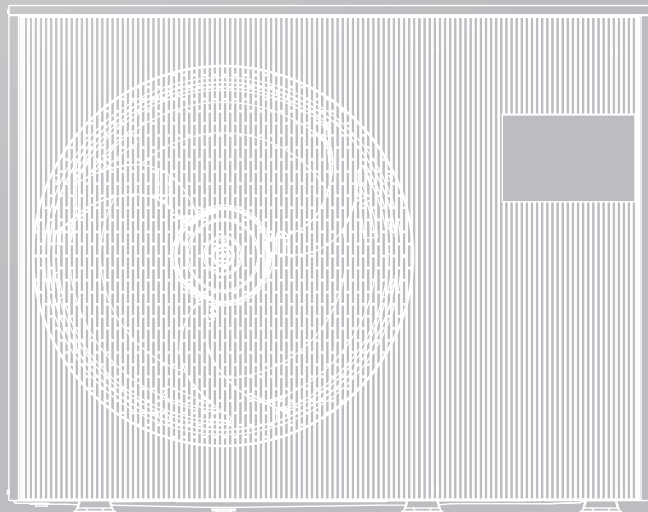


# TECHNICAL DATA MANUAL

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	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	
		-	dB	kW	%	kWh	kW	%	kWh	kW	%	kWh	kWh
MHC-V8WD2N7-B		A+++	53	8.2	159.6	4168	7.6	135.0	5429	8.4	191.4	2309	2309
MHC-V8WD2N7-B***		A+++	53	8.2	159.6	4168	7.6	135.0	5429	8.4	191.4	2309	2309
MHC-V10WD2N7-B		A+++	54	10.0	157.5	5148	9.6	136.8	6773	10.2	190.9	2812	2812
MHC-V10WD2N7-B***		A+++	54	10.0	157.5	5148	9.6	136.8	6773	10.2	190.9	2812	2812
MHC-V8WD2RN7-B		A+++	53	8.2	159.6	4168	7.6	135.0	5429	8.4	191.4	2309	2309
MHC-V8WD2RN7-B***		A+++	53	8.2	159.6	4168	7.6	135.0	5429	8.4	191.4	2309	2309
MHC-V10WD2RN7-B		A+++	54	10.0	157.5	5148	9.6	136.8	6773	10.2	190.9	2812	2812
MHC-V10WD2RN7-B***		A+++	54	10.0	157.5	5148	9.6	136.8	6773	10.2	190.9	2812	2812
MHC-V12WD2N7-B		A+++	55	12.1	155.4	6312	12.0	139.6	8299	12.1	192.7	3304	3304
MHC-V12WD2N7-B***		A+++	55	12.1	155.4	6312	12.0	139.6	8299	12.1	192.7	3304	3304
MHC-V14WD2N7-B		A+++	57	13.8	151.0	7405	13.2	138.7	9186	14.1	191.9	3865	3865
MHC-V14WD2N7-B***		A+++	57	13.8	151.0	7405	13.2	138.7	9186	14.1	191.9	3865	3865
MHC-V16WD2N7-B		A+++	59	14.7	151.5	7862	14.9	137.4	10462	15.0	191.4	4124	4124
MHC-V16WD2N7-B***		A+++	59	14.7	151.5	7862	14.9	137.4	10462	15.0	191.4	4124	4124
MHC-V12WD2RN7-B		A+++	55	12.1	155.4	6312	12.0	139.6	8299	12.1	192.7	3304	3304
MHC-V12WD2RN7-B***		A+++	55	12.1	155.4	6312	12.0	139.6	8299	12.1	192.7	3304	3304
MHC-V14WD2RN7-B		A+++	57	13.8	151.0	7405	13.2	138.7	9186	14.1	191.9	3865	3865
MHC-V14WD2RN7-B***		A+++	57	13.8	151.0	7405	13.2	138.7	9186	14.1	191.9	3865	3865
MHC-V16WD2RN7-B		A+++	59	14.7	151.5	7862	14.9	137.4	10462	15.0	191.4	4124	4124
MHC-V16WD2RN7-B***		A+++	59	14.7	151.5	7862	14.9	137.4	10462	15.0	191.4	4124	4124

Unit type explanation:

- 1.MHC-V\*\*\*\*N7-B, without back-up heater ,
- 2.MHC-V\*\*\*\*N7-BE30, with 3kW back-up heater and 1-Phase power source
- 3.MHC-V\*\*\*\*N7-BER60, with 6kW back-up heater and 3-Phase power source
- 4.MHC-V\*\*\*\*N7-BER90, with 9kW 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-V8WD2N7-B	A+++	52	7.9	211.0	3051	8.0	180.8	4291	8.1	273.4	1566	8.1	273.4	1566
MHC-V8WD2N7-B***	A+++	52	7.9	211.0	3051	8.0	180.8	4291	8.1	273.4	1566	8.1	273.4	1566
MHC-V10WD2N7-B	A+++	54	9.8	210.0	3802	9.9	178.0	5392	10.1	271.9	1963	10.1	271.9	1963
MHC-V10WD2N7-B***	A+++	54	9.8	210.0	3802	9.9	178.0	5392	10.1	271.9	1963	10.1	271.9	1963
MHC-V8WD2RN7-B	A+++	52	7.9	211.0	3051	8.0	180.8	4291	8.1	273.4	1566	8.1	273.4	1566
MHC-V8WD2RN7-B***	A+++	52	7.9	211.0	3051	8.0	180.8	4291	8.1	273.4	1566	8.1	273.4	1566
MHC-V10WD2RN7-B	A+++	54	9.8	210.0	3802	9.9	178.0	5392	10.1	271.9	1963	10.1	271.9	1963
MHC-V10WD2RN7-B***	A+++	54	9.8	210.0	3802	9.9	178.0	5392	10.1	271.9	1963	10.1	271.9	1963
MHC-V12WD2N7-B	A+++	54	12.1	194.5	5064	12.2	178.3	6637	12.1	269.1	2377	12.1	269.1	2377
MHC-V12WD2N7-B***	A+++	54	12.1	194.5	5064	12.2	178.3	6637	12.1	269.1	2377	12.1	269.1	2377
MHC-V14WD2N7-B	A+++	57	14.1	187.5	6118	14.2	175.0	7868	13.0	266.8	2575	13.0	266.8	2575
MHC-V14WD2N7-B***	A+++	57	14.1	187.5	6118	14.2	175.0	7868	13.0	266.8	2575	13.0	266.8	2575
MHC-V16WD2N7-B	A+++	58	15.9	185.6	6966	15.0	169.2	8587	14.0	267.8	2763	14.0	267.8	2763
MHC-V16WD2N7-B***	A+++	58	15.9	185.6	6966	15.0	169.2	8587	14.0	267.8	2763	14.0	267.8	2763
MHC-V12WD2RN7-B	A+++	54	12.1	194.5	5064	12.2	178.3	6637	12.1	269.1	2377	12.1	269.1	2377
MHC-V12WD2RN7-B***	A+++	54	12.1	194.5	5064	12.2	178.3	6637	12.1	269.1	2377	12.1	269.1	2377
MHC-V14WD2RN7-B	A+++	57	14.1	185.6	6118	14.2	175.0	7868	13.0	266.8	2575	13.0	266.8	2575
MHC-V14WD2RN7-B***	A+++	57	14.1	185.6	6118	14.2	175.0	7868	13.0	266.8	2575	13.0	266.8	2575
MHC-V16WD2RN7-B	A+++	58	15.9	185.6	6966	15.0	169.2	8587	14.0	267.8	2763	14.0	267.8	2763
MHC-V16WD2RN7-B***	A+++	58	15.9	185.6	6966	15.0	169.2	8587	14.0	267.8	2763	14.0	267.8	2763
MHC-V16WD2RN7-B***	A+++	58	15.9	185.6	6966	15.0	169.2	8587	14.0	267.8	2763	14.0	267.8	2763

Unit type explanation:

- 1.MHC-V\*\*\*\*\*N7-B, without back-up heater,
- 2.MHC-V\*\*\*\*\*N7-BE30, with 3kW back-up heater and 1-Phase power source
- 3.MHC-V\*\*\*\*\*N7-BER60, with 6kW back-up heater and 3-Phase power source
- 4.MHC-V\*\*\*\*\*N7-BER90, with 9kW back-up heater and 3-Phase power source

