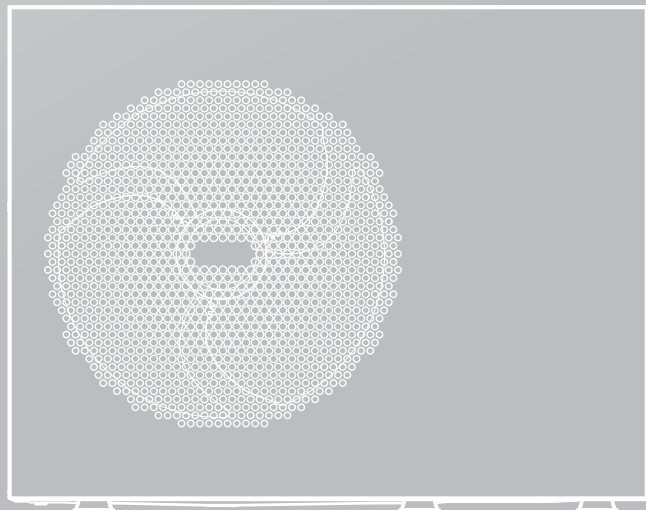


TECHNICAL DATA MANUAL

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.

For medium - temperature application														
Model	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			
Outdoor unit	-	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	8.4	191.4	2 309
MHC-V8WD2N7M-B***	A+++	53	8.2	159.6	4 168	7.6	135.0	5 429	8.4	191.4	2 309	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	10.2	190.9	2 812
MHC-V10WD2N7M-B***	A+++	54	10.0	157.5	5 148	9.6	136.8	6 773	10.2	190.9	2 812	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	8.4	191.4	2 309
MHC-V8WD2RN7M-B***	A+++	53	8.2	159.6	4 168	7.6	135.0	5 429	8.4	191.4	2 309	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	10.2	190.9	2 812
MHC-V10WD2RN7M-B***	A+++	54	10.0	157.5	5 148	9.6	136.8	6 773	10.2	190.9	2 812	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	12.1	192.7	3 304
MHC-V12WD2N7M-B***	A+++	55	12.1	155.4	6 312	12.0	139.6	8 299	12.1	192.7	3 304	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	14.1	191.9	3 865
MHC-V14WD2N7M-B***	A+++	57	13.8	151.0	7 405	13.2	138.7	9 186	14.1	191.9	3 865	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	15.0	191.4	4 124
MHC-V16WD2N7M-B***	A+++	59	14.7	151.5	7 862	14.9	137.4	10 462	15.0	191.4	4 124	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	12.1	192.7	3 304
MHC-V12WD2RN7M-B***	A+++	55	12.1	155.4	6 312	12.0	139.6	8 299	12.1	192.7	3 304	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	14.1	191.9	3 865
MHC-V14WD2RN7M-B***	A+++	57	13.8	151.0	7 405	13.2	138.7	9 186	14.1	191.9	3 865	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	15.0	191.4	4 124
MHC-V16WD2RN7M-B***	A+++	59	14.7	151.5	7 862	14.9	137.4	10 462	15.0	191.4	4 124	15.0	191.4	4 124

Unit type explanation:

- 1.MHC-V*****N7M-B, without back-up heater,
- 2.MHC-V*****N7M-BE30, 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.MHC-V*****N7M-BER90, with 9 kW back-up heater and 3-Phase power source

For low - temperature application														
Model	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
Outdoor unit	-	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Unit type explanation:

- 1.MHC-V****N7M-B, without back-up heater ,
- 2.MHC-V****N7M-BE30, 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.MHC-V****N7M-BER90, with 9 kW back-up heater and 3-Phase power source

