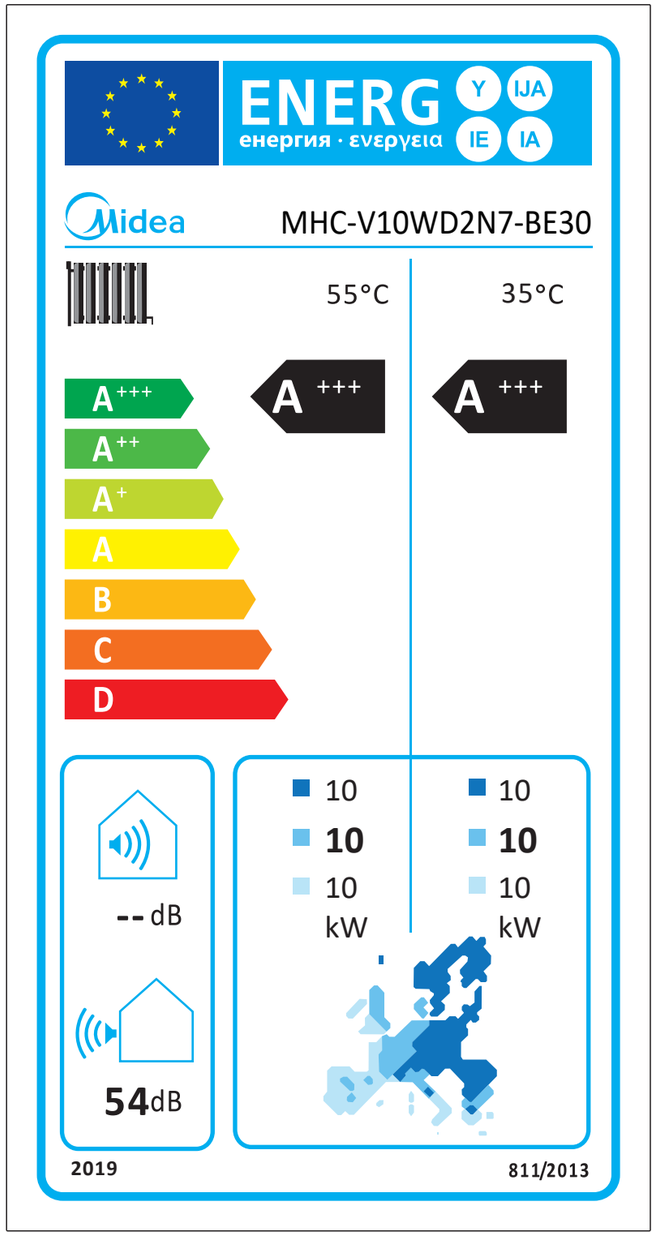
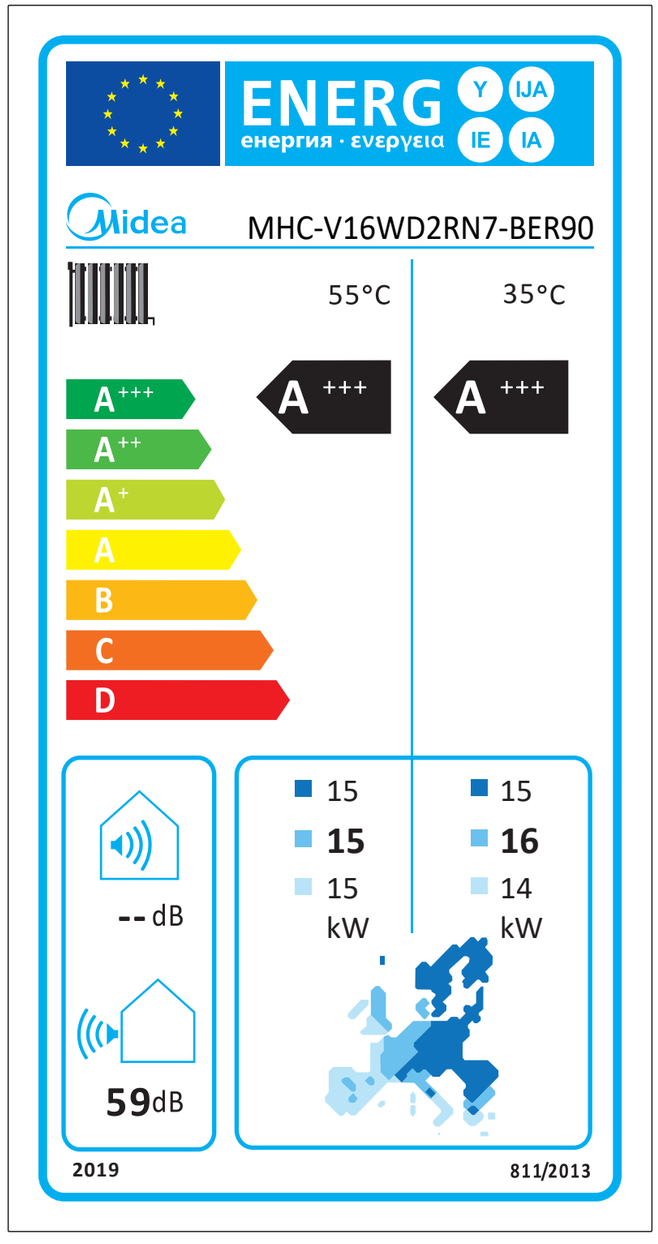

