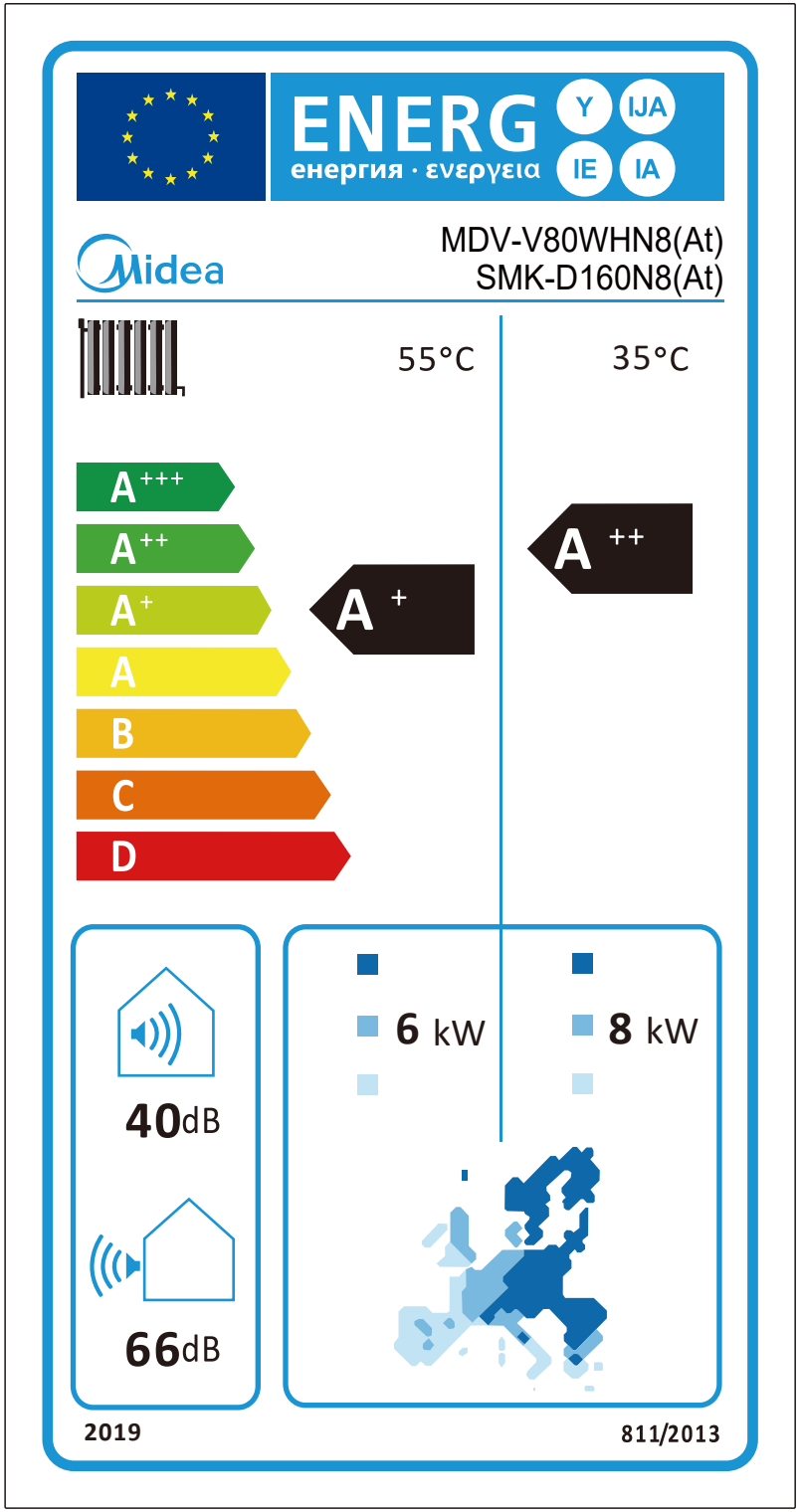
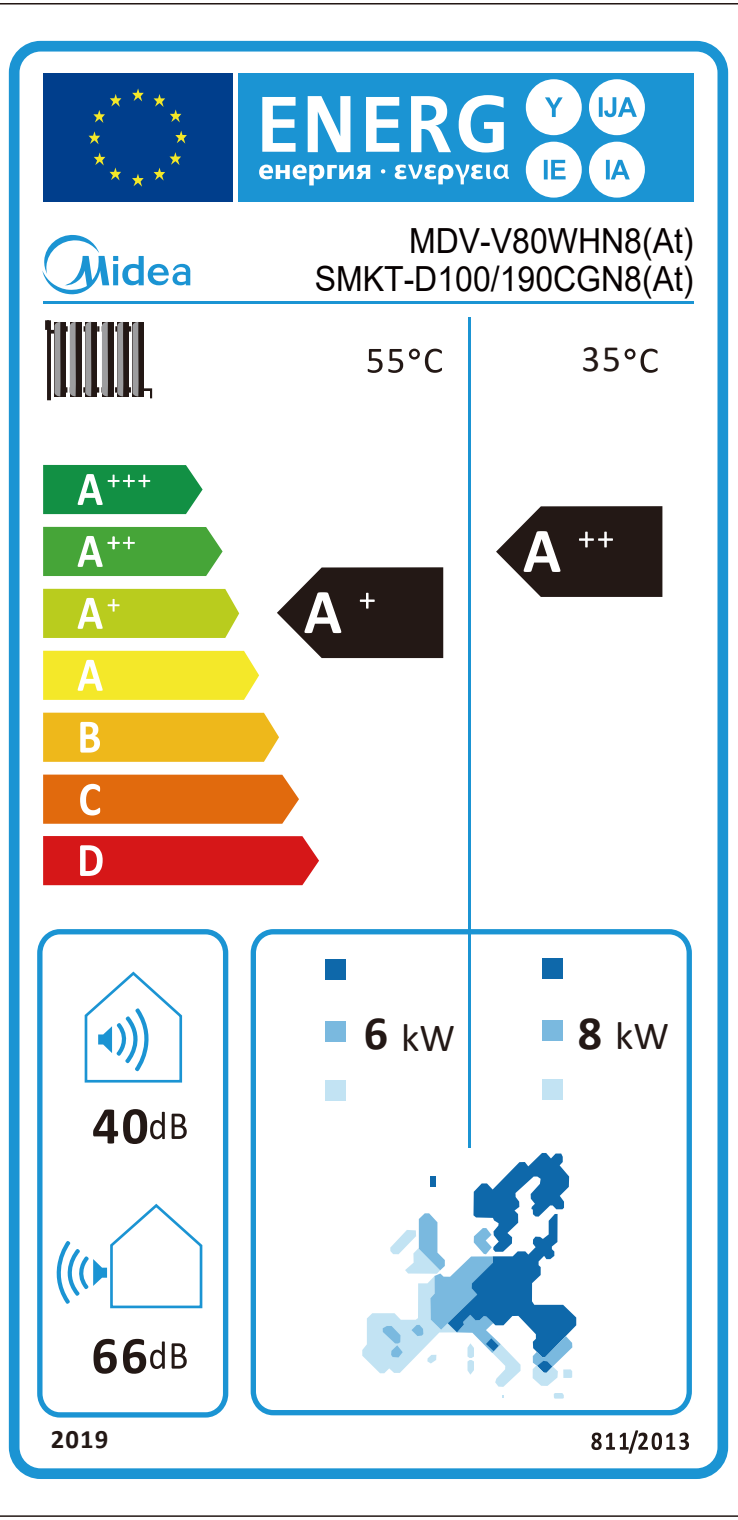
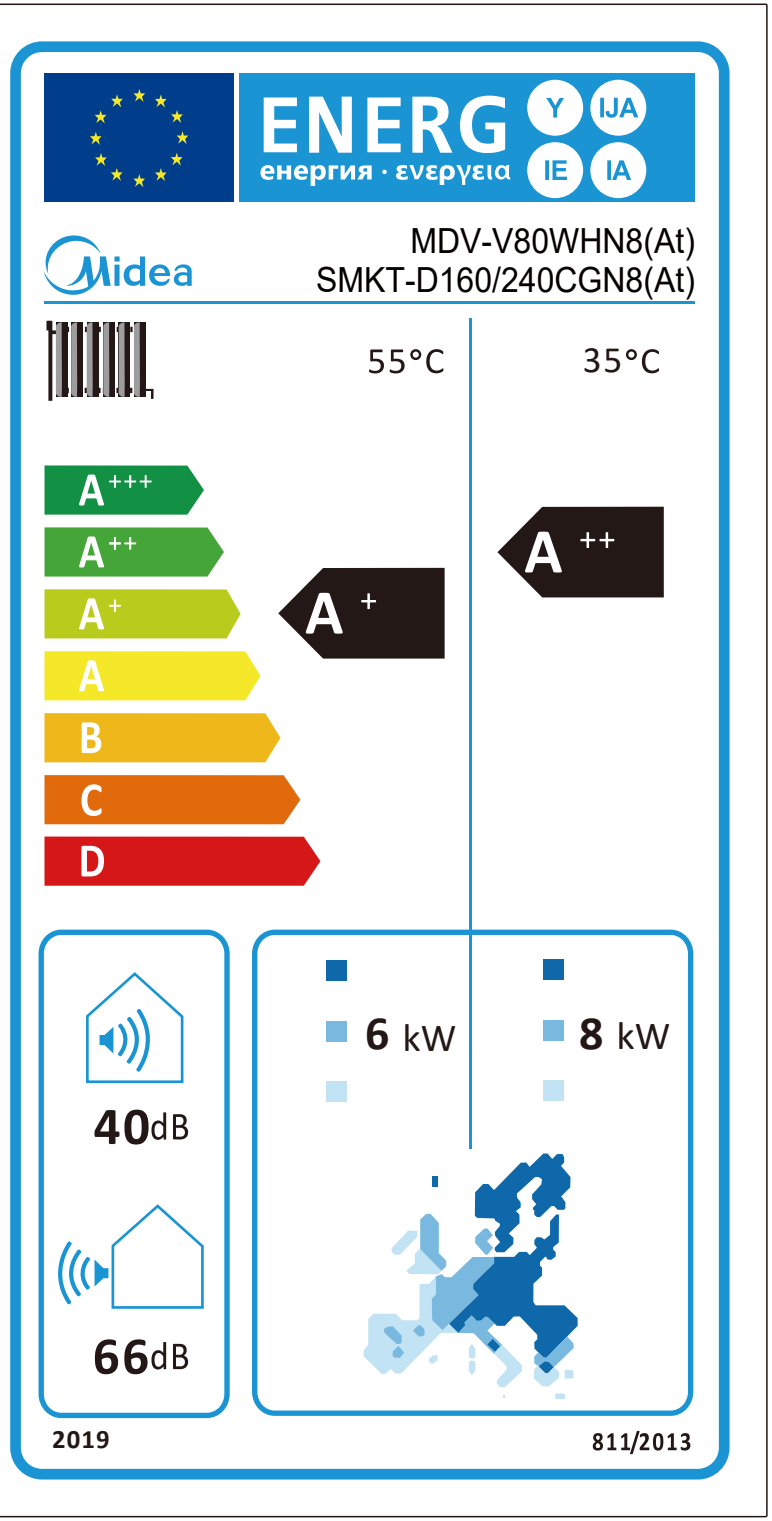
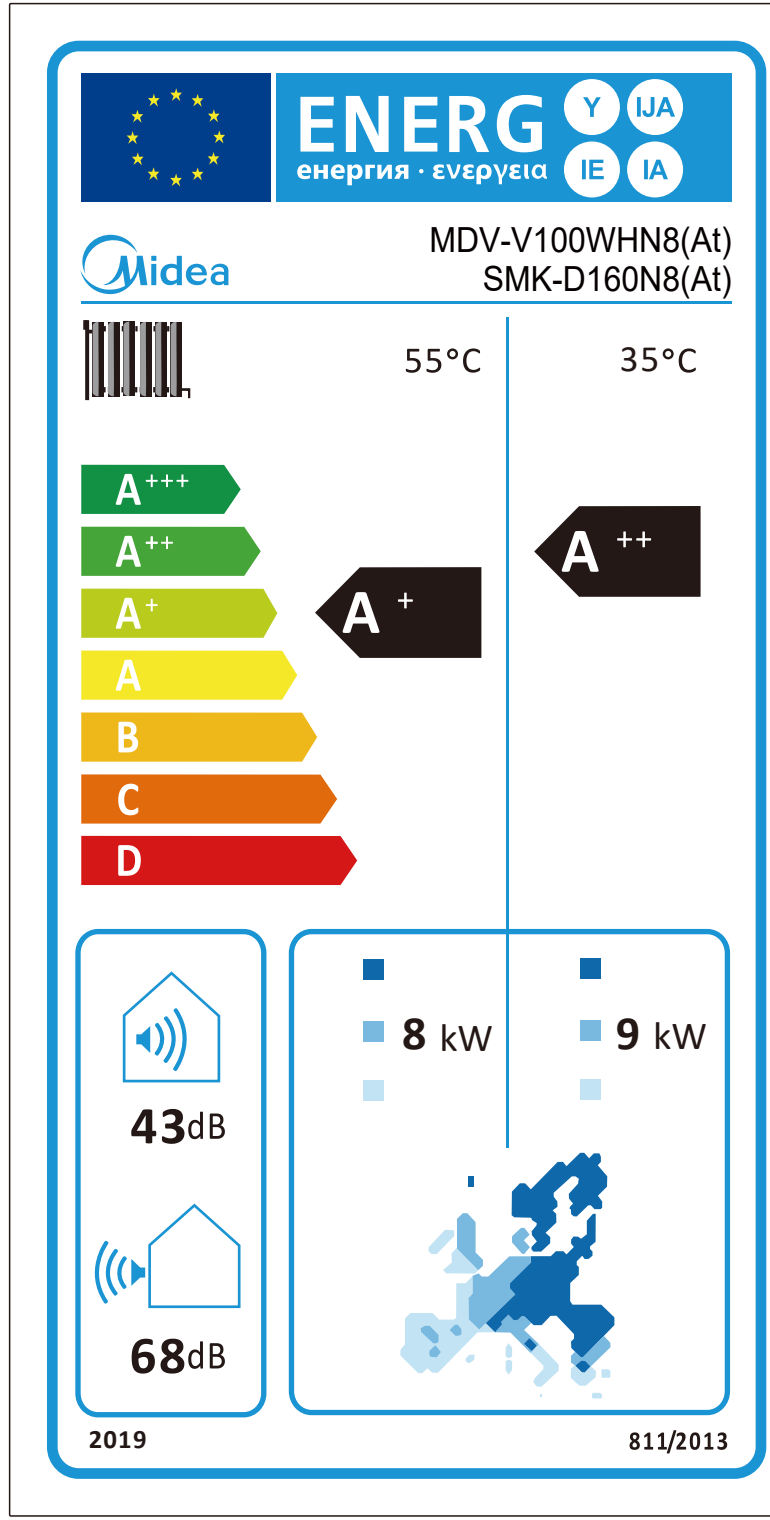
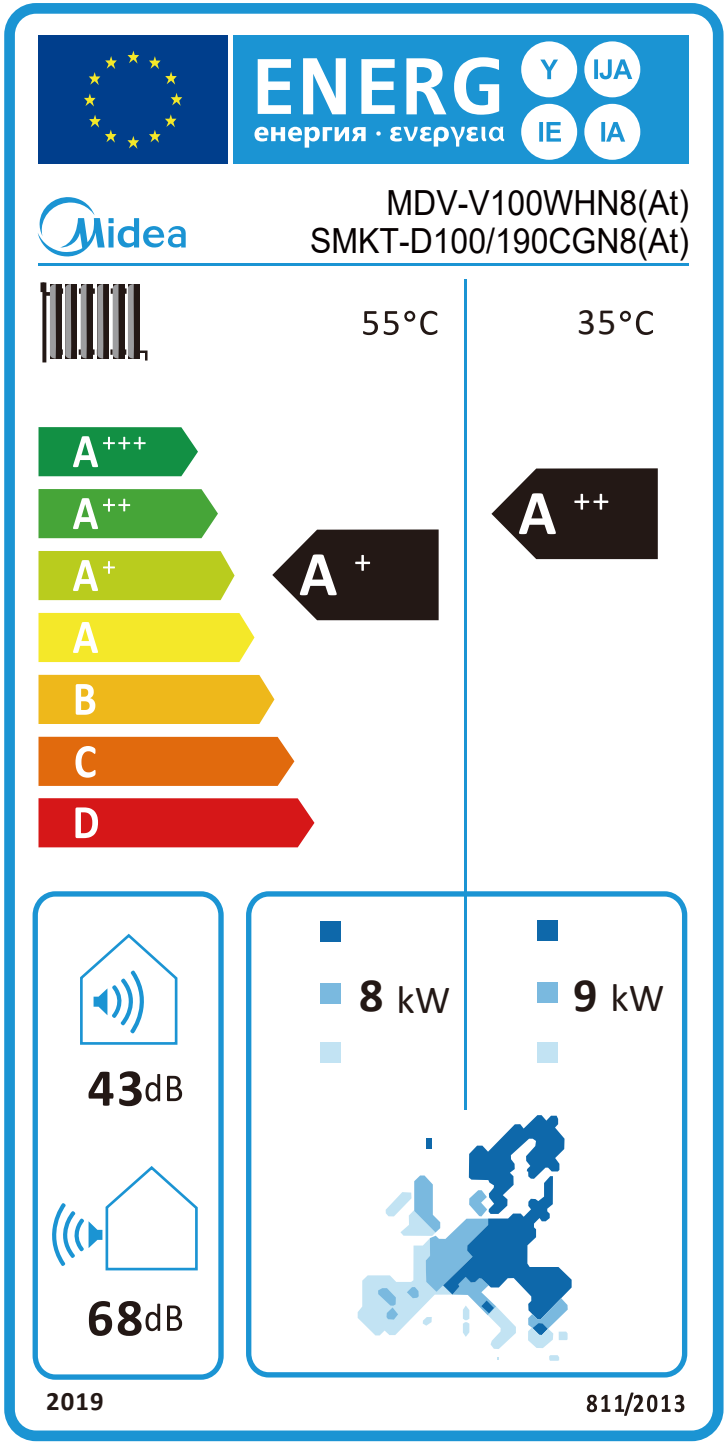
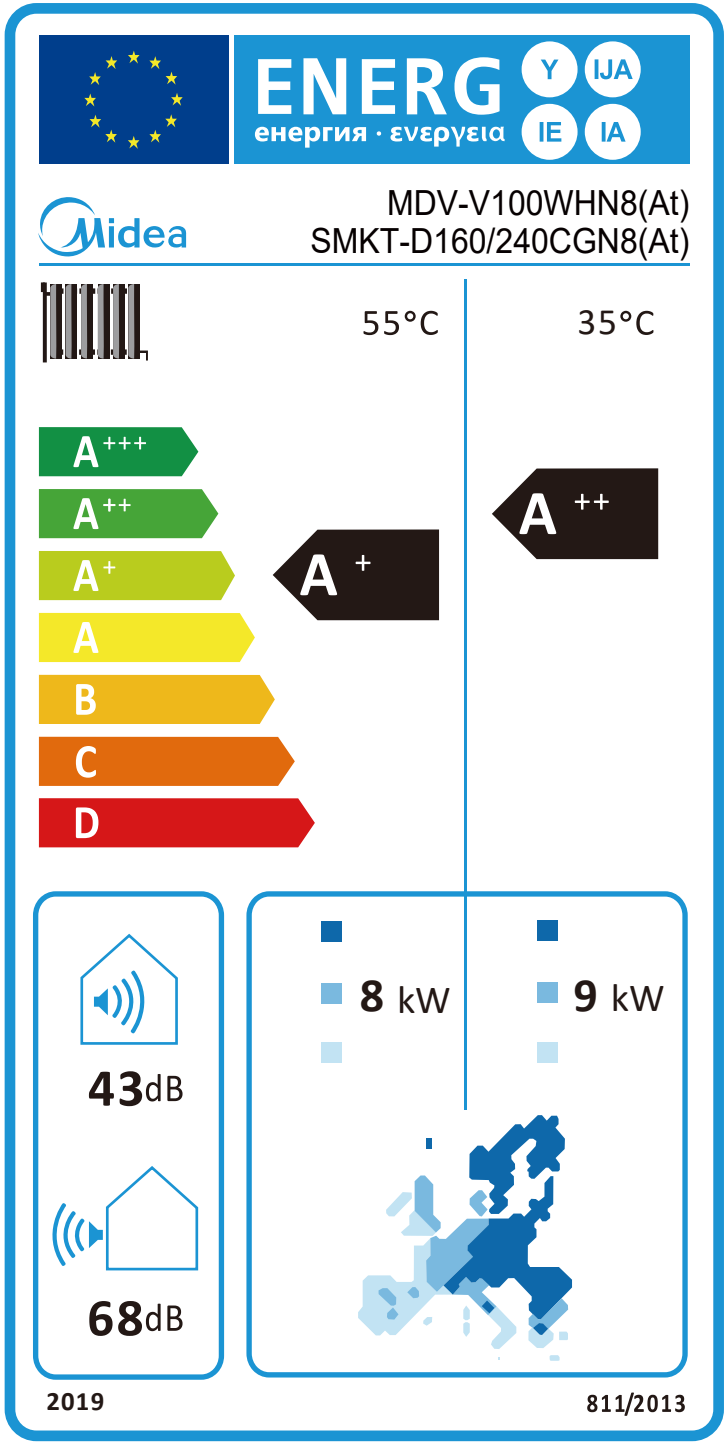

