



Date: August 29, 2019

CERTIFICATE OF COMPLIANCE

This certificate of compliance validates the following			
TEST REPORT NUMBER	1. 1845/BA/19 2. 1356/BA/18 3. 963/BA/18	CERTIFICATE NUMBER	DC – UAE – 0138
DATE OF ISSUE	1. August 6, 2019 2. February 15, 2018 3. August 16, 2018	DATE OF ISSUE	August 29, 2019
DATE OF EXPIRY	Not applicable	DATE OF EXPIRY	August 28, 2029
Manufacturer details			
NAME OF FACTORY / MANUFACTURER	Ambient-System Sp. z o.o.	NAME OF THE BRAND	Edwards
FACTORY ADDRESS / REGION	ul. Galaktyczna 37 80-299 Gdańsk Republic of Poland	MODEL / NO	EST-S106, EST-S136
WEBSITE	www.firesecurityproducts.com	LOGO ON THE PRODUCT	
TELEPHONE	+34 93 480 27 78	EMAIL	secretariaat.nederland@fs.utc.com





Product Details From Test Report				Reference Test Report Page No.
DESCRIPTION OF THE PRODUCT	Loudspeaker for voice alarm systems type EST-S106, EST-S136 (Detailed specification below)			(3) 1845/BA/19 1356/BA/18 963/BA/18
TESTS STANDARD	EN 54-24:2008: Fire detection and fire alarm systems – Part 24: Components of voice alarm systems – Loudspeakers			(6) 1845/BA/19 (7) 1356/BA/18 (7) 963/BA/18
TESTS DESCRIPTION	Requirements, test methods and performance criteria for loudspeakers intended to broadcast a warning of fire between a fire detection and fire alarm system and the occupants of a building.			(6) 1845/BA/19 (7-13) 1356/BA/18 (7-13) 963/BA/18
SPECIFICATION OF TEST SPECIMEN	Loudspeaker type:	EST-S106	EST-S136	(4) 1845/BA/19 (4) 1356/BA/18 (4-5) 963/BA/18
	Transformer type:	TF0817		
	Loudspeaker power voltage [V]:	70 / 100		
	Loudspeaker rated power [W]:	6		
	Loudspeaker output setting on the transformer taps [W]:	70V: 3 / 1,5 / 0,75 / 0,38 100V: 6 / 3 / 1,5 / 0,75		
	Loudspeaker impedance [Ω]:	8		
	Impedance of transformer – for particular terminals[Ω]:	1667 / 3333 / 6667 / 13333		
	Maximum sound pressure level (rated power / 4m) [dB]:	76	78	
	Sensitivity S (1W / 4m) [dB]:	65	68	
	Coverage angle for 500 Hz [°]	180		
	Coverage angle for 1kHz [°]	180		
	Coverage angle for 2kHz [°]	170		
	Coverage angle for 4kHz [°]	150	90	
	Type of work environment:	A		
	IP protection:	21C		
	Terminals:	ceramic connection block		
	Type of installation:	recessed into wall or ceiling made of gyproc plasterboard suspended ceiling mounted hanging		
	Dimensions of loudspeaker with housing [mm]:	Ø 104 x 111	Ø 134 x 113	
	Material of housing:	metal		
	Mass [g]:	720	820	
Optional elements	Identifying data			
Fuse activation parameter:	250V, 1A, 145°C			
Type of capacitor:	not applicable			
Filter:	not applicable			
Type of additional protection:	not applicable			
TESTS RESULTS	EN 54-24	Frequency response limits	PASS	(6) 1845/BA/19 (7-13) 1356/BA/18 (7-13) 963/BA/18
	EN 54-24	Reproducibility	PASS	
	EN 54-24	Rated impedance	PASS	
	EN 54-24	Horizontal and vertical coverage angles	PASS	
	EN 54-24	Maximum sound pressure level	PASS	
	EN 54-24	Durability	PASS	
	EN 54-24	Construction	PASS	
	EN 54-24	Marking and data	PASS	
	EN 54-24	Rated noise power (durability)	PASS	
	EN 54-24 - EN 60529	Enclosure protection IP 21C	PASS	
	EN 54-24 - EN 60068-2-2	Dry heat (operational)	PASS	
	EN 54-24 - EN 60068-2-2	Dry heat (endurance)	PASS	
	EN 54-24 - EN 60068-2-1	Cold (operational)	NOT APPLICABLE	
	EN 54-24 - EN 60068-2-30	Damp heat, cyclic (operational)	PASS	
	EN 54-24 - EN 60068-2-30	Damp heat, steady state (endurance)	PASS	
	EN 54-24 - EN 60068-2-30	Damp heat, cyclic (endurance)	PASS	
	EN 54-24 - EN 60068-2-42	Sulphur dioxide corrosion (endurance)	NOT APPLICABLE	
	EN 54-24 - EN 60068-2-27	Shock (operational)	PASS	
	EN 54-24 - EN 60068-2-75	Impact (operational)	PASS	
	EN 54-24 - EN 60068-2-6	Sinusoidal vibration (operational)	PASS	
EN 54-24 - EN 60068-2-6	Sinusoidal vibration (endurance)	PASS		
PRODUCT APPLICATION GUIDELINE	21.08.2019	EST-S106, EST-S136 are indoor loudspeakers. They are made of metal. They may be recessed into a wall or ceiling made of gyproc plasterboard. In addition they may be mounted to suspended ceiling hanging. Loudspeakers for voice alarm systems type EST-S106, EST-S136 have to be used with Voice Alarm Systems.		Not applicable

