

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

Certificate No.: **IECEx ULD 14.0004X** Page 1 of 5 Certificate history:

Issue 6 (2023-10-17) Issue No: 7 Status: Current Issue 5 (2022-03-28)

Date of Issue: 2023-10-18

Applicant: **European Safety Systems Limited** 

Impress House Mansell Road Acton

London W3 7QH **United Kingdom** 

Equipment: Beacons, Sounders, sounder/ beacon combinations and Junction boxes, D2xS1 (sounder), D2xS2 (sounder),

D2xL\* (Loudspeaker), D2xC1 (sounder beacon), D2xB1 (beacon), D2xC2 (sounder beacon), D2xJ1 (junction

**Lucy Frieders** 

Optional accessory:

Increased Safety "ec" and Dust Ignition Protection by Enclosure "tc" Type of Protection:

Marking: Ex ec IIC T6...T1 Gc

Ex tc IIIC T55°C...T110°C Dc

Please see Annex for additional temperature range information.

Approved for issue on behalf of the IECEx

Certification Body:

Position: Staff Engineer

Signature:

(for printed version)

(for printed version)

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The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Issue 4 (2019-11-25)

Issue 3 (2018-06-11) Issue 2 (2017-09-29)

Issue 1 (2015-05-11)

Issue 0 (2015-03-03)

Certificate issued by:

**UL Solutions (Demko) Borupvang 5A** Ballerup DK-2750 **Denmark** 





Certificate No.: IECEx ULD 14.0004X Page 2 of 5

Date of issue: 2023-10-18 Issue No: 7

Manufacturer: European Safety Systems Limited

Impress House Mansell Road Acton London

**United Kingdom** 

Manufacturing European Safety Systems Limited

locations: Impress House Mansell Road

Acton London W3 7QH

**W3 7QH** 

**United Kingdom** 

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"

Edition:3.0

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Certificate **does not** indicate compliance with 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 Reports:

DK/ULD/ExTR14.0009/00
DK/ULD/ExTR14.0009/01
DK/ULD/ExTR14.0009/03
DK/ULD/ExTR14.0009/04
DK/ULD/ExTR14.0009/05
DK/ULD/ExTR14.0009/07

**Quality Assessment Report:** 

GB/SIR/QAR06.0020/11



Certificate No.: IECEx ULD 14.0004X Page 3 of 5

Date of issue: 2023-10-18 Issue No: 7

#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

D2xS1 (sounder) comprises an aluminum enclosure housing components to generate selectable tones. The enclosure is sealed with o-rings to prevent ingress of dust or water. Up to two M20 threaded entries may be provided for installation of appropriately certified cable entry devices by the end user.

D2xS2 (sounder) comprises an aluminium enclosure housing components to generate selectable tones. The enclosure is sealed with o-rings to prevent ingress of dust or water. Up to three M20 threaded entries may be provided for installation of appropriately certified cable entry devices by the end user.

D2xC1X05 (sounder beacon) is the same aluminum housing as the D2xS1, except on one end the beacon assembly is mounted. The lamp is protected by a lens and wire guard. The lens and retaining ring screws are sealed with o-rings to prevent ingress of dust or water. Additional electrical components associated with the operation of the 5 Joule beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xC1X10 (sounder beacon) is the same aluminum housing as the D2xS1, except on one end the beacon assembly is mounted. The lamp is protected by a lens and wire guard. The lens and retaining ring screws are sealed with o-rings to prevent ingress of dust or water. Additional electrical components associated with the operation of the 10 Joule beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xB1X05 (beacon) comprises an aluminum enclosure housing components to generate visual outputs. The enclosure is sealed with o-rings to prevent ingress of dust and water. Up to 7 M20,  $\frac{1}{2}$  NPT or  $\frac{3}{4}$  NPT threaded entries may be provided for installation of appropriately certified cable entry devices by the end user. The lamp is protected by a lens and an optional wire guard. Additional electrical components associated with the operation of the 5 Joule beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xB1X10 (beacon) is the same aluminium housing enclosure as the D2xB1X05. The lamp is protected by a lens and an optional wire guard. Additional electrical components associated with the operation of the 10 Joule beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xB1LD2 (beacon) is the same aluminum housing enclosure as the D2xB1X05. The lamp is protected by a lens and an optional wire guard. Additional electrical components associated with the operation of the LED beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xB1LD3 (beacon) is the same aluminum housing enclosure as the D2xB1X05. The lamp is protected by a lens and an optional wire guard. Additional electrical components associated with the operation of the LED beacon, are installed within the housing and reflected by the nomenclature with "DC" followed by the voltage.