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V80WHN8(At)
SMK-D160N8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A +
A ++
40dB
66dB
6 kW
8 kW
2019
811/2013

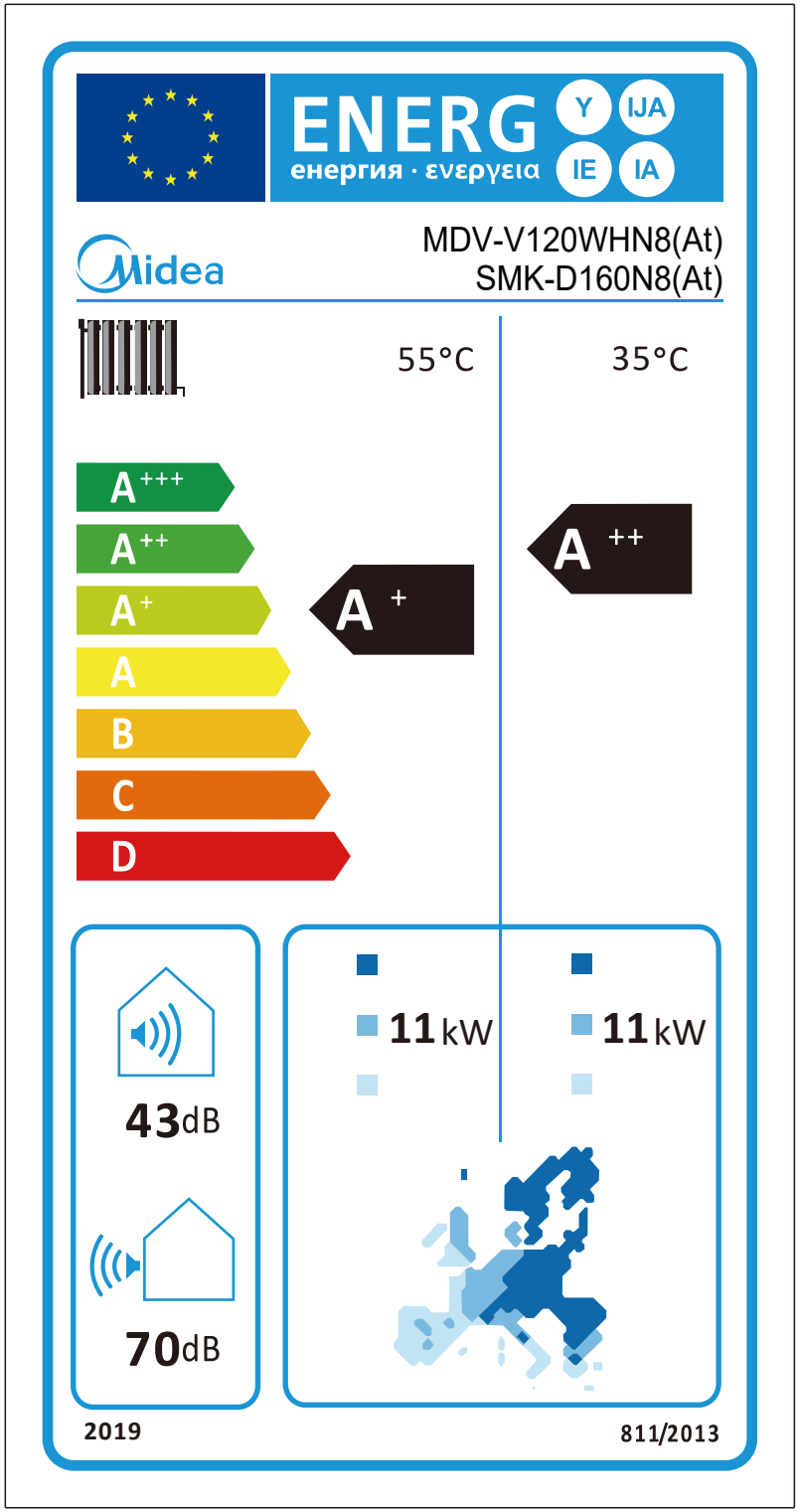

ENERG
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Y
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IA
Midea
MDV-V80WHN8(At)
SMKT-D100/190CGN8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A +
A ++
40dB
66dB
6 kW
8 kW
2019
811/2013

