



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx TSA 11.0023

Issue No: 3

Certificate history:

[Issue No. 3 \(2017-04-07\)](#)

[Issue No. 2 \(2016-04-29\)](#)

[Issue No. 1 \(2014-05-23\)](#)

[Issue No. 0 \(2011-06-07\)](#)

Status: **Current**

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Date of Issue: **2017-04-07**

Applicant: **Eflare Corporation Pty Ltd**
Suite 4, 750 Blackburn Road
Clayton, Victoria 3168
Australia

Equipment: **Eflare Compact Warning Beacon 250, 350, 280 magenta, 280 / 290, 700 magenta, 700, 800, 800 BAST, 800 aviation, 500/600 series.**

Optional accessory:

Type of Protection: **Intrinsic Safety 'ic'**

Marking:
Eflare Corporation Pty Ltd
Eflare Compact Warning Beacon
Ex ic IIC T4 Gc
IECEX TSA 11.0023
S/N: _____

*Approved for issue on behalf of the IECEx
Certification Body:*

Ujen Singh

Position:

Quality and Certification Manager

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](#).

Certificate issued by:

TestSafe Australia
919 Londonderry Road
Londonderry NSW 2753
Australia





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Manufacturer: **Verifan Limited, Hong Kong**
Unit 5-6, Wing Hang Industrial Building
13-29 Kwai Hei Street, Kwai Chung N.T.
Hong Kong

Additional Manufacturing location(s):

Shenzhen Value Tech Industrial Ltd

No. 15, Area C, Buyong Industrial Zone, Shajing Town, Baoan District, Shen Zhen City, Guangdong Province
China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[AU/TSA/ExTR10.0028/01](#)

[AU/TSA/ExTR14.0017/00](#)

[AU/TSA/ExTR17.0005/00](#)

Quality Assessment Report:

[AU/TSA/QAR11.0001/05](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Eflare Compact Warning Beacon is a battery operated beacon device with options for different colours and whether the beacon flashes or is continuously lit.

The apparatus is fully self contained in a cylindrical moulded plastic enclosure, the batteries are removed from the bottom by a screw on cap, the beacon is turned on and off by rotating the top clear lens moulding that actuates a switch controlling power to the device.

Sealing is achieved by O rings installed in the main body moulding for the bottom cap and the top rotating clear lens. The Eflare Compact Warning Beacon may also optionally be inserted into a moulded rubber mounting base that holds the Beacon in an upright position on a level surface.

More details, please refer to the Annexe of the certificate.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

For Issue 3:

1. Added 250 series – same body and lens as 280 series, the lens has been updated from the EF350 series (already accredited) to increase the brightness and the body of the EF350 series has been slightly modified (position of lens pins) to accommodate new lens. The lens is the same as used in the 700 series which is already accredited.
2. Added 280 Series – as per 250 series but with different PCB.
3. Added 290 series – uses the same PCB as per the 280 series, the battery cassette changes to allow for the longer body (same body as is 700 series).
4. 500/600 series – New body for a rail customer in USA and called it the RB range (rail Beacon), no changes to PCB – only a new body with same interface to lens.
5. 700 series updates – improvements have been made to the PCB to allow for alternative switching, sunlight sensor and improved performance. The current design and functions have been left in the design as an option.
6. 800 series updates – improvements have been made to the PCB to allow for alternative switching, sunlight sensor and improved performance. The current design and functions have been left in the design as an option.
7. Added 280M – uses the same lens and body as the 280 series but a different PCB design allowing for magenta LED's
8. Added 700M – uses the same lens and body as the 700 series but a different PCB design allowing for magenta LED's
9. Update the standards to IEC 60079-0:2011 and IEC 60079-11:2011.

Annex:

[Annexe_IECEX TSA 11.0023-3.pdf](#)



IECEX Certificate of Conformity Annexe

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Description of the equipment:

The Eflare Compact Warning Beacon is a battery operated beacon device with options for different colours and whether the beacon flashes or is continuously lit.

The apparatus is fully self contained in a cylindrical moulded plastic enclosure, the batteries are removed from the bottom by a screw on cap, the beacon is turned on and off by rotating the top clear lens moulding that actuates a switch controlling power to the device. Sealing is achieved by O rings installed in the main body moulding for the bottom cap and the top rotating clear lens.

The Eflare Compact Warning Beacon may also optionally be inserted into a moulded rubber mounting base that holds the Beacon in an upright position on a level surface.

The following models have been covered in the certificate:

350 Series Beacons

LED Colours Available: Red or Amber

Unit Prefixed with Letters EF.
Units are single colour flash.



