



Date : 21-10-2022

CERTIFICATE OF COMPLIANCE

This certificate of compliance validates the following			
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	1) P000030043-001-Ver 2.00	CERTIFICATE NUMBER	0560-CPR-212190020 Issue: 00
DATE OF ISSUE	1) 06-10-2022	DATE OF ISSUE	11-10-2022
DATE OF EXPIRY	NA	DATE OF EXPIRY	NA
Manufacturer details			
NAME OF FACTORY/ MANUFACTURER	d&b audiotechnik GmbH &Co.KG	NAME OF THE BRAND	A-Series
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Eugen-Adolff-Straße 134 Backnang DE	MODEL / NO	Z0732.541 Z0732.542 Z0732.543 Z0733.541 Z0733.542 Z0733.543
WEBSITE	www.dbaudio.com	LOGO ON THE PRODUCT	d&b audiotechnik 
TEL	+49-7191-9669-700	EMAIL	info@dbaudio.com

telefication

telefication bv
Edisonstraat 12 A
6902 PK Zevenaar
tel: +31 316 583 180
fax: +31 316 583 189
The Netherlands

KIWA N.V.
WILMERSDORF 50, 7327 AC APELDOORN
POSTBUS 137, 7300 AC APELDOORN
NEDERLAND



Product Details From Test Report				Reference Test Report page NO																																																							
DESCRIPTION OF THE PRODUCT (TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)	EN54-24 Product description: Loudspeaker for Voice Alarm Systems for Fire Detection and Fire Alarm Systems for Buildings Trademark: A-Series Type Designation: Z0732.541 Z0732.542 Z0732.543 Z0733.541 Z0733.542 Z0733.543 Hardware version: 00 Software version: NA			P000030043- 001-Ver 2.00, Page 5																																																							
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	EN 54-24 : 2008			P000030043- 001-Ver 2.00, Page 6																																																							
TEST DESCRIPTION	Fire detection and fire alarm systems Part 24 - Components of voice alarm systems - Loudspeakers			P000030043- 001-Ver 2.00, Page 6																																																							
SPECIFICATION OF TEST SPECIMEN	Components of voice alarm systems - Loudspeakers according to EN 54-24 requirements			P000030043- 001-Ver 2.00, Page 6																																																							
TEST RESULT (SUCH AS PASSED CRITERIA___/ COMPLIED TO___/ DURATION___/OBSERVATION___/ETC)	Summary EN 54-24 / ISO 7240-24 ; § 4 (requirements) <table><tr><th>EN 54-24</th><th>ISO 7240-24</th><th>Description</th><th>Remark</th><th>Result</th></tr><tr><td>§ 4.1</td><td>§ 4.1</td><td>Compliance</td><td>Overall compliance result</td><td>PASS</td></tr><tr><td>§ 4.2</td><td>§ 4.2</td><td>Frequency response limits</td><td>Refer to § 5.2 test results</td><td>PASS</td></tr><tr><td>§ 4.3</td><td>§ 4.3</td><td>Durability</td><td>Refer to § 5.6 test results</td><td>PASS</td></tr><tr><td>§ 4.4.1</td><td>§ 4.4.1</td><td>Provision for external conductors</td><td>Refer to § 4.4.1 results</td><td>PASS</td></tr><tr><td>§ 4.4.2</td><td>§ 4.4.2</td><td>Materials</td><td>To be declared by the manufacturer</td><td>N.T.</td></tr><tr><td>§ 4.4.3</td><td>--</td><td>Enclosure protection</td><td>Refer to § 5.18 test results</td><td>PASS</td></tr><tr><td>--</td><td>§ 4.4.3</td><td>Ingress protection</td><td>Refer to § 5.18 test results</td><td>PASS</td></tr><tr><td>§ 4.4.4</td><td>§ 4.4.4</td><td>Access</td><td>Refer to § 4.4.4 results</td><td>PASS</td></tr><tr><td>§ 4.5.1</td><td>§ 7</td><td>Marking</td><td>Refer to § 4.5.1 / § 7 results</td><td>PASS</td></tr><tr><td>§ 4.5.2</td><td>§ 8</td><td>Information in the product data sheet</td><td>Refer to § 4.5.2 / § 8 results</td><td>PASS</td></tr></table>			EN 54-24	ISO 7240-24	Description	Remark	Result	§ 4.1	§ 4.1	Compliance	Overall compliance result	PASS	§ 4.2	§ 4.2	Frequency response limits	Refer to § 5.2 test results	PASS	§ 4.3	§ 4.3	Durability	Refer to § 5.6 test results	PASS	§ 4.4.1	§ 4.4.1	Provision for external conductors	Refer to § 4.4.1 results	PASS	§ 4.4.2	§ 4.4.2	Materials	To be declared by the manufacturer	N.T.	§ 4.4.3	--	Enclosure protection	Refer to § 5.18 test results	PASS	--	§ 4.4.3	Ingress protection	Refer to § 5.18 test results	PASS	§ 4.4.4	§ 4.4.4	Access	Refer to § 4.4.4 results	PASS	§ 4.5.1	§ 7	Marking	Refer to § 4.5.1 / § 7 results	PASS	§ 4.5.2	§ 8	Information in the product data sheet	Refer to § 4.5.2 / § 8 results	PASS	P000030043- 001-Ver 2.00, Page 10
EN 54-24	ISO 7240-24	Description	Remark	Result																																																							
§ 4.1	§ 4.1	Compliance	Overall compliance result	PASS																																																							
§ 4.2	§ 4.2	Frequency response limits	Refer to § 5.2 test results	PASS																																																							
§ 4.3	§ 4.3	Durability	Refer to § 5.6 test results	PASS																																																							
§ 4.4.1	§ 4.4.1	Provision for external conductors	Refer to § 4.4.1 results	PASS																																																							
§ 4.4.2	§ 4.4.2	Materials	To be declared by the manufacturer	N.T.																																																							
§ 4.4.3	--	Enclosure protection	Refer to § 5.18 test results	PASS																																																							
--	§ 4.4.3	Ingress protection	Refer to § 5.18 test results	PASS																																																							
§ 4.4.4	§ 4.4.4	Access	Refer to § 4.4.4 results	PASS																																																							
§ 4.5.1	§ 7	Marking	Refer to § 4.5.1 / § 7 results	PASS																																																							
§ 4.5.2	§ 8	Information in the product data sheet	Refer to § 4.5.2 / § 8 results	PASS																																																							