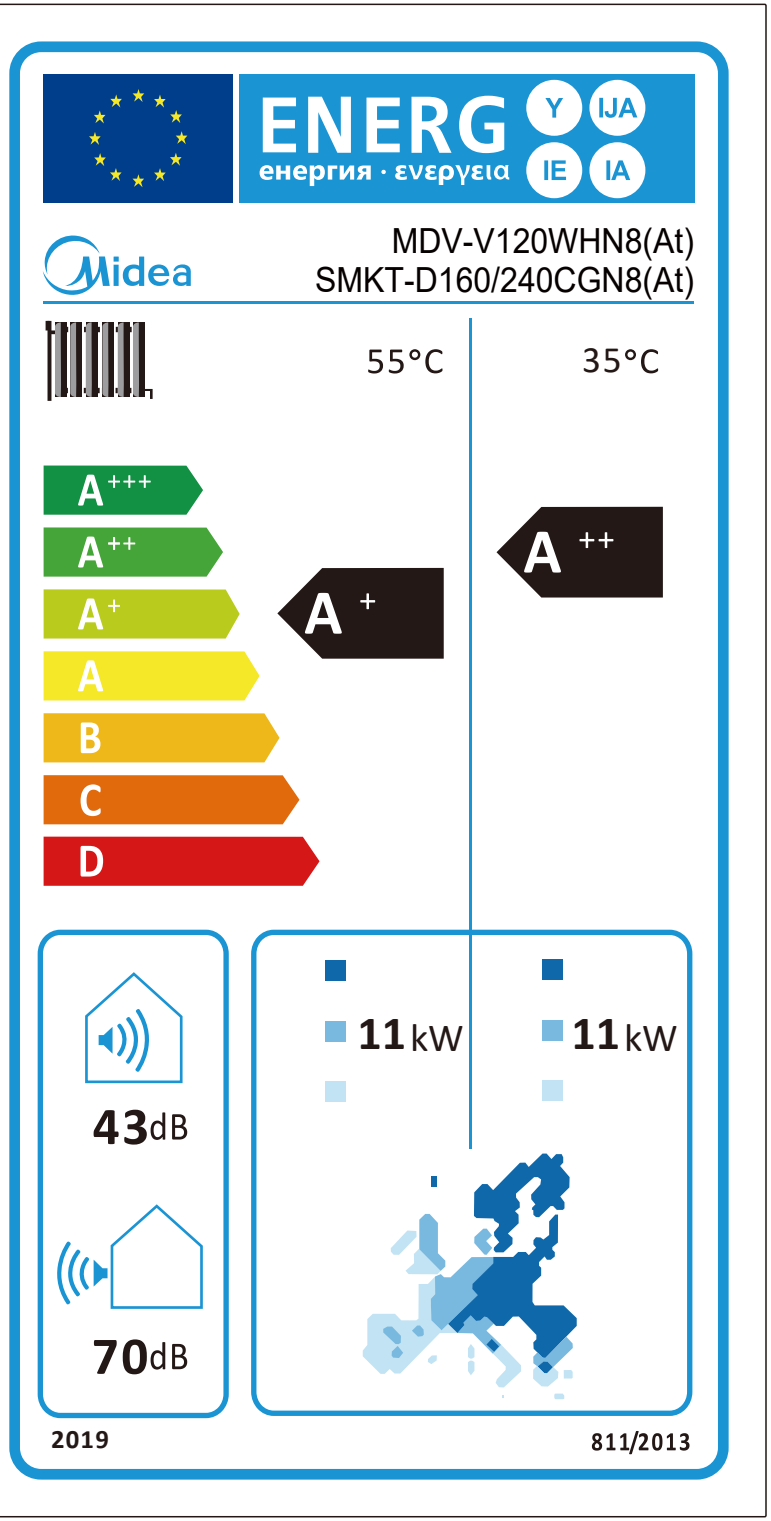

ENERG
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енергия · ενεργεια
Midea
MDV-V80WHN8(At)
SMKT-D160/240CGN8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
6 kW
8 kW
40dB
66dB
2019
811/2013

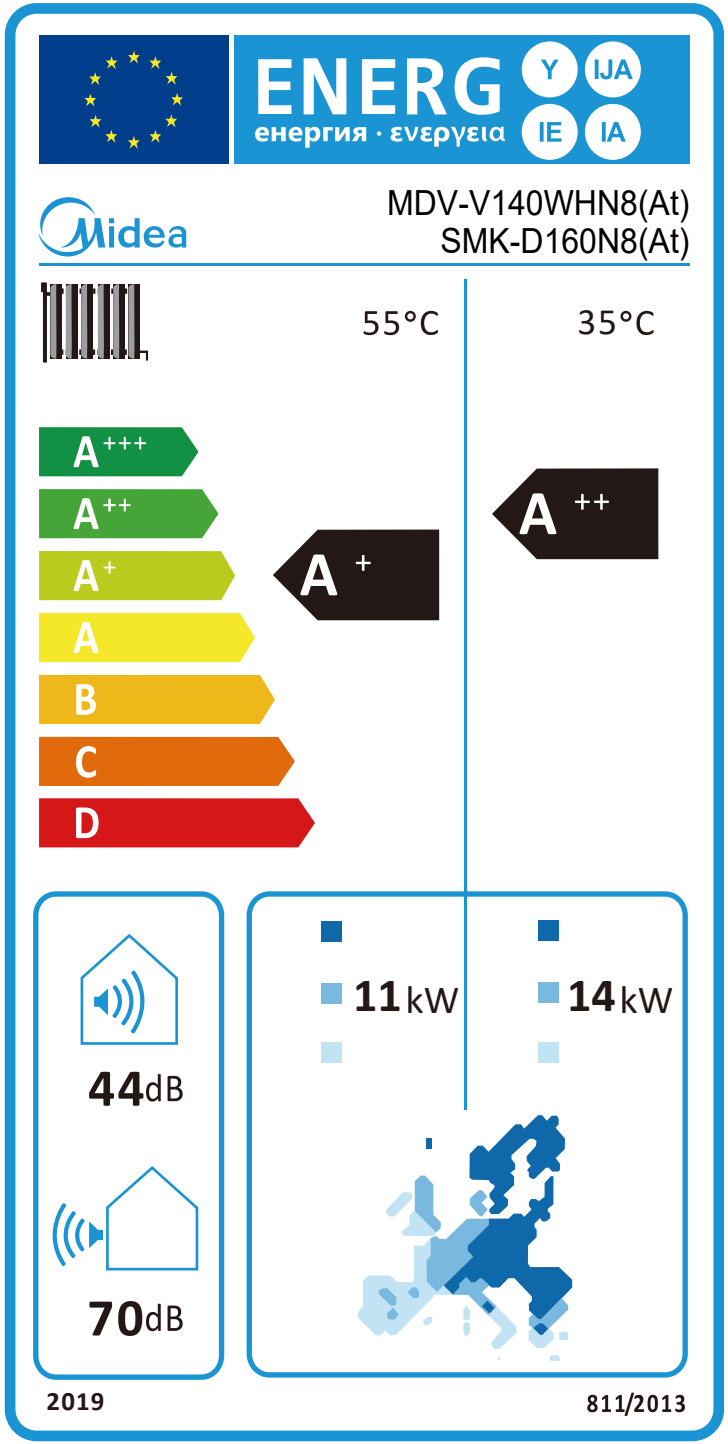

ENERG
Y
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енергия · ενεργεια
Midea
MDV-V100WHN8(At)
SMK-D160N8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
8 kW
9 kW
43dB
68dB
2019
811/2013

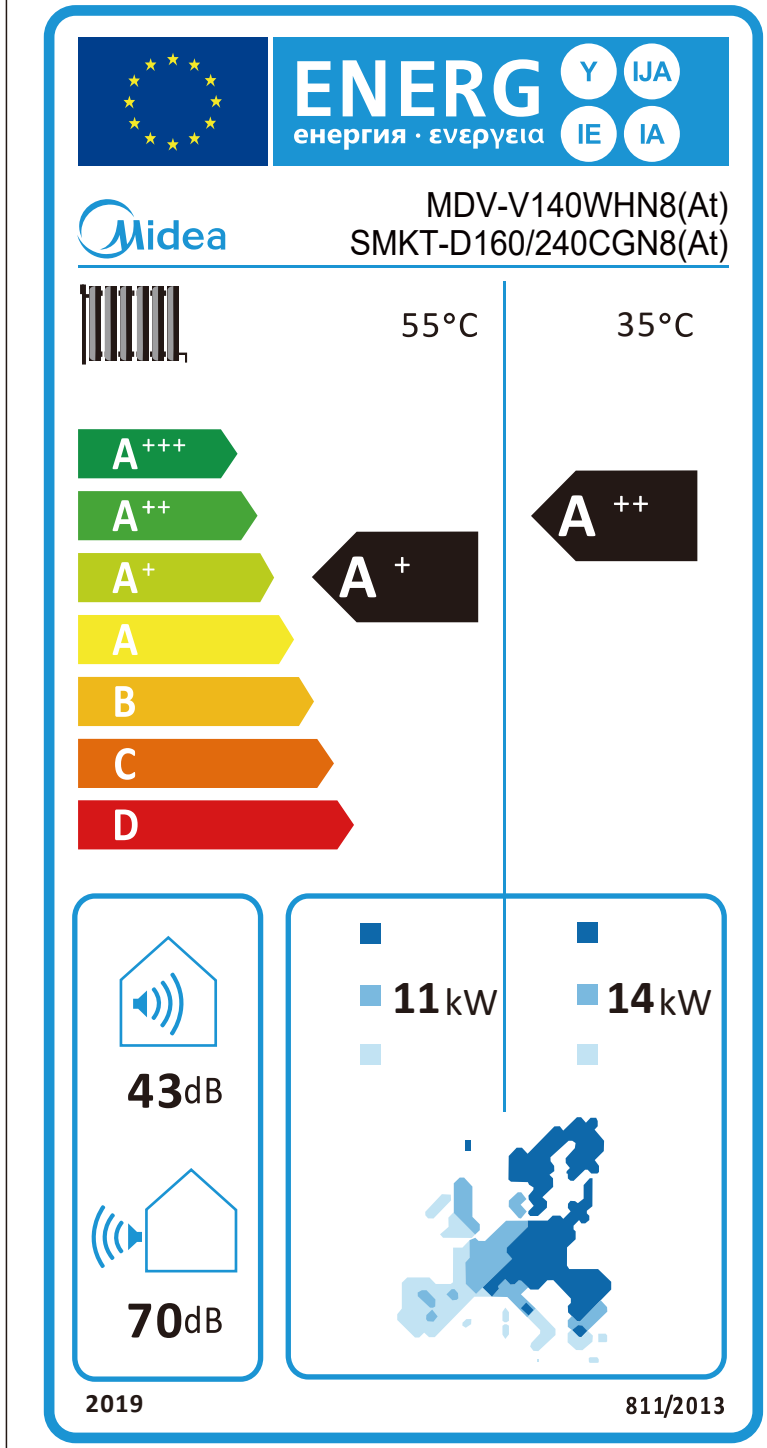

ENERG
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Y
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Midea
MDV-V100WHN8(At)
SMKT-D100/190CGN8(At)
55°C
35°C
A+++
A++
A+
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B
C
D
A+
A++
8 kW
9 kW
43dB
68dB
2019
811/2013

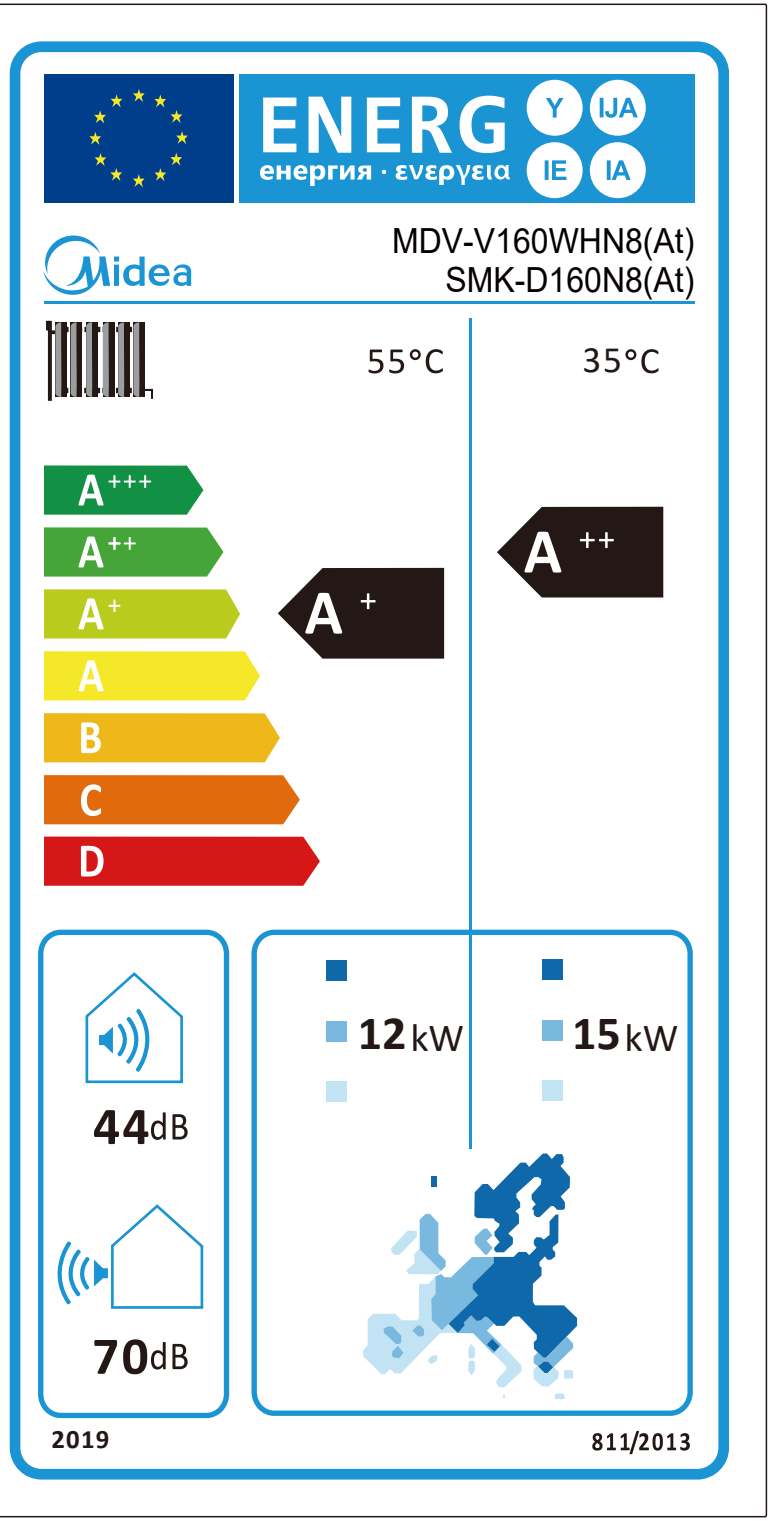

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V100WHN8(At)
SMKT-D160/240CGN8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
8 kW
9 kW
43dB
68dB
2019
811/2013