D2xC2X05 (sounder beacon) is the same aluminum housing as the D2xB1X05, coupled with the D2xS1 aluminum enclosure. Two brass connectors with locknuts secure the two housings together with a neoprene foam seal providing the ingress protection. Additional electrical components associated with the operation of the 5 Joule beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

See Annex for additional information and see Equipment (continued) section of this CoC.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- End user shall adhere to the manufacturer's installation and instruction when performing housekeeping to avoid the potential for hazardous electrostatic charges during cleaning, by using a damp cloth.
- Not to be mounted with the horn facing upwards. Refer to Manufacturer's Instructions.
- · The equipment shall only be used in end use with appropriately certified cable entry devices and blanking plugs.

Specific Conditions of Use for D2xB1LD\*\*\*\*\* and D2xC2LD\*\*\*\*\*\*, D2xB1XH1DC024, D2xB1XH2DC024, D2xC2XH1DC024 and D2xC2XH2DC024:

• The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.



Certificate No.: IECEx ULD 14.0004X Page 4 of 5

Date of issue: 2023-10-18 Issue No: 7

#### Equipment (continued):

D2xC2X10 (sounder beacon) is the same aluminum housing as the D2xB1X05, coupled with the D2xS1 aluminum enclosure. Two brass connectors with locknuts secure the two housings together with a neoprene foam seal providing the ingress protection. Additional electrical components associated with the operation of the 10 Joule beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xC2LD2 (sounder beacon) is the same aluminum housing as the D2xB1X05, coupled with the D2xS1 aluminum enclosure. Two brass connectors with locknuts secure the two housings together with a neoprene foam seal providing the ingress protection. Additional electrical components associated with the operation of the LED beacon, are installed within the housing and reflected by the nomenclature with "AC or DC" followed by the voltage.

D2xC2LD3 (sounder beacon) is the same aluminum housing as the D2xB1X05, coupled with the D2xS1 aluminum enclosure. Two brass connectors with locknuts secure the two housings together with a neoprene foam seal providing the ingress protection. Additional electrical components associated with the operation of the LED beacon, are installed within the housing and reflected by the nomenclature with "DC" followed by the voltage.

D2xJ1T (Junction Box) is the same aluminum housing as the D2xB1X05 with the junction box lid replacing the lens assembly lid. The enclosure is provided with a 12 Way Terminal Block. The D2xJ1T is approved as an accessory to the D2x product range.

D2xJ1D (Junction Box) is the same aluminum housing as the D2xB1X05 with the junction box lid replacing the lens assembly lid. The enclosure is provided with a DIN rail for installation for up to 12 AKZ 2.5 terminal blocks, and 4 AKE 2.5 Terminal blocks. The D2xJ1D is approved as an accessory to the D2x product range.

D2xB1XH1DC024 (beacon) is the same aluminum housing enclosure as the D2xB1X05. The lamp is protected by a lens and an optional wire guard. The electronics are similar to that of D2xB1X05DC024, with the addition of a low voltage sub board to control flash rate timing.

D2xB1XH2DC024 (beacon) is the same aluminum housing enclosure as the D2xB1X05. The lamp is protected by a lens and an optional wire guard. The electronics are similar to that of D2xB1X10DC024, with the addition of a low voltage sub board to control flash rate timing.

D2xC2XH1DC024 (sounder beacon) is the same aluminum housing as the D2xB1X05, coupled with the D2xS1 aluminum enclosure. Two brass connectors with locknuts secure the two housings together with a neoprene foam seal providing the ingress protection. The model utilizes the D2xB1XH1DC024 beacon coupled with D2xS1DC024.

D2xC2XH2DC024 (sounder beacon) is the same aluminum housing as the D2xB1X05, coupled with the D2xS1 aluminum enclosure. Two brass connectors with locknuts secure the two housings together with a neoprene foam seal providing the ingress protection. The model utilizes the D2xB1XH2DC024 beacon coupled with D2xS1DC024.

D2xL\* (Loudspeaker) comprises an aluminium enclosure housing components to generate selectable tones. Up to three M20 threaded entries may be provided for installation of appropriately certified cable entry devices by the end user. D2xL1 incorporates a 15W driver, D2xL2 incorporates a 25W driver.

