

We simplify construction

At Lindab we are driven by a strong desire to continuously generate improvements and to simplify construction. We do that by developing products and systems that are easy to use and energy efficient, together with industry-leading knowledge, support, logistics and efficient availability. We want to simplify everything – from designing, ordering, delivery, goal achievement and installation to the entire way of doing business with us. By simplifying in every stage of the construction process, we also contribute to energy-efficiency.

A good thinking company

Good thinking is a deeply rooted philosophy that guides us in everything we do. We firmly believe that good thinking makes good solutions to the challenges we all face. Taking responsibility for what we do and how we do things is therefore important to us. Because good thinking is not only about making life easier and more comfortable for our customers and end users. It is also a matter of thinking in a global perspective, all the time. Knowing that we at Lindab are helping to make the world a better place.

Premium class plug&play air handling units

The upgraded Lindab compact air handling units range was developed to ensure perfect indoor climate for different types of smaller non-residential premises, such as offices, restaurants, hotels and shops.

Impressive technical features paired with ultimate user experience

The new CompAir range boasts significantly improved housing characteristics, premium-class components, more flexible installation in limited spaces and an optimized price-performance ratio. A new cloud-based control system allows simple interconnection with other HVAC elements and user friendly setting of the desired parameters via PC or smartphone.





Advanced selection software

An advanced software selection tool AirCalc++, available in multiple languages, makes it easy to determine the optimum unit for individual premises.

Besides calculations, the program also allows to create drawings, which can be exported to AutoCad, detailed project descriptions and a thermodynamic process Mollier h x diagram.

Convincing technical performance and top class components

Housing	BASIC	PLUS
Thermal transmittance	T2	T2
Thermal bridge factor	TB3	TB2
Casing strength	D1	D1
Air leakage	L1	L1
Panel thickness	50 mm	50 mm

One of the most distinctive features of the new compact AHU range is a high quality housing with 50 mm panels, insulated with mineral wool, and convincing technical characteristics. For higher resistance the panels are powder-coated as standard. Optionally they are also available in Aluzinc.

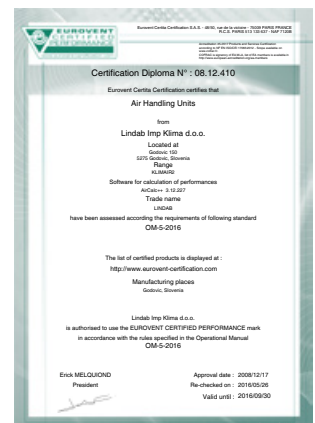
The implementation of EC fans results in higher energy efficiency, while low air velocities lead to better performance.

Another important competitive advantage are the multiple coils options, including electrical pre-heaters, electrical or water heaters, water cooling coils or DX coils.

Certified quality and impressive energy efficiency

CompAir air handling units are Eurovent certified within the existing Klimair2 range and fulfill the requirements of ErP 2016/ErP 2018 according Ecodesign Directive (2009/125/EC).

Due to a high heat recuperation level of up to 90% (Compair CF) / up to 85% (CompAir RW), the energy consumption for the ventilation of buildings is minimized.





User friendly control system

Our plug&play air handling units are equipped with an advanced integrated control system. A new cloud based platform allows flawless communication to achieve the best system performance.

Integration on automation level without any need for Scada-based support.

Immense flexibility regarding user functions and price level due 3 different user levels: Basic, Standard and Advanced. All units are fully wired and pre-tested at the factory.



Immense flexibility in limited spaces

The new compact range features three different types of connections placement, so that the units also can be fitted in very limited spaces:

- Horizontal connections (H) - 4 side connections.
- Half-vertical connections (HV) – 2 side and 2 top connections.
- Vertical connections (V) - 4 top connections.

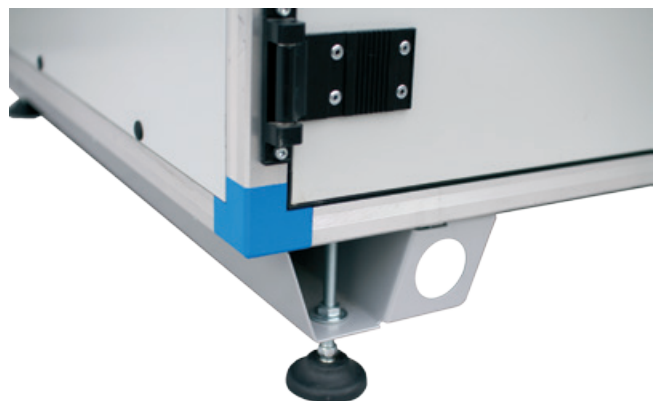
Connections can be circular (with Lindab Safe double rubber seal) or rectangular (fix or flexible).

For even greater flexibility, all basic units are available in monoblock or splitted version.

Large accessory range

With our customers' needs in mind, we have decided to offer a broad range of standard accessories, such as:

- Valves
- Drive valves
- Roofs
- Hoods
- Duct silencers
- Duct coils
- Feet
- Anti-vibration pads



CompAir RW



Description

CompAir RW is a family of air handling units in six sizes, covering air flow volumes from 910 up to 10 700 m³/h and boasting up to 85% heat recovery of the exhaust air. As an additional option heating and/or cooling can be included. The basic unit is available as monoblock or splitted version, with various connection options and is designed for both indoor and outdoor installation. The integrated control system is available in three versions: Basic, Standard and Advanced.

Basic configuration:

- Highly efficient rotary wheel heat exchanger.
- Inlet and outlet fans with EC motors.
- Bag or panel filter F7 on inlet and M5 or F7 on outlet side.

