



CATALOGUE LXS LUXSOLAR EXPLOSION PROOF AWL



Luxsolar and LXS are registered trademarks of C&E S.r.l., a company that since 1988 produces special equipment for the Oil&Gas Industry. Working in this sector, we realized that there was an increasing need of reliable lighting systems, suitable for dangerous and potentially explosive atmospheres.

In 2005, to satisfy the specific demand of LED Aircraft Warning Lights, C&E S.r.l. created Luxsolar.

Today, after a decade marked by a stable and growing global market presence, Luxsolar has become the first manufacturer of Aircraft Warning Lights that, using LED technology, can offer a complete range from low intensity LIOL (10cd) to medium intensity MIOL (20.000cd) and high intensity HIOL for ATEX Zone 2 (200.000cd).

Design and Quality are important to Luxsolar, as well as the possibility to rely on a network of certified American and European suppliers. All the products are designed and manufactured at the company headquarter in Oggiono, Italy. This work style has allowed Luxsolar to become the only company in the aeronautic field, to obtain ENAC Certification.

Luxsolar and LXS products are submitted to a constant improvement process, thanks to an intense R&D activity conducted both independently and in collaboration with major Universities and Research Centres.

Thanks to its ability to offer individual solutions for customers and to produce lighting systems compliant to local and international regulations, Luxsolar processes purchase orders from around the world.

Luxsolar mission is to create more and more sustainable products, thanks to a constant innovation in the field of light signalling devices.

At Luxsolar, everything is made for passion.

A handwritten signature in blue ink, appearing to read 'Roberto', is positioned in the lower right area of the page.

#madeforpassion

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AIRCRAFT WARNING LIGHTS FOR HAZARDOUS AREAS

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LOW INTENSITY OBSTRUCTION LIGHT



As specified by Annex 14 of ICAO regulations, Low Intensity Obstruction Light can be used to warn the presence of obstacles up to 45m height, that may be present on offshore platforms, flares and other structures.

This beacon is the simplest device according to ICAO standards. It provides steady burning red light with two types of intensity: **$\geq 10\text{cd}$ for Type A Ex and $\geq 32\text{cd}$ for Type B Ex.**

Low intensity obstacle lights, **Type A Ex** can be used alone.

Low intensity obstacle lights, **Type B Ex**, can be used either alone or in combination with medium intensity obstacle lights, Type B Ex.



LOW INTENSITY

LIOL-A Ex/LIOL-B Ex

Twilight sensor*

Stabilised light output:
LIOL-A: >10cd
LIOL-B: >32cd

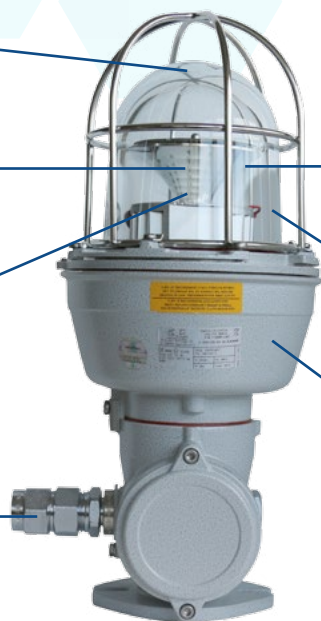
Based on LED technology
Red flashing light (FAA)
Red steady burning light (ICAO-FAA)

- ▶ Standard circuits or TWIN*
- ▶ Infrared version*

Borosilicate glass dome

Cable gland M25x1,5

Patented RAL 7035 aluminium body



*as option

IP66

INTERNATIONAL PATENTS: GRANTED AND PENDING

Low Intensity Obstruction Light is compliant to ICAO (Low Intensity – Type A or B), FAA (Type L-810) and ATEX certified.

This beacon has been designed for hazardous areas with Ex d IIC e Ex tb protection and is compliant to EN/IEC 60079-0, EN/IEC 60079-1, EN/IEC 60079-31 regulations.

These Aircraft Warning Lights are suitable for the installation in hazardous areas (Zone 1, 2, 21 e 22) where there are flammable and explosive vapours, gas or dust and are suitable for outdoor installation.

This LED device is the ideal solution for an **efficient, light and compact** obstacle signalling, able to guarantee a **product life exceeding ten years**, along with a **reduced power consumption**.

LIOL-A Ex/ LIOL-B Ex beacon has a **red steady burning light** with an omnidirectional light beam and a patented optical reflector, able to ensure a vertical beam spread of 10°, according to ICAO Annex 14.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



LOW INTENSITY

LIOL-A Ex and LIOL-B Ex TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light - Steady Burning (ICAO - FAA)
- RED light - Flashing (FAA)
- LIOL-A Ex: >10 cd
- LIOL-B Ex: >32 cd
- Cd emission: +6° e +10°
- Horizontal beam radiation: 360°
- Vertical beam spread: >10°
- Optical reflector
- ATEX execution: Ex II 2GD Ex de IIC T6 Gb
Ex tb IIIC T67°C Db IP66

TWIN OPTION

- Twin version: two galvanically separate circuits in the same fixture
- Fault alarm
- Automatic changeover from normal to backup light

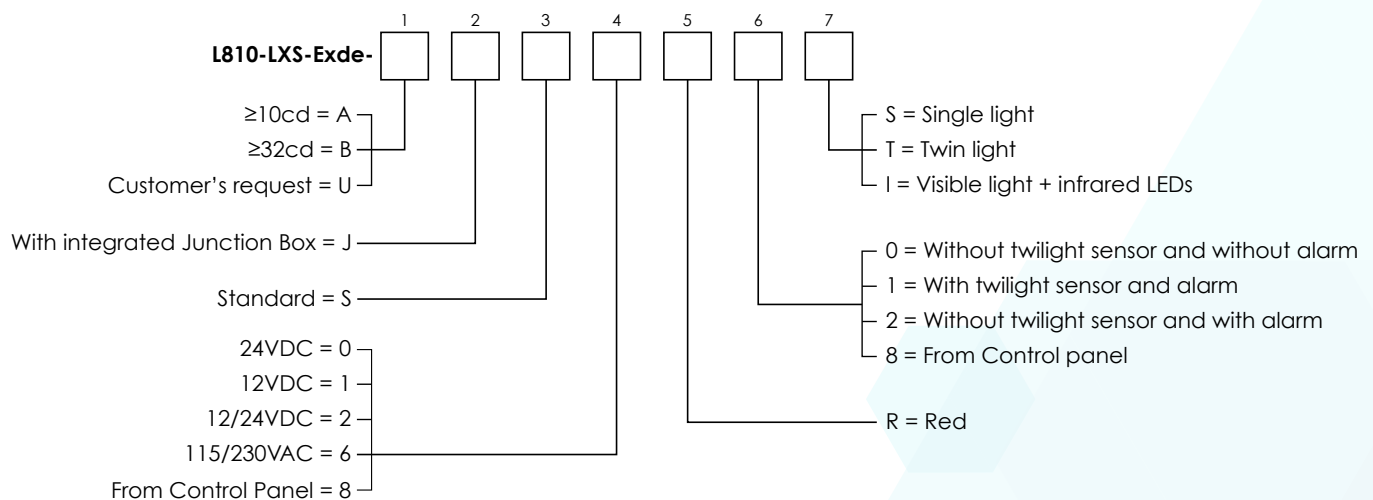
INFRARED OPTION

- IR Wavelength - 850nm

ELECTRICAL FEATURES

- Power supply AC or DC
- Power consumption LIOL-B Ex: 4W (for DC)
- LED feeded at constant current

ORDER CODE



MECHANICAL FEATURES

- Painted RAL 7035 aluminium body
- Borosilicate glass dome
- Degree of protection: IP66
- Operation temperature: -50°C to +55°C
- Storage temperature: -50°C to +60°C
- Lamp unit weight: 6kg

APPLY TO

- Stack - Chimney - Tower crane
- Offshore Platform
- Chemical and petrochemical plant

CERTIFICATION

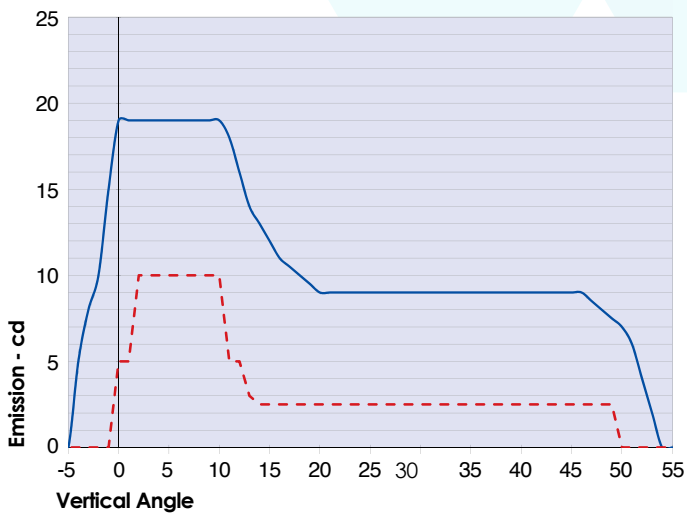
- ATEX certificate no. CESI 13ATEX037
- DGAC/STAC approval nr. 2013A048
- ENAC approval nr. 0135182/ENAC/CIA
- ASD404 certificate no. ASD404/CERT/117-2019
- CE marking

COMPLIANCE

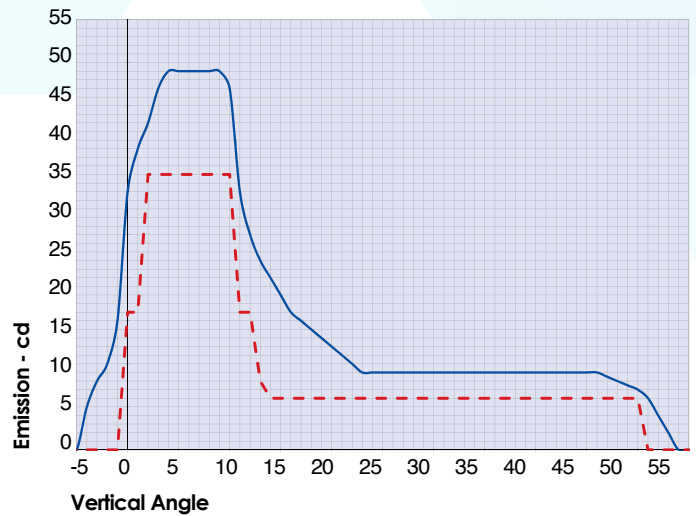
- ICAO Aerodromes -Annex 14 Volume 1, Chapter 6: Low intensity, Type A-B steady burning obstacle light
- FAA AC150/5345-43 E.B. #67 type L-810
- Licensing of aerodromes - CAP168 - Chapter 4
- Airport Standard Directive - Malaysian Regulation [ASD404]

LOW INTENSITY

LIOL-A Ex and LIOL-B Ex TECHNICAL SPECIFICATIONS

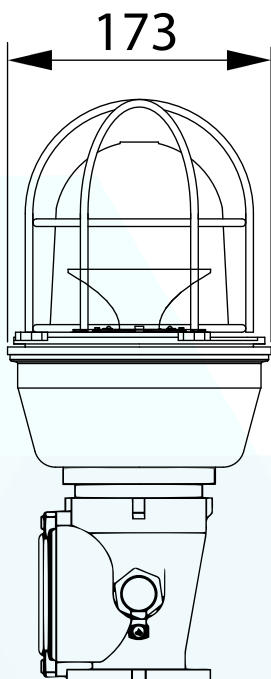


— L810-LXS-A Exde average emission level
- - - ICAO ANNEX 14 low intensity type A Minimum Required Intensity

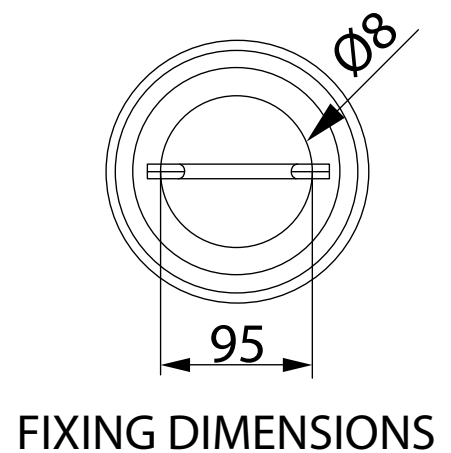
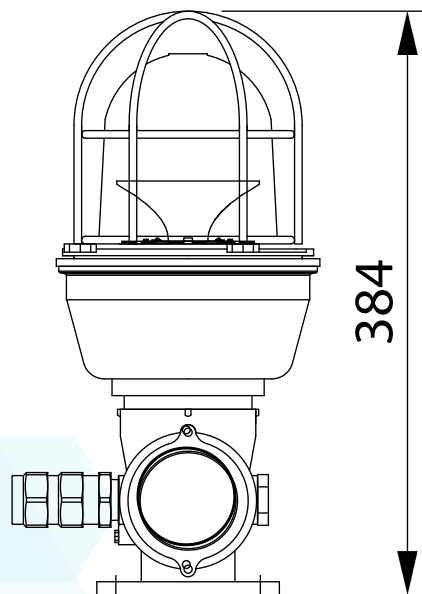


— L810-LXS-B Exde average emission level
- - - ICAO ANNEX 14 low intensity type B Minimum Required Intensity

SIDE VIEW



FRONT VIEW



FIXING DIMENSIONS

MEDIUM INTENSITY

PATENTED
PATENT ACHIEVED WITH THE CONTRIBUTION
OF REGIONE LOMBARDIA_CALL FOR BIDS
"RESEARCH & INNOVATION_MEASURE F"

MEDIUM INTENSITY OBSTRUCTION LIGHT



According to ICAO - Annex 14 Medium Intensity Obstruction Lights - Type A Ex, B Ex or C Ex - have to be used where the obstacle is particularly large and the height of the surrounding ground is more than 45m in hazardous areas.

