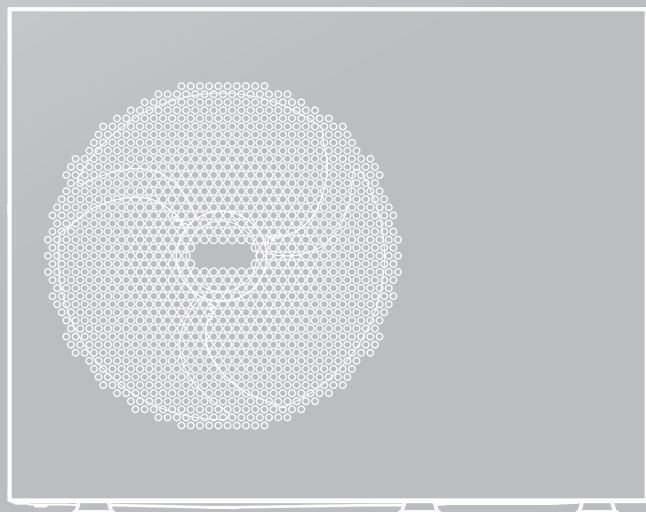


TECHNICAL DATA MANUAL

ATW Heat Pump



IMPORTANT NOTE:

Thank you very much for purchasing our product,
Before using your unit , please read this manual carefully and keep it for future reference.

Model		For medium - temperature application												
		average climate			colder climate			warmer climate						
Outdoor unit	Energy efficiency class	Outdoor unit sound power	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	Rated heat output	Seasonal space heating energy efficiency	For space heating, annual energy consumption
	-	dB	kW	%	kWh	kW	%	kWh	kW	%	kWh	kW	%	kWh
MHC-V8WD2N7M-B	A+++	53	8.2	159.6	4 168	7.6	135.0	5 429	8.4	191.4	2 309			
KHON-08PMA1	A+++	53	8.2	159.6	4 168	7.6	135.0	5 429	8.4	191.4	2 309			
MHC-V10WD2N7M-B	A+++	54	10.0	157.5	5 148	9.6	136.8	6 773	10.2	190.9	2 812			
KHON-10PMA1	A+++	54	10.0	157.5	5 148	9.6	136.8	6 773	10.2	190.9	2 812			
MHC-V8WD2RN7M-B	A+++	53	8.2	159.6	4 168	7.6	135.0	5 429	8.4	191.4	2 309			
KHON-08PMA3	A+++	53	8.2	159.6	4 168	7.6	135.0	5 429	8.4	191.4	2 309			
MHC-V10WD2RN7M-B	A+++	54	10.0	157.5	5 148	9.6	136.8	6 773	10.2	190.9	2 812			
KHON-10PMA3	A+++	54	10.0	157.5	5 148	9.6	136.8	6 773	10.2	190.9	2 812			
MHC-V12WD2N7M-B	A+++	55	12.1	155.4	6 312	12.0	139.6	8 299	12.1	192.7	3 304			
KHON-12PMA1	A+++	55	12.1	155.4	6 312	12.0	139.6	8 299	12.1	192.7	3 304			
MHC-V14WD2N7M-B	A+++	57	13.8	151.0	7 405	13.2	138.7	9 186	14.1	191.9	3 865			
KHON-14PMA1	A+++	57	13.8	151.0	7 405	13.2	138.7	9 186	14.1	191.9	3 865			
MHC-V16WD2N7M-B	A+++	59	14.7	151.5	7 862	14.9	137.4	10 462	15.0	191.4	4 124			
KHON-16PMA1	A+++	59	14.7	151.5	7 862	14.9	137.4	10 462	15.0	191.4	4 124			
MHC-V12WD2RN7M-B	A+++	55	12.1	155.4	6 312	12.0	139.6	8 299	12.1	192.7	3 304			
KHON-12PMA3	A+++	55	12.1	155.4	6 312	12.0	139.6	8 299	12.1	192.7	3 304			
MHC-V14WD2RN7M-B	A+++	57	13.8	151.0	7 405	13.2	138.7	9 186	14.1	191.9	3 865			
KHON-14PMA3	A+++	57	13.8	151.0	7 405	13.2	138.7	9 186	14.1	191.9	3 865			
MHC-V16WD2RN7M-B	A+++	59	14.7	151.5	7 862	14.9	137.4	10 462	15.0	191.4	4 124			
KHON-16PMA3	A+++	59	14.7	151.5	7 862	14.9	137.4	10 462	15.0	191.4	4 124			

Unit type explanation:

- 1.MHC-V*****N7M-B, without back-up heater ,
- 2.KHON****PMA1, with 3 kW back-up heater and 1-Phase power source
- 3.MHC-V*****N7M-BER60, with 6 kW back-up heater and 3-Phase power source
- 4.KHON*****PMA3, with 9 kW back-up heater and 3-Phase power source

