

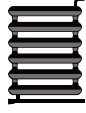


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ΑQUANTIA

KHP-BI 14 DTR2
KHPI-BI-16VR2XL



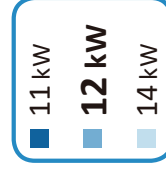
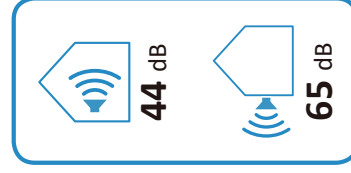
A++



XL



A+





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KHP-BI 14 DTR2
KHPI-BI-16VR2XL



55°C

35°C



A
++

A
+++

44dB

65dB

11 12 14 kW

13 14 12 kW

2019

811/2013

Product fiche

Energy labelling regulation: (EU)812/2013
Ecodesign regulation: (EU)814/2013

Heat pump combination heater		Outdoor		KHP-BI 10 DVR2	KHP-BI 12 DVR2	KHP-BI 14 DVR2	KHP-BI 16 DVR2	KHP-BI 14 DTR2	KHP-BI 16 DTR2	KHP-BI 16 DTR2
		Indoor		KHP-BI-10VR2XL B	KHP-BI-16VR2XL B	KHP-BI-16VR2XL B	KHP-BI-16VR2XL B	KHP-BI-16VR2XL B	KHP-BI-16VR2XL B	KHP-BI-16VR2XL B
Indoor unit sound power(*)		dB		40	42	44	44	44	44	44
Outdoor unit sound power(*)		dB		60	64	65	68	65	68	68
Water heating		-		XL	XL	XL	XL	XL	XL	XL
Declared load profile		-		A+	A+	A+	A+	A+	A+	A+
Energy efficiency class		-		A++	A++	A++	A++	A++	A++	A++
Space heating		-		A++	A++	A++	A++	A++	A++	A++
Average climate										
Water heating			[%]	137	123	123	123	123	123	123
Annual electricity consumption (AEC)			[kWh]	1218	1360	1360	1360	1360	1360	1360
P _{rated} (declared heating capacity)@-10°C			[kW]	7.7	11.6	12.1	12.1	12.1	13.0	13.0
Seasonal space heating efficiency(η _s)			[%]	136.6	135.1	135.6	135.6	135.6	133.3	133.2
Annual energy consumption			[kWh]	4539	6927	7202	7202	7203	7895	7896
Off-peak operation function integrated in heat pump			Y/N	Y	Y	Y	Y	Y	Y	Y
Colder climate										
Water heating			[%]	111	92	92	92	92	92	92
Annual energy consumption			[kWh]	1508	1822	1822	1822	1822	1822	1822
P _{rated} (declared heating capacity)@22°C			[kW]	6.71	10.31	10.96	10.96	11	11.8	11.8
Seasonal space heating efficiency(η _s)			[%]	116.4	117.8	118.9	118.9	118.9	121.8	121.8
Annual energy consumption			[kWh]	5540	8419	8666	8667	8667	9309	9310
Warmer climate										
Water heating			[%]	171	153	153	153	153	153	153
Annual energy consumption			[kWh]	977	1088	1088	1088	1088	1088	1088
P _{rated} (declared heating capacity)@2°C			[kW]	8.63	12.5	13.7	13.7	13.7	13.8	13.8
Seasonal space heating efficiency(η _s)			[%]	180.3	174.0	176.5	176.5	176.4	176.1	175.9
Annual energy consumption			[kWh]	2516	3776	4088	4088	4092	4112	4116
Ecodesign technical data										
Air-to-water heat pump			Y/N	Y	Y	Y	Y	Y	Y	Y
Water-to-water heat pump			Y/N	N	N	N	N	N	N	N
Brine-to-water heat pump			Y/N	N	N	N	N	N	N	N
Low-temperature heat pump			Y/N	N	N	N	N	N	N	N
Equipped with a supplementary heater			Y/N	Y	Y	Y	Y	Y	Y	Y
Heat pump combination heater			Y/N	Y	Y	Y	Y	Y	Y	Y
Rated airflow (outdoor)			[m³/h]	4030	4060	4060	4060	4060	4650	4650
Brine/water-to-water heat pump			[m³/h]	-	-	-	-	-	-	-

