

komfovent

KOMBI



Hybrid heating
and
ventilation unit

KOMBI – Your comfort and perfect well-being, all in one unit

Comfort at home is not only about its interior, but also about the whole atmosphere. Fresh air, pleasant warmth or coolness, and hot water play a significant role in the comfort at home concept.

KOMBI addresses every one of these facets to attain complete indoor climate control. It is a stand-alone hybrid unit that combines all HVAC systems: air-to-water heat pump, ventilation and domestic hot water. Such solution not only saves time, needed for planning, but also installation space and investment costs when compared to multiple systems.



Air-to-Air
heating



Air-to-water
heating



Ventilation
with heat recovery



Domestic
hot water



Air
filtration



Cooling



Humidity
recovery



All HVAC systems
IN ONE UNIT

Why KOMBI is worth it

Integrated comfort solution for homes 80–200 m²

- Ensures stable indoor temperature even at -25 °C outdoor conditions.
- Continuous supply of fresh, filtered air, while maintaining optimal indoor humidity with integrated sorption–enthalpy rotary heat exchanger.
- Provides cooling via underfloor circuits or the ventilation system.
- Fast installation: no refrigeration technician required and full commissioning possible by one person.
- Incorporates all key hydronic heating components (pumps, valves, expansion vessels).
- No outdoor units – no external noise, no external service needs.
- Large integrated DHW tank for household demand.
- Clean interior design and simplified maintenance—everything accessible indoors from one point.



Unified control system

A single control platform manages all algorithms for ventilation, heating/cooling, and DHW, eliminating multiple controllers. All parameters are pre-configured and automatically regulated, with easy user adjustment through a single control panel with colour touchscreen.

- Easy to navigate control panel with integrated temperature and humidity sensors.
- 8 preset operating modes controlling ventilation, room temperature, and DHW.
- Built-in energy-saving logic: air-quality-based ventilation, outdoor-temperature-based heating/cooling curves, etc.
- Detailed weekly schedules for seasonal operation.
- Full manual override of individual comfort parameters.
- Real-time efficiency and consumption monitoring.
- Filter contamination indication.
- Automatic periodic DHW disinfection.
- Factory-configured safety functions for stable operation.