Medium Intensity Obstacle Lights Type A Ex and C Ex have to be used alone, whereas Medium Intensity Obstacle Lights, Type B Ex, should be used either alone or in combination with Low Intensity Obstacle Lights, Type B Ex.

The Medium Intensity Obstruction Lights Type A Ex is **white flashing 20.000cd during day mode and 2.000cd during night mode.**

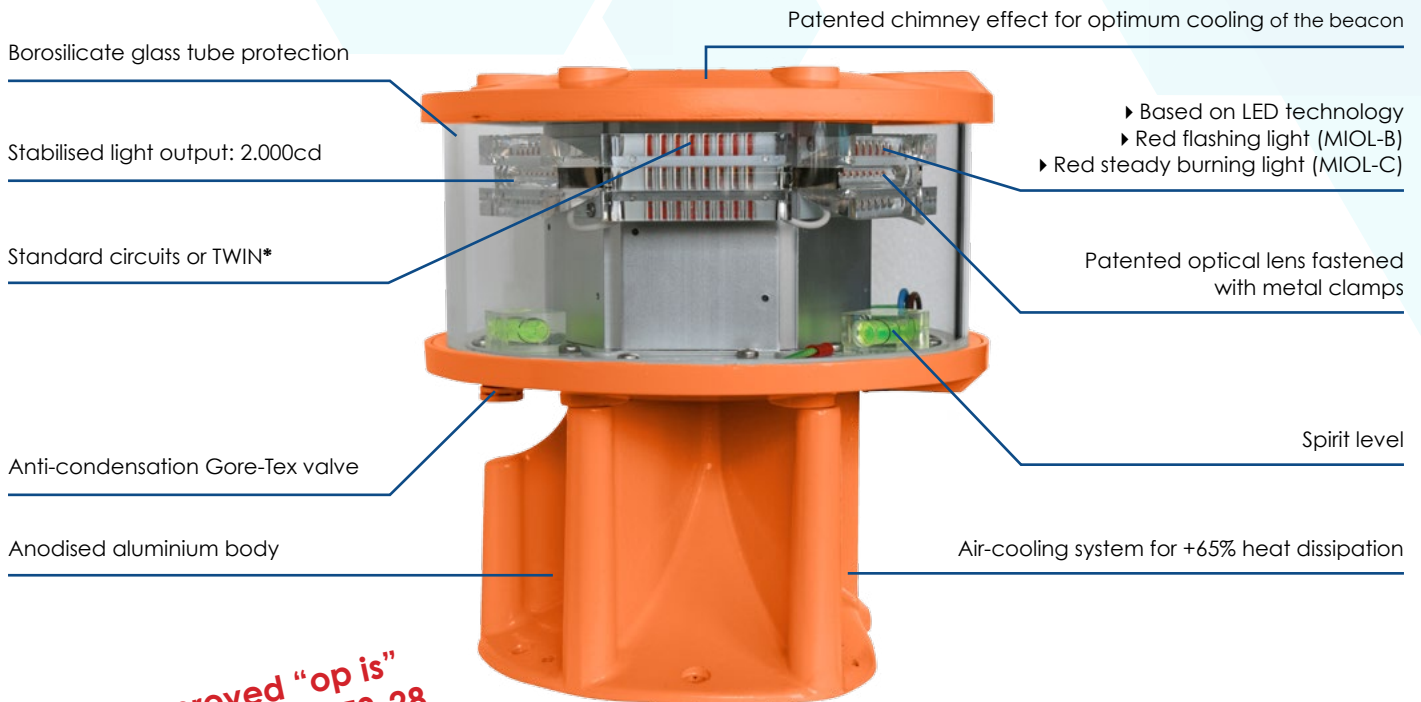
The Medium Intensity Obstruction Lights Type B Ex is **red flashing 2.000cd during night mode.**

The Medium Intensity Obstruction Lights Type C Ex is **red steady burning 2.000cd during night mode.**



MEDIUM INTENSITY

MIOL-B Ex eb mb op is / MIOL-C Ex eb mb op is



approved "op is"
as per IEC 60079-28
Optical Radiation

*as option

IP66

INTERNATIONAL PATENTS: GRANTED AND PENDING

Medium Intensity Obstruction Light is according to ICAO (Medium Intensity – Type B or C), FAA (Type L-864). Our beacons are ATEX and IECEx certified.

This beacon is the ideal solution for an **efficient, lightweight** and **compact** obstacle signalling.

MIOL-B Ex emits a **red flashing light**, while **MIOL-C Ex** emits **red steady burning light**.

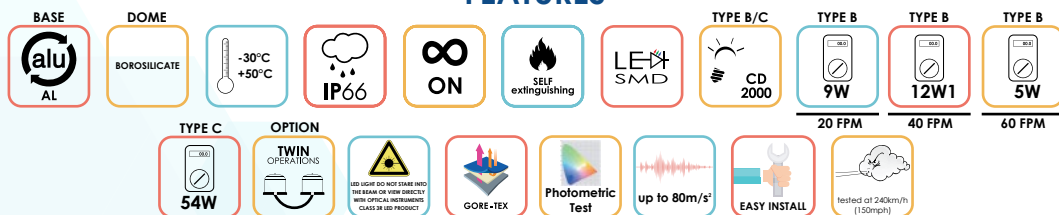
CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-B Ex eb mb op is/MIOL-C Ex eb mb op is TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- RED light 2.000cd
- Horizontal beam radiation: 360°
- Vertical beam spread: 4°
- PMMA lens (PMMA)
- Light output alignment device
- ATEX execution Zone 1: II 2GD
Ex eb mb op is IIC T6 Gk Ex
- Ex op is tb IIIC T80° Db IP66
- ATEX execution Zone 2: II 3GD
Ex eb mb IIC T6 Gc Ex
- Ex tb IIIC T80° Dc IP66
- IECEx execution Zone 1: Ex eb mb op is IIC T6 Gb
Ex op is tb IIIC T80°C Db IP66
- IECEx execution Zone 2: Ex eb mb IIC T6 Gc
Ex tb IIIC T80° Dc IP66

GENERAL OPTIONS

- Horizontal beam radiation: 180°
- Power supply AC or DC
- GPS (Global Position System) Sincro
- Fault alarm

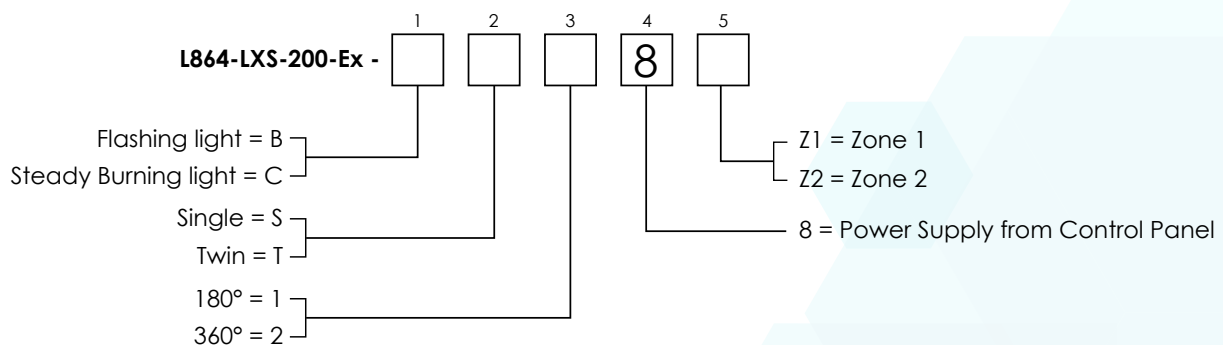
TWIN VERSION OPTIONS

- Twin version: two galvanically separated circuits in the same fixture
- Fault alarm
- Automatic changeover from normal to backup light

MECHANICAL FEATURES

- Borosilicate glass tube protection
- RAL 2004 painted aluminium body lamp
- Degree of protection: IP66
- Anti-Condensation Gore-Tex Valve
- Ambient temperature: -30°C to +50°C
- Storage temperature: -30°C to +50°C
- Lamp unit weight: 6kg

ORDER CODE



APPLY TO

- Stack - Chimney - Tower crane
- Offshore Platform
- Chemical and petrochemical plant

ELECTRICAL FEATURES

- Alarm/remote status control
- Electronic control parts installed outside the beacon
- Average power consumption for MIOL-B Ex:
 - @20fpm: 9W
 - @40fpm: 12W
 - @60fpm: 15W
- Average power consumption for MIOL-C Ex (Steady Burning): 54W
- LED feeded at constant current
- Lightning protection
- No RF-radiations
- Range section of connectable conductors: da 0,5 a 2,5 mm²

CERTIFICATIONS

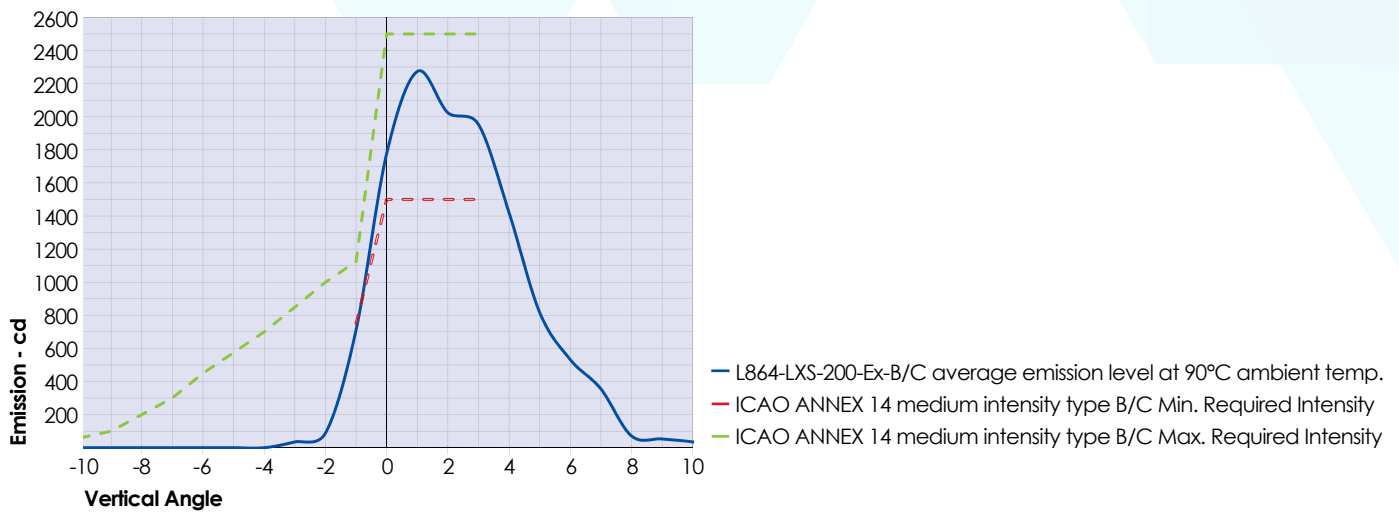
- ATEX certificate for Zone 1 nr EPT 18 ATEX 3019X
- ATEX certificate for Zone 2 nr EPTI 18 ATEX 0353X
- IECEx certificate for Zone 1 - in progress
- IECEx certificate for Zone 2 nr. IECEx EUT 18.0029X
- ENAC approval nr. 0135182/ENAC/CIA
- DGAC/STAC approval nr. 2013A037
- ASD404 Malaysian certificate ASD404/CERT/118-2019
- CE marking

COMPLIANCE

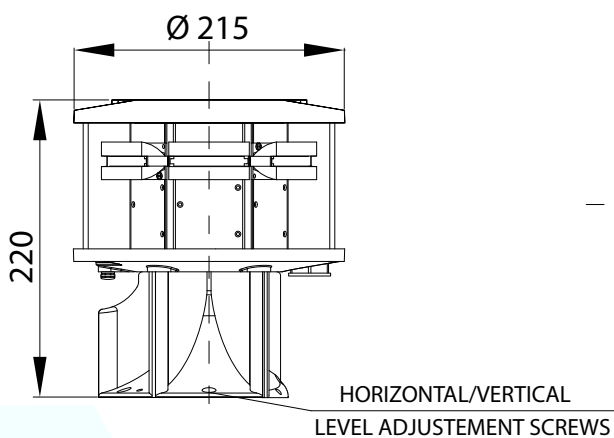
- ICAO Aerodromes -Annex 14 Vol. 1, Chapter 6: Medium intensity, Type B flashing obstacle light MIOL-B type or Type C steady burning obstacle light MIOL-C type
- FAA AC150/5345-43F E.B. #67 type L-864

MEDIUM INTENSITY

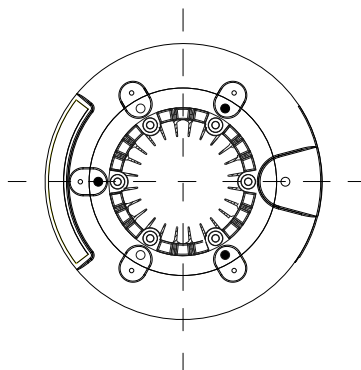
MIOL-B Ex eb mb op is/MIOL-C Ex eb mb op is TECHNICAL SPECIFICATIONS