500/600 Series Beacons

LED Colours Available: Red, Amber, Blue, Green, White in either single or combination

Prefix Notes;

1. All beacons are manufactured as standard with HZ as a prefix e.g. HZ510R or EF as a prefix e.g. EF512A.
 2. Units with and LS prefix have an additional photocell P/N SFH603P fitted at position PD2 e.g. LS510R
 3. Units with a TF prefix have an additional 3 x Torch LED P/N TKP17 fitted in position LD14-LD16 e.g. TF510R
 4. Units with an AV prefix have an additional 3 x Torch LED P/N TKP17 fitted in position LD14-LD16 e.g. AV610W but are programmed to either all flash (inc torch LED's), all steady on (inc torch LED's) or torch only.
- Note: Connections are not used.

Part No Function Definitions;

1. 510 = Flash Only – 8 LED
2. 512 = Flash Only – 16 LED
3. 513 = 180 or 360 deg Flash – 8 LED
4. 520 = Steady On – 8 LED
5. 521 = Steady On One Colour OR Second Colour – 16 LED
6. 522 = Steady On – 16 LED
7. 530 = Dual Flash Beacon – 8 LED
8. 532 = Dual Flash Beacon – 16 LED
9. 550 = Steady on Different Colours Either Side – 16 LED
10. 610 = Flash or Steady On – 8 LED
11. 612 = Flash or Steady On – 16 LED
12. Letter(s) at the end denotes LED colour



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700 Series Beacons

Led Colours Available: Red, Amber, Blue, Green, White in either single or combination

Prefix Notes;

1. All beacons are manufactured as standard with AT as a prefix e.g. AT700R
2. Units with and LS prefix have an additional photocell P/N SFH603P fitted at position PD2... e.g. LS700R
3. Units with a TF prefix have an additional 3 x Torch LED P/N TKP17 fitted in position LD14 – LD16 e.g. TF700R

Part No Function Definitions;

1. 700 = Flash or Steady On
2. 710 = Flash Only
3. 713 = 180 or 360 deg Flash
4. 720 = Steady On Only
5. 723 = 180 or 360 deg Steady On
6. 730 = Dual Flash Beacon
7. Letter(s) at the end denotes LED colour

800 Series beacons

Led Colours Available: Red, Amber, Blue, Green, White in either single or combination

Prefix Notes;

1. All beacons are manufactured as standard with AT as a prefix e.g. AT800R
2. Units with and LS prefix have an additional photocell P/N SFH603P fitted at position PD2 e.g. LS800R
3. Units with a TF prefix have an additional 3 x Torch LED P/N TKP17L51WC2 fitted in position LD14-LD16 e.g. TF800R

Part No Function Definitions;

1. 800 = Flash or Steady On
2. 810 = Flash Only
3. 811 = Flash One Colour OR Second Colour
4. 813 = 180 or 360 deg Flash
5. 814 = Flash With Choice of 3 Colours
6. 815 = Flash – Full or Half Bright
7. 820 = Steady On Only
8. 821 = Steady On One Colour OR Second Colour
9. 823 = 180 or 360 deg Steady On
10. 824 = Steady On With Choice of 3 Colours
11. 825 = Steady On – Full or Half Bright
12. 830 = Dual Flash Beacon
13. 850 = Steady on Different Colours Either Side
14. Letter(s) at the end denotes LED colour



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EN800 BAST Series Beacons

LED Colours Available: Red or Amber

Unit Prefixed with Letters EN.

Units are single colour and can be flash, steady on or torch (or combination)

800 Aviation Series Beacons

Led Colours Available: Red, Amber, Blue, Green, White in either single or combination

Unit Prefixed with Letters AV.

Units are single colour and can be flash, steady on or torch (or combination)


Variations Permitted by Issue 3:

1. Added 250 series – same body and lens as 280 series, the lens has been updated from the EF350 series (already accredited) to increase the brightness and the body of the EF350 series has been slightly modified (position of lens pins) to accommodate new lens. The lens is the same as used in the 700 series which is already accredited.
2. Added 280 Series – as per 250 series but with different PCB.
3. Added 290 series – uses the same PCB as per the 280 series, the battery cassette changes to allow for the longer body (same body as is 700 series).
4. 500/600 series – New body for a rail customer in USA and called it the RB range (rail Beacon), no changes to PCB – only a new body with same interface to lens.
5. 700 series updates – improvements have been made to the PCB to allow for alternative switching, sunlight sensor and improved performance. The current design and functions have been left in the design as an option.
6. 800 series updates – improvements have been made to the PCB to allow for alternative switching, sunlight sensor and improved performance. The current design and functions have been left in the design as an option.
7. Added 280M – uses the same lens and body as the 280 series but a different PCB design allowing for magenta LED's
8. Added 700M – uses the same lens and body as the 700 series but a different PCB design allowing for magenta LED's
9. Update the standards to IEC 60079-0:2011 and IEC 60079-11:2011.