Housing:

- Basic housing: panels TopAir: T2, TB3 class.
- Plus housing: panels TopAir Plus; T2, TB2 class.
- Exterior of the panels coated in RAL 7035, option: Aluzinc.

Optional sections:

- Water heater or electrical heater.
- Water cooler or DX cooler.
- Duct heater and cooler.

Accessories:

- CO₂ or pressure sensors.
- Fire by-pass.
- Smoke detector.
- Regulation of external humidifier.
- Roofs, inlet and outlet hoods for outdoor version.
- Circular or rectangular duct connections.
- Support feet.
- Syphons.

Recuperation type	Designation	Max. capacity [m ³ /h]	SFP [w/m ³ /s] ($\Delta p_{ext}=200Pa$)*	Connection [mm]		Connection placement **	Heat recovery***
				○	□		
○	RW 2000	2400	807	Ø 400	675 x 410	H, HV, V	78,9%
○	RW 3000	3300	888	Ø 500	795 x 410	H, HV, V	76,8%
○	RW 4000	4700	823	Ø 500	1100 x 410	H, HV, V	72,2%
○	RW 6000	7000	803	Ø 630	1420 x 510	H, HV	74,5%
○	RW 8000	8700	742	Ø 800	1560 x 610	H, HV	73,6%
○	RW 10000	10700	755	Ø 800	1915 x 610	H, HV	77,9%

* SFP value for supply fan at V_{nom} and basic unit configuration

** H = horizontal (4 side connections), HV = half vertical (2 top+ 2 side connections), V = vertical (4 top connections)

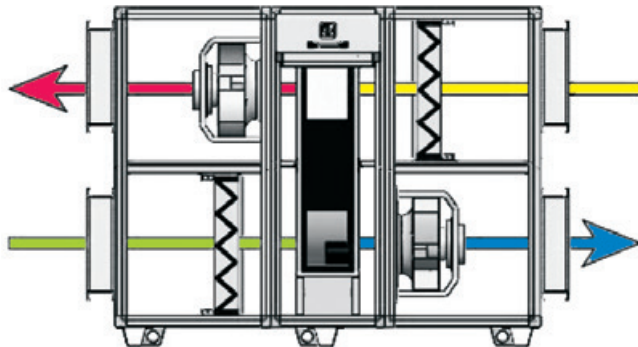
*** Heat recovery is calculated according to EN 308 standard. In real conditions efficiencies up to 85% can be reached.

CompAir RW

Connection placement versions – options to be selected in AirCalc++

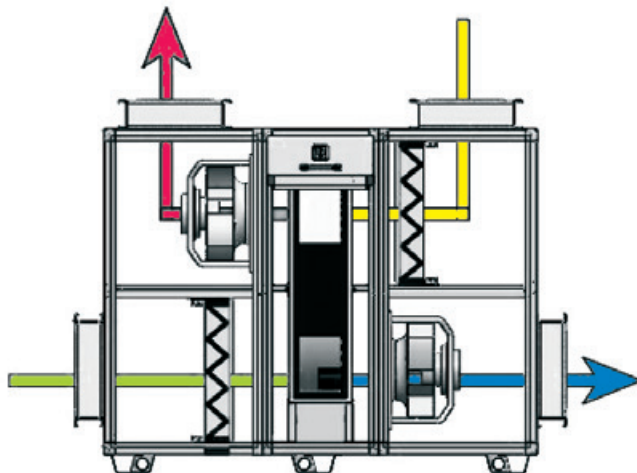
CompAir RW with 4 side connections (H)* – 6 sizes, airflows up to 10 700 m³/h

fresh air intake on lower side

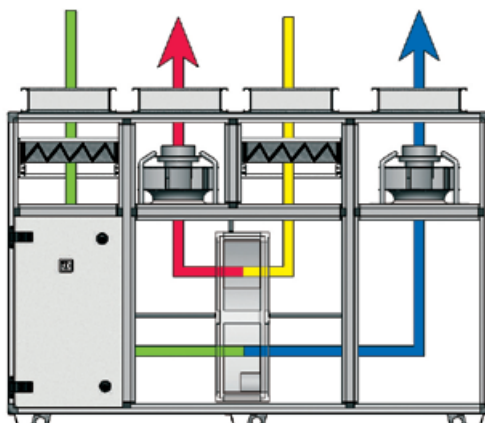


CompAir RV with 2 side and 2 top connections (HV)* - 6 sizes, airflows up to 10 700 m³/h

