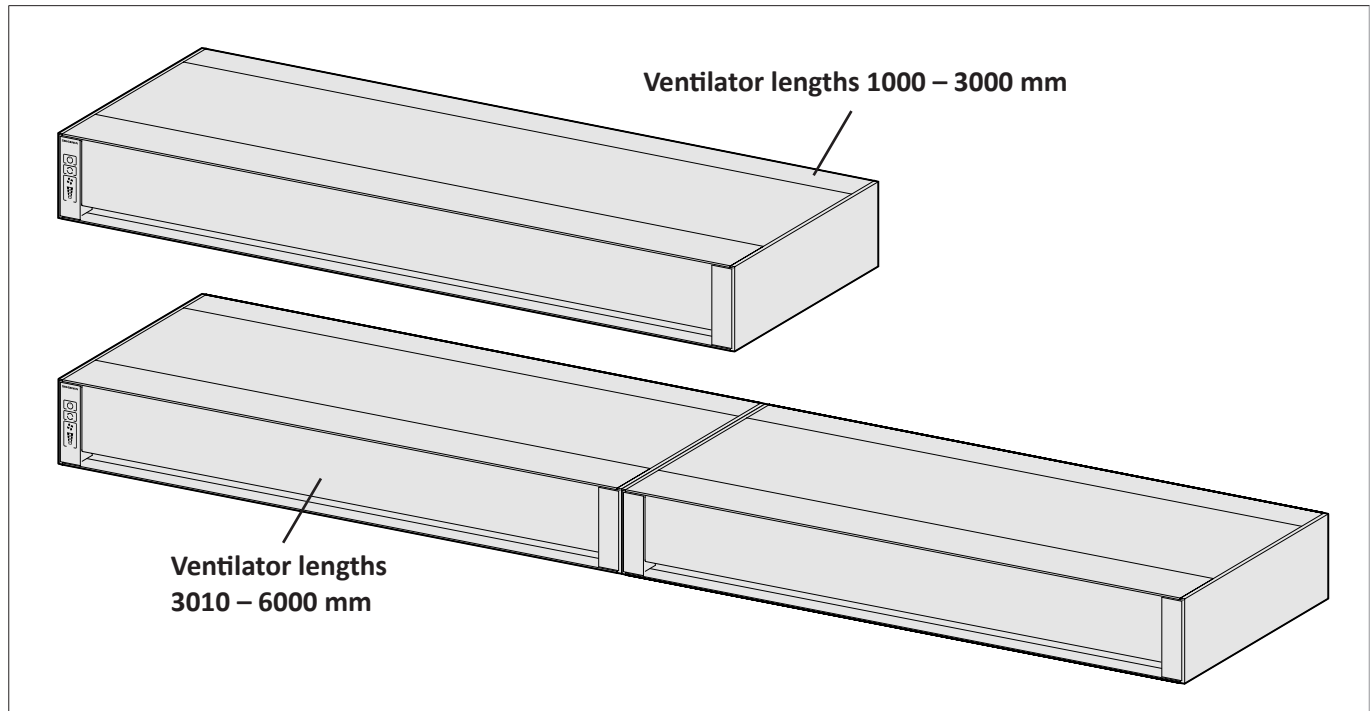


1 Features and functions



1.1 Features

- AEROMAT VT WRG is a bidirectional ventilation unit (including heat recovery) for ventilation of closed rooms. The air exchange is accomplished with supply air and exhaust air blowers with heat recovery.
- AEROMAT VT WRG is part of the AEROMAT VT systems, which consists of different device types. The different device types can be combined with each other. Separate data sheets must be taken into consideration.
- Installation variants:
 - reveal
 - reveal concealed (with vent duct)
 - lintel
 - lintel concealed (with lintel duct)
 - wall
 - concealed in the wall (with wall duct)

