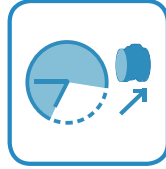
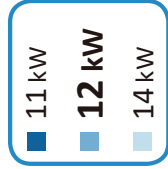
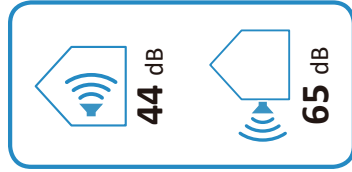




KHP-BI 14 DVR2  
KHPI-BI-16VR2XL



2019

811/2013



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KAYSUN  
AQUANTIA

KHP-BI 14 DVR2  
KHPI-BI-16VR2XL



55°C

35°C

A<sup>+++</sup>

A<sup>++</sup>

A<sup>+</sup>

A

B

C

D

A<sup>+++</sup>

A<sup>++</sup>



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-I-BI-10VR2XL B	KHP-BI 12 DVR2 KHP-I-BI-16VR2XL B	KHP-BI 12 DTR2 KHP-I-BI-16VR2XL B	KHP-BI 14 DVR2 KHP-I-BI-16VR2XL B	KHP-BI 16 DVR2 KHP-I-BI-16VR2XL B	KHP-BI 16 DTR2 KHP-I-BI-16VR2XL B
Indoor unit sound power(*)		Indoor						
Outdoor unit sound power(*)		dB	40	42	42	44	44	44
		dB	60	64	64	65	68	68
Water heating	Declared load profile	-	XL	XL	XL	XL	XL	XL
	Energy efficiency class	-	A+	A+	A+	A+	A+	A+
	Energy efficiency class at 55°C (High temp. app.)	-	A++	A++	A++	A++	A++	A++
Average climate								
Water heating	Water heating energy efficiency ( $\eta_{wh}$ )	[%]	137	123	123	123	123	123
	Annual electricity consumption (AEC)	[kWh]	1218	1360	1360	1360	1360	1360
	$P_{rated}$ (declared heating capacity)@-10°C	[kW]	7.7	11.6	11.6	12.1	13.0	13.0
	Seasonal space heating efficiency( $\eta_s$ )	[%]	136.6	135.1	135.1	135.6	133.3	133.2
Annual energy consumption		[kWh]	4539	6927	6928	7202	7895	7896
Off-peak operation function integrated in heat pump		Y/N	Y	Y	Y	Y	Y	Y
Colder climate								
Water heating	Water heating energy efficiency ( $\eta_{wh}$ )	[%]	111	92	92	92	92	92
	Annual energy consumption	[kWh]	1508	1822	1822	1822	1822	1822
	$P_{rated}$ (declared heating capacity)@-22°C	[kW]	6.71	10.31	10.3	10.96	11.8	11.8
	Seasonal space heating efficiency( $\eta_s$ )	[%]	116.4	117.8	117.7	118.9	121.8	121.8
Annual energy consumption		[kWh]	5540	8419	8420	8866	9309	9310
Warmer climate								
Water heating	Water heating energy efficiency ( $\eta_{wh}$ )	[%]	171	153	153	153	153	153
	Annual energy consumption	[kWh]	977	1088	1088	1088	1088	1088
	$P_{rated}$ (declared heating capacity)@2°C	[kW]	8.63	12.5	12.5	13.7	13.8	13.8
	Seasonal space heating efficiency( $\eta_s$ )	[%]	180.3	174.0	173.8	176.5	176.1	175.9
Annual energy consumption		[kWh]	2516	3776	3780	4088	4112	4116
Ecodesign technical data								
Product description	Air-to-water heat pump	Y/N	Y	Y	Y	Y	Y	Y
	Water-to-water heat pump	Y/N	N	N	N	N	N	N
	Brine-to-water heat pump	Y/N	N	N	N	N	N	N
	Low-temperature heat pump	Y/N	N	N	N	N	N	N
	Equipped with a supplementary heater	Y/N	Y	Y	Y	Y	Y	Y
	Heat pump combination heater	Y/N	Y	Y	Y	Y	Y	Y
Air-to-water unit	Rated airflow (outdoor)	[m³/h]	4030	4060	4060	4060	4650	4650
Brine/water-to-water heat pump	Rated brine/water flow (outdoor H/E)	[m³/h]	-	-	-	-	-	-