Control options



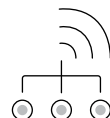
App KOMFOVENT
Control



Control panel



Web Server



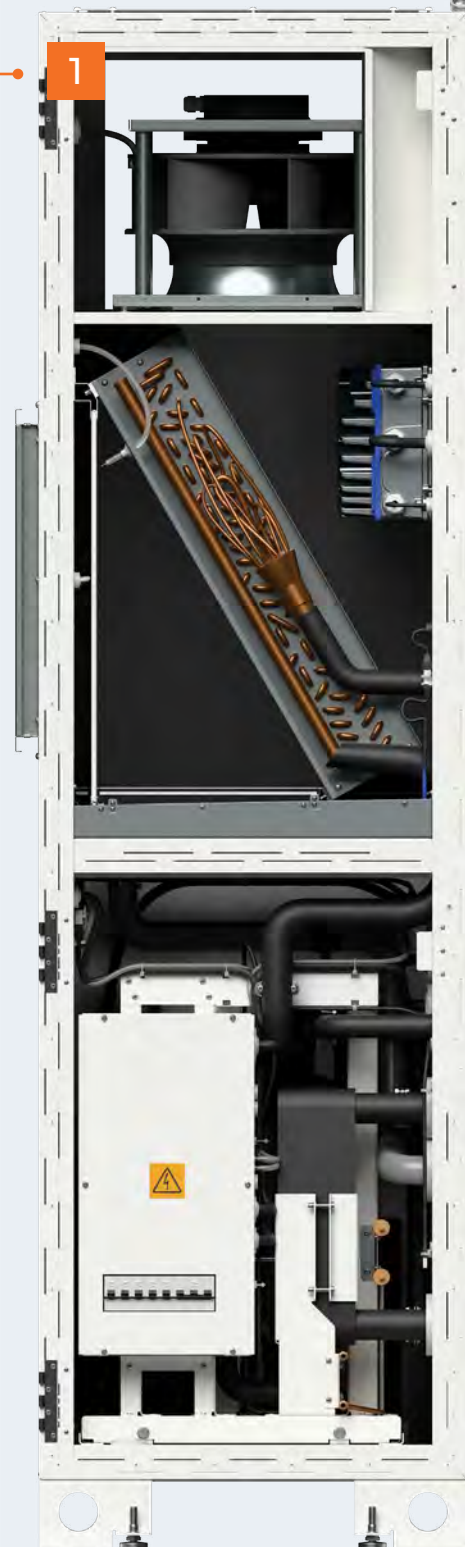
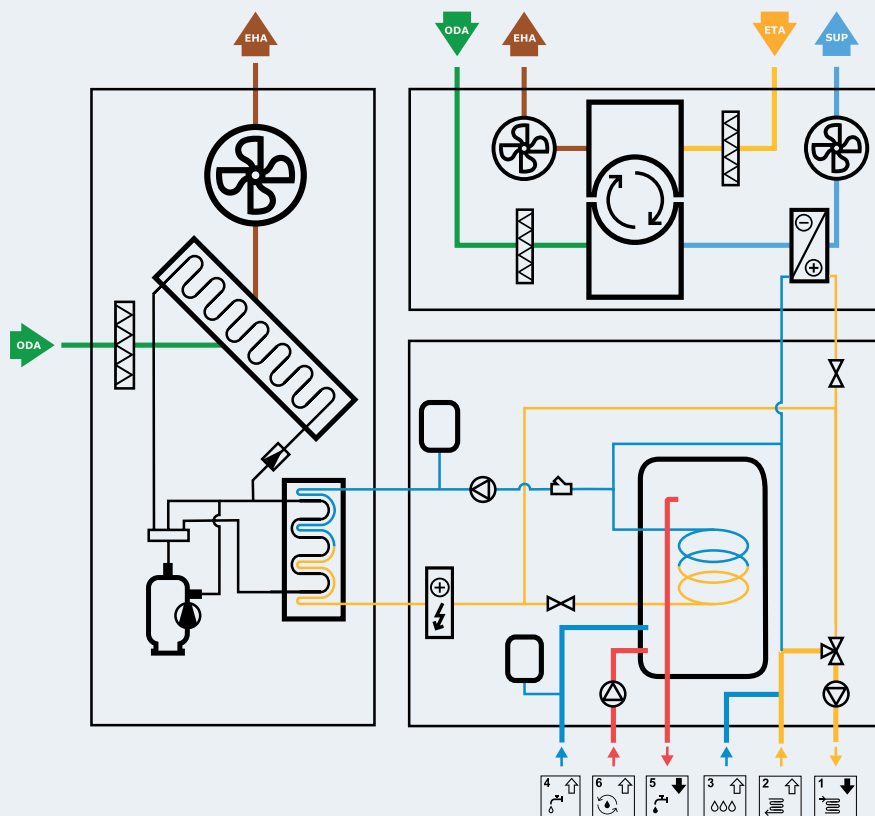
Connectivity &
Protocols

KOMBI features and components

The heat pump module:

- The air-to-water heat pump maintains constant heating output across the entire outdoor temperature range.
- Twin rotor, premium class inverter compressor, ensures quiet and economical operation, as well as maximum reliability and durability.
- Pre-filled with refrigerant in the factory, thus cooling specialists are not needed for installation or start-up.
- High energy and cost savings lead to high COP and EER coefficients.
- Backup electric heater grants stable operation even at -30 °C outdoor temperature or during evaporator defrosting.
- Quiet heat pump fan does not generate lots of noise even at maximum speeds.

Basic diagram of the KOMBI unit





The ventilation unit:

- High airflow of 517 m³/h.
- Zeolite-coated sorption-enthalpy rotary heat exchanger – high thermal efficiency (up to 86 %) and humidity recovery throughout the year.
- Dust, allergens, and fungal spores are removed from ventilated premises by ePM1 60 % class filter that come as standard equipment.
- Energy-efficient fans and control system components grant a low SPI of 0.31 W/(m³/h).
- Additional air-to-air heating/cooling power of 3.3 kW ensures that user-desired supply air temperature will be maintained under extreme outdoor conditions.
- Ventilation on demand, possibility to connect various air quality sensors and other useful functions to further increase comfort and reduce power consumption.