# Product fiche 1

## Heat pump space heater

	Outdoor	MHC-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-B***
Outdoor unit sound power (*)	Outdoor	MHC-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-B***
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]	3051	3802	3051	3802	5064
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]	4168	5148	4168	5148	6312
Part load conditions space heating average climate low temperature application						
(A) condition (-7°C)						
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
(C) condition (7°C)						
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
(D) condition (12°C)						
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
(E) Tol (temperature operating limit)						
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-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-B***
Outdoor unit sound power (*)	Average climate low temperature application		57	58	54	57	58
	Average climate medium temperature application		57	59	55	57	59
Capacity of the back-up heater integrated in the unit	P <sub>sup</sub> 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 <sub>s</sub> )	[%]	187.5	185.6	194.5	187.5	185.6
	Annual energy consumption	[kWh]	6118	6966	5064	6118	6966
Space heating 55°C	Prated (declared heating capacity) @ -10°C	[kW]	13.8	14.7	12.1	13.8	14.7
	Seasonal space heating efficiency (η <sub>s</sub> )	[%]	151.0	151.5	155.4	151.0	151.5
	Annual energy consumption	[kWh]	7405	7862	6312	7405	7862
Part load conditions space heating average climate low temperature application							
(A) condition (-7°C)	P <sub>dh</sub> (declared heating capacity)	[kW]	12.47	14.07	10.70	12.47	14.07
	COP <sub>d</sub> (declared COP)	-	2.63	2.45	2.89	2.63	2.45
	C <sub>dh</sub> (degradation coefficient)	-	1.00	1.00	1.00	1.00	1.00
(B) condition (2°C)	P <sub>dh</sub> (declared heating capacity)	[kW]	7.60	8.54	6.51	7.60	8.54
	COP <sub>d</sub> (declared COP)	-	4.52	4.53	4.71	4.52	4.53
	C <sub>dh</sub> (degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(C) condition (7°C)	P <sub>dh</sub> (declared heating capacity)	[kW]	5.49	5.50	5.46	5.49	5.50
	COP <sub>d</sub> (declared COP)	-	7.16	7.25	7.04	7.16	7.25
	C <sub>dh</sub> (degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
(D) condition (12°C)	P <sub>dh</sub> (declared heating capacity)	[kW]	6.30	6.27	6.30	6.30	6.27
	COP <sub>d</sub> (declared COP)	-	8.66	8.80	8.64	8.66	8.80
	C <sub>dh</sub> (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 <sub>dh</sub> (declared heating capacity)	[kW]	12.63	13.42	11.72	12.63	13.42
	COP <sub>d</sub> (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-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-B***
(F) Tivalent temperature	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
	Psup (@Tdesign: -10°C)	[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)	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
	Pdh (declared heating capacity)	[kW]	4.51	5.48	4.51	5.48	6.74
(B) condition (2°C)	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
	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
(C) condition (7°C)	Cdh(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98
	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
(D) condition (12°C)	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
(E) Tol (temperature operating limit)	Tblv	[°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
	Psup (@Tdesign: -10°C)	[kW]	0.00	1.02	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	9.9	12.2
	Seasonal space heating efficiency (ns)	[%]	180.8	178.0	180.8	178.0	178.3
	Annual energy consumption	[kWh]	4291	5392	4291	5392	6637

# Product fiche 2

## Heat pump space heater

	Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-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	7868	8587	6637	7868	8587



# Product fiche 3

<b>Heat pump space heater</b>		Outdoor	MHC-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-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]	5429	6773	5429	6773	8299
<b>Part load conditions space heating colder climate low temperature application</b>							
(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
<b>Part load conditions space heating colder climate medium temperature application</b>							
(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