Heat pump combination heater													
	Outdoor	KHP-BI-10 DVR2		KHP-BI-12 DVR2		KHP-BI-14 DVR2		KHP-BI-14 DTR2		KHP-BI-16 DVR2		KHP-BI-16 DTR2	
		KHP-BI-10VR2XL B		KHP-BI-16VR2XL B		KHP-BI-16VR2XL B		KHP-BI-16VR2XL B		KHP-BI-16VR2XL B		KHP-BI-16VR2XL B	
Other	Capacity control	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	P <sub>off</sub> (Power consumption Off mode)	[kW]	0.014	0.014	0.014	0.020	0.020	0.014	0.020	0.014	0.014	0.020	0.020
	P <sub>b</sub> (Power consumption Thermostat off mode)	[kW]	0.024	0.024	0.024	0.030	0.030	0.024	0.030	0.024	0.024	0.030	0.030
	P <sub>sb</sub> (Power consumption standby mode)	[kW]	0.014	0.014	0.014	0.020	0.020	0.014	0.020	0.014	0.014	0.020	0.020
	P <sub>CK</sub> (Power crankcase heater model)	[kW]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Q <sub>elec</sub> (Daily electricity consumption)	[kWh]	5.67		6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35	6.35
Part load conditions space heating average climate	Q <sub>fuel</sub> (Daily fuel consumption)		-	-	-	-	-	-	-	-	-	-	-
	P <sub>th</sub> (declared heating capacity)	[kW]	6.78	10.24	10.24	10.24	10.68	10.68	10.68	11.52	11.52	11.52	11.52
	COP <sub>d</sub> (declared COP)	-	2.24	2.01	2.01	2.01	2.01	2.01	2.01	1.99	1.99	1.99	1.99
	C <sub>dh</sub> (declaradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	P <sub>th</sub> (declared heating capacity)	[kW]	4.28	6.52	6.52	6.52	6.86	6.86	6.86	7.18	7.18	7.18	7.18
	COP <sub>d</sub> (declared COP)	-	3.42	3.44	3.44	3.44	3.43	3.43	3.43	3.34	3.34	3.34	3.34
(A) condition (-7℃)	C <sub>dh</sub> (declaradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	P <sub>th</sub> (declared heating capacity)	[kW]	2.77	4.36	4.36	4.36	4.63	4.63	4.63	4.67	4.67	4.67	4.67
	COP <sub>d</sub> (declared COP)	-	4.52	4.59	4.59	4.59	4.66	4.66	4.66	4.61	4.61	4.61	4.61
	C <sub>dh</sub> (declaradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	P <sub>th</sub> (declared heating capacity)	[kW]	1.58	3.29	3.29	3.29	3.31	3.31	3.31	3.32	3.32	3.32	3.32
	COP <sub>d</sub> (declared COP)	-	5.68	6.05	6.05	6.05	6.13	6.13	6.13	6.07	6.07	6.07	6.07
(D) condition (12℃)	C <sub>dh</sub> (declaradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	T <sub>ol</sub> (Temperature Operating Limit)	[℃]	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
	P <sub>th</sub> (declared heating capacity)	[kW]	5.38	9.1	9.1	9.1	9.19	9.19	9.19	10.33	10.33	10.33	10.33
	COP <sub>d</sub> (declared COP)	-	1.83	1.79	1.79	1.79	1.76	1.76	1.76	1.80	1.80	1.80	1.80
	WTOL(Heating water Operation Limit)	[℃]	65	65	65	65	65	65	65	65	65	65	65
	T <sub>bw</sub>	[℃]	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7
(F) Tbivalent Temperature	P <sub>th</sub> (declared heating capacity)	[kW]	6.78	10.27	10.27	10.27	10.68	10.68	10.68	11.52	11.52	11.52	11.52
	COP <sub>d</sub> (declared COP)	-	2.24	2.01	2.01	2.01	2.01	2.01	2.01	1.99	1.99	1.99	1.99
	P <sub>sup</sub> back-up heater (@ T <sub>designh</sub> : -10℃)	[kW]	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9
	P <sub>sup</sub> (@ T <sub>designh</sub> : -10℃)	[kW]	2.28	2.5	2.5	2.5	2.91	2.91	2.91	2.67	2.67	2.67	2.67