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MHC-V10WD2N7-BE30
55°C
35°C
A+++
A++
A+
A
B
C
D
A +++
A +++
-- dB
54dB
10
10
10
kW
10
10
10
kW
2019
811/2013


ENERG
енергия · ενεργεια
Y
IJA
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Midea
MHC-V16WD2RN7-BER90
55°C
35°C
A+++
A++
A+
A
B
C
D
A +++
A +++
-- dB
59dB
15
15
15
kW
15
16
14
kW
2019
811/2013

Midea®

Model	For medium - temperature application											
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	
MHC-V10WD2N7-B***	A+++	54	10.0	157.5	5148	9.6	136.8	6773	10.2	190.9	2812	
MHC-V14WD2N7-B***	A+++	57	13.8	151.0	7405	13.2	138.7	9186	14.1	191.9	3865	
MHC-V16WD2RN7-B***	A+++	59	14.7	151.5	7862	14.9	137.4	10462	15.0	191.4	4124	

Model	For low - temperature application											
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	%					
MHC-V10WD2N7-B***	A+++	54	9.8	210.0	3802	9.9	178.0	5392	10.1	271.9	1963	
MHC-V14WD2N7-B***	A+++	57	14.1	187.5	6118	14.2	175.0	7868	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	

Unit type explanation:

1. MHC-V******N7-BE30, with 3kW back-up heater and 1-Phase power source
2. MHC-V******N7-BER90, with 9kW back-up heater and 3-Phase power source

Product fiche 1

Heat pump space heater		Outdoor	MHC-V10WD2N7-B***
Outdoor unit sound power (*)	Average climate low temperature application	dB	54
	Average climate medium temperature application	dB	54
Capicity of the back-up heater integrated in the unit	Psup back-up heater (optional)	[kW]	0/3/6/9
Space heating	Energy efficiency class 35°C (Low temp. app.)	-	A+++
Space heating	Energy efficiency class 55°C (Medium temp. app.)	-	A+++
Average climate (Design temperature = –10°C)			
Space heating 35°C	Prated (declared heating capacity) @ –10°C	[kW]	9.8
	Seasonal space heating efficiency (ηs)	[%]	210.0
	Annual energy consumption	[kWh]	3802
Space heating 55°C	Prated (declared heating capacity) @ –10°C	[kW]	10.0
	Seasonal space heating efficiency (ηs)	[%]	157.5
	Annual energy consumption	[kWh]	5148
Part load conditions space heating average climate low temperature application			
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	8.67
	COPd (declared COP)	-	3.19
	Cdh(degradation coefficient)	-	0.99
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	5.50
	COPd (declared COP)	-	5.19
	Cdh(degradation coefficient)	-	0.98
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	3.93
	COPd (declared COP)	-	7.17
	Cdh(degradation coefficient)	-	0.97
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	4.53
	COPd (declared COP)	-	9.12
	Cdh(degradation coefficient)	-	0.97
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10
	Pdh (declared heating capacity)	[kW]	9.75
	COPd (declared COP)	-	2.65
	WTOL (Heating water Operation Limit)	[°C]	80