For low - temperature application															
Model	Outdoor unit	Energy efficiency class	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	Rated heat output	Seasonal space heating energy efficiency	For space heating, annual energy consumption
		-	dB	kW	%	kWh	kW	%	kWh	kW	%	kWh	kW	%	kWh
MHC-V8WD2N7M-B		A+++	52	7.9	211.0	3 051	8.0	180.8	4 291	8.1	273.4	4 291	8.1	273.4	1 566
KHON-08PMA1		A+++	52	7.9	211.0	3 051	8.0	180.8	4 291	8.1	273.4	4 291	8.1	273.4	1 566
MHC-V10WD2N7M-B		A+++	54	9.8	210.0	3 802	9.9	178.0	5 392	10.1	271.9	5 392	10.1	271.9	1 963
KHON-10PMA1		A+++	54	9.8	210.0	3 802	9.9	178.0	5 392	10.1	271.9	5 392	10.1	271.9	1 963
MHC-V8WD2RN7M-B		A+++	52	7.9	211.0	3 051	8.0	180.8	4 291	8.1	273.4	4 291	8.1	273.4	1 566
KHON-08PMA3		A+++	52	7.9	211.0	3 051	8.0	180.8	4 291	8.1	273.4	4 291	8.1	273.4	1 566
MHC-V10WD2RN7M-B		A+++	54	9.8	210.0	3 802	9.9	178.0	5 392	10.1	271.9	5 392	10.1	271.9	1 963
KHON-10PMA3		A+++	54	9.8	210.0	3 802	9.9	178.0	5 392	10.1	271.9	5 392	10.1	271.9	1 963
MHC-V12WD2N7M-B		A+++	54	12.1	194.5	5 064	12.2	178.3	6 637	12.1	269.1	6 637	12.1	269.1	2 377
KHON-12PMA1		A+++	54	12.1	194.5	5 064	12.2	178.3	6 637	12.1	269.1	6 637	12.1	269.1	2 377
MHC-V14WD2N7M-B		A+++	57	14.1	187.5	6 118	14.2	175.0	7 868	13.0	266.8	7 868	13.0	266.8	2 575
KHON-14PMA1		A+++	57	14.1	187.5	6 118	14.2	175.0	7 868	13.0	266.8	7 868	13.0	266.8	2 575
MHC-V16WD2N7M-B		A+++	58	15.9	185.6	6 966	15.0	169.2	8 587	14.0	267.8	8 587	14.0	267.8	2 763
KHON-16PMA1		A+++	58	15.9	185.6	6 966	15.0	169.2	8 587	14.0	267.8	8 587	14.0	267.8	2 763
MHC-V12WD2RN7M-B		A+++	54	12.1	194.5	5 064	12.2	178.3	6 637	12.1	269.1	6 637	12.1	269.1	2 377
KHON-12PMA3		A+++	54	12.1	194.5	5 064	12.2	178.3	6 637	12.1	269.1	6 637	12.1	269.1	2 377
MHC-V14WD2RN7M-B		A+++	57	14.1	185.6	6 118	14.2	175.0	7 868	13.0	266.8	7 868	13.0	266.8	2 575
KHON-14PMA3		A+++	57	14.1	185.6	6 118	14.2	175.0	7 868	13.0	266.8	7 868	13.0	266.8	2 575
MHC-V16WD2RN7M-B		A+++	58	15.9	185.6	6 966	15.0	169.2	8 587	14.0	267.8	8 587	14.0	267.8	2 763
KHON-16PMA3		A+++	58	15.9	185.6	6 966	15.0	169.2	8 587	14.0	267.8	8 587	14.0	267.8	2 763
MHC-V16WD2RN7M-B		A+++	58	15.9	185.6	6 966	15.0	169.2	8 587	14.0	267.8	8 587	14.0	267.8	2 763
KHON-16PMA3		A+++	58	15.9	185.6	6 966	15.0	169.2	8 587	14.0	267.8	8 587	14.0	267.8	2 763

Unit type explanation:

- 1.MHC-V*****N7M-B, without back-up heater ,
- 2.KHON*****PMA1, with 3 kW back-up heater and 1-Phase power source
- 3.MHC-V*****N7M-BER60, with 6 kW back-up heater and 3-Phase power source
- 4.KHON*****PMA1, with 9 kW back-up heater and 3-Phase power source

Product fiche 1

Heat pump space heater

	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
Outdoor unit sound power (*)	dB	52	54	52	54	54
Average climate low temperature application	dB	53	54	53	54	55
Average climate medium temperature application	[kW]	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9
Capacity of the back-up heater integrated in the unit	-	A+++	A+++	A+++	A+++	A+++
Space heating	-	A+++	A+++	A+++	A+++	A+++
Energy efficiency class 35°C (Low temp. app.)	-	A+++	A+++	A+++	A+++	A+++
Energy efficiency class 55°C (Medium temp. app.)	-	A+++	A+++	A+++	A+++	A+++
Average climate (Design temperature = -10°C)						
Prated (declared heating capacity) @ -10°C	[kW]	7.9	9.8	7.9	9.8	12.1
Seasonal space heating efficiency (ηs)	[%]	211.0	210.0	211.0	210.0	194.5
Annual energy consumption	[kWh]	3 051	3 802	3 051	3 802	5 064
Prated (declared heating capacity) @ -10°C	[kW]	8.2	10.0	8.2	10.0	12.1
Seasonal space heating efficiency (ηs)	[%]	159.6	157.5	159.6	157.5	155.4
Annual energy consumption	[kWh]	4 168	5 148	4 168	5 148	6 312
Part load conditions space heating average climate low temperature application						
Pdh (declared heating capacity)	[kW]	6.99	8.67	6.99	8.67	10.70
COPd (declared COP)	-	3.30	3.19	3.30	3.19	2.89
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	1.00
Pdh (declared heating capacity)	[kW]	4.51	5.50	4.51	5.50	6.51
COPd (declared COP)	-	5.30	5.19	5.30	5.19	4.71
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.99
Pdh (declared heating capacity)	[kW]	3.88	3.93	3.88	3.93	5.46
COPd (declared COP)	-	6.87	7.17	6.87	7.17	7.04
Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.98
Pdh (declared heating capacity)	[kW]	4.52	4.53	4.52	4.53	6.30
COPd (declared COP)	-	9.03	9.12	9.03	9.12	8.64
Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.98
Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10
Pdh (declared heating capacity)	[kW]	7.90	9.75	7.90	9.75	11.72
COPd (declared COP)	-	2.85	2.65	2.85	2.65	2.59
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80