For medium - temperature application														
Model		Energy efficiency class	Indoor unit sound power	Outdoor unit sound power	average climate			colder climate			warmer climate			
Outdoor unit	Indoor unit				Rated heat output	Seasonal space heating energy efficiency	For space heating, annual energy consumption	Rated heat output	Seasonal space heating energy efficiency	For space heating, annual energy consumption	Rated heat output	Seasonal space heating energy efficiency	For space heating, annual 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-16VR2XL	A++	42	64	11.6	135.1	6927	10.3	117.8	8419	12.5	174.1	3376	
	KHPM-BI 16 DVR2	A++	43	64	11.6	135.1	6928	10.3	117.7	8420	12.5	173.8	3780	
KHP-BI 14 DVR2	KHPI-BI-16VR2XL	A++	42	64	11.6	135.1	6928	10.3	117.7	8420	12.5	173.8	3780	
	KHPM-BI 16 DVR2	A++	43	65	12.1	135.6	7202	11.0	118.9	8866	13.7	176.5	4088	
	KHPI-BI-16VR2XL	A++	44	65	12.1	135.6	7202	11.0	118.9	8866	13.7	176.5	4088	
KHP-BI 14 DTR2	KHPM-BI 16 DVR2	A++	43	65	12.1	135.6	7203	11.0	118.9	8867	13.7	176.4	4092	
	KHPI-BI-16VR2XL	A++	44	65	12.1	135.6	7203	11.0	118.9	8867	13.7	176.4	4092	
	KHPM-BI 16 DVR2	A++	43	68	13.0	133.3	7895	11.8	121.8	9309	13.8	176.1	4112	
KHP-BI 16 DVR2	KHPI-BI-16VR2XL	A++	44	68	13.0	133.3	7895	11.8	121.8	9309	13.8	176.1	4112	
	KHPM-BI 16 DVR2	A++	43	68	13.0	133.2	7896	11.8	121.8	9310	13.8	175.9	4116	
	KHPI-BI-16VR2XL	A++	44	68	13.0	133.2	7896	11.8	121.8	9310	13.8	175.9	4116	