fresh air intake on lower side



CompAir RW with 4 top connections (V) - 3 sizes, airflows up to 4700 m³/h

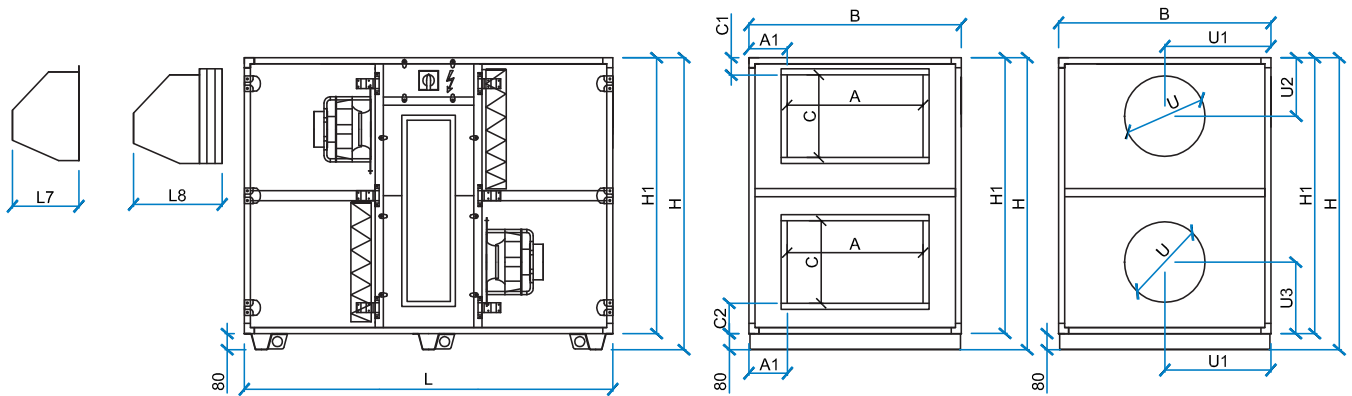


* the stated connection placement options are valid for both monoblock and splitted version

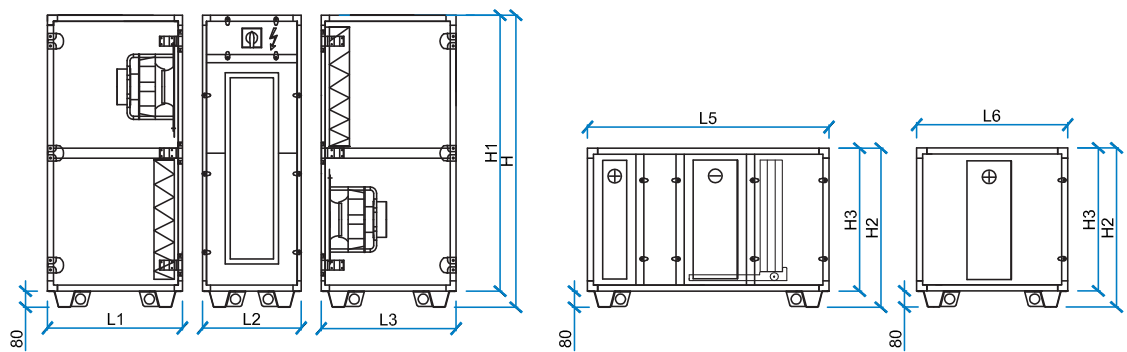
CompAir RW (H)

Units with horizontal connections (H)

CompAir RW (H) monoblock version



CompAir RW (H) splitted version with additional sections



All configurations are available:
 - In splitted or monoblock version.
 - With round connections (fix) or rectangular connections (fix or flexible).

Technical data

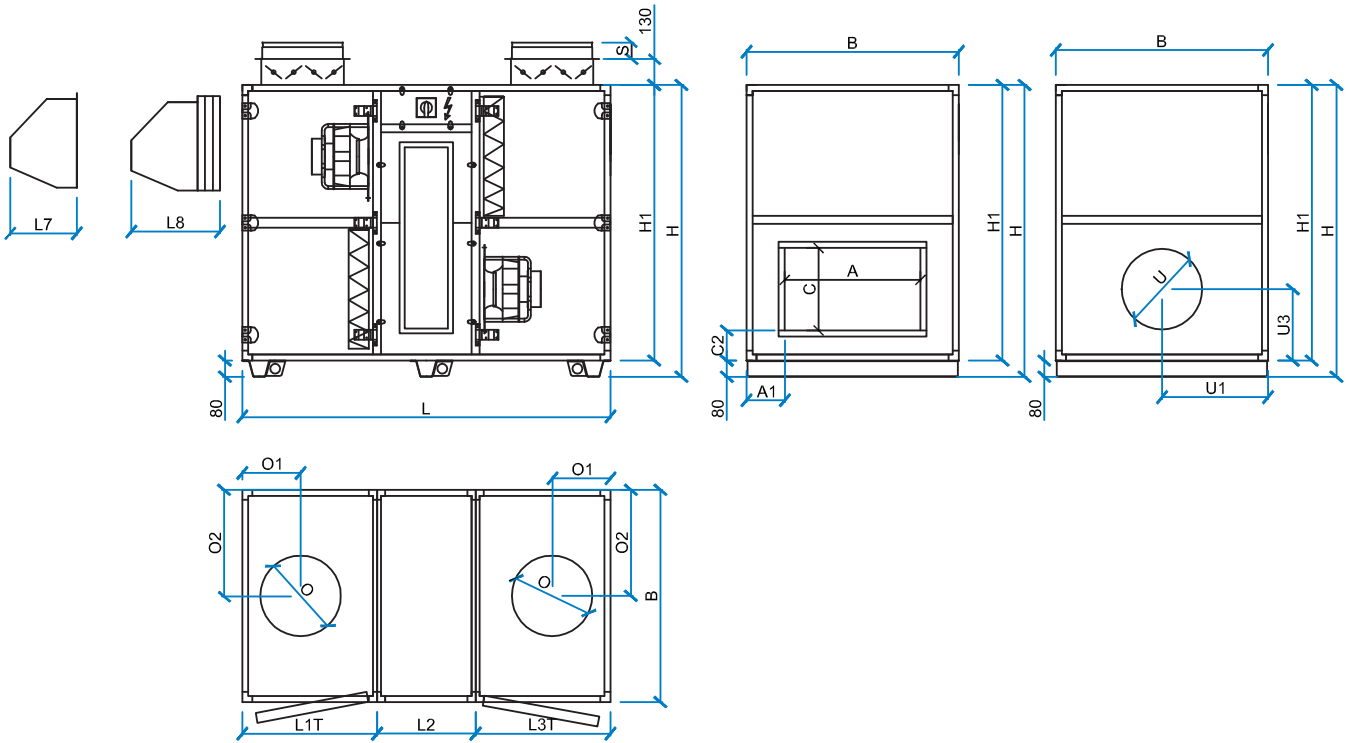
CompAir RW with horizontal (H) connections (2 + 2 side connections)

