F of the Report under 'Recommendations' and on a label near to the consumer unit / distribution board.

CONDITION REPORT
GUIDANCE FOR THE INSPECTOR

This report is an important and valuable document which should be retained for future reference.

1 Section 1. Where inadequacies in the distributor's equipment are present, the inspector should advise the person ordering the work to inform the appropriate authority.

2 Older installations designed prior to BS 7671:2008 are unlikely to have been provided with RCDs for additional protection. The absence of such protection should, as a minimum, be given a code C3 classification (item 5.12).

3 This schedule is not exhaustive.

4 Numbers in brackets are Regulation references to specified requirements.

ELECTRICAL INSTALLATION CONDITION REPORT

ELECSA Part of the ECA Group

Certificate number: 00323 Registration number: 32674 (optional) Sheet 1 of *

SECTION A: DETAILS OF THE CLIENT / PERSON ORDERING THE REPORT

Name MERVYN LAMBERT PLANT HIRE Address MILL POND FARM, GARBOLDISHAM NORFOLK IP22 2SP

SECTION B: REASON FOR PRODUCING THIS REPORT

PERIOD / INSURANCE

Date(s) on which inspection and testing was carried out FEB 2014

SECTION C: DETAILS OF THE INSTALLATION WHICH IS THE SUBJECT OF THIS REPORT

Occupier MERVYN LAMBERT PLANT HIRE

Address AS ABOVE

Description of premises (tick as appropriate)

Domestic ☐ Commercial ☐ Industrial ☑ Other (include brief description) .....

Estimated age of wiring system 15-20 years

Evidence of additions / alterations Yes ☑ No ☐ Not apparent ☐ If yes, estimate age 2-4 years

Installation records available? (Regulation 621.1) Yes ☐ No ☑ Date of last inspection — (date)

SECTION D: EXTENT AND LIMITATIONS OF INSPECTION AND TESTING

Extent of electrical installation covered by this report FIXED WIRING AND EQUIPMENT TO DATE - NO PORTABLE APPLIANCES / HIDDEN JOINTS

Agreed limitations including the reasons (see Regulation 634.2) *

Agreed with: MR LAMBERT

Operational limitations including the reasons (see page no.) .....

The inspection and testing detailed in this report and accompanying schedules have been carried out in accordance with BS 7671:2008 (IET Wiring Regulations) as amended to 2011

* It should be noted that 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 inspection.

SECTION E: SUMMARY OF THE CONDITION OF THE INSTALLATION

General condition of the installation (in terms of electrical safety) SOME REMEDIAL AND IMPROVEMENT WORKS REQUIRED. ELECTRICALLY OK

Overall assessment of the installation in terms of its suitability for continued use SATISFACTORY / (UNSATISFACTORY)* (delete as appropriate).

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

SECTION F: RECOMMENDATIONS

Where the overall assessment of the suitability of the installation for continued use above is stated as UNSATISFACTORY, I/we recommend that any observations classed as *'Danger present'* (code C1) or *'Potentially dangerous'* (code C2) are acted upon as a matter of urgency. Investigation without delay is recommended for observations identified as *'Further investigation required'*. Observations classified as *'Improvements recommended'* (code C3) should be given due consideration. Subject to the necessary remedial action being taken, I/we recommend that the installation is further inspected and tested by 3 YEARS MAX (date).

SECTION G: 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 above, having exercised reasonable skill and care when carrying out the inspection and testing, hereby declare that the information in this report, including the observations and the attached schedules, provides an accurate assessment of the condition of the electrical installation taking into account the stated extent and limitations in Section D of this report.

Inspected and tested by:

Name (CAPITALS): S MASON

Signature: .....

For/on behalf of: SWITCH ELECTRICS

Position: DIRECTOR

Address: 68 OLIVE RD NORWICH NR5 0AP

Date: 20/02/14

Report authorised for issue by:

Name (CAPITALS): .....

Signature: .....

For/on behalf of: SWITCH ELECTRICS

Position: .....

Address: .....

Date: 20/02/14

SECTION H: SCHEDULE(S)

..... schedule(s) of inspection and ..... schedule(s) of test results are attached. The attached schedule(s) are part of this document and this report is valid only when they are attached to it.

ELECTRICAL INSTALLATION CONDITION REPORT

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Sheet ☐ of ☐

SECTION I: SUPPLY CHARACTERISTICS AND EARTHING ARRANGEMENTS

Earthing arrangements	Number and type of live conductors	Nature and type of supply parameters	Supply protective device
TN-C ☐	a.c. ☑ d.c. ☐	Nominal voltage, U / U_0 (1) 400 V	BS (EN) See Diag
TN-S ☐	1-phase, 2 wire ☐ 2-wire ☐	Nominal frequency, f (1) 50 Hz	Type
TN-C-S ☑	2-phase, 3 wire ☐ 3-wire ☐	Prospective fault current, I_{pf} (2) 5.7 kA	
TT ☐	3-phase, 3 wire ☐	External loop impedance, Ze (2) 0.08 Ω	
IT ☐	3-phase, 4 wire ☑	Note: (1) by enquiry. (2) by enquiry or measurement	Rated current A
	Confirmation of supply polarity ☑		

Other sources of supply (as detailed on attached schedule) NA

SECTION J: PARTICULARS OF INSTALLATION REFERRED TO IN REPORT

Means of earthing	Details of Earth Electrode (where applicable)
Distributor's facility ☑	Type
Installation earth electrode ☐	Location NA
	Resistance to earth Ω

Main protective conductors

Earthing conductor	Material Copper	Csa 25 mm²	Connection/continuity verified ☑
Main protective bonding conductors	Material Copper	Csa mm²	Connection/continuity verified ☐
To incoming water service ☐	To incoming gas service ☐	To incoming oil service ☐	To structural steel ☐
To lightning protection ☐	To other incoming service(s) ☐	Specify	

Main switch / switch fuse / circuit breaker / RCD

Location MAIN WORKSHOP	Current rating ~~415~~ 225 A	**If RCD main switch**
BS (EN) 6094	Fuse / device rating or setting 400 225 A	Rated residual operating current (I∆n) mA
No. of poles 3	Voltage rating 415 V	Rated time delay ms
		Measured operating time (at I∆n) ms

SECTION K: OBSERVATIONS

Referring to the attached schedules of inspection and test results, and subject to the limitations specified in the *Extent and Limitations of Inspection and testing section*

No remedial action is required ☐ The following observations are made: ☑ (See below)

Observation(s)	Classification code	Further investigation required (YES/NO)
SEE ATTACHED SHEET		YES

One of the following codes, as appropriate, has been allocated to each of the observations made to indicate to the person(s) responsible for the installation the degree of urgency of remedial action required.