Heat pump combination heater		Outdoor		KHP-BI-10 DVR2		KHP-BI-12 DVR2		KHP-BI-14 DVR2		KHP-BI-16 DVR2		KHP-BI-16 DTR2		KHP-BI-16 DTR2			
		Indoor	-	KHP-BI-10VR2XL B	Yes	Yes	KHP-BI-16VR2XL B	Yes	Yes	KHP-BI-16VR2XL B	Yes	Yes	KHP-BI-16VR2XL B	Yes	Yes	KHP-BI-16VR2XL B	Yes
Capacity control																	
P _{off} (Power consumption Off mode)		[kW]		0.014		0.014		0.014		0.014		0.014		0.014		0.014	
P _b (Power consumption Thermostat off mode)		[kW]		0.024		0.024		0.024		0.024		0.024		0.024		0.024	
P _{stb} (Power consumption standby mode)		[kW]		0.014		0.014		0.014		0.014		0.014		0.014		0.014	
P _{CK} (Power crankcase heater model)		[kW]		0.000		0.000		0.000		0.000		0.000		0.000		0.000	
Q _{elec} (Daily electricity consumption)		[kWh]		5.67		6.35		6.35		6.35		6.35		6.35		6.35	
Q _{fuel} (Daily fuel consumption)		[kWh]		-		-		-		-		-		-		-	
Part load conditions space heating average climate																	
(A) condition (7°C)		[kW]		6.78		10.24		10.24		10.68		10.68		11.52		11.52	
COP _d (declared COP)		-		2.24		2.01		2.01		2.01		2.01		1.99		1.99	
C _{dh} (deklaration coefficient)		-		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
P _{dh} (declared heating capacity)		[kW]		4.28		6.52		6.52		6.86		6.86		7.18		7.18	
COP _d (declared COP)		-		3.42		3.44		3.44		3.43		3.43		3.34		3.34	
C _{dh} (deklaration coefficient)		-		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
P _{dh} (declared heating capacity)		[kW]		2.77		4.36		4.36		4.63		4.63		4.67		4.67	
COP _d (declared COP)		-		4.52		4.59		4.59		4.66		4.66		4.61		4.61	
C _{dh} (deklaration coefficient)		-		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
P _{dh} (declared heating capacity)		[kW]		1.58		3.29		3.29		3.31		3.31		3.32		3.32	
COP _d (declared COP)		-		5.68		6.05		6.05		6.13		6.13		6.07		6.07	
C _{dh} (deklaration coefficient)		-		0.90		0.90		0.90		0.90		0.90		0.90		0.90	
T _{ol} (Temperature Operating Limit)		[°C]		-10		-10		-10		-10		-10		-10		-10	
P _{dh} (declared heating capacity)		[kW]		5.38		9.1		9.1		9.19		9.19		10.33		10.33	
COP _d (declared COP)		-		1.83		1.79		1.79		1.76		1.76		1.80		1.80	
WTOL (Heating water Operation Limit)		[°C]		65		65		65		65		65		65		65	
T _{bw}		[°C]		-7		-7		-7		-7		-7		-7		-7	
P _{dh} (declared heating capacity)		[kW]		6.78		10.27		10.27		10.68		10.68		11.52		11.52	
COP _d (declared COP)		-		2.24		2.01		2.01		2.01		2.01		1.99		1.99	
Capacity of the back-up heater integrated in the unit		[kW]		3/6/9		3/6/9		3/6/9		3/6/9		3/6/9		3/6/9		3/6/9	
Supplementary capacity at P _{design}		[kW]		2.28		2.5		2.5		2.91		2.91		2.67		2.67	

For medium - temperature application

Model		For medium - temperature application											
Outdoor unit	Indoor unit	Energy efficiency class	Indoor unit sound power	Outdoor unit sound power	average climate			colder climate			warmer climate		
					Rated heat output	Seasonal space heating energy efficiency	For space heating energy consumption	Rated heat output	Seasonal space heating energy efficiency	For space heating energy consumption	Rated heat output	Seasonal space heating energy efficiency	For space heating energy consumption
		-	dB	dB	kW	%	kWh	kW	%	kWh	kW	%	kWh
KHP-BI 4 DVR2	KHPM-BI 6 DVR2	A++	38	56	4.4	129.5	2744	3.4	102.1	3158	5.0	163.1	1614
	KHPI-BI-10VR2L	A++	38	56	4.4	129.5	2744	3.4	102.1	3158	5.0	163.1	1614
	KHPI-BI-10VR2XL	A++	38	56	4.4	129.5	2744	3.4	102.1	3158	5.0	163.1	1614
KHP-BI 6 DVR2	KHPM-BI 6 DVR2	A++	38	58	5.7	137.9	3345	4.3	111.1	3680	5.1	165.4	1634
	KHPI-BI-10VR2L	A++	38	58	5.7	137.9	3345	4.3	111.1	3680	5.1	165.4	1634
	KHPI-BI-10VR2XL	A++	38	58	5.7	137.9	3345	4.3	111.1	3680	5.1	165.4	1634
KHP-BI 8 DVR2	KHPM-BI 10 DVR2	A++	42	59	6.6	131.5	4056	5.8	112.1	4948	7.6	177.2	2242
	KHPI-BI-10VR2L	A++	40	59	6.6	131.5	4056	5.8	112.1	4948	7.6	177.2	2242
	KHPI-BI-10VR2XL	A++	40	59	6.6	131.5	4056	5.8	112.1	4948	7.6	177.2	2242
KHP-BI 10 DVR2	KHPM-BI 10 DVR2	A++	42	60	7.7	136.6	4539	6.7	116.5	5539	8.6	181.7	2496
	KHPI-BI-10VR2L	A++	40	60	7.7	136.6	4539	6.7	116.5	5539	8.6	181.7	2496
	KHPI-BI-10VR2XL	A++	40	60	7.7	136.6	4539	6.7	116.5	5539	8.6	181.7	2496
KHP-BI 12 DVR2	KHPM-BI 16 DVR2	A++	43	64	11.6	135.1	6927	10.3	117.8	8419	12.5	174.1	3376
	KHPI-BI-16VR2L	A++	42	64	11.6	135.1	6927	10.3	117.8	8419	12.5	174.1	3376
	KHPI-BI-16VR2XL	A++	43	64	11.6	135.1	6928	10.3	117.7	8420	12.5	173.8	3780
KHP-BI 14 DVR2	KHPM-BI 16 DVR2	A++	43	65	12.1	135.6	7202	11.0	118.9	8866	13.7	176.5	4088
	KHPI-BI-16VR2L	A++	44	65	12.1	135.6	7202	11.0	118.9	8866	13.7	176.5	4088
	KHPI-BI-16VR2XL	A++	43	65	12.1	135.6	7203	11.0	118.9	8867	13.7	176.4	4092
KHP-BI 16 DVR2	KHPM-BI 16 DVR2	A++	43	68	13.0	133.3	7895	11.8	121.8	9309	13.8	176.1	4112
	KHPI-BI-16VR2L	A++	44	68	13.0	133.3	7895	11.8	121.8	9309	13.8	176.1	4112
	KHPI-BI-16VR2XL	A++	43	68	13.0	133.2	7896	11.8	121.8	9310	13.8	175.9	4116
KHP-BI 16 DTR2	KHPI-BI-16VR2XL	A++	44	68	13.0	133.2	7896	11.8	121.8	9310	13.8	175.9	4116