Size	2000	3000	4000	6000	8000	10000
Air flow range [m ³ /h]	910-2400	1150-3300	1420-4700	2390-7000	2980-8700	3850-10700
Electrical supply [V]	1 x 230	3 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Motor and fan type	Radial plug-in fan with EC motor					
Frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Input power (per fan)	730 W	1140 W	1700 W	2600 W	2900 W	3300 W
Current draw (per fan)	3,2 A	1,8 A	2,6 A	4,0 A	4,43 A	5,1 A
Insulation	50 mm mineral wool					
Panel material/colour	Sheet steel, powder coated in RAL 7035 or Aluzinc					
Filter type	Panel or bag filter					
Filter class	F7 / M5 or F7					
Damper exhaust	Outlet air damper 24 V actuator					
Damper supply	Supply (fresh air) damper 24 V actuator					
Condensate drain connection	DN40					
Heater connections	3/4"	1"	1"	1 1/4"	1 1/2"	1 1/2"
Cooler connections	1"	1 1/4"	1 1/4"	1 1/2"	2"	2 1/2"
Dimension inside and outside [mm]	Monoblock / Splitted				Splitted	
Length monoblock L [mm]	1870	1870	1870	2070		
Length L1 [mm] - filter section	690	690	690	790	690	690
Length L2 [mm] - heat recovery section	490	490	490	490	490	490
Length L3 [mm] - fan section	690	690	690	790	790	990
Options: L5, L6, L7, L8						
Length L5 with heater (water, electrical) and cooler (water, DX) [mm]	1200					
Length L6 with heater (water, electrical) or cooler (water, DX) [mm]	750					
Length L7 with hood [mm]	330	330	330	430	500	500
Length L8 with hood and drop eliminator [mm]	445	445	445	545	615	615
Roof (for outside units)	50 mm over the unit's edge					
Height H [mm]	1450	1450	1450	1730	2060	2060
Height H1 [mm]	1370	1370	1370	1650	1980	1980
Height H2 [mm]	790	790	790	930	1095	1095
Height H3 [mm]	710	710	710	850	1015	1015
Width B [mm]	1055	1155	1460	1780	1920	2275
Rectangular duct dimension A x C [mm]	675 x 410	795 x 410	1100 x 410	1420 x 510	1560 x 610	1915 x 610
A1 position duct connection	190	180	180	180	210	180
C1 position duct connection	85	85	85	85	85	85
C2 position duct connection	150	150	150	170	202.5	202.5
J length of duct connection [mm]	100					
Round duct connection U [mm]	400	500	500	630	800	800
U1 position round connection	527.5	577.5	730	890	960	1137.5
U2 position round connection	290	340	340	400	490	490
U3 position round connection	355	355	355	425	507.5	507.5
S length of round connection [mm]	80	80	80	80	100	100
Efficiency	up to 85 %					
Heat recovery	Rotary wheel					
Operating temperature	-20°C to 40°C					

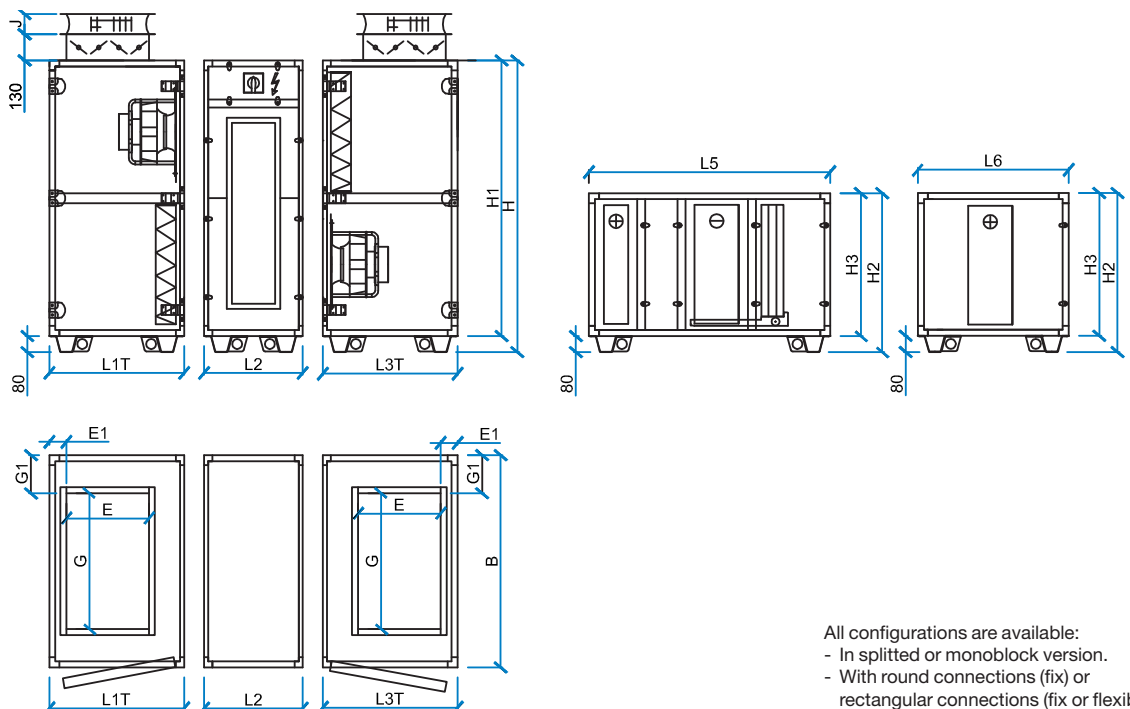
CompAir RW (HV)

Units with half-vertical connections (HV)

CompAir RW (HV) monoblock version



CompAir RW (HV) splitted version with additional sections



All configurations are available:
 - In splitted or monoblock version.
 - With round connections (fix) or rectangular connections (fix or flexible).