Product fiche 1

Heat pump space heater

		Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
Outdoor unit sound power (*)	Average climate low temperature application	dB	57	58	54	57	58
	Average climate medium temperature application	dB	57	59	55	57	59
Capacity of the back-up heater integrated in the unit	P _{sup} back-up heater (optional)	[kW]	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9
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]	14.1	15.9	12.1	14.1	15.9
	Seasonal space heating efficiency (η _s)	[%]	187.5	185.6	194.5	187.5	185.6
	Annual energy consumption	[kWh]	6 118	6 966	5 064	6 118	6 966
	Prated (declared heating capacity) @ -10°C	[kW]	13.8	14.7	12.1	13.8	14.7
Space heating 55°C	Seasonal space heating efficiency (η _s)	[%]	151.0	151.5	155.4	151.0	151.5
	Annual energy consumption	[kWh]	7 405	7 862	6 312	7 405	7 862
Part load conditions space heating average climate low temperature application							
(A) condition (-7°C)	P _{dh} (declared heating capacity)	[kW]	12.47	14.07	10.70	12.47	14.07
	COP _d (declared COP)	-	2.63	2.45	2.89	2.63	2.45
	C _{dh} (degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(B) condition (2°C)	P _{dh} (declared heating capacity)	[kW]	7.60	8.54	6.51	7.60	8.54
	COP _d (declared COP)	-	4.52	4.53	4.71	4.52	4.53
	C _{dh} (degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(C) condition (7°C)	P _{dh} (declared heating capacity)	[kW]	5.49	5.50	5.46	5.49	5.50
	COP _d (declared COP)	-	7.16	7.25	7.04	7.16	7.25
	C _{dh} (degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(D) condition (12°C)	P _{dh} (declared heating capacity)	[kW]	6.30	6.27	6.30	6.30	6.27
	COP _d (declared COP)	-	8.66	8.80	8.64	8.66	8.80
	C _{dh} (degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(E) Tol (temperature operating limit)	T _{ol} (temperature operating limit)	[°C]	-10	-10	-10	-10	-10
	P _{dh} (declared heating capacity)	[kW]	12.63	13.42	11.72	12.63	13.42
	COP _d (declared COP)	-	2.53	2.43	2.59	2.53	2.43
	WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80

Product fiche 2

Heat pump space heater

	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
(F) Tivalent temperature	Outdoor					
Tblv	[°C]	-7	-7	-7	-7	-7
Pdh (declared heating capacity)	[kW]	6.99	8.67	6.99	8.67	10.70
COPd (declared COP)	-	3.30	3.19	3.30	3.19	2.89
Supplementary capacity at P_design	[kW]	0.00	0.05	0.00	0.05	0.38
Part load conditions space heating average climate medium temperature application						
(A) condition (-7°C)	[kW]	7.26	8.85	7.26	8.85	10.70
Pdh (declared heating capacity)	[kW]	7.26	8.85	7.26	8.85	10.70
COPd (declared COP)	-	2.46	2.23	2.46	2.23	2.52
Cdh(degradation coefficient)	-	0.99	1.00	0.99	1.00	1.00
(B) condition (2°C)	[kW]	4.51	5.48	4.51	5.48	6.74
Pdh (declared heating capacity)	[kW]	4.51	5.48	4.51	5.48	6.74
COPd (declared COP)	-	4.02	3.98	4.02	3.98	3.83
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(C) condition (7°C)	[kW]	3.72	3.78	3.72	3.78	5.32
Pdh (declared heating capacity)	[kW]	3.72	3.78	3.72	3.78	5.32
COPd (declared COP)	-	5.27	5.48	5.27	5.48	5.25
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(D) condition (12°C)	[kW]	4.40	4.43	4.40	4.43	5.94
Pdh (declared heating capacity)	[kW]	4.40	4.43	4.40	4.43	5.94
COPd (declared COP)	-	6.90	7.03	6.90	7.03	6.46
Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.98
(E) Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10
Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10
Pdh (declared heating capacity)	[kW]	8.20	8.98	8.20	8.98	11.27
COPd (declared COP)	-	2.11	2.06	2.11	2.06	2.01
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80
(F) Tivalent temperature	[°C]	-7	-7	-7	-7	-7
Pdh (declared heating capacity)	[kW]	7.26	8.85	7.26	8.85	10.70
COPd (declared COP)	-	2.46	2.23	2.46	2.23	2.52
Supplementary capacity at P_design	[kW]	0.00	1.02	0.00	1.02	0.83
Colder climate (Design temperature = -22°C)						
Prated (declared heating capacity) @ -22°C	[kW]	8.0	9.9	8.0	9.9	12.2
Seasonal space heating efficiency (ns)	[%]	180.8	178.0	180.8	178.0	178.3
Annual energy consumption	[kW/h]	4 291	5 392	4 291	5 392	6 637

Product fiche 2

Heat pump space heater

	Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
(F) Tbivalent temperature	Outdoor [°C]	-7	-7	-7	-7	-7
Pdh (declared heating capacity)	[kW]	12.47	14.07	10.70	12.47	14.07
COPd (declared COP)	-	2.63	2.45	2.89	2.63	2.45
Psup (@Tdesignh: -10°C)	[kW]	1.47	2.48	0.38	1.47	2.48
Part load conditions space heating average climate medium temperature application						
(A) condition (-7°C)	[kW]	12.21	13.00	10.70	12.21	13.00
Pdh (declared heating capacity)	[kW]	12.21	13.00	10.70	12.21	13.00
COPd (declared COP)	-	2.23	2.33	2.52	2.23	2.33
Cdh(degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
Pdh (declared heating capacity)	[kW]	7.51	7.96	6.74	7.51	7.96
COPd (declared COP)	-	3.71	3.68	3.83	3.71	3.68
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
Pdh (declared heating capacity)	[kW]	5.15	5.34	5.32	5.15	5.34
COPd (declared COP)	-	5.39	5.40	5.25	5.39	5.40
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
Pdh (declared heating capacity)	[kW]	6.13	5.98	5.94	6.13	5.98
COPd (declared COP)	-	6.84	6.58	6.46	6.84	6.58
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10
Pdh (declared heating capacity)	[kW]	12.25	13.39	11.27	12.25	13.39
COPd (declared COP)	-	1.97	1.95	2.01	1.97	1.95
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80
Tbiv	[°C]	-7	-7	-7	-7	-7
(F) Tbivalent temperature	[kW]	12.21	13.00	10.70	12.21	13.00
COPd (declared COP)	-	2.23	2.33	2.52	2.23	2.33
Psup (@Tdesignh: -10°C)	[kW]	1.55	1.31	0.83	1.55	1.31
Colder climate (Design temperature = -22°C)						
Prated (declared heating capacity) @ -22°C	[kW]	14.2	15.0	12.2	14.2	15.0
Seasonal space heating efficiency (ηs)	[%]	175.0	169.2	178.3	175.0	169.2
Annual energy consumption	[kWh]	7 868	8 587	6 637	7 868	8 587