<b>Heat pump space heater</b>		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-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]	9186	10462	8299	9186	10462
<b>Part load conditions space heating colder climate low temperature application</b>							
(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
<b>Part load conditions space heating colder climate medium temperature application</b>							
(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-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-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)	[kW]	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)	[kW]	7.12	7.20	7.12	7.20	6.97
(D) condition (12°C)	-	0.97	0.97	0.97	0.97	0.98
Pdh (declared heating capacity)	[°C]	-22	-22	-22	-22	-22
COPd (declared COP)	[kW]	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)	[°C]	80	80	80	80	66
WTOL (Heating water Operation Limit)	[°C]	-15	-15	-15	-15	-15
Tblv	[kW]	6.20	7.83	6.20	7.83	9.79
(F) Tivalent temperature	-	2.08	1.96	2.08	1.96	2.17
Pdh (declared heating capacity)	[kW]	1.84	3.34	1.84	3.34	3.31
COPd (declared COP)	[kW]					
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)	[kWh]	1566	1963	1566	1963	2377
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]	2309	2812	2309	2812	3304
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-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2R7-B***	MHC-V14WD2R7-B***	MHC-V16WD2R7-B***
	Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2R7-B***	MHC-V14WD2R7-B***	MHC-V16WD2R7-B***
	[kW]	4.88	5.39	4.50	4.88	5.39
(B) condition (2°C)	Pdh (declared heating capacity)	4.40	4.44	4.36	4.40	4.44
	COPd (declared COP)	0.99	0.99	0.98	0.99	0.99
	Cdh(degradation coefficient)	5.39	5.34	5.17	5.39	5.34
(C) condition (7°C)	Pdh (declared heating capacity)	5.71	5.73	5.50	5.71	5.73
	COPd (declared COP)	0.98	0.98	0.98	0.98	0.98
	Cdh(degradation coefficient)	5.95	6.16	5.94	5.95	6.16
(D) condition (12°C)	Pdh (declared heating capacity)	7.03	7.20	6.97	7.03	7.20
	COPd (declared COP)	0.98	0.98	0.98	0.98	0.98
	Cdh(degradation coefficient)	-22	-22	-22	-22	-22
	Tol (temperature operating limit)	9.30	10.12	8.69	9.30	10.12
(E) Tol (temperature operating limit)	Pdh (declared heating capacity)	1.64	1.62	1.72	1.64	1.62
	COPd (declared COP)	66	66	66	66	66
	WTOL (Heating water Operation Limit)	-15	-15	-15	-15	-15
(F) Tbiivalent temperature	Tblv	10.77	12.15	9.79	10.77	12.15
	Pdh (declared heating capacity)	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	Psup (@Tdesignh: -22°C)					
Warmer climate (Design temperature = 2°C)						
	Prated (declared heating capacity) @ 2°C	13.0	14.0	12.1	13.0	14.0
Space heating 35°C	Seasonal space heating efficiency (ηs)	266.8	267.8	269.1	266.8	267.8
	Annual energy consumption	2575	2763	2377	2575	2763
	Prated (declared heating capacity) @ 2°C	14.1	15.0	12.1	14.1	15.0
Space heating 55°C	Seasonal space heating efficiency (ηs)	191.9	191.4	192.7	191.9	191.4
	Annual energy consumption	3865	4124	3304	3865	4124
Part load conditions space heating warmer climate low temperature application						
	Pdh (declared heating capacity)	12.86	14.00	11.96	12.86	14.00
(B) condition (2°C)	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
	Pdh (declared heating capacity)	8.37	9.00	7.78	8.37	9.00
(C) condition (7°C)	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	MHC-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-B***
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	4.50	4.52	4.50	4.52	6.34
COPd (declared COP)	-	8.69	8.92	8.69	8.92	8.67
Cdh(degradation coefficient)	-	0.97	0.97	0.97	0.97	0.98
Tol (temperature operating limit)	[°C]	2	2	2	2	2
(E) Tol (temperature operating limit)						
Pdh (declared heating capacity)	[kW]	8.02	10.00	8.02	10.00	11.96
COPd (declared COP)	-	3.83	3.36	3.83	3.36	3.59
WTOL (Heating water Operation Limit)	[°C]	80	80	80	80	80
Tblv	[°C]	7	7	7	7	7
(F) Tblv (temperature operating limit)						
Pdh (declared heating capacity)	[kW]	5.21	6.50	5.21	6.50	7.78
COPd (declared COP)	-	6.26	6.07	6.26	6.07	6.03
Supplementary capacity at P_design	[kW]	0.08	0.11	0.08	0.11	0.14
<b>Part load conditions space heating warmer climate medium temperature application</b>						
(B) condition (2°C)						
Pdh (declared heating capacity)	[kW]	8.20	9.63	8.20	9.63	11.90
COPd (declared COP)	-	2.59	2.43	2.59	2.43	2.59
Cdh(degradation coefficient)	-	0.99	1.00	0.99	1.00	1.00
(C) condition (7°C)						
Pdh (declared heating capacity)	[kW]	5.40	6.56	5.40	6.56	7.78
COPd (declared COP)	-	4.17	4.12	4.17	4.12	4.18
Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99
(D) condition (12°C)						
Pdh (declared heating capacity)	[kW]	4.28	4.31	4.28	4.31	6.13
COPd (declared COP)	-	6.41	6.61	6.41	6.61	6.43
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]	8.20	9.63	8.20	9.63	11.90
COPd (declared COP)	-	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)						
Pdh (declared heating capacity)	[kW]	5.40	6.56	5.40	6.56	7.78
COPd (declared COP)	-	4.17	4.12	4.17	4.12	4.18
Supplementary capacity at P_design	[kW]	0.20	0.57	0.20	0.57	0.20