Technical data

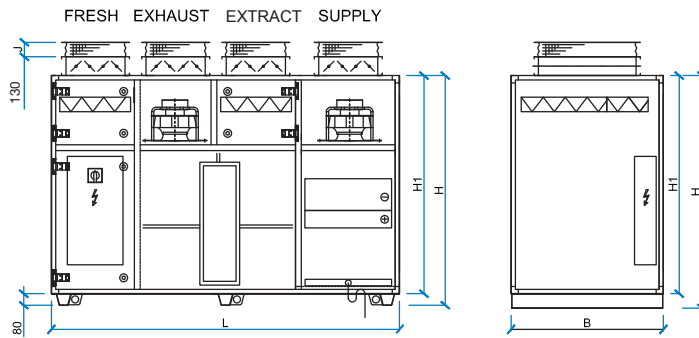
CompAir RW with half-vertical (HV) connections (2 side + 2 top connections)

Size	2000	3000	4000	6000	8000	10000
Air flow range [m ³ /h]	910-2400	1150-3300	1420-4700	2390-7000	2980-8700	3850-10700
Electrical supply [V]	1 x 230	3 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Motor and fan type	Radial plug-in fan with EC motor					
Frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Input power (per fan)	730 W	1140 W	1700 W	2600 W	2900 W	3300 W
Current draw (per fan)	3,2 A	1,8 A	2,6 A	4,0 A	4,43 A	5,1 A
Insulation	50 mm mineral wool					
Panel material/colour	Sheet steel, powder coated in RAL 7035 or Aluzinc					
Filter type	Panel or bag filter					
Filter class	F7 / M5 or F7					
Damper exhaust	Outlet air damper 24 V actuator					
Damper supply	Supply (fresh air) damper 24 V actuator					
Condensate drain connection	DN 40					
Heater connections	3/4"	1"	1"	1 1/4"	1 1/2"	1 1/2"
Cooler connections	1"	1 1/4"	1 1/4"	1 1/2"	2"	2 1/2"
Dimension inside and outside [mm]	Monoblock / Splitted				Splitted	
Length monoblock L [mm]	1870	1870	1870	2070		
Length L1T [mm] - filter section with top connection	690	690	690	790	990	990
Length L2 [mm] - heat recovery section	490	490	490	490	490	490
Length L3T [mm] - fan section with top connection	690	690	690	790	990	990
Options: L5, L6, L7, L8						
Length L5 with heater (water, electrical) and cooler (water, DX) [mm]	1200					
Length L6 with heater (water, electrical) or cooler (water, DX) [mm]	750					
Length L7 with hood [mm]	330	330	330	430	500	500
Length L8 with hood and drop eliminator [mm]	445	445	445	545	615	615
Height H [mm]	1450	1450	1450	1730	2060	2060
Height H1 [mm]	1370	1370	1370	1650	1980	1980
Height H2 [mm]	790	790	790	930	1095	1095
Height H3 (mm):	710	710	710	850	1015	1015
Width B [mm]	1055	1155	1460	1780	1920	2275
Rectangular duct dimension A x C [mm]	675 x 410	795 x 410	1100 x 410	1420 x 510	1560 x 610	1915 x 610
A1 position duct connection	190	180	180	180	210	180
C2 position duct connection	150	150	150	170	202.5	202.5
Rectangular duct dimension on roof E x G [mm]	410 x 675	410 x 795	410 x 1100	510 x 1420	610 x 1560	610 x 1915
E1 position duct connection	85	85	85	85	85	85
G1 position duct connection	190	180	180	180	150	180
J length of duct connection [mm]	100					
Round duct connection U [mm]	400	500	500	630	800	800
U1 position round connection	527.5	577.5	730	890	960	1137.5
U3 position round connection	355	355	355	425	507.5	507.5
Round duct connection on roof O [mm]	400	500	500	630	800	800
O1 position round connection	290	340	340	400	490	490
O2 position round connection	527.5	577.5	730	890	960	1137.5
S length of round connection [mm]	80	80	80	80	100	100
Efficiency	up to 85 %					
Heat recovery	Rotary wheel					
Operating temperature	-20°C to 40°C					

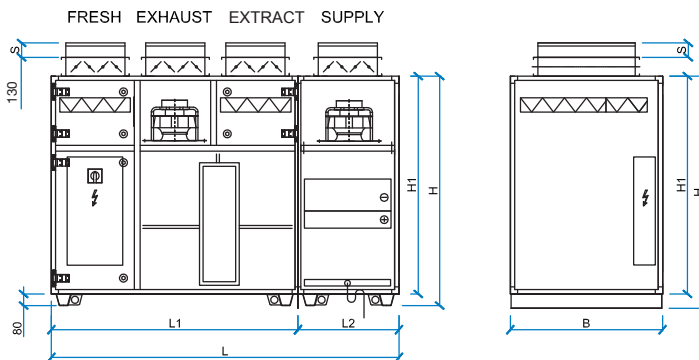
CompAir RW (V)