Product fiche 3

Heat pump space heater						
	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
Space heating 55°C						
P rated (declared heating capacity) @ -22°C	[kW]	7.6	9.6	7.6	9.6	12.0
Seasonal space heating efficiency (ηs)	[%]	135.0	136.8	135.0	136.8	139.6
Annual energy consumption	[kWh]	5 429	6 773	5 429	6 773	8 299
Part load conditions space heating colder climate low temperature application						
(A) condition (-7°C)						
Pdh (declared heating capacity)	[kW]	4.98	6.07	4.98	6.07	7.42
COPd (declared COP)	-	3.78	3.59	3.78	3.59	3.66
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(B) condition (2°C)						
Pdh (declared heating capacity)	[kW]	3.29	3.85	3.29	3.85	4.60
COPd (declared COP)	-	5.79	5.92	5.79	5.92	5.67
Cdh(degradation coefficient)	-	0.97	0.98	0.97	0.98	0.98
(C) condition (7°C)						
Pdh (declared heating capacity)	[kW]	3.84	3.93	3.84	3.93	5.48
COPd (declared COP)	-	7.13	7.32	7.13	7.32	7.16
Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.98
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	4.52	4.54	4.52	4.54	6.30
COPd (declared COP)	-	8.78	8.90	8.78	8.90	8.55
Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.98
(E) Tol (temperature operating limit)						
Tol (temperature operating limit)	[°C]	-22	-22	-22	-22	-22
(F) Tivalent temperature						
Pdh (declared heating capacity)	[kW]	6.16	6.79	6.16	6.79	9.33
COPd (declared COP)	-	2.05	2.00	2.05	2.00	2.14
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	66
Tblv	[°C]	-15	-15	-15	-15	-15
(G) Supplementary capacity at P_design						
Pdh (declared heating capacity)	[kW]	6.53	8.08	6.53	8.08	9.95
COPd (declared COP)	-	2.65	2.48	2.65	2.48	2.65
P sup (@Tdesignh: -22°C)	[kW]	1.84	3.11	1.84	3.11	2.87
Part load conditions space heating colder climate medium temperature application						
(A) condition (-7°C)						
Pdh (declared heating capacity)	[kW]	4.76	5.89	4.76	5.89	7.28
COPd (declared COP)	-	2.84	2.81	2.84	2.81	2.89
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99

Product fiche 3

Heat pump space heater						
	Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
Space heating 55°C						
Prated (declared heating capacity) @ -22°C	[kW]	13.2	14.9	12.0	13.2	14.9
Seasonal space heating efficiency (ηs)	[%]	138.7	137.4	139.6	138.7	137.4
Annual energy consumption	[kWh]	9 186	10 462	8 299	9 186	10 462
Part load conditions space heating colder climate low temperature application						
(A) condition (-7°C)						
Pdh (declared heating capacity)	[kW]	8.54	9.26	7.42	8.54	9.26
COPd (declared COP)	-	3.54	3.27	3.66	3.54	3.27
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(B) condition (2°C)						
Pdh (declared heating capacity)	[kW]	5.18	5.61	4.60	5.18	5.61
COPd (declared COP)	-	5.68	5.64	5.67	5.68	5.64
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(C) condition (7°C)						
Pdh (declared heating capacity)	[kW]	5.52	5.44	5.48	5.52	5.44
COPd (declared COP)	-	7.04	7.22	7.16	7.04	7.22
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	6.22	6.30	6.30	6.22	6.30
COPd (declared COP)	-	8.53	8.59	8.55	8.53	8.59
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(E) Tol (temperature operating limit)	[°C]	-22	-22	-22	-22	-22
(F) Tivalent temperature						
Pdh (declared heating capacity)	[kW]	10.04	10.97	9.33	10.04	10.97
COPd (declared COP)	-	2.00	1.92	2.14	2.00	1.92
WTOL (Heating water Operation Limit)	[°C]	66	66	66	66	66
Tbiv	[°C]	-15	-15	-15	-15	-15
(G) Supplementary capacity at P_design						
Pdh (declared heating capacity)	[kW]	11.58	12.24	9.95	11.58	12.24
COPd (declared COP)	-	2.58	2.44	2.65	2.58	2.44
Psup (@Tdesignh: -22°C)	[kW]	4.15	4.03	2.87	4.15	4.03
Part load conditions space heating colder climate medium temperature application						
(A) condition (-7°C)						
Pdh (declared heating capacity)	[kW]	7.86	9.04	7.28	7.86	9.04
COPd (declared COP)	-	2.81	2.83	2.89	2.81	2.83
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99

Product fiche 4

Heat pump space heater

	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
(B) condition (2°C)	[kW]	2.99	3.58	2.99	3.58	4.50
Pdh (declared heating capacity)		4.16	4.41	4.16	4.41	4.36
COPd (declared COP)	-	0.98	0.98	0.98	0.98	0.98
Cdh(degradation coefficient)		3.68	3.69	3.68	3.69	5.17
(C) condition (7°C)	[kW]	5.49	5.61	5.49	5.61	5.50
Pdh (declared heating capacity)		0.98	0.98	0.98	0.98	0.98
COPd (declared COP)	-	4.32	4.34	4.32	4.34	5.94
Cdh(degradation coefficient)		7.12	7.20	7.12	7.20	6.97
(D) condition (12°C)	[kW]	0.97	0.97	0.97	0.97	0.98
Pdh (declared heating capacity)		-22	-22	-22	-22	-22
COPd (declared COP)	[°C]	5.76	6.26	5.76	6.26	8.69
Cdh(degradation coefficient)		1.58	1.55	1.58	1.55	1.72
(E) Tol (temperature operating limit)	[kW]	80	80	80	80	66
Tol (temperature operating limit)	[°C]	-15	-15	-15	-15	-15
Pdh (declared heating capacity)	[°C]	6.20	7.83	6.20	7.83	9.79
COPd (declared COP)	[kW]	2.08	1.96	2.08	1.96	2.17
WTOL (Heating water Operation Limit)	-	1.84	3.34	1.84	3.34	3.31
Tblv	[kW]					
(F) Tblvalent temperature						
Pdh (declared heating capacity)						
COPd (declared COP)						
Psup (@Tdesignh: -22°C)						
Supplementary capacity at P_design						
Warmer climate (Design temperature = 2°C)						
Space heating 35°C	[kW]	8.1	10.1	8.1	10.1	12.1
Prated (declared heating capacity) @ 2°C		273.4	271.9	273.4	271.9	269.1
Seasonal space heating efficiency (ηs)	[%]	1 566	1 963	1 566	1 963	2 377
Annual energy consumption	[kWh]	8.4	10.2	8.4	10.2	12.1
Prated (declared heating capacity) @ 2°C	[kW]	191.4	190.9	191.4	190.9	192.7
Seasonal space heating efficiency (ηs)	[%]	2 309	2 812	2 309	2 812	3 304
Annual energy consumption	[kWh]					
Part load conditions space heating warmer climate low temperature application						
(B) condition (2°C)	[kW]	8.02	10.00	8.02	10.00	11.96
Pdh (declared heating capacity)		3.83	3.36	3.83	3.36	3.59
COPd (declared COP)	-	0.99	0.99	0.99	0.99	1.00
Cdh(degradation coefficient)		5.21	6.50	5.21	6.50	7.78
(C) condition (7°C)	[kW]	6.26	6.07	6.26	6.07	6.03
Pdh (declared heating capacity)		0.98	0.99	0.98	0.99	0.99
COPd (declared COP)	-					
Cdh(degradation coefficient)						

