



G008710

System: CS3000*, CS4000, NSAC-1, TERRA FIRE

IS optical smoke/heat detector

Salwico NS-AOHS-IS

Part no. N11250

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.

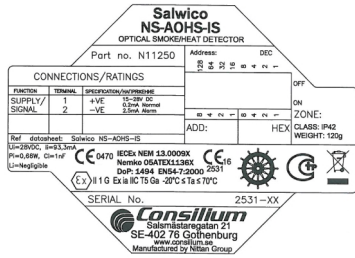
Data

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. 5100775-00A together with IP-BASE part. no. 5100774-00A. For information about suitable bases, see separate document "Base matrix Salwico units".

* SPK-2 for NOSE based detectors.

Certifications



G023510

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

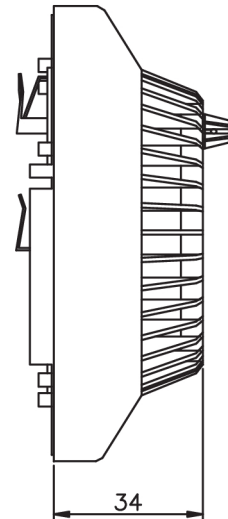
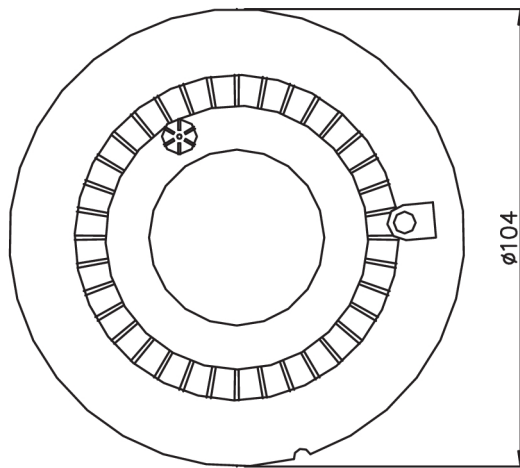
CPR

Certificate No:
CE
2531-CPR-232.1494
Certified according to:
EN54-7:2000 + A2:2006
EN54-5:2000 + A1:2002
DOP No:
1494

ATEX Ex ia

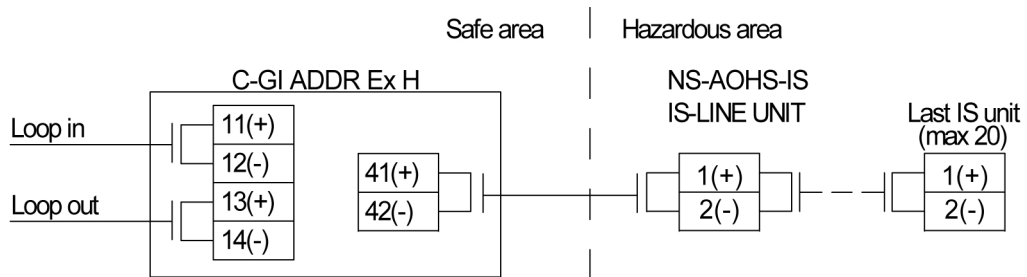
Certificate No:
05ATEX1136X
Certified according to:
EN 60079-0:2018
EN 60079-11:2012
EN 60079-26:2007
Ex II 1G

Dimensions (mm)

