EXPLOLABS Explosion Prevention Services (Pty) Ltd
Reg No: 1999/027771/07

7 Spanner Rd / PO Box 467
Olifantsfontein
1665
Tel: +27 (11) 316 4601
Fax: +27 (11) 316 5670
E-mail: admin-mgr@explolabs.co.za

GOVERNMENT APPROVED TEST LABORATORY

IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued: **20 Oct 2021**
*Expiry date: **20 Oct 2024**

Issue: 0

Ex – Type Examination Certificate

Certificate Number: **S-XPL/21.1058 X**
Equipment: **Conventional Optical Smoke Detector**
Model / Type: **SOC-E-IS**
Applicant: **Carrier Fire and Security South Africa (Pty) Ltd**
29 Angus Crescent
Longmeadow Business Park East
Edenvale, Johannesburg, 1609, South Africa
Manufacturer: **Hochiki Europe**
Serial No: All serial numbers imported between issued- and expire date and all serial numbers covered by a valid report or acceptable product certification mark.

Supplied by
Carrier Fire and Security South Africa (Pty) Ltd
Identified by Inspection Authority number
S-XPL/21.1058 X

And as described in the Explolabs file number **XPL/22360/21.1058** is hereby certified "Explosion Protected (Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of South African Standards.

SANS 60079-0: 2019 Ed 6 **IEC 60079-0: 2017 Ed 7**	Explosive atmospheres Part 0: Equipment — General requirements
SANS 60079-11: 2012 Ed 4 **IEC 60079-11: 2011 Ed 6**	Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL) Group	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
Very high	Ga Group II	Two independent means of protection or safe even when two faults occur independently of each other	Equipment remains functioning in zones 0, 1 and 2	T5 (100°C)

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:

i) SANS 10086 and IEC/SANS 61241-14 requirements as applicable;
ii) Any conditions mentioned in the above report;
iii) Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; and
iv) Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
v) A revision certificate replaces all previous version of the certificate.
vi) * - Only covers equipment Imported between the "Issued" and "Expire" dates.
vii) If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd

1. GENERAL

The marking of the Conventional Optical Smoke Detector shall include the following:
Ex ia IIC T5 Ga (-20°C ≤ Ta ≤ +55°C)

The SOC-E-IS Conventional Optical Smoke Detector is designed to detect combustion products in the air within a hazardous area and provides an alarm indication on a locally mounted LED and to equipment located in the non-hazardous area via a suitable interface.

The SOC-E-IS comprises various components, including LEDs and a photodetector, mounted on a printed circuit board (PCB) which is encapsulated and housed within a plastic enclosure. A perforated metal sheet permits access for the combustion products to the photodetector. The smoke detector sub-assembly is mounted on a Base Unit Type YBN-R/4(IS) which incorporates the field terminals. Cable entry to the field terminals is from the base of the enclosure.

This certificate covers the following variants:
SOC-E-IS, all variants
SOC-E-IS (WHT), all variants

Input/output parameters
Both variants:
Ui = 30V Ci = 0
Ii = 100mA Li = 0
Pi = 750mW

Based on the following documentation: Baseefa 19 ATEX 0143 X

2. INSTALLATION INSTRUCTIONS

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

3. SPECIAL CONDITIONS FOR SAFE USE *(denoted by "X" after certificate number)*

The plastic enclosure may present a potential electrostatic ignition hazard; the equipment must not be rubbed or cleaned with a dry cloth or solvents or installed within a dust-laden airflow.

4. SCHEDULE OF LIMITATIONS *(denoted by "U" after certificate number)*

None.

5. CONDITIONS OF CERTIFICATION

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

6. MARKING

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : Carrier Fire and Security South Africa (Pty) Ltd
Manufacturer : Hochiki Europe
Equipment : Conventional Optical Smoke Detector
Model/Type : SOC-E-IS
Serial No. : ---
Ex Rating : Ex ia IIC T5 Ga (-20°C ≤ Ta ≤ +55°C)
IA Certificate No : S-XPL/21.1058 X

Responsible Testing Officer:

Digitally signed
by Marcel
Date: 2021.10.25
11:08:10 +02'00'

M Lategan
Technical Specialist
EXPLOLABS EXPLOSION PREVENTION SERVICES