

Aquantia KHPMS-BI PRO



KEYMARK


 SMART GRID
READY

 R-32
REFRIGERANT

 DOMESTIC HOT
WATER

 COOLING AND
HEATING

 COMPATIBLE
WITH AIRZONE


WI-FI



MODBUS


 CONFIGURATION
VIA USB PORT

Technical documentation	Download
Technical Manual	
User Manual	
Declaration of Conformity	
ErP	
Dimensions	
Installation diagrams	

Set model		KHPMS-BI 4 PRO	KHPMS-BI 6 PRO	KHPMS-BI 8 PRO	KHPMS-BI 10 PRO	KHPMS-BI 12 PRO
> Set						
Heating capacity / COP (A+7°C / W+35°C)	kW	4,25 / 5,2	6,2 / 5	8,3 / 5,2	10 / 5	12,1 / 4,95
Consumption (A+7 °C / W+35 °C)	W	817	1240	1596	2000	2444
Heating capacity / COP (A+7°C / W+55°C)	kW	4,4 / 2,95	6 / 3	7,5 / 3,18	9,5 / 3,1	12 / 3,1
Consumption (A+7 °C / W+55 °C)	W	1492	2000	2358	3065	3871
Heating capacity / COP (A-7°C / W+35°C)	kW	4,7 / 3,1	6 / 3	7 / 3,2	8 / 3,05	10 / 3
Consumption (A-7 °C / W+35 °C)	W	1516	2000	2188	2623	3333
Heating capacity / COP (A-7°C / W+55°C)	kW	4 / 1,95	5,15 / 2	6,15 / 2,05	6,85 / 2	9,8 / 2,05
Consumption (A-7 °C / W+55 °C)	W	2051	2575	3000	3425	4780
Cooling capacity / EER (A+35°C / W+18°C)	kW	4,5 / 0,81	6,55 / 1,34	8,4 / 1,66	10 / 2,08	12 / 4
Consumption (A+35 °C / W+18 °C)	W	811	1337	1663	2083	3000
Cooling capacity / EER (A+35°C / W+7°C)	kW	4,7 / 3,45	7 / 3	7,4 / 3,38	8,2 / 3,3	11,6 / 2,75
Consumption (A+35 °C / W+7 °C)	W	1362	2333	2189	2485	4218
Average heating climate (W+35°C / W+55°C). Energy class		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Average heating climate (W+35°C / W+55°C). η_s	%	191 / 130	195 / 138	206 / 132	205 / 137	189 / 135
Average heating climate (W+35°C / W+55°C). SCOP		4,85 / 3,31	4,95 / 3,52	5,22 / 3,36	5,2 / 3,49	4,81 / 3,45
Warm heating climate (W+35°C / W+55°C). η_s	%	255 / 162	260 / 165	277 / 177	281 / 180	256 / 174
Warm heating climate (W+35°C / W+55°C). SCOP		6,46 / 4,14	6,57 / 4,19	6,99 / 4,5	7,09 / 4,58	6,48 / 4,43
Cold heating climate (W+35°C / W+55°C). η_s	%	160 / 102	165 / 111	170 / 112	170 / 116	160 / 118
Cold heating climate (W+35°C / W+55°C). SCOP		4,06 / 2,63	4,21 / 2,85	4,33 / 2,88	4,32 / 2,99	4,08 / 3,02
Chilling efficiency (W+7°C / W+18°C). Keymark certification. $\eta_{s,c}$	%	197 / 308	211 / 325	230 / 355	236 / 348	192 / 281
Chilling efficiency (W+7°C / W+18°C). Keymark certification. SEER		4,99 / 7,77	5,34 / 8,21	5,83 / 8,95	5,98 / 8,78	4,89 / 7,1
> Indoor unit						
Width / Height / Depth	mm	420 / 790 / 270	420 / 790 / 270	420 / 790 / 270	420 / 790 / 270	420 / 790 / 270
Net weight	kg	37	37	37	37	39
Power supply	V/ph/Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Max. intensity	A	14,3	14,3	14,3	14,3	14,3
Circuit breaker		C16	C16	C16	C16	C16
Sound pressure rated	dB(A)	28	28	30	30	32
Sound power	dB(A)	38	38	38	38	44
Minimum water volume	l	40	40	40	40	60
Nominal flow rate	m ³ /h	0,7	0,95	1,40	1,70	2,10
Backup electrical resistor	kW	3	3	3	3	3
Maximum pump pressure available	mH ₂ O	8,5	8,5	8,5	8,5	8,5
Expansion vessel	l	8	8	8	8	8
Water pipe connections	inch	1"	1"	1"	1"	1"
Water outlet temperature; DHW min. / max.	°C	30 / 65	30 / 65	30 / 65	30 / 65	30 / 65
Water outlet temperature; Heating min. / max.	°C	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65
Water outlet temperature; Cooling min. / max.	°C	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25