For low - temperature application

Model		For low - temperature application															
Outdoor unit	Indoor unit	Energy efficiency class	Indoor unit sound power dB	Outdoor unit sound power dB	average climate			colder climate			warmer climate						
					Rated heat output kW	Seasonal space heating energy efficiency %	For space heating, annual energy consumption kWh	Rated heat output kW	Seasonal space heating energy efficiency %	For space heating, annual energy consumption kWh	Rated heat output kW	Seasonal space heating energy efficiency %	For space heating, annual energy consumption kWh				
		-															
	KHPM-BI 6 DVR2	A+++	38	56	5.5	191.0	2351	4.6	159.5	2769	5.5	255.4	1146				
KHP-BI 4 DVR2	KHP-BI-10VR2L	A+++	38	56	5.5	191.0	2351	4.6	159.5	2769	5.5	255.4	1146				
	KHP-BI-10VR2XL	A+++	38	56	5.5	191.0	2351	4.6	159.5	2769	5.5	255.4	1146				
	KHPM-BI 6 DVR2	A+++	38	58	6.8	195.0	2845	5.6	165.3	3300	6.1	259.8	1244				
KHP-BI 6 DVR2	KHP-BI-10VR2L	A+++	38	58	6.8	195.0	2845	5.6	165.3	3300	6.1	259.8	1244				
	KHP-BI-10VR2XL	A+++	38	58	6.8	195.0	2845	5.6	165.3	3300	6.1	259.8	1244				
	KHPM-BI 10 DVR2	A+++	42	59	8.1	205.6	3218	7.0	170.0	3976	8.1	276.6	1551				
KHP-BI 8 DVR2	KHP-BI-10VR2L	A+++	40	59	8.1	205.6	3218	7.0	170.0	3976	8.1	276.6	1551				
	KHP-BI-10VR2XL	A+++	40	59	8.1	205.6	3218	7.0	170.0	3976	8.1	276.6	1551				
	KHPM-BI 10 DVR2	A+++	42	60	9.2	204.8	3644	7.7	169.8	4423	8.6	280.5	1617				
KHP-BI 10 DVR2	KHP-BI-10VR2L	A+++	40	60	9.2	204.8	3644	7.7	169.8	4423	8.6	280.5	1617				
	KHP-BI-10VR2XL	A+++	40	60	9.2	204.8	3644	7.7	169.8	4423	8.6	280.5	1617				
	KHPM-BI 16 DVR2	A+++	43	64	12.0	189.4	5152	11.4	160.2	6870	11.1	256.1	2292				
KHP-BI 12 DVR2	KHP-BI-16VR2L	A+++	42	64	12.0	189.4	5152	11.4	160.2	6870	11.1	256.1	2292				
	KHPM-BI 16 DVR2	A+++	43	64	12.0	189.3	5153	11.4	160.2	6871	11.1	255.6	2296				
KHP-BI 12 DTR2	KHP-BI-16VR2XL	A+++	42	64	12.0	189.3	5153	11.4	160.2	6871	11.1	255.6	2296				
	KHPM-BI 16 DVR2	A+++	43	65	13.7	185.7	6012	12.6	159.6	7667	12.1	260.3	2457				
KHP-BI 14 DVR2	KHP-BI-16VR2XL	A+++	44	65	13.7	185.7	6012	12.6	159.6	7667	12.1	260.3	2457				
	KHPM-BI 16 DVR2	A+++	43	65	13.7	185.6	6013	12.6	159.6	7667	12.1	259.8	2462				
KHP-BI 14 DTR2	KHP-BI-16VR2XL	A+++	44	65	13.7	185.6	6013	12.6	159.6	7667	12.1	259.8	2462				
	KHPM-BI 16 DVR2	A+++	43	68	15.2	181.7	6804	13.7	157.8	8431	13.1	248.5	2781				
KHP-BI 16 DVR2	KHP-BI-16VR2XL	A+++	44	68	15.2	181.7	6804	13.7	157.8	8431	13.1	248.5	2781				
	KHPM-BI 16 DVR2	A+++	43	68	15.2	181.6	6805	13.7	157.8	8431	13.1	248.1	2786				
KHP-BI 16 DTR2	KHP-BI-16VR2XL	A+++	44	68	15.2	181.6	6805	13.7	157.8	8431	13.1	248.1	2786				

Product fiche 1

Heat pump space heater		Outdoor		KHP-BI 4 DVR2	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2	
		Indoor		KHPM-BI 6 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 6 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 10 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 10 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 16 DVR2 KHP-BI-16VR2L KHP-BI-16VR2XL	
Indoor unit sound power (*)		dB		38 ^{a)} /38 ^{b)}	38 ^{a)} /38 ^{b)}	42 ^{a)} /40 ^{b)}	42 ^{a)} /40 ^{b)}	43 ^{a)} /42 ^{b)}	
Outdoor unit sound power (*)	Average climate low temperature application	dB		56	58	59	60	64	
	Average climate medium temperature application	dB		56	58	59	60	64	
Capacity of the back-up heater integrated in the unit	Psup back-up heater (optional)	[kW]		3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	
Space heating	Energy efficiency class 35°C (Low temp. app.)	-		A+++	A+++	A+++	A+++	A+++	
Space heating	Energy efficiency class 55°C (Medium temp. app.)	-		A++	A++	A++	A++	A++	
Average climate (Design temperature = -10°C)									
Space heating 35°C	Prated (declared heating capacity) @ -10°C	[kW]		5.5	6.8	8.1	9.2	12.0	
	Seasonal space heating efficiency (ηs)	[%]		191.0	195.0	205.6	204.8	189.4	
	Annual energy consumption	[kWh]		2,351	2,845	3,218	3,644	5,152	
Space heating 55°C	Prated (declared heating capacity) @ -10°C	[kW]		4.4	5.7	6.6	7.7	11.6	
	Seasonal space heating efficiency (ηs)	[%]		129.5	137.9	131.5	136.6	135.1	
	Annual energy consumption	[kWh]		2,744	3,345	4,056	4,539	6,927	
Part load conditions space heating average climate low temperature application									
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]		4.88	6.03	7.18	8.10	10.61	
	COPd (declared COP)	-		3.19	3.09	3.35	3.23	2.88	
	Cdh(degradation coefficient)	-		0.90	0.90	0.90	0.90	0.90	
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]		3.05	3.88	4.65	5.18	6.69	
	COPd (declared COP)	-		4.78	4.85	5.09	5.01	4.65	
	Cdh(degradation coefficient)	-		0.90	0.90	0.90	0.90	0.90	
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]		1.93	2.39	2.90	3.32	4.44	
	COPd (declared COP)	-		6.13	6.63	6.82	7.08	6.62	
	Cdh(degradation coefficient)	-		0.90	0.90	0.90	0.90	0.90	
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]		1.48	1.39	1.63	1.65	3.74	
	COPd (declared COP)	-		8.05	7.93	8.35	8.58	8.47	
	Cdh(degradation coefficient)	-		0.90	0.90	0.90	0.90	0.90	
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]		-10.00	-10.00	-10.00	-10.00	-10.00	
	Pdh (declared heating capacity)	[kW]		4.41	5.36	6.44	7.40	10.74	
	COPd (declared COP)	-		2.86	2.76	3.04	2.96	2.77	
	WTOL (Heating water Operation Limit)	[°C]		65	65	65	65	65	

