

# AIR BASIC 109 C11B T200

## AIR/WATER HEAT PUMP INCL. VERTICAL SPLIT EVAPORATOR

ORDER NUMBER: 285920

SERIES: T200

TF MAX. 55 °C

SPLIT

### APPLIANCE DATA

Dimensions of outdoor unit HxWxD	[mm]	610x869x290
Dimensions of indoor unit HxWxD	[mm]	1908x680x871
Hydraulic connection	[inch]	1" union nut
Weight of outdoor unit	[kg]	38
Weight of indoor unit	[kg]	203 / 471
Casing colour		Tiger white 29/11289/grey RAL 7016

### HEATING MODE PERFORMANCE FIGURES (to EN 14511)

#### Standard point A10/W35

Heating output range	[kW]	3.25 - 6.78
Total heating output/power consumption	[kW]	4.88 / 1.01
COP		4.83

#### Operating point A7/W35

Heating output range	[kW]	3.08 - 6.24
Total heating output/power consumption	[kW]	4.37 / 0.94
COP		4.63

#### Standard point A2/W35

Heating output range	[kW]	1.25 - 3.30
Total heating output/power consumption	[kW]	3.09 / 0.92
COP		3.35

#### Standard point A-7/W35

Heating output range	[kW]	1.30 - 2.95
Total heating output/power consumption	[kW]	2.59 / 0.98
COP		2.64

#### Operating point A-10/W35

Heating output range	[kW]	1.27 - 2.73
Total heating output/power consumption	[kW]	2.51 / 1.05
COP		2.39

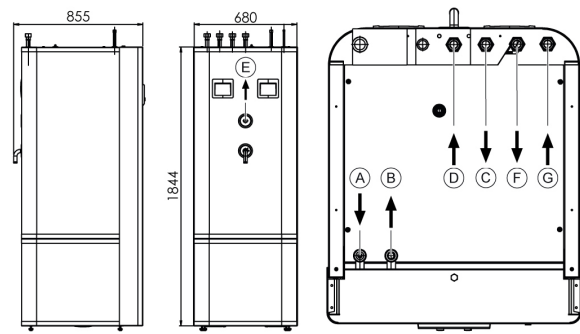
#### Operating point A2/W50

Heating output range	[kW]	2.09 - 3.33
Total heating output/power consumption	[kW]	3.04 / 1.27
COP		2.40

### COOLING MODE PERFORMANCE FIGURES

#### Operating point A35/W18

Cooling capacity range	[kW]	2.22 - 6.46
Nominal cooling capacity	[kW]	4.91
Total nominal power consumption	[kW]	1.02
Energy efficiency ratio EER at nominal output		4.81



Indoor unit

- (A) Refrigerant line LL (liquid line)
- (B) Refrigerant line HG (hot gas line)
- (C) FL heating/cooling 1"
- (D) RTN heating/cooling 1"
- (E) DHW circulation 1/2"
- (F) DHW 1"
- (G) Cold water 1"

### SPECIFICATION

Phases/nominal voltage/frequency	[~]/[V]/[Hz]	1/230/50
Outdoor unit, controller		
Phases/nominal voltage/frequency	[~]/[V]/[Hz]	3/400/50 or 1/230/50
Electric immersion heater		
Electric immersion heater internal	[kW]	5.9 (2.95 / 2.95)
Output factor cos φ		0.97
Fuse protection (tripping curve "C")	[A]	16
Max. operating current	[A]	13.50
Max. starting current, compressor	[A]	10.50 / 20.00*
Sound power/sound pressure level (at 1 m distance), indoor level	[dBA]**	- / -
Sound power/sound pressure level (at 10 m distance), outdoor unit	[dBA]	60.0 / 35.0

### CONDENSER

Type		Plate heat exchanger
Material		Stainless steel 1.4301
Max. refrigerant operating pressure	[bar]	43
Max. heat transfer medium operating pressure	[bar]	3
Heat transfer medium temperature differential	[K]	5
Application range	[°C]	55
Heat transfer medium		Water
Test pressure	[bar]	59
Heat transfer medium flow rate	[m³/h]	0.80
Internal pressure differential	[mbar]	25
Flow meter FM standard		Internal built-in
Circulation pump heat sink WNA	Internal	Yonos Para HPS15/7.5
Residual head I WNA external, incl. FM	[mbar]	700

### REFRIGERANT CIRCUIT

Refrigerant		R410A
Defrost technology		Hot gas
Refrigerant charge	[kg]	1.2

### COMPRESSOR

Type		Rotary piston
Output levels		Infinitely variable
Speed	[rpm]	2400-5040
Voltage/frequency	[V]/[Hz]	230/50

