

SUPER NEWS

INTRODUCING THE NEWLY ENGINEERED R-SERIES COMPACT AIR HANDLING UNIT

R-SERIES COMPACT AIR HANDLING UNIT



BASIC INFORMATION:

Compact Design:

Includes an integrated air/air heat pump for efficient performance. Installation is straightforward with a pre-prepared frame, designed for quick integration onto any roof.

Ideal for Various Applications:

Perfectly suited for shopping malls, warehouses, and production halls, enhancing indoor air quality and climate control where it matters most.

Standardized Product Range:

Offering a selection of fixed sizes, performances, and levels tailored to meet the demands of commercial spaces.

Transport-Friendly Dimensions:

Specifically designed to fit within shipping containers for easy and cost-effective transportation.

SCOP = 3.98

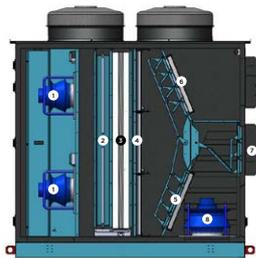
SEER = 4.83 (1)

¹⁾ according to EN 14511/2023



KEY FEATURES:

- Primary Heat Source:** Heat pump utilizing refrigerant R454C (GWP 148).
- Secondary Heat Source:** Optional water or electric heater for additional heating requirements.
- Durable Construction:** Features a double-skin, powder-coated body with 50 mm insulation for maximum durability and efficiency.
- Easy Maintenance:** Equipped with a removable stainless steel condensate pan that is easy to clean.
- Accessible Design:** Access doors are secured with hinges and locks, providing security and ease of maintenance.
- Integrated Technology:** Includes a switchboard integrated into the unit body for streamlined operations.
- Advanced Control:** Managed via a new PLC – CLIMAN (a Mandik development), enhancing functionality through smart technology.
- Connectivity:** In addition to the standard LAN/wifi connection to a local web server, CLIMAN also offers a cloud solution. The unit can be controlled from anywhere in the world via a cloud access using web browser or a mobile application for remote access.



- 1 Supply fan
- 2 Electric/water heater
- 3 Heat pump heat exchanger
- 4 Filters
- 5 Mixture damper
- 6 Fresh air damper
- 7 Exhaust air damper
- 8 Exhaust fan

GENERAL OVERVIEW

Unit	[€]	A	B	C
Nominal air flow	[m³/h]	4000	6000	8000
Capacity - Heating (1)	[kW]	20	30	40
Capacity - Cooling (1)	[kW]	20	30	35
Electric heater	[kW]	10	30	60
Water heater (80/60 °C)	[kW]	Up to 60	Up to 100	Up to 160
No. of compressors (type)	[pcs]	1 (inverter)	2 (inverter)	3 (2x Inverter, 1x ON/OFF)
No. of ref. circuits	[pcs]	1	2	4 (2x Inverter, 2x ON/OFF)
Refrigerant	[-]	R454C	R454C	R454C
COP (1)	[-]	3.44	3.33	2.98
EER (1)	[-]	3.91	3.50	2.92
Dimensions (H x W x D)	[mm]	2070 x 2200 x 2650	2070 x 2200 x 3250	2670 x 2050 x 5050
Weight	[kg]	1233	1248	1680
Sound power to the surroundings	[dB(A)]	86	89	91
Sound power in the supply duct	[dB(A)]	74	78	79
Sound power in the exhaust duct	[dB(A)]	85	89	91
Supply fan - EC (radial free wheel)	[pcs]	1	2	3
Exhaust fan - EC (radial free wheel)	[pcs]	1	2	3
Refrigerant fan - EC (axial)	[pcs]	1	2	3
Filterklassen	[-]	G4/M5/F7/F9		
1-stage filter	[-]	4 pcs (592 x 592 x 48)	6 pcs (592 x 592 x 48)	6 pcs (592 x 592 x 48)
2-stage filter	[-]	6 pcs (592 x 592 x 48)	9 pcs (592 x 592 x 48)	12 pcs (592 x 592 x 48)
Sensors	[-]	Heat/Humidity/CO ₂ /Smoke		
Communication	[-]	ModBus/Analog/(BACnet)		
Regulation	[-]	MCS/Cloud/Room thermostat/ModBus		
Power supply	[V/Hz]	400/3/50		
Recommended fuse	[A]	63	100	250

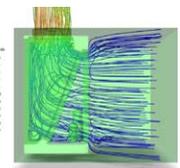
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CERTIFICATION 2025*:

The Low Voltage Directive (2014/35/EU) - LVD
 Electromagnetic Compatibility (2014/53/EU) - EMC
 Pressure Equipment (2014/68/EU) - PED
 RoHS Directive (2011/65/EU) - RoHS
 Machinery directive (2006/42/EC) - MD
 Ecodesign (2009/125/ES)

For the development and optimization of our units, we use state-of-the-art computer simulations in ANSYS Fluent software.



* This product is in the process of certification.

MANDIK

MANDIK, a. s., Dobříšská 550, 267 24 Hostomice, Czech Republic
 Tel.: +420 311 706 706 | E-mail: mandik@mandik.cz

www.mandik.com