

### AmberAir

4 model boxes: find your perfect match



L1

Top-class airtightness

# TB1

Thermal bridging factor class of SD50+



## TOP QUALITY CASING

leads to perfect performance of the air handling unit



High quality of SALDA air handling units AmberAir is a combination:

- Experienced development team and testing capabilities;
- Modern production equipment;
- 4 stage quality assurance system;
- Components from well-established EU manufacturers.

One of the essential indicators of AmberAir quality is it's casing. Precision manufactured components and tight tolerance assembly results in an airtight casing, which manifests exceptional characteristic L1(M) as well as F9(M) of filter by-pass tightness. High external airtightness lead to lower energy consumption as well as smoother overall performance of the entire HVAC system. Together with airtight construction we offer 4 casings with various combinations balancing required technical characteristics and a price.

#### OPTIONS OF CASINGS

AND CONSTRUCTION

Casing	Frame	Insulation	Thermal breaking
SD50+	Aluminum	polyurethane insulation 45 mm	plastic stripe
SD50	Aluminum	polyurethane insulation 45 mm	-
MD50+	Aluminum	mineral wool insulation, 45 mm	plastic stripe
MD50	Aluminum	mineral wool insulation, 45 mm	-



- Rigid plastic corners;
- Polyurethane insulation (SD50+, SD50);
- Mineral wool insulation (MD50+, MD50);
- Plastic strip (25 mm) for thermal braking (SD50+, MD50+);
- · Rounded corners for easy cleaning;
- Rubber sealing strips helps to maintain top class airtightness;
- Aluminum profile.

# **TECHNICAL CHARACTERISTICS**

and optimal price-benefit ratio



A choice of 4 casings allows you to choose the optimal unit for your project:

- Fire rating class A1 or B-s2 d0;
- Thermal bridging class of TB1 or TB4;
- Premium characteristics or lower initial costs.

Model	Casing strength class	Casing air leakage class at -400 Pa	Casing air leakage class at 700 Pa	Filter bypass leakage class	Thermal transmittance class	Thermal bridging factor class	Insulation material fire class <sup>1</sup>	Price level
SD50+	D1(M)	L1(M)	L1(M)	F9(M)	T2	TB1	B-s2 d0	++++
MD50+	D2(M)	L1(M)	L1(M)	F9(M)	Т3	TB2	A1	+++
SD50	D1(M)	L1(M)	L1(M)	F9(M)	T3	TB4	B-s2 d0	++
MD50	D2(M)	L1(M)	L1(M)	F9(M)	T3	TB4	A1	+

#### TOP CLASS OF THERMAL BRIDGING

LEADS TO HYGIENIC AND DURABLE PERFORMANCE

SD50+ and MD50+ casings have profiles with thermal braking plastic strip thus eliminating thermal bridges in the unit. Their tests were performed by Eurovent Certification and results from the external laboratory showed outstanding TB1 (SD50+) and TB2 (MD50+) classes. Thermal bridging influences overall performance of the air handling unit. Low thermal bridging class may lead to condensation occurrence on the wall, what leads to following negative effects:

- Hygienic issues: growth of microorganisms;
- Corrosion of the unit and faster aging of the unit's construction.
- The highest risk of condensation occurs when high temperature differences of the air inside the unit and ambient air exist.

For example, for the unit in the room of 22° C of temperature when outdoor air is -16° C, condensation occurs:

- TB4 (kb = 0.30) 22°C, RH 16%.
- TB3 (kb = 0.45) 22°C, RH 26%.
- TB2 (kb = 0.60) 22°C, RH 38%
- TB1 (kb = 0.75) 22°C, RH 55%.

As the indoor air humidity is usually 30-50%, there will be no condensation on the unit walls only if casing has TB1 thermal bridging factor class

## MULTIPLE OPTIONS

for your projects



We offer a selection of multiple casing options:

- Different materials of internal and external panel: galvanized steel, powder coated galvanized steel, Aluzinc AZ185, stainless steel (AISI 304 or AISI 316);
- Aluminum profile for standard or anodized aluminum profile for corrosion resistant units.

Casing	MD50	SD50	MD50+	SD50+	
Casing profiles	Aluminum	Aluminum	Aluminum without thermal bridge	Aluminum without thermal bridge	
	Anodized aluminum	Anodized aluminum	Anodized aluminum without thermal bridge	Anodized aluminum without thermal bridge	
Insulation material	Mineral wool	Polyurethane foam	Mineral wool	Polyurethane foam	
Insulation material density	<95kg/m³	45kg/m <sup>3</sup>	<95kg/m <sup>3</sup>	45kg/m <sup>3</sup>	
External metal	0.7mm galvanized steel	0.5mm galvanized steel	0.7mm galvanized steel	0.5mm galvanized steel polyester coating (C4)	
sheet, coating, corrosion	(C2) or powder coated galvanized steel (C3)	polyester coating (C4)	(C2) or powder coated galvanized steel (C3)		
resistance class	0.7mm AZ185 (C4)		0.7mm AZ185 (C4)		
	0.8mm stainless steel AISI 304 or AISI 316 (C4)		0.8mm stainless steel AISI 304 or AISI 316 (C4)		
Internal metal	0.7mm galvanized steel	0.5mm galvanized steel	0.7mm galvanized steel	0.5mm galvanized steel	
sheet and coating	(C2)	(C2)	(C2)	(C2)	
	0.7mm AZ185 (C4)	0.5mm AZ185 (C4)	0.7mm AZ185 (C4)	0.5mm AZ185 (C4)	
	0.8mm stainless steel AISI 304 or AISI 316 (C4)	0.5mm stainless steel AISI 304 (C4)	0.8mm stainless steel AISI 304 or AISI 316 (C4)	0.5mm stainless steel AISI 304 (C4)	



Technical data of SALDA casings is provided at Eurovent Certification website click here <a href="https://goo.gl/BEVFYm">https://goo.gl/BEVFYm</a> or scan code

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