Model		For low - 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, annual energy consumption	Rated heat output	Seasonal space heating energy efficiency	For space heating, annual energy consumption	Rated heat output	Seasonal space heating energy efficiency	For space heating, annual energy consumption
		-	dB	dB	kW	%	kWh	kW	%	kWh	kW	%	kWh
KHP-BI 4 DVR2	KHPM-BI 6 DVR2	A+++	38	56	5.5	191.0	2351	4.6	159.5	2769	5.5	255.4	1146
	KHP-I-BI-10VR2L	A+++	38	56	5.5	191.0	2351	4.6	159.5	2769	5.5	255.4	1146
	KHP-I-BI-10VR2XL	A+++	38	56	5.5	191.0	2351	4.6	159.5	2769	5.5	255.4	1146
KHP-BI 6 DVR2	KHPM-BI 6 DVR2	A+++	38	58	6.8	195.0	2845	5.6	165.3	3300	6.1	259.8	1244
	KHP-I-BI-10VR2L	A+++	38	58	6.8	195.0	2845	5.6	165.3	3300	6.1	259.8	1244
	KHP-I-BI-10VR2XL	A+++	38	58	6.8	195.0	2845	5.6	165.3	3300	6.1	259.8	1244
KHP-BI 8 DVR2	KHPM-BI 10 DVR2	A+++	42	59	8.1	205.6	3218	7.0	170.0	3976	8.1	276.6	1551
	KHP-I-BI-10VR2L	A+++	40	59	8.1	205.6	3218	7.0	170.0	3976	8.1	276.6	1551
	KHP-I-BI-10VR2XL	A+++	40	59	8.1	205.6	3218	7.0	170.0	3976	8.1	276.6	1551
KHP-BI 10 DVR2	KHPM-BI 10 DVR2	A+++	42	60	9.2	204.8	3644	7.7	169.8	4423	8.6	280.5	1617
	KHP-I-BI-10VR2L	A+++	40	60	9.2	204.8	3644	7.7	169.8	4423	8.6	280.5	1617
	KHP-I-BI-10VR2XL	A+++	40	60	9.2	204.8	3644	7.7	169.8	4423	8.6	280.5	1617
KHP-BI 12 DVR2	KHPM-BI 16 DVR2	A+++	43	64	12.0	189.4	5152	11.4	160.2	6870	11.1	256.1	2292
	KHP-I-BI-16VR2XL	A+++	42	64	12.0	189.4	5152	11.4	160.2	6870	11.1	256.1	2292
KHP-BI 12 DTR2	KHPM-BI 16 DVR2	A+++	43	64	12.0	189.3	5153	11.4	160.2	6871	11.1	255.6	2296
	KHP-I-BI-16VR2XL	A+++	42	64	12.0	189.3	5153	11.4	160.2	6871	11.1	255.6	2296
KHP-BI 14 DVR2	KHPM-BI 16 DVR2	A+++	43	65	13.7	185.7	6012	12.6	159.6	7667	12.1	260.3	2457
	KHP-I-BI-16VR2XL	A+++	44	65	13.7	185.7	6012	12.6	159.6	7667	12.1	260.3	2457
KHP-BI 14 DTR2	KHPM-BI 16 DVR2	A+++	43	65	13.7	185.6	6013	12.6	159.6	7667	12.1	259.8	2462
	KHP-I-BI-16VR2XL	A+++	44	65	13.7	185.6	6013	12.6	159.6	7667	12.1	259.8	2462
KHP-BI 16 DVR2	KHPM-BI 16 DVR2	A+++	43	68	15.2	181.7	6804	13.7	157.8	8431	13.1	248.5	2781
	KHP-I-BI-16VR2XL	A+++	44	68	15.2	181.7	6804	13.7	157.8	8431	13.1	248.5	2781
KHP-BI 16 DTR2	KHPM-BI 16 DVR2	A+++	43	68	15.2	181.6	6805	13.7	157.8	8431	13.1	248.1	2786
	KHP-I-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									
Indoor unit sound power (*)		Outdoor	KHP-BI 4 DVR2	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2		
Outdoor unit sound power (*)	Average climate low temperature application	Indoor	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL		
	Average climate medium temperature application	dB	38 <sup>a)</sup> /38 <sup>b)</sup>	38 <sup>a)</sup> /38 <sup>b)</sup>	42 <sup>a)</sup> /40 <sup>b)</sup>	42 <sup>a)</sup> /40 <sup>b)</sup>	43 <sup>a)</sup> /42 <sup>b)</sup>		
Capacity of the back-up heater integrated in the unit	Average climate low temperature application	dB	56	58	59	60	64		
	Average climate medium temperature application	dB	56	58	59	60	64		
Space heating	Psup back-up heater (optional)	[kW]	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9		
	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

(F) TbiValent temperature	Tblv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00
	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
	Psup (@Tdesignh: -10°C)	[kW]	1.11	1.45	1.68	1.76	1.26
Part load conditions space heating average climate medium temperature application							
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	3.89	5.04	5.84	6.78	10.24
	COPd (declared COP)	-	2.17	2.17	2.16	2.24	2.01
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	2.38	3.12	3.75	4.28	6.52
	COPd (declared COP)	-	3.30	3.51	3.30	3.42	3.44
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.94	2.08	2.42	2.77	4.36
	COPd (declared COP)	-	4.41	4.54	4.34	4.52	4.59
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	1.32	1.28	1.39	1.58	3.29
	COPd (declared COP)	-	5.66	5.59	5.33	5.68	6.05
	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]	3.42	4.52	4.90	5.38	9.10
	COPd (declared COP)	-	1.91	1.91	1.84	1.83	1.79
(F) TbiValent temperature	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65
	Tblv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	3.89	5.04	5.84	6.78	10.24
Supplementary capacity at P_design	COPd (declared COP)	-	2.17	2.17	2.16	2.24	2.01
	Psup (@Tdesignh: -10°C)	[kW]	0.98	1.18	1.69	2.28	2.50
	Colder climate (Design temperature = -22°C)						
Space heating 35°C	Prated (declared heating capacity) @ -22°C	[kW]	4.6	5.6	7.0	7.7	11.4
	Seasonal space heating efficiency (ns)	[%]	159.5	165.3	170.0	169.8	160.2
	Annual energy consumption	[kWh]	2,769	3,300	3,976	4,423	6,870



