



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx EMT 24.0008X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2025-04-15

Applicant: **Moflash Signalling Limited**
11 Upper Conybere Street
Highgate
Birmingham
B12 0EB
United Kingdom

Equipment: **Acoustic Pneumatic TDE Horn. Models TDE 198 Ex, TDE 360 Ex, TDE 450 Ex.**

Optional accessory:

Type of Protection: **Non-electrical Ex 'h'**

Marking: Ex h IIB+H₂ T6 Gb -30 °C ≤Ta ≤ 70 °C
Ex h IIIC T85 °C Db -30 °C ≤Ta ≤ 70 °C

Approved for issue on behalf of the IECEx
Certification Body:

Stephen Winsor

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Element Materials Technology
Unit 1 Pendle Place
Skelmersdale
West Lancashire
United Kingdom





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Manufacturing
locations: **Moflash Signalling Limited**
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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

ISO 80079-36:2016 Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements
Edition:1.0

ISO 80079-37:2016 Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
Edition:1.0

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 Report:

GB/EMT/ExTR24.0002/00

Quality Assessment Report:

GB/EMT/QAR17.0001/06



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The equipment is a bronze and stainless steel acoustic pneumatic horn to be install as a fixed equipment in hazardous location zones 1 and 21.

The TDE pneumatic horn uses compressed air, which flows from the inlet line through a narrow opening past the bronze diaphragm, causing the diaphragm to vibrate, which creates sound waves. The sound wave travel through the trumpet horn, serving as an acoustic impedance transformer to amplify the transfer of sound energy from the diaphragm to the open air, making the sound louder.

The TDE pneumatic horn comprises of a phosphor bronze diaphragm membrane encased in a 316L stainless steel diaphragm casing. The back lid of the diaphragm casing is made of MS58 Brass and is designed with threads in order for the lid to be screwed directly into the diaphragm casing. The TDE pneumatic horn is to be secured to a wall or any flat surface, using the two 8.50 mm diameter mounting holes positioned 135 mm apart, located on the stainless steel diaphragm casing. The TDE trumpet horn comes in three different size variations; 198 mm, 360 mm and 450 mm in length. The trumpets are made of brass that has been coated in black varnish and comprise of threads at the narrow end so that the horn can be screwed directly into the stainless steel diaphragm casing. In order to make sure the trumpet horn is tightly secured, a M4 grub screw is used for added security.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The air supply tube must be protected from direct UV radiation.
2. The equipment shall be suitably bonded to a common earth point.

Annex:

[Annex_to_IECEX EMT 24.0008X iss 0.pdf](#)



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Unit 1, Pendle Place,
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United Kingdom

Annex to IECEx Certificate of Conformity

IECEx EMT 24.0008X issue No.: 0

“Special conditions for manufacture”

1. None

Routine Tests

1. None

Rating

Model	Air Pressure	Air Consumption	Frequency	dB(A)
TDE 198 Ex	2 -10 bar	2 - 3.5 l/s	660 Hz	116-138
TDE 360 Ex	1.5 -10 bar	1.5 - 3.5 l/s	377 Hz	116-132
TDE 450 Ex	1.5 - 10 bar	1.5 - 3.5 l/s	307 Hz	116-132

Manufacturer's Documents			
Title:	Drawing No.:	Rev. Level:	Date:
TDE Ex Series Pneumatically Driven Air Horn	Doc: S00662	01	2024-11-04
TDE AIRHORN, ATEX (Technical Drawing)	TDE 195Ex/360Ex/450Ex	01	2025-03-19
MoFlash TDE Ex rating plate drawing.	-	01	2025-03-11

Note: The symbol " - " indicates that this information was not available.



Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.