Product fiche 4

Heat pump space heater

	Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3	
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	4.88	5.39	4.50	4.88	5.39
	COPd (declared COP)	-	4.40	4.44	4.36	4.40	4.44
	Cdh(degradation coefficient)	-	0.99	0.99	0.98	0.99	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	5.39	5.34	5.17	5.39	5.34
	COPd (declared COP)	-	5.71	5.73	5.50	5.71	5.73
	Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	5.95	6.16	5.94	5.95	6.16
	COPd (declared COP)	-	7.03	7.20	6.97	7.03	7.20
	Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-22	-22	-22	-22	-22
	Pdh (declared heating capacity)	[kW]	9.30	10.12	8.69	9.30	10.12
	COPd (declared COP)	-	1.64	1.62	1.72	1.64	1.62
(F) Tivalent temperature	WTOL (Heating water Operation Limit)	[°C]	66	66	66	66	66
	Tblv	[°C]	-15	-15	-15	-15	-15
	Pdh (declared heating capacity)	[kW]	10.77	12.15	9.79	10.77	12.15
Supplementary capacity at P_design			2.12	1.89	2.17	2.12	1.89
Warmer climate (Design temperature = 2°C)			3.90	4.77	3.31	3.90	4.77
Space heating 35°C	Prated (declared heating capacity) @ 2°C	[kW]	13.0	14.0	12.1	13.0	14.0
	Seasonal space heating efficiency (ηs)	[%]	266.8	267.8	269.1	266.8	267.8
	Annual energy consumption	[kWh]	2 575	2 763	2 377	2 575	2 763
	Prated (declared heating capacity) @ 2°C	[kW]	14.1	15.0	12.1	14.1	15.0
	Seasonal space heating efficiency (ηs)	[%]	191.9	191.4	192.7	191.9	191.4
Annual energy consumption	[kWh]	3 865	4 124	3 304	3 865	4 124	
Part load conditions space heating warmer climate low temperature application							
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	12.86	14.00	11.96	12.86	14.00
	COPd (declared COP)	-	3.46	3.14	3.59	3.46	3.14
	Cdh(degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	8.37	9.00	7.78	8.37	9.00
	COPd (declared COP)	-	5.91	5.83	6.03	5.91	5.83
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99

Product fiche 5

Heat pump space heater

	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
(D) condition (12°C)	[kW]	4.50	4.52	4.50	4.52	6.34
Pdh (declared heating capacity)		8.69	8.92	8.69	8.92	8.67
COPd (declared COP)	-	0.97	0.97	0.97	0.97	0.98
Cdh(degradation coefficient)		2	2	2	2	2
Tol (temperature operating limit)	[°C]	8.02	10.00	8.02	10.00	11.96
(E) Tol (temperature operating limit)	[kW]	3.83	3.36	3.83	3.36	3.59
Pdh (declared heating capacity)	-	80	80	80	80	80
COPd (declared COP)	[°C]	7	7	7	7	7
WTOL (Heating water Operation Limit)	[°C]	5.21	6.50	5.21	6.50	7.78
Tblv	-	6.26	6.07	6.26	6.07	6.03
(F) Tblv (temperature operating limit)	[kW]	0.08	0.11	0.08	0.11	0.14
Psup (@Tdesignh: 2°C)						
Supplementary capacity at P_design	[kW]					
Part load conditions space heating warmer climate medium temperature application						
(B) condition (2°C)	[kW]	8.20	9.63	8.20	9.63	11.90
Pdh (declared heating capacity)	-	2.59	2.43	2.59	2.43	2.59
COPd (declared COP)	-	0.99	1.00	0.99	1.00	1.00
Cdh(degradation coefficient)		5.40	6.56	5.40	6.56	7.78
(C) condition (7°C)	[kW]	4.17	4.12	4.17	4.12	4.18
Pdh (declared heating capacity)	-	0.99	0.99	0.99	0.99	0.99
COPd (declared COP)	-	4.28	4.31	4.28	4.31	6.13
Cdh(degradation coefficient)	[kW]	6.41	6.61	6.41	6.61	6.43
(D) condition (12°C)	-	0.98	0.98	0.98	0.98	0.98
Pdh (declared heating capacity)	[°C]	2	2	2	2	2
COPd (declared COP)	[kW]	8.20	9.63	8.20	9.63	11.90
(E) Tol (temperature operating limit)	-	2.59	2.43	2.59	2.43	2.59
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80
Tblv	[°C]	7	7	7	7	7
(F) Tblv (temperature operating limit)	[kW]	5.40	6.56	5.40	6.56	7.78
Pdh (declared heating capacity)	-	4.17	4.12	4.17	4.12	4.18
COPd (declared COP)	[kW]	0.20	0.57	0.20	0.57	0.20
Supplementary capacity at P_design						

