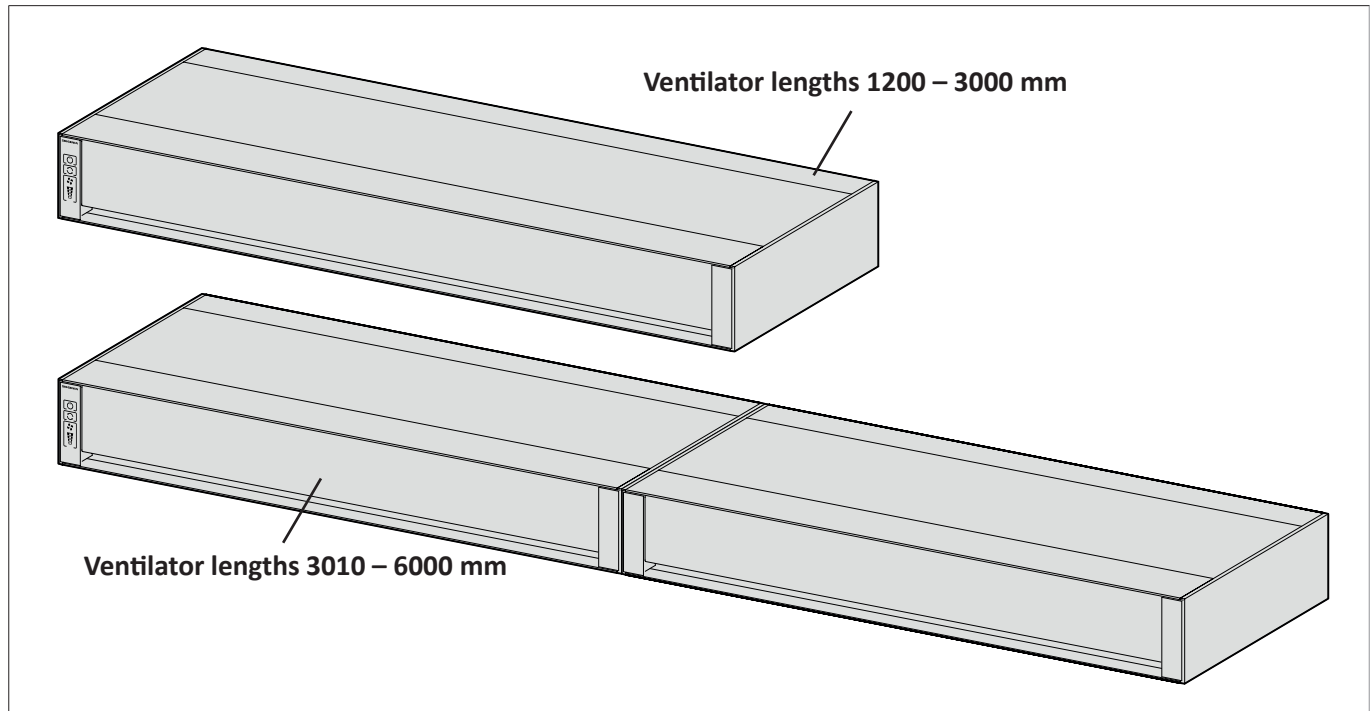


1 Features and functions



1.1 Features

- AEROMAT VT WRG plus 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 plus 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)

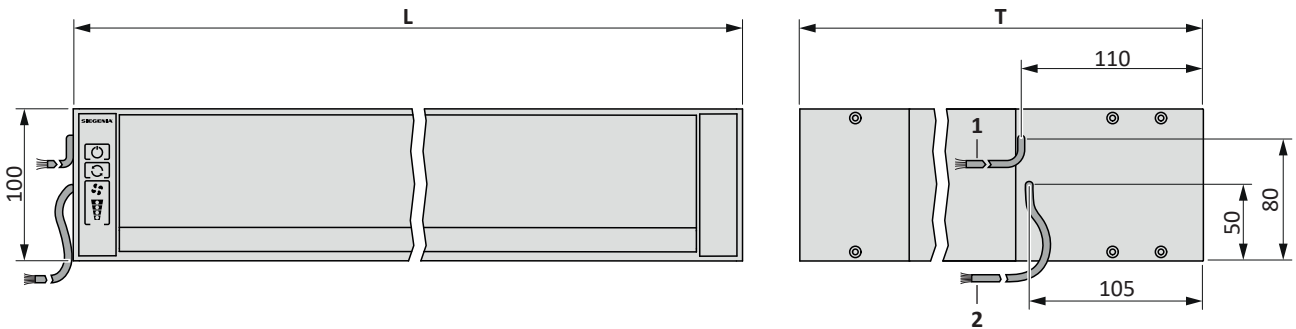
1.2 Functions

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 plus



Dimensions in mm

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	optional for units with standard cables
	Control cable 2 x 1.5 mm ² for supply voltage	for units with halogen-free cables
2	Control cable 7 x 0.75 mm ² for supply voltage	for units with standard cables
	Control cable 5 x 0.75 mm ² for external outputs	for units with halogen-free cables

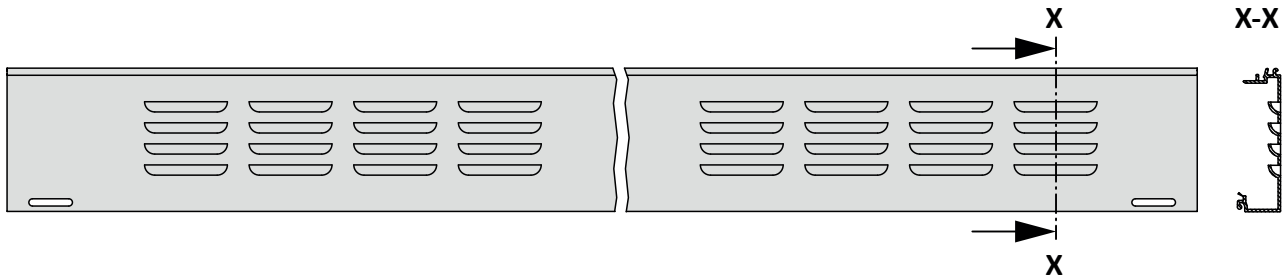
Device type	Dimension L (mm)	Dimension D (mm)
AEROMAT VT WRG plus	1200 – 6000	320 – 500

