



## EC TYPE EXAMINATION (Module B) CERTIFICATE MARINE EQUIPMENT DIRECTIVE Certificate No.: 0832-MED-1019

This is to certify that BRE Global Ltd, as specified as a "notified body" under the terms of the Statutory Instrument 1999 No. 1957 The Merchant Shipping (Marine Equipment) Regulations 1999, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the Fire protection of Marine Equipment Directive (MED) 96/98/EC as modified by Directive (EU) 2015/559 subject to any conditions in the annex attached hereto.

Applicant / Distributer : Life Safety Distribution GmbH, Consilium Marine & Safety AB  
System Sensor Europe Salsmastaregatan 21  
Javastrasse 2 P.O. Box 8763  
CH-8604 SE-402 76 Gothenburg  
Hegnau Sweden  
Switzerland

Manufacturer : Pittway Tecnologica Srl.  
Via Caboto 19/3  
34147  
Trieste  
Italy

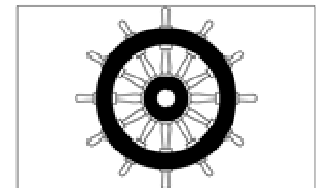
Product Description/  
Identification : (see attached annex)

Annex A.1 Item designation : A.1/3.51 – Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies\*, machinery spaces and unattended machinery spaces – Items (c) heat detectors and (d) smoke detectors.  
\* See Applications/Limitations note 4.

Specified Standard : IEC 60092-504: 2001  
IEC 60533:1999  
EN 54-5: 2000 + A1: 2002  
EN 54-7: 2000 + A1: 2002 + A2: 2006

Signed on behalf of BRE Global Ltd

T. Baker  
Certification Scheme Manager



Issue date: 18 August 2016  
First issued: 02 August 2010

**Issue: 04**  
Valid Until: 17 August 2021

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The examination encompassed the modules of conformity assessment of Annex B, EC Type Examination (Module B).

This Certificate is issued under the authority of the MCA under the terms stated above and remains valid for a period up to but not exceeding 5 years unless cancelled or revoked, providing the conditions in the attached annex are complied with and the equipment remains satisfactory in service.

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with BRE Global Ltd.

Subject to compliance with the conditions in the attached annex, which forms part of this certificate, and those articles 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the 'Mark of Conformity' to the product described herein. This certificate on its own, does not entitle the manufacturer to place the EU mark of conformity (wheelmark) and notified body number on the product, unless conformity assessment module D or E or F have been carried out in addition to Module B.

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Annex to  
EC TYPE EXAMINATION (Module B) CERTIFICATE  
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SCHEDULE OF APPROVAL

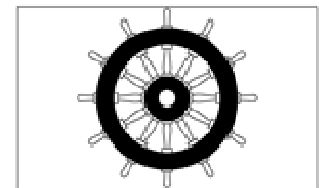
Product Description	System Sensor Europe:
	<p>ECO1002 Conventional photo-thermal detector approved with ECO1000B, ECO1000BSD, ECO1000BR, ECO1000BRSD, ECO1000BR680, ECO1000BR680SD, ECO1000BR1000, ECO1000BR1000SD, ECO1000DB, ECO1000DBR, WB-1* and ECO1000DBRSD bases.</p> <p>Notes: 1) Meets the requirements of EN 54-5: 2000 at class A1R and EN 54-7: 2000 at pre-set sensitivity. 2) *See specific application limitation 1) below.</p>
	<p>ECO1003 Conventional photoelectric smoke detector approved with ECO1000B, ECO1000BSD, ECO1000BR, ECO1000BRSD, ECO1000BR680, ECO1000BR680SD, ECO1000BR1000, ECO1000BR1000SD, ECO1000DB, ECO1000DBR, WB-1* and ECO1000DBRSD bases.</p> <p>Note: *See specific application limitation 1) below.</p>
	<p>ECO1005 Class A1R conventional thermal detector approved with ECO1000B, ECO1000BSD, ECO1000BR, ECO1000BRSD, ECO1000BR680, ECO1000BR680SD, ECO1000BR1000, ECO1000BR1000SD, ECO1000DB, ECO1000DBR, WB-1* and ECO1000DBRSD bases.</p> <p>Note: *See specific application limitation 1) below.</p>
	<p>ECO1005T Class A2S conventional fixed temperature detector approved with ECO1000B, ECO1000BSD, ECO1000BR, ECO1000BRSD, ECO1000BR680, ECO1000BR680SD, ECO1000BR1000, ECO1000BR1000SD, ECO1000DB, ECO1000DBR, WB-1* and ECO1000DBRSD bases.</p> <p>Note: *See specific application limitation 1) below.</p>