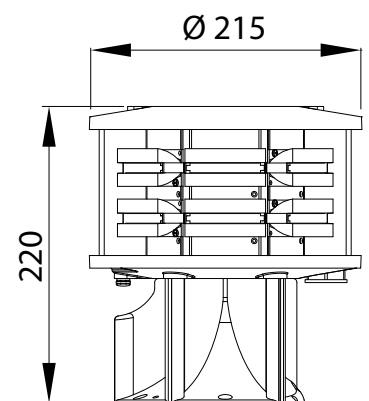
SINGLE VERSION
SIDE VIEW



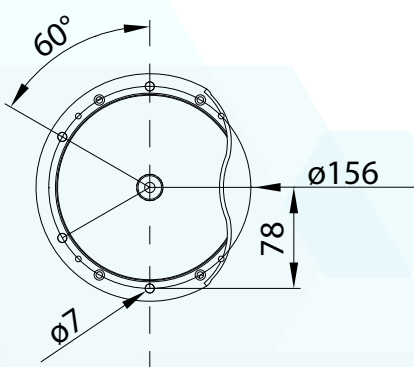
TOP VIEW



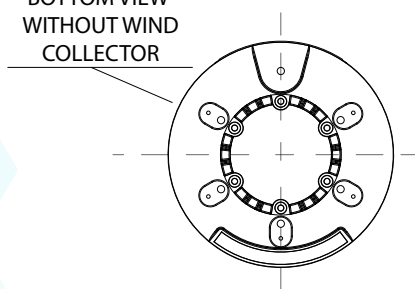
TWIN VERSION
SIDE VIEW



BOTTOM VIEW

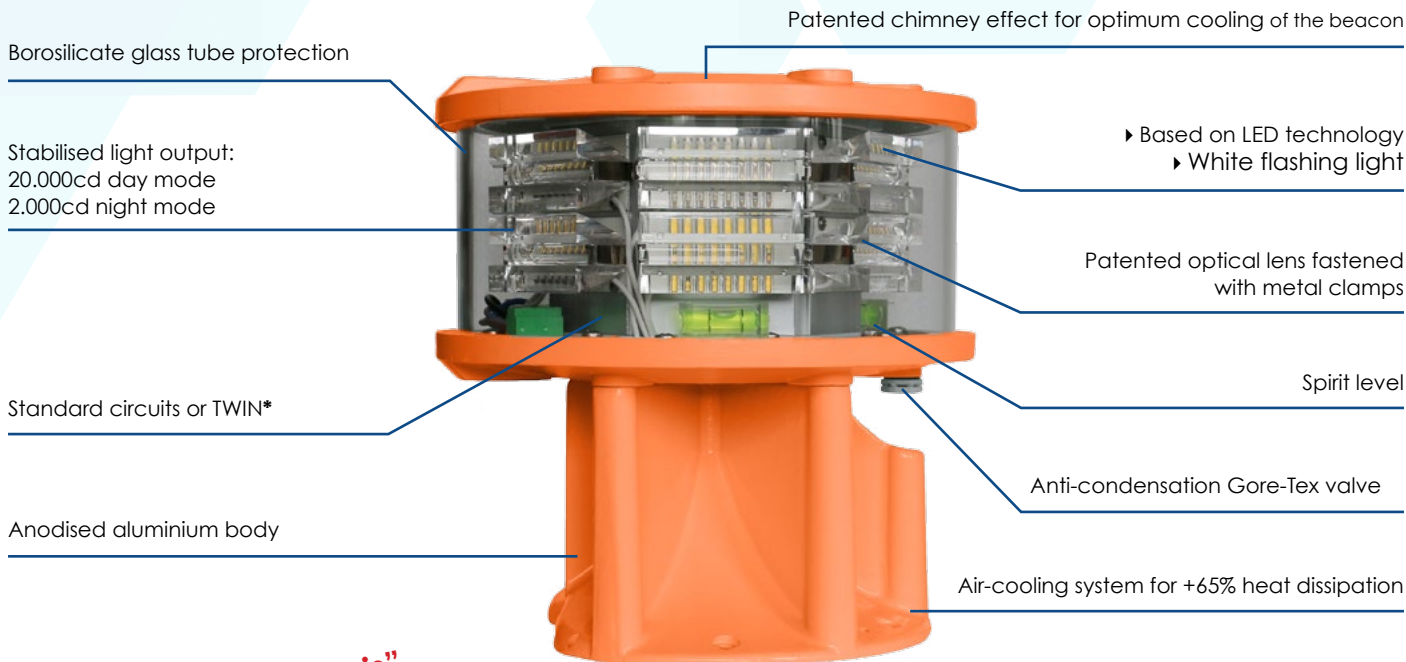


BOTTOM VIEW
WITHOUT WIND
COLLECTOR



MEDIUM INTENSITY

MIOL-A Ex eb mb op is



approved "op is"
as per IEC 60079-28
Optical Radiation

*as option

IP66

INTERNATIONAL PATENTS: GRANTED AND PENDING

The Medium Intensity Obstruction Light is compliant to ICAO (Medium Intensity – Type A), FAA (Type L-865). Our beacons are ATEX and IECEx certified.

Thanks to a **lifetime >10 years** and a **low power consumption**, this beacon is the ideal solution for an **efficient, lightweight** and **compact** obstacle signalling.

MIOL-A Ex emits **white flashing light**.

CERTIFICATION



COMPLIANCE



FEATURES



TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-A Ex eb mb op is TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- 20.000cd day mode, WHITE flashing
- 2.000cd night mode, WHITE flashing
- Horizontal beam radiation: 360°
- Vertical beam spread: 4°
- PMMA lens (PMMA)
- Light output alignment device
- ATEX execution Zone 1: II 2GD
Ex eb mb op is IIC T6 Gk Ex
- Ex op is tb IIC T80° Db IP66
- ATEX execution Zone 2: II 3GD
Ex eb mb IIC T6 Gc Ex
- Ex tb IIC T80° Dc IP66
- IECEx execution Zone 1: Ex eb mb op is IIC T6 Gb
Ex op is tb IIC T80°C Db IP66
- IECEx execution Zone 2: Ex eb mb IIC T6 Gc
Ex tb IIC T80° Dc IP66

GENERAL OPTIONS

- Power supply AC or DC
- Horizontal beam radiation: 180°
- GPS (Global Position System) Sincro
- Fault alarm

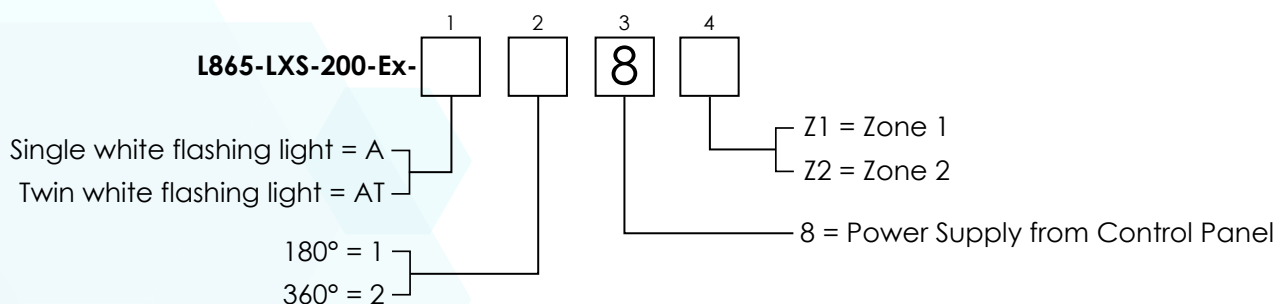
TWIN VERSION OPTIONS

- Twin version: two galvanically separated circuits in the same fixture
- Fault alarm
- Automatic changeover from normal to backup light

MECHANICAL FEATURES

- Borosilicate glass cover protection
- RAL 2004 painted aluminium body lamp
- Anti-Condensation Gore-Tex Valve
- Degree of protection: IP66
- Ambient temperature: -30°C to +50°C
- Storage temperature: -30°C to +50°C
- Lamp unit weight: 15kg

ORDER CODE



ELECTRICAL FEATURES

- Alarm/remote status control
- Electronic control parts installed outside the beacon
- Average power consumption (@20fpm):
 - day mode: 45W
 - night mode: 10W
- Average power consumption (@40fpm):
 - day mode: 110W
 - night mode: 13W
- Average power consumption (@60fpm):
 - day mode: 160W
 - night mode: 18W
- LED feeded at constant current
- Lightning protection
- No RF-radiations
- Range section of connectable conductors: da 0,5 a 2,5 mm²

APPLY TO

- Stack - Chimney - Tower crane
- Offshore Platform
- Chemical and petrochemical plant

CERTIFICATIONS

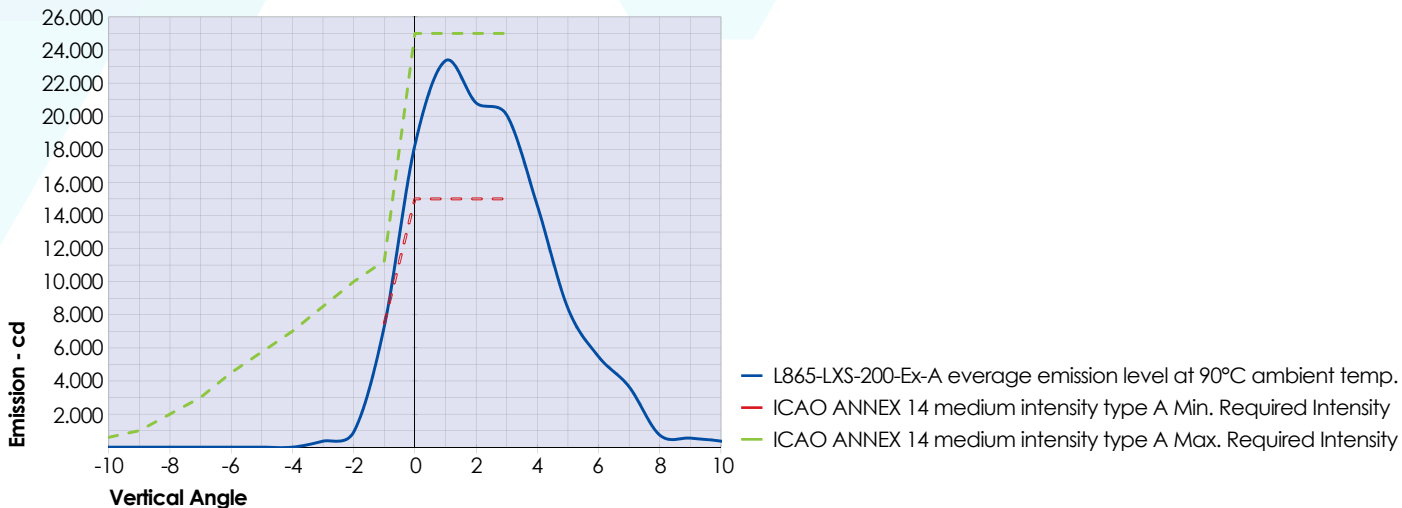
- ATEX certificate for Zone 1 nr EPT 18 ATEX 3019X
- ATEX certificate for Zone 2 nr EPTI 18 ATEX 0353X
- IECEx certificate for Zone 1 - in progress
- IECEx certificate for Zone 2 nr. IECEx EUT 18.0029X
- ENAC approval nr. 0135182/ENAC/CIA
- DGAC/STAC approval nr. 2013A037
- CE marking

COMPLIANCE

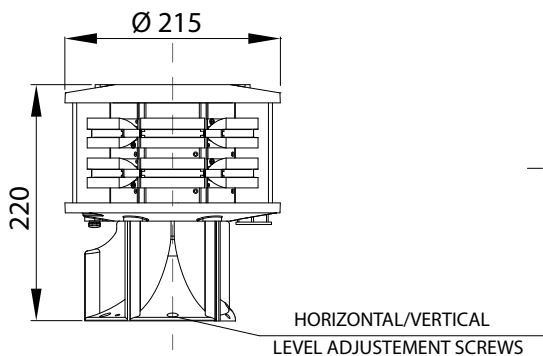
- ICAO Aerodromes -Annex 14 Volume 1, Chapter 6: Medium intensity, Type A flashing obstacle light MIOL-A type
- FAA AC150/5345-43F E.B. #67 Lamp type L-865

MEDIUM INTENSITY

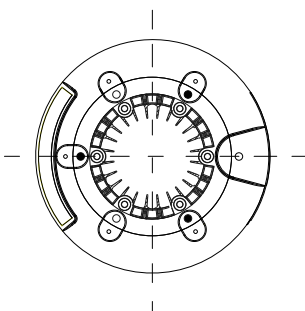
MIOL-A Ex eb mb op is TECHNICAL SPECIFICATIONS