Product fiche 1

Heat pump space heater

	Outdoor	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V12WD2N7M-B***
Outdoor unit sound power (*)	Outdoor					
Average climate low temperature application	dB	52	54	52	54	54
Average climate medium temperature application	dB	53	54	53	54	55
Capacity of the back-up heater integrated in the unit	[kW]	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9	0/3/6/9
Space heating	-	A+++	A+++	A+++	A+++	A+++
Space heating	-	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	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2R7M-B***	MHC-V14WD2R7M-B***	MHC-V16WD2R7M-B***
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)	Tol (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	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V12WD2N7M-B***
(F) Tivalent temperature	Tblv	[°C]	-7	-7	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	6.99	8.67	6.99	6.99	8.67	10.70
	COPd (declared COP)	-	3.30	3.19	3.30	3.30	3.19	2.89
	Psup (@Tdesign: -10°C)	[kW]	0.00	0.05	0.00	0.00	0.05	0.38
Part load conditions space heating average climate medium temperature application								
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	7.26	8.85	7.26	7.26	8.85	10.70
	COPd (declared COP)	-	2.46	2.23	2.46	2.46	2.23	2.52
	Cdh(degradation coefficient)	-	0.99	1.00	0.99	0.99	1.00	1.00
	Pdh (declared heating capacity)	[kW]	4.51	5.48	4.51	4.51	5.48	6.74
(B) condition (2°C)	COPd (declared COP)	-	4.02	3.98	4.02	4.02	3.98	3.83
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	3.72	3.78	3.72	3.72	3.78	5.32
	COPd (declared COP)	-	5.27	5.48	5.27	5.27	5.48	5.25
(C) condition (7°C)	Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98	0.98
	Pdh (declared heating capacity)	[kW]	4.40	4.43	4.40	4.40	4.43	5.94
	COPd (declared COP)	-	6.90	7.03	6.90	6.90	7.03	6.46
	Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.97	0.98
(D) condition (12°C)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	8.20	8.98	8.20	8.20	8.98	11.27
	COPd (declared COP)	-	2.11	2.06	2.11	2.11	2.06	2.01
	WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80	80
(E) Tol (temperature operating limit)	Tblv	[°C]	-7	-7	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	7.26	8.85	7.26	7.26	8.85	10.70
	COPd (declared COP)	-	2.46	2.23	2.46	2.46	2.23	2.52
	Psup (@Tdesign: -10°C)	[kW]	0.00	1.02	0.00	0.00	1.02	0.83
Colder climate (Design temperature = -22°C)								
Space heating 35°C	Prated (declared heating capacity) @ -22°C	[kW]	8.0	9.9	8.0	8.0	9.9	12.2
	Seasonal space heating efficiency (ns)	[%]	180.8	178.0	180.8	180.8	178.0	178.3
	Annual energy consumption	[kW/h]	4 291	5 392	4 291	4 291	5 392	6 637

Product fiche 2

Heat pump space heater

	Outdoor	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2RN7M-B***	MHC-V14WD2RN7M-B***	MHC-V16WD2RN7M-B***
(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)	Pdh (declared heating capacity)	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
(B) condition (2°C)	Pdh (declared heating capacity)	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
(C) condition (7°C)	Pdh (declared heating capacity)	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
(D) condition (12°C)	Pdh (declared heating capacity)	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
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	-10	-10	-10	-10	-10
	Pdh (declared heating capacity)	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)	80	80	80	80	80
(F) Tbivalent temperature	Tbiv	-7	-7	-7	-7	-7
	Pdh (declared heating capacity)	12.21	13.00	10.70	12.21	13.00
	COPd (declared COP)	2.23	2.33	2.52	2.23	2.33
Supplementary capacity at P_design	Psup (@Tdesignh: -10°C)	1.55	1.31	0.83	1.55	1.31
Colder climate (Design temperature = -22°C)						
Space heating 35°C	Prated (declared heating capacity) @ -22°C	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	7 868	8 587	6 637	7 868	8 587