C1 – Danger present. Risk of injury. Immediate remedial action required
C2 – Potentially dangerous. Urgent remedial action required
C3 – Improvement recommended

Use additional form if required

SCHEDULE OF INSPECTIONS

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NOTES:

✓ to indicate an inspection has been carried out and the result is satisfactory
N/A to indicate that the inspection is not applicable to a particular item

NOTE – items on the right are seldom relevant in a domestic setting

Sheet of

METHODS OF PROTECTION AGAINST ELECTRIC SHOCK

Basic protection:

- ☑ (i) Insulation of live parts
- ☑ (ii) Barriers or enclosures

Fault protection:

(i) Automatic disconnection of supply:

- ☑ Presence of earthing conductor
- ☑ Presence of circuit protective conductors
- ☑ Presence of protective bonding conductors
- ☒ Presence of supplementary bonding conductors
- ☑ Choice of setting of protective and monitoring devices (for fault and/or overcurrent protection)

Additional protection:

- ☒ Presence of residual current device(s)
- ☑ Presence of supplementary bonding conductors

PREVENTION OF MUTUAL DETRIMENTAL INFLUENCE

- ☑ (a) Proximity to non-electrical services and other influences
- ☑ (b) Segregation of Band I and Band II circuits or use of Band II insulation

IDENTIFICATION

- ☒ (a) Presence of diagrams, instructions, circuit charts and similar information
- ☒ (b) Presence of danger notices and other warning notices
- ☑ (c) Labelling of protective devices, switches and terminals
- ☒ (d) Identification of conductors

CABLES AND CONDUCTORS

- ☑ Selection of conductors for current-carrying capacity and voltage drop
- ☑ Erection methods
- ☑ Routing of cables in prescribed zones
- ☑ Cables incorporating earthed armour or sheath, or run within an earthed wiring system, or otherwise adequately protected against nails, screws and the like

CABLES AND CONDUCTORS (continued)

- ☑ Additional protection provided by 30 mA RCD for cables concealed in walls (where required in premises not under the supervision of a skilled or instructed person)
- ☑ Connection of conductors
- ☑ Presence of fire barriers, suitable seals and protection against thermal effects

GENERAL

- ☑ Presence of correct location of appropriate devices for isolation and switching
- ☑ Adequacy of access to switchgear and other equipment
- ☑ Particular protective measures for special installations and locations
- ☑ Connection of single-pole devices for protection or switching in line conductors only
- ☑ Correct connection of accessories and equipment
- ☒ Selection of equipment and protective measures appropriate to external influences
- ☑ Selection of appropriate functional switching devices

ADDITIONAL SCHEDULE OF ITEMS INSPECTED (where applicable)

- ☐ SELV
- ☐ PELV
- ☐ Double insulation
- ☐ Reinforced insulation
- ☐ Obstacles
- ☐ Placing out of reach
- ☐ Presence of earthing arrangements for combined protective and functional purposes
- ☐ Presence of adequate arrangements for alternative source(s), where applicable
- ☐ FELV
- ☐ Absence of protective conductors
- ☐ Presence of earth-free local equipotential bonding
- ☐ Electrical separation provided for **one item** of current-using equipment
- ☐ Electrical separation provided for **more than one item** of current-using equipment
- ☐ Segregation of safety circuits
- ☐ Presence of undervoltage protective devices

SCHEDULE OF TEST RESULTS

Sheet ☐ of ☐

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DB Reference no. DB1 Location Workshop Zs at DB (Ω) 0.08 I_{pf} at DB (kA) Correct polarity of supply confirmed ✓ YES / NO Phase sequence confirmed (where appropriate) Y	Details of circuits and/or installed equipment vulnerable to damage when testing CHECK ALL MACHINARY	Details of test instruments used (state serial and/or asset numbers) Continuity Insulation resistance Earth fault loop impedance RCD Earth electrode resistance

Tested by:
Name (CAPITALS)
Signature **Date**

Circuit details

	Circuit number	Circuit description	Overcurrent device: BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Conductor details: Reference method	Live (mm²)	cpc (mm²)
	A	B	C	D	E	F	G	H	I
1+2		PHONE SYSTEM	61009	2C	20	10		2.5	2.5
3+4		W/SHOP SOCKETS	RCBO	C	32	10		2.5	2.5
5+6		W/SHOP SOCKETS	RCBO	C	32	10		6.0	4
	7	WATER HEATER	60898	B	20	10		2.5	2.5
	8	OFFICE LIGHTS	60898	B	20	10		2.5	1.5
	9	W/SHOP LIGHTS	"	C	10	10		1.5	1.5
	10	EMERGENCY LIGHTS	"	B	6	6		1.5	1.5
11+12		SOCKET LEFT OF W/SHOP	61009	C	10	10	SWA	1.5	1.5
13+14+15		OFFICE BLOCK	60898	D	63	10	SWA	25	25
16+17+18		SMALL TOOL W/SHOP DB1	"	D	63	10	SWA	25	25
	22	WELFARE UNIT DB5	"	C	63	10		25	16
23+24+25		2 POST LIFT NEAR	"	D	20	10	SWA	2.5	2.5
26+27+28		2 POST LIFT FAR	"	C	20	10	SWA	2.5	2.5
	29	WELDER ON POST	RCBO	C	32	10		6.0	6.0
	30	TYRE REMOVER		C	10	10		1.5	1.5
		CONT.							