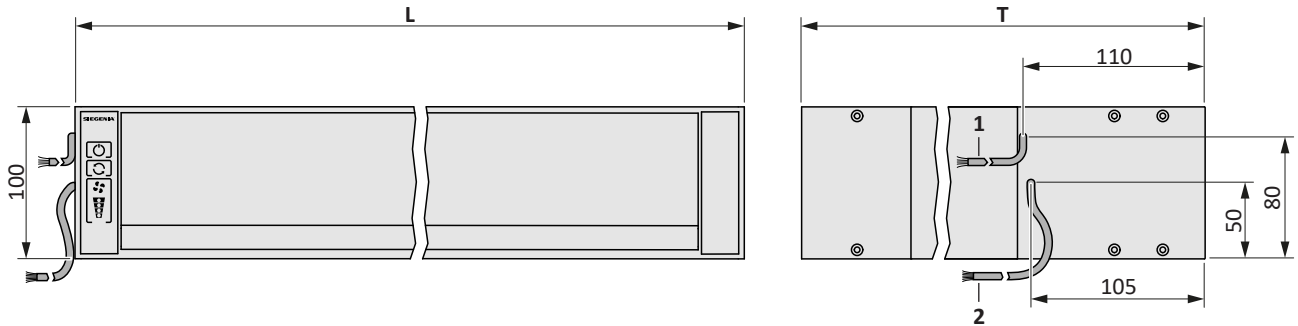
1.2 Functions

Versions	
Outside air filter ISO Coarse $\geq 45\%$	●
Outside air filter ISO ePM1 $\geq 50\%$	○
Outside air filter NOx	○
Exhaust air filter ISO Coarse $\geq 30\%$	●
Magnetic lock (room side)	●
Electric lock	○
Touch control	●
Inside temperature and humidity sensor	●
Outside temperature and humidity sensor	●
Air quality sensor with CO ₂ regulation	○
Air quality sensor with CO ₂ and TVOC regulation	○
Wifi	○
Preheating register (additional ventilator length 200 mm)	○
Halogen-free cable	○
Digital outputs	○
External inputs (e. g night or cross ventilation or bathroom control)	○
Configurable software	○

- Serial version
- optional or alternative version

2 Dimensions

2.1 Dimensions AEROMAT VT WRG



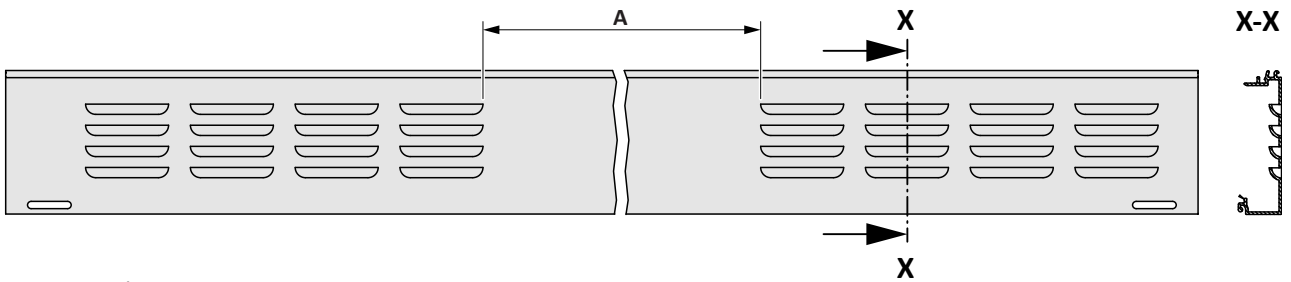
Measurements in mm

	L (mm)	T (mm)
AEROMAT VT WRG	1000 – 6000	320 – 500

Key		
L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
1	Control cable 5 x 0.75 mm ²	for digital outputs
2	Control cable 7 x 0.75 mm ²	for supply voltage