2.2 Dimensions of outer panel without extension parts

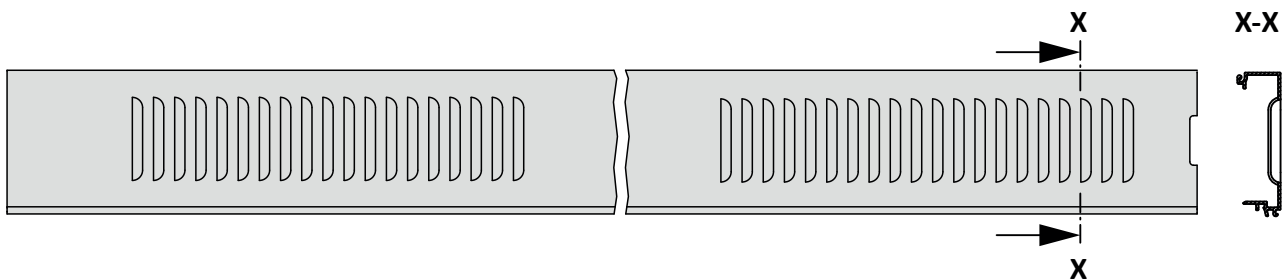
The dimensions of the outside panels are dependent on the device equipment level and the ventilator length. You can find more detailed information about the outside panels in the media centre or via the following link:

link.si/fens015/1123

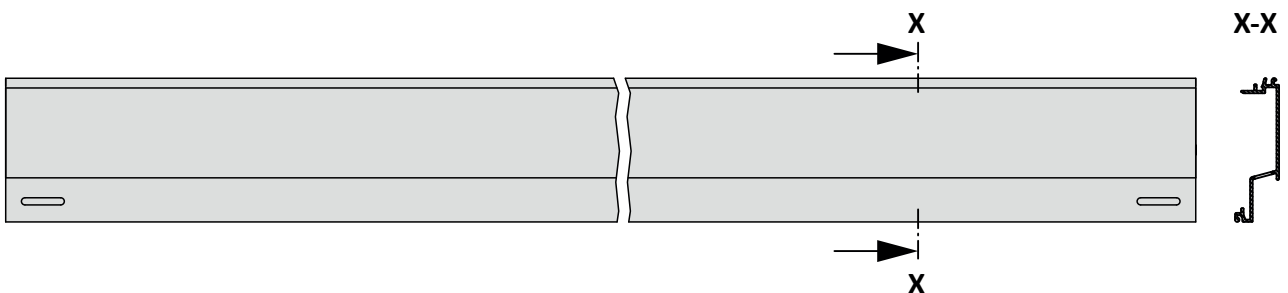
Outer panel for horizontal installation



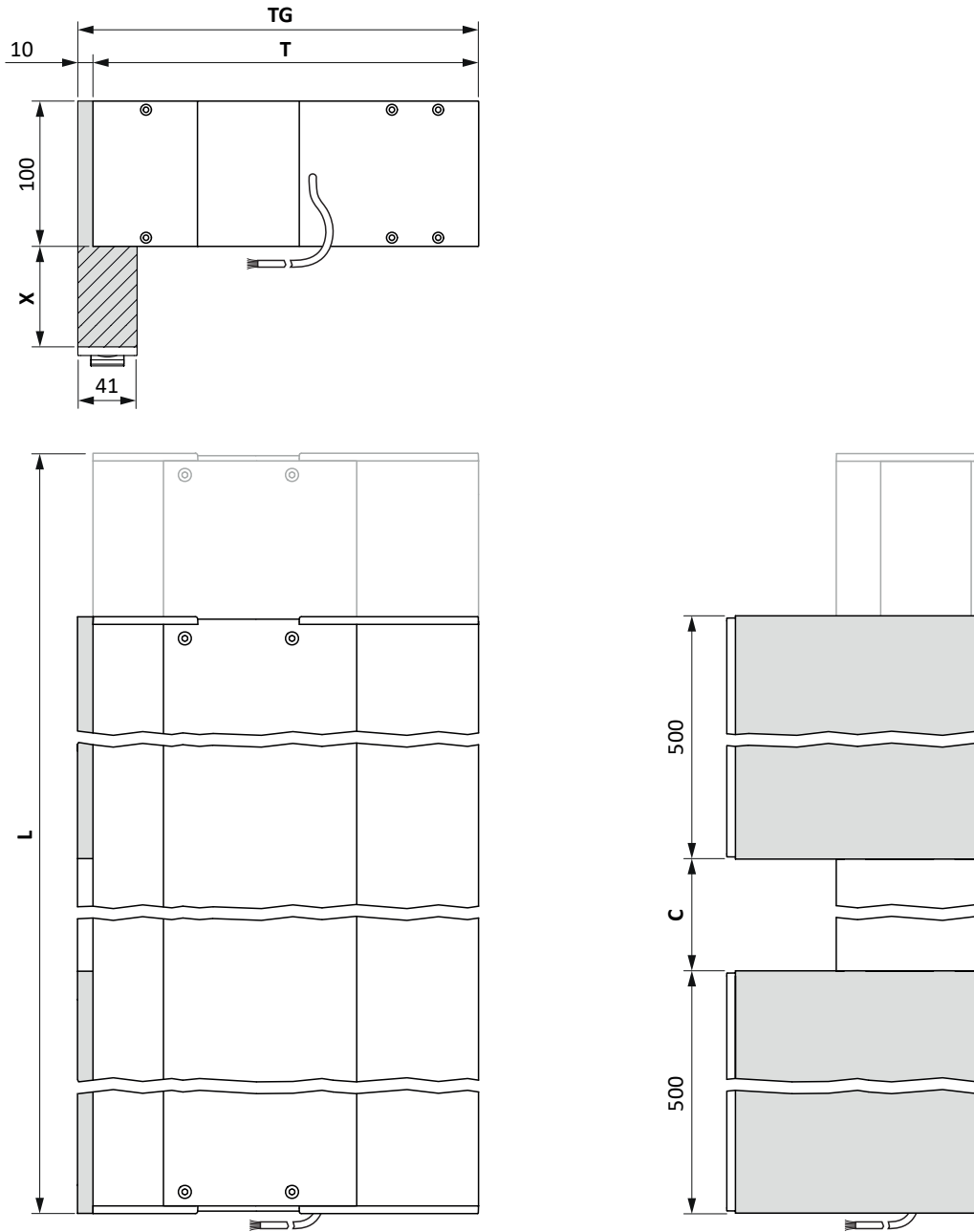
Outer panel for vertical installation




Outer panel for shadow gap



2.3 Dimensions of reveal and lintel duct EPP



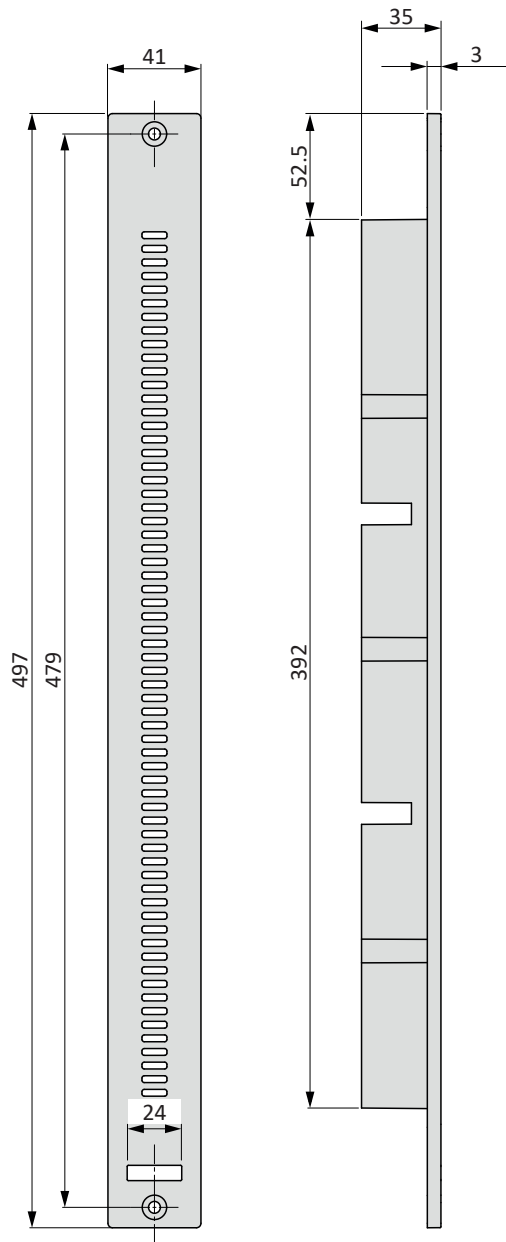
Dimensions in mm

L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
X	Height of ducts	The height of the ducts can be shortened to the required dimension on site.
C	Duct interval	
TG	Total depth	Ventilator depth T + 10 mm
	Cropping area	

Device type	Dimension L (mm)	Dimension D (mm)	Dimension X (mm)	Dimension C (mm)
AEROMAT VT WRG plus without preheating register	1200 – 6000	320 – 500	0 – 570	200
AEROMAT VT WRG plus with preheating register	1400 – 6000	320 – 500	0 – 570	400

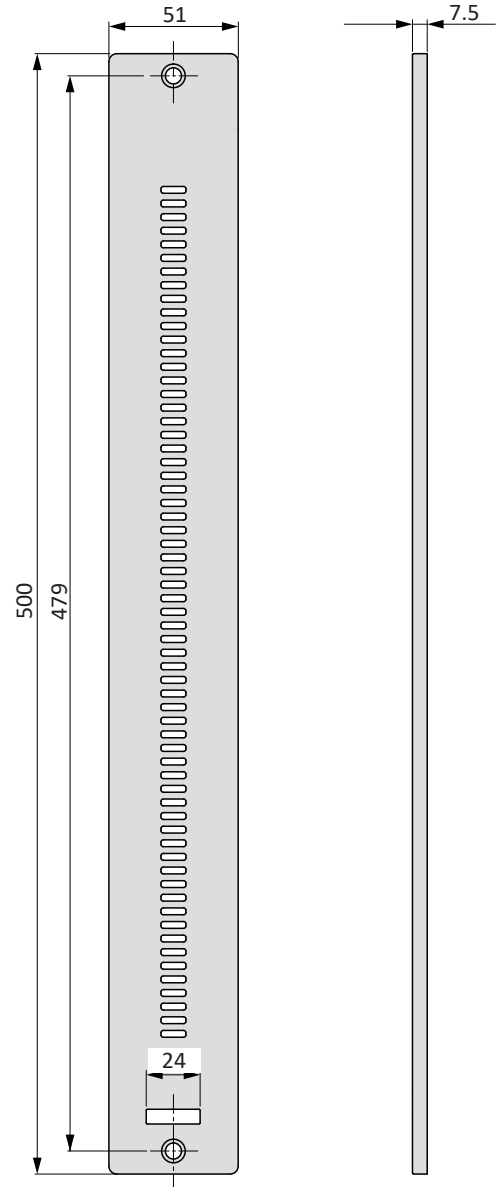
2.4 Dimensions of reveal and lintel duct outside panels EPP