Test results

	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@$5I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
	J	K	L	M	N	O	P	Q	R	S	T	U	V
1+2				0.21		Yes	Yes	✓	0.26	33	18	✓	30mA
3+4	0.53	0.55	0.58	0.44		120	130	✓	0.61	29	18	✓	30mA
5+6				0.19		Yes	Yes	✓	0.29	21	14	✓	30mA
7				0.14		Yes	Yes	✓					
8				0.46		Yes	Yes	✓					
9				1.48		—	—	✓					LAMPS NOT OUT
10				0.87		—	Yes	✓					
11+12				0.39		Yes	Yes	✓					30mA
13+14+15				0.48		Yes	Yes	✓					
16+17+18				0.16		Yes	Yes	✓					
22				0.21		Yes	Yes	✓					
23+24+25				0.53		Yes	Yes	✓					5C ARM.
26+27+28				0.56		Yes	Yes	✓					
29				0.34		150	Yes	✓					30mA
30				1.04		Yes	Yes	✓					N USED AS CPC

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

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Distribution Board Reference: DB1

CONT. Pg 2

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
31,32,33	WASH BAY (DB3)	60898	C	40	10		10	10
34,35,36	LARGE W/SHOP		C	63	10		25	25
	WORKSHOP OFFICE DB	FROM	LARGE W/SHOP	(DB2)	CIRCUIT 13		TT SYSTEM	Ze = 24.7Ω
1	SOCKETS	60898	B	32	6		2.5	1.5
	SOCKETS	" "	B	32	6		2.5	1.5
	FAR A/C	" "	B	16	6		2.5	1.5
	NEAR A/C	" "	B	16	6		2.5	1.5
	LIGHTS	" "	B	6	6		1.0	1.0

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
			0.42		Two	Two	✓	0.57				
			0.38		Two	Two	✓	0.44				
0.44	0.44	0.63	0.31		Two	Two	✓	2.49				
0.41	0.39	0.64	0.33		150	Two	✓	2.48				
			0.37		Two	Two	✓	0.46				
			0.19		Two	Two	✓	24.3				
			0.84		—	100+	✓	25.0				

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

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Distribution Board Reference: DB2 - LARGE WISHOP
63A 30MA M/S Ze = 0.09 Zs Ω
PFC = 21.5KA 25mm

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
1+2+3	UP+OVER DOORS		C	20	10		2.5	1.5
4+5+6	COMPRESSOR		C	32	10		6	6
7+8+9	No.16 3PH OUTLET		C	32	10		6	6
10+11+12	No.33 3PH OUTLET		C	32	10		6	4
13	OFFICE CABINS DB		B	32	10		6	6
14	WTR HTR		B	16	10		2.5	1.5
15	OUT + EM LIGHTS		B	10	10		2.5	1.5
16	L6 W/SHOP LIGHTS		B	10	10		2.5	2.5
17	L2 W/SHOP LIGHTS		B	10	10		2.5	1.5
18	L3 W/SHOP LIGHTS		B	10	10		2.5	1.5
19	L4+5 W/SHOP LIGHTS		B	10	10		2.5	1.5
20	OFFICE LIGHTS		B	10	10		1.5	1.5
21	LIGHTING CONTROL		B	6	10		1.5	1.5
22	SOCKETS THIS SIDE		B	32	10		2.5	2.5
23	SOCKETS		C	32	10		2.5	2.5

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): $(R_1+R_2)^*$	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@5$I_{\Delta n}$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
			0.33		∞	∞	✓	0.34	17	7.5	✓	
			0.17		∞	∞	✓	NO NEUTRAL				
			0.61		∞	∞	✓	NO N				
			0.31		∞	∞	✓	NO N				
			0.45		∞	∞	✓	0.53				
			0.22		∞	∞	✓	0.29				
			0.31		—	—	✓	0.46				LAMPS IN
			0.89		—	160	✓	0.96				
			0.62		—	∞	✓	0.73				
			—		—	120	✓	—				CANT ACCESS R1+R2
			—		—	150	✓	—				" "
			0.40		∞	∞	✓	0.61				
			0.02		∞	∞		—				IN BOARD.
0.57					∞	∞	✓	0.43				NO R1+R2 -NO CONT. *
0.62	0.62	0.21	0.18		∞	∞	✓	0.44				
					GLOBAL = 4.5 MΩ							

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET

Sheet ☐ of ☐

ELECA
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Distribution Board Reference: DB3-LARGE WISHOP SUB.

0.11Ω Zs PFC = 2.1kA

C63A 25mm TAILS SUPPLY.

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
	63A RCCB C63							
A	B	C	D	E	F	G	H	I
1,2,3	3PH OUTLET No.17		C	32	10			
4,5,6	3PH OUTLET No.18		C	32	10			
7,8,9	3PH OUTLET No.19		C	32	10			
10	PIT SOCKETS		B	16	10			
11	SOCKETS		B	32	10			
12	EXHAUST EXT FAN		C	16	10			
	3PH OUTLET No.20		C	32	10			
	3PH OUTLET No.21		C	32	10			
	3PH OUTLET No.22		C	32	10			
	PIT/OUT LIGHTS		B	10	10			
	SECURITY + CONT LIGHTS		B	10	10			

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
A	J	K	L	M	N	O	P	Q	R	S	T	U	V
1,2,3				0.104		∞	∞	✓					NO NEUTRAL
4,5,6				0.109		∞	∞	✓					
7,8,9				0.13		∞	∞	✓					
10				0.34		∞	∞	✓					
11	0.66	0.66	0.25	0.86		160	140	✓	0.91				
12				—		—		—					CANT ACCESS
				—		∞	∞	✓					" "
				—		—	∞	✓					" "
				0.21		∞	∞	✓	0.32				
				0.47		120	120	✓	0.53				
				0.66		—	∞	✓	0.73				

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

0.09 0.06 0.07

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

ELECA
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Distribution Board Reference: DB4 - SMALL TOOLS W/SHOP