Product fiche 3

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-16VR2XL					
Space heating 55°C	Prated (declared heating capacity) @ -22°C	[kW]	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	[kW/h]	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)	[kW]	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)	[kW]	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)	[kW]	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)	[kW]	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)	[°C]	-22.00	-22.00	-22.00	-22.00	-22.00					
	Pdh (declared heating capacity)	[kW]	2.80	3.48	4.06	4.62	7.01					
	COPd (declared COP)	-	1.97	1.96	1.95	1.97	1.98					
	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65					
(F) TbiValent temperature	TbiV	[°C]	-15.00	-15.00	-15.00	-15.00	-15.00					
	Pdh (declared heating capacity)	[kW]	3.72	4.59	5.69	6.32	9.28					
	COPd (declared COP)	-	2.57	2.53	2.83	2.64	2.59					
	Psup (@Tdesignh: -22°C)	[kW]	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)	[kW]	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	KHP-BI 6 DVR2	KHP-BI 8 DVR2	KHP-BI 10 DVR2	KHP-BI 12 DVR2
		Indoor	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL
(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
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	1.01	1.02	1.44	1.65	2.78
	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
(D) condition (12°C)	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
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(E) ToI (temperature operating limit)	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
(F) TbiValent temperature	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
Supplementary capacity at P_design	COPd (declared COP)	-	1.74	1.86	1.90	2.00	1.84
	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 (ηs)	[%]	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 (ηs)	[%]	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 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
(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
	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
(E) Tol (temperature operating limit)	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
	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65
	Tblv	[°C]	7.00	7.00	7.00	7.00	7.00
(F) TbiValent temperature	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
	Psup (@Tdesignh: 2°C)	[kW]	0.18	0.18	0.55	0.14	0.00
Part load conditions space heating warmer climate medium temperature application							
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	4.83	5.02	7.55	8.06	12.07
	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
	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
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	1.47	1.59	2.31	2.53	3.75
	COPd (declared COP)	-	5.15	5.29	5.55	5.82	5.70
(D) condition (12°C)	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
	Pdh (declared heating capacity)	[kW]	4.83	5.02	7.83	8.15	12.07
	COPd (declared COP)	-	2.51	2.48	2.66	2.61	2.31
(E) Tol (temperature operating limit)	WTOL (Heating water Operation Limit)	[°C]	65	65	65	65	65
	Tblv	[°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
	COPd (declared COP)	-	3.68	3.67	3.92	4.10	3.86
Supplementary capacity at P_design	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						Indoor	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 6 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 10 DVR2 KHPI-BI-10VR2L KHPI-BI-10VR2XL	KHPM-BI 16 DVR2 KHPI-BI-16VR2XL	
							Y/N	Yes	Yes	Yes	Yes	
							Y/N	No	No	No	No	
							Y/N	No	No	No	No	
							Y/N	No	No	No	No	
							Y/N	Yes	Yes	Yes	Yes	
Other	Air to water unit						Y/N	Yes	Yes	Yes	Yes	
							Y/N	Yes	Yes	Yes	Yes	
							[m³/h]	2770	2770	4030	4030	
								/	/	/	/	
							-	Inverter	Inverter	Inverter	Inverter	
							[kW]	0.014	0.014	0.014	0.014	
								0.024	0.024	0.024	0.024	
								0.014	0.014	0.014	0.014	
								0.000	0.000	0.000	0.000	
								/	/	/	/	
								/	/	/	/	
								/	/	/	/	