Please see Annex for additional information.



Certificate No.: IECEx ULD 14.0004X Page 5 of 5

Date of issue: 2023-10-18 Issue No: 7

#### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Issue 1: Correction of the Nomenclature voltage detail to include AC or DC0 as applicable.

Correction of the Conditions of Certification to match installation instructions.,

- Issue 2: Addition of D2xB1 beacons, D2xC2 sounder beacon combinations and D2xJ1 Junction boxes.
- Issue 3: Adds new models and sub board assembly.
- Issue 4: Adds two new models (new LED driver boards), D2XB1LD3-DC024 and D2XC2LD3-DC024 and updates some of the existing models
- Issue 5: Change of protection concept for all models from "nA" to "ec".
- Issue 6: Addition of model D2xL\* Loudspeakers. Addition of model D2xS2 sounders. Update to IEC 60079-31, 3<sup>rd</sup> Edition.

Issue 7: Replacement of scheduled drawings to address typographical correction of D2xL\* label, D2xL\* instructions and D2xS2 instructions. No technical changes made.

#### Annex:

Annex to IECEx ULD 14.0004X Issue 7.pdf



Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 1 of 8

#### TYPE DESIGNATION

Nomenclature

#### Sounder:

Example - D2xS1DC024A1R

Model	Model Voltage (refer to electrical tables below)	Suffix
D2xS1 (low power)	AC115 AC230 DC024 DC048	Up to 4 alpha numeric characters, not associated with equipment certification
D2xS2F and D2xS2H (medium and high power, F and H	AC230	-A – Normal type.  Up to 4 alpha numeric characters, not associated with equipment certification
denote the size of the horn which is a mechanical part outside of the type of protection)	DC024	-A – Normal typeS – SIL type.  Up to 4 alpha numeric characters, not associated with equipment certification

#### Combined sounder beacon:

Example - D2xC1X05DC024AR/C

Example – D2XC1X05DC024AR/C	1	1	T
Model	Beacon energy (Joules)	Voltage (refer to electrical tables below)	Suffix
		AC115	
D2xC1X	05, 10	AC230	
(low power)	03, 10	DC024	
		DC048	
		DC024	
D2xC2X	05, 10	DC048	
(medium and high power)	03, 10	AC115	
		AC230	Up to 4 alpha numeric
		DC024	characters, not associated
D2xC2LD2		DC048	with equipment certification
(LED beacon)	- [	AC115	with equipment continuation
		AC230	
D2xC2LD3	_	DC024	
(LED beacon)		20021	
D2xC2XH1	_	DC024	
(xenon beacon)			
D2xC2XH2	_	DC024	
(xenon beacon)			



Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 2 of 8

#### Beacon:

Example - D2xB1X05DC024

Example DZXD1X00D00Z+		1		
Model	Beacon energy (Joules)	Model Voltage (refer to electrical tables below)	Suffix	
		DC024		
D2xB1X	05, 10	DC048		
DZXBTX	03, 10	AC115		
		AC230		
D2xB1LD2	DC024		Up to 4 alpha numeric	
(LED beacon)	-	AC115	characters, not associated	
	=	AC230	with equipment	
D2xB1LD3 (LED beacon)	-	DC024	certification	
D2xB1XH1 (xenon beacon)	-	DC024		
D2xB1XH2 (xenon beacon)	-	DC024		

#### **Junction Box:**

Example - D2xJ1T

Model	Model Voltage (refer to electrical tables below)		
D2xJ1T	54Vdc/230Vac 50/60Hz Max,		
D2xJ1D	10A Max		

#### Loudspeaker:

Example - D2xL1FV100

Model	
D2xL1FV725	15W, 25V to 70V loudspeaker, small horn
D2xL2FV725	25W, loudspeaker, large horn
D2xL2HV725	25W, loudspeaker, extra large horn
D2xL1FV100	15W, 100V loudspeaker, small horn
D2xL2FV100	25W, 100V loudspeaker, large horn
D2xL2HV100	25W, 100V loudspeaker, extra large horn
D2xL1FR008	15W, 8 ohm resistance loudspeaker, small horn
D2xL1FR016	15W, 16 ohm resistance loudspeaker, small horn
D2xL2FR008	25W, 8 ohm resistance loudspeaker, large horn
D2xL2FR016	25W, 16 ohm resistance loudspeaker, large horn
D2xL2HR008	25W, 8 ohm resistance loudspeaker, extra large horn
D2xL2HR016	25W, 16 ohm resistance loudspeaker, extra large horn



Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 3 of 8

#### Electrical Ratings:

Model	Electrical Ratings			
	DC	AC	Hz	Max. Amps, mA, (W)
D2xS1DC024	10-30	-	-	313 mA
D2xS1DC048	38-58	-	-	218 mA
D2xS1AC115	-	103.5-126.5	60	91 mA
D2xS1AC230	-	207-253	50	72 mA
D2xS2FDC024-A	11.5-54	-	-	12Vdc - P2: 289 mA, P3: 356 mA
D2xS2HDC024-A				24Vdc – P2: 324 mA, P3: 740 mA
				48Vdc – P2: 195 mA, P3: 391 mA
D2xS2FDC024-S	20-28	-	-	24Vdc - P2: 324 mA, P3: 740 mA
D2xS2HDC024-S				
D2xS2FAC230-A	-	100-240	50/60	115Vac – P2: 193 mA, P3: 479mA
D2xS2HAC230-A				230Vac – P2: 103 mA, P3: 221mA
D2xC1X05DC024	20-28	-	-	521 mA
D2xC1X05DC048	42-58	-	-	328 mA
D2xC1X05AC115	-	115-125	60	183 mA
D2xC1X05AC230	-	215-250	50	77 mA
D2xC1X10DC024	20-28	-	-	876 mA
D2xC1X10DC048	42-58	-	-	475 mA
D2xC1X10AC115	-	115-125	60	343 mA
D2xC1X10AC230	-	215-250	50	115 mA
D2xB1X05DC024	20-28	-	-	296 mA
D2xB1X05DC048	48	-	-	145 mA
D2xB1X05AC115	-	115-120	50/60	80 mA
D2xB1X05AC230	-	220-230	50/60	30 mA
D2xB1X10DC024	20-28	-	-	609 mA
D2xB1X10DC048	48	-	-	260 mA
D2xB1X10AC115	-	115-120	50/60	185 mA
D2xB1X10AC230	-	220-230	50/60	107 mA
D2xB1LD2DC024	18-54	-	-	346 mA
D2xB1LD2AC115	-	115-120	50/60	102.4 mA
D2xB1LD2AC230	-	220-230	50/60	75 mA
D2xB1LD3DC024	16-33	-	-	528 mA
D2xC2X05DC024	20-28	-	-	296+313 mA
D2xC2X05DC048	48	-	-	145+218 mA
D2xC2X05AC115	-	115-120	50/60	80+91 mA
D2xC2X05AC230	-	220-230	50/60	30+72 mA
D2xC2X10DC024	20-28	-	-	609+313 mA
D2xC2X10DC048	48	-	-	260+218 mA
D2xC2X10AC115	-	115-120	50/60	185+91 mA
D2xC2X10AC230	-	220-230	50/60	107+72 mA
D2xC2LD2DC024	24	-	-	346+313 mA
D2xC2LD2DC048	48	-	1-	115+218 mA
D2xC2LD2AC115	-	115-120	50/60	102.4+91 mA
D2xC2LD2AC230	_	220-230	50/60	75+72 mA
D2xC2LD3DC024	16-33	-	-	528+250 mA
D2xJ1T	54 Max	230 Max	50/60	10A
D2xJ1D	54 Max	230 Max	50/60	10A



Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 4 of 8

Model	Electrical Ratings			
	DC	AC	Hz	Max. Amps, mA, (W)
D2xB1XH2DC024	20-28	-	-	609 mA
D2xC2XH1DC024	20-28	-	-	449 mA
D2xC2XH2DC024	20-28	-	-	785 mA
D2xL1FV725	•	25 / 70	signal	15 W
D2xL2FV725	•	25 / 70	signal	25 W
D2xL2HV725	•	25 / 70	signal	25 W
D2xL1FV100	•	100	signal	15 W
D2xL2FV100	•	100	signal	25 W
D2xL2HV100	•	100	signal	25 W
D2xL1FR008	•	10.95V Max	signal	15 W
D2xL1FR016	•	15.49V Max	signal	15 W
D2xL2FR008	•	10.95V Max	signal	25 W
D2xL2FR016	-	15.49V Max	signal	25 W
D2xL2HR008	-	10.95V Max	signal	25 W
D2xL2HR016	-	15.49V Max	signal	25 W

Temperature range and class for each Model Series:

Model	Type of protection	Temperature Class	Associated Ambient Temperature range
D2XS1	Ex ec IIC	T4	-40°C ≤ Tamb ≤ +50°C
DZAST	Ex tc IIIC	T90°C	-40°C ≤ Tamb ≤ +50°C
D2xSF2DC024-A	Ex ec IIC	T3	-55°C ≤ Tamb ≤ +75°C
D2xSH2DC024-A D2xS2FDC024-S	Ex ec IIC	T4	-55°C ≤ Tamb ≤ +55°C
D2xS2HDC024-S	Ex tc IIIC	T95°C	-55°C ≤ Tamb ≤ +75°C
D0 005100001	Ex ec IIC	T4	-55°C ≤ Tamb ≤ +75°C
D2xS2FAC230-A D2xS2HAC230-A	Ex ec IIC	T5	-55°C ≤ Tamb ≤ +50°C
DZXOZI IAOZOO-A	Ex tc IIIC	T93°C	-55°C ≤ Tamb ≤ +75°C
D2XC1X05	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
DZACTAOS	Ex tc IIIC	T90°C	-40°C ≤ Tamb ≤ +50°C
	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2XC1X10	Ex ec IIC	T1	-40°C ≤ Tamb ≤ +50°C
	Ex tc IIIC	T110°C	-40°C ≤ Tamb ≤ +50°C
D2xB1LD2	Ex ec IIC	T4	-40°C ≤ Tamb ≤ +50°C
DZXB ILDZ	Ex tc IIIC	T75°C	-40°C ≤ Tamb ≤ +50°C
D2xB1LD3	Ex ec IIC	T4	-40°C ≤ Tamb ≤ +50°C
DZXBILDS	Ex tc IIIC	T75°C	-40°C ≤ Tamb ≤ +50°C
D2xB1X05DC024	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2XB1X03DC024	Ex tc IIIC	T80°C	-40°C ≤ Tamb ≤ +50°C
D2xB1X05DC048	Ex ec IIC	T3	-40°C ≤ Tamb ≤ +50°C
D2xB1X05AC115 D2xB1X05AC230	Ex tc IIIC	T95°C	-40°C ≤ Tamb ≤ +50°C



Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 5 of 8

Model	Type of protection	Temperature Class	Associated Ambient Temperature range
D0:-D4V40D0004	Ex ec IIC	T1	-40°C ≤ Tamb ≤ +50°C
D2xB1X10DC024	Ex tc IIIC	T105°C	-40°C ≤ Tamb ≤ +50°C
D2xB1X10DC048	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2xB1X10AC115 D2xB1X10AC230	Ex tc IIIC	T95°C	-40°C ≤ Tamb ≤ +50°C
	Ex ec IIC	Т3	-40°C ≤ Tamb ≤ +50°C
D2xC2X05DC024	Ex tc IIIC	T75°C	-40°C ≤ Tamb ≤ +50°C
D2xC2X05DC048	Ex ec IIC	Т3	-40°C ≤ Tamb ≤ +50°C
D2xC2X05AC115 D2xC2X05AC230	Ex tc IIIC	T95°C	-40°C ≤ Tamb ≤ +50°C
D000V40D0004	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2xC2X10DC024	Ex tc IIIC	T85°C	-40°C ≤ Tamb ≤ +50°C
D2xC2X10DC048	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2xC2X10AC115 D2xC2X10AC230	Ex tc IIIC	T95°C	-40°C ≤ Tamb ≤ +50°C
	Ex ec IIC	T4	-40°C ≤ Tamb ≤ +50°C
D2xC2LD2	Ex tc IIIC	T75°C	-40°C ≤ Tamb ≤ +50°C
	Ex ec IIC	T4	-40°C ≤ Tamb ≤ +50°C
D2xC2LD3	Ex tc IIIC	T75°C	-40°C ≤ Tamb ≤ +50°C
D0 14T	Ex ec IIC	T6	-40°C ≤ Tamb ≤ +50°C
D2xJ1T	Ex tc IIIC	T55°C	-40°C ≤ Tamb ≤ +50°C
D0 14D	Ex ec IIC	T6	-40°C ≤ Tamb ≤ +50°C
D2xJ1D	Ex tc IIIC	T55°C	-40°C ≤ Tamb ≤ +50°C
D0 D4)///D0004	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2xB1XH1DC024	Ex tc IIIC	T80°C	-40°C ≤ Tamb ≤ +50°C
D0 D4)///0D0004	Ex ec IIC	T1	-40°C ≤ Tamb ≤ +50°C
D2xB1XH2DC024	Ex tc IIIC	T105°C	-40°C ≤ Tamb ≤ +50°C
D0. 00VII.4D0004	Ex ec IIC	Т3	-40°C ≤ Tamb ≤ +50°C
D2xC2XH1DC024	Ex tc IIIC	T75°C	-40°C ≤ Tamb ≤ +50°C
D0 000/110D0004	Ex ec IIC	T2	-40°C ≤ Tamb ≤ +50°C
D2xC2XH2DC024	Ex tc IIIC	T85°C	-40°C ≤ Tamb ≤ +50°C
	Ev. 22 110	Т3	-55°C ≤ Tamb ≤ +75°C
D2xL1	Ex ec IIC	T4	-55°C ≤ Tamb ≤ +50°C
	Ex tc IIC	T109°C	-55°C ≤ Tamb ≤ +75°C
Dovi o	Ex ec IIC	Т3	-55°C ≤ Tamb ≤ +75°C
D2xL2	Ex tc IIC	T119°C	-55°C ≤ Tamb ≤ +75°C



