

Certificate Reference: LS 0747 Fleet Air Arm Museum

1 DETAILS OF THE MINOR WORKS

Client address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Installation address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Description of the minor works: Installation of RCBO onto circuit 8 of DB 1. (Servey extra coffee machine). No alteration to the existing circuit.

Details of departures, if any, from BS 7671:2008 as amended:

None

Details of permitted exceptions (Regulation 411.3.3):

None

Date minor works completed:

12/09/2016

Risk assessment attached:

✓

2 INSTALLATION DETAILS

System type and earthing arrangements:

TN-C-S

✓

TN-S

N/A

TT

N/A

IT

N/A

Method of fault protection:

ADS

Protective device for the modified circuit:

BS (EN):

BS EN 61009 RCD/RCBO

Type:

C

Rating: 32 A

Residual current device (if applicable):

BS (EN):

BS EN 61009 RCD/RCBO

Type: N/A

Rating (IΔn): 30 mA

Wiring type of the modified circuit: Type: PVC/PVC cables

Reference Method: A

Live csa:

4 mm²

cpc conductor csa:

1.5 mm²

Maximum disconnection time permitted by BS 7671:

0.4 s

Maximum Z_s permitted by BS 7671:

0.68 Ω

Comments, if any, on existing installation, including adequacy of earthing and bonding arrangements (See Regulation 132.16):

None

3 ESSENTIAL TESTS

Necessary inspections have been undertaken:

✓

Protective bonding satisfactory:

✓

Instrument Serial No(s): Multifunctional:

Earth continuity satisfactory:

✓

Polarity satisfactory:

✓

Continuity:

1618132

Circuit resistance:

Maximum measured earth fault loop impedance Z_s:

N/A Ω

Insulation resistance:

R₁+R₂: N/A Ω or R₂: N/A Ω

RCD operation (if applicable):

Insulation resistance:

Disconnection time at IΔn:

17.6 ms

Earth fault loop impedance:

Live - Live: Lim MΩ

Disconnection time at 5IΔn:

7.4 ms

RCD:

Live - Earth: Lim MΩ

Satisfactory test button operation:

✓

4 DECLARATION

I/we CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with BS 7671:2008 (LET Wiring Regulations), amended to 2015, and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with BS 7671 except as detailed in Section 1 above.

Trading Title: Wessex Electricals

Address: Wincombe Lane
Shaftesbury
Dorset

Registration Number (if applicable): 005682

Telephone Number: 01747 852878

Postcode: SP7 8PJ

Name: Liam Samways

Position: Electrician

Signature: *Liam Samways*

Date: 12/09/2016

Report reviewed and confirmed by:

Name: Tim Latter

Position: QS Electrical Manager

Signature: _____

Date: 21/09/2016

Certificate Reference: **LS 0750 Flee Air Arm Museum**

1 DETAILS OF THE MINOR WORKS

Client: **Fleet Air Arm Museum**
address: **RNAS Yeovilton, Somerset, BA22 8HT**

Installation address: **Fleet Air Arm Museum**
RNAS Yeovilton, Somerset, BA22 8HT

Description of the minor works: **Installation of RCBO onto circuit 12 of DB 1. (Servery item 6). No alteration to the existing circuit.**

Details of departures, if any, from BS 7671:2008 as amended:

None

Details of permitted exceptions (Regulation 411.3.3):

None

Date minor works completed: **12/09/2016**

Risk assessment attached:

2 INSTALLATION DETAILS

System type and earthing arrangements: **TN-C-S** **TN-S** **N/A** **TT** **N/A** **IT** **N/A**

Method of fault protection: **ADS**

Protective device for the modified circuit: **BS (EN): BS EN 61009 RCD/RCBO** Type: **C** Rating: **16 A**

Residual current device (if applicable): **BS (EN): BS EN 61009 RCD/RCBO** Type: **AC** Rating (IΔn): **30 mA**

