

Subtype ALYA 6/8M FS	
Certificate Holder	BAXI S.p.A.
Address	Via Trozzetti, 20
ZIP	
City	Bassano del Grappa (VI)
Country	IT
Certification Body	Kiwa Nederland B.V.
Subtype title	ALYA 6/8M FS
Registration number	007-DM0116
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.2 kg
Certification Date	12.11.2021
Testing basis	European KEYMARK Scheme for Heat Pumps (v9)

**Model AWHPR 6 MR + SYSMGR ALYA 4-8M E FS**

Model name	AWHPR 6 MR + SYSMGR ALYA 4-8M E FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency $\eta_{DHW}$	128 %
COP	3.07
Heating up time	01:32 h:min
Standby power input	28.3 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	255 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 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	6.40 kW	5.70 kW
El input	1.28 kW	1.97 kW
COP	5.00	2.90
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.30 kW	1.43 kW
Cooling capacity	6.50	7.00
EER	2.83	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	177 %	132 %
Prated	6.50 kW	6.00 kW
SCOP	4.50	3.37
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.90 kW	5.50 kW
COP Tj = -7°C	3.16	2.22
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.50 kW	3.40 kW
COP Tj = +2°C	4.48	3.37
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.30 kW	2.10 kW
COP Tj = +7°C	5.61	4.07
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.50 kW	2.50 kW
COP Tj = 12°C	6.92	6.58
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	6.50 kW	5.50 kW
COP Tj = Tbiv	2.68	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	5.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82

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	2986 kWh	3679 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	207 %	141 %
Prated	6.50 kW	6.00 kW
SCOP	5.24	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.50 kW	6.00 kW
COP Tj = +2°C	3.40	2.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.30 kW	4.05 kW
COP Tj = +7°C	5.30	3.16
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.86 kW	1.90 kW
COP Tj = 12°C	6.07	4.70
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	6.50 kW	6.00 kW
COP Tj = Tbiv	3.40	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.40	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
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 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1658 kWh	2222 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.00 kW
SEER	3.95	5.99
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.00 kW
EER T <sub>j</sub> = 35°C	2.83	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.90 kW	5.39 kW
EER T <sub>j</sub> = 30°C	3.99	6.65
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.980
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.10 kW	3.32 kW
EER T <sub>j</sub> = 25°C	4.55	4.93
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.37 kW	1.78 kW
EER T <sub>j</sub> = 20°C	3.96	9.48
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.960	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	987 kWh	701 kWh

**Model AWHPR 6 MR + SYSMGR ALYA 4-8M H FS**

Model name	AWHPR 6 MR + SYSMGR ALYA 4-8M H FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency $\eta_{DHW}$	128 %
COP	3.07
Heating up time	01:32 h:min
Standby power input	28.3 W
Reference hot water temperature	54.1 °C
Mixed water at 40°C	255 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 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	6.40 kW	5.70 kW
El input	1.28 kW	1.97 kW
COP	5.00	2.90
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.30 kW	1.43 kW
Cooling capacity	6.50	7.00
EER	2.83	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
ηs	177 %	132 %
Prated	6.50 kW	6.00 kW
SCOP	4.50	3.37
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.90 kW	5.50 kW
COP Tj = -7°C	3.16	2.22
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.50 kW	3.40 kW
COP Tj = +2°C	4.48	3.37
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.30 kW	2.10 kW
COP Tj = +7°C	5.61	4.07
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.50 kW	2.50 kW
COP Tj = 12°C	6.92	6.58
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	6.50 kW	5.50 kW
COP Tj = Tbiv	2.68	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	5.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82

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	2986 kWh	3679 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	207 %	141 %
Prated	6.50 kW	6.00 kW
SCOP	5.24	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.50 kW	6.00 kW
COP Tj = +2°C	3.40	2.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.30 kW	4.05 kW
COP Tj = +7°C	5.30	3.16
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.86 kW	1.90 kW
COP Tj = 12°C	6.07	4.70
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	6.50 kW	6.00 kW
COP Tj = Tbiv	3.40	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.40	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
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 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1658 kWh	2222 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.00 kW
SEER	3.95	5.99
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.00 kW
EER T <sub>j</sub> = 35°C	2.83	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.90 kW	5.39 kW
EER T <sub>j</sub> = 30°C	3.99	6.65
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.980
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.10 kW	3.32 kW
EER T <sub>j</sub> = 25°C	4.55	4.93
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.37 kW	1.78 kW
EER T <sub>j</sub> = 20°C	3.96	9.48
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.960	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	987 kWh	701 kWh