Product fiche 3

Heat pump space heater

		Outdoor	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V12WD2N7M-B***
Space heating 55°C	Prated (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
	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
(F) Tivalent temperature	WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	66
	Tblv	[°C]	-15	-15	-15	-15	-15
	Pdh (declared heating capacity)	[kW]	6.53	8.08	6.53	8.08	9.95
Supplementary capacity at P_design	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	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2R7M-B***	MHC-V14WD2R7M-B***	MHC-V16WD2R7M-B***
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)	Tol (temperature operating limit)	[°C]	-22	-22	-22	-22	-22
	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
(F) Tivalent temperature	WTOL (Heating water Operation Limit)	[°C]	66	66	66	66	66
	Tbiv	[°C]	-15	-15	-15	-15	-15
	Pdh (declared heating capacity)	[kW]	11.58	12.24	9.95	11.58	12.24
Supplementary capacity at P_design	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	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V12WD2N7M-B***
(B) condition (2°C)	[kW]	2.99	3.58	2.99	3.58	4.50
Pdh (declared heating capacity)	[kW]	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)	[kW]	3.68	3.69	3.68	3.69	5.17
(C) condition (7°C)	-	5.49	5.61	5.49	5.61	5.50
Pdh (declared heating capacity)	-	0.98	0.98	0.98	0.98	0.98
Cdh(degradation coefficient)	[kW]	4.32	4.34	4.32	4.34	5.94
(D) condition (12°C)	-	7.12	7.20	7.12	7.20	6.97
Pdh (declared heating capacity)	-	0.97	0.97	0.97	0.97	0.98
Cdh(degradation coefficient)	[°C]	-22	-22	-22	-22	-22
Tol (temperature operating limit)	[kW]	5.76	6.26	5.76	6.26	8.69
(E) Tol (temperature operating limit)	-	1.58	1.55	1.58	1.55	1.72
Pdh (declared heating capacity)	[°C]	80	80	80	80	66
COPd (declared COP)	[°C]	-15	-15	-15	-15	-15
WTOL (Heating water Operation Limit)	[kW]	6.20	7.83	6.20	7.83	9.79
Tblv	-	2.08	1.96	2.08	1.96	2.17
(F) Tblv	[kW]	1.84	3.34	1.84	3.34	3.31
Pdh (declared heating capacity)	-					
COPd (declared COP)	[kW]					
Psup (@Tdesignh: -22°C)						
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)	[kWh]	1 566	1 963	1 566	1 963	2 377
Annual energy consumption	[kW]	8.4	10.2	8.4	10.2	12.1
Prated (declared heating capacity) @ 2°C	[%]	191.4	190.9	191.4	190.9	192.7
Seasonal space heating efficiency (ηs)	[kWh]	2 309	2 812	2 309	2 812	3 304
Annual energy consumption	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)	[kW]	5.21	6.50	5.21	6.50	7.78
(C) condition (7°C)	-	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	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2R7M-B***	MHC-V14WD2R7M-B***	MHC-V16WD2R7M-B***
(B) condition (2°C)	Outdoor [kW]	4.88	5.39	4.50	4.88	5.39
	Pdh (declared heating capacity) [kW]	4.40	4.44	4.36	4.40	4.44
	COPd (declared COP)	-	0.99	0.98	0.99	0.99
	Cdh(degradation coefficient)	5.39	5.73	5.17	5.39	5.73
(C) condition (7°C)	Outdoor [kW]	5.71	0.98	5.50	5.71	0.98
	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
(D) condition (12°C)	Outdoor [°C]	-22	-22	-22	-22	-22
	Tol (temperature operating limit) [°C]	9.30	10.12	8.69	9.30	10.12
	Pdh (declared heating capacity) [kW]	1.64	1.62	1.72	1.64	1.62
	COPd (declared COP)	66	66	66	66	66
	WTOL (Heating water Operation Limit) [°C]	-15	-15	-15	-15	-15
(F) Tivalent temperature	Outdoor [kW]	10.77	12.15	9.79	10.77	12.15
	Pdh (declared heating capacity) [kW]	2.12	1.89	2.17	2.12	1.89
	COPd (declared COP)	3.90	4.77	3.31	3.90	4.77
Supplementary capacity at P_design	Outdoor [kW]	3.90	4.77	3.31	3.90	4.77
Warmer climate (Design temperature = 2°C)						
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
Space heating 55°C	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)	Outdoor [kW]	12.86	14.00	11.96	12.86	14.00
	Pdh (declared heating capacity) [kW]	3.46	3.14	3.59	3.46	3.14
	COPd (declared COP)	-	1.00	1.00	-	1.00
	Cdh(degradation coefficient)	8.37	9.00	7.78	8.37	9.00
(C) condition (7°C)	Outdoor [kW]	5.91	5.83	6.03	5.91	5.83
	Pdh (declared heating capacity) [kW]	0.99	0.99	0.99	0.99	0.99
	COPd (declared COP)	-	-	-	-	-
	Cdh(degradation coefficient)	12.86	14.00	11.96	12.86	14.00