Product fiche 1

Heat pump space heater		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
Outdoor unit sound power (*)	Average climate low temperature application	dB	57	58
	Average climate medium temperature application	dB	57	59
Capicity of the back-up heater integrated in the unit	Psup back-up heater (optional)	[kW]	0/3/6/9	0/3/6/9
Space heating	Energy efficiency class 35°C (Low temp. app.)	-	A+++	A+++
Space heating	Energy efficiency class 55°C (Medium temp. app.)	-	A+++	A+++
Average climate (Design temperature = –10°C)				
Space heating 35°C	Prated (declared heating capacity) @ –10°C	[kW]	14.1	15.9
	Seasonal space heating efficiency (ηs)	[%]	187.5	185.6
	Annual energy consumption	[kWh]	6118	6966
Space heating 55°C	Prated (declared heating capacity) @ –10°C	[kW]	13.8	14.7
	Seasonal space heating efficiency (ηs)	[%]	151.0	151.5
	Annual energy consumption	[kWh]	7405	7862
Part load conditions space heating average climate low temperature application				
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	12.47	14.07
	COPd (declared COP)	-	2.63	2.45
	Cdh(degradation coefficient)	-	1.00	1.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	7.60	8.54
	COPd (declared COP)	-	4.52	4.53
	Cdh(degradation coefficient)	-	0.99	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	5.49	5.50
	COPd (declared COP)	-	7.16	7.25
	Cdh(degradation coefficient)	-	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	6.30	6.27
	COPd (declared COP)	-	8.66	8.80
	Cdh(degradation coefficient)	-	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10
	Pdh (declared heating capacity)	[kW]	12.63	13.42
	COPd (declared COP)	-	2.53	2.43
	WTOL (Heating water Operation Limit)	[°C]	80	80

Product fiche 2

Heat pump space heater		Outdoor	MHC-V10WD2N7-B***
(F) Tbivalent temperature	Tbiv	[°C]	-7
	Pdh (declared heating capacity)	[kW]	8.67
	COPd (declared COP)	-	3.19
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	0.05
Part load conditions space heating average climate medium temperature application			
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	8.85
	COPd (declared COP)	-	2.23
	Cdh(degradation coefficient)	-	1.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	5.48
	COPd (declared COP)	-	3.98
	Cdh(degradation coefficient)	-	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	3.78
	COPd (declared COP)	-	5.48
	Cdh(degradation coefficient)	-	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	4.43
	COPd (declared COP)	-	7.03
	Cdh(degradation coefficient)	-	0.97
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10
	Pdh (declared heating capacity)	[kW]	8.98
	COPd (declared COP)	-	2.06
	WTOL (Heating water Operation Limit)	[°C]	80
(F) Tbivalent temperature	Tbiv	[°C]	-7
	Pdh (declared heating capacity)	[kW]	8.85
	COPd (declared COP)	-	2.23
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	1.02
Colder climate (Design temperature = –22°C)			
Space heating 35°C	Prated (declared heating capacity) @ –22°C	[kW]	9.9
	Seasonal space heating efficiency (ηs)	[%]	178.0
	Annual energy consumption	[kWh]	5392

Product fiche 2

Heat pump space heater		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
(F) Tbivalent temperature	Tblv	[°C]	-7	-7
	Pdh (declared heating capacity)	[kW]	12.47	14.07
	COPd (declared COP)	-	2.63	2.45
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	1.47	2.48
Part load conditions space heating average climate medium temperature application				
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	12.21	13.00
	COPd (declared COP)	-	2.23	2.33
	Cdh(degradation coefficient)	-	1.00	1.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	7.51	7.96
	COPd (declared COP)	-	3.71	3.68
	Cdh(degradation coefficient)	-	0.99	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	5.15	5.34
	COPd (declared COP)	-	5.39	5.40
	Cdh(degradation coefficient)	-	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	6.13	5.98
	COPd (declared COP)	-	6.84	6.58
	Cdh(degradation coefficient)	-	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10
	Pdh (declared heating capacity)	[kW]	12.25	13.39
	COPd (declared COP)	-	1.97	1.95
	WTOL (Heating water Operation Limit)	[°C]	80	80
(F) Tbivalent temperature	Tblv	[°C]	-7	-7
	Pdh (declared heating capacity)	[kW]	12.21	13.00
	COPd (declared COP)	-	2.23	2.33
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	1.55	1.31
Colder climate (Design temperature = –22°C)				
Space heating 35°C	Prated (declared heating capacity) @ –22°C	[kW]	14.2	15.0
	Seasonal space heating efficiency (ηs)	[%]	175.0	169.2
	Annual energy consumption	[kWh]	7868	8587