**Model AWHPR 6 MR + SYSMGR ALYA 4-8M E FS**

Model name	AWHPR 6 MR + SYSMGR ALYA 4-8M E FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	M
Efficiency $\eta_{DHW}$	122 %
COP	2.88
Heating up time	01:32 h:min
Standby power input	20.4 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	261 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 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	6.40 kW	5.70 kW
El input	1.28 kW	1.97 kW
COP	5.00	2.90
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.30 kW	1.43 kW
Cooling capacity	6.50	7.00
EER	2.83	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	177 %	132 %
Prated	6.50 kW	6.00 kW
SCOP	4.50	3.37
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.90 kW	5.50 kW
COP Tj = -7°C	3.16	2.22
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.50 kW	3.40 kW
COP Tj = +2°C	4.48	3.37
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.30 kW	2.10 kW
COP Tj = +7°C	5.61	4.07
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.50 kW	2.50 kW
COP Tj = 12°C	6.92	6.58
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	6.50 kW	5.50 kW
COP Tj = Tbiv	2.68	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	5.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82

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	2986 kWh	3679 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	207 %	141 %
Prated	6.50 kW	6.00 kW
SCOP	5.24	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.50 kW	6.00 kW
COP Tj = +2°C	3.40	2.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.30 kW	4.05 kW
COP Tj = +7°C	5.30	3.16
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.86 kW	1.90 kW
COP Tj = 12°C	6.07	4.70
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	6.50 kW	6.00 kW
COP Tj = Tbiv	3.40	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.40	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
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 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1658 kWh	2222 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.00 kW
SEER	3.95	5.99
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.00 kW
EER T <sub>j</sub> = 35°C	2.83	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.90 kW	5.39 kW
EER T <sub>j</sub> = 30°C	3.99	6.65
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.980
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.10 kW	3.32 kW
EER T <sub>j</sub> = 25°C	4.55	4.93
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.37 kW	1.78 kW
EER T <sub>j</sub> = 20°C	3.96	9.48
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.960	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	987 kWh	701 kWh

**Model AWHPR 6 MR + SYSMGR ALYA 4-8M H FS**

Model name	AWHPR 6 MR + SYSMGR ALYA 4-8M H FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	M
Efficiency $\eta_{DHW}$	122 %
COP	2.88
Heating up time	01:32 h:min
Standby power input	20.4 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	261 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	149 %
COP	3.50
Heating up time	01:28 h:min
Standby power input	36.5 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	277 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	6.40 kW	5.70 kW
El input	1.28 kW	1.97 kW
COP	5.00	2.90
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.30 kW	1.43 kW
Cooling capacity	6.50	7.00
EER	2.83	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	57 dB(A)	57 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	177 %	132 %
Prated	6.50 kW	6.00 kW
SCOP	4.50	3.37
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.90 kW	5.50 kW
COP Tj = -7°C	3.16	2.22
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.50 kW	3.40 kW
COP Tj = +2°C	4.48	3.37
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.30 kW	2.10 kW
COP Tj = +7°C	5.61	4.07
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	2.50 kW	2.50 kW
COP Tj = 12°C	6.92	6.58
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	6.50 kW	5.50 kW
COP Tj = Tbiv	2.68	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	5.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82

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	2986 kWh	3679 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	34 dB(A)	34 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	207 %	141 %
Prated	6.50 kW	6.00 kW
SCOP	5.24	3.61
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.50 kW	6.00 kW
COP Tj = +2°C	3.40	2.27
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.30 kW	4.05 kW
COP Tj = +7°C	5.30	3.16
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.86 kW	1.90 kW
COP Tj = 12°C	6.07	4.70
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	6.50 kW	6.00 kW
COP Tj = Tbiv	3.40	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.50 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.40	2.27
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
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 kW	0 kW
Annual energy consumption Q <sub>he</sub>	1658 kWh	2222 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.00 kW
SEER	3.95	5.99
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.00 kW
EER T <sub>j</sub> = 35°C	2.83	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.90 kW	5.39 kW
EER T <sub>j</sub> = 30°C	3.99	6.65
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.980
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.10 kW	3.32 kW
EER T <sub>j</sub> = 25°C	4.55	4.93
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.37 kW	1.78 kW
EER T <sub>j</sub> = 20°C	3.96	9.48
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.960	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	987 kWh	701 kWh