Note :

a) represents the hydraulic module series ;

b) represents the m-thermal tank series ;

Product fiche 2

Heat pump space heater		Outdoor					Indoor							
		KHP-BI 4 DVR2 KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 6 DVR2 KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 8 DVR2 KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 10 DVR2 KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 12 DVR2 KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor		
(F) Tivalenttemperature	Tbiv	-7.00	-7.00	-7.00	-7.00	-7.00	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	4.88	6.03	7.18	8.10	10.61	[kW]	4.88	6.03	7.18	8.10	10.61	10.61	10.61
Supplementary capacity at P_design	COPd (declared COP)	3.19	3.09	3.35	3.23	2.88	-	3.19	3.09	3.35	3.23	2.88	2.88	
	Psup (@Tdesign: -10°C)	1.11	1.45	1.68	1.76	1.26	[kW]	1.11	1.45	1.68	1.76	1.26	1.26	
Part load conditions space heating average climate medium temperature application														
(A) condition (-7°C)	Pdh (declared heating capacity)	3.89	5.04	5.84	6.78	10.24	[kW]	3.89	5.04	5.84	6.78	10.24	10.24	
	COPd (declared COP)	2.17	2.17	2.16	2.24	2.01	-	2.17	2.17	2.16	2.24	2.01	2.01	
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90	-	0.90	0.90	0.90	0.90	0.90	0.90	
(B) condition (2°C)	Pdh (declared heating capacity)	2.38	3.12	3.75	4.28	6.52	[kW]	2.38	3.12	3.75	4.28	6.52	6.52	
	COPd (declared COP)	3.30	3.51	3.30	3.42	3.44	-	3.30	3.51	3.30	3.42	3.44	3.44	
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90	-	0.90	0.90	0.90	0.90	0.90	0.90	
(C) condition (7°C)	Pdh (declared heating capacity)	2.94	2.08	2.42	2.77	4.36	[kW]	2.94	2.08	2.42	2.77	4.36	4.36	
	COPd (declared COP)	4.41	4.54	4.34	4.52	4.59	-	4.41	4.54	4.34	4.52	4.59	4.59	
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90	-	0.90	0.90	0.90	0.90	0.90	0.90	
(D) condition (12°C)	Pdh (declared heating capacity)	1.32	1.28	1.39	1.58	3.29	[kW]	1.32	1.28	1.39	1.58	3.29	3.29	
	COPd (declared COP)	5.66	5.59	5.33	5.68	6.05	-	5.66	5.59	5.33	5.68	6.05	6.05	
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90	-	0.90	0.90	0.90	0.90	0.90	0.90	
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	-10.00	-10.00	-10.00	-10.00	-10.00	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	
	Pdh (declared heating capacity)	3.42	4.52	4.90	5.38	9.10	[kW]	3.42	4.52	4.90	5.38	9.10	9.10	
	COPd (declared COP)	1.91	1.91	1.84	1.83	1.79	-	1.91	1.91	1.84	1.83	1.79	1.79	
	WTOL (Heating water Operation Limit)	65	65	65	65	65	[°C]	65	65	65	65	65	65	
	Tbiv	-7.00	-7.00	-7.00	-7.00	-7.00	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	
(F) Tivalenttemperature	Pdh (declared heating capacity)	3.89	5.04	5.84	6.78	10.24	[kW]	3.89	5.04	5.84	6.78	10.24	10.24	
	COPd (declared COP)	2.17	2.17	2.16	2.24	2.01	-	2.17	2.17	2.16	2.24	2.01	2.01	
	Psup (@Tdesign: -10°C)	1.11	1.45	1.68	1.76	1.26	[kW]	1.11	1.45	1.68	1.76	1.26	1.26	
Colder climate (Design temperature = -22°C)														
Space heating 35°C	Pdh (declared heating capacity) @ -22°C	4.6	5.6	7.0	7.7	11.4	[kW]	4.6	5.6	7.0	7.7	11.4	11.4	
	Seasonal space heating efficiency (ns)	159.5	165.3	170.0	169.8	160.2	[%]	159.5	165.3	170.0	169.8	160.2	160.2	
	Annual energy consumption	2,769	3,300	3,976	4,423	6,870	[kWh]	2,769	3,300	3,976	4,423	6,870	6,870	