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
	TEM OFFICE		C	40				
	NEAR W/SHOP LIGHTS	60898	C	10	10	B	1.5	1.5
	HEATER	60898	D	16	10	B	2.5	1.5
	OFFICE LIGHTS	60898	C	10	10	B	1.5	1.5
	FAR W/SHOP LIGHTS	60898	C	10	10	B	1.5	1.5
	TEST AREA SOCKETS	60898	C	32	10	B	6.0	6.0
	OFFICE SOCKETS	60898	C	32	10	B	2.5	1.5
	W/SHOP SOCKETS	60898	C	32	10	B	2.5	1.5
	ALARM	60898	C	16	10	B	2.5	1.5
	3PH COMPRESSOR	60898	C	32	10	B	6	6
	FAR 3PH OUTLET	60898	C	32	10	B	10.6	6
	NEAR 3PH OUTLET	60898	C	32	10	B	6	6

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω) (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@$5I_{\Delta n}$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
												NOT USED
			0.41		–	110	✓	0.50	35	9		
			0.23		>200	>200	✓	0.32	35	9		
			0.52		>200	>200	✓	0.63	35	9		
			0.64		–	–	✓	0.72	35	9		
			0.10		>200	>200	✓	0.20	35	9		
0.51	0.51	0.64	0.29		>200	160	✓	0.38	35	9		
0.14	0.14	0.12	0.19		>200	>200	✓	0.25	35	9		
				0.01	–	>200	✓	0.05	35	9		
			0.18				✓	0.25	35	9		
			0.20	0.10	>200	>200	✓	0.30	35	9	✓	
				0.02	>200	>200	✓	0.11	35	9	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

0.11

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

ELECSA
Part of the ECA Group

Distribution Board Reference: DB5 - CANTEEN
SINGLE PHASE

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
	LIGHTS	60598	B	10	6	100	1.6	1.6
	LIGHTS	60598	B	10	6	100	1.0	1.0
	FIRE ALARM	60598	B	6	6	100	2.5	1.5
	GREEN ARCHIVE STORE	60898	B	32	6		6.0	6.0
63A 30mA								
	SOCKETS	60898	B	32	6	100	2.5	1.5
	SOCKETS	60898	B	32	6	100	6.0	2.5
	SEWAGE PLANT	60898	B	16	6	E	2.5	2.5

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
A	J	K	L	M	N	O	P	Q	R	S	T	U	V
				0.53			>200	✓	0.63				
				0.74			>200	✓	0.82				
				0.15			>200	✓	0.24				
	0.59	0.59	0.95	0.39			>200	✓	0.45	35	9	✓	
				0.16			>200	✓	0.25	35	9	✓	
				0.31			>200	✓	0.42	35	9	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

ELECSA
Part of the ECA Group

Distribution Board Reference: DB6

CONCRETE SHED. - YARD WASH SHED

GLOBAL 3.0 MΩ

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
1,2,3	3PH OUTLET - PUMP	60898	D	32	10		6.0	4.0
	PLANT PARK FLOODS		C	32	10		6.0	6.0
	¢ YARD LIGHTS + ALARM		D	6	10		2.5	1.5
	DIESEL PUMP		D	32	10		23 6.0	6.0
	SOCKET UNDER BOARD		C	16	10		2.5	2.5
	LIGHTS		C	10	10		1.5	1.5
	BOOSTER PUMP		C	10	10		1.5	1.5
	WASHER 3PH OUTLET		C	32	10		6.0	6.0

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): $(R_1+R_2)^*$	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
			0.07		>1mΩ	>1mΩ	✓					
			0.99		–	150		1.18				
			0.03		–	>1mΩ	✓	0.09				R1+R2 TO CONTACTOR.
			0.29		>1mΩ	>1mΩ	✓	0.40				IN ELEMENTS
			0.02		>1mΩ	>1mΩ	✓	0.40				
			0.19		>1mΩ	>1mΩ	✓	0.39				
			0.24		–	>1mΩ	✓	0.42				FLEX IN CHIP
			0.04		>1mΩ	>1mΩ	✓					
								2	23	9	✓	
												SCREW MISSING ON BOX

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS

Sheet ☐ of ☐

ELECSA
Part of the ECA Group

DB Reference no. DB7
Location TRAFFIC WORKSHOP - FRONT OF SITE
Zs at DB (Ω) 19.55
I_{pf} at DB (kA) 11.6
Correct polarity of supply confirmed YES / NO
Phase sequence confirmed (where appropriate)

Details of circuits and/or installed equipment vulnerable to damage when testing
RCBO'S / ALARM

63A 30mA RCD/M/S

Details of test instruments used (state serial and/or asset numbers)
Continuity
Insulation resistance
Earth fault loop impedance
RCD
Earth electrode resistance

Tested by:
Name (CAPITALS)
Signature **Date**

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
	W/SHOP SOCKETS	61009	C	20	10	-	4	2.5
	WATER HEATERS - W/C	3871	B	32	10		4	2.5
	EM LIGHTS + ALARM	60898	B	6	6		1.5	1.5
	SP							
	LIGHTS	3871	C	10	10		1.5	1.5
	SOCKETS IN CHARGE RM	61009	C	32	10		6.0	6.0
	SOCKETS IN W/SHOP	61009	C	20	10		4.0	2.5
	WELFARE UNIT		C	32	10	SWA	10	10
	CARAVAN		C	63	10	SWA	16	NOT CPC
	HEATING 16A OUTLET	61009	C	16	10		2.5	2.5

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω) (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@5$I_{\Delta n}$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
			0.34		>1GΩ	>1GΩ	✓	19.44	34	20	✓	30mA
			0.19		>1GΩ	>1GΩ	✓	19.41				
			0.43		-	>1GΩ	✓	19.5				
			1.93		90	90	✓	19.60				
			0.84		130	130	✓		36	21	✓	
			0.61		>1GΩ	>1GΩ	✓		49	18	✓	
			0.04		>1GΩ	>1GΩ	✓					
			—		>1GΩ	>1GΩ	✓	19.1				
			0.18		>1GΩ	>1GΩ	✓	19	28	16	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