Wiring type of the modified circuit: **Type: PVC/PVC cables** Reference Method: **A** Live csa: **4 mm²** CPC conductor csa: **1.5 mm²**

Maximum disconnection time permitted by BS 7671: **0.4 s** Maximum Z_s permitted by BS 7671: **1.37 Ω**

Comments, if any, on existing installation, including adequacy of earthing and bonding arrangements (See Regulation 132.16):

None

3 ESSENTIAL TESTS

Necessary inspections have been undertaken: Protective bonding satisfactory: Instrument Serial No(s): Multifunctional: **1618132**

Earth continuity satisfactory: Polarity satisfactory: Continuity: **N/A**

Circuit resistance: **N/A** Maximum measured earth fault loop impedance Z_s: **Ω** Insulation resistance:

R₁+R₂: **N/A** Ω or R₂: **N/A** Ω RCD operation (if applicable): **17.6 ms** Earth fault loop impedance:

Insulation resistance: **17.6 ms**

Live - Live: **LIm MΩ** Disconnection time at 5IΔn: **7.2 ms**

Live - Earth: **LIm MΩ** Satisfactory test button operation: RCD:

4 DECLARATION

I/we CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with BS 7671:2008 (IET Wiring Regulations), amended to 2015, and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with BS 7671 except as detailed in Section 1 above.

Trading Title: **Wessex Electricals**

Address: **Wincombe Lane**

Shaftesbury

Dorset

Registration Number (if applicable): **005682**

Telephone Number: **01747 852878**

Postcode: **SP7 8PJ**

Name: **Liam Samways** Position: **Electrician** Signature: *Liam Samways* Date: **12/09/2016**

Report reviewed and confirmed by:

Name: **Tim Latter** Position: **QS Electrical Manager** Signature: *Tim Latter* Date: **20/09/2016**

Certificate Reference: LS 0748 Fleet Air Arm Museum

1 DETAILS OF THE MINOR WORKS

Client address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Installation address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Description of the minor works: Installation of RCBO onto circuit 10 of DB 1. (Servery item 4). No alteration to the existing circuit.

Details of departures, if any, from BS 7671:2008 as amended:

None

Details of permitted exceptions (Regulation 411.3.3):

None

Date minor works completed:

12/09/2016

Risk assessment attached:

✓

2 INSTALLATION DETAILS

System type and earthing arrangements: TN-C-S ✓ TN-S N/A TT N/A IT N/A

Method of fault protection:

ADS

Protective device for the modified circuit: BS (EN): BS EN 61009 RCD/RCBO Type: C Rating: 16 A

Residual current device (if applicable): BS (EN): BS EN 61009 RCD/RCBO Type: AC Rating (IΔn): 30 mA

Wiring type of the modified circuit: Type: PVC/PVC cables Reference Method: A Live csa: 4 mm² cpc conductor csa: 1.5 mm²

Maximum disconnection time permitted by BS 7671: 0.4 s Maximum Z_spermitted by BS 7671: 1.37 Ω

Comments, if any, on existing installation, including adequacy of earthing and bonding arrangements (See Regulation 132.16):

None

3 ESSENTIAL TESTS

Necessary inspections have been undertaken:

✓

Protective bonding satisfactory:

✓

Instrument Serial No(s): Multifunctional:

Earth continuity satisfactory:

✓

Polarity satisfactory:

✓

Continuity: 1618132

Circuit resistance:

Maximum measured earth fault loop impedance Z_s:

N/A Ω

R₁+R₂: N/A Ω or R₂: N/A Ω RCD operation (if applicable):

Insulation resistance:

Disconnection time at IΔn:

17.6 ms

Earth fault loop impedance:

Live - Live:

LIM MΩ

Disconnection time at 5IΔn:

7.4 ms

RCB:

Live - Earth:

LIM MΩ

Satisfactory test button operation:

✓

4 DECLARATION

I/we CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with BS 7671:2008 (LET Wiring Regulations), amended to 2015, and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with BS 7671 except as detailed in Section 1 above.

