

# Kombi A9

## General data

Voltage, V	3~400
Nominal current, A	27,7
Power cable, mm <sup>2</sup>	5x4
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 BxHxL, mm	550 x 2010 x 684
Boiler and AHU section dimensions BxHxL, mm	850 x 2010 x 684
Maintenance space, mm	≥ 850

## 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) x 315
Ducts, air handling unit, mm	4 x 200

## Noise power level, L<sub>WA</sub>

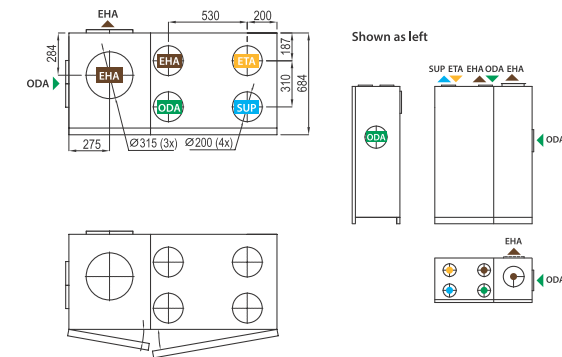
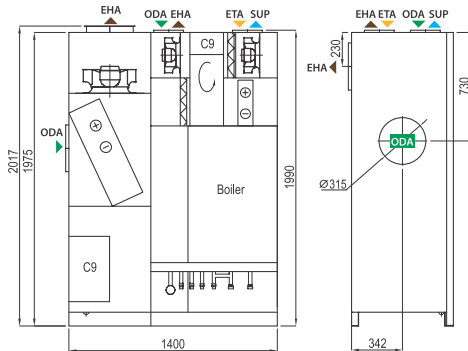
Casing in heating mode (A7/W35), dB(A)	48
Casing in heating mode (A7/W45), dB(A)	49,5
Casing in heating mode (A7/W55), dB(A)	49
Casing max., dB(A)	53,6
Outdoor in heating mode (A7/W35), dB(A)	50,4
Outdoor in heating mode (A7/W45), dB(A)	50,5
Outdoor in heating mode (A7/W55), dB(A)	51,1
Outdoor max, dB(A)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

## Accessories

Closing damper	AGUJ-M-200 + CM230
Silencer	ODA/EHA AGS-200-50-600-M SUP/ETA AGS-200-50-900-M
Noise damping / connection boxes	KSD-700 x 700
Flexible duct connection, mm	JLA-315



Shown as right



▶ ODA – outdoor intake    ▶ SUP – supply air    ▶ ETA – extract indoor    ▶ EHA – exhaust air

## Air handling unit data

Maximal air flow, m <sup>3</sup> /h	586
Maximal air flow, l/s	163
Reference flow rate, m <sup>3</sup> /s	0,101
Reference pressure difference, Pa	50
SPI, W/(m <sup>3</sup> /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	2,2
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 <sub>WA</sub> , dB(A)	55
Noise power level, Supply outlet, L <sub>WA</sub> , dB(A)	67
Noise power level, Exhaust inlet, L <sub>WA</sub> , dB(A)	57
Noise power level, Exhaust outlet, L <sub>WA</sub> , dB(A)	68
Air filters dimensions BxHxL, mm	585 x 258 x 46
Air filters class according to ISO 16890, Supply/Extract	ePM1 60 % / ePM10 50 %

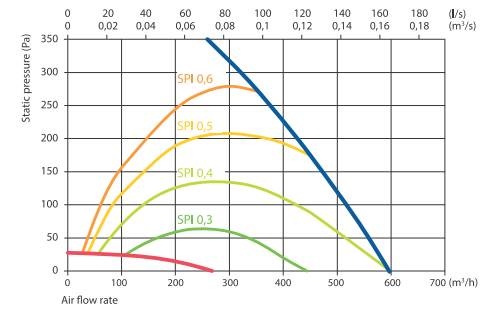
## Heat pump data

Compressor type	Twin rotor
Refrigerant type	R410A
Refrigerant charge, kg	4,5
Nominal heating capacity, kW	9
Nominal cooling capacity (floor+AHU), kW	7
Back-up electrical heater, kW	6
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., m <sup>3</sup> /h	0,34
Heating circuit water flow at nominal capacity, m <sup>3</sup> /h	1,54
Operating water pressure min., bar	0,5
Operating water pressure max., bar	3
Operating outdoor temperature min. (heat pump only), °C	-22
Operating outdoor temperature max. (heating), °C	17
Operating outdoor temperature min. (cooling), °C	15
Operating outdoor temperature max. (cooling), °C	40
Air filter dimensions BxH, mm	585 x 505
Filter class according to ISO 16890	coarse 65%
Heat pump seasonal energy efficiency to EN 14825	
Heating average climate (+2 °C), SCOP W 35 °C	4,86
Heating warm climate (+7 °C), SCOP W 35 °C	6,53
Heating cold climate (-7 °C), SCOP W 35 °C	4,03
Cooling (35 °C), SEER W 18 °C	5,11

## Domestic hot water (DHW) data

Hot water tank volume, l	186
Hot water tank material	Steel, enamel
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

## AHU performance



## 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	9	2,14	4,21	–
A7/W35	9	2,01	4,47	–
A2/W45	9	2,80	3,21	–
A7/W45	9	2,47	3,65	–
A2/W55	9	3,17	2,84	–
A7/W55	9	2,90	3,1	–
A35/W18	7	1,38	–	5,07
A35/W7*	3,3	1,24	–	2,67

\* AHU only