**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) KHPI-BI-10VR2L includes the following type :  
KHPI-BI-10VR2L : 190L tank with 3kW back-up heater and 1-Phase Source.  
KHPI-BI-100/190CD60GN8-B : 190L tank with 6kW back-up heater and 1-Phase Source.  
KHPI-BI-100/190CDS90GN8-B : 190L tank with 9kW back-up heater and 3-Phase Source.  
2) KHPI-BI-10VR2XL includes the following type :  
KHPI-BI-10VR2XL : 240L tank with 3kW back-up heater and 1-Phase Source.  
KHPI-BI-100/240CD60GN8-B : 240L tank with 6kW back-up heater and 1-Phase Source.  
KHPI-BI-100/240CDS90GN8-B : 240L tank with 9kW back-up heater and 3-Phase Source.  
3) KHPI-BI-16VR2XL includes the following type :  
KHPI-BI-16VR2XL : 240L tank with 3kW back-up heater and 1-Phase Source.  
KHPI-BI-160/240CD60GN8-B : 240L tank with 6kW back-up heater and 1-Phase Source.  
KHPI-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 DVR2 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:		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		ηs	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		Pcych	-	kW	Cycling interval efficiency		COPcyc	-	-		
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		Poff	0.014	kW	Rated heat output (**)		Psup	1.40	kW		
Standby mode		Psb	0.014	kW							
Thermostat-off mode		Pto	0.024	kW	Type of energy input		Electrical				
Crankcase heater mode		Pck	0.000	kW							
Other items											
Capacity control		variable			For air-to-water heat pumps: Rated air flow rate, outdoors		-	4060	m³/h		
Sound power level, indoors/outdoors		LWA	43 <sup>a)</sup> /65 44 <sup>b)</sup> /65	dB	For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger		-	-	m³/h		
Annual energy consumption		QHE	7202	kWh							
For heat pump combination heater:											
Declared load profile		XL			Water heating energy efficiency		ηwh	123	%		
Daily electricity consumption		Qelec	6.35	kWh	Daily fuel consumption		Qfuel	-	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)									
(*) 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											

Technical parameters	
Model(s):	Outdoor unit: KHP-BI 14 DVR2 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		ηs	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		Pdh	-	kW	For air-to-water heat pumps: Tj = -15°C		COPd	-	-
Bivalent temperature		Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature		TOL	-22	°C
Cycling interval capacity for heating		Pcyc	-	kW	Cycling interval efficiency		COPcyc	-	-
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		Poff	0.014	kW	Rated heat output (**)		Psup	6.80	kW
Standby mode		Psb	0.014	kW	Type of energy input		Electrical		
Thermostat-off mode		Pto	0.024	kW					
Crankcase heater mode		Pck	0.000	kW					
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors		-	4060	m³/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		-	-	m³/h
Annual energy consumption		QHE	8866	kWh					
For heat pump combination heater:									
Declared load profile		XL		Water heating energy efficiency		ηwh	92	%	
Daily electricity consumption		Qelec	8.49	kWh	Daily fuel consumption		Qfuel	-	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 DVR2  
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	ηs	176.5	%		
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	Pcyc	-	kW	Cycling interval efficiency	COPcyc	-	-		
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	Poff	0.014	kW	Rated heat output (**)	Psup	0.66	kW		
Standby mode	Psb	0.014	kW						
Thermostat-off mode	Pto	0.024	kW	Type of energy input	Electrical				
Crankcase heater mode	Pck	0.000	kW						

Other items



Capacity control	variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4060	m³/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	-	-	m³/h
Annual energy consumption	QHE	4088	kWh				
For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	153	%
Daily electricity consumption	Q <sub>elec</sub>	5.12	kWh	Daily fuel consumption	Q <sub>fuel</sub>	-	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)							
<p>(*) For heat pump space heaters and heat pump combination heaters, the rated heat output <math>P_{rated}</math> is equal to the design load for heating <math>P_{designh}</math>, and the rated heat output of a supplementary heater <math>P_{sup}</math> is equal to the supplementary capacity for heating <math>sup(T_j)</math>.</p> <p>(**) If <math>C_{dh}</math> is not determined by measurement then the default degradation coefficient is <math>C_{dh} = 0.9</math>.</p>							