2.2 Dimensions of outer panel without extension parts

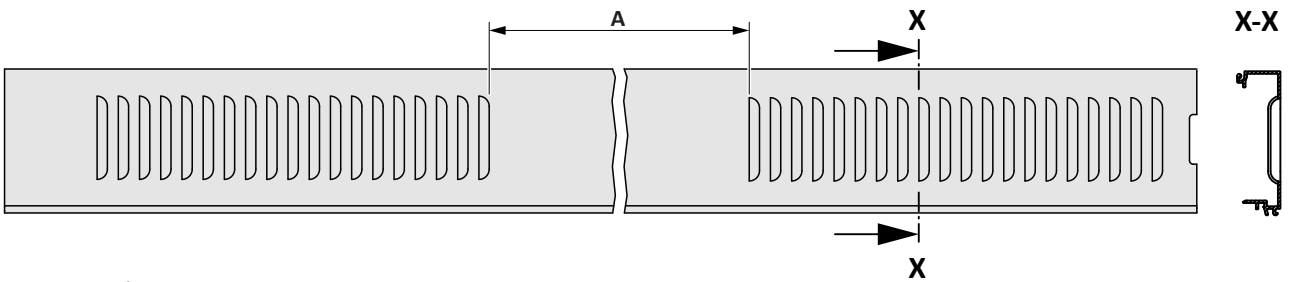
Outer panel for horizontal installation



Measurements in mm

	Preheating register	Ventilator length (mm)	A (mm)
AEROMAT VT WRG	No	1000 – 1190	244.5
	No	1200 – 6000	444.5
	yes	1200 – 1390	444.5
	yes	1400 – 6000	644.5