Product fiche 5

Heat pump space heater

	Outdoor	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2R7M-B***	MHC-V10WD2R7M-B***	MHC-V12WD2N7M-B***
(D) condition (12°C)	[kW]	4.50	4.52	4.50	4.52	4.52
Pdh (declared heating capacity)	[kW]	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)	[°C]	2	2	2	2	2
Tol (temperature operating limit)	[kW]	8.02	10.00	8.02	10.00	11.96
(E) Tol (temperature operating limit)	-	3.83	3.36	3.83	3.36	3.59
Pdh (declared heating capacity)	[°C]	80	80	80	80	80
COPd (declared COP)	[°C]	7	7	7	7	7
WTOL (Heating water Operation Limit)	[kW]	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)	[kW]					
Supplementary capacity at P_design						
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)	[kW]	5.40	6.56	5.40	6.56	7.78
(C) condition (7°C)	-	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)	[kW]	4.28	4.31	4.28	4.31	6.13
Cdh(degradation coefficient)	-	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
Tol (temperature operating limit)	[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
Pdh (declared heating capacity)	[°C]	80	80	80	80	80
COPd (declared COP)	[°C]	7	7	7	7	7
WTOL (Heating water Operation Limit)	[kW]	5.40	6.56	5.40	6.56	7.78
Tblv	-	4.17	4.12	4.17	4.12	4.18
(F) Tblv (temperature operating limit)	[kW]	0.20	0.57	0.20	0.57	0.20
Psup (@Tdesignh: 2°C)	[kW]					
Supplementary capacity at P_design						