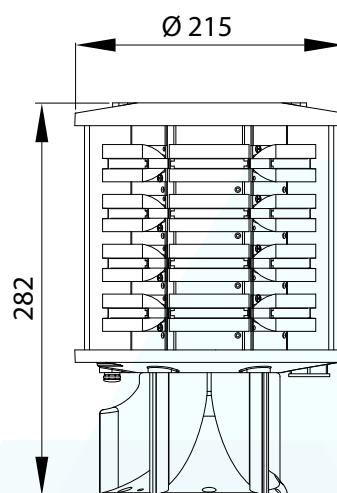
SINGLE VERSION
SIDE VIEW



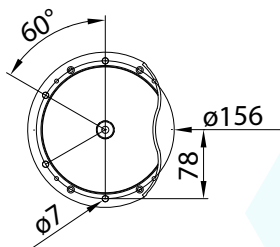
TOP VIEW



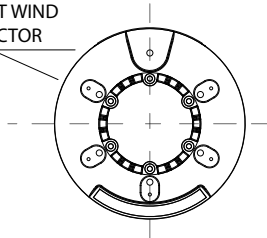
TWIN VERSION
SIDE VIEW



BOTTOM VIEW

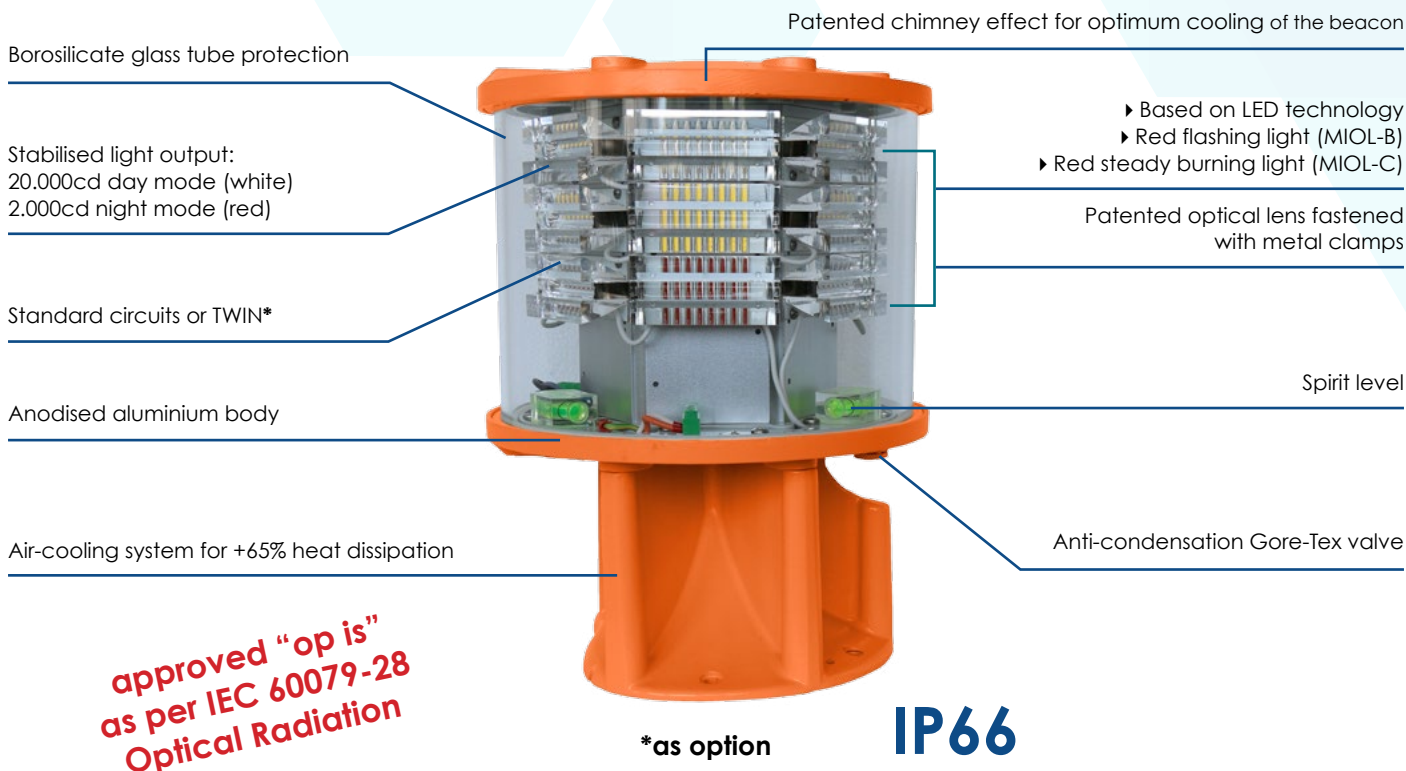


BOTTOM VIEW
WITHOUT WIND
COLLECTOR



MEDIUM INTENSITY

MIOL-AB Ex eb mb op is/MIOL-AC Ex eb mb op is



approved "op is" as per IEC 60079-28 Optical Radiation

*as option

IP66

SEVERAL INTERNATIONAL PATENTS: GRANTED AND PENDING

Medium Intensity Obstruction Light is compliant to ICAO (Medium Intensity – Type A + Type B/C), FAA (Type L-865/L-866+L864). Our beacons are ATEX and IECEx certified.

Thanks to a **lifetime >10 years** and a **low power consumption**, this beacon is the ideal solution for an **efficient, lightweight** and **compact** obstacle signalling.

MIOL-AB Ex / MIOL-AC Ex emits **white flashing light for day** mode and **red light for night mode** (flashing for Type AB Ex or steady burning for Type AC Ex).

CERTIFICATION



COMPLIANCE



FEATURES





TYPICAL APPLICATION



MEDIUM INTENSITY

MIOL-AB Ex eb mb op is/MIOL-AC Ex eb mb op is TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

- Based on LED technology
- 20.000cd day mode, WHITE light
- 2.000cd night mode, RED light
- Horizontal beam radiation 360°
- Vertical beam spread 4°
- PMMA lens
- Light output alignment device
- ATEX execution Zone 1: II 2GD
Ex eb mb op is IIC T6 Gb 
Ex op is tb IIIC T80° Db IP66
- ATEX execution Zone 2: II 3GD
Ex eb mb IIC T6 Gc 
Ex tb IIIC T80° Dc IP66
- IECEx execution Zone 1: Ex eb mb op is IIC T6 Gb
Ex op is tb IIIC T80°C Db IP66
- IECEx execution Zone 2: Ex eb mb IIC T6 Gc
Ex tb IIIC T80° Dc IP66

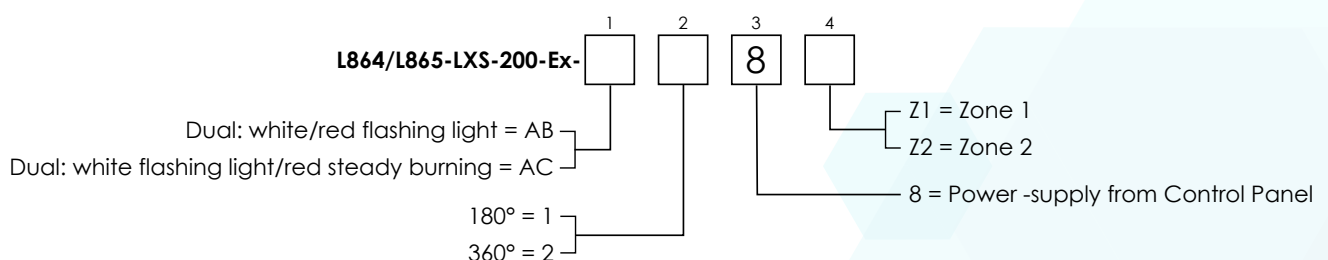
GENERAL OPTION

- Dual AB: white flash on day, red flash on night
- Dual AC: white flash on day, red steady burning on night
- Horizontal beam radiation: 180°
- Power supply AC or DC
- GPS (Global Position System) Sincro

MECHANICAL FEATURES

- Borosilicate glass tube protection
- RAL 2004 painted aluminium body lamp
- Silicon gasket
- Degree of protection: IP66
- Anti-Condensation Gore-Tex Valve
- Ambient temp.: -30°C to +50°C
- Storage temperature: -30°C to +50°C
- Lamp unit weight: 6kg

ORDER CODE



APPLY TO

- Stack - Chimney - Tower crane
- Offshore Platform
- Chemical and petrochemical plant

ELECTRICAL FEATURES

- Alarm/remote status control
- Electronic Control parts installed outside the beacon
- Average power consumption:
 - @20fpm day mode: 45W (Miol-AB/Miol-AC)
 - @20fpm night mode: 10W (Miol-AB)
 - @40fpm day mode: 110W (Miol-AB/Miol-AC)
 - @40fpm night mode: 12W (Miol-AB)
 - @60fpm day mode: 160W (Miol-AB/Miol-AC)
 - @60fpm night mode: 16W (Miol-AB)
 - night mode (luce fissa) Miol-AC: 50W
- LED feeded at constant current
- Lightning protection
- No RF-radiations
- Range section of connectable conductors: da 0,5 a 2,5 mm²

CERTIFICATIONS

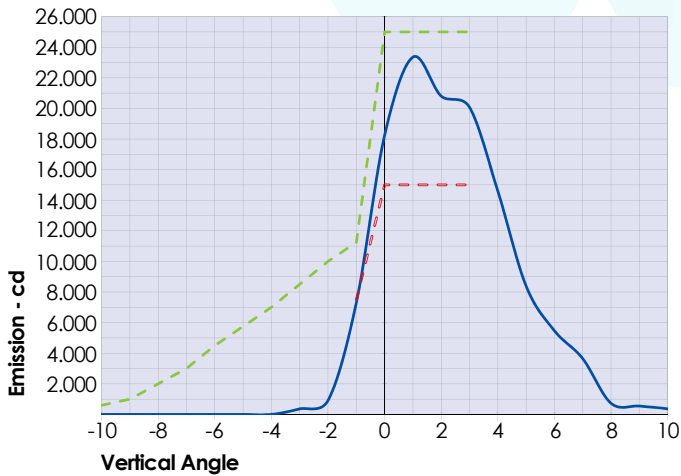
- ATEX certificate for Zone 1 nr EPT 18 ATEX 3019X
- ATEX certificate for Zone 2 nr EPTI 18 ATEX 0353X
- IECEx certificate for Zone 1 - in progress
- IECEx certificate for Zone 2 nr. IECEx EUT 18.0029X
- ENAC approval nr. 0135182/ENAC/CIA
- DGAC/STAC approval nr. 2013A037
- CE marking

COMPLIANCE

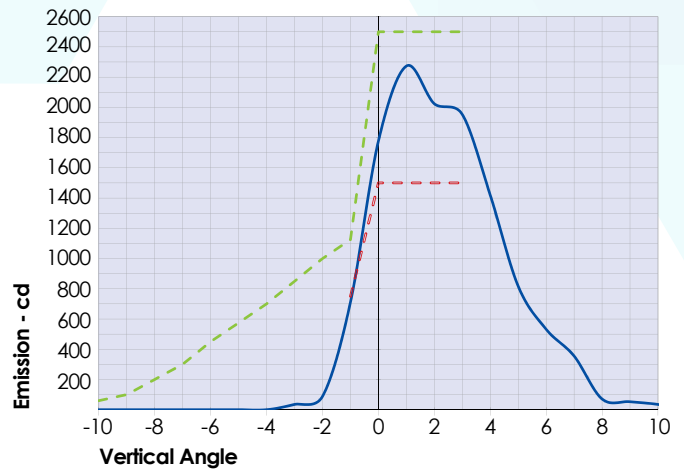
- ICAO Aerodromes - Annex 14 Vol.1, Ch. 6: Medium intensity, Type B flashing obstacle light MIOL-AB type, Type AC flashing/steady burning obstacle light MIOL-AC Type
- FAA AC150/5345-43F E.B. #67 Lamp type Dual L-864/L-865

MEDIUM INTENSITY

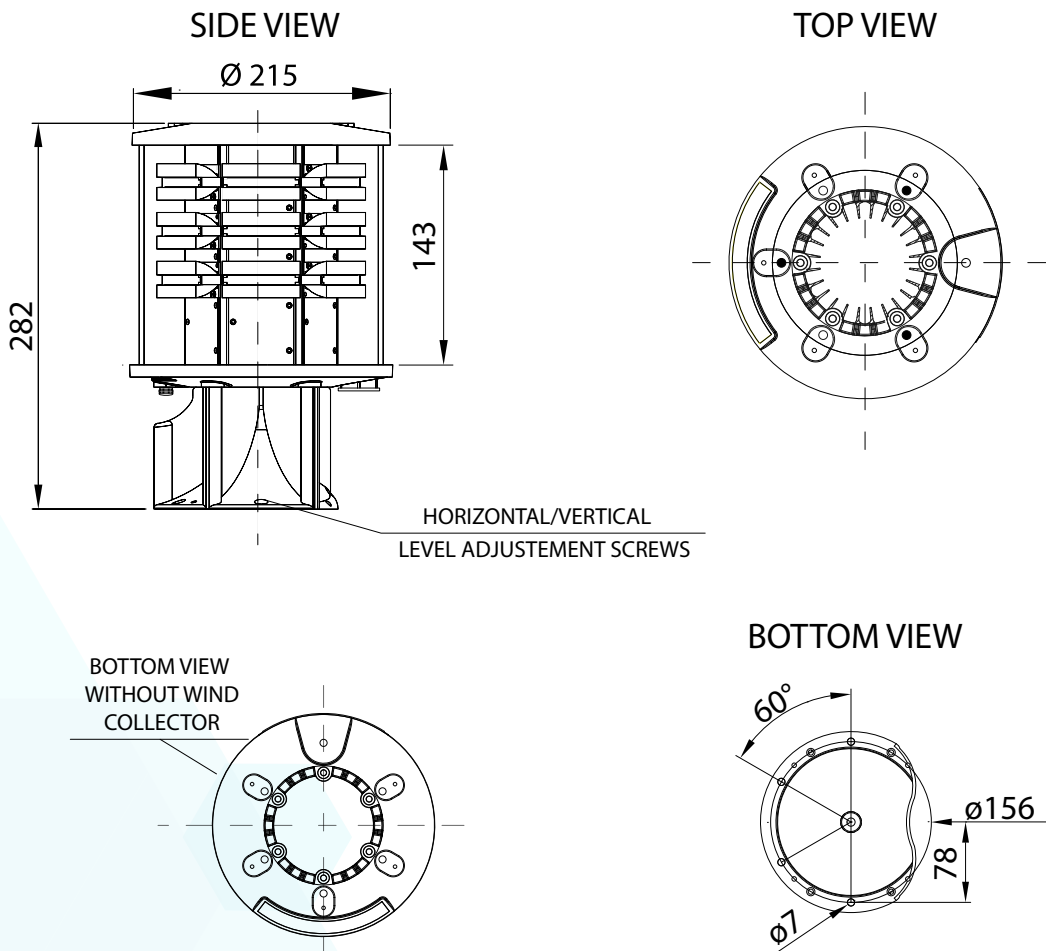
MIOL-AB Ex eb mb op is/MIOL-AC Ex eb mb op is TECHNICAL SPECIFICATIONS



- L865-LXS-200-Ex-A average emission level at 90°C ambient temp.
- ICAO ANNEX 14 medium intensity type A Min. Required Intensity
- ICAO ANNEX 14 medium intensity type A Max. Required Intensity



- L864-LXS-200-Ex-B average emission level at 90°C ambient temp.
- ICAO ANNEX 14 medium intensity type B/C Min. Required Intensity
- ICAO ANNEX 14 medium intensity type B/C Max. Required Intensity



AWL SYSTEM CONTROL PANEL FOR CLASSIFIED AREAS (IIB OR IIB+H2)



- ▶ Main isolating switch for power supply 110/230VAC 50/60Hz;
- ▶ AUTO/MAN switch to override photocell (if any);
- ▶ Module for simultaneous flashing (if any);
- ▶ Beacon fault contacts available on terminals;
- ▶ Local LED indicator for Power On;
- ▶ Power electronics to feed the beacons;
- ▶ Overvoltage protection (lightning protection);
- ▶ Twilight sensor;
- ▶ Enclosure material: RAL 7035, painted aluminum or natural finish AISI316L

The installation of multiple devices on the same obstacle is defined "**System**" and a control panel that contains all the necessary elements for the proper operation of the system is necessary.

