



TYPE APPROVAL CERTIFICATE
No. ELE174515XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	Sounders and Strobes
<i>Type</i>	BBL-100 BBL-100/IP BBQ-130 BBQ-230 BBQ-230/IP BBR-130 BBR-230 BBR-230/IP
<i>Applicant</i>	AUTRONICA FIRE AND SECURITY AS Haakon VII's gt 4, N-7483 Trondheim NORWAY
<i>Manufacturer</i>	AUTRONICA FIRE AND SECURITY AS - COOPER
<i>Place of manufacture</i>	FULLEON LTD LLANTARNAM PARK CWMBRAN NP44 3AW GWENT UNITED KINGDOM
<i>Reference standards</i>	Rules for Classification of Ships - Part C - machinery, Systems and fire protection - Ch.3, Sect. 6, Tab. 1 and European Rules EN 54-3 and EN 54-17

Issued in **Hamburg** on **November 5, 2015**. This Certificate is valid until **November 5, 2020**

RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure



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BBL-100 BBL-100/IP BBQ-130 BBQ-230 BBQ-230/IP BBR-130 BBR-230 BBR-230/IP

Component description:

Sounders and Strobes for Autronica Interactive Fire Detection and Alarm Systems type: "AutoSafe" and "Autoprime"

The Sounders and Strobes can be connected directly to the detection loop, no extra wiring needed..

Model / Type	Part No.	Features	Tecn. Data
Beacon Indoor Addressable BBL-100	116-BBL-100	<ul style="list-style-type: none"> - Automatic addressing - 2 Candela output - Used with interactive fire detection systems - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: 4,56 mA Peak: 5,35 mA - Current Quiescent: 300 µA - Degree of protection: IP 32C
Beacon Outdoor Addressable BBL-100/IP	116-BBL.100/IP	<ul style="list-style-type: none"> - Automatic addressing - 2 Candela output - Used with interactive fire detection systems - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: 4,56 mA Peak: 5, 35 mA - Current Quiescent: 300 µA - Degree of protection: IP 65
Sounder/Strobe w/base BBQ-130	116-BBQ-130	<ul style="list-style-type: none"> - With base for indoor use - Automatic addressing - Configurable sound pattern - High sound output - Used with interactive fire detection systems - High/low volume setting - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: 4,56 mA Sounder LP: 2,15 mA Sounder HP: 4,3 mA Peak: 8,56 mA - Current Quiescent: 260 µA - Degree of protection: IP 21C - Sound performance: Max = 90dB(A) Low Volume = 80dB - Light performance: Flash power: 2 candela
Sounder/Strobe Indoor Addressable – BBQ-230	116-BBQ-230	<ul style="list-style-type: none"> - Automatic addressing - Configurable sound pattern - Used with interactive fire detection systems - High/low volume setting - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: Strobe only: 4,68 mA Sounder LP: 2,18 mA Sounder HP: 4,44 mA Peak: 9 mA Sounder HP + Strobe: 8,6mA - Current Quiescent: 330 µA - Degree of protection: IP 32C - Sound performance: Max = 100dB(A) Low Volume = 90dB - Light performance: Flash power: 2 candela



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Model / Type	Part No.	Features	Tecn. Data
Sounder/Strobe Outdoor Addressable BBQ-230/IP	116-BBQ-230IP	<ul style="list-style-type: none"> - Automatic addressing - Configurable sound pattern - Used with interactive fire detection systems - High/low volume setting - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: <ul style="list-style-type: none"> Strobe only: 4,68 mA Sounder LP: 2,18 mA Sounder HP: 4,44 mA Peak: 9 mA Sounder HP + Strobe: 8,6mA - Current Quiescent: 330 μA - Degree of protection: IP 65 - Sound performance: <ul style="list-style-type: none"> Max = 100dB(A) Low Volume = 90dB - Light performance: <ul style="list-style-type: none"> Flash power: 2 candela
Sounder Addressable w/base-BBR-130	116-BBR-130	<ul style="list-style-type: none"> - With base for indoor use - Automatic addressing - Configurable sound pattern - High sound output - Used with interactive fire detection systems - High/low volume setting - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: <ul style="list-style-type: none"> Sounder LP: 2,15 mA Sounder HP: 4,3 mA Peak: 4,3 mA - Current Quiescent: 260 μA - Degree of protection: IP 21C - Sound performance: <ul style="list-style-type: none"> Max = 90dB(A) Low Volume = 80dB
Sounder Indoor Addressable BBR-230	116-BBR-230	<ul style="list-style-type: none"> - Automatic addressing - Configurable sound pattern - Used with interactive fire detection systems - High/low volume setting - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: <ul style="list-style-type: none"> Sounder LP: 2,18 mA Sounder HP: 4,44 mA Peak: 5 mA - Current Quiescent: 330 μA - Degree of protection: IP 32C - Sound performance: <ul style="list-style-type: none"> Max = 100dB(A) Low Volume = 90dB
Sounder Outdoor Addressable BBR-230/IP	116-BBR-230/IP	<ul style="list-style-type: none"> - Automatic addressing - Configurable sound pattern - Used with interactive fire detection systems - High/low volume setting - Short circuit isolator in each unit 	<ul style="list-style-type: none"> - Voltage: 17 – 25 VDC - Alarm current: <ul style="list-style-type: none"> Sounder LP: 2,18 mA Sounder HP: 4,44 mA Peak: 5 mA - Current Quiescent: 330 μA - Degree of protection: IP 65 - Sound performance: <ul style="list-style-type: none"> Max = 100dB(A) Low Volume = 90dB



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Reference Documents:

Document	Document Id.
Cooper Fullcon ISO 9001 certificate	LPCB Certificate No C378-8.pdf
Autronica Fire and Security ISO 9001 certificate	Nemko Certificate No 900776
CPD Certificate BBL-100	0832-CPD-1039
CPD Certificate BBL-100/IP	0832-CPD-1040
CPD Certificate BBQ-130	0832-CPD-1046
CPD Certificate BBQ-230	0832-CPD-1041
CPD Certificate BBQ-230/IP	0832-CPD-1042
CPD Certificate BBR-130	0832-CPD-1045
CPD Certificate BBR-230	0832-CPD-1043
CPD Certificate BBR-230/IP	0832-CPD-1044
Data Sheet BBL-100	116-P-BBL100/CGB, Rev. C, 2014-06-25
Data Sheet BBL-100/IP	116-P-BBL100IP/CGB, Rev C, 2014-06-25
Data Sheet BBQ-130	116-P-BBQ130/CGB, Rev. C, 2014-06-25
Data Sheet BBQ-230	116-P-BBQ230/CGB, Rev. C, 2014-06-25
Data Sheet BBQ-230/IP	116-P-BBQ230IP/CGB, Rev. C, 2014-06-25
Data Sheet BBR-130	116-P-BBR130/CGB, Rev. B, 2011-02-21
Data Sheet BBR-230	116-P-BBR230/CGB, Rev. B, 2011-02-21
Data Sheet BBR-230/IP	116-P-BBR230IP/CGB, Rev. B, 2011-02-21
Test report EN 54-3, EN 54-17	TE 243617
Test report, Maritime testing, all units	2010-3107

This certificate replace the previous certificate ELE007011XG

Hamburg November 5, 2015



Signature