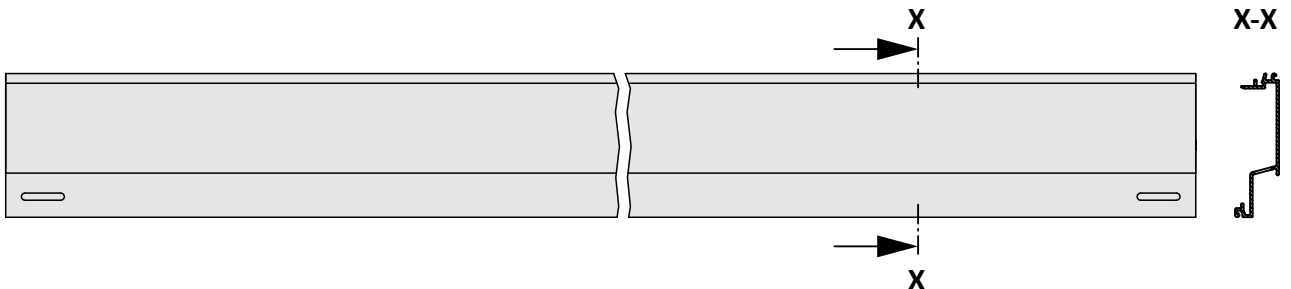
Outer panel for vertical installation



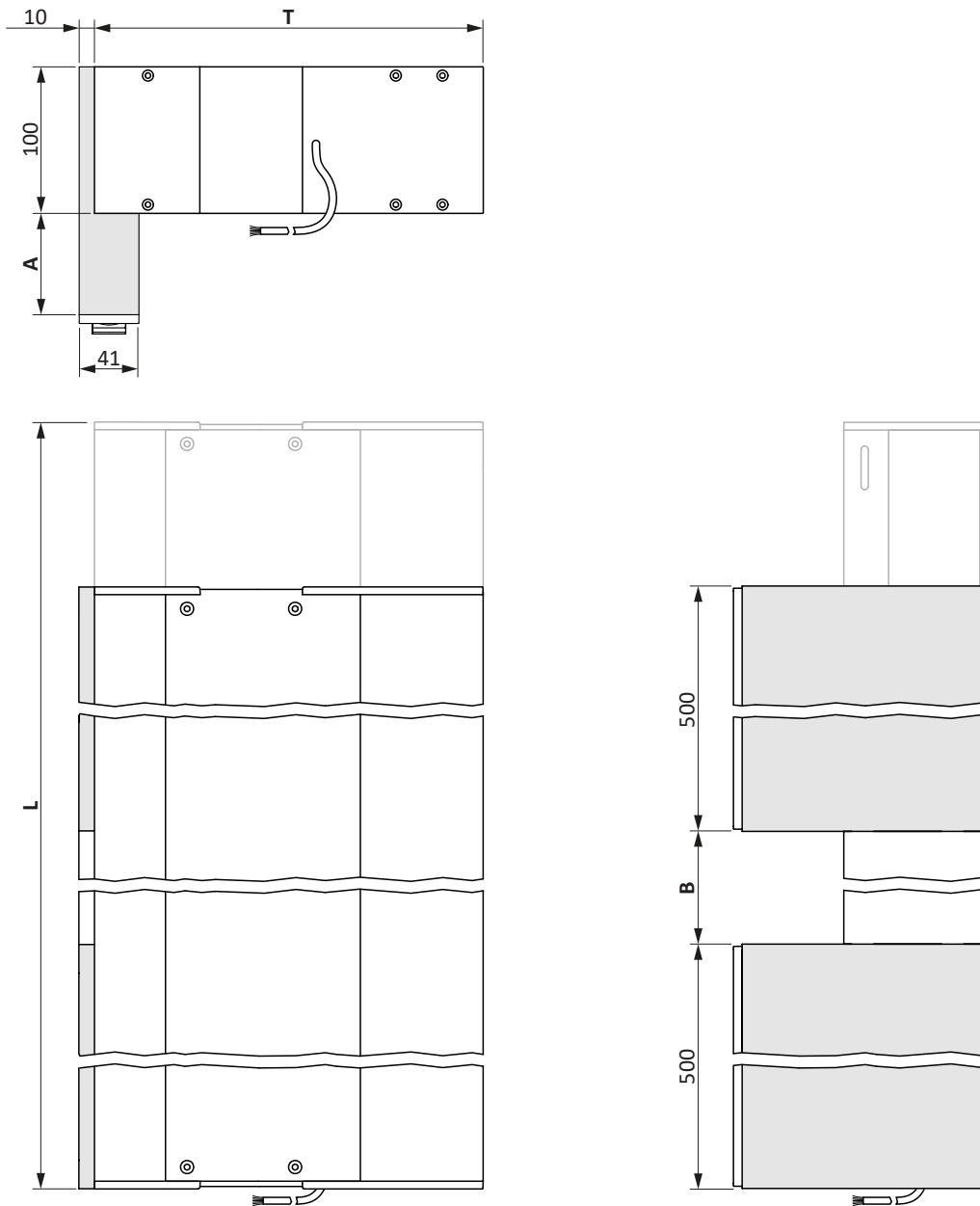
Measurements in mm

	Preheating register	Ventilator length (mm)	A (mm)
AEROMAT VT WRG	No	1000 – 1190	111.4
	No	1200 – 6000	311.4
	yes	1200 – 1390	311.4
	yes	1400 – 6000	511.4