Trading Title: Wessex Electricals

Address: Wincombe Lane
Shaftesbury
Dorset

Registration Number (if applicable): 005682

Telephone Number: 01747 852878

Postcode: SP7 8PJ

Name: Liam Samways Position: Electrician Signature: *Liam Samways* Date: 12/09/2016

Report reviewed and confirmed by:

Name: Tim Latter Position: QS Electrical Manager Signature: *Tim Latter* Date: 21/09/2016

MINOR ELECTRICAL INSTALLATION WORKS
To be used only for minor electrical work which does not include the provision of a new circuit

Certificate Reference: **LS 0751 Fleet Air Arm Museum**

1 DETAILS OF THE MINOR WORKS

Client address: **Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT**

Installation address: **Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT**

Description of the minor works: **Installation of RCBO onto circuit 15 of DB 1. (Servery item 9). No alteration to the existing circuit.**

Details of departures, if any, from BS 7671:2008 as amended:

None

Details of permitted exceptions (Regulation 411.3.3):

None

Date minor works completed:

12/09/2016

Risk assessment attached:

2 INSTALLATION DETAILS

System type and earthing arrangements:

TN-C-S

TN-S

N/A

TT

N/A

IT

N/A

ADS

Protective device for the modified circuit:

BS (EN):

BS EN 61009 RCD/RCBO

Type:

B

Rating:

32 A

Residual current device (if applicable):

BS (EN):

BS EN 61009 RCD/RCBO

Type:

AC

Rating (I_{Δn}):

30 mA

Wiring type of the modified circuit:

Type: PVC/PVC cables

Reference Method:

A

Live csa:

4 mm²

cpc conductor csa:

1.5 mm²

Maximum disconnection time permitted by BS 7671:

0.4 s

Maximum Z_s permitted by BS 7671:

1.37 Ω

Comments, if any, on existing installation, including adequacy of earthing and bonding arrangements (See Regulation 132.16):

None

3 ESSENTIAL TESTS

Necessary inspections have been undertaken:

Protective bonding satisfactory:

Instrument Serial No(s): Multifunctional:

1618132

Earth continuity satisfactory:

Polarity satisfactory:

Continuity:

1618132

Circuit resistance:

Maximum measured earth fault loop impedance Z_s:

N/A Ω

R₁+R₂: N/A Ω or R₂: N/A Ω

RCD operation (if applicable):

Insulation resistance:

Insulation resistance:

Disconnection time at I_{Δn}:

17.4 ms

Earth fault loop impedance:

Live - Live:

LIM MΩ

Disconnection time at 5I_{Δn}:

7.4 ms

Live - Earth:

LIM MΩ

Satisfactory test button operation:

RCD:

4 DECLARATION

I/we CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with BS 7671:2008 (IET Wiring Regulations), amended to 2015, and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with BS 7671 except as detailed in Section 1 above.

Trading Title: **Wessex Electricals**

Address:

**Wincombe Lane
Shaftesbury
Dorset**

Registration Number (if applicable): **005682**

Telephone Number: **01747 852878**

Postcode: **SP7 8PJ**

Name:

Liam Samways

Position:

Electrician

Signature:

Liam Samways

Date: **12/09/2016**

Report reviewed and confirmed by:

Name:

Tim Latter

Position:

QS Electrical Manager Signature:

Date: **20/09/2016**

Certificate Reference: LS 0749 Fleet Air Arm Museum

1 DETAILS OF THE MINOR WORKS

Client address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Installation address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Description of the minor works: Installation of RCBO onto circuit 11 of DB 1. (Serverry item 5). No alteration to the existing circuit.