Drawing list pertaining to Issue 3 of this Certificate:

Drawing/Document Number:	Page/s :	Title:	Revision Level:	Date: (yyyy-mm-dd)
250 Series BOM	4	250 Series BOM	D07	2016-09-16
PCBD05_TF250B_06AUG15	1	PCB TF250B PLCC2 Bottom Layer	05	2015-08-06
PCBD05_TF250B_06AUG15	1	PCB TF250B PLCC2 Bottom Overlay	05	2015-08-06
PCBD05_TF250B_06AUG15	1	PCB TF250B PLCC2 Top Layer	05	2015-08-06
PCBD05_TF250B_06AUG15	1	PCB TF250B PLCC2 Top Overlay	05	2015-08-06
PCBD05_TF250R_06AUG15	1	PCB TF250R PLCC2 Bottom Layer	05	2015-08-06

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Drawing/Document Number:	Page/s :	Title:	Revision Level:	Date: (yyyy-mm-dd)
PCBD05_TF250R_06AUG15	1	PCB TF250R PLCC2 Bottom Overlay	05	2015-08-06
PCBD05_TF250R_06AUG15	1	PCB TF250R PLCC2 Top Layer	05	2015-08-06
PCBD05_TF250R_06AUG15	1	PCB TF250R PLCC2 Top Overlay	05	2015-08-06
SCHD05_TF250B_06AUG15	1	TF250B Schematic	5	2015-08-06
SCHD05_TF250R_06AUG15	1	TF250R Schematic	5	2015-08-06
280 Series BOM	6	Development Bill of Material for 280 MAG Series Units	D04	2016-08-26
PCBD11_TF280M_04Apr14	1	PCB TF280M PLCC4 Bottom Layer	11	2014-04-04
PCBD11_TF280M_04Apr14	1	PCB TF280M PLCC4 Bottom Overlay	11	2014-04-04
PCBD11_TF280M_04Apr14	1	PCB TF280M PLCC4 Top Layer	11	2014-04-04
PCBD11_TF280M_04Apr14	1	PCB TF280M PLCC4 Top Overlay	11	2014-04-04
SCHD01_TF280MAG_31Jul14	1	TF280MAG Schematic	01	2015-08-06
280 & 290 Series BOM	8	280 & 290 Series BOM	D18	2016-08-24
PCBD11_TF280B_21MAY15	1	PCB TF280B PLCC4 Bottom Layer	11	2015-05-21
PCBD11_TF280B_21MAY15	1	PCB TF280B PLCC4 Bottom Overlay	11	2015-05-21
PCBD11_TF280B_21MAY15	1	PCB TF280B PLCC4 Top Layer	11	2015-05-21
PCBD11_TF280B_21MAY15	1	PCB TF280B PLCC4 Top Overlay	11	2015-05-21
PCBD11_TF280B_24MAY15	1	PCB TF280B PLCC2 Bottom Layer	11	2015-05-24
PCBD11_TF280B_24MAY15	1	PCB TF280B PLCC2 Bottom Overlay	11	2015-05-24
PCBD11_TF280B_24MAY15	1	PCB TF280B PLCC2 Top Layer	11	2015-05-24
PCBD11_TF280B_24MAY15	1	PCB TF280B PLCC2 Top Overlay	11	2015-05-24
PCBD11_TF280R_20MAY15	1	PCB TF280R PLCC4 Bottom Layer	11	2015-05-20
PCBD11_TF280R_20MAY15	1	PCB TF280R PLCC4 Bottom Overlay	11	2015-05-20
PCBD11_TF280R_20MAY15	1	PCB TF280R PLCC4 Top Layer	11	2015-05-20
PCBD11_TF280R_20MAY15	1	PCB TF280R PLCC4 Top Overlay	11	2015-05-20
PCBD11_TF280R_23MAY15	1	PCB TF280R PLCC2 Bottom Layer	11	2015-05-23
PCBD11_TF280R_23MAY15	1	PCB TF280R PLCC2 Bottom Overlay	11	2015-05-23
PCBD11_TF280R_23MAY15	1	PCB TF280R PLCC2 Top Layer	11	2015-05-23
PCBD11_TF280R_23MAY15	1	PCB TF280R PLCC2 Top Overlay	11	2015-05-23
PCBD11_TF280RB_19MAY15	1	PCB TF280RB PLCC4 Bottom Layer	11	2015-05-19
PCBD11_TF280RB_19MAY15	1	PCB TF280RB PLCC4 Bottom Overlay	11	2015-05-19
PCBD11_TF280RB_19MAY15	1	PCB TF280RB PLCC4 Top Layer	11	2015-05-19
PCBD11_TF280RB_19MAY15	1	PCB TF280RB PLCC4 Top Overlay	11	2015-05-19
PCBD11_TF280RB_22MAY15	1	PCB TF280RB PLCC2 Bottom Layer	11	2015-05-22
PCBD11_TF280RB_22MAY15	1	PCB TF280RB PLCC2 Bottom Overlay	11	2015-05-22
PCBD11_TF280RB_22MAY15	1	PCB TF280RB PLCC2 Top Layer	11	2015-05-22
PCBD11_TF280RB_22MAY15	1	PCB TF280RB PLCC2 Top Overlay	11	2015-05-22
SCHD02_TF280B_21MAY15	1	Schematic AT280B TF280B LS280B	2	2015-05-21
SCHD02_TF280R_20MAY15	1	Schematic AT280R TF280R LS280R	2	2015-05-20
SCHD02_TF280RB_19MAY15	1	Schematic AT280RB TF280RB LS280RB	2	2015-05-19
700 Series BOM	7	700 Series BOM	D19	2016-10-14
PCBD08_TF700_02MAY16	1	PCB 700 PLCC4 Bottom Layer	08	2016-05-02
PCBD08_TF700_02MAY16	1	PCB 700 PLCC4 Bottom Overlay	08	2016-05-02
PCBD08_TF700_02MAY16	1	PCB 700 PLCC4 Top Layer	08	2016-05-02