Units with vertical connections (V)

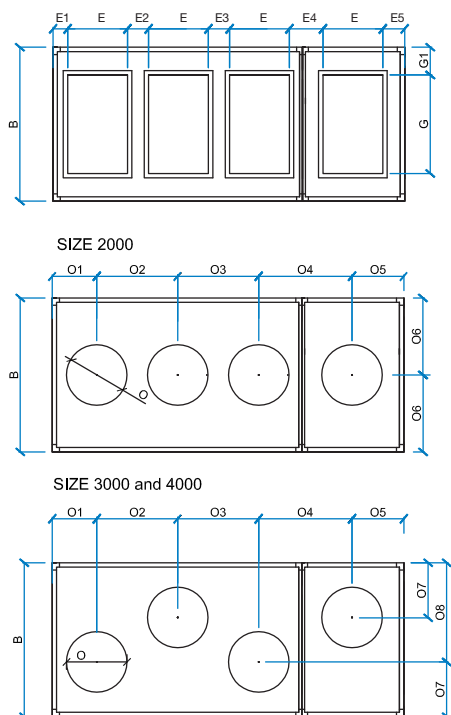
CompAir RW (V) monoblock



CompAir RW (V) splitted version



Connection placement variants – circular or rectangular top connections



All configurations are available:
 - In splitted or monoblock version.
 - With round connections (fix) or rectangular connections (fix or flexible).

Technical data

CompAir RW vertical (V) connections (4 top connections)

Size	2000	3000	4000
Airflow range [m ³ /h]	910-2400	1150-3300	1420-4700
Electrical supply [V]	1 x 230	3 x 400	3 x 400
Motor and fan type	Radial plug-in fan with EC motor		
Frequency	50 Hz	50 Hz	50 Hz
Input power (per fan)	730 W	1140 W	1700 W
Current draw (per fan)	3,2 A	1,8 A	2,6 A
Insulation	50 mm mineral wool		
Panel material/colour	Sheet steel, powder coated in RAL 7035 or Aluzinc		
Filter type	Panel filter		
Filter class	F7 / M5 or F7		
Damper exhaust	Outlet air damper 24 V actuator		
Damper supply	Supply (fresh air) damper 24 V actuator		
Condensate drain connection	DN 40		
Heater connections	3/4"	1"	1"
Cooler connections	1"	1 1/4"	1 1/4"
Dimension inside and outside [mm]	Monoblock / Splitted		
Length monoblock L [mm]	2420	2520	2520
Length L1 [mm] - heat recovery section	1720	1820	1820
Length L2 [mm] - fan section and heat exchanger	700	700	700
Height H [mm]	1590	1690	1790
Height H1 [mm]	1510	1610	1710
Width B [mm]	1055	1155	1460
Rectangular duct dimension on roof E x G [mm]	410 x 675	410 x 795	410 x 1100
Position duct connection [mm]			
E1 position duct connection	80	110	110
E2 position duct connection [mm]	160	190	190
E3 position duct connection [mm]	160	190	190
E4 position duct connection [mm]	230	240	240
E5 position duct connection [mm]	150	150	150
G1 position duct connection	190	180	180
J length of duct connection [mm]		100	
Round connection on roof O [mm]	400	500	500
Position round connection [mm]			
O1 position round connection	285	315	315
O2 position round connection	570	600	600
O3 position round connection [mm]	570	600	600
O4 position round connection [mm]	640	650	650
O5 position round connection [mm]	355	355	355
O6 position round connection [mm]	527.5	/	/
O7 position round connection [mm]	/	425	577.5
O8 position round connection [mm]	/	730	882.5
S length of round connection [mm]	80	80	80
Efficiency	up to 85 %		
Heat recovery	Rotary wheel		
Operating temperature	-20°C to 40°C		

Ordering key example

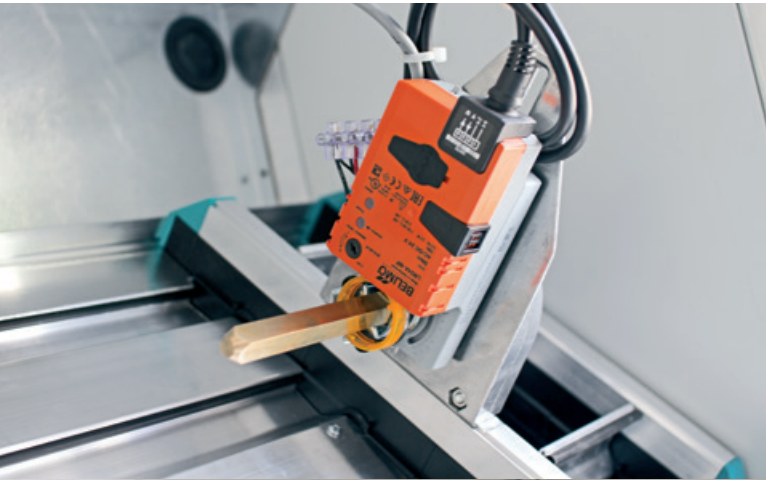
(generated from selection software AirCalc++)

CompAir RW1 (Plus) 2000-R-I-M-P1-FK(7;5),C,KW-R-S3-DA1(1)3(1)-x-x-RC1234-PH14-LI-FT-SY-B-1-FB-SD-CO2-DP-DH