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<b>Product Description (Cont.)</b>	ECO1004T	Class BS conventional high temperature heat detector approved with ECO1000DB, ECO1000DBR, ECO1000DBRSD, ECO1000B, ECO1000BSD, ECO1000BR, ECO1000BRSD, ECO1000BR680, ECO1000BR680SD, ECO1000BR1000, WB-1* and ECO1000BR1000SD bases. <i>Note: *See specific application limitation 1) below.</i>
	<b>Consilium Marine &amp; Safety AB:</b>	
	EC-PH/A1R	Conventional photo-thermal detector approved with EC-ADAPT and EC-BASE bases. <i>Note: Meets the requirements of EN 54-5: 2000 at class A1R &amp; EN 54-7: 2000 at pre-set sensitivity.</i>
	EC-P	Conventional photoelectric smoke detector approved with ADAPT and EC-BASE bases
	EC-H/A1R	Class A1R conventional thermal detector approved with EC-ADAPT and EC-BASE bases.
	EC-H/A2S	Class A2S conventional fixed temperature detector approved with EC-ADAPT and EC-BASE bases.
	EC-H/BS	Class BS conventional high temperature heat detector approved with EC-ADAPT and EC-BASE bases
<b>Bases</b>	<b>System Sensor Europe:</b> a) ECO1000B standard base b) ECO1000BSD standard base with schottky diode c) ECO1000BR standard base, 470Ω resistor d) ECO1000BRSD standard base, 470Ω resistor and schottky diode e) ECO1000BR680 standard base, 680Ω resistor	

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<b>Bases (Cont.)</b>	f) ECO1000BR680SD standard base, 680Ω resistor and schottky diode g) ECO1000BR1000 standard base, 1000Ω resistor h) ECO1000BR1000SD standard base, 1000Ω resistor & schottky diode i) ECO1000DB deep base j) ECO1000DBR deep base with 470Ω resistor k) ECO1000DBRSD deep base with 470Ω resistor and schottky diode l) WB-1 Wet base  <b><u>Consilium Marine &amp; Safety AB:</u></b> a) EC-ADAPT, Bulkhead Adaptor b) EC-BASE, Standard detector base with 470Ω resistor
<b>Testing/Assessment</b>	The technical documentation in support of this certificate is located within the BRE project file E121928, E122175 and P104379.  <b><u>System Sensor Europe:</u></b> All models tested according to IEC 60092-504:2001 & IEC 60533:1999  ECO1005, ECO1005T and ECO1004T models tested according to EN 54-5: 2000 + A1: 2002.  ECO1003 model tested according to EN 54-7: 2000 + A1: 2002 + A2: 2006.  ECO1002 model tested to EN 54-7: 2000 + A1: 2002 + A2: 2006, EN 54-5: 2000 + A1: 2002 and CEA 4021: 2003*. *CEA 4021 is not a specified standard under MED but is included for information only.  <b><u>Consilium Marine &amp; Safety AB:</u></b> All models tested according to IEC 60092-504:2001 & IEC 60533:1999  EC-H/A1R, EC-H/A2S and EC-H/BS models tested according to EN 54-5: 2000 + A1: 2002.  EC-P model tested according to EN 54-7: 2000 + A1: 2002 + A2: 2006.

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<b>Testing/Assessment</b>	EC-PH/A1R model tested to EN 54-7: 2000 + A1: 2002 + A2: 2006, EN 54-5: 2000 + A1: 2002 and CEA 4021: 2003*. *CEA 4021 is not a specified standard under MED but is included for information only.
<b>Applications/Limitations</b>	<p><b><u>System Sensor Europe:</u></b></p> <p>1) The combination of any standard base, a) to h) above, with WB-1 Wet base is excluded from this certification.</p> <p>2) IP Ratings: ECO1003; - IP40 when used with any standard ECO1000 base - IP43 when used in conjunction with the WB-1 Wet base ECO1002, ECO1004T, ECO1005 &amp; ECO1005T; - IP20 when used with any standard ECO1000 base - IP23 when used in conjunction with the WB-1 Wet base Note that the WB-1 Wet base must always be used in conjunction with a deep base (base reference, j &amp; k listed above).</p> <p>3) The devices have been tested to the prescribed vibration levels for general use.</p> <p>4) The detectors have not been considered for cabin balcony applications.</p> <p><b><u>Consilium Marine &amp; Safety AB:</u></b></p> <p>1) The devices when used with any designated base have been tested to a protection rating of IP20.</p> <p>2) The devices have been tested to the prescribed vibration levels for general use.</p> <p>3) The detectors have not been considered for cabin balcony applications.</p>

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<b>Applications/Limitations (Cont.)</b>	<p>This Certificate does not apply to equipment which has been varied or modified from the systems tested. The manufacturer must submit modified equipment for consideration by this Agency prior to any modifications being made to equipment supplied to market.</p> <p>This certificate does not entitle the manufacturer to place the EU mark of conformity (Wheel mark) and Notified body number on the product, unless conformity assessment module D or E or F have been carried out in addition to Module B.</p>
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