# Information requirements for comfort chillers

Model(s):				Outdoor unit: KHP-BI 14 DVR2 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 <sub>rated,c</sub>	12.2	kW		Seasonal space cooling efficiency	η <sub>s,c</sub>	191.4	%
Declared cooling capacity for part load at given outdoor temperature T <sub>j</sub>					Declared energy efficiency ratio for part load at given outdoor temperature T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	12.19	kW		T <sub>j</sub> =+35°C	EER <sub>d</sub>	2.46	-
T <sub>j</sub> =+30°C	P <sub>dc</sub>	9.41	kW		T <sub>j</sub> =+30°C	EER <sub>d</sub>	3.85	-
T <sub>j</sub> =+25°C	P <sub>dc</sub>	6.16	kW		T <sub>j</sub> =+25°C	EER <sub>d</sub>	5.80	-
T <sub>j</sub> =+20°C	P <sub>dc</sub>	2.63	kW		T <sub>j</sub> =+20°C	EER <sub>d</sub>	6.74	-
Degradationco-efficient for chillers(*)	C <sub>dc</sub>	0.9	-					
Power consumption in modes other than "active mode"								
Off mode	P <sub>OFF</sub>	0.014	kW		Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Thermosat-off mode	P <sub>TO</sub>	0.010	kW		Standby mode	P <sub>SB</sub>	0.014	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers: air flow rate, outdoor measured	-	4060	m³/h
Soundpowerlevel, indoors /outdoors	LWA	44/65	dB					

# Information requirements for comfort chillers

Emissions of nitrogen oxides(ifapplicable)	NO <sub>x</sub> (**)	-	mg/kWh input GCV	For water /brine-to-water chillers:Ratedbrineor water flow rate, outdoor sideheatexchanger	-	-	m³/h
GWP of the refrigerant	-	675	kg CO <sub>2</sub> 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 <sub>dc</sub> 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 DVR2 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 <sub>rated,c</sub>	13.3	kW	Seasonal space cooling efficiency	η <sub>s,c</sub>	272.8	%
Declared cooling capacity for part load at given outdoor temperature T <sub>j</sub>				Declared energy efficiency ratio for part load at given outdoor temperature T <sub>j</sub>			
T <sub>j</sub> =+35°C	P <sub>dc</sub>	13.30	kW	T <sub>j</sub> =+35°C	EER <sub>d</sub>	3.47	-
T <sub>j</sub> =+30°C	P <sub>dc</sub>	10.20	kW	T <sub>j</sub> =+30°C	EER <sub>d</sub>	5.26	-
T <sub>j</sub> =+25°C	P <sub>dc</sub>	6.57	kW	T <sub>j</sub> =+25°C	EER <sub>d</sub>	8.45	-
T <sub>j</sub> =+20°C	P <sub>dc</sub>	3.33	kW	T <sub>j</sub> =+20°C	EER <sub>d</sub>	10.07	-
Degradationco-efficient for chillers(*)C <sub>dc</sub>		0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P <sub>OFF</sub>	0.014	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Thermosat-off mode	P <sub>TO</sub>	0.010	kW	Standby mode	P <sub>SB</sub>	0.014	kW

## Information requirements for comfort chillers

Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	4060	m³/h
Soundpowerlevel, indoors /outdoors	LWA	44/64	dB				
Emissions of nitrogen oxides(if applicable)	NO <sub>x</sub> (**)	-	mg/kWh input GCV				
GWP of the refrigerant	-	675	kg CO <sub>2</sub> eq (100years)	For water /brine-to-water chillers:Ratedbrineor water flow rate, outdoor sideheatexchanger	-	-	m³/h
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<sub>dc</sub> 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(℃)	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