Summary EN 54-24 / ISO 7240-24; § 5 (tests)

EN 54-24	ISO 7240-24	Description	Remark	Result
§ 5.2	§ 5.2	Reproducibility	--	PASS
§ 5.3	§ 5.3	Rated impedance	--	PASS
§ 5.4	§ 5.4	Horizontal and vertical coverage angles	--	PASS
§ 5.5	§ 5.5	Maximum sound pressure level	--	PASS
§ 5.6	§ 5.6	Rated noise power (durability)	--	PASS
§ 5.7	§ 5.7	Dry heat (operational)	--	PASS
§ 5.8	§ 5.8	Dry heat (endurance)	--	PASS
§ 5.9	§ 5.9	Cold (operational)	--	PASS
§ 5.10	§ 5.10	Damp heat, cyclic (operational)	--	PASS
§ 5.11	§ 5.11	Damp heat, steady state (endurance)	--	PASS
§ 5.12	§ 5.12	Damp heat, cyclic (endurance)	--	PASS
§ 5.13	§ 5.13	Sulfur dioxide (SO ₂) corrosion (endurance)	--	PASS
§ 5.14	§ 5.14	Shock (operational)	> 4,75 kg	N.A.
§ 5.15	§ 5.15	Impact (operational)	--	PASS
§ 5.16	§ 5.16	Vibration, sinusoidal (operational)	--	PASS
§ 5.17	§ 5.17	Vibration, sinusoidal (endurance)	--	PASS
§ 5.18	--	Enclosure protection	--	PASS
--	§ 5.18	Ingress protection	--	PASS

N.A.: Not Applicable
N.T.: Not Tested

P000030043-
001-Ver
2.00, Page
10

**PRODUCT APPLICATION
GUIDELINE
(END USE)**

(CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN ___/TO BE INSTALLED AT ___/TO BE CONNECTED WITH ___/TO BE INSTALLED WITH ___ ETC ALONG WITH ANY WARNINGS SUCH AS NOT TO BE USED IN ___/NOT TO BE INSTALLED AT ___/ NOT TO BE INSTALLED WITH ___ ETC.