Product fiche 5

Heat pump space heater

	Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	6.34	6.35	6.34	6.34	6.35
COPd (declared COP)	-	8.70	8.92	8.67	8.70	8.92
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
Tol (temperature operating limit)	[°C]	2	2	2	2	2
(E) Tol (temperature operating limit)						
Pdh (declared heating capacity)	[kW]	12.86	14.00	11.96	12.86	14.00
COPd (declared COP)	-	3.46	3.14	3.59	3.46	3.14
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80
Tblv	[°C]	7	7	7	7	7
(F) Tivalent temperature						
Pdh (declared heating capacity)	[kW]	8.37	9.00	7.78	8.37	9.00
COPd (declared COP)	-	5.91	5.83	6.03	5.91	5.83
Psup (@Tdesignh: 2°C)	[kW]	0.14	0.00	0.14	0.14	0.00
Supplementary capacity at P_design						
Part load conditions space heating warmer climate medium temperature application						
(B) condition (2°C)						
Pdh (declared heating capacity)	[kW]	13.56	14.29	11.90	13.56	14.29
COPd (declared COP)	-	2.45	2.40	2.59	2.45	2.40
Cdh(degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(C) condition (7°C)						
Pdh (declared heating capacity)	[kW]	9.06	9.64	7.78	9.06	9.64
COPd (declared COP)	-	4.14	4.09	4.18	4.14	4.09
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	6.15	6.14	6.13	6.15	6.14
COPd (declared COP)	-	6.56	6.65	6.43	6.56	6.65
Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(E) Tol (temperature operating limit)						
Tol (temperature operating limit)	[°C]	2	2	2	2	2
Pdh (declared heating capacity)	[kW]	13.56	14.29	11.90	13.56	14.29
COPd (declared COP)	-	2.44	2.40	2.59	2.44	2.40
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80
Tblv	[°C]	7	7	7	7	7
(F) Tivalent temperature						
Pdh (declared heating capacity)	[kW]	9.06	9.64	7.78	9.06	9.64
COPd (declared COP)	-	4.14	4.09	4.18	4.14	4.09
Supplementary capacity at P_design	[kW]	0.53	0.71	0.20	0.53	0.71

Product fiche 6

Heat pump space heater

	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
Air-to-water heat pump	Y/N	Y	Y	Y	Y	Y
Water-to-water heat pump	Y/N	N	N	N	N	N
Brine-to-water heat pump	Y/N	N	N	N	N	N
Low-temperature heat pump	Y/N	N	N	N	N	N
Equipped with a supplementary heater	Y/N	Y	Y	Y	Y	Y
Heat pump combination heater	Y/N	Y	Y	Y	Y	Y
Rated airflow (outdoor)	[m ³ /h]	4 680	4 680	4 680	4 680	4 780
Rated water/brine flow (outdoor H/E)		/	/	/	/	/
Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
Poff (Power consumption Off mode)	[kW]	0.011	0.011	0.011	0.011	0.011
Pto (Power consumption Thermostat off mode)	[kW]	0.016	0.016	0.016	0.016	0.016
Psb (Power consumption Standby mode)	[kW]	0.011	0.011	0.011	0.011	0.011
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 :

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.

Product fiche 6

Heat pump space heater		Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
Product description	Air-to-water heat pump	Y/N	Y	Y	Y	Y	Y
	Water-to-water heat pump	Y/N	N	N	N	N	N
	Brine-to-water heat pump	Y/N	N	N	N	N	N
	Low-temperature heat pump	Y/N	N	N	N	N	N
	Equipped with a supplementary heater	Y/N	Y	Y	Y	Y	Y
	Heat pump combination heater	Y/N	Y	Y	Y	Y	Y
	Rated airflow (outdoor)	[m ³ /h]	4 780	4 780	4 780	4 780	4 780
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/	/	/	/	/
Other	Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
	Poff (Power consumption Off mode)	[kW]	0.011	0.011	0.011	0.011	0.011
	Pto (Power consumption Thermostat off mode)	[kW]	0.016	0.016	0.016	0.016	0.016
	Psb (Power consumption Standby mode)	[kW]	0.011	0.011	0.011	0.011	0.011
	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 :

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.

Product fiche 7

Heat pump space cooling

		Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
Outdoor unit sound power (*)	Average climate low temperature application	dB	54	55	54	55	57
	Average climate medium temperature application	dB	53	54	53	54	56
Space cooling 7°C	Prated (declared cooling capacity) @ 35°C	[kW]	7.5	8.1	7.5	8.1	11.5
	Seasonal space cooling efficiency (ηs)	[%]	221.5	218.3	221.5	218.3	196.6
	Annual energy consumption	[kWh]	797	878	797	878	1383
Space cooling 18°C	Prated (declared cooling capacity) @ 35°C	[kW]	8.3	10.0	8.3	10.0	12.0
	Seasonal space cooling efficiency (ηs)	[%]	302.4	303.9	302.4	303.9	278.2
	Annual energy consumption	[kWh]	652	782	652	782	1024
Part load conditions space cooling : low temperature application@7°C							
(A) condition (35°C)	Pdc (declared cooling capacity)	[kW]	7.45	8.10	7.45	8.10	11.50
	EERd (declared EER)	-	3.35	3.10	3.35	3.10	3.05
	Cdc(degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(B) condition (30°C)	Pdc (declared cooling capacity)	[kW]	5.48	6.28	5.48	6.28	8.40
	EERd (declared EER)	-	5.00	4.89	5.00	4.89	4.42
	Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(C) condition (25°C)	Pdc (declared cooling capacity)	[kW]	3.84	3.98	3.84	3.98	5.44
	EERd (declared EER)	-	6.58	6.49	6.58	6.49	5.45
	Cdc(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.99
(D) condition (20°C)	Pdc (declared cooling capacity)	[kW]	3.50	3.52	3.50	3.52	4.29
	EERd (declared EER)	-	6.80	6.87	6.80	6.87	6.34
	Cdc(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.99