Product fiche 3

Heat pump space heater			MHC-V10WD2N7-B***
Space heating 55°C	Prated (declared heating capacity) @ –22°C	[kW]	9.6
	Seasonal space heating efficiency (ηs)	[%]	136.8
	Annual energy consumption	[kWh]	6773
Part load conditions space heating colder climate low temperature application			
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	6.07
	COPd (declared COP)	-	3.59
	Cdh(degradation coefficient)	-	0.99
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	3.85
	COPd (declared COP)	-	5.92
	Cdh(degradation coefficient)	-	0.98
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	3.93
	COPd (declared COP)	-	7.32
	Cdh(degradation coefficient)	-	0.97
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	4.54
	COPd (declared COP)	-	8.90
	Cdh(degradation coefficient)	-	0.97
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-22
	Pdh (declared heating capacity)	[kW]	6.79
	COPd (declared COP)	-	2.00
	WTOL (Heating water Operation Limit)	[°C]	80
(F) Tbivalent temperature	Tbiv	[°C]	-15
	Pdh (declared heating capacity)	[kW]	8.08
	COPd (declared COP)	-	2.48
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	3.11
Part load conditions space heating colder climate medium temperature application			
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	5.89
	COPd (declared COP)	-	2.81
	Cdh(degradation coefficient)	-	0.99

Product fiche 3

Heat pump space heater			MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
Space heating 55°C	Prated (declared heating capacity) @ –22°C	[kW]	13.2	14.9
	Seasonal space heating efficiency (ηs)	[%]	138.7	137.4
	Annual energy consumption	[kWh]	9186	10462
Part load conditions space heating colder climate low temperature application				
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	8.54	9.26
	COPd (declared COP)	-	3.54	3.27
	Cdh(degradation coefficient)	-	0.99	0.99
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	5.18	5.61
	COPd (declared COP)	-	5.68	5.64
	Cdh(degradation coefficient)	-	0.98	0.98
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	5.52	5.44
	COPd (declared COP)	-	7.04	7.22
	Cdh(degradation coefficient)	-	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	6.22	6.30
	COPd (declared COP)	-	8.53	8.59
	Cdh(degradation coefficient)	-	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-22	-22
	Pdh (declared heating capacity)	[kW]	10.04	10.97
	COPd (declared COP)	-	2.00	1.92
	WTOL (Heating water Operation Limit)	[°C]	66	66
(F) Tbivalent temperature	Tblv	[°C]	-15	-15
	Pdh (declared heating capacity)	[kW]	11.58	12.24
	COPd (declared COP)	-	2.58	2.44
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	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
	COPd (declared COP)	-	2.81	2.83
	Cdh(degradation coefficient)	-	0.99	0.99