United Arab Emirates

Ministry of interior

Civil Defense G.H.Q

Fire intentional Lab & House
of Expertise & Training Center

Approval Committee



دولة الامارات العربية المتحدة

وزارة الداخلية

القيادة العامة للدفاع المدني

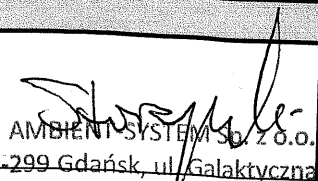
لجنة اعتماد المختبرات العالمية

وبيوت الخبرة ومعاهد التدريب

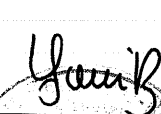
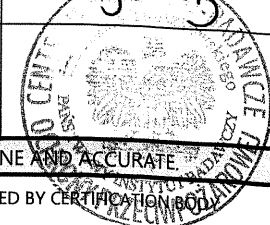
Laboratory and Certification Body Details

NAME OF CERTIFICATION BODY	CNBOP-PIB Centrum Naukowo-Badawcze Ochrony Przeciwpożarowej Państwowy Instytut Badawczy	NAME OF TEST FACILITY	CNBOP-PIB Zespół Laboratoriów Sygnalizacji Alarmu Pożaru i Automatyki Pożarniczej
CERTIFICATION BODY ADDRESS / REGION	ul. Nadwiślańska 213 05-420 Józefów REPUBLIC OF POLAND	TEST FACILITY ADDRESS / REGION	ul. Nadwiślańska 213 05-420 Józefów REPUBLIC OF POLAND
WEBSITE	www.cnbop.pl	WEBSITE	www.cnbop.pl
TELEPHONE	+48 22 769 33 47	TELEPHONE	+48 22 769 32 26
EMAIL	jcw@cnbop.pl	EMAIL	ba@cnbop.pl
ACCREDITED BY	Polish Centre for Accreditation http://www.pca.gov.pl	ACCREDITED BY	Polish Centre for Accreditation http://www.pca.gov.pl
AS PER	EN ISO/IEC 17065 Requirements for bodies certifying products, processes and services	AS PER	EN ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories
VALIDITY	October 3, 2022	VALIDITY	October 11, 2021
REFERENCE NUMBER	AC 063	REFERENCE NUMBER	AB 207
CERTIFICATION MARK	 CNBOP-PIB		

(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER

NAME AND SURNAME OF MANUFACTURERS SIGNATORY	Ambient-System Sp. z o.o. CEO Marcin Starzyński	SIGNATURE	 AMBIENT-SYSTEM Sp. z o.o. 80-299 Gdańsk, ul. Galaktyczna 37 Tel./fax/058/345 51 95; 343 18 77 REGON 190061698 NIP 584-030-22-20
EMAIL / TELEPHONE	ambient@ambient-system.pl +48 58 345 51 95	FACTORY OFFICIAL SEAL	
NOTES	I UNDERTAKE THAT ALL DATA AND INFORMATION PROVIDED ARE GENUINE AND ACCURATE.		

(ENDORSEMENT) TO BE CERTIFICATION BODY

NAME AND SURNAME OF CERTIFICATION BODY SIGNATORY	st. bryg. dr inż. Paweł Janik	SIGNATURE	
EMAIL / TELEPHONE	cnbop@cnbop.pl +48 22 769 33 00	CERTIFICATION BODY OFFICIAL SEAL	
NOTES	I UNDERTAKE THAT ALL DATA AND INFORMATION PROVIDED ARE GENUINE AND ACCURATE.		

ATTACHEMENT:

COPY OF "CERTIFICATE OF CONSTANCY OF PERFORMANCE" NO. 1438-CPR-0678 ISSUED BY CERTIFICATION BODY