Product fiche 7

Heat pump space cooling

		Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
Outdoor unit sound power (*)	Average climate low temperature application	dB	58	60	57	58	60
	Average climate medium temperature application	dB	57	59	56	57	59
Space cooling 7°C	Prated (declared cooling capacity) @ 35°C	[kW]	12.4	14.0	11.5	12.4	14.0
	Seasonal space cooling efficiency (ηs)	[%]	195.7	196.3	196.6	195.7	196.3
	Annual energy consumption	[kWh]	1 498	1 686	1 383	1 498	1 686
Space cooling 18°C	Prated (declared cooling capacity) @ 35°C	[kW]	14.0	15.0	12.0	14.0	15.0
	Seasonal space cooling efficiency (ηs)	[%]	274.7	271.7	278.2	274.7	271.7
	Annual energy consumption	[kWh]	1 210	1 310	1 024	1 210	1 310
Part load conditions space cooling : low temperature application@7°C							
(A) condition (35°C)	Pdc (declared cooling capacity)	[kW]	12.40	14.00	11.50	12.40	14.00
	EERd (declared EER)	-	3.00	2.70	3.05	3.00	2.70
	Cdc(degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(B) condition (30°C)	Pdc (declared cooling capacity)	[kW]	9.19	10.24	8.40	9.19	10.24
	EERd (declared EER)	-	4.26	4.24	4.42	4.26	4.24
	Cdc(degradation coefficient)	-	1.00	1.00	0.99	1.00	1.00
(C) condition (25°C)	Pdc (declared cooling capacity)	[kW]	5.91	6.63	5.44	5.91	6.63
	EERd (declared EER)	-	5.52	5.62	5.45	5.52	5.62
	Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(D) condition (20°C)	Pdc (declared cooling capacity)	[kW]	4.32	4.43	4.29	4.32	4.43
	EERd (declared EER)	-	6.39	6.60	6.34	6.39	6.60
	Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99

Product fiche 8

Heat pump space cooling

Part load conditions space cooling : medium temperature application@18°C

	Outdoor	KHON-08PMA1	KHON-10PMA1	KHON-08PMA3	KHON-10PMA13	KHON-12PMA1
	[kW]	8.30	10.00	8.30	10.00	12.00
(A) condition (35°C)						
Pdc (declared cooling capacity)	[kW]	8.30	10.00	8.30	10.00	12.00
EERd (declared EER)	-	5.25	4.60	5.25	4.60	4.60
Cdc(degradation coefficient)	-	0.99	1.00	0.99	1.00	1.00
(B) condition (30°C)						
Pdc (declared cooling capacity)	[kW]	6.05	7.48	6.05	7.48	9.03
EERd (declared EER)	-	7.23	7.14	7.23	7.14	6.37
Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(C) condition (25°C)						
Pdc (declared cooling capacity)	[kW]	4.53	4.83	4.53	4.83	5.44
EERd (declared EER)	-	8.61	8.90	8.61	8.90	5.45
Cdc(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.99
(D) condition (20°C)						
Pdc (declared cooling capacity)	[kW]	4.30	4.30	4.30	4.30	5.65
EERd (declared EER)	-	8.97	8.97	8.97	8.97	8.04
Cdc(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.99
Air to water unit						
Rated airflow (outdoor)	[m³/h]	3 570	3 900	3 570	3 900	4 550
Brine/water to water unit						
Rated water/brine flow (outdoor H/E)		/	/	/	/	/
Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
Poff (Power consumption Off mode)	[kW]	0.011	0.011	0.011	0.011	0.011
Pto (Power consumption Thermostat off mode)	[kW]	0.010	0.010	0.010	0.010	0.010
Psb (Power consumption Standby mode)	[kW]	0.011	0.011	0.011	0.011	0.011
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 :

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.

Product fiche 8

Heat pump space cooling

Part load conditions space cooling: medium temperature application@18°C

	Outdoor	KHON-14PMA1	KHON-16PMA1	KHON-12PMA3	KHON-14PMA3	KHON-16PMA3
(A) condition (35°C)	[kW]	14.00	15.00	12.00	14.00	15.00
Pdc (declared cooling capacity)						
EERd (declared EER)	-	4.40	4.25	4.60	4.40	4.25
Cdc(degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(B) condition (30°C)	[kW]	10.42	11.17	9.03	10.42	11.17
Pdc (declared cooling capacity)						
EERd (declared EER)	-	6.26	6.09	6.37	6.26	6.09
Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(C) condition (25°C)	[kW]	6.79	7.30	5.44	6.79	7.30
Pdc (declared cooling capacity)						
EERd (declared EER)	-	7.86	7.75	5.45	7.86	7.75
Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(D) condition (20°C)	[kW]	5.75	5.77	5.65	5.75	5.77
Pdc (declared cooling capacity)						
EERd (declared EER)	-	8.24	8.27	8.04	8.24	8.27
Cdc(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
Air to water unit	[m ³ /h]	4 550	4 550	4 550	4 550	4 550
Brine/water to water unit		/	/	/	/	/
Rated water/brine flow (outdoor H/E)						
Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
Poff (Power consumption Off mode)	[kW]	0.011	0.011	0.011	0.011	0.011
Pto (Power consumption Thermostat off mode)	[kW]	0.010	0.010	0.010	0.010	0.010
Psb (Power consumption Standby mode)	[kW]	0.011	0.011	0.011	0.011	0.011
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 :

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.

Condition(°C)	Model	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 35/24 Water temperature: 12/7	KHON-08PMA1	7.45	2.224	3.35
	KHON-10PMA1	8.1	2.613	3.10
	KHON-08PMA3	7.45	2.224	3.35
	KHON-10PMA3	8.1	2.613	3.10
	KHON-12PMA1	11.5	3.770	3.05
	KHON-14PMA1	12.4	4.133	3.00
	KHON-16PMA1	14.0	5.185	2.70
	KHON-12PMA3	11.5	3.770	3.05
	KHON-14PMA3	12.4	4.133	3.00
	KHON-16PMA3	14.0	5.185	2.70
Ambient Temperature: 35/24 Water temperature: 23/18	KHON-08PMA1	8.3	1.581	5.25
	KHON-10PMA1	10.0	2.174	4.60
	KHON-08PMA3	8.3	1.581	5.25
	KHON-10PMA3	10.0	2.174	4.60
	KHON-12PMA1	12.0	2.609	4.60
	KHON-14PMA1	14.0	3.182	4.40
	KHON-16PMA1	15.0	3.529	4.25
	KHON-12PMA3	12.0	2.609	4.60
	KHON-14PMA3	14.0	3.182	4.40
	KHON-16PMA3	15.0	3.529	4.25
Ambient Temperature: 7/6 Water temperature: 30/35	KHON-08PMA1	8.0	1.524	5.25
	KHON-10PMA1	9.5	1.919	4.95
	KHON-08PMA3	8.0	1.524	5.25
	KHON-10PMA3	9.5	1.919	4.95
	KHON-12PMA1	12.1	2.444	4.95
	KHON-14PMA1	14.0	2.979	4.70
	KHON-16PMA1	15.5	3.444	4.50
	KHON-12PMA3	12.1	2.444	4.95
	KHON-14PMA3	14.0	2.979	4.70
	KHON-16PMA3	15.5	3.444	4.50
Ambient Temperature: 2/1 Water temperature: 30/35	KHON-08PMA1	7.1	1.732	4.10
	KHON-10PMA1	8.2	2.103	3.90
	KHON-08PMA3	7.1	1.732	4.10
	KHON-10PMA3	8.2	2.103	3.90
	KHON-12PMA1	9.2	2.300	4.00
	KHON-14PMA1	11.0	2.895	3.80
	KHON-16PMA1	13.0	3.714	3.50
	KHON-12PMA3	9.2	2.300	4.00
	KHON-14PMA3	11.0	2.895	3.80
	KHON-16PMA3	13.0	3.714	3.50