# Product fiche 5

## Heat pump space heater

	Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-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
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	MHC-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-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]	4680	4680	4680	4680	4780
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-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-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
	Rated airflow (outdoor)	[m <sup>3</sup> /h]	4780	4780	4780	4780	4780
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	MHC-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-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
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	MHC-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-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]	1498	1686	1383	1498	1686
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]	1210	1310	1024	1210	1310
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-V8WD2N7-B***	MHC-V10WD2N7-B***	MHC-V8WD2RN7-B***	MHC-V10WD2RN7-B***	MHC-V12WD2N7-B***
(A) condition (35°C)	Pdc (declared cooling capacity)	[kW]	8.30	10.00	8.30	10.00	8.30	10.00	12.00	
	EERd (declared EER)	-	5.25	4.60	5.25	4.60	5.25	4.60	4.60	
	Cdc(degradation coefficient)	-	0.99	1.00	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	6.05	7.48	9.03	
	EERd (declared EER)	-	7.23	7.14	7.23	7.14	7.23	7.14	6.37	
	Cdc(degradation coefficient)	-	0.99	0.99	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	4.53	4.83	5.44	
	EERd (declared EER)	-	8.61	8.90	8.61	8.90	8.61	8.90	5.45	
	Cdc(degradation coefficient)	-	0.98	0.98	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	4.30	4.30	5.65	
	EERd (declared EER)	-	8.97	8.97	8.97	8.97	8.97	8.97	8.04	
	Cdc(degradation coefficient)	-	0.98	0.98	0.98	0.98	0.98	0.98	0.99	
Air to water unit	Rated airflow (outdoor)	[m³/h]	3570	3900	3570	3900	3570	3900	4550	
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/	/	/	/	/	/	/	
Other	Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
	Poff (Power consumption Off mode)	[kW]	0.011	0.011	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	0.010	0.010	
	Psb (Power consumption Standby mode)	[kW]	0.011	0.011	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	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-V14WD2N7-B***	MHC-V16WD2N7-B***	MHC-V12WD2RN7-B***	MHC-V14WD2RN7-B***	MHC-V16WD2RN7-B***
<b>(A) condition (35°C)</b>	[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>(B) condition (30°C)</b>	[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
