

Subtype DE DIETRICH Alezio S V200 R32 4 MR

Certificate Holder	BDR Thermea FR (DE DIETRICH)
Address	57 rue de la Gare
ZIP	67580
City	Mertzwiller
Country	FR
Certification Body	Kiwa Nederland B.V.
Subtype title	DE DIETRICH Alezio S V200 R32 4 MR
Registration number	007-DM0109
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.2 kg
Certification Date	19.12.2023
Testing basis	European KEYMARK Scheme for Heat Pumps (v9)

**Model AWHPR 4 MR + MIV-S/E 4-8 V200 R32**

Model name	AWHPR 4 MR + MIV-S/E 4-8 V200 R32
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	133 %
COP	3.17
Heating up time	1:37 h:min
Standby power input	27.9 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	255 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	169 %
COP	4.00
Heating up time	1:35 h:min
Standby power input	28.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.60 kW	4.10 kW
El input	0.88 kW	1.55 kW
COP	5.20	2.65

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	1.33 kW	1.16 kW
EER	4.50	6.00
	3.39	5.18

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	176 %	134 %
Prated	5.00 kW	5.00 kW
SCOP	4.48	3.43
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.18	2.15
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	3.00	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	234 %	163 %
P <sub>rated</sub>	5.00 kW	5.00 kW
SCOP	5.94	4.16
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	5.00 kW	5.00 kW
COP T <sub>j</sub> = +2°C	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	0.99	0.99
P <sub>dh T<sub>j</sub></sub> = +7°C	3.30 kW	3.30 kW
COP T <sub>j</sub> = +7°C	5.65	3.67
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	0.98	0.98
P <sub>dh T<sub>j</sub></sub> = 12°C	2.10 kW	1.90 kW
COP T <sub>j</sub> = 12°C	7.94	5.67
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.42
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1125 kWh	1607 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	4.50 kW	6.00 kW
SEER	4.61	7.99
P <sub>dc T<sub>j</sub></sub> = 35°C	4.50 kW	6.00 kW
EER T <sub>j</sub> = 35°C	3.39	5.18
P <sub>dc T<sub>j</sub></sub> = 30°C	3.32 kW	4.50 kW
EER T <sub>j</sub> = 30°C	3.97	7.09
C <sub>dc T<sub>j</sub></sub> = 30 °C	0.990	0.980

Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Cdc Tj = 25 °C	0.980	0.950
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Cdc Tj = 20 °C	0.950	0.940
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	586 kWh	450 kWh

**Model AWHPR 4 MR + MIV-S/H 4-8 V200 R32**

Model name	AWHPR 4 MR + MIV-S/H 4-8 V200 R32
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

**General data**

Power supply	n/a
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	133 %
COP	3.17
Heating up time	1:37 h:min
Standby power input	27.9 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	255 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	169 %
COP	4.00
Heating up time	1:35 h:min
Standby power input	28.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.60 kW	4.10 kW
El input	0.88 kW	1.55 kW
COP	5.20	2.65

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	1.33 kW	1.16 kW
EER	4.50	6.00
	3.39	5.18

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	176 %	134 %
Prated	5.00 kW	5.00 kW
SCOP	4.48	3.43
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.18	2.15
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	3.00	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	234 %	163 %
P <sub>rated</sub>	5.00 kW	5.00 kW
SCOP	5.94	4.16
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	5.00 kW	5.00 kW
COP T <sub>j</sub> = +2°C	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	0.99	0.99
P <sub>dh T<sub>j</sub></sub> = +7°C	3.30 kW	3.30 kW
COP T <sub>j</sub> = +7°C	5.65	3.67
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	0.98	0.98
P <sub>dh T<sub>j</sub></sub> = 12°C	2.10 kW	1.90 kW
COP T <sub>j</sub> = 12°C	7.94	5.67
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.42
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1125 kWh	1607 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	4.50 kW	6.00 kW
SEER	4.61	7.99
P <sub>dc T<sub>j</sub></sub> = 35°C	4.50 kW	6.00 kW
EER T <sub>j</sub> = 35°C	3.39	5.18
P <sub>dc T<sub>j</sub></sub> = 30°C	3.32 kW	4.50 kW
EER T <sub>j</sub> = 30°C	3.97	7.09
C <sub>dc T<sub>j</sub></sub> = 30 °C	0.990	0.980

Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Cdc Tj = 25 °C	0.980	0.950
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Cdc Tj = 20 °C	0.950	0.940
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	586 kWh	450 kWh

**Model AWHPR 4 MR + MIV-S/E 4-8 V200 R32**

Model name	AWHPR 4 MR + MIV-S/E 4-8 V200 R32
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

**General data**

Power supply	n/a
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	M
Efficiency ηDHW	127 %
COP	2.98
Heating up time	1:39 h:min
Standby power input	20.9 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	260 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency ηDHW	169 %
COP	4.00
Heating up time	1:35 h:min
Standby power input	28.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.60 kW	4.10 kW
El input	0.88 kW	1.55 kW
COP	5.20	2.65

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	1.33 kW	1.16 kW
EER	4.50	6.00
	3.39	5.18

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	176 %	134 %
Prated	5.00 kW	5.00 kW
SCOP	4.48	3.43
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.18	2.15
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	3.00	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	234 %	163 %
P <sub>rated</sub>	5.00 kW	5.00 kW
SCOP	5.94	4.16
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.00 kW	5.00 kW
COP T <sub>j</sub> = +2°C	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +7°C	3.30 kW	3.30 kW
COP T <sub>j</sub> = +7°C	5.65	3.67
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	0.98	0.98
P <sub>dh</sub> T <sub>j</sub> = 12°C	2.10 kW	1.90 kW
COP T <sub>j</sub> = 12°C	7.94	5.67
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.42
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1125 kWh	1607 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	4.50 kW	6.00 kW
SEER	4.61	7.99
P <sub>dc</sub> T <sub>j</sub> = 35°C	4.50 kW	6.00 kW
EER T <sub>j</sub> = 35°C	3.39	5.18
P <sub>dc</sub> T <sub>j</sub> = 30°C	3.32 kW	4.50 kW
EER T <sub>j</sub> = 30°C	3.97	7.09
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.980

Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Cdc Tj = 25 °C	0.980	0.950
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Cdc Tj = 20 °C	0.950	0.940
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	586 kWh	450 kWh

**Model AWHPR 4 MR + MIV-S/H 4-8 V200 R32**

Model name	AWHPR 4 MR + MIV-S/H 4-8 V200 R32
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

**General data**

Power supply	n/a
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	M
Efficiency ηDHW	127 %
COP	2.98
Heating up time	1:39 h:min
Standby power input	20.9 W
Reference hot water temperature	53.8 °C
Mixed water at 40°C	260 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency ηDHW	169 %
COP	4.00
Heating up time	1:35 h:min
Standby power input	28.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	4.60 kW	4.10 kW
El input	0.88 kW	1.55 kW
COP	5.20	2.65

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	1.33 kW	1.16 kW
EER	4.50	6.00
	3.39	5.18

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	176 %	134 %
Prated	5.00 kW	5.00 kW
SCOP	4.48	3.43
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.50 kW
COP Tj = -7°C	3.18	2.15
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	5.00 kW	4.50 kW
COP Tj = Tbiv	3.00	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	4.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.70 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	234 %	163 %
P <sub>rated</sub>	5.00 kW	5.00 kW
SCOP	5.94	4.16
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	5.00 kW	5.00 kW
COP T <sub>j</sub> = +2°C	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +7°C	3.30 kW	3.30 kW
COP T <sub>j</sub> = +7°C	5.65	3.67
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	0.98	0.98
P <sub>dh</sub> T <sub>j</sub> = 12°C	2.10 kW	1.90 kW
COP T <sub>j</sub> = 12°C	7.94	5.67
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.42
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.00 kW	5.00 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.42
Cd <sub>h</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1125 kWh	1607 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	4.50 kW	6.00 kW
SEER	4.61	7.99
P <sub>dc</sub> T <sub>j</sub> = 35°C	4.50 kW	6.00 kW
EER T <sub>j</sub> = 35°C	3.39	5.18
P <sub>dc</sub> T <sub>j</sub> = 30°C	3.32 kW	4.50 kW
EER T <sub>j</sub> = 30°C	3.97	7.09
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.980

Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Cdc Tj = 25 °C	0.980	0.950
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Cdc Tj = 20 °C	0.950	0.940
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	586 kWh	450 kWh