The **control panel helps to simplify both core management tasks** (start up, check anomalies, etc.) and **the maintenance of the system**. Beacons can be managed by one or several panels, according to installation requirements or project specifications.

Luxsolar control panels for classified areas are available with: **ATEX, IECEx, Tr Cu, INMETRO, CNEX and PESO certificates.**

OPTIONAL ITEMS

- GPS sync for wireless sync of panels controlling flashing beacons;
- Fault alarm available on the front window/door;
- Heat controller;
- Radio system;
- GSM system;
- UPS system.

DESIGN

Our Team of experts can assist designers and installers with professional support according to regulations and project specification.



For any additional information please contact:
lxs@luxsolar.com

ICAO CERTIFICATION

In 2014, following a long technical and qualitative process, Luxsolar has obtained ENAC certification for Aircraft Warning Lights. Luxsolar is today the only company that has obtained this kind of acknowledgement from ENAC (the Italian Body for Civil Aviation).



ENAC
 Protocollo del 22/12/2014
 0135182/ENAC/CIA

Airport Infrastructures & Air Space
 Directorate

To: Combustion & Energy s.r.l.
 Via Per Dolzago 21
 23848 Oggiono – Lecco (LC)

SUBJECT: Luxsolar Obstacle Warning Led Lights – STATEMENT OF CONFORMITY.

- Having regard to following reference regulation:
 1. ICAO - Annex14 - § 6.2 "Marking and/or lighting of objects" - Sixth Edition 2013 (Reference to Table 6.3 different from Table Q-2 of Chapter Q - EASA ADR Rules). ;
 2. ICAO – Doc. 9157 – Part 4 – Visual Aids - Fourth Edition 2004 (for applicable paragraph);
 3. ENAC – Aerodromes Regulation – Chapter 4 (for applicable paragraph);
 4. ENAC – Circular APT 28 "Aerodrome devices acceptance criteria";
 5. EN60068-2-1 (2007/04) & EN60068-2-2 (2007/09) for temperature range (-20°C++50°C);
 6. EN60529 & EN60598 (only applicable §) for IP65 compliance;
 7. EN60068-2-6:2008 for vibration compliance (150Hz, 30mm peak to peak, 80m/s² accel.);
- Having regard to the following manufacturer's documents received on 16-05-2014:
 - ✓ Technical description of the concerned lights;
 - ✓ Assembling schemes, showing construction schemes and relative data sheets;
 - ✓ Operation and Maintenance manual - Rev.1 del 19.12.2014;
- Whereas Luxsolar Obstacle Warning Led Lights fulfill previous regulatory references as certified by the technical available data by laboratory test: [6] by Prima s.r.l.– (Como) [7] by Prima s.r.l. (Como) and Nemko Spa (Monza Brianza); [8] by Qualilab s.r.l. (Brescia);
- Whereas laboratory tests about a photometric and colorimetric performances issued a compliance;
- ENAC hereby states that the following devices:

Article	Description
L810-LXS	Low Intensity Led Red Obstruction Aircraft Warning Light
L865-LXS-A	Medium Intensity White Flashing Led Obstruction Aircraft Warning Light
L864-LXS-B	Medium Intensity Red Flashing Led Obstruction Aircraft Warning Light
L864-LXS-C	Medium Intensity Red Steady Burning Led Obstruction Aircraft Warning Light

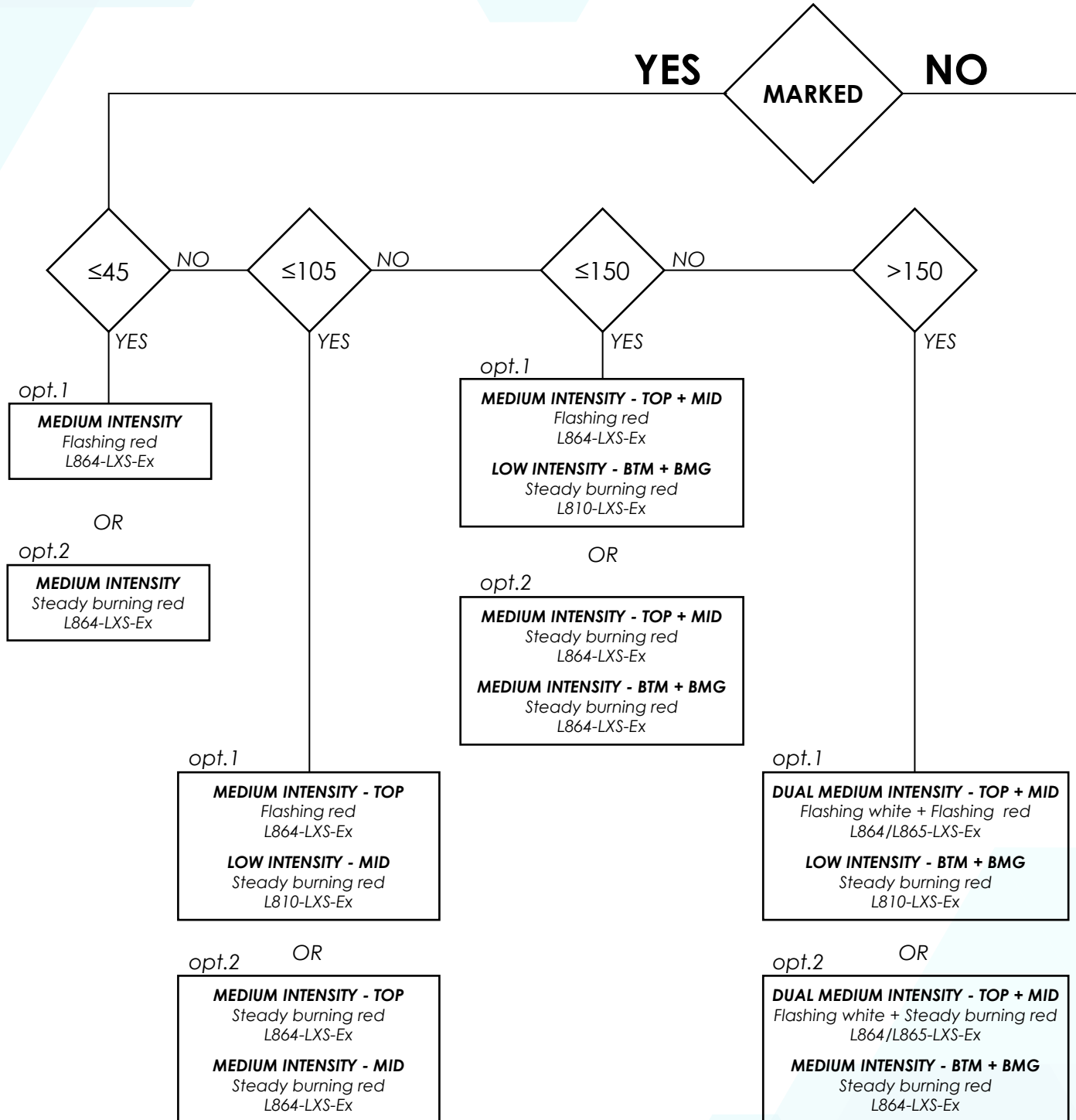
- comply with the above reference regulation (from point 1 to point 7).

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 infrastrutture@enac.gov.it
 protocollo@pec.enac.gov.it