Outer panel for shadow gap



2.3 Dimensions of vent duct and lintel duct



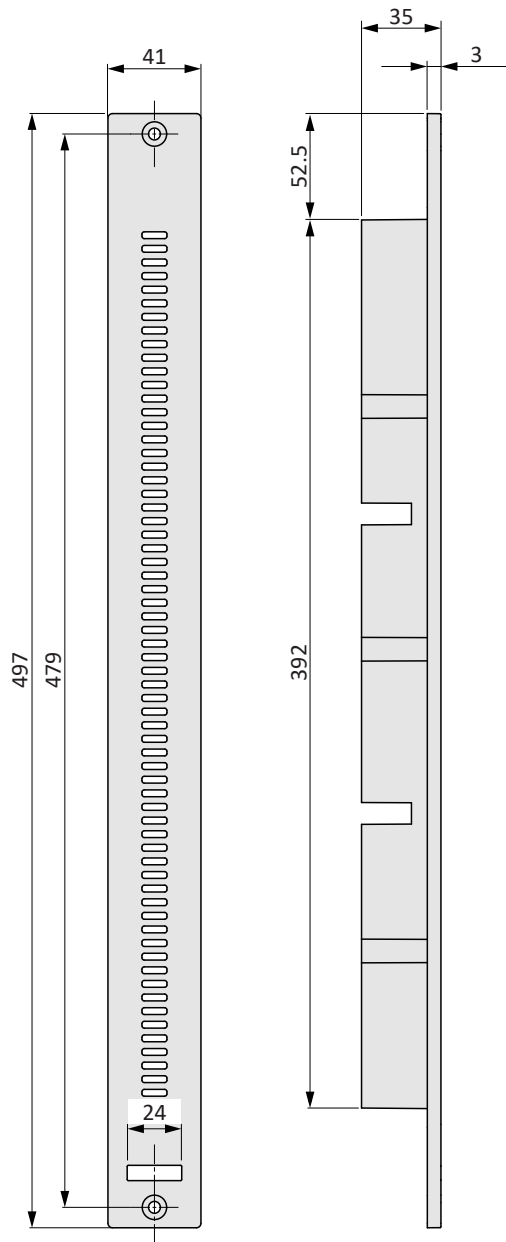
Measurements in mm

	Preheating register	L (mm)	T (mm)	A (mm)	B (mm)
AEROMAT VT WRG	No	1000 – 1190	320 – 500	0 – 570	0
	No	1200 – 6000	320 – 500	0 – 570	200
	yes	1200 – 1390	320 – 500	0 – 570	200
	yes	1400 – 6000	320 – 500	0 – 570	400

Key		
L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
A	Height of ducts	The height of the ducts can be shortened to the required dimension on site.
B	Duct interval	

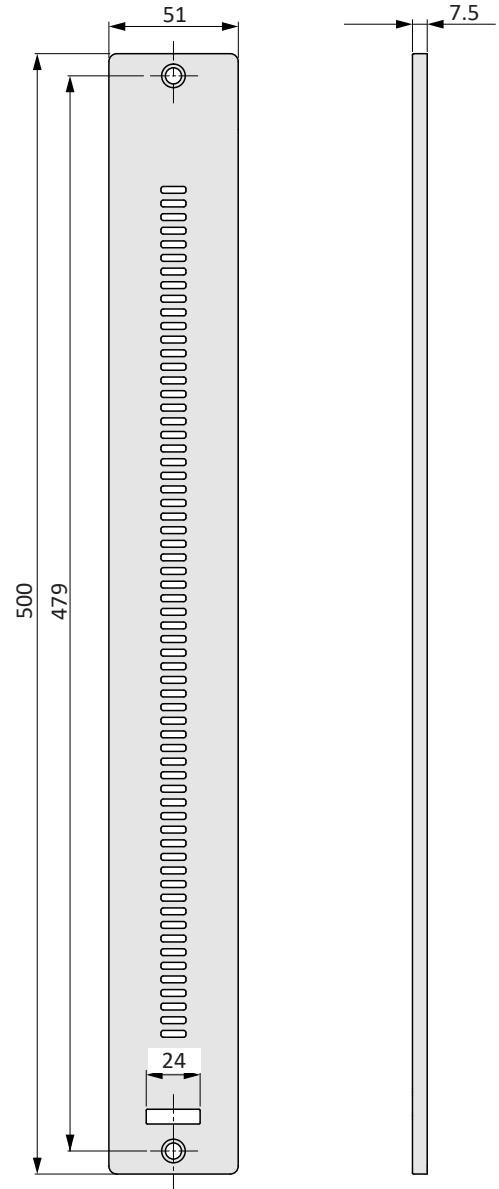
2.4 Dimensions of vent duct and lintel duct outer panels