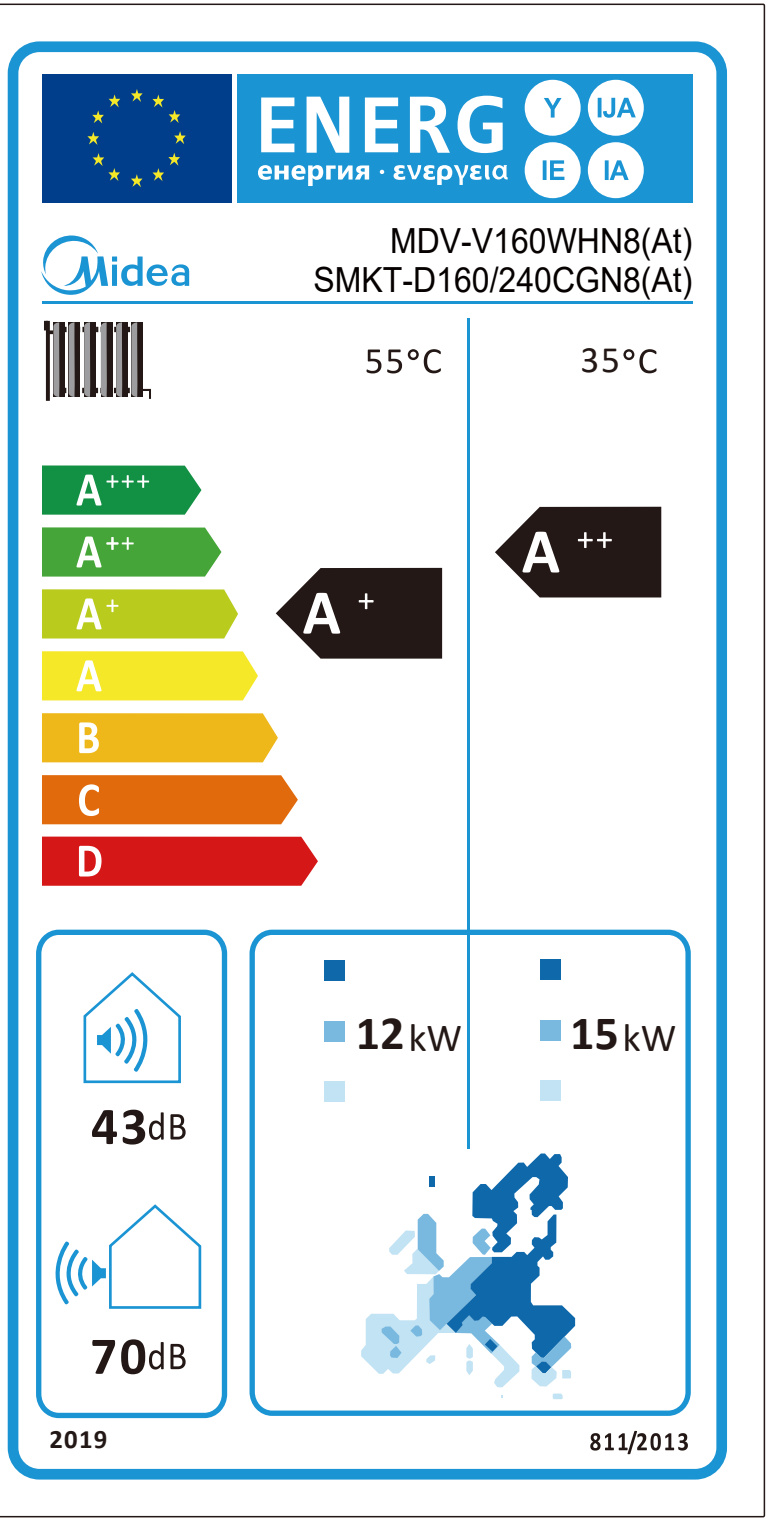

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V120WHN8(At)
SMK-D160N8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A +
A ++
43dB
70dB
11 kW
11 kW
2019
811/2013

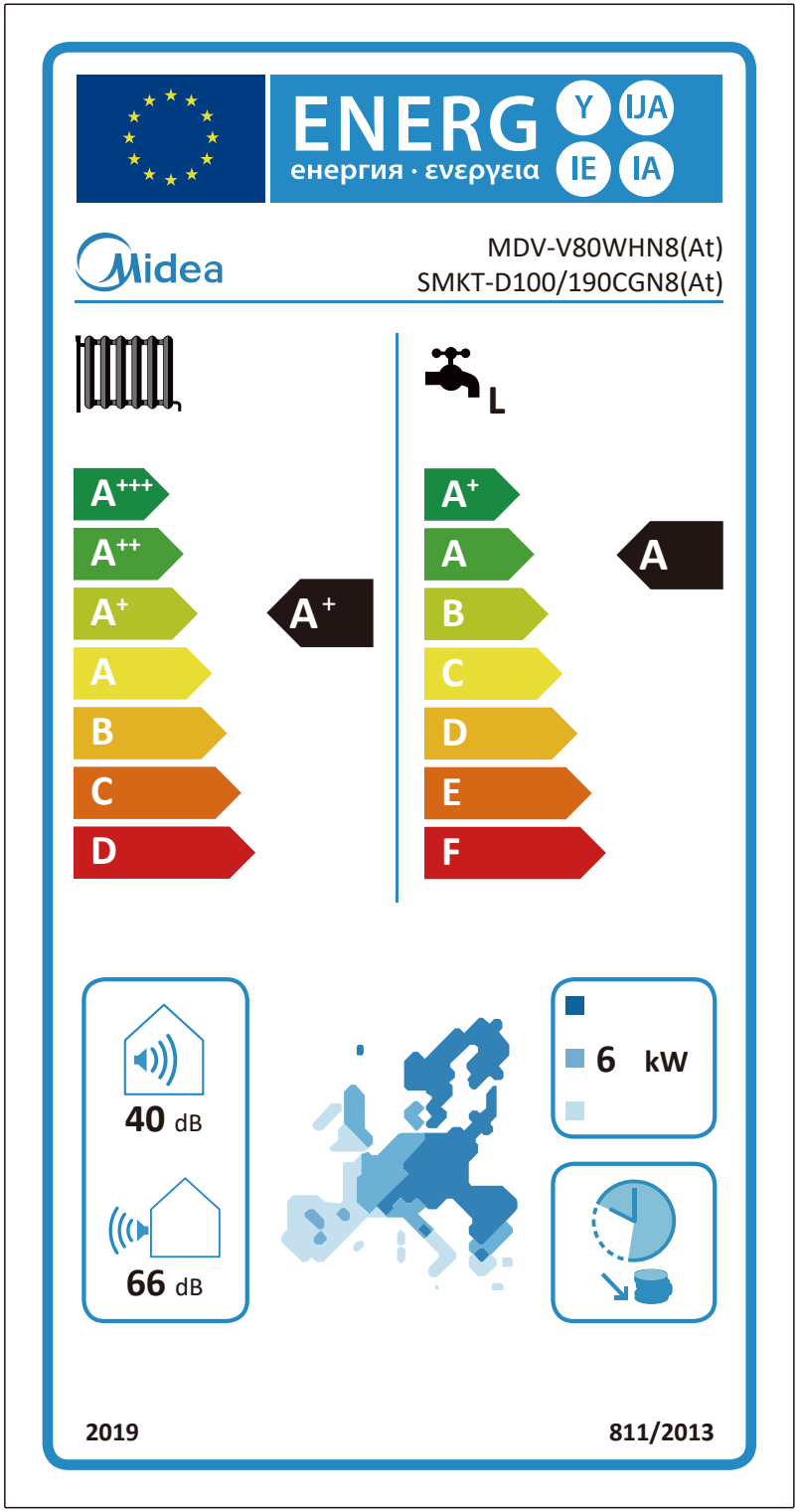

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V120WHN8(At)
SMKT-D160/240CGN8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A +
A ++
43dB
70dB
11 kW
11 kW
2019
811/2013

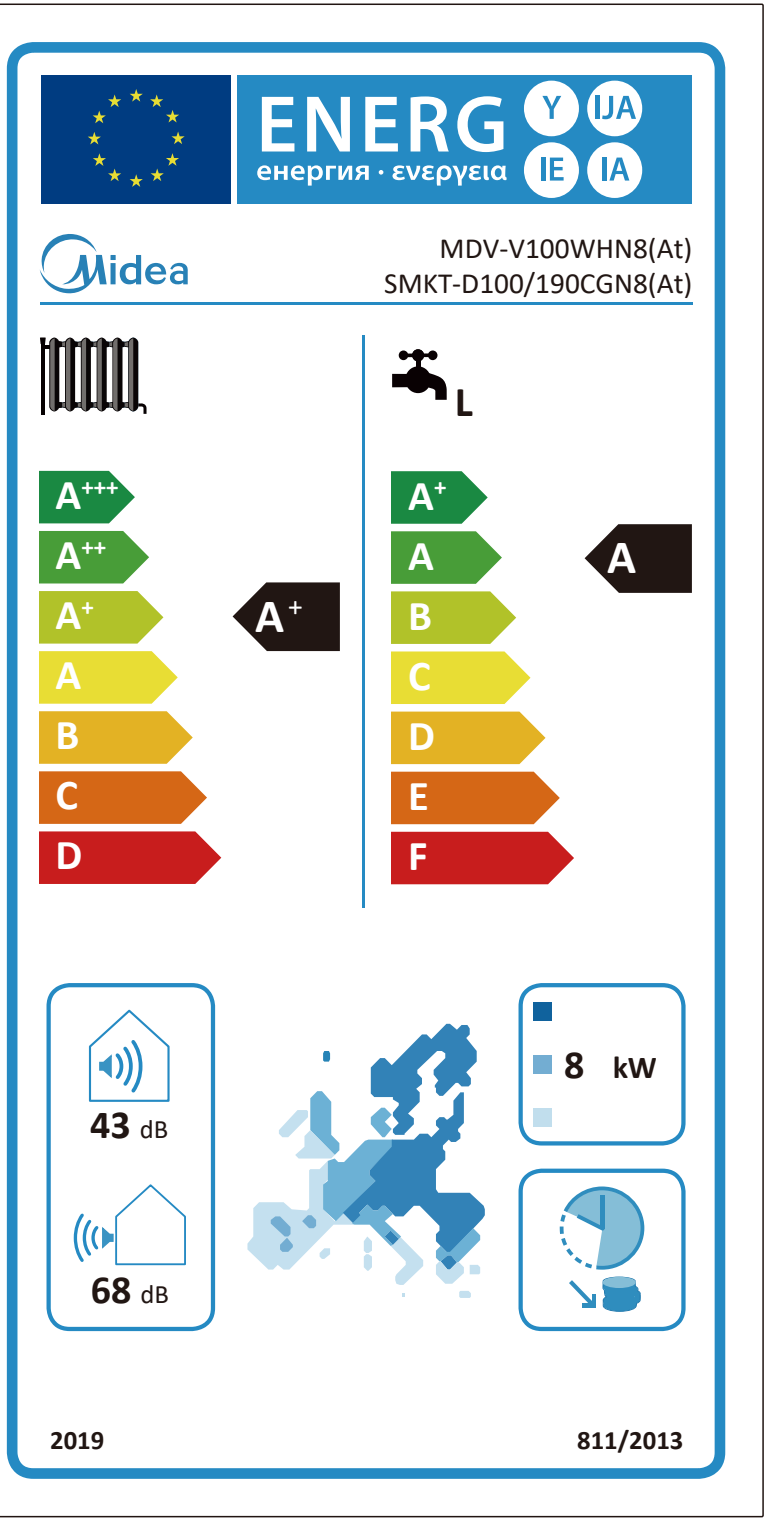

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V140WHN8(At)
SMK-D160N8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
44dB
70dB
11kW
14kW
2019
811/2013