Product fiche 3

Heat pump space heater

		KHP-BI 4 DVR2	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2
		KHPM-BI 6 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 6 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 10 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 10 DVR2 KHP-BI-10VR2L KHP-BI-10VR2XL	KHPM-BI 16 DVR2 KHP-BI-16VR2XL
Outdoor	Indoor	[kW]	[kW]	[kW]	[kW]	[kW]
Space heating 55°C	Prated (declared heating capacity) @ -22°C	3.4	4.3	5.8	6.7	10.3
	Seasonal space heating efficiency (ηs)	102.1	111.1	112.0	116.4	117.8
	Annual energy consumption	3,159	3,681	4,950	5,540	8,419
Part load conditions space heating colder climate low temperature application						
(A) condition (-7°C)	Pdh (declared heating capacity)	2.75	3.42	4.46	4.83	7.05
	COPd (declared COP)	3.49	3.59	3.66	3.60	3.48
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	1.77	2.06	2.69	2.94	4.67
	COPd (declared COP)	4.95	5.21	5.20	5.26	4.96
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	1.17	1.46	1.65	1.92	3.14
	COPd (declared COP)	5.53	6.24	6.53	7.08	6.10
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	1.43	1.44	1.65	1.65	3.57
	COPd (declared COP)	7.67	7.66	7.96	7.96	7.87
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	-22.00	-22.00	-22.00	-22.00	-22.00
	Pdh (declared heating capacity)	2.80	3.48	4.06	4.62	7.01
	COPd (declared COP)	1.97	1.96	1.95	1.97	1.98
(F) TbiValent temperature	WTOL (Heating water Operation Limit)	65	65	65	65	65
	Tblv	-15.00	-15.00	-15.00	-15.00	-15.00
	Pdh (declared heating capacity)	3.72	4.59	5.69	6.32	9.28
Supplementary capacity at P_design	COPd (declared COP)	2.57	2.53	2.83	2.64	2.59
	Psup (@Tdesign: -22°C)	1.76	2.15	2.91	3.08	4.40
Part load conditions space heating colder climate medium temperature application						
(A) condition (-7°C)	Pdh (declared heating capacity)	2.13	2.70	3.86	4.27	6.63
	COPd (declared COP)	2.32	2.46	2.48	2.54	2.63
	Cdh(degradation coefficient)	0.90	0.90	0.90	0.90	0.90

Product fiche 4

Heat pump space heater		Outdoor						
		KHP-BI 4 DVR2 KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 6 DVR2 KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 8 DVR2 KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 10 DVR2 KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHP-BI 12 DVR2		
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	1.28	1.60	2.21	2.57	4.06	
	COPd (declared COP)	-	2.99	3.36	3.35	3.51	3.60	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	
	Pdh (declared heating capacity)	[kW]	1.01	1.02	1.44	1.65	2.78	
(C) condition (7°C)	COPd (declared COP)	-	3.86	3.94	4.11	4.37	4.54	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	
	Pdh (declared heating capacity)	[kW]	1.36	1.37	1.46	1.47	3.33	
	COPd (declared COP)	-	6.28	6.35	5.92	5.96	6.25	
(D) condition (12°C)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	
	Toi (temperature operating limit)	[°C]	-22.00	-22.00	-22.00	-22.00	-22.00	
	Pdh (declared heating capacity)	[kW]	1.64	2.09	2.80	2.80	4.19	
	COPd (declared COP)	-	1.02	1.13	1.22	1.22	1.13	
(E) Toi (temperature operating limit)	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65	
	Tbiv	[°C]	-15.00	-15.00	-15.00	-15.00	-15.00	
	Pdh (declared heating capacity)	[kW]	2.74	3.47	4.71	5.47	8.41	
	COPd (declared COP)	-	1.74	1.86	1.90	2.00	1.84	
Supplementary capacity at P_design	Psup (@Tdesignh: -22°C)	[kW]	1.72	2.17	2.97	3.91	6.12	
Warmer climate (Design temperature = 2°C)								
Space heating 35°C	Prated (declared heating capacity) @ 2°C	[kW]	5.5	6.1	8.1	8.6	11.1	
	Seasonal space heating efficiency (ns)	[%]	255.4	259.8	276.6	280.5	256.1	
	Annual energy consumption	[kWh]	1,146	1,244	1,551	1,617	2,292	
Space heating 55°C	Prated (declared heating capacity) @ 2°C	[kW]	5.0	5.1	7.6	8.6	12.5	
	Seasonal space heating efficiency (ns)	[%]	162.4	164.7	175.8	180.3	174.0	
	Annual energy consumption	[kWh]	1,621	1,640	2,259	2,516	3,776	
Part load conditions space heating warmer climate low temperature application								
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	5.34	5.93	7.56	8.44	11.26	
	COPd (declared COP)	-	3.94	3.91	3.98	3.84	3.59	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	3.56	3.93	5.22	5.52	7.14	
	COPd (declared COP)	-	5.92	5.89	6.26	6.18	5.87	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	

Product fiche 5

Heat pump space heater		Outdoor	KHP-BI 4 DVR2	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	1.63	1.79	2.62	2.62	3.55
	COPd (declared COP)	-	7.91	8.20	9.23	9.04	7.94
(E) Tol (temperature operating limit)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
	Tol (temperature operating limit)	[°C]	2.00	2.00	2.00	2.00	2.00
(F) Tivalent temperature	Pdh (declared heating capacity)	[kW]	5.34	5.93	7.56	8.44	11.26
	COPd (declared COP)	-	3.94	3.91	3.98	3.84	3.59
Supplementary capacity at P_design	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65
	Tbiv	[°C]	7.00	7.00	7.00	7.00	7.00
Part load conditions space heating warmer climate medium temperature application	Pdh (declared heating capacity)	[kW]	3.56	3.93	5.22	5.52	7.14
	COPd (declared COP)	-	5.92	5.89	6.26	6.18	5.87
(B) condition (2°C)	Psup (@Tdesignh: 2°C)	[kW]	0.18	0.18	0.55	0.14	0.00
	Pdh (declared heating capacity)	[kW]	4.83	5.02	7.55	8.06	12.07
(C) condition (7°C)	COPd (declared COP)	-	2.51	2.48	2.59	2.59	2.31
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	3.22	3.31	4.86	5.54	8.04
	COPd (declared COP)	-	3.68	3.67	3.92	4.10	3.86
(E) Tol (temperature operating limit)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
	Tol (temperature operating limit)	[°C]	1.47	1.59	2.31	2.53	3.75
(F) Tivalent temperature	Pdh (declared heating capacity)	[kW]	5.15	5.29	5.55	5.82	5.70
	COPd (declared COP)	-	0.90	0.90	0.90	0.90	0.90
Supplementary capacity at P_design	Tol (temperature operating limit)	[°C]	2.00	2.00	2.00	2.00	2.00
	Pdh (declared heating capacity)	[kW]	4.83	5.02	7.83	8.15	12.07
Part load conditions space heating warmer climate medium temperature application	COPd (declared COP)	-	2.51	2.48	2.66	2.61	2.31
	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65
(B) condition (2°C)	Tbiv	[°C]	7.00	7.00	7.00	7.00	7.00
	Pdh (declared heating capacity)	[kW]	3.22	3.31	4.86	5.54	8.04
(C) condition (7°C)	COPd (declared COP)	-	3.68	3.67	3.92	4.10	3.86
	Psup (@Tdesignh: 2°C)	[kW]	0.18	0.12	0.00	0.48	0.43