Details of departures, if any, from BS 7671:2008 as amended: None

Details of permitted exceptions (Regulation 411.3.3): None

Date minor works completed: 12/09/2016

Risk assessment attached:

2 INSTALLATION DETAILS

System type and earthing arrangements: TN-C-S

TN-S

N/A

TT

N/A

IT

N/A

Method of fault protection: ADS

Protective device for the modified circuit: BS (EN):

BS EN 61009 RCD/RCBO

Type: C

Rating: 16 A

Residual current device (if applicable): BS (EN):

BS EN 61009 RCD/RCBO

Type: AC

Rating (I_{Δn}): 30 mA

Wiring type of the modified circuit: Type: PVC/PVC cables

Reference Method: A

Live csa: 4

mm² cpc conductor

1.5 mm² csa:

Maximum disconnection time permitted by BS 7671: 0.4 s Maximum Z_s permitted by BS 7671: 1.37 Ω

Comments, if any, on existing installation, including adequacy of earthing and bonding arrangements (See Regulation 132.16):

None

3 ESSENTIAL TESTS

Necessary inspections have been undertaken:

Protective bonding satisfactory:

Instrument Serial No(s): Multifunctional:

Earth continuity satisfactory:

Polarity satisfactory:

1618132

Circuit resistance:

Maximum measured earth fault loop impedance Z_s:

N/A Ω

Continuity:

R₁+R₂: N/A Ω or R₂: N/A Ω

RCD operation (if applicable):

Insulation resistance:

Insulation resistance:

Disconnection time at I_{Δn}:

17.6 ms

Earth fault loop impedance:

Live - Live: Lim MΩ

Disconnection time at 5I_{Δn}:

7.4 ms

RCD:

Live - Earth: Lim MΩ

Satisfactory test button operation:

4 DECLARATION

I/we CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with BS 7671:2008 (JET Wiring Regulations), amended to 2015, and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with BS 7671 except as detailed in Section 1 above.

Trading Title: Wessex Electricals

Address: Wincombe Lane
Shaftesbury
Dorset

Registration Number (if applicable): 005682

Telephone Number: 01747 852878

Postcode: SP7 8PJ

Name: Liam Samways

Position: Electrician

Signature: *Liam Samways*

Date: 12/09/2016

Report reviewed and confirmed by:

Name: Tim Latter

Position: QS Electrical Manager Signature: *Tim Latter*

Date: 20/09/2016

Certificate Reference: LS 0746 Fleet Air Arm Museum

1 DETAILS OF THE MINOR WORKS

Client address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Installation address: Fleet Air Arm Museum
RNAS Yeovilton, Somerset, BA22 8HT

Description of the minor works: Installation of RCBO onto circuit 6 of DB 1. (Restaurant socket ring). No alteration to the existing circuit.

Details of departures, if any, from BS 7671:2008 as amended:

None

Details of permitted exceptions (Regulation 411.3.3):

None

Date minor works completed:

12/09/2016

Risk assessment attached:

✓

2 INSTALLATION DETAILS

System type and earthing arrangements:

TN-C-S

✓

TN-S

N/A

TT

N/A

IT

N/A

Method of fault protection:

ADS

Protective device for the modified circuit:

BS (EN):

BS EN 61009 RCD/RCBO

Type: B

Rating: 32

A

Residual current device (if applicable):

BS (EN):

BS EN 61009 RCD/RCBO

Type: AC

Rating (IΔn): 30

mA

Wiring type of the modified circuit:

Type: PVC/PVC cables

Reference Method:

A

Live csa:

4

cpc conductor csa:

1.5 mm²

Maximum disconnection time permitted by BS 7671:

0.4

s

Maximum Zs permitted by BS 7671:

1.37

Comments, if any, on existing installation, including adequacy of earthing and bonding arrangements (See Regulation 132.16):

None

3 ESSENTIAL TESTS

Necessary inspections have been undertaken:

✓

Protective bonding satisfactory:

✓

Instrument Serial No(s):

Multifunctional:

1618132

Earth continuity satisfactory:

✓

Polarity satisfactory:

✓

Continuity:

Maximum measured earth fault loop impedance Zs:

N/A

Ω

Circuit resistance:

RCD operation (if applicable):

Insulation resistance:

R₁+R₂:

N/A

Ω

Disconnection time at IΔn:

14.4

ms

Earth fault loop impedance:

Insulation resistance:

Disconnection time at 5IΔn:

7.2

ms

RCB:

Live - Earth:

100

MΩ

Satisfactory test button operation:

✓

4 DECLARATION

I/we CERTIFY that the said works do not impair the safety of the existing installation, that the said works have been designed, constructed, inspected and tested in accordance with BS 7671:2008 (IET Wiring Regulations), amended to 2015, and that the said works, to the best of my/our knowledge and belief, at the time of my/our inspection, complied with BS 7671 except as detailed in Section 1 above.

