

Type Examination Certificate

This is to certify that:

Moflash Signalling Ltd
11 Upper Conybere Street
Highgate
Birmingham
B12 0EB
United Kingdom

Holds Certificate Number:

BSI/UK/3.53/738807

In respect of:

UK/3.53 - Fire alarm devices – Sounders

Product : YODALARM - YO3 Series (YA30 AC/DC), YO4 Series (YA40/YL40 AC/DC, YO5 Series (YA50/YL50 AC/DC), YO8 Series (YA80/YL80/YA8S/YL8S AC/DC)

Specified Standard : EN 54-3:2014 incl. A1:2019, IEC 60092-504:2016, IEC 60533:2015.

On the basis of our examination under the requirements of the Merchant Shipping (Marine Equipment) Regulations (SI 2016/1025) as amended for Conformity Assessment Procedure Module B - Type Examination.

For and on behalf of BSI, an Approved Body for the above Regulation (Approved Body Number 0086):



Shahm Barhom, Group Product Certification Director

First Issued: 2021-03-05

Latest Issue: 2024-05-29

Effective Date: 2024-05-29

Expiry Date: 2026-03-04



UK Approved Body Authorised
by the MCA

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Schedule of Approval

Models Covered:

YO3 Series - YA30 AC/DC Units (Sounder only)

Model YA30**abc** (100dB(A) @ 1 Meter)

- a** = D (24Vdc), F (48Vdc), L (115Vac), N (230Vac), H (110Vdc)
- b** = RF Material (Red Flame)
- c** = WR (IP rating IP65)

YO4 Series - YA40 AC/DC Units (Sounder only), YL40 AC/DC (Sounder + Strobe)

Model YA40**abc** (106dB(A) @ 1 Meter)

- a** = D (24Vdc), F (48Vdc), L (115Vac), N (230Vac), H (110Vdc),
- b** = Material RF (Red Flame), RN (Red Normal), WN (White Normal)
- c** = WR (IP rating IP65)

Model YL40**abcde** (106dB(A) @ 1 Meter)

- a** = D25 (24Vdc 2.5 Joules), D50 (24Vdc 5.0 Joules), F50 (48Vdc 5.0 Joules), L50 (115Vac 5.0 Joules), N50 (230Vac 5.0 Joules), DL (24Vdc) LED, FL (48Vdc) LED, HL (110Vdc) LED, LL (115Vac) LED, NL (230Vac) LED
- b** = Lens Colour A (Amber), R (Red), G (Green), O (Opal), B (Blue), C (Clear), M (Magenta), Y (Yellow)
- c** = HV (Hi-Vis option), 25 (25 LED version)
- d** = Material RF (Red Flame), RN (Red Normal), WN (White Normal)
- e** = WR (IP rating IP 65)

YO5 Series - YA50 AC/DC Units (Sounder only), YL50 AC/DC (Sounder + Strobe)

Model YA50**abc** (110dB(A) @ 1 Meter)

- a** = D (24Vdc), F (48Vdc), L (115Vac), N (230Vac), H (110Vdc)
- b** = Material RF (Red Flame)
- c** = WR (IP rating IP65)

Model YL50**abcde** (106dB(A) @ 1 Meter)

- a** = D25 (24Vdc 2.5 Joules), D50 (24Vdc 5.0 Joules), F50 (48Vdc 5.0 Joules), L50 (115Vac 5.0 Joules), N50 (230Vac 5.0 Joules), DL (24Vdc) LED, FL (48Vdc) LED, HL (110Vdc) LED, LL (115Vac) LED, NL (230Vac) LED
- b** = Lens Colour A (Amber), R (Red), G (Green), O (Opal), B (Blue), C (Clear) M (Magenta), Y (Yellow)
- c** = HV (Hi-Vis option), 25 (25 LED version)
- d** = Material RF (Red Flame)
- e** = WR (IP rating IP 65)

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Models Covered (continued):

Y08 Series - YA80 AC/DC Units (Sounder only), YL80 AC/DC (Sounder + Strobe)
YA8S AC/DC Units (Sounder only), YL8S AC/DC (Sounder + Strobe)

Model YA80**abcd** (115dB(A) @ 1 Meter)

- a** = D (24Vdc), F (48Vdc), L (115Vac), N (230Vac),
- b** = Material RF (Red Flame)
- c** = SU Super Unit **YA8S** Model (120dB(A) @ 1 Meter)
- d** = WR (IP rating IP65)

Model YL80**abcdef** (115dB(A) @ 1 Meter)

- a** = D25 (24Vdc 2.5 Joules), D50 (24Vdc 5.0 Joules), F50 (48Vdc 5.0 Joules), DL (24Vdc) LED, FL (48Vdc) LED, HL (110Vdc) LED, LL (115Vac) LED, NL (230Vac) LED, L50 (115Vac 5.0 Joules, N50 (230Vac 5.0 Joules)
- b** = Lens Colour A (Amber), R (Red), G (Green), O (Opal), B (Blue), C (Clear) M (Magenta), Y (Yellow)
- c** = Material RF (Red Flame)
- d** = HV (Hi-Vis option), 25 (25 LED version)
- e** = SU Super Unit **YL8S** Model (120dB(A) @ 1 Meter)
- f** = WR (IP rating IP 65)

Restrictions:

The Strobe functionality is outside the scope of this approval.