<b>(C) condition (25°C)</b>	[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
<b>(D) condition (20°C)</b>	[kW]	4550	4550	4550	4550	4550
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
<b>Air to water unit</b>	[m <sup>3</sup> /h]	0.010	0.010	0.010	0.010	0.010
Rated airflow (outdoor)		0.011	0.011	0.011	0.011	0.011
<b>Brine/water to water unit</b>	[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-V8WD2N7-B***	7.45	2.224	3.35
	MHC-V10WD2N7-B***	8.1	2.613	3.10
	MHC-V8WD2RN7-B***	7.45	2.224	3.35
	MHC-V10WD2RN7-B***	8.1	2.613	3.10
	MHC-V12WD2N7-B***	11.5	3.770	3.05
	MHC-V14WD2N7-B***	12.4	4.133	3.00
	MHC-V16WD2N7-B***	14.0	5.185	2.70
	MHC-V12WD2RN7-B***	11.5	3.770	3.05
	MHC-V14WD2RN7-B***	12.4	4.133	3.00
	MHC-V16WD2RN7-B***	14.0	5.185	2.70
Ambient Temperature: 35/24 Water temperature: 23/18	MHC-V8WD2N7-B***	8.3	1.581	5.25
	MHC-V10WD2N7-B***	10.0	2.174	4.60
	MHC-V8WD2RN7-B***	8.3	1.581	5.25
	MHC-V10WD2RN7-B***	10.0	2.174	4.60
	MHC-V12WD2N7-B***	12.0	2.609	4.60
	MHC-V14WD2N7-B***	14.0	3.182	4.40
	MHC-V16WD2N7-B***	15.0	3.529	4.25
	MHC-V12WD2RN7-B***	12.0	2.609	4.60
	MHC-V14WD2RN7-B***	14.0	3.182	4.40
	MHC-V16WD2RN7-B***	15.0	3.529	4.25
Ambient Temperature: 7/6 Water temperature: 30/35	MHC-V8WD2N7-B***	8.0	1.524	5.25
	MHC-V10WD2N7-B***	9.5	1.919	4.95
	MHC-V8WD2RN7-B***	8.0	1.524	5.25
	MHC-V10WD2RN7-B***	9.5	1.919	4.95
	MHC-V12WD2N7-B***	12.1	2.444	4.95
	MHC-V14WD2N7-B***	14.0	2.979	4.70
	MHC-V16WD2N7-B***	15.5	3.444	4.50
	MHC-V12WD2RN7-B***	12.1	2.444	4.95
	MHC-V14WD2RN7-B***	14.0	2.979	4.70
	MHC-V16WD2RN7-B***	15.5	3.444	4.50
Ambient Temperature: 2/1 Water temperature: 30/35	MHC-V8WD2N7-B***	7.1	1.732	4.10
	MHC-V10WD2N7-B***	8.2	2.103	3.90
	MHC-V8WD2RN7-B***	7.1	1.732	4.10
	MHC-V10WD2RN7-B***	8.2	2.103	3.90
	MHC-V12WD2N7-B***	9.2	2.300	4.00
	MHC-V14WD2N7-B***	11.0	2.895	3.80
	MHC-V16WD2N7-B***	13.0	3.714	3.50
	MHC-V12WD2RN7-B***	9.2	2.300	4.00
	MHC-V14WD2RN7-B***	11.0	2.895	3.80
	MHC-V16WD2RN7-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-V8WD2N7-B***	7.0	2.154	3.25
	MHC-V10WD2N7-B***	8.0	2.540	3.15
	MHC-V8WD2RN7-B***	7.0	2.154	3.25
	MHC-V10WD2RN7-B***	8.0	2.540	3.15
	MHC-V12WD2N7-B***	10.0	3.175	3.15
	MHC-V14WD2N7-B***	12.0	4.286	2.80
	MHC-V16WD2N7-B***	13.1	4.852	2.70
	MHC-V12WD2RN7-B***	10.0	3.175	3.15
	MHC-V14WD2RN7-B***	12.0	4.286	2.80
	MHC-V16WD2RN7-B***	13.1	4.852	2.70
Ambient Temperature: 7/6 Water temperature: 40/45	MHC-V8WD2N7-B***	8.1	2.025	4.00
	MHC-V10WD2N7-B***	9.5	2.436	3.90
	MHC-V8WD2RN7-B***	8.1	2.025	4.00
	MHC-V10WD2RN7-B***	9.5	2.436	3.90
	MHC-V12WD2N7-B***	12.3	3.154	3.90
	MHC-V14WD2N7-B***	14.1	3.760	3.75