IECEx ULD 14.0004X Issue No.:7 Annex to Certificate No.:

Page 6 of 8

#### **MARKING**

Marking has to be readable and indelible; it has to include the following indications:

Note: Label 1 & 2 are both applied to the appropriate equipment incorporating relevant protection concept information, warning and cautionary markings.

#### D2xS1 Product label 1

#### D2xS1 Product label 2

#### D2xS1DC024A1R

Voltage: 10-30VDC Alarm Horn Nominal Current: 250mA

(Ex)||3D Max Current: 313mA @ 24VDC

Ex ec IIC T4 Gc Ta -40°C to +50°C Ex tc IIIC T90°C Dc Ta -40°C to +50°C

Canada

Ex ec IIC T4A Gc X Ta -40°C to +50°C Ex tc IIIC T90°C Dc Ta -40°C to +50°C Class II Division 2 EFG T5 Ta -40°C to +50°C

2 x cable entries M20 x 1.5mm.

Use heat resistant cables and glands (rated 90°C)

DEMKO 14ATEX4786493904X **( (** 

Type 4 / 4X / 13 / 3R IECEx ULD14.0004X

Year / Serial No. 14/01D1200001

Impress House, Mansell Rd, London UK W3 7QH www.e2s.com

#### D2xS1 ALARM HORN

USA / Canada

Class I Division 2 Ta -40°C to +70°C Class I Division 2 ABCD T4 Ta -40°C to +65°C Class I Division 2 ABCD T4A Ta -40°C to +50°C Class II Division 2 FG T5 Ta -40°C to +50°C Class II Division 2 FG T6 Ta -40°C to +45°C Class III Division 1 & 2 Ta -40°C to +50°C

USA

Class I Zone 2 AEx ec IIC T4 Gc Ta -40°C to +50°C Zone 22 AEx tc IIIC T90°C Dc Ta -40°C to +50°C

WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

AVERTISSEMENT - NE PAS OUVRIR UN PRÉSENCE D'ATMOSPHÈRE

**EXPLOSIVE** 

AVERTISSEMENT - DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE - NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE

Audible Signalling Appliance For Use In Hazardous Locations

#### D2xS2 Product label 1

#### D2xS2 Product label 2

#### D2xS2FDC024

II 3G

#### Alarm Horn



Nominal Voltage: 12/24/48Vdc Nominal Current: P2: 289/324/195mA Nominal Current: P3: 356/740/391mA

 $\langle \mathcal{E}_{\mathbf{x}} \rangle_{\parallel 3D}^{\parallel 3G}$ Voltage: 11.5-54VDC ATEX / IECEx / UKEX

Ex ec IIC T3 Gc Ta -55°C to +75°C Ex ec IIC T4 Gc Ta -55°C to +55°C Ex to IIIC T95°C Do Ta -55°C to +75°C

2 x cable entries M20 x 1,5mm / Single 1/2" NPT Use heat resistant cables and glands (rated 90°C)

DEMKO 14ATEX4786493904X

IECEx ULD14,0004X Type 4 / 4X / 13 / 3R UL21UKEX2131X

Year / Serial No. 23/01D2200001

Impress House, Mansell Rd, London UK W3 7QH www.e2s.com

D2xS2FDC024

ALARM HORN

WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH WARNING - DO NOT OPEN WHEN AN EXPLOSIVE