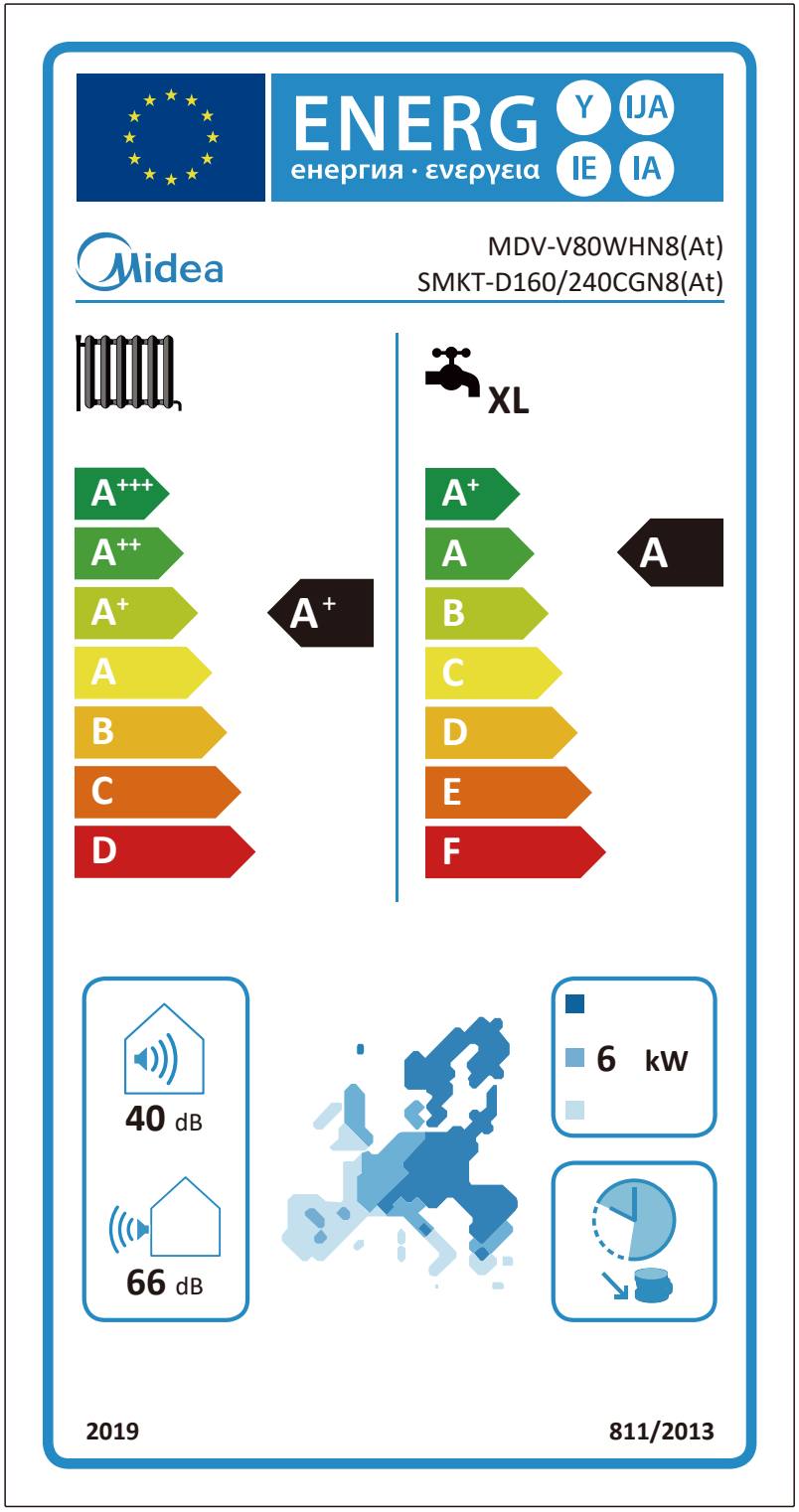

ENERG
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Y
IJA
IE
IA
Midea
MDV-V140WHN8(At)
SMKT-D160/240CGN8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
43dB
70dB
11kW
14kW
2019
811/2013

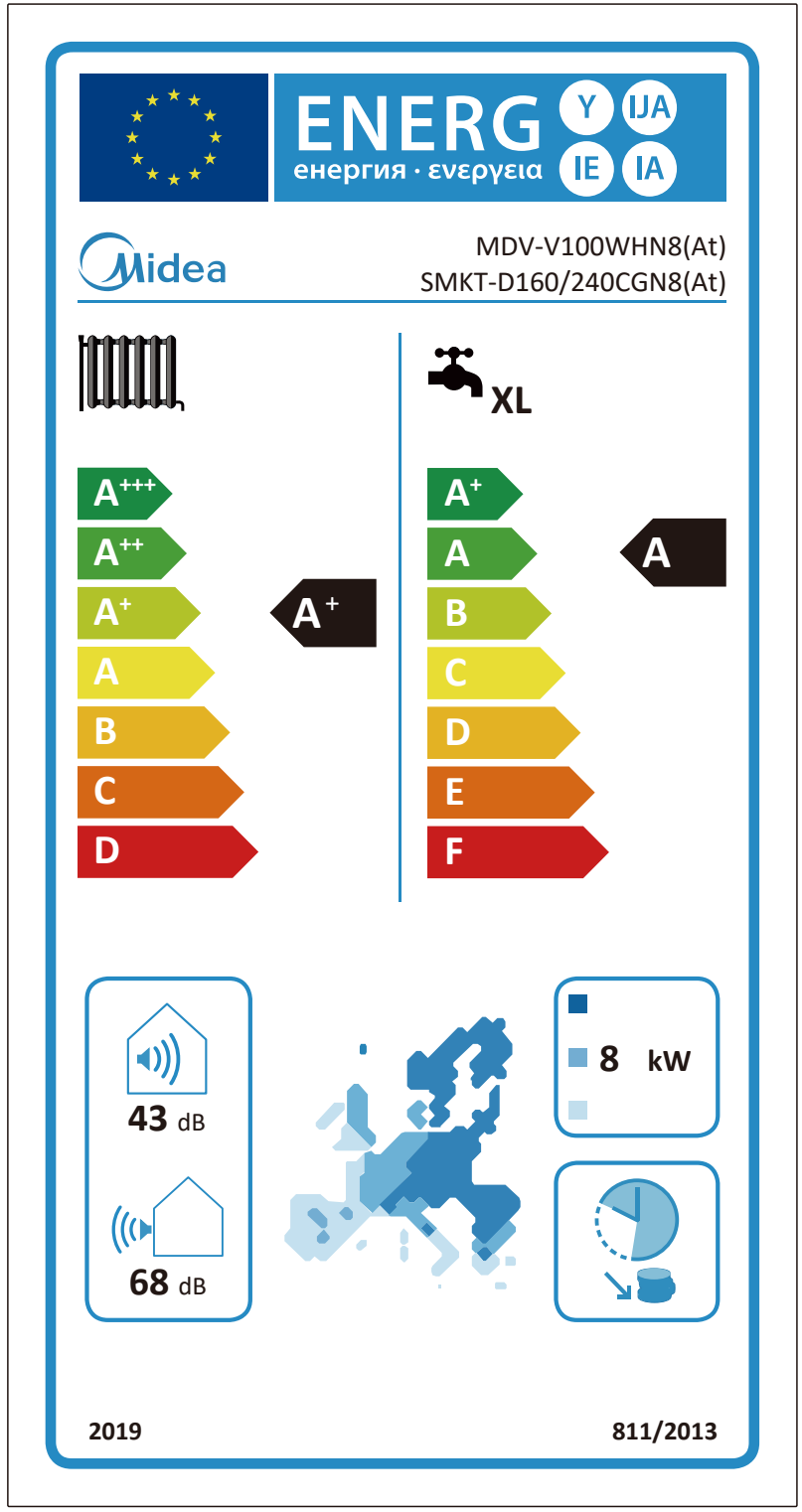

ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V160WHN8(At)
SMK-D160N8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
44dB
70dB
12kW
15kW
2019
811/2013


ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V160WHN8(At)
SMKT-D160/240CGN8(At)
55°C
35°C
A+++
A++
A+
A
B
C
D
A+
A++
43dB
70dB
12kW
15kW
2019
811/2013


ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V80WHN8(At)
SMKT-D100/190CGN8(At)
L
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
40 dB
66 dB
6 kW
2019
811/2013


ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V100WHN8(At)
SMKT-D100/190CGN8(At)
L
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
43 dB
68 dB
8 kW
2019
811/2013

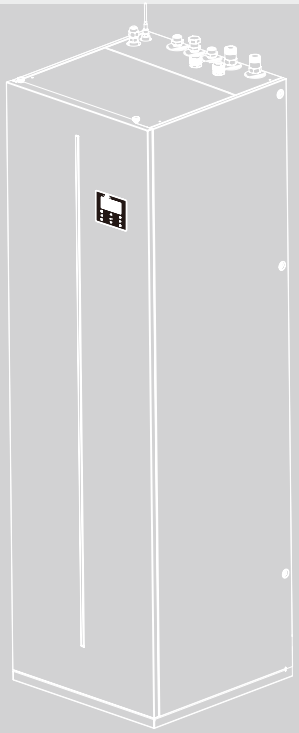

ENERG
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Y
IJA
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Midea
MDV-V80WHN8(At)
SMKT-D160/240CGN8(At)
XL
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
40 dB
66 dB
6 kW
2019
811/2013


ENERG
енергия · ενεργεια
Y
IJA
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IA
Midea
MDV-V100WHN8(At)
SMKT-D160/240CGN8(At)
XL
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
43 dB
68 dB
8 kW
2019
811/2013

TECHNICAL DATA MANUAL AND ENERGY EFFICIENCY

Full DC Inverter Atom T Series VRF (ODU)

All In One Hydraulic Module



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.

Product fiche

Energy labelling regulation: (EU)811/2013

Ecodesign regulation: (EU)813/2013

Heat pump combination heater			Outdoor	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V120WHN8(At)	MDV-V140WHN8(At)	MDV-V160WHN8(At)
			Indoor	SMKT-D100/190CGN8(At)	SMKT-D100/190CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)
Indoor unit sound power (*)		[dB(A)]		40.0	43.0	40.0	43.0	43.0	43.0	43.0
Outdoor unit sound power (*)	Average climate low temperature application	[dB(A)]		66.0	68.0	66.0	68.0	70.0	70.0	70.0
	Average climate medium temperature application	[dB(A)]		66.0	68.0	66.0	68.0	70.0	70.0	70.0
Capicity of the back-up heater integrated in the unit	Psup back-up heater (optional)	[kW]		3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9	3/6/9
Water heating	Declared load profile	-		L		XL				
	Energy efficiency class	-		A	A	A	A	A	A	A
Space heating	Energy efficiency class 35°C (Low temp. app.)	-		A++	A++	A++	A++	A++	A++	A++
Space heating	Energy efficiency class 55°C (Medium temp.app.)	-		A+	A+	A+	A+	A+	A+	A+
Average climate (Design temperature = –10°C)										
Water heating	Water heating energy efficiency (ηwh)	[%]		112.0	108.0	123.0	119.0	113.0	102.0	102.0
	Annual electricity consumption (AEC)	[kWh]		908.0	942.0	1356.0	1405.0	1476.0	1626.0	1626.0
Space heating 35°C	Prated (declared heating capacity) @ –10°C	[kW]		8.0	9.2	8.0	9.2	11.0	13.7	14.8
	Seasonal space heating efficiency (η s)	[%]		151	151	151	151	151	151	151
	Annual energy consumption	[kWh]		4246	4926	4246	4926	5829	7262	7781
Space heating 55°C	Prated (declared heating capacity) @ –10°C	[kW]		6.4	7.6	6.4	7.6	11.0	11.4	11.6
	Seasonal space heating efficiency (η s)	[%]		110.0	112.0	110.0	112.0	112.0	110.0	110.0
	Annual energy consumption	[kWh]		4606	5490	4606	5490	7396	8034	8258
Part load conditions space heating average climate low temperature application										
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]		6.90	8.20	6.90	8.20	9.32	11.86	12.75
	COPd (declared COP)	-		2.37	2.47	2.37	2.47	2.76	2.55	2.34
	Cdh(degradation coefficient)	-		0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]		4.40	4.95	4.40	4.95	6.38	7.10	8.61
	COPd (declared COP)	-		3.99	3.61	3.99	3.61	3.53	3.83	3.61
	Cdh(degradation coefficient)	-		0.00	0.00	0.00	0.00	0.00	0.00	0.00

Heat pump combination heater		Outdoor	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V120WHN8(At)	MDV-V140WHN8(At)	MDV-V160WHN8(At)
		Indoor	SMKT-D100/190CGN8(At)	SMKT-D100/190CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.78	3.23	2.78	3.23	3.83	4.83	5.51
	COPd (declared COP)	-	4.14	5.70	4.14	5.70	6.06	6.09	6.20
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	2.56	2.51	2.56	2.51	2.93	3.94	4.37
	COPd (declared COP)	-	5.57	8.98	5.57	8.98	9.08	9.00	9.05
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00
	Pdh (declared heating capacity)	[kW]	7.10	7.68	7.10	7.68	7.82	11.87	11.87
	COPd (declared COP)	-	2.17	2.45	2.17	2.45	2.40	2.27	2.27
	WTOL (Heating water Operation Limit)	[°C]	60.00	60.00	60.00	60.00	60.00	60.00	60.00
(F) Tbivalent temperature	Tblv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	6.90	8.20	6.90	8.20	9.32	11.86	12.75
	COPd (declared COP)	-	2.37	2.47	2.37	2.47	2.76	2.55	2.34
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	0.90	1.48	0.90	1.48	3.18	1.83	2.93
Part load conditions space heating average climate medium temperature application									
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	5.90	6.72	5.90	6.72	9.22	10.92	10.88
	COPd (declared COP)	-	1.68	1.80	1.68	1.80	1.79	1.84	1.76
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	3.53	4.34	3.53	4.34	6.22	6.20	6.40
	COPd (declared COP)	-	2.90	2.92	2.90	2.92	2.91	2.89	2.85
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.43	2.78	2.43	2.78	4.14	4.08	4.37
	COPd (declared COP)	-	4.14	4.09	4.14	4.09	4.45	4.14	4.14
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	2.32	2.40	2.32	2.40	2.56	3.22	3.04
	COPd (declared COP)	-	5.57	5.84	5.57	5.84	6.23	5.83	5.47
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90