PVC outer panel for vent duct and lintel duct



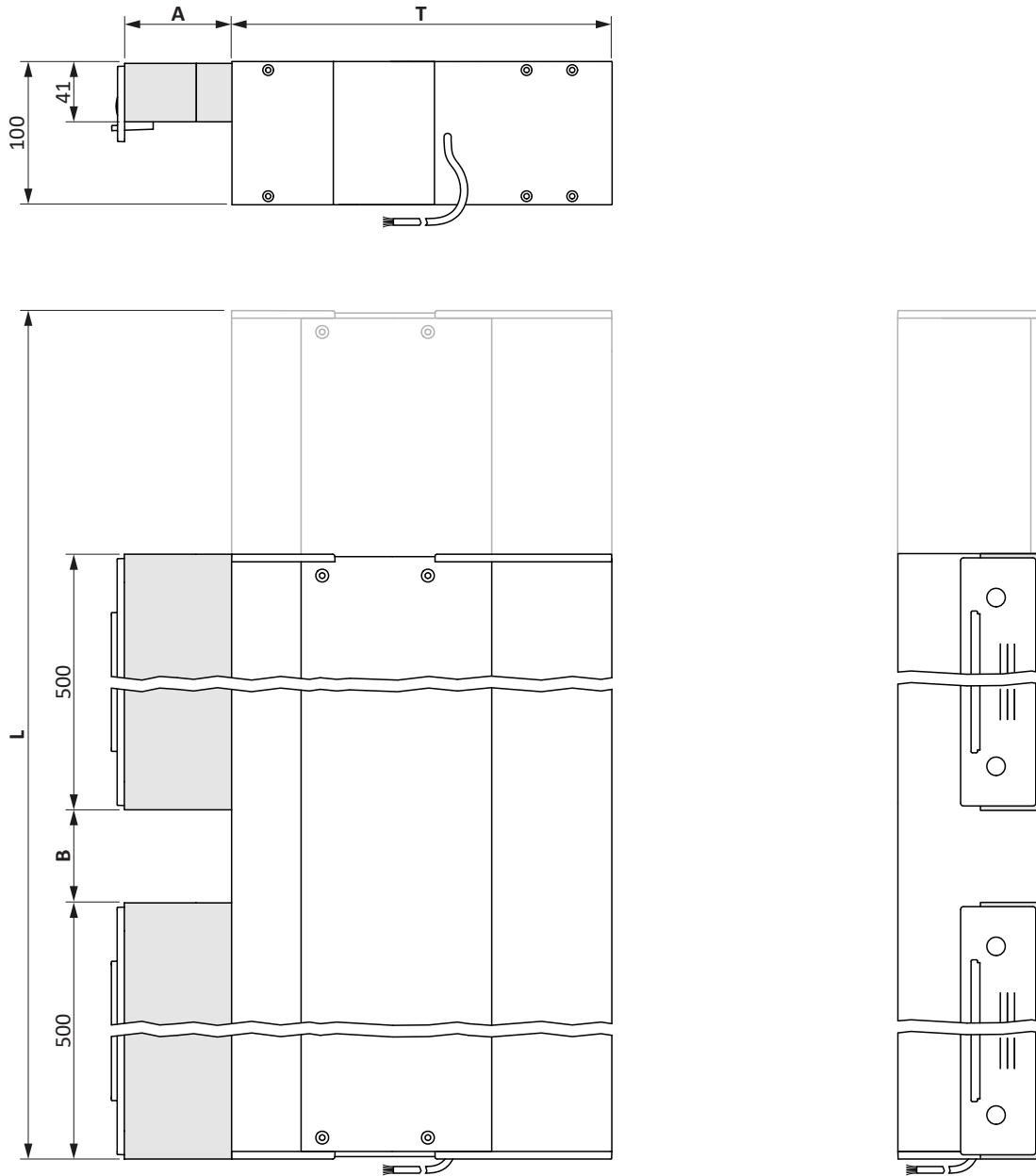
Measurements in mm

Aluminium outer panel for vent duct and lintel duct



Measurements in mm

2.5 Dimensions of wall duct



Measurements in mm

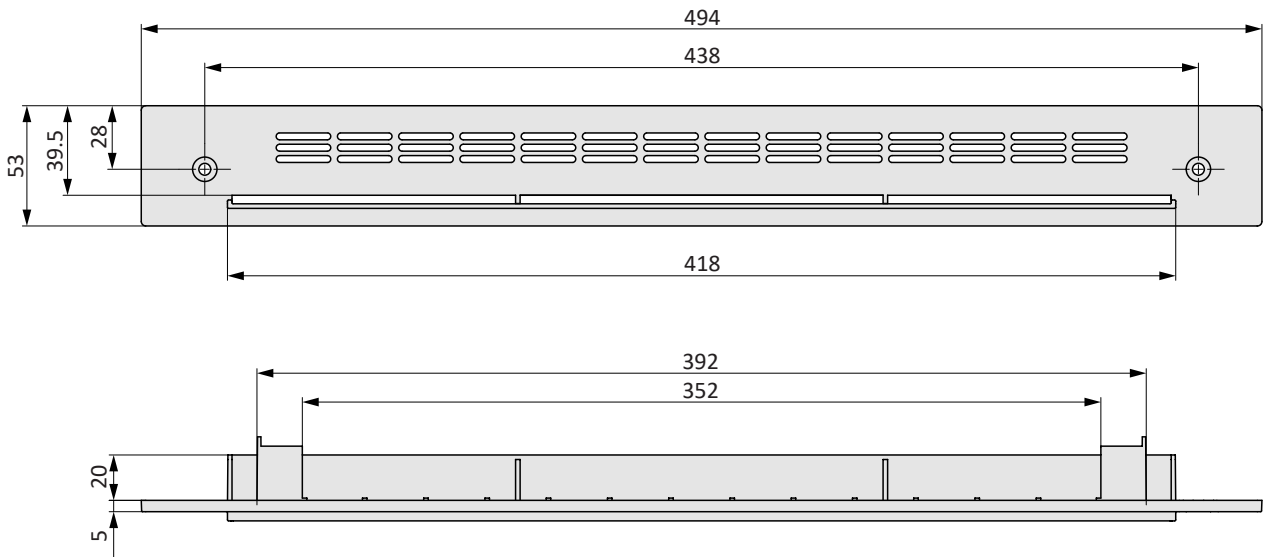
	Preheating register	L (mm)	T (mm)	A (mm)	B (mm)
AEROMAT VT WRG	No	1000 – 1190	320 – 500	25 – 500	0