ELECSA
Part of the ECA Group

Distribution Board Reference: DB8 - TRAFFIC PORTACABINS
FED FROM DB1A

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
ARM.	CABIN 2		B	32	10		10	10
	CABIN 1		B	32	10		10	10
	CABIN 3		B	32	10		10	10
	CABIN 4		B	32	10		10	10
DISCONNECTED	YELLOW STORE		B	32				
	ARCHIVE STORE		B	32				

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω) ($R_1 + R_2$) or R_2: ($R_1 + R_2$)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
			0.09		∞	∞	✓	0.31				
			0.09		∞	∞	✓	0.29				
			0.14		∞	∞	✓	0.34				
			0.19		∞	∞	✓	0.38				
								∞	~~35~~	~~22~~	✓	

* Where there are no spurs connected to a ring final circuit this value is also the ($R_1 + R_2$) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET

Sheet ☐ of ☐

ELECA
Part of the ECA Group

Distribution Board Reference: DB9 PAINT W/SHOP

From 25mm 21.2Ω 10.86KA

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Conductor details: Reference method	Live (mm²)	cpc (mm²)
A	B	C	D	E	F	G	H	I
	LIGHTS	3871	2	10	6		2.5	2.5
16A	SOCKETS THIS WALL	3871	2	32	6		4.0	2.5
13A	SOCKETS THIS WALL	60898	B	20	6		2×4.0	2.5
	EXTERIOR FLOODS	3871	2	10	6		1.5	1.5
	PRINTER CABIN	3871	2	32	6		10	10
	SPARE							
3PH	EXTRACT FAN –	3871	2 XS	32	6		4.0	4.0
ACM.	NO.N. –	3871	2	32	6		4.0	
	–	3871	2	32	6		4.0	
3	COMPRESSOR –	60898	C	20	10		6.0	6.0
3PH.	–							
	–							
	FAN 1	3871	2	10	6		1.5	1.0
	FAN 2	3871	2	10	6		1.0	1.0
	SOCKET - FAR WALL + UNDER B.	3871	2	16	6		2×2.5	1.5
3								
3PH	HEATER.	60898	B	20	10		2.5	~~1.0~~ 2.5

* Where there are no spurs connected to a ring final circuit this value is also the $(R_1 + R_2)$ of the circuit.

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
			1.38		90	90	✓					NOT VAPOUR PROOF
			0.30		∞	∞	✓					
			0.39		∞	∞	✓					
			1.03		–	∞	✓					
												3C ARM.
			.		∞	∞	✓					3 PHASE ON
			0.11				✓					SINGLE PHASE
												BREAKERS
			0.88		∞	∞	✓					
			0.41									
			0.41									
			0.33		∞	∞	✓					
			0.45		130	∞	✓					
			0.48		160	∞	✓					
			0.49		∞	∞	✓					
							✓		60.	10	✓	
									30MA	IN SHED		
									RCD	TRIPS	IN	TIN SHED!

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET

Sheet ☐ of ☐

ELECA
Part of the ECA Group

Distribution Board Reference: DB10 – SHED BEHIND SPRAY WKSHOP

25mm In To 63A 30mA

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
	SOCKET		2	32	6		6.0	2.5
	SOCKET		2	32	6		6.0	2.5
	BLUE CABIN STORE		B	40	10		6.0	6.0
	LIGHTS		2	5	6		1.5	1.5
	PRINT STORE		2	32	6		6.0	6.0
	SPRAY SHOP			63	10		16	16

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity: ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@5$I_{\Delta n}$	Test button operation	Remarks (continue on a separate sheet if necessary)
A	J	K	L	M	N	O	P	Q	R	S	T	U	V
				0.03		Two	Two	✓	0.14				
				0.19		Two	Two	✓	0.76				
				0.37		Two	Two	✓	0.65				CABIN NEEDS ATTENTION - IP
				0.51		110	100	✓	0.63				
						~	-	✓					NO ACCESS
				0.31		Two	Two	✓	0.37				
										31	11	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS

Sheet ☐ of ☐

ELECSA
Part of the ECA Group

DB Reference no. DB11 - SITE LIGHTING + POWER Location SIDE OR YARD - RIGHT Zs at DB (Ω) 0.108 — 10mm SWA I_{pf} at DB (kA) 2.98 — 16mm STAND. Correct polarity of supply confirmed (YES) / NO Phase sequence confirmed (where appropriate)	Details of circuits and/or installed equipment vulnerable to damage when testing	Details of test instruments used (state serial and/or asset numbers) Continuity Insulation resistance Earth fault loop impedance RCD Earth electrode resistance

Tested by:
Name (CAPITALS)
Signature **Date**

Circuit details

Test results

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)	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): (R_1+R_2)*	Continuity (Ω): R_2	Insulation resistance (MΩ): Live – Live	Insulation resistance (MΩ): Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	RCD (ms): @5$I_{\Delta n}$	RCD (ms): Test button operation	Remarks (continue on a separate sheet if necessary)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	YARD SOCKETS	61009	C	32	10		2.5	6				0.168		∞	∞	✓	0.161	36	11	✓	
	YARD LIGHTS	" "	C	32	10		6	6				0.194		∞	∞	✓	0.199	27	11	✓	
	CONTACTOR + CONT.	60898	B	6	6		1.5	1.0				0.103		∞	∞	✓	0.104				

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

0.29 0.20 0.4

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

ELECA
Part of the ECA Group

Distribution Board Reference: DB 17 - PARTS CABINS

Circuit details									Test results												
		Overcurrent device				Conductor details			Ring final circuit continuity (Ω)			Continuity (Ω) (R_1+ R_2) or R_2		Insulation resistance (MΩ)		Polarity	Z_s (Ω)	RCD (ms)			Remarks (continue on a separate sheet if necessary)
Circuit number	Circuit description	BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Reference method	Live (mm²)	cpc (mm²)	r_1 (line)	r_n (neutral)	r_2 (cpc)	(R_1+R_2)*	R_2	Live – Live	Live – E	✓	Ω	@$I_{\Delta}n$	@5$I_{\Delta}n$	Test button operation	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	CABIN 3391	60898	C	32	10	E	10	10				1.84		✓	>200	✓	0.24				
	CABIN 3396	60898	C	32	10	E	10	10				0.10			>200	✓	0.31				
	CHAIN STORE	60898	C	32	10	E	10	10				0.21			>200	✓	0.42				
	CABIN 3515	60898	C	32	10	E	10	10				0.18			>200	✓	0.39				
	CABIN 3384	60898	C	32	10	E	10	10				0.09			>200	✓	0.30				
	AIR CON	61009	C	20	10	B	4	4					0.02		>200	✓	0.20	56	23	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+ R_2) of the circuit.