Heat pump combination heater		Outdoor	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V120WHN8(At)	MDV-V140WHN8(At)	MDV-V160WHN8(At)
		Indoor	SMKT-D100/190CGN8(At)	SMKT-D100/190CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)	SMKT-D160/240CGN8(At)
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00
	Pdh (declared heating capacity)	[kW]	6.56	7.36	6.56	7.36	8.15	10.17	10.65
	COPd (declared COP)	-	1.64	1.61	1.64	1.61	1.72	1.61	1.67
	WTOL (Heating water Operation Limit)	[°C]	60.00	60.00	60.00	60.00	60.00	60.00	60.00
(F) Tbivalent temperature	Tblv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	5.90	6.72	5.90	6.72	9.22	10.92	10.88
	COPd (declared COP)	-	1.68	1.80	1.68	1.80	1.79	1.84	1.76
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	0.00	0.24	0.00	0.24	2.85	1.23	0.95
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No	No	No	No
	Brine-to-water heat pump	NBVCXZ	No	No	No	No	No	No	No
	Low-temperature heat pump	Y/N	No	No	No	No	No	No	No
	Equipped with a supplementary heater	Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Heat pump combination heater	Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Air to water unit	Rated airflow (outdoor)	[m^3/h]	3750	4000	3750	4000	5000	5100	5000
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]	0.025	0.025	0.025	0.025	0.025	0.025	0.025
	Pto (Power consumption Thermostat off mode)	[kW]	0.024	0.024	0.024	0.024	0.024	0.240	0.024
	Psb (Power consumption Standby mode)	[kW]	0.025	0.025	0.025	0.025	0.025	0.025	0.025
	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]	/	/	/	/	/	/	/

Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.
Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.

Heat pump space heating		For medium - temperature application					
Outdoor unit	Indoor unit	Energy efficiency class	Indoor unit sound power	Outdoor unit sound power	average climate		
					Rated heat output	Seasonal space heating energy efficiency	For space heating,annual energy consumptio
		-	dB	dB	kW	%	kWh
MDV-V80WHN8(At)	SMK-D160N8(At)	A+	40	66	6.4	110	4606
	SMKT-D100/190CGN8(At)	A+	40	66	6.4	110	4606
	SMKT-D160/240CGN8(At)	A+	40	66	6.4	110	4606
MDV-V100WHN8(At)	SMK-D160N8(At)	A+	43	68	7.6	112	5490
	SMKT-D100/190CGN8(At)	A+	43	68	7.6	112	5490
	SMKT-D160/240CGN8(At)	A+	43	68	7.6	112	5490
MDV-V120WHN8(At)	SMK-D160N8(At)	A+	43	70	11	112	7396
	SMKT-D160/240CGN8(At)	A+	43	70	11	112	7396
MDV-V140WHN8(At)	SMK-D160N8(At)	A+	44	70	11.4	110	8034
	SMKT-D160/240CGN8(At)	A+	43	70	11.4	110	8034
MDV-V160WHN8(At)	SMK-D160N8(At)	A+	44	70	11.6	110	8258
	SMKT-D160/240CGN8(At)	A+	43	70	11.6	110	8258

Heat pump space heating		For low - temperature application					
Outdoor unit	Indoor unit	Energy efficiency class	Indoor unit sound power	Outdoor unit sound power	average climate		
					Rated heat output	Seasonal space heating energy efficiency	For space heating,annual energy consumptio
		-	dB	dB	kW	%	kWh
MDV-V80WHN8(At)	SMK-D160N8(At)	A++	40	66	8	151	4246
	SMKT-D100/190CGN8(At)	A++	40	66	8	151	4246
	SMKT-D160/240CGN8(At)	A++	40	66	8	151	4246
MDV-V100WHN8(At)	SMK-D160N8(At)	A++	43	68	9.2	151	4926
	SMKT-D100/190CGN8(At)	A++	43	68	9.2	151	4926
	SMKT-D160/240CGN8(At)	A++	43	68	9.2	151	4926
MDV-V120WHN8(At)	SMK-D160N8(At)	A++	43	70	11	151	5829
	SMKT-D160/240CGN8(At)	A++	43	70	11	151	5829
MDV-V140WHN8(At)	SMK-D160N8(At)	A++	44	70	13.7	151	7262
	SMKT-D160/240CGN8(At)	A++	43	70	13.7	151	7262
MDV-V160WHN8(At)	SMK-D160N8(At)	A++	44	70	14.8	151	7781
	SMKT-D160/240CGN8(At)	A++	43	70	14.8	151	7781

Product fiche 1

Heat pump space heating		Outdoor	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V120WHN8(At)	MDV-V140WHN8(At)	MDV-V160WHN8(At)
		Indoor	SMK-D160N8(At) SMKT-D100/190CGN8(At)	SMK-D160N8(At) SMKT-D100/190CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)
Indoor unit sound power (*)	hydraulic module	[dB(A)]	40.0	43.0	43.0	44.0	44.0
	all in one hydraulic module	[dB(A)]	40.0	43.0	43.0	43.0	43.0
Outdoor unit sound power (*)	Average climate low temperature application	[dB(A)]	66.0	68.0	70.0	70.0	70.0
	Average climate medium temperature application	[dB(A)]	66.0	68.0	70.0	70.0	70.0
Capicity of the back-up heater integrated in the unit	Psup back-up heater (optional)	[kW]	3/6/9	3/6/9	3/6/9	3/6/9	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]	8.0	9.2	11.0	13.7	14.8
	Seasonal space heating efficiency (ηs)	[%]	151	151	151	151	151
	Annual energy consumption	[kWh]	4246	4926	5829	7262	7781
Space heating 55°C	Prated (declared heating capacity) @ –10°C	[kW]	6.4	7.6	11.0	11.4	11.6
	Seasonal space heating efficiency (ηs)	[%]	110.0	112.0	112.0	110.0	110.0
	Annual energy consumption	[kWh]	4606	5490	7396	8034	8258
Part load conditions space heating average climate low temperature application							
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	6.90	8.20	9.32	11.86	12.75
(A) condition (-7°C)	COPd (declared COP)	-	2.37	2.47	2.76	2.55	2.34
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	4.40	4.95	6.38	7.10	8.61
	COPd (declared COP)	-	3.99	3.61	3.53	3.83	3.61
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.78	3.23	3.83	4.83	5.51
	COPd (declared COP)	-	4.14	5.70	6.06	6.09	6.20
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00

Product fiche 2

Heat pump space heating		Outdoor	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V120WHN8(At)	MDV-V140WHN8(At)	MDV-V160WHN8(At)
		Indoor	SMK-D160N8(At) SMKT-D100/190CGN8(At)	SMK-D160N8(At) SMKT-D100/190CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	2.56	2.51	2.93	3.94	4.37
	COPd (declared COP)	-	5.57	8.98	9.08	9.00	9.05
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00
	Pdh (declared heating capacity)	[kW]	7.10	7.68	7.82	11.87	11.87
	COPd (declared COP)	-	2.17	2.45	2.40	2.27	2.27
	WTOL (Heating water Operation Limit)	[°C]	60.00	60.00	60.00	60.00	60.00
(F) Tbivalent temperature	Tblv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	6.90	8.20	9.32	11.86	12.75
	COPd (declared COP)	-	2.37	2.47	2.76	2.55	2.34
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	0.90	1.48	3.18	1.83	2.93
Part load conditions space heating average climate medium temperature application							
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	5.90	6.72	9.22	10.92	10.88
(A) condition (-7°C)	COPd (declared COP)	-	1.68	1.80	1.79	1.84	1.76
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	3.53	4.34	6.22	6.20	6.40
	COPd (declared COP)	-	2.90	2.92	2.91	2.89	2.85
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.43	2.78	4.14	4.08	4.37
	COPd (declared COP)	-	4.14	4.09	4.45	4.14	4.14
	Cdh(degradation coefficient)	-	0.00	0.00	0.00	0.00	0.00
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	2.32	2.40	2.56	3.22	3.04
	COPd (declared COP)	-	5.57	5.84	6.23	5.83	5.47
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00
	Pdh (declared heating capacity)	[kW]	6.56	7.36	8.15	10.17	10.65
	COPd (declared COP)	-	1.64	1.61	1.72	1.61	1.67
	WTOL (Heating water Operation Limit)	[°C]	60.00	60.00	60.00	60.00	60.00

Product fiche 3

Heat pump space heating		Outdoor	MDV-V80WHN8(At)	MDV-V100WHN8(At)	MDV-V120WHN8(At)	MDV-V140WHN8(At)	MDV-V160WHN8(At)
		Indoor	SMK-D160N8(At) SMKT-D100/190CGN8(At)	SMK-D160N8(At) SMKT-D100/190CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)	SMK-D160N8(At) SMKT-D160/240CGN8(At)
(F) Tbivalent temperature	Tbiv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00
	Pdh (declared heating capacity)	[kW]	5.90	6.72	9.22	10.92	10.88
	COPd (declared COP)	-	1.68	1.80	1.79	1.84	1.76
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	0.00	0.24	2.85	1.23	0.95
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No	No
	Brine-to-water heat pump	NBVCXZ	No	No	No	No	No
	Low-temperature heat pump	Y/N	No	No	No	No	No
	Equipped with a supplementary heater	Y/N	Yes	Yes	Yes	Yes	Yes
	Heat pump combination heater	Y/N	Yes	Yes	Yes	Yes	Yes
Air to water unit	Rated airflow (outdoor)	[m^3/h]	3750	4000	5000	5100	5000
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]	0.025	0.025	0.025	0.025	0.025
	Pto (Power consumption Thermostat off mode)	[kW]	0.024	0.024	0.024	0.240	0.024
	Psb (Power consumption Standby mode)	[kW]	0.025	0.025	0.025	0.025	0.025
	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]	/	/	/	/	/

Details and precautions on installation, maintenance and assembly can be found in the installation and oroperation manuals.
Sound power measured according to the EN12102 under conditions of the EN14825.
Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.

Outdoor unit	Indoor unit	Ambient Temperature： 7/6 Water temperature： 30/35			Ambient Temperature： 2/1 Water temperature： 30/35			Ambient Temperature： -7/-8 Water temperature： 30/35			Ambient Temperature： 7/6 Water temperature： 40/45		
		Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER
MDV-V80WHN8(At)	SMK-D160N8(At)	7.20	1.89	3.80	6.30	2.30	2.74	6.20	2.81	2.21	7.00	2.41	2.90
	SMKT-D100/190CGN8(At)	7.20	1.89	3.80	6.30	2.30	2.74	6.20	2.81	2.21	7.00	2.41	2.90
	SMKT-D160/240CGN8(At)	7.20	1.89	3.80	6.30	2.30	2.74	6.20	2.81	2.21	7.00	2.41	2.90
MDV-V100WHN8(At)	SMK-D160N8(At)	9.00	2.14	4.20	7.20	3.01	2.39	7.00	2.83	2.47	8.80	2.75	3.20
	SMKT-D100/190CGN8(At)	9.00	2.14	4.20	7.20	3.01	2.39	7.00	2.83	2.47	8.80	2.75	3.20
	SMKT-D160/240CGN8(At)	9.00	2.14	4.20	7.20	3.01	2.39	7.00	2.83	2.47	8.80	2.75	3.20
MDV-V120WHN8(At)	SMK-D160N8(At)	12.30	3.15	3.90	10.00	3.50	2.86	8.80	3.26	2.70	12.10	4.03	3.00
	SMKT-D160/240CGN8(At)	12.30	3.15	3.90	10.00	3.50	2.86	8.80	3.26	2.70	12.10	4.03	3.00
MDV-V140WHN8(At)	SMK-D160N8(At)	14.00	3.41	4.10	11.50	4.77	2.41	11.50	5.00	2.30	13.80	4.45	3.10
	SMKT-D160/240CGN8(At)	14.00	3.41	4.10	11.50	4.77	2.41	11.50	5.00	2.30	13.80	4.45	3.10
MDV-V160WHN8(At)	SMK-D160N8(At)	15.50	3.88	4.00	11.80	5.02	2.35	11.80	5.32	2.22	15.30	5.10	3.00
	SMKT-D160/240CGN8(At)	15.50	3.88	4.00	11.80	5.02	2.35	11.80	5.32	2.22	15.30	5.10	3.00