	No	1200 – 6000	320 – 500	25 – 500	200
	yes	1200 – 1390	320 – 500	25 – 500	200
	yes	1400 – 6000	320 – 500	25 – 500	400

Key

L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
A	Depth of ducts	The depth of the ducts can be shortened to the required dimension on site (min. 25 mm).
B	Duct interval	

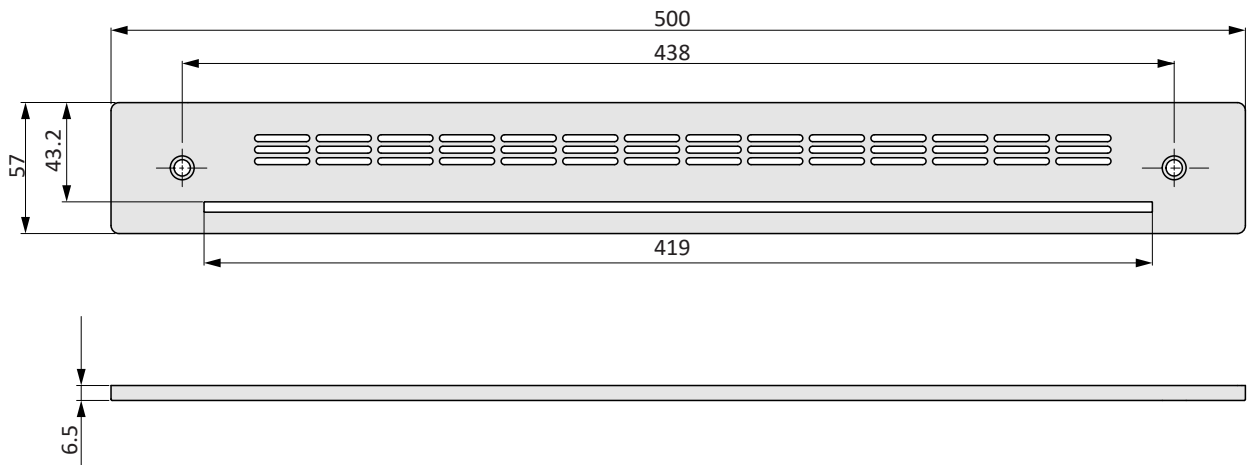
2.6 Dimensions of wall duct outer panels