Form 4

Form No: ...../4

GENERIC SCHEDULE OF TEST RESULTS

DB reference no DB13 Welding Wishop
Location .....
Zs at DB (Ω) 4.54
I_{pf} at DB (kA) <4.98
Correct supply polarity confirmed ☐
Phase sequence confirmed (where appropriate) ☐

Details of circuits and/or installed equipment vulnerable to damage when testing 50 mm SURFACE

Details of test instruments used (state serial and/or asset numbers)
Continuity .....
Insulation resistance .....
Earth fault loop impedance .....
RCD .....
Earth electrode resistance .....

Tested by:
Name (Capitals) .....
Signature ..... Date .....

Circuit number	Circuit Description	Overcurrent device: BS (EN)	type	rating (A)	breaking capacity (kA)	Conductor details: Reference Method	Live (mm²)	cpc (mm²)	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): $(R_1 + R_2)$ or R_2: $(R_1 + R_2)$ *	R_2	Insulation Resistance (MΩ): Live-Live	Live-E	Polarity	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@$5I_{\Delta n}$	Test button / functionality	Remarks (continue on a separate sheet if necessary)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	OFFICE LGTS	3871	2	6	6	B	1.5	1.5				1.90			>200	✓	5.99	18	8		
	WORK LGTS	3571	2	6	6	B	1.5	1.5				3.94			>200	✓	6.01	18	8		
	SOCKETS	4293	2	32	6	B	2.5	1.5	0.23	0.75	0.40	0.29			>200	✓	5.99	18	8		
	HIGH BAY LGTS - 6039	~~3571~~	C	10	10	B	1.5	1.5				1.12			>200	✓	5.42	18	8		
	HEATER	3571	2	16	6	B	2.5	1.5				0.24			>200	✓	5.01	18	8		
	3PH ISO	3871	2	32	6	B	4.0	2.5				0.27		>200	>200	✓	5.03	18	8		
	COMPRESSOR	60898	B	20	10	C	2.5	1.5				0.11		>200	>200	✓	4.98	18	8		
	SUB MAIN DB A	60898	B	63	10	C	16	16				0.01		>200	>200	✓	4.87	18	8		
	?																				
	2PH TO LATHE	3571	2	32	6	4	6	2.5				0.13		>200	>200	✓	4.99	18	8		

* Where there are no spurs connected to a ring final circuit this value is also the $(R_1 + R_2)$ of the circuit.

Form 4

Form No: ...../4

GENERIC SCHEDULE OF TEST RESULTS

DB reference no DB 14
Location WARDLIVE
Zs at DB (Ω) .....
I_{pf} at DB (kA) .....
Correct supply polarity confirmed ☐
Phase sequence confirmed (where appropriate) ☐

Details of circuits and/or installed equipment vulnerable to damage when testing .....

Details of test instruments used (state serial and/or asset numbers)
Continuity .....
Insulation resistance .....
Earth fault loop impedance .....
RCD .....
Earth electrode resistance .....

Tested by:
Name (Capitals) .....
Signature ..... Date .....

Circuit number	Circuit Description	Overcurrent device: BS (EN)	type	rating (A)	breaking capacity (kA)	Conductor details: Reference Method	Live (mm²)	cpc (mm²)	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω) ($R_1 + R_2$) or R_2: ($R_1 + R_2$)*	R_2	Insulation Resistance (MΩ): Live-Live	Live-E	Polarity	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@5$I_{\Delta n}$	Test button / functionality	Remarks (continue on a separate sheet if necessary)
	SP MAIN SWITCH N2RD	3571	2	32	6	B	6	2.5				0.05		>200	>200	✓	0.40	15	8	✓	
	3P MAIN SOCKET	60898	B	32	10	B	6	2.5				0.09		>200	>200	✓	0.42	15	8	✓	
	2x 3 PHASE SOCKET	60898	C	32	10	B	6	2.5				0.06		>200	>200	✓	0.40	15	8	✓	
	2x 3 PHASE SOCKET	3571	2	16	6	B	6	2.5				0.15		>200	>200	✓	0.45	15	8	✓	
	2x 3 PHASE SOCKET	60898	C	32	10	B	6	2.5				0.10		>200	>200	✓	0.43	15	8	✓	

* Where there are no spurs connected to a ring final circuit this value is also the ($R_1 + R_2$) of the circuit.

SCHEDULE OF TEST RESULTS

Sheet ☐ of ☐

ELECSA
Part of the ECA Group

DB Reference no. DB 15
Location TRAFFIC W/SHOP
Zs at DB (Ω) 19.44 TT *
I_{pf} at DB (kA) 11.6
Correct polarity of supply confirmed YES / NO
Phase sequence confirmed (where appropriate)

Details of circuits and/or installed equipment vulnerable to damage when testing
BATTERY CHARGERS
*CANT LOCATE STAKE/PLATE

Details of test instruments used (state serial and/or asset numbers)
Continuity
Insulation resistance
Earth fault loop impedance
RCD
Earth electrode resistance

Tested by:
Name (CAPITALS)
Signature **Date**

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
	W/SHOP SOCKETS	61009	C	20	10		4.0	2.5
	WATER HEATERS - W/S		C	32	10		4.0	2.5
	EM LIGHTS + ALARM		B	6	10		1.5	1.5
	SPARE							
	LIGHTS		C	10	10		1.5	1.5
	SOCKETS IN CHARGE RM	61009	C	32	10		6.0	2.5
	SOCKETS IN W/SHOP	61009	C	20	10		4.0	2.5
	WELFARE UNIT		C	32	10	SWA	10	10
	CARAVAN		C	63	10	25 SWA	16	SWA
	16A HEATING OUTLET	61009	C	16	10		2.5	2.5