Product fiche 5

Heat pump space heater

	Outdoor	MHC-V/4WD2N7M-B***	MHC-V/16WD2N7M-B***	MHC-V/12WD2RN7M-B***	MHC-V/14WD2RN7M-B***	MHC-V/16WD2RN7M-B***
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	6.34	6.35	6.34	6.34	6.34
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
Supplementary capacity at P_design	[kW]	0.14	0.00	0.14	0.14	0.00
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	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V12WD2N7M-B***
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
Air to water unit	Rated airflow (outdoor)	[m³/h]	4 680	4 680	4 680	4 680	4 780
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/	/	/	/	/
	Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
Other	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	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2R7M-B***	MHC-V14WD2R7M-B***	MHC-V16WD2R7M-B***
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
Air to water unit	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)		/	/	/	/	/
	Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter
Other	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	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2RN7M-B***	MHC-V10WD2RN7M-B***	MHC-V12WD2N7M-B***
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
	Prated (declared cooling capacity) @ 35°C	[kW]	8.3	10.0	8.3	10.0	12.0
Space cooling 18°C	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	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2RN7M-B***	MHC-V14WD2RN7M-B***	MHC-V16WD2RN7M-B***
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	MHC-V8WD2N7M-B***	MHC-V10WD2N7M-B***	MHC-V8WD2R7M-B***	MHC-V10WD2R7M-B***	MHC-V12WD2N7M-B***
(A) condition (35°C)	[kW]	8.30	10.00	8.30	10.00	12.00
Pdc (declared cooling capacity)		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)	[kW]	6.05	7.48	6.05	7.48	9.03
Pdc (declared cooling capacity)		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)	[kW]	4.53	4.83	4.53	4.83	5.44
Pdc (declared cooling capacity)		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)	[kW]	4.30	4.30	4.30	4.30	5.65
Pdc (declared cooling capacity)		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	[m³/h]	3 570	3 900	3 570	3 900	4 550
Rated airflow (outdoor)		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	MHC-V14WD2N7M-B***	MHC-V16WD2N7M-B***	MHC-V12WD2N7M-B***	MHC-V14WD2R7M-B***	MHC-V16WD2R7M-B***
(A) condition (35°C)	[kW]	14.00	15.00	12.00	14.00	15.00
Pdc (declared cooling capacity)		4.40	4.25	4.60	4.40	4.25
EERd (declared EER)	-	1.00	1.00	1.00	1.00	1.00
Cdc(degradation coefficient)		10.42	11.17	9.03	10.42	11.17
(B) condition (30°C)	[kW]	6.26	6.09	6.37	6.26	6.09
Pdc (declared cooling capacity)		0.99	0.99	0.99	0.99	0.99
EERd (declared EER)	-	6.79	7.30	5.44	6.79	7.30
Cdc(degradation coefficient)		7.86	7.75	5.45	7.86	7.75
(C) condition (25°C)	[kW]	0.99	0.99	0.99	0.99	0.99
Pdc (declared cooling capacity)		5.75	5.77	5.65	5.75	5.77
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
(D) condition (20°C)	[kW]	4.550	4.550	4.550	4.550	4.550
Pdc (declared cooling capacity)		/	/	/	/	/
EERd (declared EER)	-	Inverter	Inverter	Inverter	Inverter	Inverter
Cdc(degradation coefficient)		0.011	0.011	0.011	0.011	0.011
Air to water unit	[m ³ /h]	0.010	0.010	0.010	0.010	0.010
Rated airflow (outdoor)		0.011	0.011	0.011	0.011	0.011
Brine/water to water unit	[kW]	0.000	0.000	0.000	0.000	0.000
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	MHC-V8WD2N7M-B***	7.45	2.224	3.35
	MHC-V10WD2N7M-B***	8.1	2.613	3.10
	MHC-V8WD2RN7M-B***	7.45	2.224	3.35
	MHC-V10WD2RN7M-B***	8.1	2.613	3.10
	MHC-V12WD2N7M-B***	11.5	3.770	3.05
	MHC-V14WD2N7M-B***	12.4	4.133	3.00
	MHC-V16WD2N7M-B***	14.0	5.185	2.70
	MHC-V12WD2RN7M-B***	11.5	3.770	3.05
	MHC-V14WD2RN7M-B***	12.4	4.133	3.00
	MHC-V16WD2RN7M-B***	14.0	5.185	2.70
Ambient Temperature: 35/24 Water temperature: 23/18	MHC-V8WD2N7M-B***	8.3	1.581	5.25
	MHC-V10WD2N7M-B***	10.0	2.174	4.60
	MHC-V8WD2RN7M-B***	8.3	1.581	5.25
	MHC-V10WD2RN7M-B***	10.0	2.174	4.60
	MHC-V12WD2N7M-B***	12.0	2.609	4.60
	MHC-V14WD2N7M-B***	14.0	3.182	4.40
	MHC-V16WD2N7M-B***	15.0	3.529	4.25
	MHC-V12WD2RN7M-B***	12.0	2.609	4.60
	MHC-V14WD2RN7M-B***	14.0	3.182	4.40
	MHC-V16WD2RN7M-B***	15.0	3.529	4.25
Ambient Temperature: 7/6 Water temperature: 30/35	MHC-V8WD2N7M-B***	8.0	1.524	5.25
	MHC-V10WD2N7M-B***	9.5	1.919	4.95
	MHC-V8WD2RN7M-B***	8.0	1.524	5.25
	MHC-V10WD2RN7M-B***	9.5	1.919	4.95
	MHC-V12WD2N7M-B***	12.1	2.444	4.95
	MHC-V14WD2N7M-B***	14.0	2.979	4.70
	MHC-V16WD2N7M-B***	15.5	3.444	4.50
	MHC-V12WD2RN7M-B***	12.1	2.444	4.95
	MHC-V14WD2RN7M-B***	14.0	2.979	4.70
	MHC-V16WD2RN7M-B***	15.5	3.444	4.50
Ambient Temperature: 2/1 Water temperature: 30/35	MHC-V8WD2N7M-B***	7.1	1.732	4.10
	MHC-V10WD2N7M-B***	8.2	2.103	3.90
	MHC-V8WD2RN7M-B***	7.1	1.732	4.10
	MHC-V10WD2RN7M-B***	8.2	2.103	3.90
	MHC-V12WD2N7M-B***	9.2	2.300	4.00
	MHC-V14WD2N7M-B***	11.0	2.895	3.80
	MHC-V16WD2N7M-B***	13.0	3.714	3.50
	MHC-V12WD2RN7M-B***	9.2	2.300	4.00
	MHC-V14WD2RN7M-B***	11.0	2.895	3.80
	MHC-V16WD2RN7M-B***	13.0	3.714	3.50