SYSTEMS CONFIGURATION

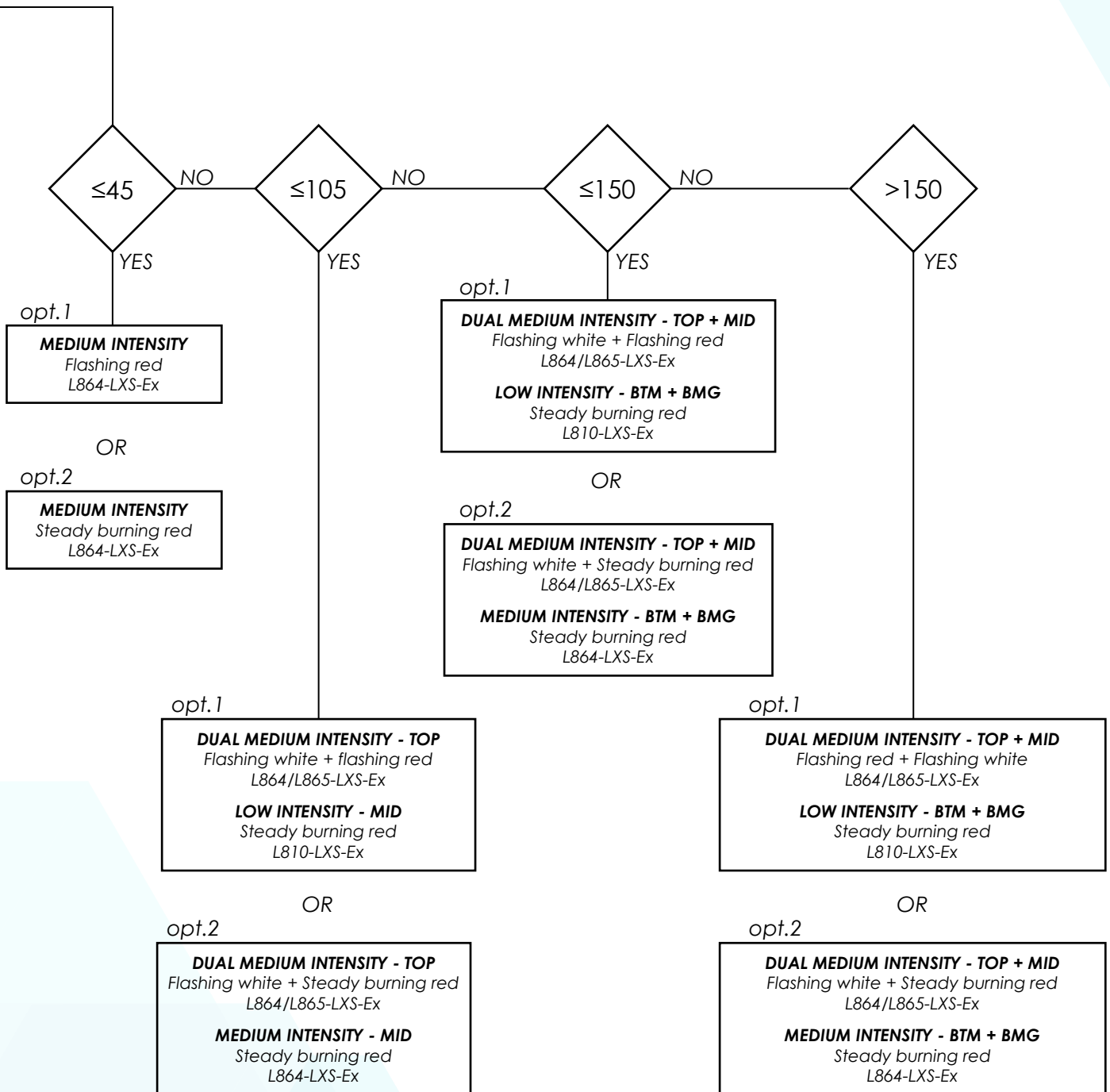
<3km FROM AIRFIELD



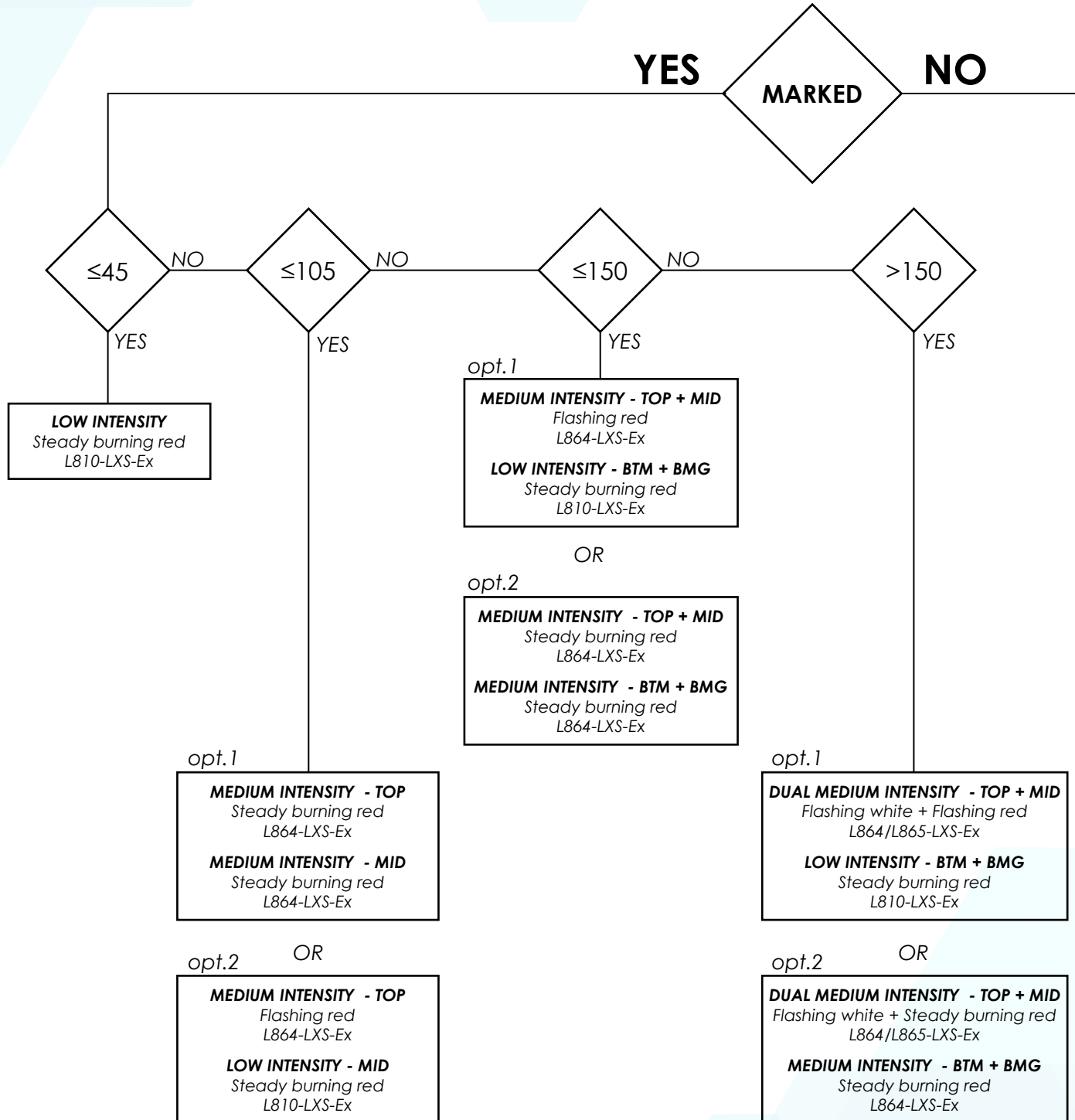
TOP = At the top of the obstacle
MID = At h/2 of the obstacle
BTM = Between top and mid (h ¼)
BMG = Between mid and ground (h ¼)

SYSTEMS CONFIGURATION

<3km FROM AIRFIELD



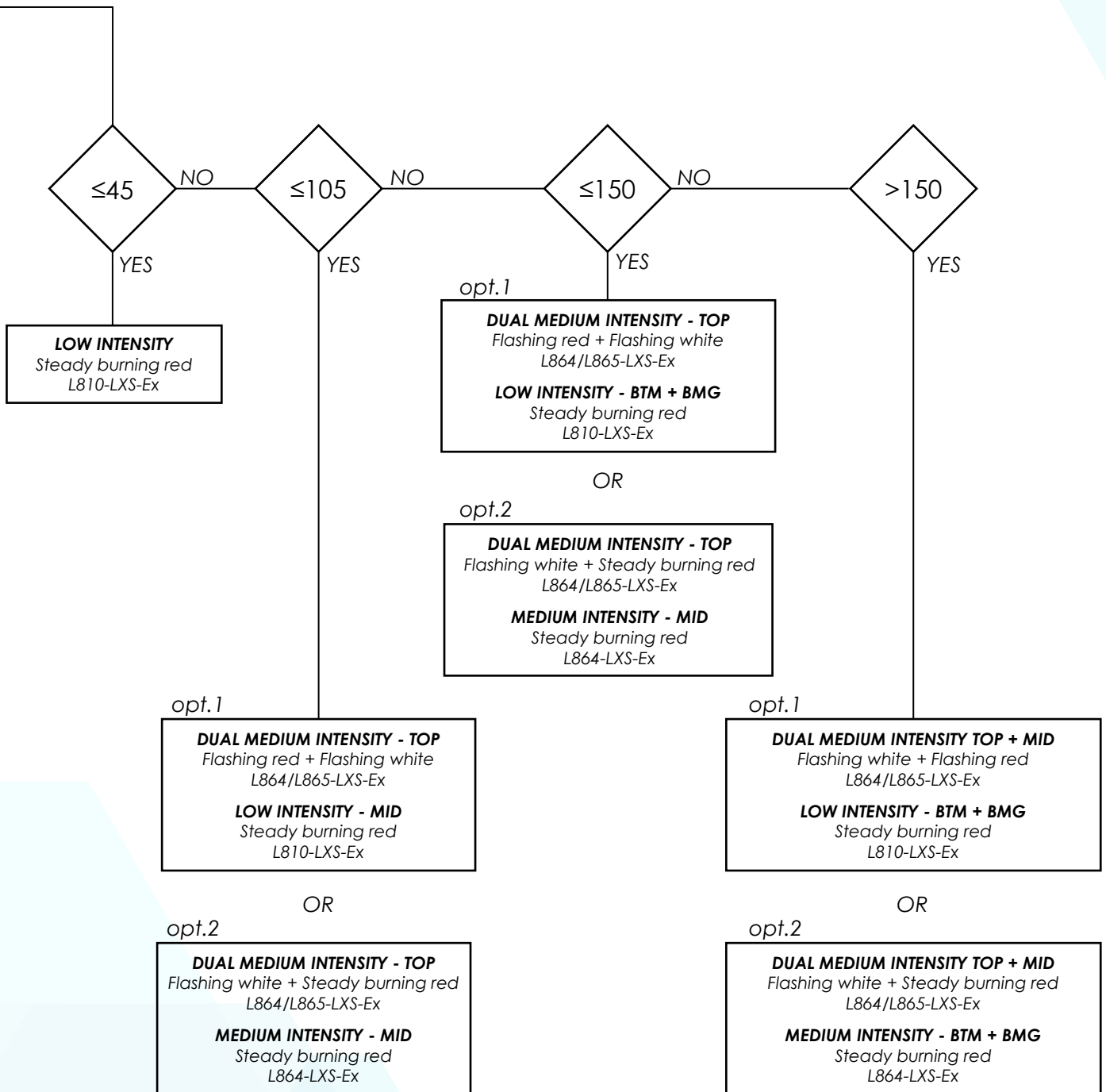
DA 3km A 10km FROM AIRFIELD



TOP = At the top of the obstacle
MID = At h/2 of the obstacle
BTM = Between top and mid (h ¼)
BMG = Between mid and ground (h ¼)

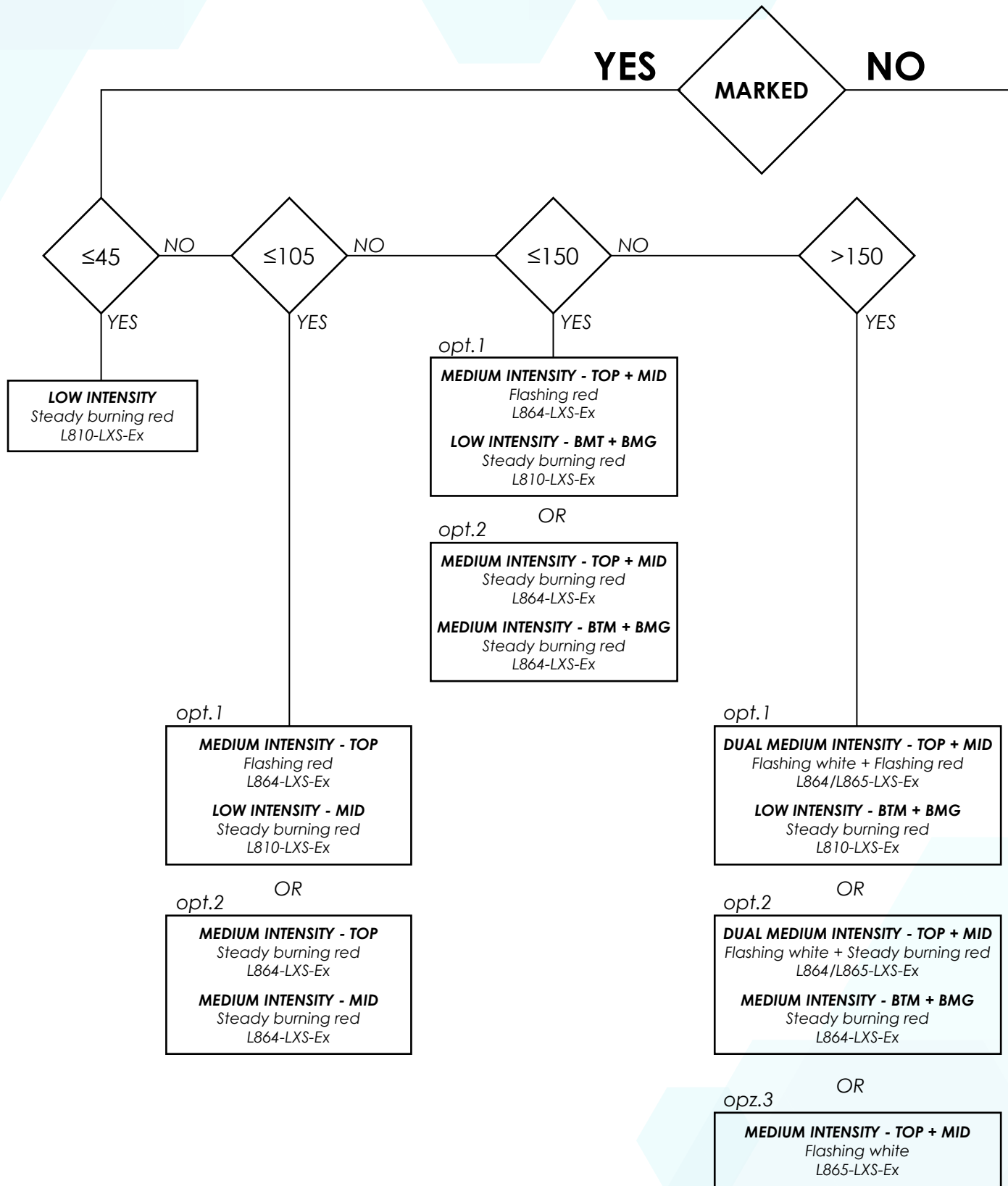
SYSTEMS CONFIGURATION

DA 3km A 10km FROM AIRFIELD



SYSTEMS CONFIGURATION

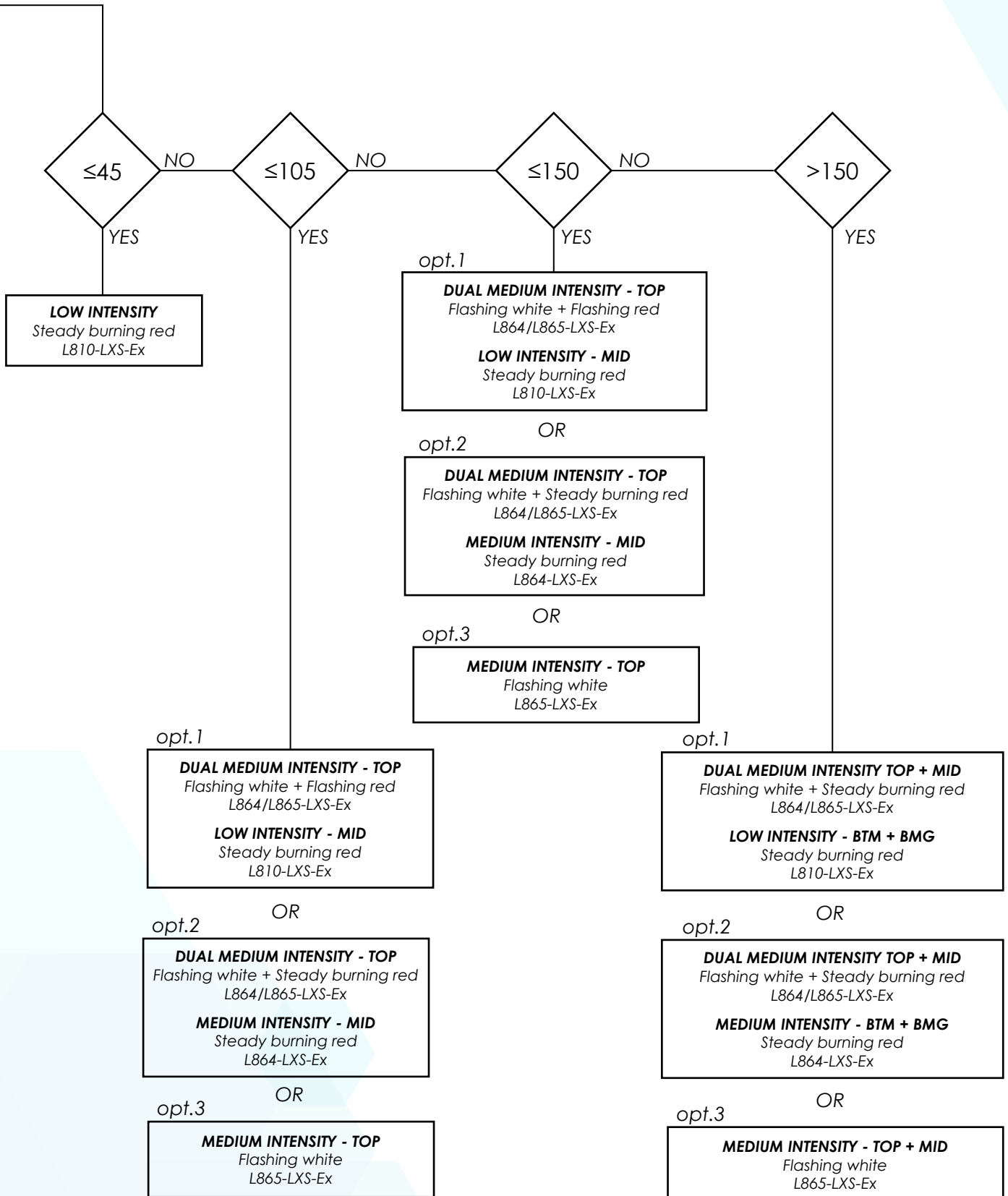
>10km FROM AIRFIELD



TOP = At the top of the obstacle
MID = At h/2 of the obstacle
BTM = Between top and mid (h ¾)
BMG = Between mid and ground (h ¼)