The ALi60 and ALi90 are augmented array loudspeakers for medium scale sound reinforcement applications providing a 60° and 90° horizontal dispersion respectively.

Both loudspeakers are passive 2-way designs. They house 2 x 10" neodymium LF drivers, one 1.4" exit HF compression driver with a 3" diaphragm mounted to a dedicated wave shaping device and a passive crossover network. The wave segments of each cabinet couple without gaps and sum up coherently.

Splay angles between adjacent cabinets can be set in the range from 20° to 40° in 5° increments resulting in a total coverage of 50° up to 70° for two cabinets, with a maximum total coverage of 150° per array.

All components are arranged symmetrically around the center axis of the cabinet to produce a perfectly symmetrical dispersion pattern. This setup allows for a smooth crossover design with a well defined overlap of adjacent frequency bands resulting in a very consistent and accurate horizontal dispersion.

Due to the bipolar arrangement of the LF drivers, broadband horizontal directivity control of 60°/90° is maintained down to 550 Hz/370 Hz respectively. The frequency response extends from 60 Hz to 18 kHz.

The cabinets are constructed from marine plywood with an impact resistant black paint finish. The front of the loudspeaker cabinet is protected by a rigid metal grill backed by an acoustically transparent fabric.

Three M10 threaded inserts are incorporated in one side panel to allow the secure attachment of a dedicated flying adapter.

--

telefication

telefication bv
Edisonstraat 12 A
6902 PK Zevenaar
tel: +31 316 583 180
fax: +31 316 583 189
The Netherlands

KIWA N.V.
WILMERSDORF 50, 7327 AC APELDOORN
POSTBUS 137, 7300 AC APELDOORN
NEDERLAND



Certification body and Laboratory details			
NAME OF CERTIFICATION BODY	Telefication B.V. also trading under the name Kiwa FSS products	NAME OF TEST FACILITY	Telefication B.V.
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Wilmsdorf 50 7327 AC Apeldoorn The Netherlands	TEST FACILITY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Wilmsdorf 50 7327 AC Apeldoorn The Netherlands
WEBSITE	www.telefication.com www.kiwa.com	WEBSITE	www.telefication.com
TEL	+31 88 998 3393	TEL	+31-88-998-3600
EMAIL	info@telefication.com nl.kiwa-fss@kiwa.nl	EMAIL	info@telefication.com
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	The Dutch Council For Accreditation (RvA, Raad voor Accreditatie)	ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	The Dutch Council For Accreditation (RvA, Raad voor Accreditatie)
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	ISO/IEC 17065:2012 Covering: - EN 54-24:2008	AS PER (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	ISO/IEC 17025:2017 Covering: - EN 54-24:2008
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	01-07-2025	VALIDITY (EXPIRY DATE OF LABORATORY ACCREDITATION)	01-07-2025
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	C224	REFERENCE NUMBER: (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	L021
CERTIFICATION MARK	 		



(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	Tom Wondrak	SIGNATURE	
EMAIL / TEL	tom.wondrak@dbaudio.com	FACTORY OFFICIAL SEAL	 d&b audiotechnik d&b audiotechnik GmbH & Co. KG Eugen-Adolff-Straße 134 71522 Backnang, Germany Telefon +49-7191-9669-0
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY TEST FACILITY			
NAME OF CERTIFICATION BODY SIGNATORY	Mr. M.A.C. van Balveren	SIGNATURE	
EMAIL / TEL	Martin.van.Balveren@kiwa.com Tel +31 88 998 3599	TEST LABORATORY OFFICIAL SEAL	 telefication telefication bv Edisonstraat 12 A 6902 PK Zevenaar tel: +31 316 583 180 fax: +31 316 583 189 The Netherlands
NOTES: I Undertake that all data and information provided are genuine and accurate			

ATTACHMENTS:

- COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)