Heat recovery type	RW1	rotary wheel exchanger (H) - 4 side connections
	RW2	rotary wheel exchanger (HV) - 2 top and 2 side connections
	RW3	rotary wheel exchanger (V) - 4 top connections
Housing type	Plus	Plus housing (TB2)
	(empty)	Basic housing (TB3)
Unit size		2000, 3000, 4000, 6000, 8000, 10000
Access side	R	right
	L	left
Installation	I	inside unit
	O	outside unit
Unit type	M	monoblock
	S	splitted
Panels	P1	steel, powder coated in RAL 7035
	P2	Aluzinc
Filter type (filtration)	FTT	bag filter (7;5 or 7;7)
	FK	panel filter (7;5 or 7;7)
	FK+FTT_FK	panel + bag filter on supply and panel filter on exhaust (5+7; 5 or 5+7;7)
	FK+FTT_FTT	panel + bag filter on supply and bag filter on exhaust (5+7; 5 or 5+7;7)
	2FTT	bag filter (7;5 or 7;7) and spare filter
	2FK	panel filter (7;5 or 7;7) and spare filter
	2(FK+FTT_FK)	panel + bag filter on supply and panel filter on exhaust (5+7; 5 or 5+7;7) and spare filter
	2(FK+FTT_FTT)	panel + bag filter on supply and bag filter on exhaust (5+7; 5 or 5+7;7) and spare filter
Type of rotary wheel	C	condensing
	E	enthalpy
Accessories 1 (function)		
Preheater	EEV (9)	electrical pre-heater (power in kW)
	EWV	glycol pre-heater
	x	without pre-heater
Accessories 2 (function)		
Heater, cooler	x	without function
	EW	water heater
	KW	water cooler
	KD	dx cooler
	EE(6)	electrical heater (power in kW)
	EW+KW	water heater + water cooler
	EW+KD	water heater + dx cooler
	EE(6)+KW	electrical heater (power in kW) + water cooler
	EE(6)+KD	electrical heater (power in kW) + dx cooler
	EWd	duct water heater
	KWd	duct water cooler
	EE(6)d	duct electrical heater (power in kW)
	EWd+KWd	duct water heater + duct water cooler
EE(6)d+KWd	duct electrical heater (power in kW) + duct water cooler	

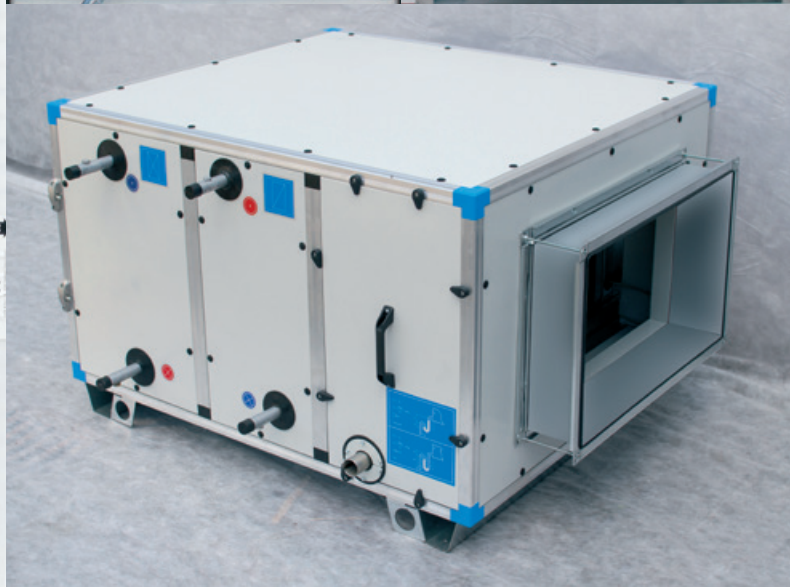
Reversible cooling coil - function	x	no reversible
	R	reversible
Accessories 3 (function)		
Sound attenuator	x	without sound attenuator
	S1	sound attenuator Exh - 500 mm
	S2	sound attenuator Exh - 750 mm
	S3	sound attenuator Exh - 1250 mm
Accessories 4 (additional equipment)		
Syphon	SY	syphon
	x	without syphon
Feet	FT	feet
	MA	rubber pad - Mafund
	x	without feet
Lights	LI	light + switch and window
	x	without light + switch and window
Protection hood	PH14	protection hood on standard connections 1,4
	PH1E	protection hood on standard connections 1 with eliminator
	x	without protection hood
Round connections	RC1234	round connections on connections 1,2,3,4
	RC24	round connections on connections 2,4
	x	without round connections
Fixed rectangular connections	FR1234	fixed rectangular connections on connections 1,2,3,4
	FR24	fixed rectangular connections on connections 2,4
	x	without fixed rectangular connections
Flexible canvas	FC1234	flexible canvas on rectangular connections 1,2,3,4
	FC24	flexible canvas on rectangular connections 2,4
	x	without flexible canvas
Dampers	DA1(1)3(1)	dampers on connections 1,3 - actuator on/off
	DA1(2)3(2)	dampers on connections 1,3 - spring actuator
	DA1(1)	damper on connection 1 - actuator on/off
	DA1(2)	damper on connection 1 - spring actuator
	x	without dampers
Automation and control accessories		
Automation type	B	basic automation
	S	standard automation
	A	advanced automation
	X	without automation
Pressure measuring	x	without magnehelic
	1	with magnehelic (2 pcs.)
Fire by-pass	x	without fire by-pass
	FB	fire by-pass
	FB1	fire by-pass + damper
Smoke detector	x	without smoke detector
	SD	smoke detector
CO ₂ sensors	x	without CO ₂ sensor
	CO2	CO ₂ sensor
Pressure sensors	x	without pressure sensor
	DV	constant airflow regulation
	DP	constant duct pressure regulation
	DB	constant duct pressure, airflow measurement
Humidifier regulation	x	without duct humidifier regulation
	DH	duct humidifier regulation

Components & Accessories



Recuperators, actuators, fans and filters from most renowned European suppliers.