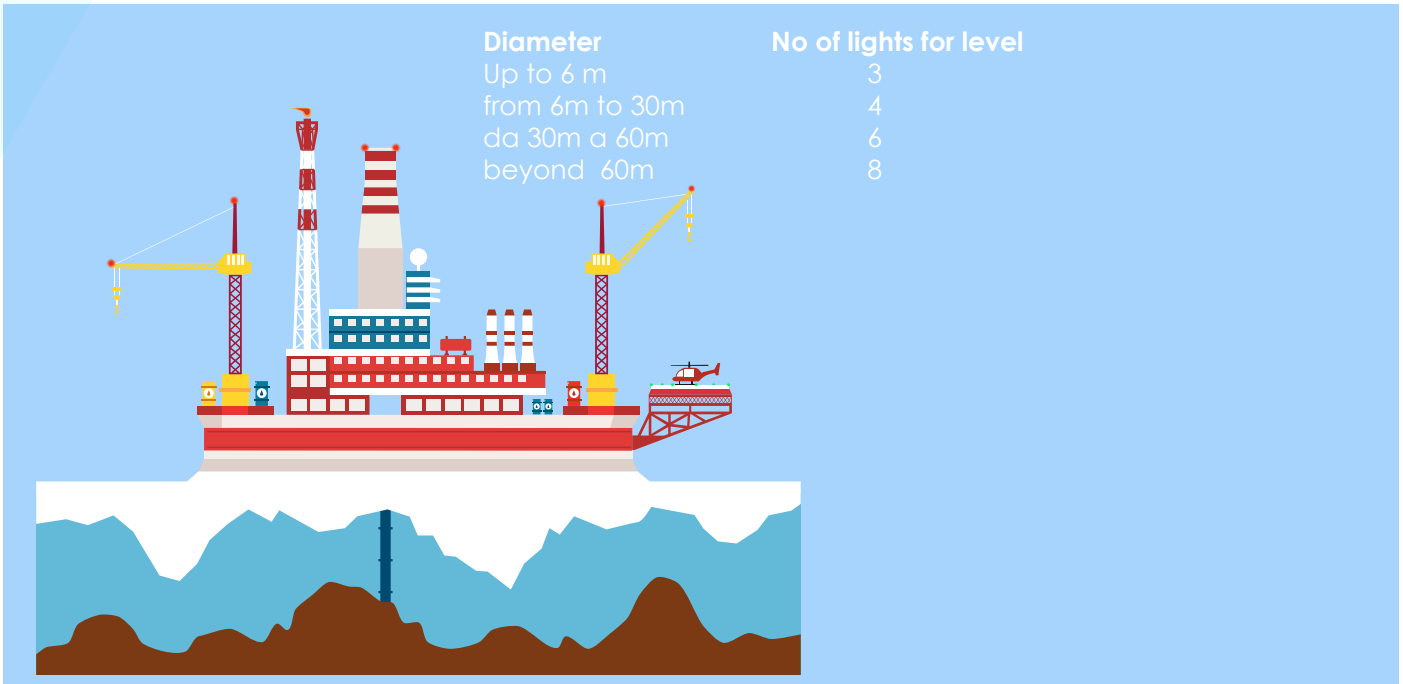
SYSTEMS CONFIGURATION

>10km FROM AIRFIELD



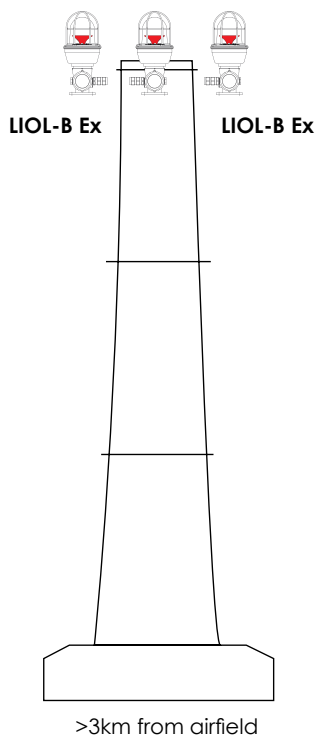
LIGHT POSITIONING

ICAO regulation Annex 14, Vol. 1 and Annex 6, specifies that – on the basis of their height and kind of marking, obstacles may require beacons installed on several levels (top, middle, etc.). The number of beacons required for each level depends on the external diameter of the structure and is suggested in the following chart:

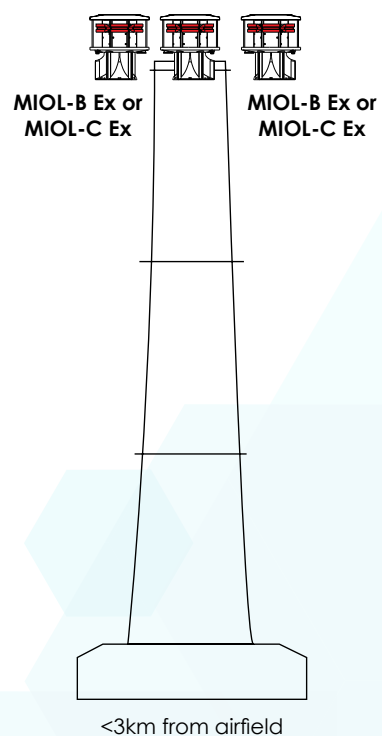


ELEVATED STRUCTURES <45m

LOW INTENSITY
Red steady burning (Night)



MEDIUM INTENSITY
Red flashing or steady burning (Night)

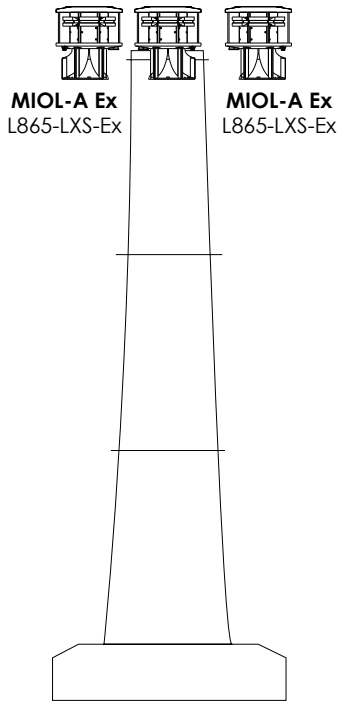


NOT MARKED

SYSTEMS CONFIGURATION

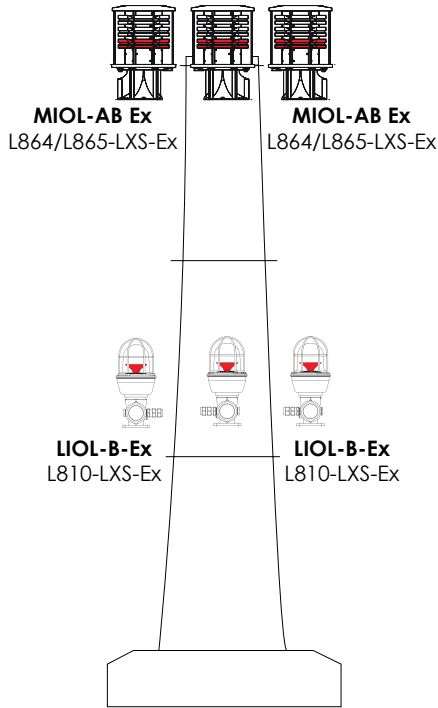
ELEVATED STRUCTURES FROM 45m TO 105m

MEDIUM INTENSITY
White flashing
(Day and Night)

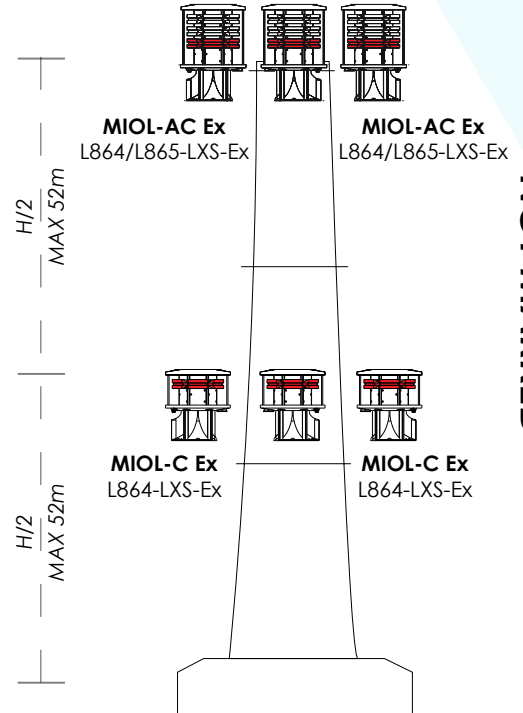


>10km from airfield

DUAL MEDIUM INTENSITY
White flashing (Day)
Red flashing (Night)

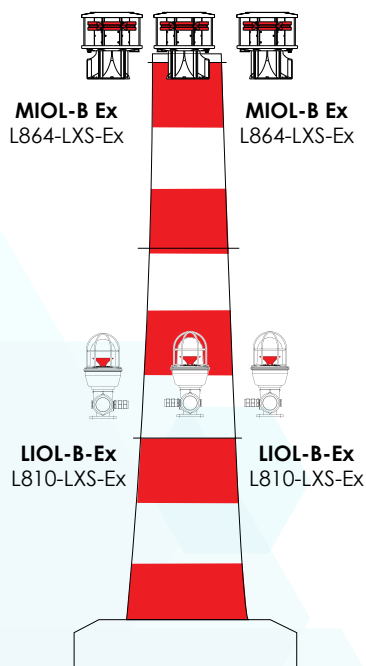


DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)

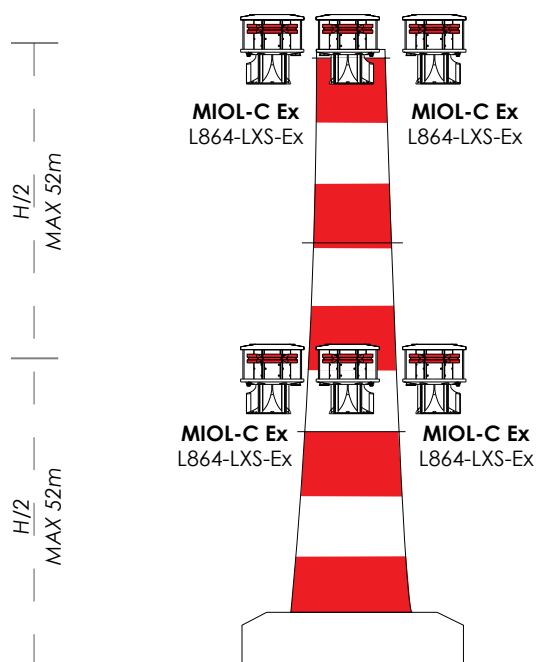


NOT MARKED

MEDIUM INTENSITY
Red flashing (Night)
Rosso steady burning (Night)



MEDIUM INTENSITY
Red steady burning (Night)



