G008710

IS optical smoke/heat detector

Salwico NS-AOHS-IS

Part no. N11250

System: * CS3000, CS4000, NSAC-1, Salwico Cargo, Salwico Cruise, Salwico LNG, Salwico Offshore, Salwico Ro/Pax, Salwico Workboat, Salwico Yacht, Salwico Navy, OEM Extinguish

General Description

NS-AOHS-IS is an intrinsically safe analogue addressable multi sensor detector for Salwico fire alarm systems.

It uses a combination of two separate analogue sensor elements. One optical-smoke-sensor and one thermistor-heat-sensor. A SMOKEHEAT alarm is activated, regardless of which sensor being triggered. However, it' s possible for the user to temporarily disable the smoke or heat sensor individually.

Alarm condition is indicated on the detector via a red LED. The LED is lit until the alarm has been reset on the control panel.

The address is set with a DIP switch, which is mounted on the backside of the detector.

NS-AOHS-IS is connected to the detector loop via an intrinsically safe isolator.

It is not possible to connect any remote LED indicator to NS-AOHS-IS.

CAUTION!
Certified product
No modifications permitted without reference to notified body.

Safety data

Max input voltage (U_i)	28 VDC
Max input current (I_i)	93.3 mA
Max input power (P_i)	0.66 W
Max internal capacitance (C_i)	1 nF
Max internal inductance (L_i)	Negligible
Responsible manufacturer	Consilium Marine & Safety AB, www.consilium.se

Only clean outside of detector by using a damp cloth.

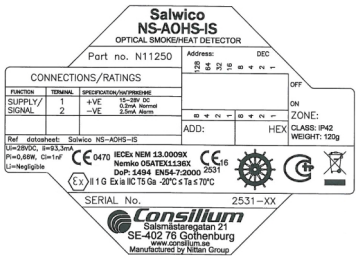
Data

Smoke sensing method	Light scattering type IR (infra-red)
Working voltage	15 - 28 VDC
Working current	0.2 mA
Alarm current	2.5 mA
Temperature class	CS (84 °C)
Temperature range	-25 °C to +70 °C
Ambient humidity	0-95% RH, non-condensing
Colour	White
Weight	100 g ± 5% (head only) 365 g ± 5% complete with adapter IP-ADAPT and base IP-BASE

It is important only to use base adapter IP-ADAPT part. no. 5100775 together with a suitable base. For information about suitable bases, see separate document "Base matrix Salwico units".

* SPK-2 for NOSE based detectors.

Certifications



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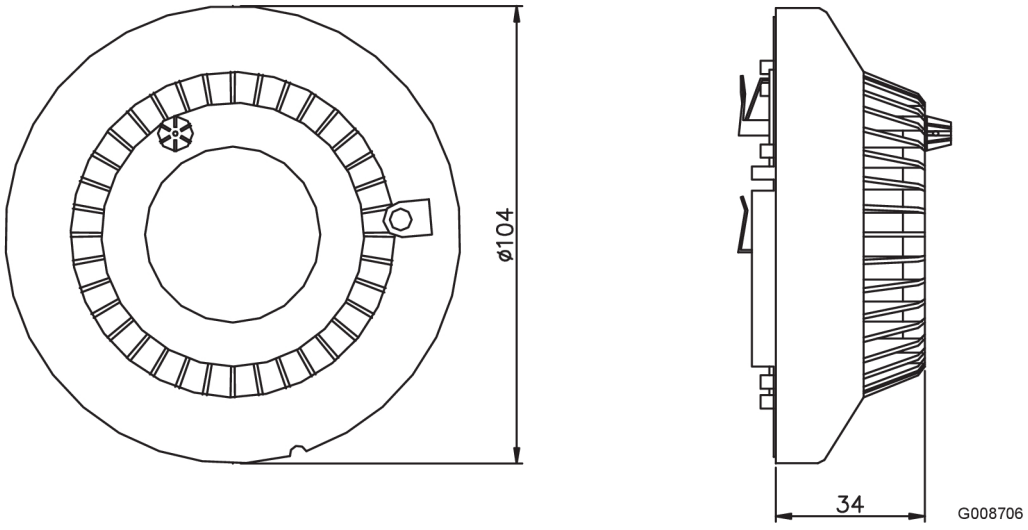
ATEX Ex ia	Certificate No: 05ATEX1136X Certified according to: EN 60079-0:2018 EN 60079-11:2012 EN 60079-26:2007 II 1G
IECEx ia	Certificate No: IECEx NEM 13.0009X Certified according to: IEC 60079-0:2017 IEC 60079-11:2011 IEC 60079-26:2006 Ex ia IIC T5 Ga -20°C ≤ Ta ≤ 70°C
MED	Certificate No: 2531-MED-CMC10040 Certificate according to: EN54-5:2000 + A1:2002 EN54-7:2000 + A1:2002 and A2:2006 IEC 60092-504: 2016, IEC 60533:2015 2531/yyyy yyyy = year of production

Dimensions (mm)