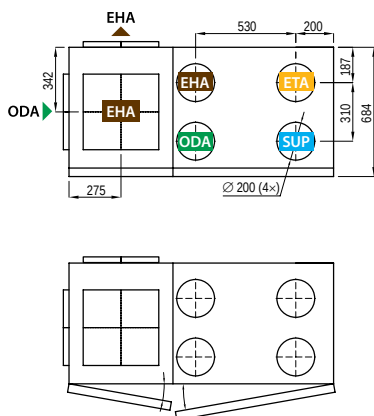
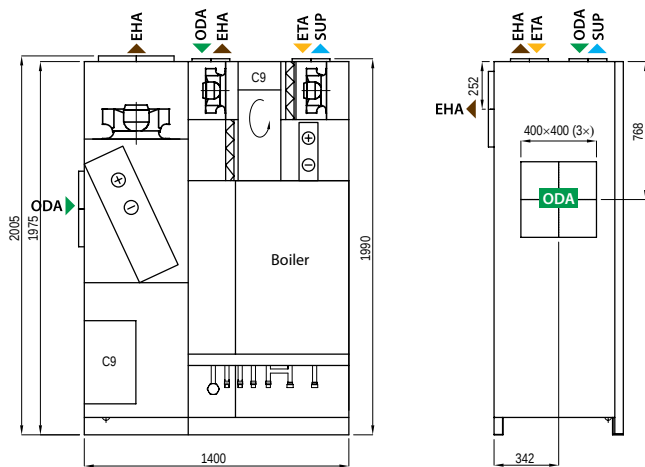
The domestic hot water (DHW) module:

- Built-in insulated 186-litre water tank keeps hot water temperature stable for longer, reducing energy losses.
- Fast heat up of hot water in case of high usage demand.
- Automatic periodic disinfection for Legionella prevention ensures hygienic and clean domestic hot water.
- Complete hot water supply system with factory-fitted valves, expansion vessel, mechanical filter and prepared connections.
- Available option with integrated DHW circulation pump.

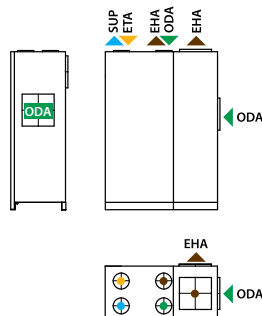
KOMBI A7



Shown as right



Shown as left



General data

Voltage, V	3~400
Nominal current, A	21,2
Power cable, mm ²	5×4
IP protection class	IP 40
Heat pump section weight, kg	180
Boiler and AHU section weight, kg	238
Unit weight, kg	418
Heat pump section dimensions B×H×L, mm	550×2005×684
Boiler and AHU section dimensions B×H×L, mm	850×2005×684
Maintenance space, mm	900

Connections

Water supplied to the heating system	1"
Water returning from the heating system	1"
Heating system refill	½"
Domestic cold water inlet	½"
Domestic hot water supplied to the system	½"
Domestic hot water recirculation	½"
Ducts, heat pump section, mm	2(3)×400×400
Ducts, air handling unit, mm	4×200

Noise power level, L_{WA}

Casing in heating mode (A7/W35), dB(A)	48
Casing in heating mode (A7/W45), dB(A)	49,5
Casing in heating mode (A7/W55), dB(A)	49
Casing max., dB(A)	53,6
Outdoor in heating mode (A7/W35), dB(A)	50,4
Outdoor in heating mode (A7/W45), dB(A)	50,5
Outdoor in heating mode (A7/W55), dB(A)	51,1
Outdoor max., dB(A)	58,1

Air handling unit data

Maximal air flow, m ³ /h	517
Maximal air flow, l/s	144
Reference flow rate, m ³ /s	0,101
Reference pressure difference, Pa	50
SPI, W/(m ³ /h)	0,31
Thermal efficiency of heat recovery, %	86
Air heater capacity at nominal airflow, W45, kW	3,4
Air cooler capacity at nominal airflow, W7, kW	3,3
Electric power input of the fan drive at maximum flow rate, W	137
Electric power input of the fan drive at reference flow rate, W	59
Noise power level, Supply inlet, L _{WA} , dB(A)	55
Noise power level, Supply outlet, L _{WA} , dB(A)	67
Noise power level, Exhaust inlet, L _{WA} , dB(A)	57
Noise power level, Exhaust outlet, L _{WA} , dB(A)	68
Air filters dimensions B×H×L, mm	585×258×46
Air filters class according to ISO 16890, Supply / Extract	ePM1 60% / ePM10 50%