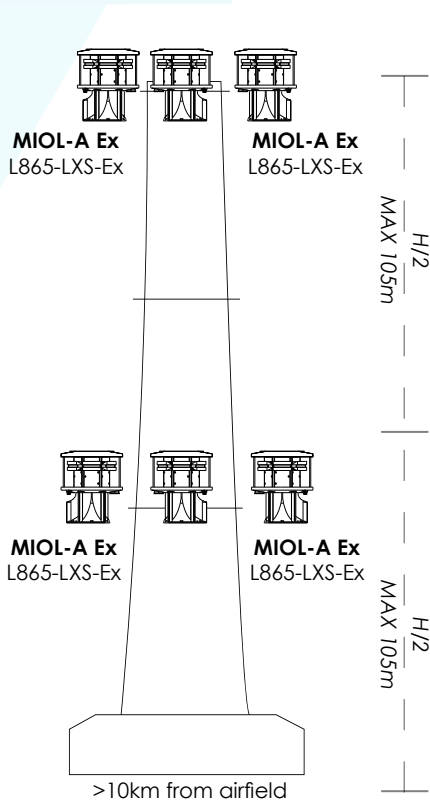
MARKED

SYSTEMS CONFIGURATION

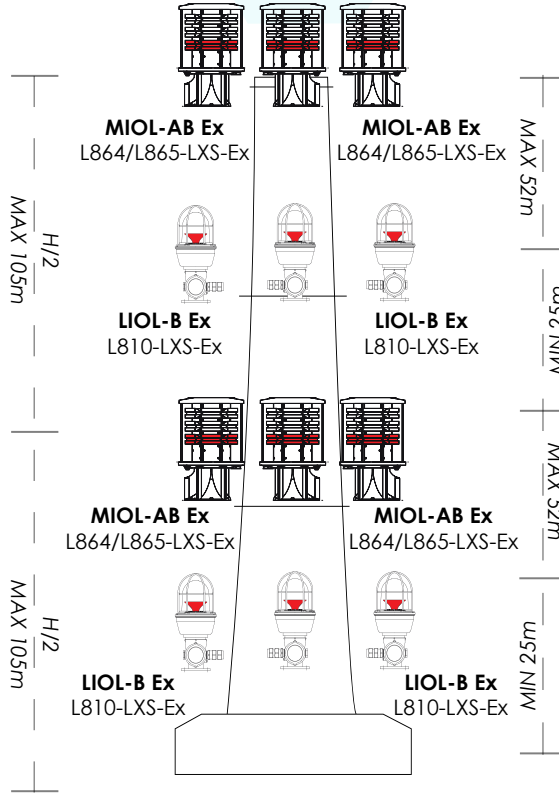
ELEVATED STRUCTURES FROM 105m TO 150m

NOT MARKED

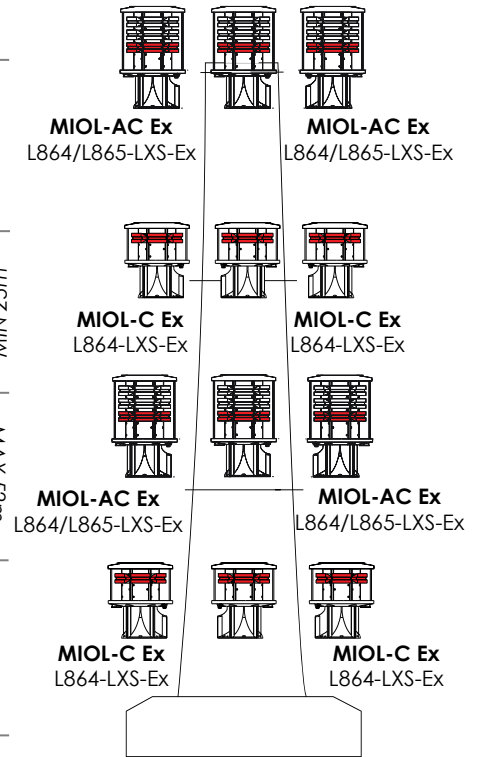
MEDIUM INTENSITY
White flashing
(Day and Night)



DUAL
White flashing (Day)
Red steady burning (Night)

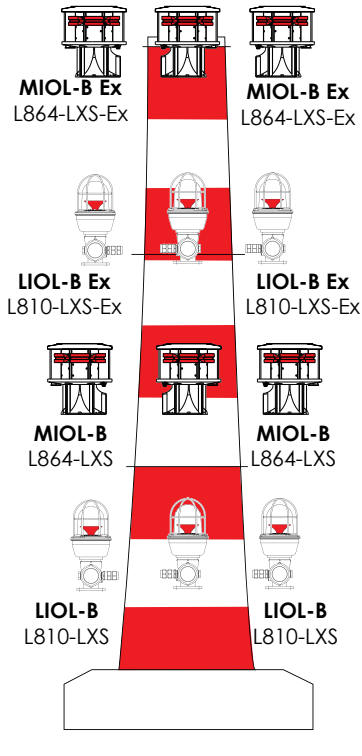


DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)

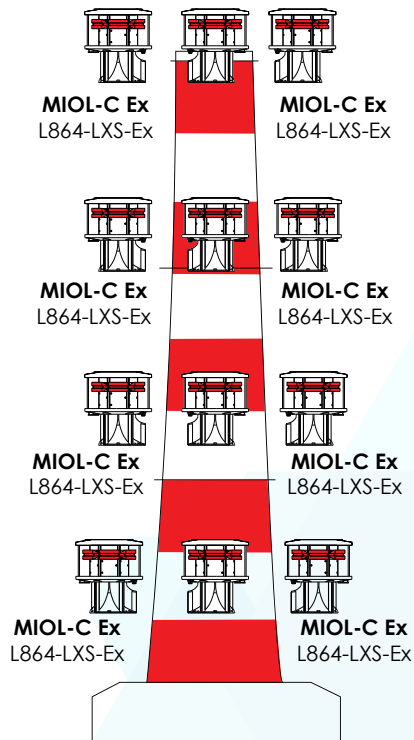


MARKED

MEDIUM INTENSITY
Red flashing (Night)
Red steady burning (night)



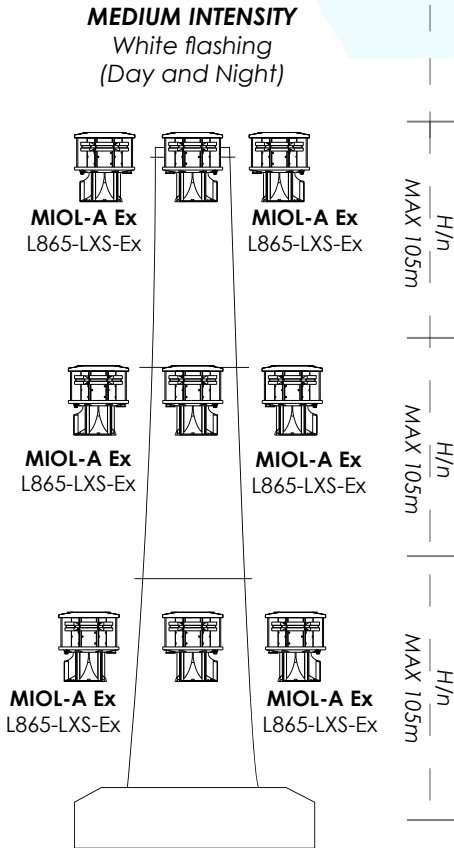
MEDIUM INTENSITY
Red steady burning (Night)



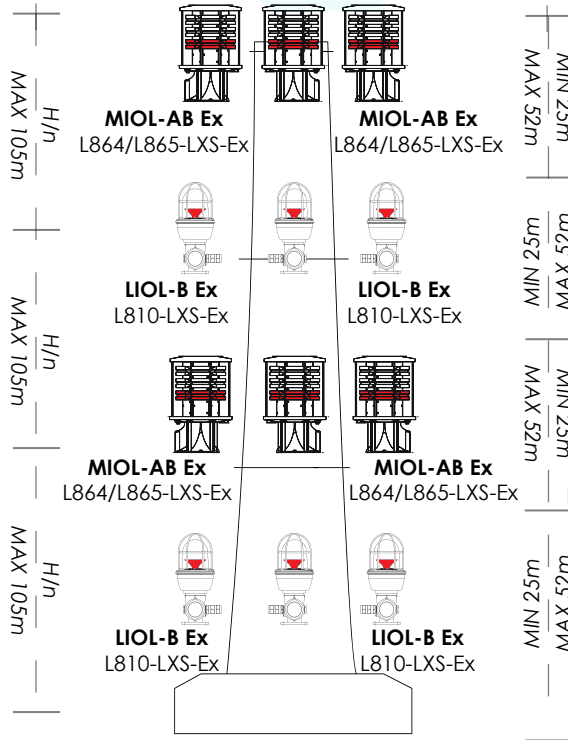
SYSTEMS CONFIGURATION

ELEVATED STRUCTURES 150m

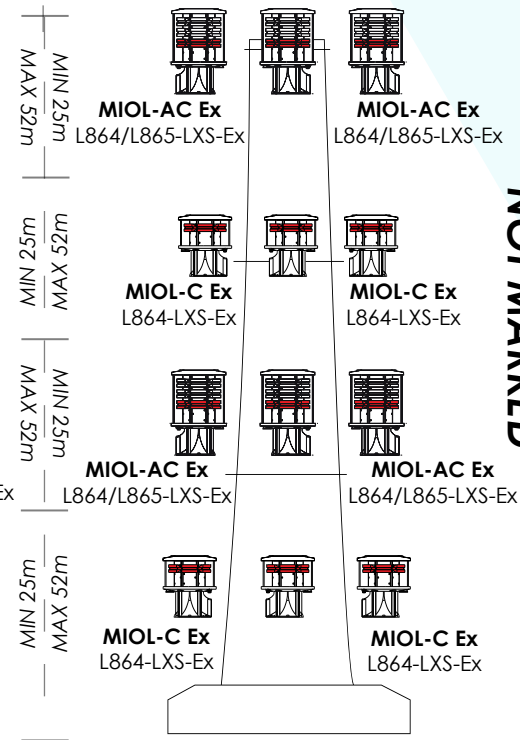
MEDIUM INTENSITY
White flashing
(Day and Night)



DUAL MEDIUM INTENSITY
White flashing (Day)
Red flashing (Night)
Red steady burning (Night)

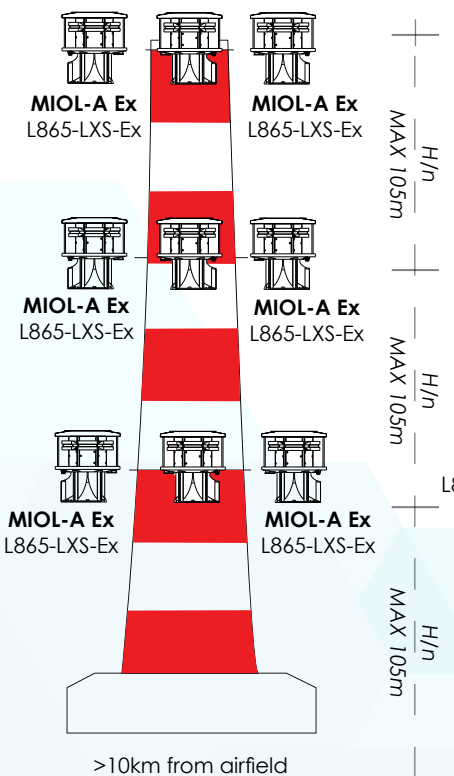


DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)

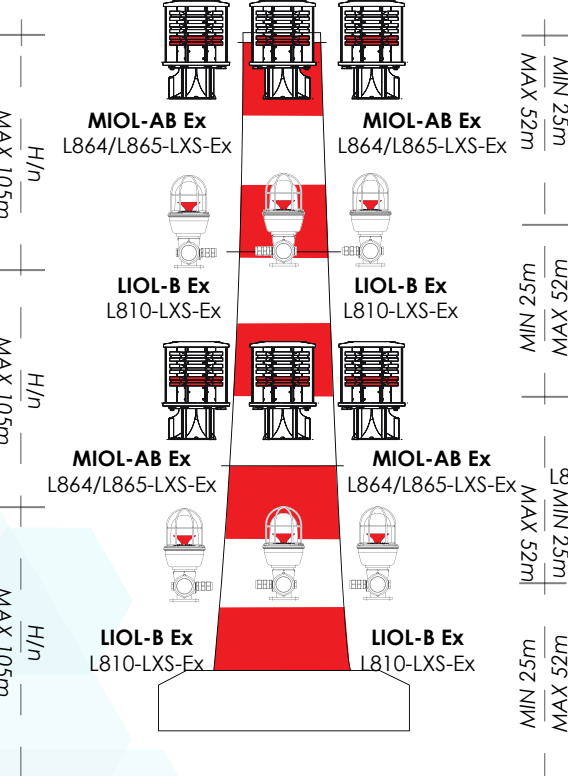


NOT MARKED

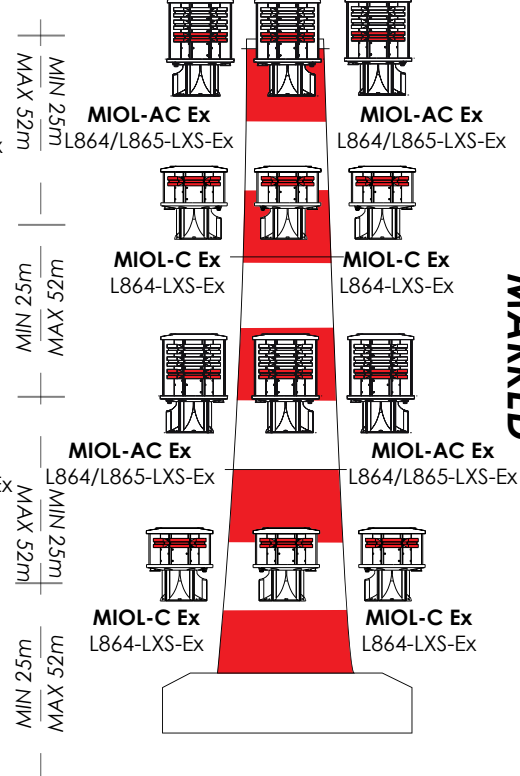
MEDIUM INTENSITY
White flashing
(Day and Night)



DUAL MEDIUM INTENSITY
White flashing (Day)
Red flashing (Night)
Red steady burning (Night)



DUAL MEDIUM INTENSITY
White flashing (Day)
Red steady burning (Night)



MARKED

OFFSHORE PLATFORM



Offshore Platform



Offshore Platform

CONTACTS

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