ATMOSPHERE IS PRESENT

AVERTISSEMENT - NE PAS OUVRIR UN PRÉSENCE D'ATMOSPHÈRE EXPLOSIVE

AVERTISSEMENT - DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE

Audible Signalling Appliance For Use In Hazardous Locations

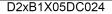


Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 7 of 8



#### D2xB1 Product label 3



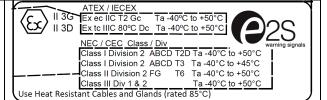
MMY Regulated Voltage: 24VDC Max Current: 296mA Range: 20-28VDC

For detailed current & light output ratings, see instructions  $\boxed{2211-0.251-IS-SC}$  Cable entries: 2-off M20 x 1.5mm, 2-off  $\frac{3}{4}$ " NPT & 1-off  $\frac{3}{4}$ " NPT;

DEMKO 14 ATEX 4786493904X

Type 4 / 4X / 3R / 13 IECEx ULD 14.0004X

Year / Serial No. 17/1DH22XXXXXX



#### D2xC1X05 Product label 1

#### D2xC1X05 Product label 2

#### D2xC1X05DC024A1R/C ALARM HORN/STROBE



 $\langle \mathcal{E}_{\mathbf{x}} \rangle_{\text{II 3D}}^{\text{II 3D}}$ II 3G

Voltage: 20-28VDC Nominal Current: 513mA Max Current: 521mA @ 20VDC

Ex ec IIC T2 Gc Ex tc IIIC T90°C Dc

Ex tc IIIC T120°C Dc

Ta -40°C to +50°C Ta -40°C to +50°C

Canada

Ta -40°C to +50°C

Ex ec IIC T2B Gc X Ex ec IIC T2C Gc X

Ta -40°C to +45°C Ta -40°C to +50°C Class II Division 2 EFG T4A Ta -40°C to +50°C

2 x cable entries M20 x 1.5mm.

Use heat resistant cables and glands (rated 90°C)

Type 4 / 4X / 13 / 3R IECEx ULD14.0004X

Year / Serial No. 14/01D5200001

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#### D2xC1X05 ALARM HORN/STROBE

USA / Canada

ABCD T2B Class I Division 2 Ta -40°C to +70°C Ta -40°C to +50°C Class I Division 2 ABCD T2C Class I Division 2 ABCD T2D Class II Division 2 FG T5 Ta -40°C to +40°C

Ta -40°C to +50°C

Ta -40°C to +50°C

Class III Division 1 & 2 USA

Ta -40°C to +50°C

Class I Zone 2 AEx ec IIC T2 Gc AEx tc IIIC T120°C Dc Ta -40°C to +50°C Zone 22

WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH

WARNING - DO NOT OPEN WHEN AN EXPLOSIVE

ATMOSPHERE IS PRESENT

AVERTISSEMENT - NE PAS OUVRIR UN PRÉSENCE D'ATMOSPHÈRE

**EXPLOSIVE** AVERTISSEMENT - DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE

- NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE Audible & Visual Signalling Appliance For

Use In Hazardous Locations

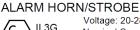
Not To Be Used As A Visual Public Mode Alarm Notification Appliance

#### D2xC1X10 Product label 1

#### D2xC1X10 Product label 2

#### D2xC1X10DC024R/C





Voltage: 20-28VDC  $\langle \mathcal{E}_{\mathbf{x}} \rangle_{\text{II 3D}}^{\text{II 3D}}$ Nominal Current: 876mA Max Current: 876mA @ 20VDC



Ex ec IIC T1 Gc Ta -40°C to +50°C Ex ec IIC T2 Gc Ta -40°C to +40°C Ex tc IIIC T110°C Dc Ta -40°C to +50°C

Canada

Ex ec IIC T1 Gc X Ta -40°C to +50°C Ex ec IIC T2 Gc X Ta -40°C to +40°C Ex tc IIIC T120°C Dc Ta -40°C to +50°C Class II Division 2 EFG T4A Ta -40°C to +50°C

2 x cable entries M20 x 1.5mm.