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Drawing/Document Number:	Page/s :	Title:	Revision Level:	Date: (yyyy-mm-dd)
PCBD08_TF700_02MAY16	1	PCB 700 PLCC4 Top Overlay	08	2016-05-02
PCBD08_TF700_03MAY16	1	PCB 700 PLCC2 Bottom Layer	08	2016-05-03
PCBD08_TF700_03MAY16	1	PCB 700 PLCC2 Bottom Overlay	08	2016-05-03
PCBD08_TF700_03MAY16	1	PCB 700 PLCC2 Top Layer	08	2016-05-03
PCBD08_TF700_03MAY16	1	PCB 700 PLCC2 Top Overlay	08	2016-05-03
SCHD06_TF700_18AUG16	1	Schematic AT700 TF700 LS700	6	2016-08-18
700M Series BOM	4	700M Series BOM	D04	2016-10-14
PCBD08_EF700M_10MAY16	1	PCB 700M PLCC4 Bottom Layer	08	2016-05-10
PCBD08_EF700M_10MAY16	1	PCB 700M PLCC4 Bottom Overlay	08	2016-05-10
PCBD08_EF700M_10MAY16	1	PCB 700M PLCC4 Top Layer	08	2016-05-10
PCBD08_EF700M_10MAY16	1	PCB 700M PLCC4 Top Overlay	08	2016-05-10
SCHD02_EF700M_10MAY16	1	Schematic EF700M	2	2016-05-10
800 Series BOM	6	800 Series BOM	D09	2016-11-03
PCBD06_800_03MAY16	1	EF800 PCB PLCC4 Bottom Layer	06	2016-05-03
PCBD06_800_03MAY16	1	EF800 PCB PLCC4 Bottom Overlay	06	2016-05-03
PCBD06_800_03MAY16	1	EF800 PCB PLCC4 Top Layer	06	2016-05-03
PCBD06_800_03MAY16	1	EF800 PCB PLCC4 Top Overlay	06	2016-05-03
PCBD07_800_04MAY16	1	EF800 PCB PLCC2 Bottom Layer	07	2016-05-04
PCBD07_800_04MAY16	1	EF800 PCB PLCC2 Bottom Overlay	07	2016-05-04
PCBD07_800_04MAY16	1	EF800 PCB PLCC2 Top Layer	07	2016-05-04
PCBD07_800_04MAY16	1	EF800 PCB PLCC2 Top Overlay	07	2016-05-04
SCHD08_TF800_09SEP16	1	Schematic TF800	8	2016-09-09
EEFL001A-0	1	Eflare Warning Label	B	2017-02-09
INS01-10MAR17	3	Eflare Operating Instruction Manual	INS01	2017-03-10

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