**Model AWHPR 8 MR + SYSMGR ALYA 4-8M E FS**

Model name	AWHPR 8 MR + SYSMGR ALYA 4-8M E FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency $\eta_{DHW}$	125 %
COP	2.99
Heating up time	01:41 h:min
Standby power input	30.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	264 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 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	7.67 kW	8.18 kW
El input	1.62 kW	2.88 kW
COP	4.73	2.84
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.33 kW	1.45 kW
Cooling capacity	6.50	7.10
EER	2.79	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	176 %	125 %
Prated	7.00 kW	7.00 kW
SCOP	4.48	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.06 kW	6.19 kW
COP Tj = -7°C	2.97	1.95
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.12 kW	3.79 kW
COP Tj = +2°C	4.46	3.24
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.78 kW	2.49 kW
COP Tj = +7°C	5.70	4.10
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.67 kW	2.55 kW
COP Tj = 12°C	7.80	6.10
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	6.06 kW	6.19 kW
COP Tj = Tbiv	2.97	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.64 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.66

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	0.36 kW	2.10 kW
Annual energy consumption Qhe	3225 kWh	4504 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	214 %	149 %
Prated	7.00 kW	6.60 kW
SCOP	5.41	3.81
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.00 kW	6.60 kW
COP Tj = +2°C	3.25	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.70 kW	4.58 kW
COP Tj = +7°C	5.11	3.36
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	6.71	5.00
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	7.00 kW	6.60 kW
COP Tj = Tbiv	3.25	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.25	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	10.6 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>	1728 kWh	2315 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.10 kW
SEER	4.32	5.82
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.10 kW
EER T <sub>j</sub> = 35°C	2.79	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.97 kW	5.65 kW
EER T <sub>j</sub> = 30°C	3.96	6.71
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.990
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.35 kW	3.18 kW
EER T <sub>j</sub> = 25°C	4.74	5.26
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.55 kW	1.67 kW
EER T <sub>j</sub> = 20°C	5.50	7.40
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.950	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	904 kWh	732 kWh

**Model AWHPR 8 MR + SYSMGR ALYA 4-8M H FS**

Model name	AWHPR 8 MR + SYSMGR ALYA 4-8M H FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency $\eta_{DHW}$	125 %
COP	2.99
Heating up time	01:41 h:min
Standby power input	30.0 W
Reference hot water temperature	54.9 °C
Mixed water at 40°C	264 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 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	7.67 kW	8.18 kW
El input	1.62 kW	2.88 kW
COP	4.73	2.84
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.33 kW	1.45 kW
Cooling capacity	6.50	7.10
EER	2.79	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
ηs	176 %	125 %
Prated	7.00 kW	7.00 kW
SCOP	4.48	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.06 kW	6.19 kW
COP Tj = -7°C	2.97	1.95
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.12 kW	3.79 kW
COP Tj = +2°C	4.46	3.24
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.78 kW	2.49 kW
COP Tj = +7°C	5.70	4.10
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.67 kW	2.55 kW
COP Tj = 12°C	7.80	6.10
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	6.06 kW	6.19 kW
COP Tj = Tbiv	2.97	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.64 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.66

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	0.36 kW	2.10 kW
Annual energy consumption Qhe	3225 kWh	4504 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	214 %	149 %
Prated	7.00 kW	6.60 kW
SCOP	5.41	3.81
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.00 kW	6.60 kW
COP Tj = +2°C	3.25	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.70 kW	4.58 kW
COP Tj = +7°C	5.11	3.36
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	6.71	5.00
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	7.00 kW	6.60 kW
COP Tj = Tbiv	3.25	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.25	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	10.6 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>	1728 kWh	2315 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.10 kW
SEER	4.32	5.82
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.10 kW
EER T <sub>j</sub> = 35°C	2.79	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.97 kW	5.65 kW
EER T <sub>j</sub> = 30°C	3.96	6.71
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.990
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.35 kW	3.18 kW
EER T <sub>j</sub> = 25°C	4.74	5.26
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.55 kW	1.67 kW
EER T <sub>j</sub> = 20°C	5.50	7.40
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.950	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	904 kWh	732 kWh

**Model AWHPR 8 MR + SYSMGR ALYA 4-8M E FS**

Model name	AWHPR 8 MR + SYSMGR ALYA 4-8M E FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	M
Efficiency $\eta_{DHW}$	121 %
COP	2.84
Heating up time	01:41 h:min
Standby power input	22.0 W
Reference hot water temperature	55.2 °C
Mixed water at 40°C	272 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 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	7.67 kW	8.18 kW
El input	1.62 kW	2.88 kW
COP	4.73	2.84
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.33 kW	1.45 kW
Cooling capacity	6.50	7.10
EER	2.79	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	176 %	125 %
Prated	7.00 kW	7.00 kW
SCOP	4.48	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.06 kW	6.19 kW
COP Tj = -7°C	2.97	1.95
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.12 kW	3.79 kW
COP Tj = +2°C	4.46	3.24
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.78 kW	2.49 kW
COP Tj = +7°C	5.70	4.10
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.67 kW	2.55 kW
COP Tj = 12°C	7.80	6.10
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	6.06 kW	6.19 kW
COP Tj = Tbiv	2.97	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.64 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.66