Product fiche 4

Heat pump space heater			Outdoor	MHC-V10WD2N7-B***
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]		3.58
	COPd (declared COP)	-		4.41
	Cdh(degradation coefficient)	-		0.98
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]		3.69
	COPd (declared COP)	-		5.61
	Cdh(degradation coefficient)	-		0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]		4.34
	COPd (declared COP)	-		7.20
	Cdh(degradation coefficient)	-		0.97
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]		-22
	Pdh (declared heating capacity)	[kW]		6.26
	COPd (declared COP)	-		1.55
	WTOL (Heating water Operation Limit)	[°C]		80
(F) Tbivalent temperature	Tbiv	[°C]		-15
	Pdh (declared heating capacity)	[kW]		7.83
	COPd (declared COP)	-		1.96
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]		3.34
Warmer climate (Design temperature = 2°C)				
Space heating 35°C	Prated (declared heating capacity) @ 2°C	[kW]		10.1
	Seasonal space heating efficiency (ηs)	[%]		271.9
	Annual energy consumption	[kWh]		1963
Space heating 55°C	Prated (declared heating capacity) @ 2°C	[kW]		10.2
	Seasonal space heating efficiency (ηs)	[%]		190.9
	Annual energy consumption	[kWh]		2812
Part load conditions space heating warmer climate low temperature application				
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]		10.00
	COPd (declared COP)	-		3.36
	Cdh(degradation coefficient)	-		0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]		6.50
	COPd (declared COP)	-		6.07
	Cdh(degradation coefficient)	-		0.99

Product fiche 4

Heat pump space heater		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	4.88	5.39
	COPd (declared COP)	-	4.40	4.44
	Cdh(degradation coefficient)	-	0.99	0.99
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	5.39	5.34
	COPd (declared COP)	-	5.71	5.73
	Cdh(degradation coefficient)	-	0.98	0.98
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	5.95	6.16
	COPd (declared COP)	-	7.03	7.20
	Cdh(degradation coefficient)	-	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-22	-22
	Pdh (declared heating capacity)	[kW]	9.30	10.12
	COPd (declared COP)	-	1.64	1.62
	WTOL (Heating water Operation Limit)	[°C]	66	66
(F) Tbivalent temperature	Tbiv	[°C]	-15	-15
	Pdh (declared heating capacity)	[kW]	10.77	12.15
	COPd (declared COP)	-	2.12	1.89
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	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
	Seasonal space heating efficiency (ηs)	[%]	266.8	267.8
	Annual energy consumption	[kWh]	2575	2763
Space heating 55°C	Prated (declared heating capacity) @ 2°C	[kW]	14.1	15.0
	Seasonal space heating efficiency (ηs)	[%]	191.9	191.4
	Annual energy consumption	[kWh]	3865	4124
Part load conditions space heating warmer climate low temperature application				
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	12.86	14.00
	COPd (declared COP)	-	3.46	3.14
	Cdh(degradation coefficient)	-	1.00	1.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	8.37	9.00
	COPd (declared COP)	-	5.91	5.83
	Cdh(degradation coefficient)	-	0.99	0.99

Product fiche 5

Heat pump space heater		Outdoor	MHC-V10WD2N7-B***
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	4.52
	COPd (declared COP)	-	8.92
	Cdh(degradation coefficient)	-	0.97
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	2
	Pdh (declared heating capacity)	[kW]	10.00
	COPd (declared COP)	-	3.36
	WTOL (Heating water Operation Limit)	[°C]	80
(F) Tbivalent temperature	Tblv	[°C]	7
	Pdh (declared heating capacity)	[kW]	6.50
	COPd (declared COP)	-	6.07
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	0.11
Part load conditions space heating warmer climate medium temperature application			
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	9.63
	COPd (declared COP)	-	2.43
	Cdh(degradation coefficient)	-	1.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	6.56
	COPd (declared COP)	-	4.12
	Cdh(degradation coefficient)	-	0.99
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	4.31
	COPd (declared COP)	-	6.61
	Cdh(degradation coefficient)	-	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	2
	Pdh (declared heating capacity)	[kW]	9.63
	COPd (declared COP)	-	2.43
	WTOL (Heating water Operation Limit)	[°C]	80
(F) Tbivalent temperature	Tblv	[°C]	7
	Pdh (declared heating capacity)	[kW]	6.56
	COPd (declared COP)	-	4.12
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	0.57