Aquantia KHPMS-BI PRO

Set model		KHPMS-BI 4 PRO	KHPMS-BI 6 PRO	KHPMS-BI 8 PRO	KHPMS-BI 10 PRO	KHPMS-BI 12 PRO
> Outdoor unit		KHP-BI 4 DVR2	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2
Width / Height / Depth	mm	1008 / 712 / 426	1008 / 712 / 426	1118 / 865 / 523	1118 / 865 / 523	1118 / 865 / 523
Net weight	kg	60	58	77	77	96
Power supply	V/ph/Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Max. intensity	A	18	18	19	19	30
Circuit breaker	A	D20	D20	D20	D20	D32
Communication wiring	mm ²	3x1	3x1	3x1	3x1	3x1
Sound pressure	dB(A)	44	45	46	49	50
Sound power	dB(A)	56	58	59	60	64
Type of refrigerant		R-32	R-32	R-32	R-32	R-32
GWP		675	675	675	675	675
Refrigerant charge	kg	1.5	1.5	1.65	1.65	1.84
t CO ₂ eq	tCO ₂	1.0	1.0	1.1	1.1	1.2
Meters of pre-charge, outdoor unit	m	15	15	15	15	15
Additional refrigerant charge, outdoor unit	kg/m	0.02	0.02	0.038	0.038	0.038
Max. total distance	m	50	50	50	50	50
Max. vertical distance	m	30	30	30	30	30
Liquid pipe	inch	1/4"	1/4"	3/8"	3/8"	3/8"
Gas pipe	inch	5/8"	5/8"	5/8"	5/8"	5/8"
> Working range						
Outdoor ambient temperature for DHW min. / max.	°C	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43
Outdoor ambient temperature for heating min. / max.	°C	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35
Outdoor ambient temperature for cooling min. / max.	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43