Simple adding of additional sections (heaters, coolers, eliminators, etc.) to the basic unit.



Control System

Advanced cloud-based controls

- The integrated control system is available in three versions: Basic, Standard and Advanced, with different functions (see table below) and price levels.
- The user friendly interface is designed in multiple languages.

BASIC controls:

- Compact preprogrammed controller with internal display allows easy controlling of basic functions and represents a reliable low-price solution for less demanding applications.

STANDARD controls:

- This version offers a large range of control functions, which are accessible via a stand-alone display and configuration unit.

ADVANCED controls:

- The modern swipe and touch display is designed to make the user interface simpler and more intuitive, with easy browsing between the screens.
- The air handling unit is also accessible via the cloud application "Lindab Connect".



Features	BASIC	STANDARD	ADVANCED
Temperature regulation	•	•	•
Heat recovery regulation	•	•	•
Air flow regulation		(•)	(•)
Air flow measurement		(•)	•
Duct pressure measurement		(•)	(•)
Duct pressure regulation		(•)	(•)
CO ₂ sensor		(•)	(•)
Smoke detector	(•)	(•)	(•)
Fire by-pass damper	(•)	(•)	(•)
Reversible function	(•)	(•)	(•)
Humidity measurement			•
Humidity regulation			(•)
Energy consumption			•
Schedule working (holiday/weekly)	•	•	•
Summer/winter compensation, free cooling		•	•
Alarms	•	•	•
Parameters history		•	•
Field connectivity		•	•
BMS connectivity		•	•
Touch display			•
Smartphone/Cloud connectivity			•

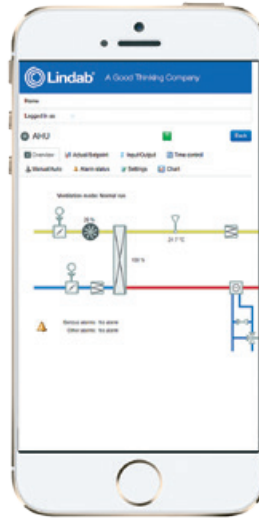
Note: (•) = optional feature, • = default feature

BMS connectivity - options

- TPC/IP Modbus communication.
- TPC/IP BACnet communication.
- TCP/IP port can be used to connect the controller to the cloud, or optionally, connect to the controller via remote IP address.

Smartphone connectivity

- The Smartphone application enables access to the controller with a web server from any mobile phone, tablet or computer with a web browser. You can control and supervise building systems, read and follow up values, change settings, manage alarms, etc. – at all times, regardless of your location.

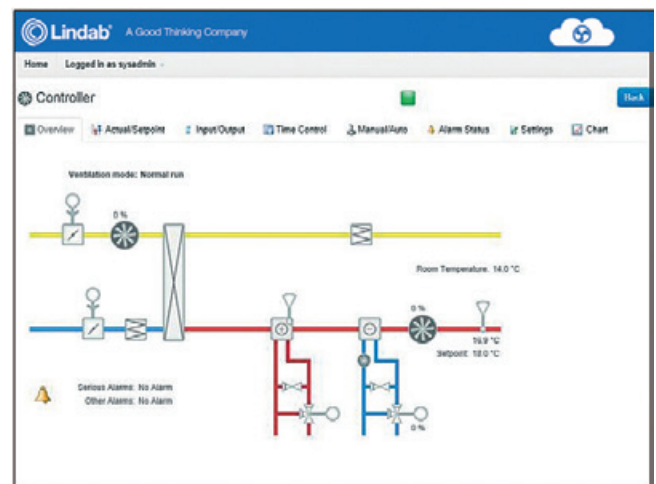


Cloud connectivity

- For users, who demand a complete control of the buildings indoor climate portfolio, our cloud application is the tool of choice. The web-based platform can always be accessed by various users, regardless of their current location.
- Once the controller has been configured, a dynamic flow window is automatically created and current configuration values are shown in real time.

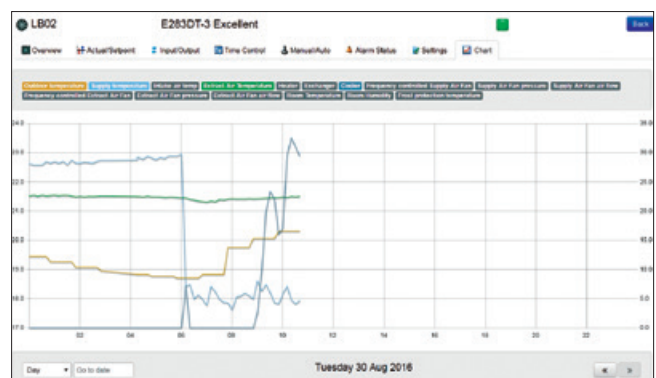
Logging

- Log values can be stored and read for up to one year in the cloud app. The controller sends log values to the cloud every ten minutes and can up to a month be viewed graphically at all times. It is also possible to view data from previous months or to save the complete log as an Excel file.



Connection

- In order to access the cloud app via a network, a network cable connected to the Internet is required. A 3G modem can also be used to access the cloud app.





Good Thinking

At Lindab we simplify construction for our customers. We do that by designing easy-to-use products and solutions, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment. We use steel in our products. It's one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

We simplify construction