Product fiche 6

Heat pump space heater

		Outdoor	KHP-BI 4 DVR2	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No	No
	Brine-to-water heat pump	Y/N	No	No	No	No	No
	Low-temperature heat pump	Y/N	No	No	No	No	No
	Equipped with a supplementary heater	Y/N	Yes	Yes	Yes	Yes	Yes
	Heat pump combination heater	Y/N	Yes	Yes	Yes	Yes	Yes
	Rated airflow (outdoor)	[m³/h]	2770	2770	4030	4030	4060
	Rated water/brine flow (outdoor H/E)		/	/	/	/	/
	Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
	Poff (Power consumption Off mode)	[kW]	0.014	0.014	0.014	0.014	0.014
Pto (Power consumption Thermostat off mode)	[kW]	0.024	0.024	0.024	0.024	0.024	
Psb (Power consumption Standby mode)	[kW]	0.014	0.014	0.014	0.014	0.014	
PCK (Power crankcase heater model)	[kW]	0.000	0.000	0.000	0.000	0.000	
Qelec (Daily electricity consumption)	[kWh]	/	/	/	/	/	
Qfuel (Daily fuel consumption)	[kWh]	/	/	/	/	/	

Note:

Indoor unit type explanation:

Hydraulic module series

1) KHPM-BI 6 DVR2 includes the following type :

KHPM-BI 60/CGN8-B: without back-up heater.

KHPM-BI 6 DVR2: with 3kW back-up heater and 1-Phase Source.

2) KHPM-BI 10 DVR2 includes the following type :

KHPM-BI 100/CGN8-B: without back-up heater.

KHPM-BI 10 DVR2: with 3kW back-up heater and 1-Phase Source.

KHPM-BI 100/CDS90GN8-B: with 9kW back-up heater and 3-Phase Source.

3) KHPM-BI 16 DVR2 includes the following type :

KHPM-BI 160/CGN8-B: without back-up heater.

KHPM-BI 16 DVR2: with 3kW back-up heater and 1-Phase Source.

KHPM-BI 160/CDS90GN8-B: with 9kW back-up heater and 3-Phase Source.

M-thermal tank series

1) KHP-BI-10VR2L includes the following type :

KHP-BI-10VR2L: 190L tank with 3kW back-up heater and 1-Phase Source.

KHP-BI-100/190CD60GN8-B: 190L tank with 6kW back-up heater and 1-Phase Source.

KHP-BI-100/190CDS90GN8-B: 190L tank with 9kW back-up heater and 3-Phase Source.

2) KHP-BI-10VR2XL includes the following type :

KHP-BI-10VR2XL: 240L tank with 3kW back-up heater and 1-Phase Source.

KHP-BI-100/240CD60GN8-B: 240L tank with 6kW back-up heater and 1-Phase Source.

KHP-BI-100/240CDS90GN8-B: 240L tank with 9kW back-up heater and 3-Phase Source.

3) KHP-BI-16VR2XL includes the following type :

KHP-BI-16VR2XL: 240L tank with 3kW back-up heater and 1-Phase Source.

KHP-BI-160/240CD60GN8-B: 240L tank with 6kW back-up heater and 1-Phase Source.

KHP-BI-160/240CDS90GN8-B: 240L tank with 9kW back-up heater and 3-Phase Source.

Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.

Sound power measured according to the EN12102 under conditions of the EN14825.

Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

Technical parameters

Model(s):	Outdoor unit: KHP-BI 14 DTR2 Indoor unit: KHPI-BI 16 DVR2, KHPI-BI-16VR2XL
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	YES
Heat pump combination heater:	YES
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	135.6	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	Pdh	10.68	kW	Tj = -7°C	COPd	2.01	-
Tj = 2°C	Pdh	6.86	kW	Tj = 2°C	COPd	3.43	-
Tj = 7°C	Pdh	4.63	kW	Tj = 7°C	COPd	4.66	-
Tj = 12°C	Pdh	3.31	kW	Tj = 12°C	COPd	6.13	-
Tj = bivalent temperature	Pdh	10.68	kW	Tj = bivalent temperature	COPd	2.01	-
Tj = operating limit	Pdh	9.19	kW	Tj = operating limit	COPd	1.76	-
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cyc}	-	kW	Cycling interval efficiency	COP _{cyc}	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{off}	0.020	kW	Rated heat output (**)	P _{sup}	1.40	kW
Standby mode	P _{sb}	0.020	kW	Type of energy input	Electrical		
Thermostat-off mode	P _{to}	0.030	kW				
Crankcase heater mode	P _{ck}	0.000	kW				

Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m ³ /h
Sound power level, indoors/outdoors	LWA	43 ^a /65 44 ^b /65	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h
Annual energy consumption	Q _{HE}	7203	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	η_{wh}	123	%
Daily electricity consumption	Q _{elec}	6.35	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	1360	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	GD Midea Heating & Ventilating Equipment Co. Ltd (Penglai industry road, Beijiao, Shunde, Foshan, Guangdong, P.R China)						
<p>(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9. a) Represents : KHPM-BI 16 DVR2 b) Represents : KHPI-BI-16VR2XL</p>							