Condition(°C)	Model	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: -7/-8 Water temperature: 30/35	MHC-V8WD2N7M-B***	7.0	2.154	3.25
	MHC-V10WD2N7M-B***	8.0	2.540	3.15
	MHC-V8WD2RN7M-B***	7.0	2.154	3.25
	MHC-V10WD2RN7M-B***	8.0	2.540	3.15
	MHC-V12WD2N7M-B***	10.0	3.175	3.15
	MHC-V14WD2N7M-B***	12.0	4.286	2.80
	MHC-V16WD2N7M-B***	13.1	4.852	2.70
	MHC-V12WD2RN7M-B***	10.0	3.175	3.15
	MHC-V14WD2RN7M-B***	12.0	4.286	2.80
	MHC-V16WD2RN7M-B***	13.1	4.852	2.70
Ambient Temperature: 7/6 Water temperature: 40/45	MHC-V8WD2N7M-B***	8.1	2.025	4.00
	MHC-V10WD2N7M-B***	9.5	2.436	3.90
	MHC-V8WD2RN7M-B***	8.1	2.025	4.00
	MHC-V10WD2RN7M-B***	9.5	2.436	3.90
	MHC-V12WD2N7M-B***	12.3	3.154	3.90
	MHC-V14WD2N7M-B***	14.1	3.760	3.75
	MHC-V16WD2N7M-B***	15.5	4.247	3.65
	MHC-V12WD2RN7M-B***	12.3	3.154	3.90
	MHC-V14WD2RN7M-B***	14.1	3.760	3.75
	MHC-V16WD2RN7M-B***	15.5	4.247	3.65
Ambient Temperature: 2/1 Water temperature: 40/45	MHC-V8WD2N7M-B***	8.0	2.540	3.15
	MHC-V10WD2N7M-B***	9.0	2.951	3.05
	MHC-V8WD2RN7M-B***	8.0	2.540	3.15
	MHC-V10WD2RN7M-B***	9.0	2.951	3.05
	MHC-V12WD2N7M-B***	11.5	3.710	3.10
	MHC-V14WD2N7M-B***	12.5	4.098	3.05
	MHC-V16WD2N7M-B***	13.8	4.759	2.90
	MHC-V12WD2RN7M-B***	11.5	3.710	3.10
	MHC-V14WD2RN7M-B***	12.5	4.098	3.05
	MHC-V16WD2RN7M-B***	13.8	4.759	2.90
Ambient Temperature: -7/-8 Water temperature: 40/45	MHC-V8WD2N7M-B***	8.0	3.077	2.60
	MHC-V10WD2N7M-B***	9.0	3.600	2.50
	MHC-V8WD2RN7M-B***	8.0	3.077	2.60
	MHC-V10WD2RN7M-B***	9.0	3.600	2.50
	MHC-V12WD2N7M-B***	11.0	4.400	2.50
	MHC-V14WD2N7M-B***	12.0	5.000	2.40
	MHC-V16WD2N7M-B***	13.0	5.652	2.30
	MHC-V12WD2RN7M-B***	11.0	4.400	2.50
	MHC-V14WD2RN7M-B***	12.0	5.000	2.40
	MHC-V16WD2RN7M-B***	13.0	5.652	2.30

