Subtype ALYA 4.5M E FS Slim

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 4.5M E FS Slim
Registration number	007-DM0107
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.2 kg
Certification Date	22.10.2021
Testing basis	European KEYMARK Scheme for Heat Pumps (v9)

Model AWHPR 4 MR + SYSMGR FS Slim 4.5-8MRE

Model name	AWHPR 4 MR + SYSMGR FS Slim 4.5-8MRE
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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 ηDHW	139 %
COP	3.30
Heating up time	1:35 h:min
Standby power input	31.8 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 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

	+7°C/+12°C	+18°C/+23°C
El input	1.25 kW	1.12 kW
Cooling capacity	4.50	6.00
EER	3.60	5.35

EN 12102-1 | Average 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 | 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	0.99	0.99
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.96	0.96
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.95	0.95
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	0.99	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	0.7 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
ηs	234 %	163 %
Prated	5.00 kW	5.00 kW
SCOP	5.94	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.51	2.42
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.30 kW	3.30 kW
COP Tj = +7°C	5.65	3.67
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.10 kW	1.90 kW
COP Tj = 12°C	7.94	5.67
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.51	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.51	2.42
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 Qhe	1125 kWh	1607 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	4.50 kW	6.00 kW
SEER	4.64	8.02
Pdc Tj = 35°C	4.50 kW	6.00 kW
EER Tj = 35°C	3.60	5.35
Pdc Tj = 30°C	3.32 kW	4.50 kW
EER Tj = 30°C	3.97	7.09
Cdc Tj = 30 °C		

Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Cdc Tj = 25 °C		
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Cdc Tj = 20 °C		
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	582 kWh	449 kWh

Model AWHPR 4 MR + SYSMGR FS Slim 4.5-8MRE

Model name	AWHPR 4 MR + SYSMGR FS Slim 4.5-8MRE
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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	M
Efficiency ηDHW	131 %
COP	3.00
Heating up time	1:35 h:min
Standby power input	29.9 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	279 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

	+7°C/+12°C	+18°C/+23°C
El input	1.25 kW	1.12 kW
Cooling capacity	4.50	6.00
EER	3.60	5.35

EN 12102-1 | Average 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 | 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	0.99	0.99
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	4.44	3.39
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	1.75 kW	1.74 kW
COP Tj = +7°C	5.37	4.44
Cdh Tj = +7 °C	0.96	0.96
Pdh Tj = 12°C	2.70 kW	2.10 kW
COP Tj = 12°C	8.78	7.29
Cdh Tj = +12 °C	0.95	0.95
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	0.99	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	0.7 kW
Annual energy consumption Qhe	2305 kWh	3009 kWh

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	234 %	163 %
Prated	5.00 kW	5.00 kW
SCOP	5.94	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.51	2.42
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.30 kW	3.30 kW
COP Tj = +7°C	5.65	3.67
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Pdh Tj = 12°C	2.10 kW	1.90 kW
COP Tj = 12°C	7.94	5.67
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.51	2.42
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.51	2.42
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 Qhe	1125 kWh	1607 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	4.50 kW	6.00 kW
SEER	4.64	8.02
Pdc Tj = 35°C	4.50 kW	6.00 kW
EER Tj = 35°C	3.60	5.35
Pdc Tj = 30°C	3.32 kW	4.50 kW
EER Tj = 30°C	3.97	7.09
Pdc Tj = 25°C	2.30 kW	2.80 kW
EER Tj = 25°C	5.23	9.20
Pdc Tj = 20°C	1.85 kW	2.85 kW
EER Tj = 20°C	6.40	12.23
Poff	15 W	15 W
PTO	15 W	15 W

PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	582 kWh	449 kWh