### FAN

Type		axial
Number	[pce]	1
Voltage/frequency	[V]/[Hz]	230/50
Power consumption	[W]	35

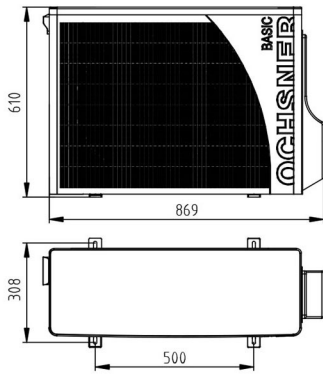
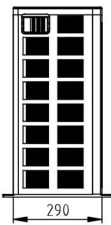
### EVAPORATOR

Unit type		built-in
Type		Finned tube
Number	[pce]	1
Air flow rate	[m³/h]	2500
Application range min./max	[°C]	-20 / 35

<sup>1)</sup>only possible with buffer tank

\*Starting current, compressor with locked rotor

\*\*Sound pressure level measured in a free field; sound power levels measured at max. nominal speed



Outdoor unit



PRODUCT DATA **ErP: AIR BASIC 109 C11B T200**

	COLDER	MEAN	HOTTER
<b>LOW TEMPERATURE</b>	<b>A++</b>		<b>35°C</b>
$\eta_s$	120	<b>162</b>	203
Energy consumption [kWh]	3991	<b>1721</b>	788
P rated [kW]	5	3	3
SCOP	3.08	<b>4.13</b>	5.14
<b>MEDIUM TEMPERATURE</b>	<b>A+</b>		<b>55°C</b>
$\eta_s$	101	<b>110</b>	144
Energy consumption [kWh]	4561	<b>2307</b>	953
P rated [kW]	5	3	3
SCOP	2.61	<b>2.84</b>	3.69
<b>DHW</b>	<b>A</b>		<b>T200</b>
$\eta_{WH}$	73	<b>80</b>	92
Energy consumption [kWh]	1148	<b>1050</b>	911
Draw-off profile	<b>L</b>		
Tank losses [W]	<b>79</b>		
	indoor	outdoor	
Sound power level [dBA]	-	60	
Controller class with room remote control	VI	Controller contribution [%]	4.0
Controller class without room remote control	II	Controller contribution [%]	2.0



**MULTI TOWER ALL IN ONE**  
Fully equipped

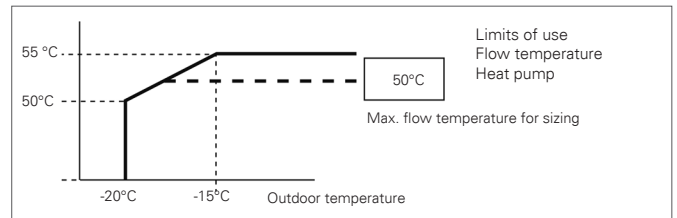
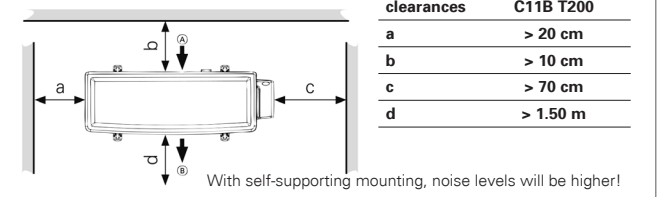
- DHW tank, 168 l
- Buffer tank 100 l, heating / cooling
- 3-way switching valve for DHW heating and/or defrosting
- Safety valve
- Electric auxiliary heater 8.8 kW
- Flow meter for safety monitoring and heat quantity measurement for heating / cooling / DHW heating
- Air vent valve
- High efficiency energy saving circulation pump
- Plate heat exchanger / condenser
- Drain and fill valve
- Pressure maintaining device (DEV), on site

	Max. connection length	Max. height differential
AIR BASIC 109 C11B T200	$L \leq 20$	$H_{max} \leq 10$

**LIMITS OF USE AIR BASIC 109 C11B T200**

Outdoor temperature/max. heat pump flow temperature	A-10/W55°C A-15/W55°C A-20/W50°C
Underfloor heating (-15°C / 35°C)	YES
Radiators (-15°C / 50°C)	YES
Radiators (-15°C / 60°C)	NO
Domestic hot water	YES

**Observe minimum clearances**



**PERFORMANCE CURVES AIR BASIC 109 C11B T200**