Outdoor unit	Indoor unit	Ambient Temperature: 2/1 Water temperature: 40/45			Ambient Temperature: -7/-8 Water temperature: 40/45			Ambient Temperature: 7/6 Water temperature: 47/55			Ambient Temperature: 2/1 Water temperature: 47/55			Ambient Temperature: -7/-8 Water temperature: 47/55		
		Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER	Capacity kW	Power input kW	EER
MDV-V80WHN8(At)	SMK-D160N8(At)	6.20	2.61	2.38	5.50	2.96	1.86	6.80	3.02	2.25	6.80	3.66	1.86	5.84	4.00	1.46
	SMKT-D100/190CGN8(At)	6.20	2.61	2.38	5.50	2.96	1.86	6.80	3.02	2.25	6.80	3.66	1.86	5.84	4.00	1.46
	SMKT-D160/240CGN8(At)	6.20	2.61	2.38	5.50	2.96	1.86	6.80	3.02	2.25	6.80	3.66	1.86	5.84	4.00	1.46
MDV-V100WHN8(At)	SMK-D160N8(At)	7.10	2.68	2.65	6.80	3.58	1.90	8.50	3.54	2.40	7.70	3.89	1.98	5.70	3.88	1.47
	SMKT-D100/190CGN8(At)	7.10	2.68	2.65	6.80	3.58	1.90	8.50	3.54	2.40	7.70	3.89	1.98	5.70	3.88	1.47
	SMKT-D160/240CGN8(At)	7.10	2.68	2.65	6.80	3.58	1.90	8.50	3.54	2.40	7.70	3.89	1.98	5.70	3.88	1.47
MDV-V120WHN8(At)	SMK-D160N8(At)	10.40	4.43	2.35	9.80	5.27	1.86	11.50	4.69	2.45	10.20	5.10	2.00	8.88	5.19	1.71
	SMKT-D160/240CGN8(At)	10.40	4.43	2.35	9.80	5.27	1.86	11.50	4.69	2.45	10.20	5.10	2.00	8.88	5.19	1.71
MDV-V140WHN8(At)	SMK-D160N8(At)	11.30	4.67	2.42	10.20	5.23	1.95	13.00	6.05	2.15	11.88	6.39	1.86	10.3	6.5	1.6
	SMKT-D160/240CGN8(At)	11.30	4.67	2.42	10.20	5.23	1.95	13.00	6.05	2.15	11.88	6.39	1.86	10.3	6.5	1.6
MDV-V160WHN8(At)	SMK-D160N8(At)	12.10	5.13	2.36	11.20	6.44	1.74	13.50	6.28	2.15	12.20	6.63	1.84	10.5	6.7	1.6
	SMKT-D160/240CGN8(At)	12.10	5.13	2.36	11.20	6.44	1.74	13.50	6.28	2.15	12.20	6.63	1.84	10.5	6.7	1.6

Fan Types	Axial fan		
Directive (or Standard) for Regulation		ErP Directive 2009/125/EC COMMISSION REGULATION (EU) No 327/2011	
Model Name	ZKSN-200-10-4L+ZL-580*200*12-3N	Rev.	
Prepare by			

Specified Information of Fan:

No.	Information Item	Comment
1	η_{target} =	29.41%
2	Overall efficiency (η_e) =	33.44%
3	Pass or not (Criteria: $\eta_e \geqq \eta_{target}$)	Pass
4	Measurement category (A-D)	A
5	Efficiency category (static or total)	Static
6	Efficiency grade at optimum energy efficiency point	N =42.6
7	VSD is integrated within the fan	YES
8	Year of Manufacture	Ref. to the Unit Nameplate
9	Manufacturer's name and place of manufacture	Ref. to the Unit Nameplate
10.1	Rated motor power input(s) (kW), at optimum energy efficiency	0.211
10.2	Flow rate(s) at optimum energy efficiency (m^3/h)	4891
10.3	Pressure(s) at optimum energy efficiency (Pa)	50
11	Rotations per minute (R.P.M) at the optimum energy efficiency point	800r/min
12	Specific ratio	1.001
13	Information relevant for facilitating disassembly, recycling or disposal at end-of-life	all materials can be recycled
14	Information relevant to minimize impact on the environment and ensure optimal life expectancy as regards installation, use and maintenance of the fan	For installation, the clearance of 500 mm shall be kept from inlet
15	Description of additional items used when determining the fan energy efficiency, such as ducts, that are not described in the measurement category and not supplied with the fan.	Measurement category A, fan is free inlet and outlet conditions
16	Motor manufacturer	GUANGDONG WELLING MOTOR MANUFACTURING CO.,LTD.

Fan Types	Axial fan		
Directive (or Standard) for Regulation		ErP Directive 2009/125/EC COMMISSION REGULATION (EU) No 327/2011	
Model Name	ZKSN-200-10-4L+ZL-580*200*12-3N	Rev.	
Prepare by			

Specified Information of Fan:

No.	Information Item	Comment
1	η_{target} =	29.23%
2	Overall efficiency (η_e) =	36.14%
3	Pass or not (Criteria: $\eta_e \geqq \eta_{target}$)	Pass
4	Measurement category (A-D)	A
5	Efficiency category (static or total)	Static
6	Efficiency grade at optimum energy efficiency point	N =45.3
7	VSD is integrated within the fan	YES
8	Year of Manufacture	Ref. to the Unit Nameplate
9	Manufacturer's name and place of manufacture	Ref. to the Unit Nameplate
10.1	Rated motor power input(s) (kW), at optimum energy efficiency	0.198
10.2	Flow rate(s) at optimum energy efficiency (m^3/h)	4886
10.3	Pressure(s) at optimum energy efficiency (Pa)	50
11	Rotations per minute (R.P.M) at the optimum energy efficiency point	800r/min
12	Specific ratio	1.001
13	Information relevant for facilitating disassembly, recycling or disposal at end-of-life	all materials can be recycled
14	Information relevant to minimize impact on the environment and ensure optimal life expectancy as regards installation, use and maintenance of the fan	For installation, the clearance of 500 mm shall be kept from inlet
15	Description of additional items used when determining the fan energy efficiency, such as ducts, that are not described in the measurement category and not supplied with the fan.	Measurement category A, fan is free inlet and outlet conditions
16	Motor manufacturer	Jiangsu Shangqi Group Co., Ltd.

Fan Types	Axial fan		
Directive (or Standard) for Regulation		ErP Directive 2009/125/EC COMMISSION REGULATION (EU) No 327/2011	
Model Name	ZKSN-200-10-3L+ZL-580*200*12-3N	Rev.	
Prepare by			

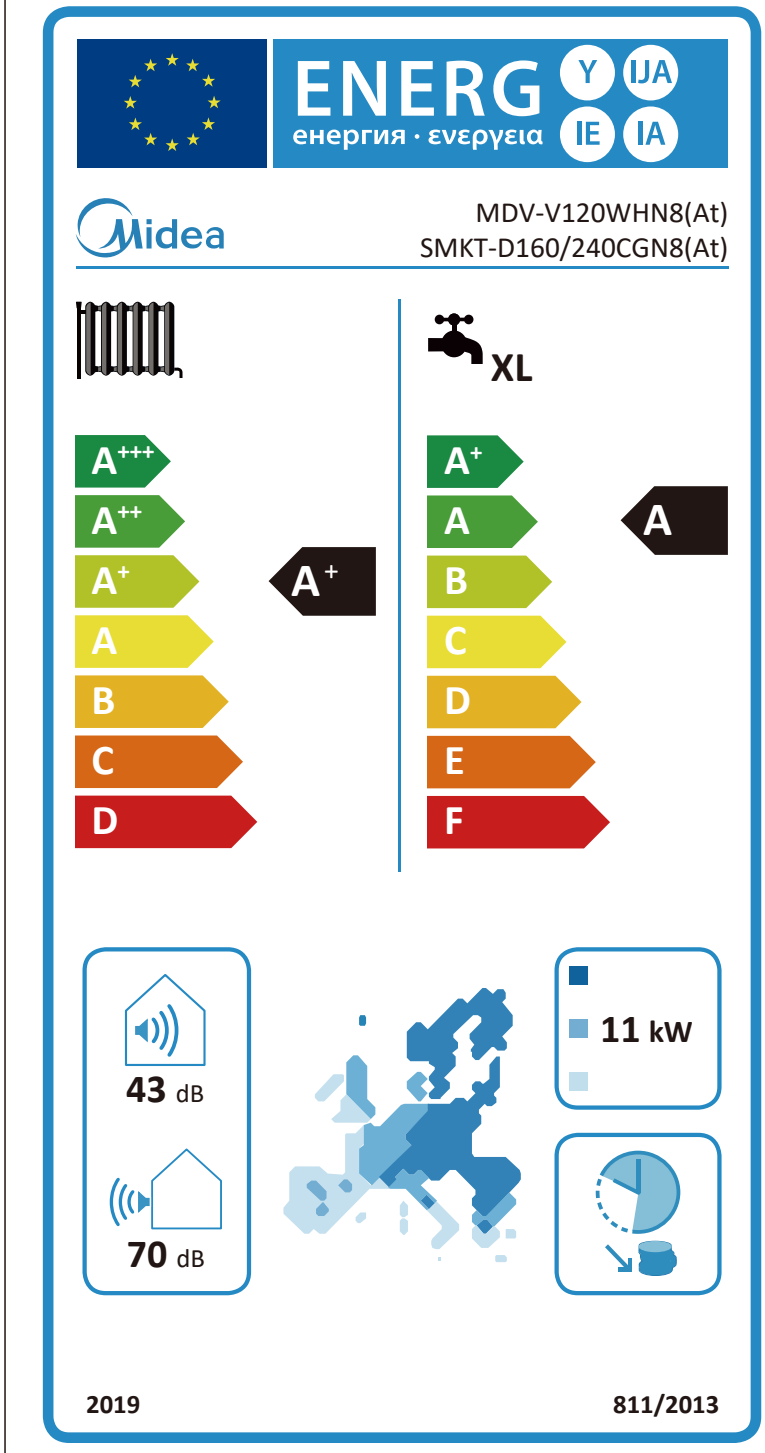
Specified Information of Fan:

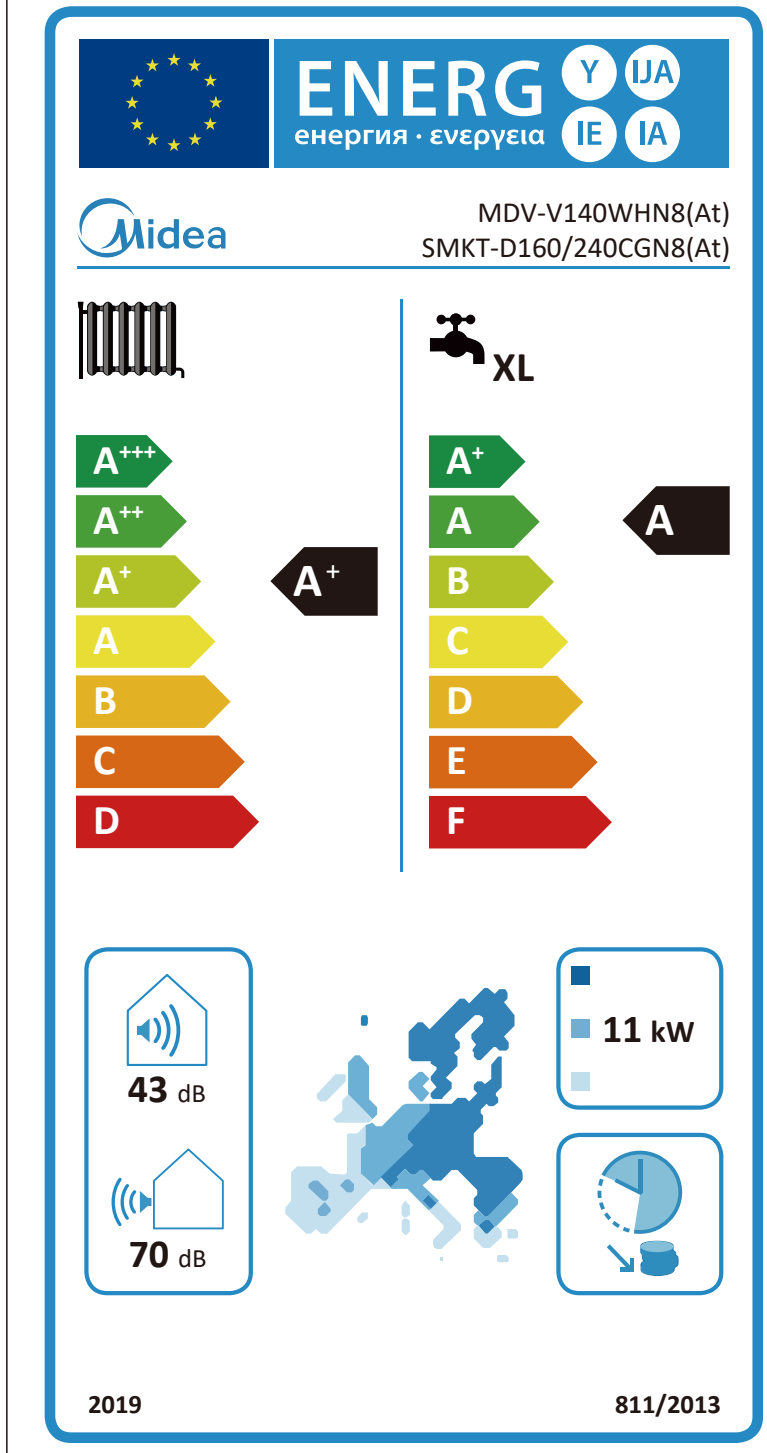
No.	Information Item	Comment
1	η_{target} =	30.26%
2	Overall efficiency (η_e) =	33.39%
3	Pass or not (Criteria: $\eta_e \geqq \eta_{target}$)	Pass
4	Measurement category (A-D)	A
5	Efficiency category (static or total)	Static
6	Efficiency grade at optimum energy efficiency point	N =42.1
7	VSD is integrated within the fan	YES
8	Year of Manufacture	Ref. to the Unit Nameplate
9	Manufacturer's name and place of manufacture	Ref. to the Unit Nameplate
10.1	Rated motor power input(s) (kW), at optimum energy efficiency	0.288
10.2	Flow rate(s) at optimum energy efficiency (m^3/h)	5615
10.3	Pressure(s) at optimum energy efficiency (Pa)	60
11	Rotations per minute (R.P.M) at the optimum energy efficiency point	900r/min
12	Specific ratio	1.001
13	Information relevant for facilitating disassembly, recycling or disposal at end-of-life	all materials can be recycled
14	Information relevant to minimize impact on the environment and ensure optimal life expectancy as regards installation, use and maintenance of the fan	For installation, the clearance of 500 mm shall be kept from inlet
15	Description of additional items used when determining the fan energy efficiency, such as ducts, that are not described in the measurement category and not supplied with the fan.	Measurement category A, fan is free inlet and outlet conditions
16	Motor manufacturer	GUANGDONG WELLING MOTOR MANUFACTURING CO.,LTD.