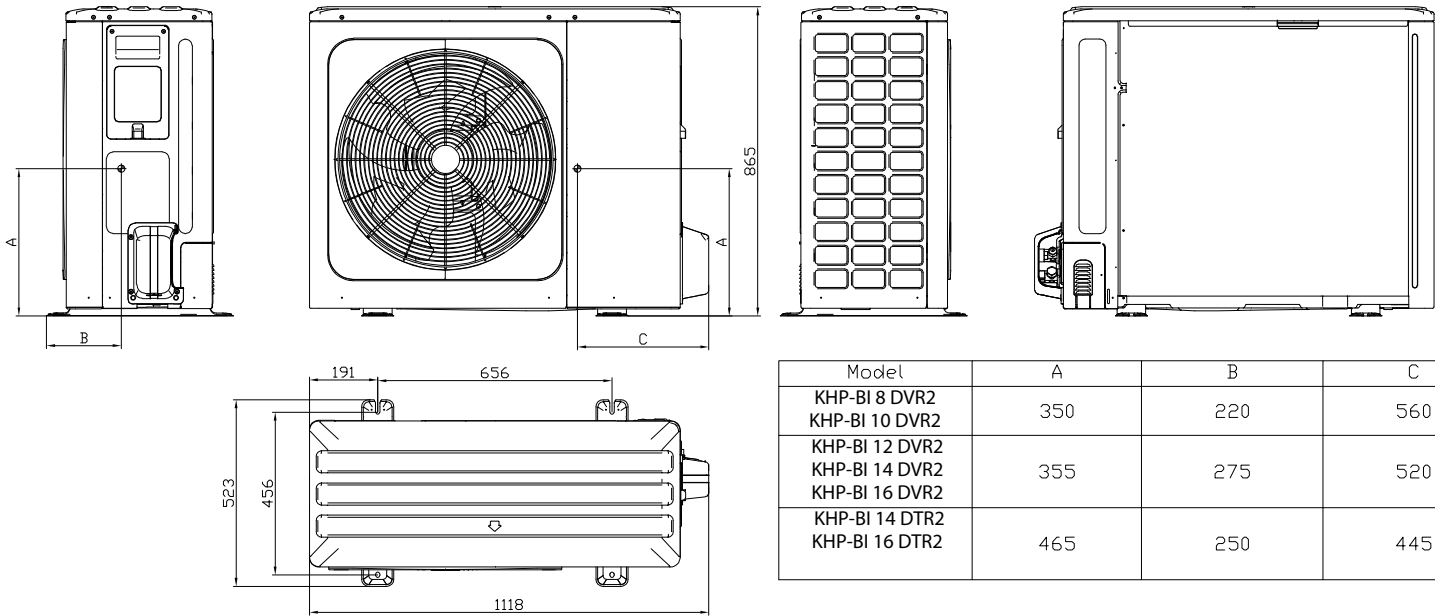
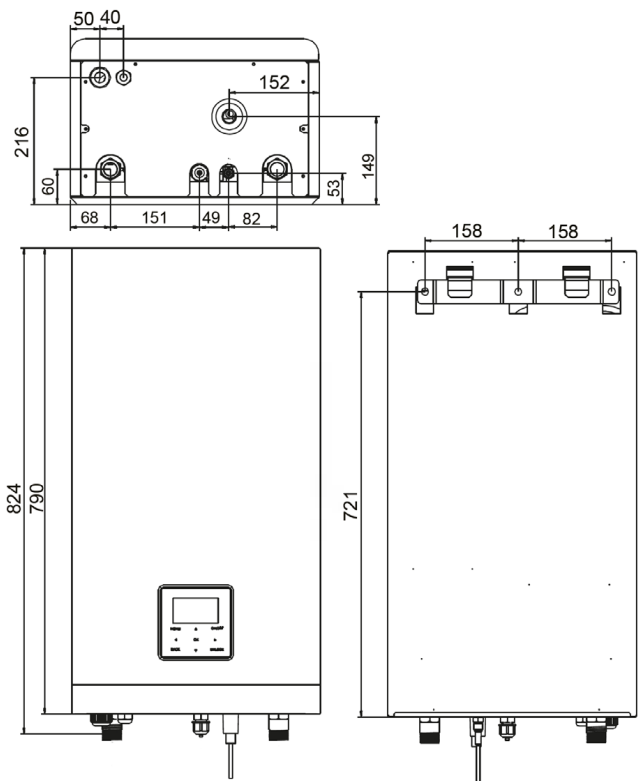
Set model		KHPMS-BI 14 PRO	KHPMS-BI 16 PRO	KHPMS-BI 14T PRO	KHPMS-BI 16T PRO
> Set					
Heating capacity / COP (A+7°C / W+35°C)	kW	14,5 / 4,7	16 / 4,5	14,5 / 4,7	16 / 4,5
Consumption (A+7 °C / W+35 °C)	W	3085	3556	3085	3556
Heating capacity / COP (A+7°C / W+55°C)	kW	13,8 / 3	16 / 2,9	13,8 / 3	16 / 2,9
Consumption (A+7 °C / W+55 °C)	W	4600	5517	4600	5517
Heating capacity / COP (A-7°C / W+35°C)	kW	12 / 2,85	13,1 / 2,7	12 / 2,8	13,3 / 2,7
Consumption (A-7 °C / W+35 °C)	W	4211	4852	4211	4852
Heating capacity / COP (A-7°C / W+55°C)	kW	11 / 2,05	12,5 / 2	11 / 2,05	12,5 / 2,02
Consumption (A-7 °C / W+55 °C)	W	5366	6250	5366	6250
Cooling capacity / EER (A+35°C / W+18°C)	kW	13,5 / 3,6	14,9 / 3,4	13,5 / 3,6	14,9 / 3,4
Consumption (A+35 °C / W+18 °C)	W	3750	4382	3750	4382
Cooling capacity / EER (A+35°C / W+7°C)	kW	12,7 / 2,55	14 / 2,45	12,7 / 2,55	14 / 2,45
Consumption (A+35 °C / W+7 °C)	W	4980	5714	4980	5714
Average heating climate (W+35°C / W+55°C). Energy class		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Average heating climate (W+35°C / W+55°C). η _s	%	186 / 136	182 / 133	186 / 136	182 / 133
Average heating climate (W+35°C / W+55°C). SCOP		4,72 / 3,47	4,62 / 3,41	4,72 / 3,47	4,62 / 3,41
Warm heating climate (W+35°C / W+55°C). η _s	%	260 / 175	249 / 176	260 / 175	248 / 176
Warm heating climate (W+35°C / W+55°C). SCOP		6,58 / 4,45	6,29 / 4,48	6,57 / 4,44	6,28 / 4,47
Cold heating climate (W+35°C / W+55°C). η _s	%	160 / 119	158 / 122	160 / 119	158 / 122
Cold heating climate (W+35°C / W+55°C). SCOP		4,07 / 3,05	4,02 / 3,12	4,07 / 3,02	4,02 / 3,12
Chilling efficiency (W+7°C / W+18°C). Keymark certification. η _{s,c}	%	191 / 273	184 / 267	190 / 271	184 / 265
Chilling efficiency (W+7°C / W+18°C). Keymark certification. SEER		4,86 / 6,9	4,69 / 6,75	4,83 / 6,85	4,67 / 6,71
> Indoor unit		KHPM-BI 16 DVR2	KHPM-BI 16 DVR2	KHPM-BI 16 DVR2	KHPM-BI 16 DVR2
Width / Height / Depth	mm	420 / 790 / 270	420 / 790 / 270	420 / 790 / 270	420 / 790 / 270
Net weight	kg	39	39	39	39
Power supply	V/ph/Hz	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50	220-240 / 1 / 50
Max. intensity	A	14.3	14.3	14.3	14.3
Circuit breaker		C16	C16	C16	C16
Sound pressure rated	dB(A)	32	32	32	32
Sound power	dB(A)	44	44	44	44
Minimum water volume	l	60	60	60	60
Nominal flow rate	m ³ /h	2.50	2.95	2.50	2.95
Backup electrical resistor	kW	3	3	3	3
Maximum pump pressure available	mH ₂ O	8.5	8.5	8.5	8.5
Expansion vessel	l	8	8	8	8
Water pipe connections	inch	1"	1"	1"	1"
Water outlet temperature; DHW min. / max.	°C	30 / 65	30 / 65	30 / 65	30 / 65
Water outlet temperature; Heating min. / max.	°C	25 / 65	25 / 65	25 / 65	25 / 65
Water outlet temperature; Cooling min. / max.	°C	5 / 25	5 / 25	5 / 25	5 / 25