Use heat resistant cables and glands (rated 90°C)

DEMKO 14ATEX4786493904X ( E Type 4 / 4X / 13 / 3R IECEx ULD14.0004X

Year / Serial No. 14/01D6200001

Impress House, Mansell Rd, London UK W3 7QH www.e2s.com

#### D2xC1X10 ALARM HORN/STROBE

USA / Canada

Class I Division 2 ABCD T1 Ta -40°C to +70°C Class I Division 2 ABCD T2 Ta -40°C to +50°C Class II Division 2 FG T4A Ta -40°C to +50°C Class II Division 2 FG Ta -40°C to +40°C T5 Class III Division 1 & 2 Ta -40°C to +50°C USA

Class I Zone 2 AEx ec IIC T1 Gc Ta -40°C to +50°C Class I Zone 2 AEx ec IIC T2 Gc Ta -40°C to +40°C AEx tc IIIC T120°C Dc Ta -40°C to +50°C Zone 22

WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT



AVERTISSEMENT - NE PAS OUVRIR UN PRÉSENCE D'ATMOSPHÈRE EXPLOSIVE

AVERTISSEMENT - DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE -NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE

Audible & Visual Signalling Appliance For

Use In Hazardous Locations

Not To Be Used As A Visual Public Mode Alarm Notification Appliance



Annex to Certificate No.: IECEx ULD 14.0004X Issue No.:7

Page 8 of 8

#### D2xL Product label 1

#### D2xL Product label 2

D2xL1FV725 70 / 25V Loudspeaker 15W

Input: 70 / 25V Line Power: 15W

 $\langle \mathcal{E}_{x} \rangle \parallel 3D$ II 3G

Max I/P Voltage: 70.7 / 25VDC

MMYY

CE

ATEX / IECEx / UKEx

Ex ec IIC T3 Gc Ta -55°C to +75°C Ex ec IIC T4 Gc Ta -55°C to +50°C Ex tc IIIC T109°C Dc Ta -55°C to +75°C

2 x cable entries M20 x 1.5mm / Single 1/2" NPT Use heat resistant cables and glands (rated 90°C)

DEMKO 14 ATEX 4786493904X

IECEx ULD14.0004X **IP66** UL21UKEX2131X

Year / Serial No. 23/1D3500001

Impress House, Mansell Rd, London UK W3 7QH www.e2s.com

D2xL2FV725 70 / 25V Loudspeaker 15W

WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH WARNING - DO NOT OPEN WHEN AN EXPLOSIVE

ATMOSPHERE IS PRESENT

AVERTISSEMENT - NE PAS OUVRIR UN PRÉSENCE D'ATMOSPHÈRE **EXPLOSIVE** 

AVERTISSEMENT - DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE - NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE

Audible Signalling Appliance For Use In Hazardous Locations

#### D2x Warning label (all xenon units)

#### D2x Warning label (all LED units)

#### **WARNING:**

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

DO NOT OPEN WHEN ENERGISED

POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH HIGH VOLTAGE SHOCK HAZARD. WAIT 5 MINUTES AFTER

REMOVING POWER BEFORE OPENING THE ENCLOSURE

AVERTISSEMENT:
NE PAS OUVRIR UN PRESENCE D'ATMOSPHERE EXPLOSIVE
NE PAS OUVRIR ENERGIE

DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE -NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE HAUT TENSION, RISK DE CHOC. ATTENDEZ 5 MINUTES

AVOIR DEBRANCHE L'ALIMENTATION AVANT D'OUVRIR LA **BOITIFR** 

NE PAS PEINTURER

**WARNING:** DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS

**PRESENT** 

DO NOT OPEN WHEN ENERGISED POTENTIAL ELECTROSTATIC CHARGING HAZARD - CLEAN ONLY WITH A DAMP CLOTH

DO NOT PAINT

#### **AVERTISSEMENT:**

NE PAS OUVRIR UN PRESENCE D'ATMOSPHERE EXPLOSIVE NE PAS OUVRIR ENERGIE

DANGER POTENTIEL CHARGE ÉLECTROSTATIQUE -NETTOYER UNIQUEMENT AVEC UN CHIFFON HUMIDE **NE PAS PEINTURER** 

#### **ROUTINE EXAMINATIONS AND TESTS**

The xenon lamp assembly shall be routinely dielectrically strength tested. Tests shall be performed as described in IEC 60079-7, clause 6.1, at 1200Vac for a minimum of 1 second.

All models shall be routinely dielectrically strength tested. The tests shall be performed as described in IEC 60079-7, clause 6.1, at 1200Vac for a minimum of 1 second.