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	0.36 kW	2.10 kW
Annual energy consumption Qhe	3225 kWh	4504 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	214 %	149 %
Prated	7.00 kW	6.60 kW
SCOP	5.41	3.81
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.00 kW	6.60 kW
COP Tj = +2°C	3.25	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.70 kW	4.58 kW
COP Tj = +7°C	5.11	3.36
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	6.71	5.00
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	7.00 kW	6.60 kW
COP Tj = Tbiv	3.25	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.25	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	10.6 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>	1728 kWh	2315 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.10 kW
SEER	4.32	5.82
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.10 kW
EER T <sub>j</sub> = 35°C	2.79	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.97 kW	5.65 kW
EER T <sub>j</sub> = 30°C	3.96	6.71
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.990
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.35 kW	3.18 kW
EER T <sub>j</sub> = 25°C	4.74	5.26
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.55 kW	1.67 kW
EER T <sub>j</sub> = 20°C	5.50	7.40
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.950	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	904 kWh	732 kWh

**Model AWHPR 8 MR + SYSMGR ALYA 4-8M H FS**

Model name	AWHPR 8 MR + SYSMGR ALYA 4-8M H FS
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	1x230V 50Hz
Off-peak product	n/a

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

Declared load profile	M
Efficiency $\eta_{DHW}$	121 %
COP	2.84
Heating up time	01:41 h:min
Standby power input	22.0 W
Reference hot water temperature	55.2 °C
Mixed water at 40°C	272 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	143 %
COP	3.40
Heating up time	01:20 h:min
Standby power input	30.9 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	278 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	7.67 kW	8.18 kW
El input	1.62 kW	2.88 kW
COP	4.73	2.84
EN 14511-2   Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.33 kW	1.45 kW
Cooling capacity	6.50	7.10
EER	2.79	4.88
EN 12102-1   Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	32 dB(A)	32 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)
EN 14825   Average Climate		
	Low temperature	Medium temperature
$\eta_s$	176 %	125 %
Prated	7.00 kW	7.00 kW
SCOP	4.48	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.06 kW	6.19 kW
COP Tj = -7°C	2.97	1.95
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.12 kW	3.79 kW
COP Tj = +2°C	4.46	3.24
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.78 kW	2.49 kW
COP Tj = +7°C	5.70	4.10
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.67 kW	2.55 kW
COP Tj = 12°C	7.80	6.10
Cdh Tj = +12 °C	0.960	0.960
Pdh Tj = Tbiv	6.06 kW	6.19 kW
COP Tj = Tbiv	2.97	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.64 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.66

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	0.36 kW	2.10 kW
Annual energy consumption Qhe	3225 kWh	4504 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	214 %	149 %
Prated	7.00 kW	6.60 kW
SCOP	5.41	3.81
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.00 kW	6.60 kW
COP Tj = +2°C	3.25	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.70 kW	4.58 kW
COP Tj = +7°C	5.11	3.36
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	6.71	5.00
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	7.00 kW	6.60 kW
COP Tj = Tbiv	3.25	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.60 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.25	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	10.6 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>	1728 kWh	2315 kWh
EN 14825   Cooling		
	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.50 kW	7.10 kW
SEER	4.32	5.82
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.50 kW	7.10 kW
EER T <sub>j</sub> = 35°C	2.79	4.88
P <sub>dc</sub> T <sub>j</sub> = 30°C	4.97 kW	5.65 kW
EER T <sub>j</sub> = 30°C	3.96	6.71
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.990	0.990
P <sub>dc</sub> T <sub>j</sub> = 25°C	3.35 kW	3.18 kW
EER T <sub>j</sub> = 25°C	4.74	5.26
C <sub>dc</sub> T <sub>j</sub> = 25 °C	0.980	0.980
P <sub>dc</sub> T <sub>j</sub> = 20°C	1.55 kW	1.67 kW
EER T <sub>j</sub> = 20°C	5.50	7.40
C <sub>dc</sub> T <sub>j</sub> = 20 °C	0.950	0.930
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Q <sub>ce</sub>	904 kWh	732 kWh