Wall outer panel



Measurements in mm

Wall aluminium panel



Measurements in mm

3 Technical specifications

		AEROMAT VT WRG			
Ventilator length		1000 mm	1000 mm	1200 mm	1200 mm
Ventilator depth		320 mm	350 mm	320 mm	350 mm
Sound absorption $D_{n,e,w}$ in ventilation operation (measured according to DIN EN 10140-2)	without extension parts	55 dB	57 dB	54 dB	55 dB
	with wall duct	55 dB	57 dB	56 dB	57 dB
	with vent duct / lintel duct	56 dB	58 dB	56 dB	57 dB
Air throughput	Blower level 1	10 m ³ /h	10 m ³ /h	10 m ³ /h	10 m ³ /h
	Blower level 2	20 m ³ /h	20 m ³ /h	20 m ³ /h	20 m ³ /h
	Blower level 3	30 m ³ /h	30 m ³ /h	30 m ³ /h	30 m ³ /h
	Blower level 4	45 m ³ /h	45 m ³ /h	45 m ³ /h	45 m ³ /h
	Blower level 5	60 m ³ /h	60 m ³ /h	60 m ³ /h	60 m ³ /h
Inherent noise L_{pA} (measured according to DIN EN ISO 13141-8, sound pressure level with room insulation of 8 dB)	Blower level 1	< 12 dB (A)	< 12 dB (A)	< 12 dB (A)	< 12 dB (A)
	Blower level 2	18 dB (A)	18 dB (A)	18 dB (A)	18 dB (A)
	Blower level 3	27 dB (A)	27 dB (A)	25 dB (A)	25 dB (A)
	Blower level 4	36 dB (A)	36 dB (A)	34 dB (A)	34 dB (A)
	Blower level 5	42 dB (A)	42 dB (A)	40 dB (A)	40 dB (A)
Heat recovery efficiency		max. 93 %	max. 93 %	max. 93 %	max. 93 %
Power consumption	Blower level 1	5 W	5 W	4 W	4 W
	Blower level 2	6 W	6 W	5 W	5 W
	Blower level 3	8 W	8 W	7 W	7 W
	Blower level 4	14 W	14 W	13 W	13 W
	Blower level 5	27 W	27 W	24 W	24 W
Supply voltage		230 V AC	230 V AC	230 V AC	230 V AC
Supply frequency		50 Hz	50 Hz	50 Hz	50 Hz
Operating voltage		24 V DC	24 V DC	24 V DC	24 V DC
Protection class		II	II	II	II
Max. permissible area load		1000 kg/m	1000 kg/m	1000 kg/m	1000 kg/m
Permissible operating temperature		-15 – +40 °C	-15 – +40 °C	-15 – +40 °C	-15 – +40 °C
Permissible operating temperature (device with preheating register)		-30 – +40 °C	-30 – +40 °C	-30 – +40 °C	-30 – +40 °C
Length of connecting cable		5 – 20 m	5 – 20 m	5 – 20 m	5 – 20 m

Ventilator length 1000 mm: technical specification measured with outside air filter ISO Coarse 45 % and exhaust air filter ISO Coarse 30 %

Ventilator length 1200 mm: technical specifications measured with outside air filter ISO Coarse 45 % and exhaust air filter ISO Coarse 30 %

as well as outside air filter ISO ePM1 50% and exhaust air filter ISO Coarse 30 %