Technical parameters							
Model(s):	Outdoor unit: KHP-BI 14 DTR2 Indoor unit: KHPM-BI 16 DVR2, KHPI-BI-16VR2XL						
Air-to-water heat pump:	YES						
Water-to-water heat pump:	NO						
Brine-to-water heat pump:	NO						
Low-temperature heat pump:	NO						
Equipped with a supplementary heater:	YES						
Heat pump combination heater:	YES						
Declared climate condition:	COLDER						
Parameters are declared for medium-temperature application.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11.0	kW	Seasonal space heating energy efficiency	η_s	118.9	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	Pdh	6.89	kW	Tj = -7°C	COPd	2.66	-
Tj = 2°C	Pdh	4.32	kW	Tj = 2°C	COPd	3.66	-
Tj = 7°C	Pdh	3.06	kW	Tj = 7°C	COPd	4.72	-
Tj = 12°C	Pdh	3.33	kW	Tj = 12°C	COPd	6.25	-
Tj = bivalent temperature	Pdh	8.94	kW	Tj = bivalent temperature	COPd	1.79	-
Tj = operating limit	Pdh	4.20	kW	Tj = operating limit	COPd	1.13	-

For air-to-water heat pumps: Tj = -15°C	P _{dh}	-	kW	For air-to-water heat pumps: Tj = -15°C	COP _d	-	-
Bivalent temperature	T _{biv}	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cyh}	-	kW	Cycling interval efficiency	COP _{cyh}	-	-
Degradation co-efficient (**)	C _{dh}	0.9	--	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{off}	0.020	kW	Rated heat output (**)	P _{sup}	6.80	kW
Standby mode	P _{sb}	0.020	kW				
Thermostat-off mode	P _{to}	0.030	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{ck}	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m ³ /h
Sound power level, indoors/outdoors	LWA	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h
Annual energy consumption	Q _{HE}	8867	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	η _{wh}	92	%
Daily electricity consumption	Q _{elec}	8.49	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	1822	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	GD Midea Heating & Ventilating Equipment Co. Ltd (Penglai industry road, Beijiao, Shunde, Foshan, Guangdong, P.R China)						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output P _{rated} is equal to the design load for heating P _{designh} , and the rated heat output of a supplementary heater P _{sup} is equal to the supplementary capacity for heating sup(T _j).							
(**) If C _{dh} is not determined by measurement then the default degradation coefficient is C _{dh} = 0,9.							

Technical parameters	
Model(s):	Outdoor unit: KHP-BI 14 DTR2 Indoor unit: KHPM-BI 16 DVR2, KHPI-BI-16VR2XL
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	YES
Heat pump combination heater:	YES
Declared climate condition:	WARMER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.7	kW	Seasonal space heating energy efficiency	η_s	176.4	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	-	-
Tj = 2°C	Pdh	13.04	kW	Tj = 2°C	COPd	2.20	-
Tj = 7°C	Pdh	8.83	kW	Tj = 7°C	COPd	3.91	-
Tj = 12°C	Pdh	4.08	kW	Tj = 12°C	COPd	5.90	-
Tj = bivalent temperature	Pdh	8.83	kW	Tj = bivalent temperature	COPd	3.91	-
Tj = operating limit	Pdh	13.04	kW	Tj = operating limit	COPd	2.20	-
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C	COPd	-	-
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cyc}	-	kW	Cycling interval efficiency	COP _{cyc}	-	-
Degradation co-efficient (**)	Cdh	0.9	--	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{off}	0.020	kW	Rated heat output (**)	P _{sup}	0.66	kW
Standby mode	P _{sb}	0.020	kW	Type of energy input	Electrical		
Thermostat-off mode	P _{to}	0.030	kW				
Crankcase heater mode	P _{ck}	0.000	kW				
Other items							
Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m ³ /h
Sound power level, indoors/outdoors	LWA	-	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h
Annual energy consumption	Q _{HE}	4092	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	η_{wh}	153	%
Daily electricity consumption	Q _{elec}	5.12	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	1088	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	GD Midea Heating & Ventilating Equipment Co. Ltd (Penglai industry road, Beijiao, Shunde, Foshan, Guangdong, P.R China)						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.							

Information requirements for comfort chillers

Model(s):	Outdoor unit: KHP-BI 14 DTR2 Indoor unit: KHPM-BI 16 DVR2, KHPI-BI-16VR2XL						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.2	kW	Seasonal space cooling efficiency	$\eta_{s,c}$	190.3	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	12.19	kW	$T_j=+35^{\circ}\text{C}$	EER_d	2.46	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	9.41	kW	$T_j=+30^{\circ}\text{C}$	EER_d	3.85	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	6.16	kW	$T_j=+25^{\circ}\text{C}$	EER_d	5.80	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	2.63	kW	$T_j=+20^{\circ}\text{C}$	EER_d	6.74	-
Degradation coefficient for chillers(*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.020	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.010	kW	Standby mode	P_{SB}	0.020	kW
Other items							

Information requirements for comfort chillers

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4060	m ³ /h
Soundpowerlevel, indoors /outdoors	LWA	44/65	dB				
Emissions of nitrogen oxides(if applicable)	NO _x (**)	-	mg/kWh input GCV	For water /brine-to-water chillers:Ratedbrineor water flow rate, outdoor sideheatexchanger	-	-	m ³ /h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	GD Midea Heating & Ventilating Equipment Co. , Ltd. Penglai industry Road, Beijiao, Shunde, Foshan, Guangdong, 528311 P.R. China						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Model(s):	Outdoor unit: KHP-BI 14 DTR2 Indoor unit: KHPI-BI-16VR2XL
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	13.3	kW	Seasonal space cooling efficiency	η _{s,c}	270.9	%
Declared cooling capacity for part load at given outdoor temperature T _j				Declared energy efficiency ratio for part load at given outdoor temperature T _j			
T _j =+35°C	P _{dc}	13.30	kW	T _j =+35°C	EER _d	3.47	-
T _j =+30°C	P _{dc}	10.20	kW	T _j =+30°C	EER _d	5.26	-
T _j =+25°C	P _{dc}	6.57	kW	T _j =+25°C	EER _d	8.45	-
T _j =+20°C	P _{dc}	3.33	kW	T _j =+20°C	EER _d	10.07	-