PVC outer panel for vent duct and lintel duct EPP



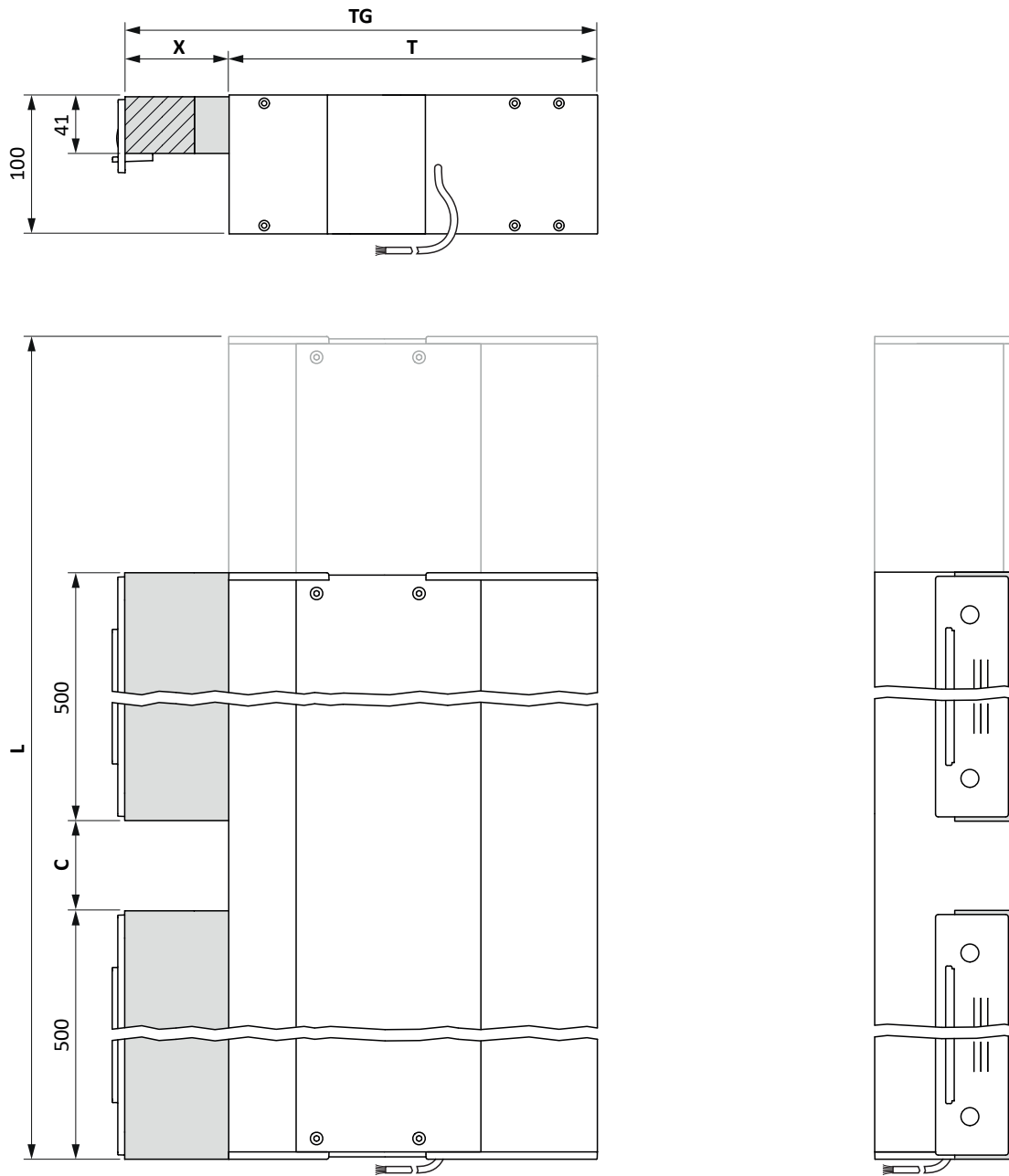
Dimensions in mm

Aluminium outer panel for vent duct and lintel duct EPP




Dimensions in mm

2.5 Dimensions of wall duct EPP

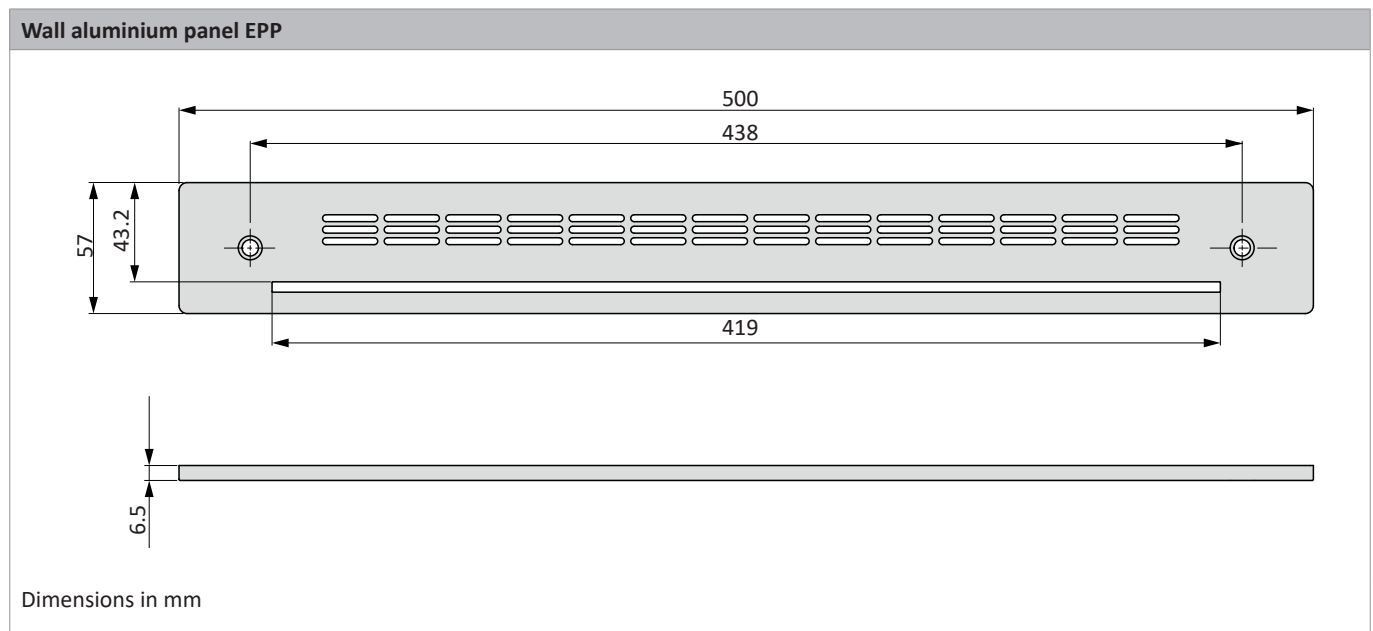
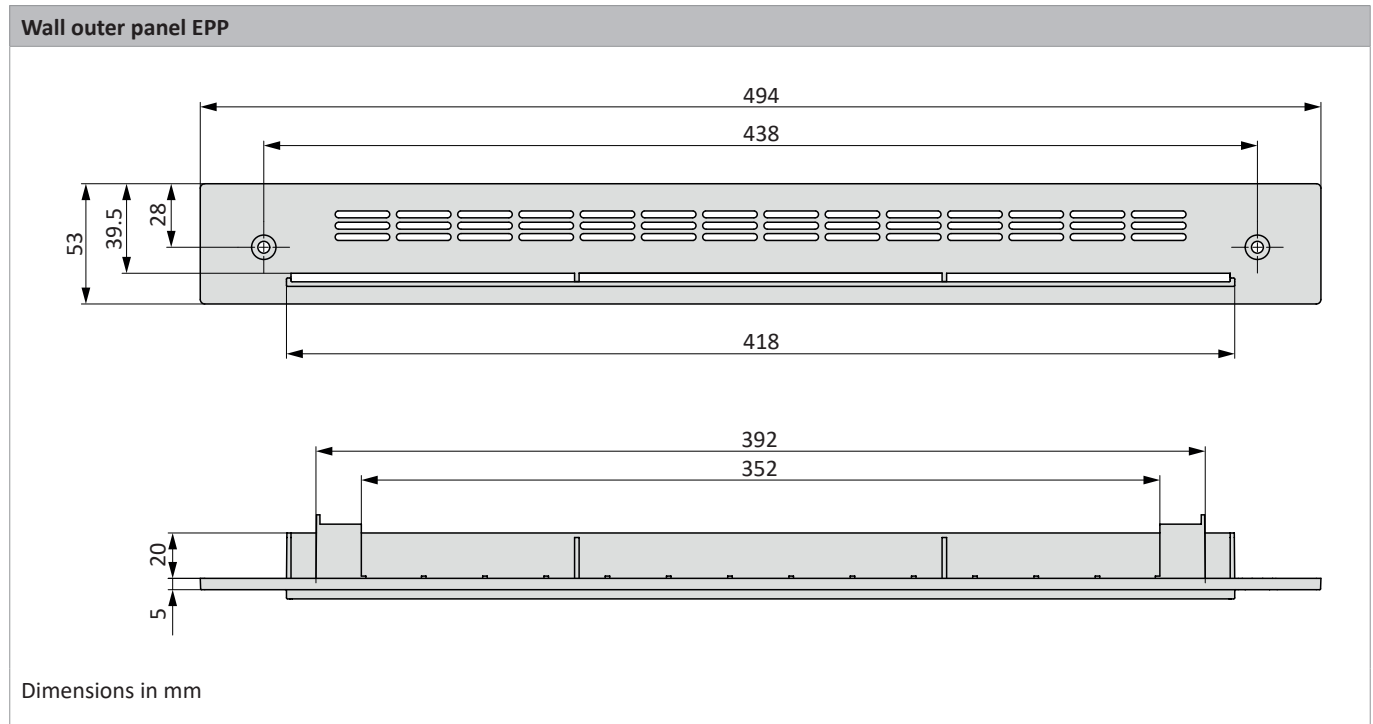