Condition(°C)	Model	Capacity (kW)	Power input (kW)	EER/COP (/)
Ambient Temperature: 7/6 Water temperature: 47/55	MHC-V8WD2N7M-B***	8.0	2.388	3.35
	MHC-V10WD2N7M-B***	9.5	2.969	3.20
	MHC-V8WD2RN7M-B***	8.0	2.388	3.35
	MHC-V10WD2RN7M-B***	9.5	2.969	3.20
	MHC-V12WD2N7M-B***	11.9	3.662	3.25
	MHC-V14WD2N7M-B***	13.8	4.381	3.15
	MHC-V16WD2N7M-B***	16.0	5.246	3.05
	MHC-V12WD2RN7M-B***	11.9	3.662	3.25
	MHC-V14WD2RN7M-B***	13.8	4.381	3.15
	MHC-V16WD2RN7M-B***	16.0	5.246	3.05
Ambient Temperature: 2/1 Water temperature: 47/55	MHC-V8WD2N7M-B***	8.0	2.963	2.70
	MHC-V10WD2N7M-B***	9.0	3.529	2.55
	MHC-V8WD2RN7M-B***	8.0	2.963	2.70
	MHC-V10WD2RN7M-B***	9.0	3.529	2.55
	MHC-V12WD2N7M-B***	11.5	4.340	2.65
	MHC-V14WD2N7M-B***	12.5	4.808	2.60
	MHC-V16WD2N7M-B***	13.8	5.520	2.50
	MHC-V12WD2RN7M-B***	11.5	4.340	2.65
	MHC-V14WD2RN7M-B***	12.5	4.808	2.60
	MHC-V16WD2RN7M-B***	13.8	5.520	2.50
Ambient Temperature: -7/-8 Water temperature: 47/55	MHC-V8WD2N7M-B***	7.5	3.261	2.30
	MHC-V10WD2N7M-B***	8.8	4.000	2.20
	MHC-V8WD2RN7M-B***	7.5	3.261	2.30
	MHC-V10WD2RN7M-B***	8.8	4.000	2.20
	MHC-V12WD2N7M-B***	11.0	4.889	2.25
	MHC-V14WD2N7M-B***	12.0	5.581	2.15
	MHC-V16WD2N7M-B***	13.0	6.190	2.10
	MHC-V12WD2RN7M-B***	11.0	4.889	2.25
	MHC-V14WD2RN7M-B***	12.0	5.581	2.15
	MHC-V16WD2RN7M-B***	13.0	6.190	2.10

Unit type explanation:

- 1.MHC-V*****N7M-B, without back-up heater,
- 2.MHC-V*****N7M-BE30, 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.MHC-V*****N7M-BER90, with 9 kW back-up heater and 3-Phase power source

Note

EER and COP calculation is based in accordance to EN14511

NOTE

A series of horizontal dotted lines for writing notes.

NOTE

A series of horizontal dotted lines for writing notes, starting below a solid horizontal line.

16125300004539 V.A

此页不做菲林，仅核对使用

印刷技术要求

材质	双胶纸80g
规格	210*297(双面)
颜色	黑白
其他	

设计更改记录表（仅做说明用，不做菲林）

版本升级	更改人	更改日期	更改主要内容	涉及更改页面 (印刷页码)