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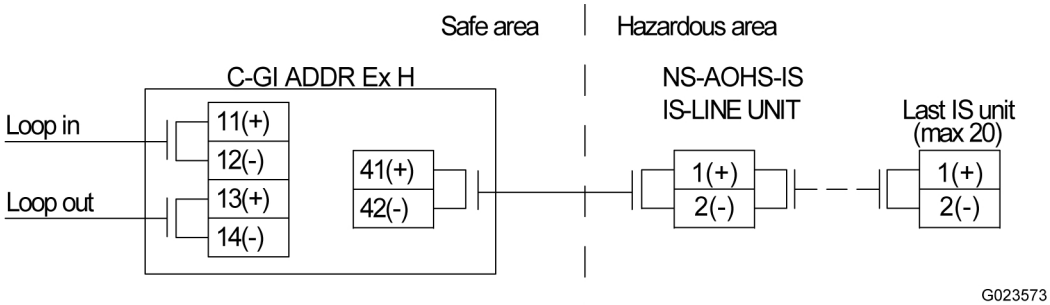
Connection



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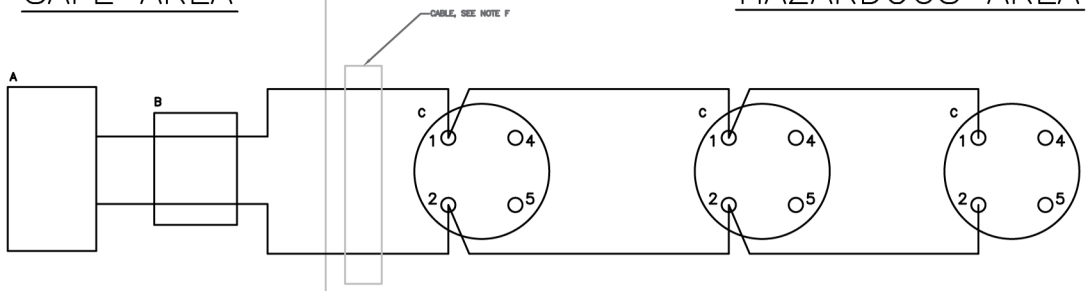
SAFE AREA

HAZARDOUS AREA



A. Apparatus which is unspecified except that it must not be supplied from nor contain in normal or abnormal conditions a source of potential with respect to earth in excess of 250 volts r.m.s. or 250 volts d.c.

B. Use single channel isolated safety barrier certified by an EEC Approved Certification Body to (Ex ai) IIC having the following or lower output parameters:

Isolator:

Uo = 28.0V
Io = 93.3mA
Po = 0.66W

Detector:

Ui = 28V
Pi = 0.66W
Ii = 93.3mA
Li = negligible
Ci = 1nF

C. Up to 20 Type NS-AOHS-IS Series Optical Smoke Detectors and Type STB-4IS2, IP-ADAPT or NS-ADAPT-IS2 Bases. (Certificate Number Nemko 05ATEX1136X).

D. Terminals are fitted to positions 4 and 5. These terminals have no electrical connection and are for mechanical fixing purposes only.

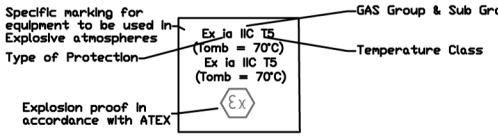
E. The installation must comply with the European Harmonised Standard, EN 60079: Part 14: 2013.

F. The capacitance and inductance or inductance to resistance (L/R) ratio of the hazardous area cable must not exceed the values shown in Table 1 below:

TABLE 1

GROUP	CAPACITANCE in µF	INDUCTANCE in mH	OR	L/R RATIO in µH/ohm
IIC	0.08	4.3		55
IIB	0.65	17		199
IIA	2.15	35		431

G. A durable label, as shown below, to be affixed at the interface of the IS and non IS circuits.



H. The electrical circuit in the Hazardous area must be capable of withstanding an A.C. test voltage of 500V r.m.s. to earth or frame of the apparatus, for 1 minute.

I. WARNING: Possible Electrostatic Discharge Risk. Do NOT Clean with Solvents. Do NOT charge by Rubbing. Clean ONLY with a Damp Cloth.

SCHEDULE DRAWING.
NO MODIFICATIONS PERMITTED WITHOUT REFERENCE TO THE NOTIFIED BODY.

Issue 2 Updated Sections B, F, G & I

12/05/21	4	210501
22/02/21	3	210202
12/08/13	2	130102
24/03/05	1	N/A
DATE	ISSUE	D.C.N.

PART No. | CURRENT ISSUE 4

MATERIAL SPEC
CLASS VINYL, SELF ADHESIVE, LAMINATED. COLOUR: BLACK TEXT ON WHITE VINYL
G014927

DRAWING. K Williams
APPRVD.
FILE REF: 073064

TOLERANCES UNLESS OTHERWISE STATED
DECIMALS ±0.1
ANGLES ±0.5°

SCALE 2:1

DRG. NO. 073064 | SHEET 1 OF 1 | REMOVE ALL BURRS | DIMMS IN MM

TITLE NSx-AOHS-IS SERIES SYSTEM CONNECTION DIAGRAM

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