Dimensions in mm

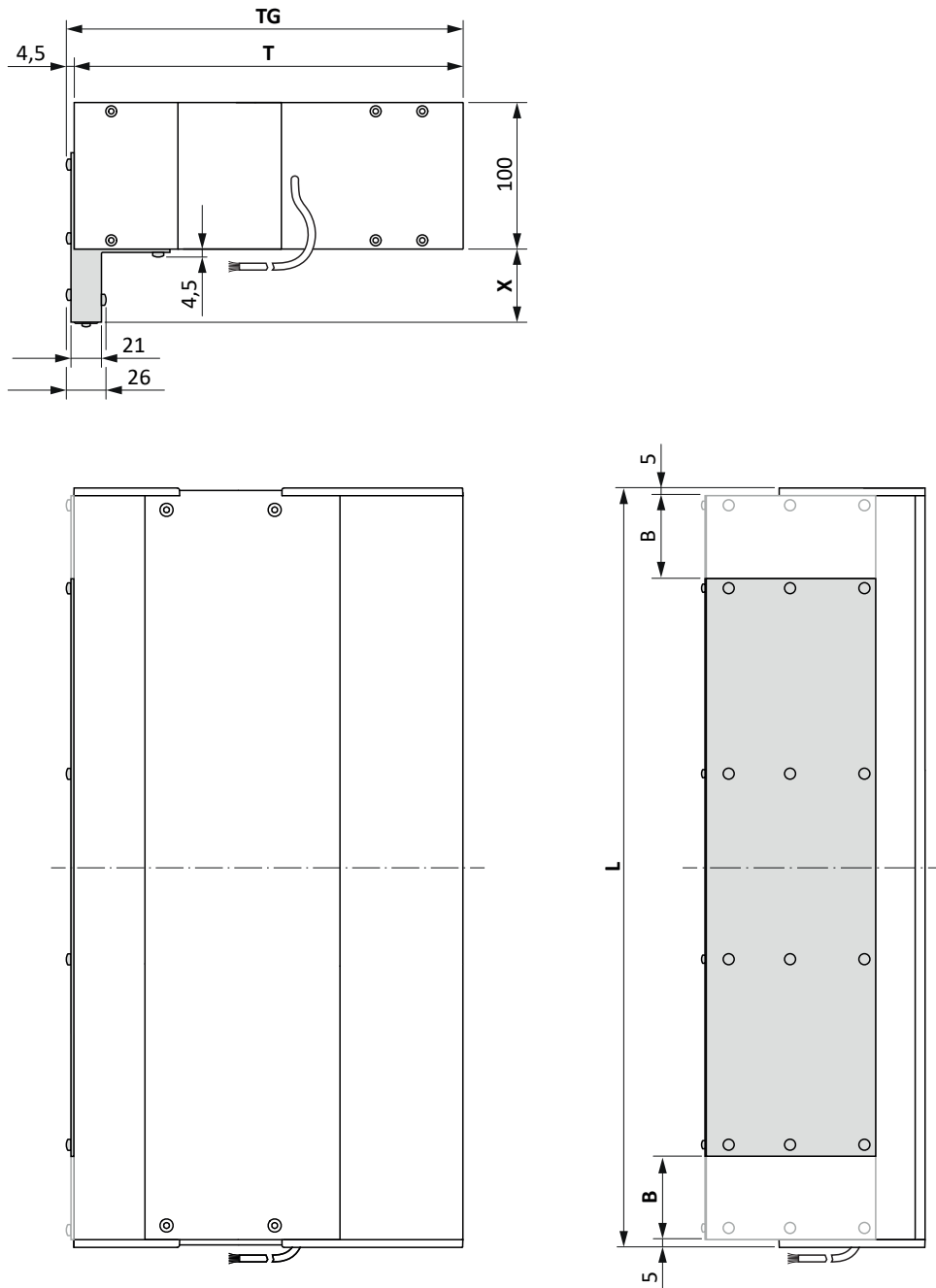
L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
X	Depth of ducts	The depth of the ducts can be shortened to the required dimension on site (min. 25 mm).
C	Duct interval	
TG	Total depth	Ventilator depth T + depth of ducts X
	Cropping area	