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Set model		KHPMS-BI 14 PRO	KHPMS-BI 16 PRO	KHPMS-BI 14T PRO	KHPMS-BI 16T PRO
> Outdoor unit		KHP-BI 14 DVR2	KHP-BI 16 DVR2	KHP-BI 14 DTR2	KHP-BI 16 DTR2
Width / Height / Depth	mm	1118 / 865 / 523	1118 / 865 / 523	1118 / 865 / 523	1118 / 865 / 523
Net weight	kg	96	96	112	112
Power supply	V/ph/Hz	220-240 / 1 / 50	220-240 / 1 / 50	380-415 / 3 / 50	380-415 / 3 / 50
Max. intensity	A	30	30	14	14
Circuit breaker	A	D32	D32	D16	D16
Communication wiring	mm ²	3x1	3x1	3x1	3x1
Sound pressure	dB(A)	51	51	55	55
Sound power	dB(A)	65	68	65	68
Type of refrigerant		R-32	R-32	R-32	R-32
GWP		675	675	675	675
Refrigerant charge	kg	1.84	1.84	1.84	1.84
t CO ₂ eq	tCO ₂	1.2	1.2	1.2	1.2
Meters of pre-charge, outdoor unit	m	15	15	15	15
Additional refrigerant charge, outdoor unit	kg/m	0.038	0.038	0.038	0.038
Max. total distance	m	50	50	50	50
Max. vertical distance	m	30	30	30	30
Liquid pipe	inch	3/8"	3/8"	3/8"	3/8"
Gas pipe	inch	5/8"	5/8"	5/8"	5/8"
> Working range					
Outdoor ambient temperature for DHW min. / max.	°C	-25 / 43	-25 / 43	-25 / 43	-25 / 43
Outdoor ambient temperature for heating min. / max.	°C	-25 / 35	-25 / 35	-25 / 35	-25 / 35
Outdoor ambient temperature for cooling min. / max.	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43

Supplementary charge: The initial charging is valid for the first 15 m (liquid line). For greater distances, a supplementary charge of 0.020 kg/m is required per each additional metre for models 4/6, and 0.038 kg/m per each additional metre for models 8/10/12/14/16.

(*): The power supply for indoor units is single-phase 220-240 V/1/50 Hz.



Model	A	B	C
KHP-BI 8 DVR2 KHP-BI 10 DVR2	350	220	560
KHP-BI 12 DVR2 KHP-BI 14 DVR2 KHP-BI 16 DVR2	355	275	520
KHP-BI 14 DTR2 KHP-BI 16 DTR2	465	250	445