Condition(°C)	Model	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: -7/-8 Water temperature: 30/35	KHON-08PMA1	7.0	2.154	3.25
	KHON-10PMA1	8.0	2.540	3.15
	KHON-08PMA3	7.0	2.154	3.25
	KHON-10PMA3	8.0	2.540	3.15
	KHON-12PMA1	10.0	3.175	3.15
	KHON-14PMA1	12.0	4.286	2.80
	KHON-16PMA1	13.1	4.852	2.70
	KHON-12PMA3	10.0	3.175	3.15
	KHON-14PMA3	12.0	4.286	2.80
	KHON-16PMA3	13.1	4.852	2.70
Ambient Temperature: 7/6 Water temperature: 40/45	KHON-08PMA1	8.1	2.025	4.00
	KHON-10PMA1	9.5	2.436	3.90
	KHON-08PMA3	8.1	2.025	4.00
	KHON-10PMA3	9.5	2.436	3.90
	KHON-12PMA1	12.3	3.154	3.90
	KHON-14PMA1	14.1	3.760	3.75
	KHON-16PMA1	15.5	4.247	3.65
	KHON-12PMA3	12.3	3.154	3.90
	KHON-14PMA3	14.1	3.760	3.75
	KHON-16PMA3	15.5	4.247	3.65
Ambient Temperature: 2/1 Water temperature: 40/45	KHON-08PMA1	8.0	2.540	3.15
	KHON-10PMA1	9.0	2.951	3.05
	KHON-08PMA3	8.0	2.540	3.15
	KHON-10PMA3	9.0	2.951	3.05
	KHON-12PMA1	11.5	3.710	3.10
	KHON-14PMA1	12.5	4.098	3.05
	KHON-16PMA1	13.8	4.759	2.90
	KHON-12PMA3	11.5	3.710	3.10
	KHON-14PMA3	12.5	4.098	3.05
	KHON-16PMA3	13.8	4.759	2.90
Ambient Temperature: -7/-8 Water temperature: 40/45	KHON-08PMA1	8.0	3.077	2.60
	KHON-10PMA1	9.0	3.600	2.50
	KHON-08PMA3	8.0	3.077	2.60
	KHON-10PMA3	9.0	3.600	2.50
	KHON-12PMA1	11.0	4.400	2.50
	KHON-14PMA1	12.0	5.000	2.40
	KHON-16PMA1	13.0	5.652	2.30
	KHON-12PMA3	11.0	4.400	2.50
	KHON-14PMA3	12.0	5.000	2.40
	KHON-16PMA3	13.0	5.652	2.30

Condition(°C)	Model	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 7/6 Water temperature: 47/55	KHON-08PMA1	8.0	2.388	3.35
	KHON-10PMA1	9.5	2.969	3.20
	KHON-08PMA3	8.0	2.388	3.35
	KHON-10PMA3	9.5	2.969	3.20
	KHON-12PMA1	11.9	3.662	3.25
	KHON-14PMA1	13.8	4.381	3.15
	KHON-16PMA1	16.0	5.246	3.05
	KHON-12PMA3	11.9	3.662	3.25
	KHON-14PMA3	13.8	4.381	3.15
	KHON-16PMA3	16.0	5.246	3.05
Ambient Temperature: 2/1 Water temperature: 47/55	KHON-08PMA1	8.0	2.963	2.70
	KHON-10PMA1	9.0	3.529	2.55
	KHON-08PMA3	8.0	2.963	2.70
	KHON-10PMA3	9.0	3.529	2.55
	KHON-12PMA1	11.5	4.340	2.65
	KHON-14PMA1	12.5	4.808	2.60
	KHON-16PMA1	13.8	5.520	2.50
	KHON-12PMA3	11.5	4.340	2.65
	KHON-14PMA3	12.5	4.808	2.60
	KHON-16PMA3	13.8	5.520	2.50
Ambient Temperature: -7/-8 Water temperature: 47/55	KHON-08PMA1	7.5	3.261	2.30
	KHON-10PMA1	8.8	4.000	2.20
	KHON-08PMA3	7.5	3.261	2.30
	KHON-10PMA3	8.8	4.000	2.20
	KHON-12PMA1	11.0	4.889	2.25
	KHON-14PMA1	12.0	5.581	2.15
	KHON-16PMA1	13.0	6.190	2.10
	KHON-12PMA3	11.0	4.889	2.25
	KHON-14PMA3	12.0	5.581	2.15
	KHON-16PMA3	13.0	6.190	2.10

Unit type explanation:

- 1.MHC-V*****N7M-B, without back-up heater,
- 2.KHON*****PMA1, with 3 kW back-up heater and 1-Phase power source
- 3.MHC-V*****N7M-BER60, with 6 kW back-up heater and 3-Phase power source
- 4.KHON*****PMA3, with 9 kW back-up heater and 3-Phase power source

Note

EER and COP calculation is based in accordance to EN14511

NOTE

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NOTE

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Manufacturer / Producent:	Importer / Importer:
Klima-Therm Sp. z o.o.	Klima-Therm Sp. z o.o.
Ostrobramska 101a	Ostrobramska 101a
04-041 Warsaw, Poland	04-041 Warsaw, Poland