Approved Tones :

Tone:	Description	Frequency
A	Alternate two tone	800 – 1000Hz
B	Slow Whoop	500 – 1200Hz
C	Reverse Sweep	1200 – 500Hz
D	AFNOR Alternate two tone	440 – 554Hz
E	Interrupted Tone	420Hz
F	ISO8201 Evacuation tone	800 – 1000Hz
G	Interrupted	1000Hz
H	Continuous tone	1000Hz

IC1 – ST Microcontroller Part Ref STM32L010R8, Software Code Ref Moflash Rev 4

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BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A member of BSI Group of Companies.

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Schedule of Approval

Approval Documentation that forms part of this certification:

	General Assy DWG			PCB DWG			Circuit DWG		
MODELS	DWG NO	REV	DATE	DWG NO	REV	DATE	DWG NO	REV	DATE
YA30	310301	B	18/05/2021	D7157	11	23/11/2011	WD9520	5	08/09/2012
				D7158	11	23/11/2011	WD9521	4	28/06/2012
				D7240	7	30/11/2011	WD9531	6	30/11/2011
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021
YA40	310401	B	22/04/2021	D7157	11	23/11/2011	WD9520	5	08/09/2012
				D7158	11	23/11/2011	WD9521	4	28/06/2012
				D7240	7	30/11/2011	WD9531	6	30/11/2011
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021
YL40	310400	B	22/04/2021	D7157	11	23/11/2011	WD9520	5	08/09/2012
				D7158	11	23/11/2011	WD9521	4	28/06/2012
				D7240	7	30/11/2011	WD9531	6	30/11/2011
				D7207	9	10/11/2013	WD9525	4	08/09/2012
				D7206	12	10/10/2013	WD9526	4	10/10/2013
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021
YA50	310501	B	05/02/2021	D7157	11	23/11/2011	WD9520	5	08/09/2012
				D7158	11	23/11/2011	WD9521	4	28/06/2012
				D7240	7	30/11/2011	WD9531	6	30/11/2011
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021
YL50	310500	B	05/02/2021	D7157	11	23/11/2011	WD9520	5	08/09/2012
				D7158	11	23/11/2011	WD9521	4	28/06/2012
				D7240	7	30/11/2011	WD9531	6	30/11/2011
				D7206	12	10/10/2013	WD9526	4	10/10/2013
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021

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YA80	310801	B	04/02/2021	D7160	9	14/07/2014	WD9522	5	21/07/2014
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021
YL80	310800	B	04/02/0221	D7160	9	14/07/2014	WD9522	5	21/07/2014
				D7207	9	10/11/2013	WD9525	4	08/09/2012
				D7206	12	10/10/2013	WD9526	4	10/10/2013
				C&S012PCB	1	05/03/2021	C&S012	1	20/01/2021
Supporting Documents									
Technical File		BSI Reference - 3620439, 30161315							

The products were assessed against the requirements of the Merchant Shipping (Marine Equipment) Regulation SI 2016/1025 as amended & MSN 1874 (M+F) Amendment 8 (UK/3.53 Row 2 of 2).

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Certificate Amendment Record and BSI internal Review relating to this Certificate

Issue date	Comments	BSI Review No.
March 2021	First Issue	0086:21:3318728
September 2022	Issue 2 to include alternative IC U1 STM32L010R8T6	0086:22:3620480
May 2024	Issue 3 to include LED beacon models	0086:24:30161316

Conditions of Certification:

- i) This certificate remains valid unless cancelled or revoked, provided the conditions listed below are complied with and the equipment remains satisfactory in service
- ii) The equipment detailed on page 1 on this certificate is to be manufactured in accordance with Conformity to Type Based on Quality Assurance of the Production Process (Module D) of the Merchant Shipping (Marine Equipment) Regulation SI 2016/1025, as amended.
- iii) SOLAS 74 Reg. II-2/7, SOLAS 74 Reg. X/3, IMO Res.MSC.98(73)-(FSS Code) 9, IMO Res.MSC.36(63)-(1994 HSC Code) 7, IMO Res.MSC.97(73)-(2000 HSC Code) 7, IMO Res.MSC.98(73)-(FSS Code) 9. IMO MSC.1/Circ.1242, IMO MSC.1/Circ.1487 requirements, as applicable.
- iv) If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
- v) Production tests are to be conducted in accordance with the applicable requirements of the IMO/SOLAS Requirements and applicable designated standards and be recorded by the manufacturer in accordance with the approved Conformity to Type Based on Quality Assurance of the Production Process (Module D) of the Marine Equipment Directive & the Merchant Shipping (Marine Equipment) Regulation SI 2016/1025, as amended.
- vi) Products with a valid UK Type Examination (Module B) Certificate & Conformity to Type Based on Quality Assurance of the Production Process (Module D) certificate to have the "Mark of Conformity" affixed and be issued with a "Declaration of Conformity".
- vii) Detailed User instructions are to be provided with each product.

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