Product fiche 5

Heat pump space heater		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	6.34	6.35
	COPd (declared COP)	-	8.70	8.92
	Cdh(degradation coefficient)	-	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	2	2
	Pdh (declared heating capacity)	[kW]	12.86	14.00
	COPd (declared COP)	-	3.46	3.14
	WTOL (Heating water Operation Limit)	[°C]	80	80
(F) Tbivalent temperature	Tblv	[°C]	7	7
	Pdh (declared heating capacity)	[kW]	8.37	9.00
	COPd (declared COP)	-	5.91	5.83
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	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
	COPd (declared COP)	-	2.45	2.40
	Cdh(degradation coefficient)	-	1.00	1.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	9.06	9.64
	COPd (declared COP)	-	4.14	4.09
	Cdh(degradation coefficient)	-	0.99	0.99
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	6.15	6.14
	COPd (declared COP)	-	6.56	6.65
	Cdh(degradation coefficient)	-	0.98	0.98
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	2	2
	Pdh (declared heating capacity)	[kW]	13.56	14.29
	COPd (declared COP)	-	2.44	2.40
	WTOL (Heating water Operation Limit)	[°C]	80	80
(F) Tbivalent temperature	Tblv	[°C]	7	7
	Pdh (declared heating capacity)	[kW]	9.06	9.64
	COPd (declared COP)	-	4.14	4.09
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	0.53	0.71

Product fiche 6

Heat pump space heater		Outdoor	MHC-V10WD2N7-B***
Product description	Air-to-water heat pump	Y/N	Y
	Water-to-water heat pump	Y/N	N
	Brine-to-water heat pump	Y/N	N
	Low-temperature heat pump	Y/N	N
	Equipped with a supplementary heater	Y/N	Y
	Heat pump combination heater	Y/N	Y
Air to water unit	Rated airflow (outdoor)	[m^3/h]	4680
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/
Other	Capacity control	-	Inverter
	Poff (Power consumption Off mode)	[kW]	0.011
	Pto (Power consumption Thermostat off mode)	[kW]	0.016
	Psb (Power consumption Standby mode)	[kW]	0.011
	PCK (Power crankcase heater model)	[kW]	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-V16WD2RN7-B***
Product description	Air-to-water heat pump	Y/N	Y	Y
	Water-to-water heat pump	Y/N	N	N
	Brine-to-water heat pump	Y/N	N	N
	Low-temperature heat pump	Y/N	N	N
	Equipped with a supplementary heater	Y/N	Y	Y
	Heat pump combination heater	Y/N	Y	Y
Air to water unit	Rated airflow (outdoor)	[m^3/h]	4780	4780
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/	/
Other	Capacity control	-	Inverter	Inverter
	Poff (Power consumption Off mode)	[kW]	0.011	0.011
	Pto (Power consumption Thermostat off mode)	[kW]	0.016	0.016
	Psb (Power consumption Standby mode)	[kW]	0.011	0.011
	PCK (Power crankcase heater model)	[kW]	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-V10WD2N7-B***
Outdoor unit sound power (*)	Average climate low temperature application	dB	55
	Average climate medium temperature application	dB	54
Space cooling 7°C	Prated (declared cooling capacity) @ 35°C	[kW]	8.1
	Seasonal space cooling efficiency (ηs)	[%]	218.3
	Annual energy consumption	[kWh]	878
Space cooling 18°C	Prated (declared cooling capacity) @ 35°C	[kW]	10.0
	Seasonal space cooling efficiency (ηs)	[%]	303.9
	Annual energy consumption	[kWh]	782
Part load conditions space cooling: low temperature application@7°C			
(A) condition (35°C)	Pdc (declared cooling capacity)	[kW]	8.10
	EERd (declared EER)	-	3.10
	Cdc(degradation coefficient)	-	1.00
(B) condition (30°C)	Pdc (declared cooling capacity)	[kW]	6.28
	EERd (declared EER)	-	4.89
	Cdc(degradation coefficient)	-	0.99
(C) condition (25°C)	Pdc (declared cooling capacity)	[kW]	3.98
	EERd (declared EER)	-	6.49
	Cdc(degradation coefficient)	-	0.98
(D) condition (20°C)	Pdc (declared cooling capacity)	[kW]	3.52
	EERd (declared EER)	-	6.87
	Cdc(degradation coefficient)	-	0.98