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@5$I_{\Delta n}$	Test button operation	Remarks (continue on a separate sheet if necessary)
A	J	K	L	M	N	O	P	Q	R	S	T	U	V
				0.61		Two	Two	✓	19.5	26	14	✓	
				0.20		Two	Two	✓	19				
				0.36		—	140	✓	19				
				1.93		-	Two	✓	19				
				0.81		Two	Two	✓	19	32	18	✓	
				0.61		Two	Two	✓	19	49	18	✓	
				0.04		Two	Two	✓	14.4				
				0.18		Two	Two	✓	0.94	36	21	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS

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ELECSA
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DB Reference no. DB16 Location OFFICE UPSTAIRS 125A MS 16/16mm Zs at DB (Ω) 13.45 I_{pf} at DB (kA) 17.10 Correct polarity of supply confirmed ~~YES~~ / NO Phase sequence confirmed (where appropriate)	Details of circuits and/or installed equipment vulnerable to damage when testing NO RCD's	Details of test instruments used (state serial and/or asset numbers) Continuity Insulation resistance Earth fault loop impedance RCD Earth electrode resistance

Tested by:
Name (CAPITALS)
Signature **Date**

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
T	CLOCK / HEATING CONTACTOR							
	SOCKETS CAR PARK SIDE	60898B	B	32	6		2.5	1.5
	SOCKETS		B	32	6		2.5	1.5
	SOCKETS - CUPBOARD		B	20	6		2.5	1.5
	HEATERS		B	20	6		2.5	1.5
	HEATERS		B	20	6		2.5	1.5
	HEATERS		B	20	6		2.5	1.5
	HEATING CONT. / FAN		B	2	6		1.5	1.5
	FUSED SPUR - DATA		C	16	10		1.5	1.5
	LIGHTING		B	10	6		1.0	1.0
	END OFFICE A/C		2	32	6		4.0	2.5
	LIGHTS							

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω) (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	@$5I_{\Delta n}$	Test button operation	Remarks (continue on a separate sheet if necessary)
A	J	K	L	M	N	O	P	Q	R	S	T	U	V
T													
	.48	.48	.64	.89		>200	>200	✓	11.4				
	.39	.37	.58	.29		>200	>200	✓	.37				
				0.44		>200	>200	✓					
				0.48		>200	>200	✓					
				0.57		>200	>200	✓					
				0.63		>200	>200	✓					
				0.01		>200	>200	✓					
				0.08		>200	>200	✓					
				1.24		—	—	✓					
				0.53		>200	>200	✓					

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET

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ELECA
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Distribution Board Reference: DB17 - OFFICE 3PH BOARD.
25mm 3C ARM 16mm CPC - STAKE . 0.18Ω - 1.191kA
BS 5419 125A .

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)
A	B	C	D	E	F	G	H	I
7	AIR CON SYS2	60898	C	20	10	SWA.	4.0	4.0
8	REAR OFFICE SUB MAIN DB B		C	40	10	SWA	10	
	REAR OFFICE SUB MAIN D		C	40		SWA	10	
	FRONT OFFICE SUB MAIN C		C	40		SWA	10	
* DOOR.	FIRE/SECURITY ALARM		B	16			1.5	1.0
	AIR CON SYS 4	3871	2	20		SWA	2.5	2.5
	SOCKETS - GROUND FL. COMPARM.	3871	2	32A			2.5	1.5
	LIGHTS		B	6			1.0	1.0
	TOILET BLOCK SUB MAIN E		B	32		SWA	6.0	6.0
	AIR CON SYS 1	3871	2	20		SWA	2.5	2.5
17	SOCKETS GROUND FL	3871	2	32		T+E	2.5	1.5
18	AIR CON SYS 3		2	20		SWA	2.5	2.5
25	AIR CON							
	3PH .		C	20		SWA	2.5	5core
	~~UPSTAIRS D~~							
	SUP D.B. DB19		C	40		SWA	10	10
	3PH							
	~~HEATERS DBA A~~		C	63		SWA	16	AOK
MAIN OFF	~~HEATERS DBA~~		C	~~63~~ 32		~~SWA~~	~~16~~ 2.5	ARM 1.5
	LIGHTS + CONT.		B	16			1.0	1.0
	LIGHTS						1.0	1.0
	GRAM 3 PH KITCHEN MAIN OFFICE	N/A .						
	SOCKETS GROUND FL.		2	32			2.5	1.5

Test results

Circuit number	Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): $(R_1+R_2)^*$	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@5$I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
A	J	K	L	M	N	O	P	Q	R	S	T	U	V
7				0.27		–	Two	✓					
8				0.21		Two	Two	✓					
				0.39		Two	Two	✓					
				0.38		Two	Two	✓					
* DOOR.				0.09		–	✓	✓					16A - 1.5
				0.56		Two	Two	✓					
	.39	.39	.81	0.34		132	130	✓					SPURS OFF RING
				.62		Two	Two	✓					
				0.21		Two	Two	✓					
				0.27		Two	Two	✓					
17	.62	.64	.92	0.51		Two	Two	✓					
18				0.40		Two	Two	✓					
25								✓					
				0.43		Two	Two	✓					
								✓					
				0.04		Two	Two	✓					
								✓					
MAIN OFF				0.14		Two	Two	✓					
				0.68		Two	Two	✓					2.5 on 32A HEATERS 1.5A CONT.
				1.04		90	80	✓					
				0.48		120	120	✓					
								✓					
	.39	.40	.59	0.28		180	Two	✓					