Device type	Dimension L (mm)	Dimension D (mm)	Dimension X (mm)	Dimension C (mm)
AEROMAT VT WRG plus without preheating register	1200 – 6000	320 – 500	25 – 500	200
AEROMAT VT WRG plus with preheating register	1400 – 6000	320 – 500	25 – 500	400

2.6 Dimensions of wall duct outside panels EPP



2.7 Dimensions of aluminium reveal and lintel duct

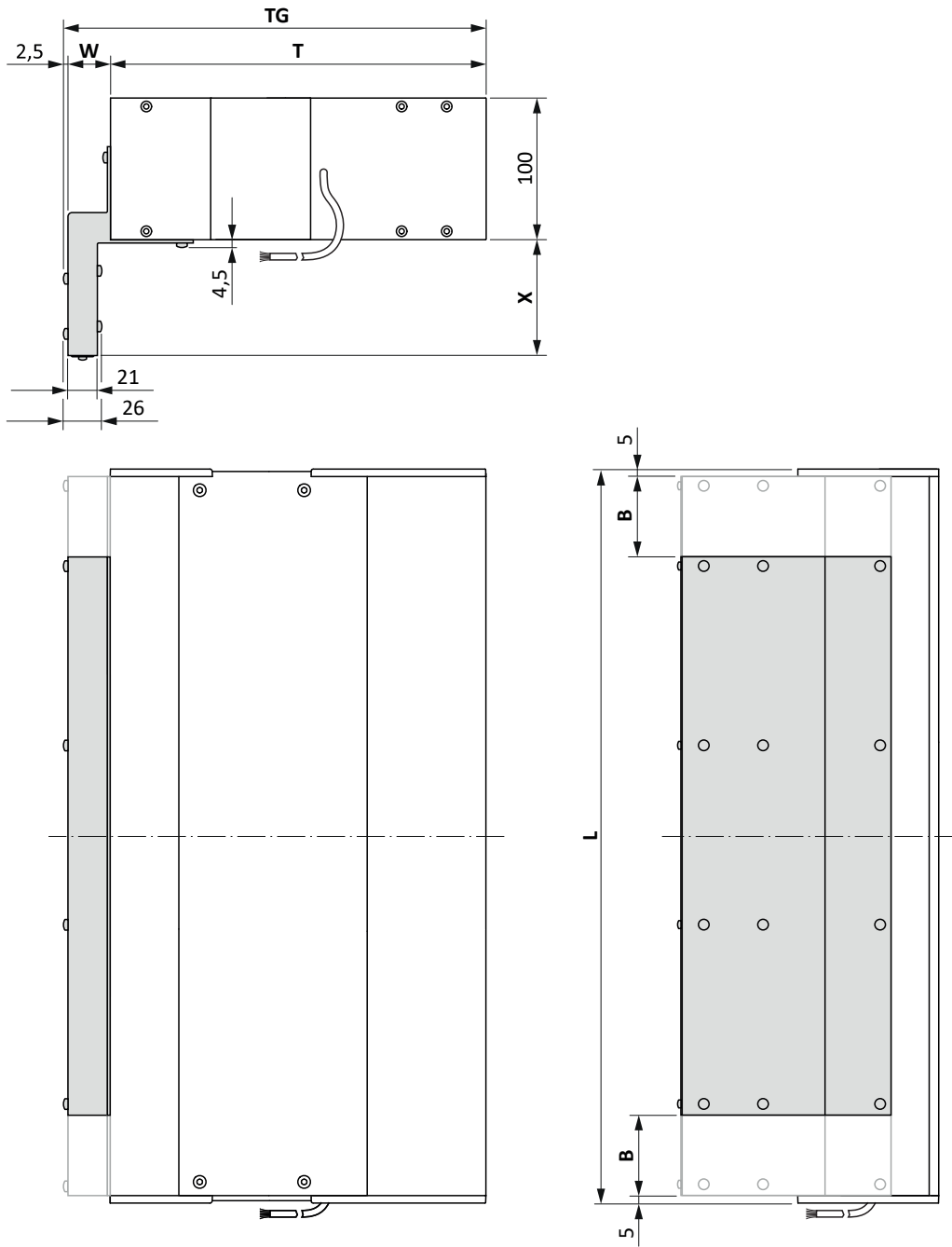


Dimensions in mm

L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
X	Height of duct	Can be ordered in 1 mm increments
TG	Total depth	Ventilator depth T + 4.5 mm

