





# **SWEDISH TYPE APPROVAL 1458**

### WITH DECISION ON PRODUCTION CONTROL

**Holder: Lindab Ventilation AB** 

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# Silencers LRCFU

# **Product description**

Circular silencers with a rectangular outer cover of steel and silencing insulation of mineral wool. The inside of the silencer is coated with a canvas (cloth) which prevents the spread of fibers. Fire technical class EI 60, E60. Can be used where the requirement is class EI 60 if the distance to escape route and combustible material is according to the requirements on page 2.

# Intended use

Silencers for circular connection with low building height, specially designed for installation above suspended ceilings or where space is otherwise limited.

### Coverage

LRCFU Diameter Ø 100 - 400 mm in lengths 500 and 1000 mm

The products meet the requirements of Chapter 8, Section 4, of the Planning and Building Act (PBL) regarding the technical properties of Building Works, 2. Safety in case of fire, 3. Protection with regard to hygiene, health and environment, 5. Protection against noise, 6. Energy and heating Insulation, depending on, that what is stated in this approval is followed. The products are approved according to the following section(s) of Boverkets's Building Regulations (BBR):

Building products with assessed properties	1:4
Fire-technical alternatives (BFS 2011:27, section 4.1.3)*	5:112
Class designations, Fire technical class**	5:231
Air treatment installations (general)	5:526
Air treatment installations, design and placement	5:533
Material	6:11
Micro-organisms***	6:24
Ventilation (Tightness class C, acc. AMA VVS & KYL 19)	6:25
Acoustics, generally	7:2
Heating and Cooling installations, generally sentence 1 & 2	9:51

The product is approved acc. fire-technical class\*\*: EI 30, E 60 as for class designation for material: A2-s1, d0 More information about fire-technical alternatives\* and micro-organisms\*\*\* is displayed on page 2.

Marking must be affixed on the product or, if there are special reasons, on the packaging or the delivery note. Marking shall indicate the following information:

Product name, and relevant article number:

Production site:

Traceability to the production:

Information about requirements or class, if relevant:

The registered trademark of Boverket No 241 217:

Certification Body:

Accreditation number:

Type Approval No:

Inspection Body:

Lindab Ventilation AB

Product name (article number)

Factory code 46

(e.g. yyyy-mm-dd or batchnumber)

Kiwa Sverige AB 1913



1458

RISE Sweden





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# **Factory production control**

The manufacturer's self-monitoring is surveyed by an accredited Inspection Body.

Inspection Body: RISE Sweden Control agreement: 210-07-0174 (2018-01-02)

During check at the construction site, the Contractor must verify the identity of the product through the marking. Furthermore, the client must ensure that the correct products are delivered and that they are installed in accordance with the manufacturer's instructions in the accompanying documents. It must also be checked that the product is accompanied by a manufacturer's declaration certifying that manufacturing has been carried out in accordance with the documents which formed the basis for this type approval.

The validity of the Swedish Type Approval also implies that the Factory Production Control takes place according to agreement **210-07-0174** (**2018-01-02**) and that the holder annually fulfils the requirement in Boverket's regulation BFS 2013: 6, § 5 (TYP 7), on continuous Factory Production Control. The holder must annually report on the result of the surveillance of the Factory Production Control, conducted by the designated Inspection Body, by e-mail to Kiwa Certification on December 15<sup>th</sup> the latest. se.bygg@kiwa.com.

### **Associated documents**

Mounting: SLCU, SLCBU, SLGU, SLBGU, BSLCU, LRCFU, LRCA, LRCB, LRBCB 2019-11-18

Date sheets: Circular straight, low build silencers LRCFU 2019-11-18

### The assessment basis for the approval

**Fire:** Test Report DBI PGA 11091A/ PGA 11091B (Test Report Attenuators, DBI Fire Technical Assessment PHA 11009A, enligt EN 1363-1:2012, Test Report VTT-S-446-07 Heat combustion Paroc Mineral Wool, DBI Rapport PHA1109A Fire Technical Assessment – 26-01-2018

Leakage-tightness: Test Report VTT-S-06359-17 Annual supervision: Rapport RISE 2019-08-28

### \*\*Fire technical classes

Silencers	Diameter/Nominal	Length max	Fire tech. class
	mm	mm	E/EI
LRCFU	100-400	1000	EI 30, E 60

### \*Fire technical alternatives when using safety-distance - advice for planning

			Skydds	avstånd till
Silencer	Diameter/Nominal	Alternative Fire class	Persons under escape 2,5kW/m2	Combustible material/interior 10kW/m²
	mm		mm	mm
LRCFU	100-400	E160	50	50

### NB: Mounting instruction must be attached each delivery where fire-technical alternatives are implemented.

If silencers are planned for with "protective distance" the installer shall fasten a warning sign well visible on the installed silencer. The warning sign shall be ordered from the Holder of this certificate

\*\*\*Micro-organisms - Air handling units for supply air must have filters of the lowest class F7 according to EN 779. The product shall not be installed in ventilation ducts where air containing greasy or sticky pollutants is distributed.

Building Control must be carried out through identifying the products, and control of the correct installation of the product by an expert, according to the manual.

Type approval is valid provided that the product is not to be CE marked according to the Construction Product Regulation, (EU) no. 305/2011 (CPR), or has been suspended or withdrawn by Kiwa Certification Sweden.

Date of decision: 2019-11-16 Registration number: 1178/19

Valid until: 2023-03-13 Previous registration number: 203/18

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