Product fiche 7

Heat pump space cooling		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
Outdoor unit sound power (*)	Average climate low temperature application	dB	58	60
	Average climate medium temperature application	dB	57	59
Space cooling 7°C	Prated (declared cooling capacity) @ 35°C	[kW]	12.4	14.0
	Seasonal space cooling efficiency (ηs)	[%]	195.7	196.3
	Annual energy consumption	[kWh]	1498	1686
Space cooling 18°C	Prated (declared cooling capacity) @ 35°C	[kW]	14.0	15.0
	Seasonal space cooling efficiency (ηs)	[%]	274.7	271.7
	Annual energy consumption	[kWh]	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
	EERd (declared EER)	-	3.00	2.70
	Cdc(degradation coefficient)	-	1.00	1.00
(B) condition (30°C)	Pdc (declared cooling capacity)	[kW]	9.19	10.24
	EERd (declared EER)	-	4.26	4.24
	Cdc(degradation coefficient)	-	1.00	1.00
(C) condition (25°C)	Pdc (declared cooling capacity)	[kW]	5.91	6.63
	EERd (declared EER)	-	5.52	5.62
	Cdc(degradation coefficient)	-	0.99	0.99
(D) condition (20°C)	Pdc (declared cooling capacity)	[kW]	4.32	4.43
	EERd (declared EER)	-	6.39	6.60
	Cdc(degradation coefficient)	-	0.99	0.99

Product fiche 8

Heat pump space cooling		Outdoor	MHC-V10WD2N7-B***
Part load conditions space cooling: medium temperature application@18°C			
(A) condition (35°C)	Pdc (declared cooling capacity)	[kW]	10.00
	EERd (declared EER)	-	4.60
	Cdc(degradation coefficient)	-	1.00
(B) condition (30°C)	Pdc (declared cooling capacity)	[kW]	7.48
	EERd (declared EER)	-	7.14
	Cdc(degradation coefficient)	-	0.99
(C) condition (25°C)	Pdc (declared cooling capacity)	[kW]	4.83
	EERd (declared EER)	-	8.90
	Cdc(degradation coefficient)	-	0.98
(D) condition (20°C)	Pdc (declared cooling capacity)	[kW]	4.30
	EERd (declared EER)	-	8.97
	Cdc(degradation coefficient)	-	0.98
Air to water unit	Rated airflow (outdoor)	[m^3/h]	3900
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/
Other	Capacity control	-	Inverter
	Poff (Power consumption Off mode)	[kW]	0.011
	Pto (Power consumption Thermostat off mode)	[kW]	0.010
	Psb (Power consumption Standby mode)	[kW]	0.011
	PCK (Power crankcase heater model)	[kW]	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		Outdoor	MHC-V14WD2N7-B***	MHC-V16WD2RN7-B***
Part load conditions space cooling: medium temperature application@18°C				
(A) condition (35°C)	Pdc (declared cooling capacity)	[kW]	14.00	15.00
	EERd (declared EER)	-	4.40	4.25
	Cdc(degradation coefficient)	-	1.00	1.00
(B) condition (30°C)	Pdc (declared cooling capacity)	[kW]	10.42	11.17
	EERd (declared EER)	-	6.26	6.09
	Cdc(degradation coefficient)	-	0.99	0.99
(C) condition (25°C)	Pdc (declared cooling capacity)	[kW]	6.79	7.30
	EERd (declared EER)	-	7.86	7.75
	Cdc(degradation coefficient)	-	0.99	0.99
(D) condition (20°C)	Pdc (declared cooling capacity)	[kW]	5.75	5.77
	EERd (declared EER)	-	8.24	8.27
	Cdc(degradation coefficient)	-	0.99	0.99
Air to water unit	Rated airflow (outdoor)	[m^3/h]	4550	4550
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		/	/
Other	Capacity control	-	Inverter	Inverter
	Poff (Power consumption Off mode)	[kW]	0.011	0.011
	Pto (Power consumption Thermostat off mode)	[kW]	0.010	0.010
	Psb (Power consumption Standby mode)	[kW]	0.011	0.011
	PCK (Power crankcase heater model)	[kW]	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-V10WD2N7-B***	8.1	2.613	3.10
	MHC-V14WD2N7-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-V10WD2N7-B***	10.0	2.174	4.60
	MHC-V14WD2N7-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-V10WD2N7-B***	9.5	1.919	4.95
	MHC-V14WD2N7-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-V10WD2N7-B***	8.2	2.103	3.90
	MHC-V14WD2N7-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