	MHC-V16WD2N7-B***	15.5	4.247	3.65
	MHC-V12WD2RN7-B***	12.3	3.154	3.90
	MHC-V14WD2RN7-B***	14.1	3.760	3.75
	MHC-V16WD2RN7-B***	15.5	4.247	3.65
Ambient Temperature: 2/1 Water temperature: 40/45	MHC-V8WD2N7-B***	8.0	2.540	3.15
	MHC-V10WD2N7-B***	9.0	2.951	3.05
	MHC-V8WD2RN7-B***	8.0	2.540	3.15
	MHC-V10WD2RN7-B***	9.0	2.951	3.05
	MHC-V12WD2N7-B***	11.5	3.710	3.10
	MHC-V14WD2N7-B***	12.5	4.098	3.05
	MHC-V16WD2N7-B***	13.8	4.759	2.90
	MHC-V12WD2RN7-B***	11.5	3.710	3.10
	MHC-V14WD2RN7-B***	12.5	4.098	3.05
	MHC-V16WD2RN7-B***	13.8	4.759	2.90
Ambient Temperature: -7/-8 Water temperature: 40/45	MHC-V8WD2N7-B***	8.0	3.077	2.60
	MHC-V10WD2N7-B***	9.0	3.600	2.50
	MHC-V8WD2RN7-B***	8.0	3.077	2.60
	MHC-V10WD2RN7-B***	9.0	3.600	2.50
	MHC-V12WD2N7-B***	11.0	4.400	2.50
	MHC-V14WD2N7-B***	12.0	5.000	2.40
	MHC-V16WD2N7-B***	13.0	5.652	2.30
	MHC-V12WD2RN7-B***	11.0	4.400	2.50
	MHC-V14WD2RN7-B***	12.0	5.000	2.40
	MHC-V16WD2RN7-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-V8WD2N7-B***	8.0	2.388	3.35
	MHC-V10WD2N7-B***	9.5	2.969	3.20
	MHC-V8WD2RN7-B***	8.0	2.388	3.35
	MHC-V10WD2RN7-B***	9.5	2.969	3.20
	MHC-V12WD2N7-B***	11.9	3.662	3.25
	MHC-V14WD2N7-B***	13.8	4.381	3.15
	MHC-V16WD2N7-B***	16.0	5.246	3.05
	MHC-V12WD2RN7-B***	11.9	3.662	3.25
	MHC-V14WD2RN7-B***	13.8	4.381	3.15
	MHC-V16WD2RN7-B***	16.0	5.246	3.05
Ambient Temperature: 2/1 Water temperature: 47/55	MHC-V8WD2N7-B***	8.0	2.963	2.70
	MHC-V10WD2N7-B***	9.0	3.529	2.55
	MHC-V8WD2RN7-B***	8.0	2.963	2.70
	MHC-V10WD2RN7-B***	9.0	3.529	2.55
	MHC-V12WD2N7-B***	11.5	4.340	2.65
	MHC-V14WD2N7-B***	12.5	4.808	2.60
	MHC-V16WD2N7-B***	13.8	5.520	2.50
	MHC-V12WD2RN7-B***	11.5	4.340	2.65
	MHC-V14WD2RN7-B***	12.5	4.808	2.60
	MHC-V16WD2RN7-B***	13.8	5.520	2.50
Ambient Temperature: -7/-8 Water temperature: 47/55	MHC-V8WD2N7-B***	7.5	3.261	2.30
	MHC-V10WD2N7-B***	8.8	4.000	2.20
	MHC-V8WD2RN7-B***	7.5	3.261	2.30
	MHC-V10WD2RN7-B***	8.8	4.000	2.20
	MHC-V12WD2N7-B***	11.0	4.889	2.25
	MHC-V14WD2N7-B***	12.0	5.581	2.15
	MHC-V16WD2N7-B***	13.0	6.190	2.10
	MHC-V12WD2RN7-B***	11.0	4.889	2.25
	MHC-V14WD2RN7-B***	12.0	5.581	2.15
	MHC-V16WD2RN7-B***	13.0	6.190	2.10

Unit type explanation:

- 1.MHC-V\*\*\*\*\*N7-B, without back-up heater,
- 2.MHC-V\*\*\*\*\*N7-BE30, with 3kW back-up heater and 1-Phase power source
- 3.MHC-V\*\*\*\*\*N7-BER60, with 6kW back-up heater and 3-Phase power source
- 4.MHC-V\*\*\*\*\*N7-BER90, with 9kW back-up heater and 3-Phase power source

Note

EER and COP calculation is based in accordance to EN14511

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# 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)