Heat pump data

Refrigerant type	R454C
Refrigerant charge, kg	1,7
Nominal heating capacity, kW	7
Nominal cooling capacity (floor+AHU), kW	7
Back-up electrical heater, kW	4,5
Number of integrated water pumps	2
Max. water pump power consumption, W	75
Integrated expansion vessel for heating system, l	12
Internal water volume for heating system, l	13,6
Heating circuit water flow min., m³/h	0,34
Heating circuit water flow at nominal capacity, m³/h	1,2
Operating water pressure min., bar	0,5
Operating water pressure max., bar	3
Operating outdoor temperature min. (heat pump only), °C	-25
Operating outdoor temperature max. (heating), °C	17
Operating outdoor temperature min. (cooling), °C	15
Air filter dimensions BxH, mm	585x505
Filter class according to ISO 16890	coarse 65 %
Heat pump seasonal energy efficiency according to EN 14825	
- Heating average climate (+2 °C), SCOP W 35 °C	4,91
- Heating warm climate (+7 °C), SCOP W 35 °C	6,62
- Heating cold climate (-7 °C), SCOP W 35 °C	4,23
- Cooling (35 °C), SEER W 18 °C	5,34

Domestic hot water (DHW) data

Hot water tank volume, l	186
Hot water tank material	Stainless steel
Hot water tank corrosion protection	Magnesium anode
Integrated expansion vessel for DHW, l	8
Operating water pressure max., bar	10
Water heating time from 10 °C to 45 °C, min.	25
Tap profile according to DIN EN 16147	XL
Number of water circulation pumps (optional)	1
Max. water pump power consumption, W	5
Tank disinfection water temperature max., °C	70

Accessories

Closing damper	AGUJ-M-200 + TF230/CM230	
Silencer	ODA/ETA	AGS-200-50-600-M
	SUP/EHA	AGS-200-50-900-M
Noise damping / connection boxes	KSD-800x800	
Flexible duct connection, mm	JLSF-400x400	

Air heat recovery

Outside air temperature, °C	Winter					Summer		
	-23	-15	-10	-5	0	25	30	35
After heat exchanger, °C	15,7	16,8	17,5	18,2	18,9	22,4	23,1	23,8

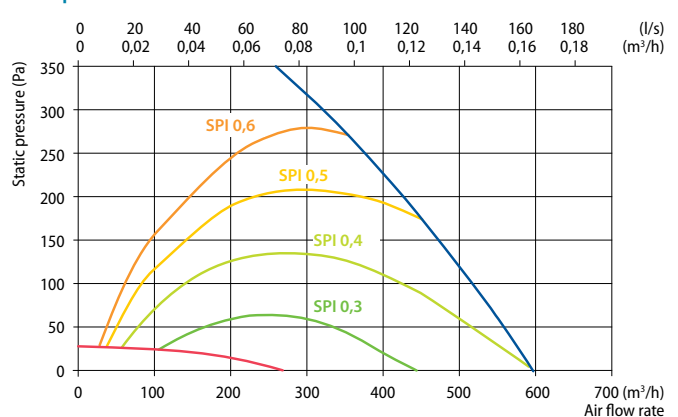
indoor +22 °C, 20 % RH

Heating / cooling performance data according to EN 14511

	Capacity, kW	Power consumption, kW	COP	EER
A2/W35	7	1,85	3,78	–
A7/W35	7	1,46	4,79	–
A2/W45	7	2,25	3,11	–
A7/W45	7	1,85	3,78	–
A2/W55	7	2,49	2,81	–
A7/W55	7	2,31	3,04	–
A35/W18	7	1,36	–	5,16
A35/W7*	3,3	1,23	–	2,68

* AHU only

AHU performance



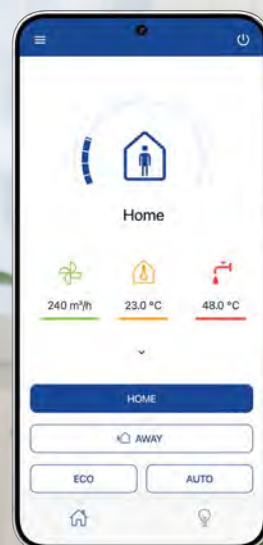
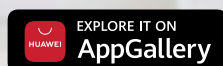
KOMFOVENT Control app

Your home indoor climate in your hand with KOMFOVENT Control app.

All KOMBI functions can be managed with the KOMFOVENT Control app, enabling remote setting adjustments from anywhere.

The app offers intuitive, detailed, and mobile control options.

KOMFOVENT Control – home comfort at your fingertips.



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