Trading Title: Wessex Electricals

Address: Wincombe Lane
Shaftesbury
Dorset

Registration Number
(if applicable):

005682

Telephone Number:

01747 852878

Postcode: SP7 8PJ

Name: Liam Samways

Position: Electrician

Signature:

Liam Samways

Date: 12/09/2016

Report reviewed and confirmed by:

Name: Tim Latter

Position: QS Electrical Manager

Signature:

Date: 22/09/2016

Certificate Reference:

023984002

DETAILS OF THE CLIENT

Client Address: **FLEET AIR ARM MUSEUM, RNAS YEOVILTON, ILCHESTER, SOMERSET, BA22 8HT**

DETAILS OF THE INSTALLATION

Installation Address: **FLEET AIR ARM MUSEUM, RNAS YEOVILTON, ILCHESTER, SOMERSET, BA22 8HT**
 Extent of the installation covered by this certificate: **Extend the supply for the new customer desk at entrance and install a new consumer unit with 2 outgoing robo circuits and install 13 twin sockets in total**

The installation is: **New Installation** N/A Addition to an existing installation Alteration to an existing installation N/A

DESIGN

I/We being the person(s) responsible for the design 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 design, hereby CERTIFY that the design work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2008, amended to 2015 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): **None** Risk assessment attached N/A
 Details of permitted exceptions (Regulations 411.3.3): **None**

The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.
For the DESIGN of the installation:

Name: **N/A** Position: **N/A** Signature: **N/A** Date: **N/A**

Where there is divided responsibility for the design:

Name: **N/A** Position: **N/A** Signature: **N/A** Date: **N/A**

CONSTRUCTION

I/We being the person(s) responsible for the construction 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 construction, hereby CERTIFY that the construction work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2008, amended to 2015 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): **None**
 The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.
For the CONSTRUCTION of the installation:

Name: **N/A** Position: **N/A** Signature: **N/A** Date: **N/A**

INSPECTION AND TESTING

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 CERTIFY that the inspection and testing work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2008, amended to 2015 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): **None**
 The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.
For the INSPECTION AND TESTING of the installation:

Name: **N/A** Position: **N/A** Signature: **N/A** Date: **N/A**

Report reviewed and confirmed by:

Name: **Position:** Signature: Date:

DESIGN, CONSTRUCTION, INSPECTION AND TESTING

I/We being the person(s) responsible for the design, construction, 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 design, construction, inspection and testing, hereby CERTIFY that the design work for which I/we have been responsible is to the best of my/our knowledge and belief in accordance with BS 7671:2008, amended to 2015 except for the departures, if any, detailed as follows.

Details of departures from BS 7671 (Regulations 120.3, 133.5): **None**
 The extent of liability of the signatory/signatories is limited to the work described above as the subject of this certificate.
For the DESIGN, the CONSTRUCTION, and the INSPECTION AND TESTING of the installation:

Name: **Paul Pearce** Position: **Qualified Supervisor** Signature: *Paul Pearce* Date: **26/06/2017**

Report reviewed and confirmed by:

Name: **Paul Pearce** Position: **Qualified Supervisor** Signature: *Paul Pearce* Date: **27/06/2017**

NEXT INSPECTION

I/We the designer(s), RECOMMEND that this installation is further inspected and tested after an interval of not more than: **5 Years or change of tenant/owner**

This form is based on the model shown in Appendix 6 of BS 7671:2008 amended 2015.