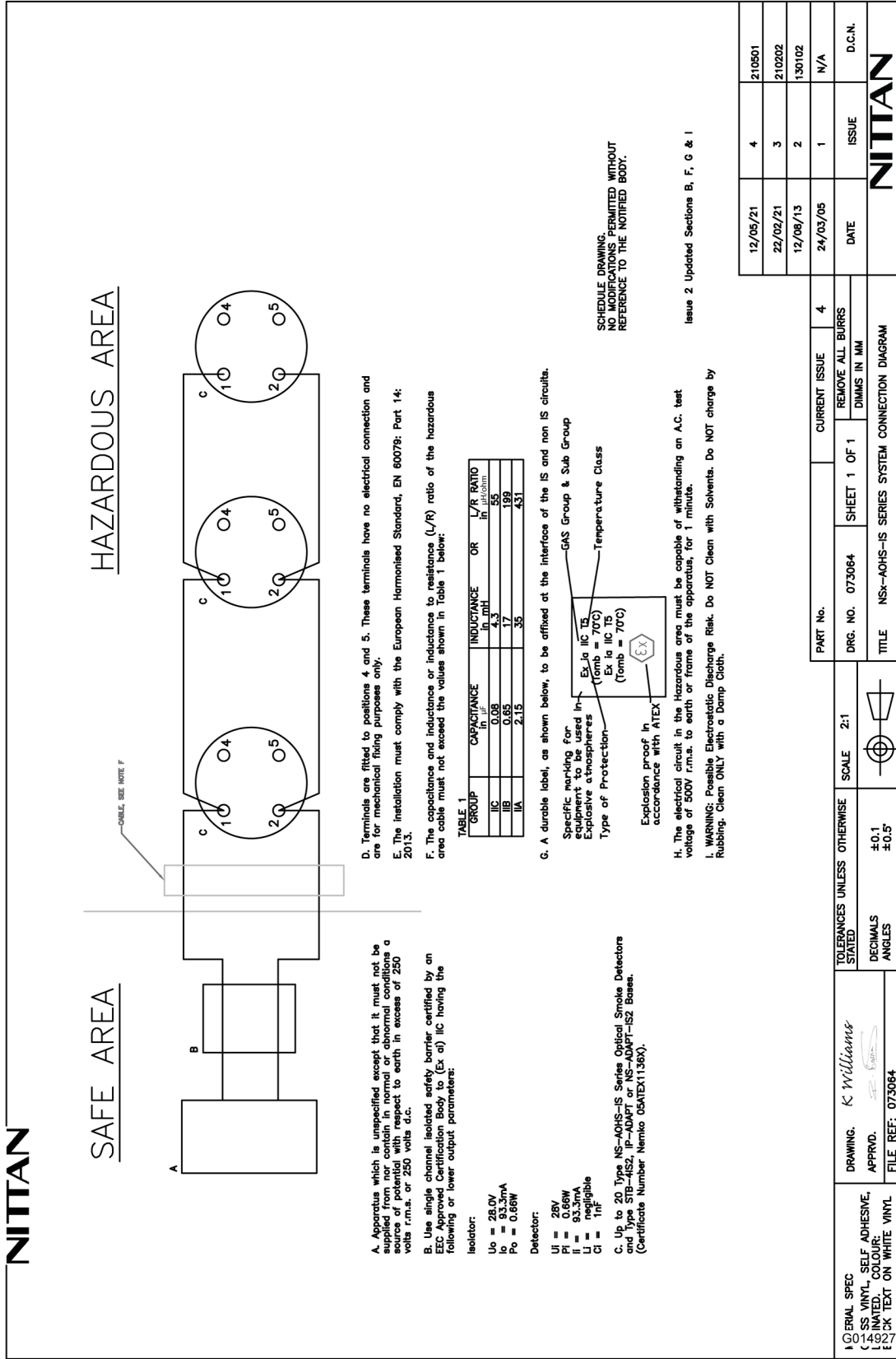


G008706

Connection



G023573



HAZARDOUS AREA

SAFE AREA

A. Apparatus which is unspecified except that it must not be connected to 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 EC-Approved Certification Body to (Ex c) IIC having the following or lower output parameters:

Isolator:
 Uo = 28V
 Io = 83.3mA
 Po = 0.68W

Detector:
 Ui = 28V
 Pi = 0.68W
 Ii = 83.3mA
 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 60078: Part 14: 2013.

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

GROUP	CAPACITANCE in μF	INDUCTANCE in μH	OR L/R RATIO in $\frac{\mu\text{H}}{\mu\text{ohm}}$
IIC	0.08	4.3	55
IIA	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.

Specific marking for equipment to be used in Explosive atmospheres
 Type of Protection: Ex
 Gas Group & Sub Group: IIC II
 Temperature Class: (Tamb = 70C) (Tamb = 70C)

Explosion proof in accordance with ATEX

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

PART No.	CURRENT ISSUE	4
DRG. NO.	SHEET 1 OF 1	073064
TITLE	NS-AOHS-IS SERIES SYSTEM CONNECTION DIAGRAM	
REMOVE ALL BURRS	DIMMS IN MM	

SCALE	2:1
TOLERANCES UNLESS OTHERWISE STATED	
DECIMALS	±0.1
ANGLES	±0.5°

DRAWING	K Williams
APPRD.	[Signature]
FILE REF:	073064

GENERAL SPEC	
C145 VINYL, SELF ADHESIVE, UNMOUNTED. COLOUR: BLACK TEXT ON WHITE VINYL	

NITTAN