Device type	Dimension L (mm)	Dimension D (mm)	Dimension X (mm)	Dimension B (mm)
WRG plus	1200 – 3000	320 – 500	25 – 1100	0 – 45
	3010 – 6000			0
WRG plus with preheating register	1400 – 3000	320 – 500	25 – 1100	0 – 45
	3010 – 6000			0

2.8 Dimensions of aluminium reveal and lintel duct angled



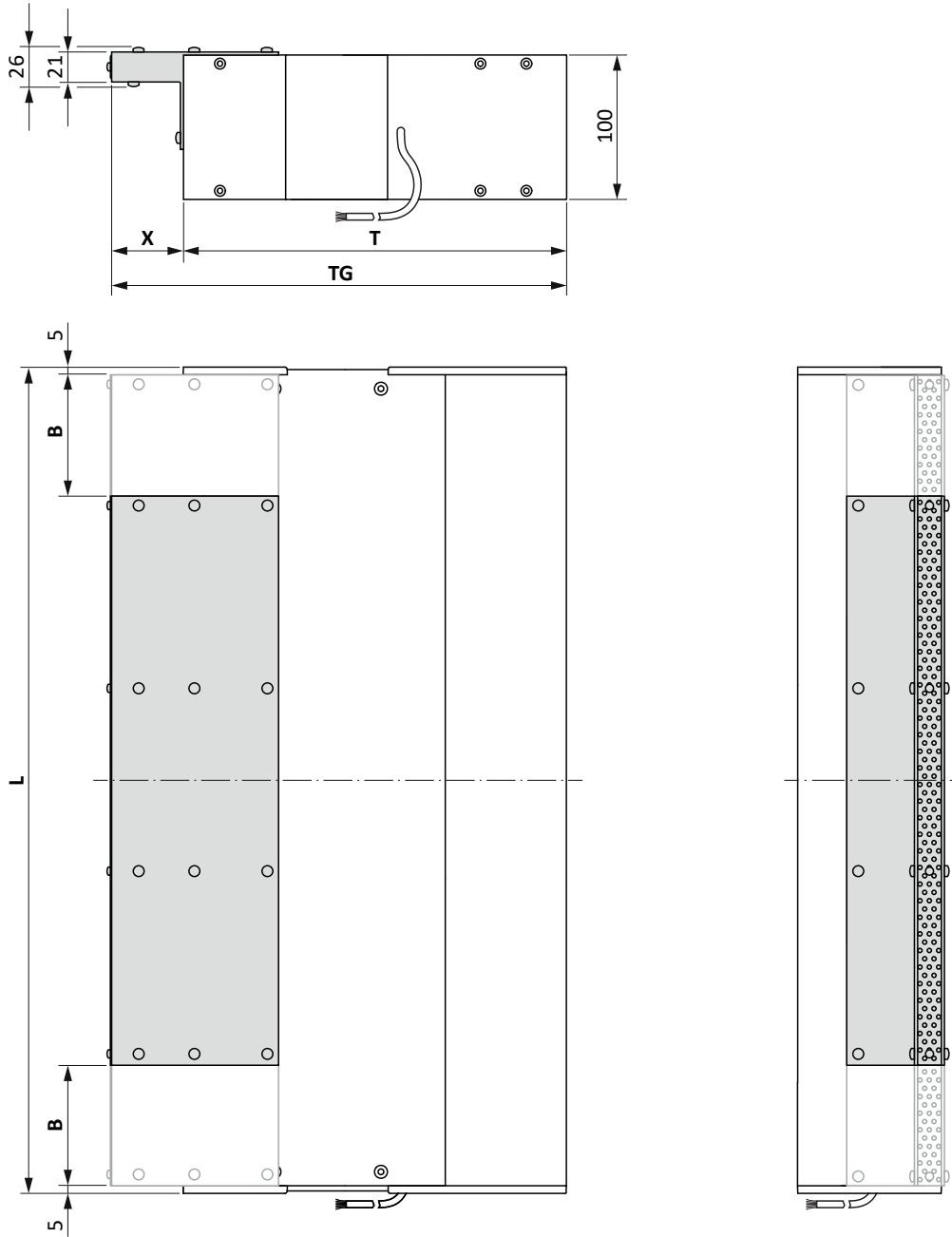
Dimensions in mm

L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
X	Height of duct	Can be ordered in 1 mm increments
W	Depth of duct	Can be ordered in 1 mm increments
TG	Total depth	Ventilator depth T + depth of duct W + 2.5 mm

Device type	Dimension L (mm)	Dimension D (mm)	Dimension W (mm) ¹	Dimension X (mm) ¹	Dimension B (mm)
WRG plus	1200 – 3000	320 – 500	15 – 500	25 – 1085	0 – 45
	3010 – 6000				0
WRG plus with preheating register	1400 – 3000	320 – 500	15 – 500	25 – 1085	0 – 45
	3010 – 6000				0