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS

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ELECSA
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DB Reference no. DB A Location MAIN RECEPTION Zs at DB (Ω) 13.45 TT I_{pf} at DB (kA) 17.1 10mm SWA Correct polarity of supply confirmed YES / NO 100A 30mA M/S Phase sequence confirmed (where appropriate)	Details of circuits and/or installed equipment vulnerable to damage when testing A/C DATA	Details of test instruments used (state serial and/or asset numbers) Continuity Insulation resistance Earth fault loop impedance RCD Earth electrode resistance

Tested by:
Name (CAPITALS) S MASON
Signature **Date**

Circuit details

Test results

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)	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) (R_1+R_2) or R_2: (R_1+R_2)*	Continuity (Ω) (R_1+R_2) or R_2: R_2	Insulation resistance (MΩ): Live – Live	Insulation resistance (MΩ): Live – E	Polarity: ✓	Z_s (Ω)	RCD (ms): @$I_{\Delta n}$	RCD (ms): @5$I_{\Delta n}$	RCD (ms): Test button operation	Remarks (continue on a separate sheet if necessary)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	RCD M/S																				
	LIGHTS	60898	C	10	10		1.0	1.0				0.30		∞	∞	✓	16.4				
	LIGHTS	"	C	10	10		1.0	1.0				0.91		130	120	✓	16				
	SOCKETS	61009	B	32	6		2.5	1.5	0.51	0.52	0.74	0.43		∞	∞	✓	0.61	28	18	✓	
	SOCKETS	61009	B	32	6		2.5	1.5	0.46	0.46	0.61	0.41		180	∞	✓		29	14	✓	
	AIR CON	60898	C	16	10		2.5	1.5						∞	∞						
	A/C	"	C	16	10		2.5	1.5						∞	∞						
	A/C	"	C	32	10		2.5	1.5						∞	∞						
																		19	19	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS – CONTINUATION SHEET Sheet ☐ of ☐

ELECSA
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Distribution Board Reference: DB B – OFFICE CABINS 10mm
↳ B-D – 63A 30mA 1m/s
58.4Ω Ze – TT

Circuit details

Circuit number	Circuit description	Overcurrent device: BS (EN)	Type	Rating (A)	Breaking capacity (kA)	Conductor details: Reference method	Live (mm²)	cpc (mm²)
A	B	C	D	E	F	G	H	I
	SOCKETS	60898	B	32	6		2.5	1.5
	LIGHTS	"	B	6	6		1.0	1.0
	WATER HEATER	"	B	32	6		4.0	4.0
	ARCHIVE STORE	"	B	32	~~6~~		2.5	ARM.
	DB-C-YARD SIDE OFFICE	63A	30MA	10mm	TT	+0.2	3A	
	SOCKETS	60898	B	32	6		2.5	1.5
	LIGHTS	"	B	6	6		1.5	1.5
	HEATER	"	B	16	6		2.5	1.5
	DB-D –	63A	30MA		TT	Ze=1.63Ω	19.7KA	
	SOCKETS	60898	B	32	6		2.5	1.5
	LIGHTS	60898	B	6	6		1.0	1.0
	PANEL HEATER	"	B	16	6		2.5	1.5
	PANEL HEATER	"	B	16	6		2.5	1.5

Test results

Ring final circuit continuity (Ω): r_1 (line)	r_n (neutral)	r_2 (cpc)	Continuity (Ω): (R_1+R_2)*	R_2	Insulation resistance (MΩ): Live – Live	Live – E	Polarity ✓	Z_s (Ω)	RCD (ms): @$I_\Delta n$	@$5I_\Delta n$	Test button operation	Remarks (continue on a separate sheet if necessary)
J	K	L	M	N	O	P	Q	R	S	T	U	V
.33	.33	.50	.28		>200	>200	✓					
			0.29		>200	>200	✓					
			0.24		>200	>200	✓					
			0.36		–	–						2.5 ON 32A?
									50	13	✓	
.57	.58	.93	.46		120	120	✓	0.66				STAKE NOT IN
			0.39		–	>200	✓					
			0.04		>200	>200	✓					
0.32	0.30	0.42	0.29		>200	>200	✓					
			0.30		>200	>200	✓					
			0.22		>200	>200	✓					
			0.26		>200	>200	✓					
									25	16	✓	

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.

SCHEDULE OF TEST RESULTS

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DB Reference no. DB E+F	Details of circuits and/or installed equipment vulnerable to damage when testing	Details of test instruments used (state serial and/or asset numbers)
Location OFFICE CABINS		Continuity
Zs at DB (Ω)		Insulation resistance
I_{pf} at DB (kA)		Earth fault loop impedance
Correct polarity of supply confirmed YES / NO		RCD
Phase sequence confirmed (where appropriate)		Earth electrode resistance

Tested by:
Name (CAPITALS)
Signature **Date**

Circuit details

Test results

Circuit number	Circuit description	Overcurrent device: BS (EN)	Overcurrent device: Type	Overcurrent device: Rating (A)	Overcurrent device: Breaking capacity (kA)	Conductor details: Reference method	Conductor details: Live (mm²)	Conductor details: cpc (mm²)	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) (R_1+R_2) or R_2: (R_1+R_2)*	Continuity (Ω) (R_1+R_2) or R_2: R_2	Insulation resistance (MΩ): Live – Live	Insulation resistance (MΩ): Live – E	Polarity ✓	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)
	E-BACKOFFICE (18)																				
A	RCD¹ B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	DADO SOCKETS	60898	B	20	6		2.5	1.5				0.54		∞	∞	✓					
	SOCKETS	60898	B	20	6		2.5/4	1.5				0.62		∞	∞	✓		22	14		
	RCD²																				
	LIGHTS	60898	B	6	6		1.5	1.0				0.39		150	160	✓					
	AIR CON																				
	EXTERNAL STORE																	26	11		
	DB F - H+S ADVISOR.																				
	SOCKETS	60898	B	32	6		2.5	1.5	.24	.25	.36	0.26		∞	∞	✓					
	AIC	60898	B	16	6		2.5	1.5				0.38		∞	∞	✓					
	LIGHTS	60898	B	6	6		1.0	1.0				0.44		∞	∞	✓					

* Where there are no spurs connected to a ring final circuit this value is also the (R_1+R_2) of the circuit.