Degradationcoefficient for chillers(*) C _{dc}	0.9	-					
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Information requirements for comfort chillers

Power consumption in modes other than "active mode"							
Off mode	P _{OFF}	0.020	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermosat-off mode	P _{TO}	0.010	kW	Standby mode	P _{SB}	0.020	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4060	m ³ /h
Soundpowerlevel, indoors /outdoors	LWA	44/64	dB				
Emissions of nitrogen oxides(ifapplicable)	NO _x (**)	-	mg/kWh input GCV	For water /brine-to-water chillers:Ratedbrineor water flow rate, outdoor sideheatexchanger	-	-	m ³ /h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	GD Midea Heating & Ventilating Equipment Co. , Ltd. Penglai industry Road, Beijiao, Shunde, Foshan, Guangdong, 528311 P.R. China						
(*) If C _{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Condition(°C)	Outdoor unit	Indoor unit	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 35/24 Water temperature: 12/7	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.70	1.36	3.45
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.00	2.33	3.00
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.40	2.19	3.38
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.20	2.48	3.30
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.60	4.22	2.75
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.70	4.98	2.55
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.00	5.71	2.45
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.60	4.22	2.75
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.70	4.98	2.55
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.00	5.71	2.45
Ambient Temperature: 35/24 Water temperature: 23/18	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.50	0.81	5.55
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.55	1.34	4.90
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.40	1.66	5.05

KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	10.00	2.08	4.80
KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.00	3.00	4.00
KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.50	3.75	3.60
KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.90	4.38	3.40
KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.00	3.00	4.00
KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.50	3.75	3.60
KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.90	4.38	3.40

Condition(°C)	Outdoor unit	Indoor unit	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 7/6 Water temperature: 30/35	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.25	0.82	5.20
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.20	1.24	5.00
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.30	1.60	5.20
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	10.00	2.00	5.00
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.10	2.44	4.95
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.50	3.09	4.70
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	16.00	3.56	4.50
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.10	2.44	4.95
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.50	3.09	4.70
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	16.00	3.56	4.50
Ambient Temperature: 2/1 Water temperature: 30/35	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.45	1.10	4.05

KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.50	1.39	3.95
KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.10	1.73	4.10
KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.20	2.02	4.05
KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	9.30	2.35	3.95
KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.40	3.12	3.65
KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.00	3.71	3.50
KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	9.30	2.35	3.95
KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.40	3.12	3.65
KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.00	3.71	3.50

Condition(°C)	Outdoor unit	Indoor unit	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: -7/-8 Water temperature: 30/35	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.80	1.52	3.15
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.10	2.00	3.05
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.10	2.18	3.25
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.25	2.62	3.15
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.00	3.33	3.00
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.00	4.29	2.80
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.30	4.93	2.70
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.00	3.33	3.00
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.00	4.29	2.80

	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.30	4.93	2.70
Ambient Temperature: 7/6 Water temperature: 40/45	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.35	1.14	3.80
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.35	1.69	3.75
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.20	2.08	3.95
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	10.00	2.63	3.80
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.30	3.24	3.80
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.20	3.89	3.65
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	16.00	4.44	3.60
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.30	3.24	3.80
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	14.20	3.89	3.65
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	16.00	4.44	3.60

Condition(°C)	Outdoor unit	Indoor unit	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 2/1 Water temperature: 40/45	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.10	1.70	3.00
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.80	1.93	3.00
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.40	2.28	3.25
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.85	2.45	3.20
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.70	3.57	3.00
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.70	4.09	2.86
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.80	4.49	2.85

	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.70	3.57	3.00
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.70	4.09	2.86
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.80	4.49	2.85
Ambient Temperature: -7/-8 Water temperature: 40/45	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.30	1.83	2.35
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.40	2.25	2.40
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.60	2.59	2.55
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.35	2.88	2.55
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.20	4.25	2.40
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.80	5.02	2.35
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.90	5.78	2.23
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.20	4.25	2.40
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.80	5.02	2.35
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.90	5.78	2.23

Condition(°C)	Outdoor unit	Indoor unit	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 7/6 Water temperature: 47/55	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.40	1.49	2.95
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.00	2.00	3.00
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.50	2.36	3.18
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	9.50	3.06	3.10
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.00	3.87	3.10

	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.80	4.60	3.00
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	16.00	5.52	2.90
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.00	3.87	3.10
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.80	4.60	3.00
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	16.00	5.52	2.90
Ambient Temperature: 2/1 Water temperature: 47/55	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.10	2.08	2.45
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.65	2.31	2.45
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	7.10	2.73	2.60
	KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	8.10	3.16	2.56
	KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.40	4.47	2.55
	KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.40	5.06	2.45
	KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.40	5.58	2.40
	KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.40	4.47	2.55
	KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.80	4.82	2.45
	KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	13.40	5.58	2.40
Condition(°C)	Outdoor unit	Indoor unit	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: -7/-8 Water temperature: 47/55	KHP-BI 4 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	4.00	2.05	1.95
	KHP-BI 6 DVR2	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	5.15	2.58	2.00
	KHP-BI 8 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.15	3.00	2.05

KHP-BI 10 DVR2	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	6.85	3.43	2.00
KHP-BI 12 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.00	4.88	2.05
KHP-BI 14 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.00	5.37	2.05
KHP-BI 16 DVR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.50	6.19	2.02
KHP-BI 12 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	10.00	4.88	2.05
KHP-BI 14 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	11.00	5.37	2.05
KHP-BI 16 DTR2	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	12.50	6.19	2.02