¹⁾ $W + X \leq 1100$

2.9 Dimensions of wall duct aluminium

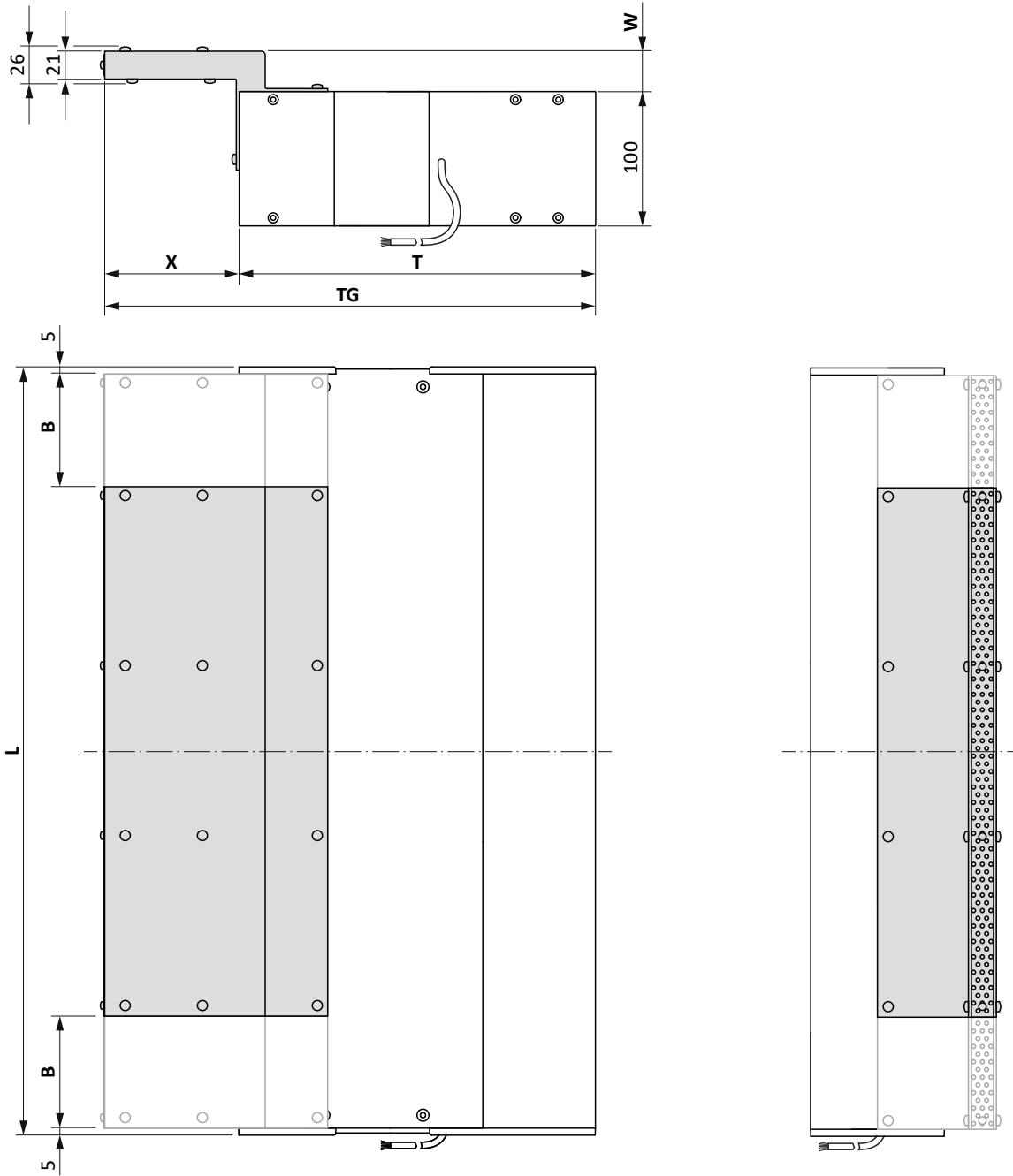


Dimensions in mm

L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
X	Depth of duct	Can be ordered in 1 mm increments
TG	Total depth	Ventilator depth T + X

Device type	Dimension L (mm)	Dimension D (mm)	Dimension X (mm)	Dimension B (mm)
WRG plus	1200 – 3000	320 – 500	25 – 1100	0 – 45
	3010 – 6000			0
WRG plus with preheating register	1400 – 3000	320 – 500	25 – 1100	0 – 45
	3010 – 6000			0

2.10 Dimensions of wall duct aluminium angled



Dimensions in mm

L	Ventilator length	Can be ordered in 10 mm increments
T	Ventilator depth	Can be ordered in 1 mm increments
X	Depth of duct	Can be ordered in 1 mm increments
W	Height of duct	Can be ordered in 1 mm increments
TG	Total depth	Ventilator depth T + X

Device type	Dimension L (mm)	Dimension D (mm)	Dimension W (mm) ¹	Dimension X (mm) ¹	Dimension B (mm)
WRG plus	1200 – 3000	320 – 500	15 – 500	25 – 1085	0 – 45
	3010 – 6000				0
WRG plus with preheating register	1400 – 3000	320 – 500	15 – 500	25 – 1085	0 – 45
	3010 – 6000				0

¹⁾ $W + X \leq 1100$

3 Technical specifications

Ventilator length		1200 mm	
Ventilator depth		320 mm	350 mm
Sound absorption $D_{n,e,w}$ in ventilation operation (measured according to DIN EN 10140-2)	without extension parts	52 dB	55 dB
	with wall duct EPP	57 dB	59 dB
	with vent duct /lintel duct EPP	55 dB	57 dB
Air throughput	Blower level 1	10 m ³ /h	10 m ³ /h
	Blower level 2	20 m ³ /h	20 m ³ /h
	Blower level 3	30 m ³ /h	30 m ³ /h
	Blower level 4	45 m ³ /h	45 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)
	Blower level 2	20 dB (A)	20 dB (A)
	Blower level 3	29 dB (A)	28 dB (A)
	Blower level 4	36 dB (A)	34 dB (A)
Max. heat recovery efficiency		95 %	95 %
Thermal efficiency in accordance with EU Directive 1254/2014		66.5 %	66.5 %
Energy efficiency class in accordance with EU Directive 1254/2014		A	A
Power consumption	Blower level 1	4 W	4 W
	Blower level 2	6 W	6 W
	Blower level 3	10 W	10 W
	Blower level 4	20 W	20 W
Maximum power consumption preheating register		350 W	350 W
Supply voltage		230 V AC	230 V AC
Supply frequency		50 Hz	50 Hz
Operating voltage		24 V DC	24 V DC
Protection class		II	II
Max. permissible area load		1000 kg/m	1000 kg/m
Permissible operating temperature		-15 – +40 °C	-15 – +40 °C
Permissible operating temperature (device with preheating register)		-30 – +40 °C	-30 – +40 °C
Length of connecting cable		5 – 20 m	5 – 20 m

Technical specification measured with outside air filter ISO Coarse 45 % and exhaust air filter ISO Coarse 30 %