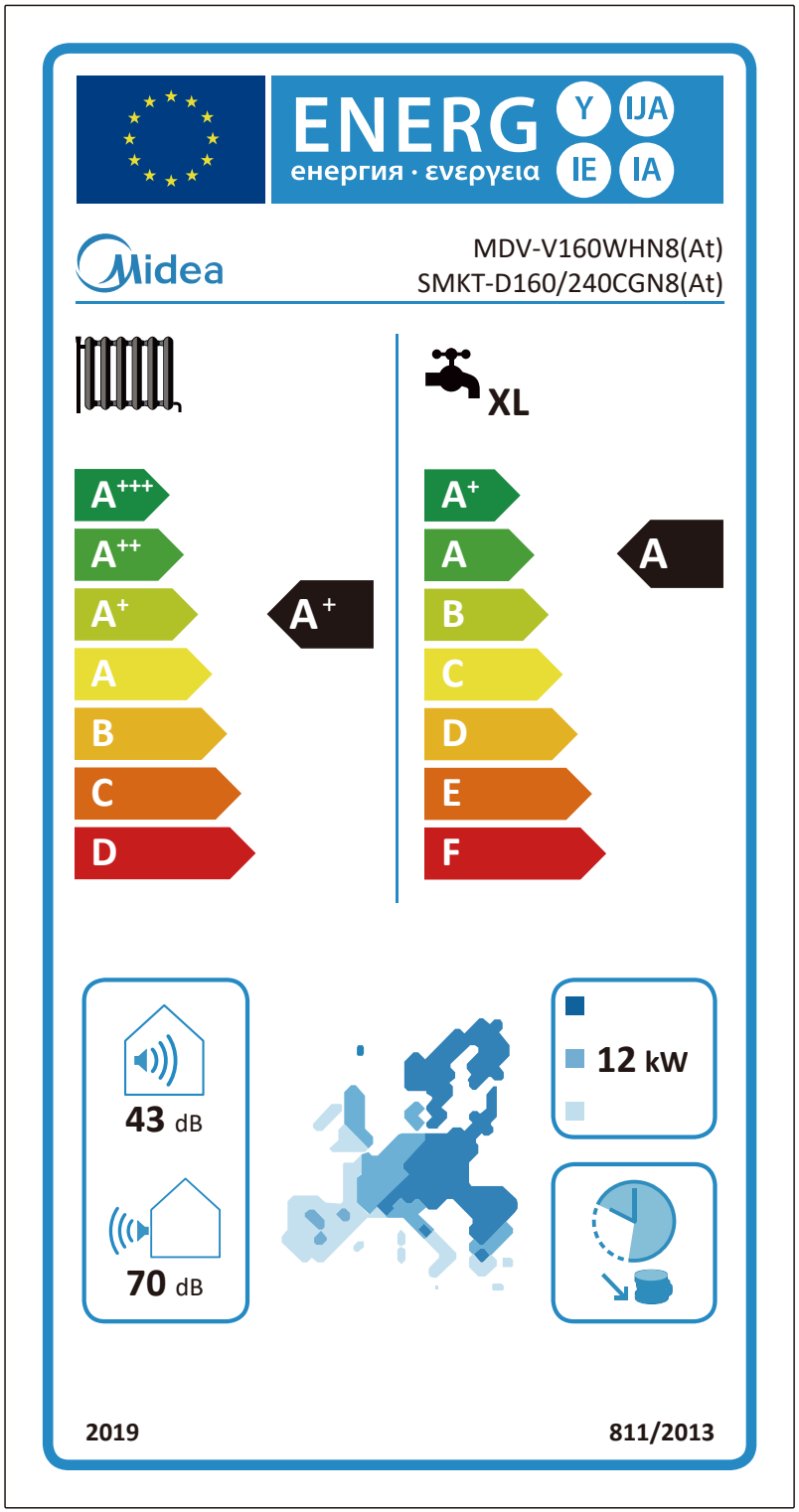
Fan Types	Axial fan		
Directive (or Standard) for Regulation		ErP Directive 2009/125/EC COMMISSION REGULATION (EU) No 327/2011	
Model Name	ZKSN-200-10-3L+ZL-580*200*12-3N	Rev.	
Prepare by			

Specified Information of Fan:

No.	Information Item	Comment
1	η_{target} =	30.32%
2	Overall efficiency (η_e) =	35.31%
3	Pass or not (Criteria: $\eta_e \geqq \eta_{target}$)	Pass
4	Measurement category (A-D)	A
5	Efficiency category (static or total)	Static
6	Efficiency grade at optimum energy efficiency point	N =43.3
7	VSD is integrated within the fan	YES
8	Year of Manufacture	Ref. to the Unit Nameplate
9	Manufacturer's name and place of manufacture	Ref. to the Unit Nameplate
10.1	Rated motor power input(s) (kW), at optimum energy efficiency	0.294
10.2	Flow rate(s) at optimum energy efficiency (m^3/h)	5448
10.3	Pressure(s) at optimum energy efficiency (Pa)	65
11	Rotations per minute (R.P.M) at the optimum energy efficiency point	900r/min
12	Specific ratio	1.001
13	Information relevant for facilitating disassembly, recycling or disposal at end-of-life	all materials can be recycled
14	Information relevant to minimize impact on the environment and ensure optimal life expectancy as regards installation, use and maintenance of the fan	For installation, the clearance of 500 mm shall be kept from inlet
15	Description of additional items used when determining the fan energy efficiency, such as ducts, that are not described in the measurement category and not supplied with the fan.	Measurement category A, fan is free inlet and outlet conditions
16	Motor manufacturer	Jiangsu Shangqi Group Co., Ltd.


ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V120WHN8(At)
SMKT-D160/240CGN8(At)
XL
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
43 dB
70 dB
11 kW
2019
811/2013


ENERG
енергия · ενεργεια
Y
IJA
IE
IA
Midea
MDV-V140WHN8(At)
SMKT-D160/240CGN8(At)
XL
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
43 dB
70 dB
11 kW
2019
811/2013


ENERG
Y
IJA
IE
IA
енергия · ενεργεια
Midea
MDV-V160WHN8(At)
SMKT-D160/240CGN8(At)
XL
A+++
A++
A+
A
B
C
D
A+
A+
A
B
C
D
E
F
A
43 dB
70 dB
12 kW
2019
811/2013


16125300003799 V.B

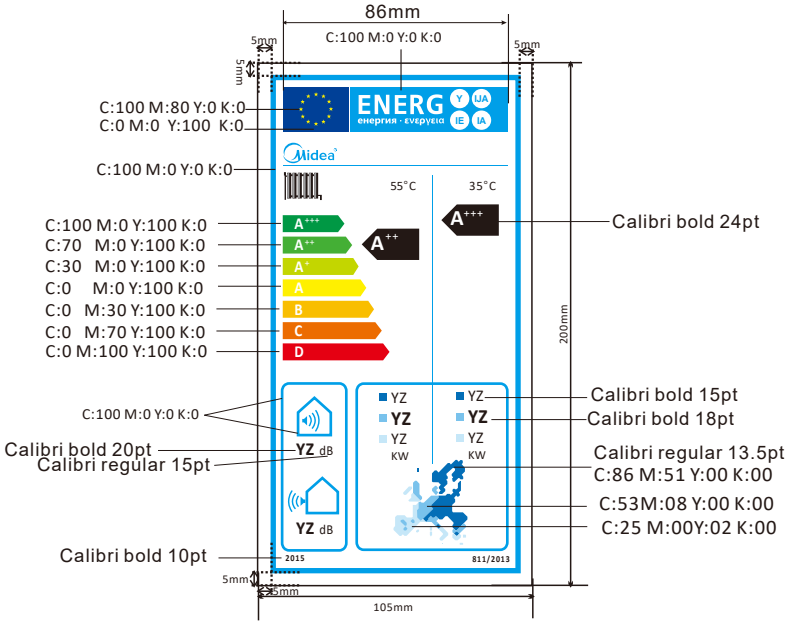
印刷技术要求

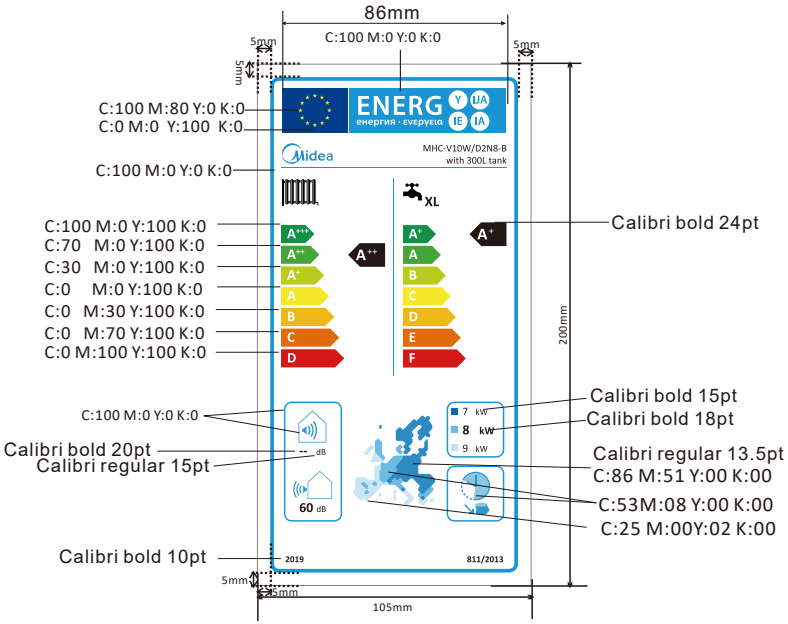
材质	内页80g双胶纸
规格	210*297(胶装，双面打印，沿短边装订)
颜色	彩色
其他	

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）
A-B	林锦袁	20230731	见附件记录表	见附件记录表 105g铜版纸材质取消

颜色标注，请参照下图：


86mm
C:100 M:0 Y:0 K:0
5mm
5mm
5mm
C:100 M:80 Y:0 K:0
C:0 M:0 Y:100 K:0
C:100 M:0 Y:0 K:0
55°C
35°C
A+++
C:100 M:0 Y:100 K:0
C:70 M:0 Y:100 K:0
C:30 M:0 Y:100 K:0
C:0 M:0 Y:100 K:0
C:0 M:30 Y:100 K:0
C:0 M:70 Y:100 K:0
C:0 M:100 Y:100 K:0
A++
A+
A
B
C
D
200mm
Calibri bold 24pt
C:100 M:0 Y:0 K:0
YZ
YZ
YZ
KW
YZ
YZ
YZ
KW
Calibri bold 15pt
Calibri bold 18pt
Calibri bold 20pt
Calibri regular 15pt
YZ dB
YZ dB
Calibri regular 13.5pt
C:86 M:51 Y:00 K:00
C:53M:08 Y:00 K:00
C:25 M:00Y:02 K:00
Calibri bold 10pt
2015
811/2013
5mm
5mm
105mm


86mm
C:100 M:0 Y:0 K:0
5mm
5mm
5mm
C:100 M:80 Y:0 K:0
C:0 M:0 Y:100 K:0
MHC-V10W/D2N8-B
with 300L tank
C:100 M:0 Y:0 K:0
XL
C:100 M:0 Y:100 K:0
C:70 M:0 Y:100 K:0
C:30 M:0 Y:100 K:0
C:0 M:0 Y:100 K:0
C:0 M:30 Y:100 K:0
C:0 M:70 Y:100 K:0
C:0 M:100 Y:100 K:0
A++
A+
A
B
C
D
E
F
200mm
Calibri bold 24pt
C:100 M:0 Y:0 K:0
7 kW
8 kW
9 kW
Calibri bold 15pt
Calibri bold 18pt
Calibri bold 20pt
Calibri regular 15pt
60 dB
Calibri regular 13.5pt
C:86 M:51 Y:00 K:00
C:53M:08 Y:00 K:00
C:25 M:00Y:02 K:00
Calibri bold 10pt
2019
811/2013
5mm
5mm
105mm