

Subtype RASM-4(V)TW2E

Certificate Holder	Johnson Controls-Hitachi AirConditioning Spain
Address	Ronda Shimizu, 1. Pol. Ind. Can Torrella
ZIP	08233
City	Vacarisses, Barcelona
Country	ES
Certification Body	BRE Global Limited
Subtype title	RASM-4(V)TW2E
Registration number	041-K002-79
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.2 kg
Certification Date	05.09.2025
Testing basis	Heat Pump Keymark Scheme Rules Rev 15
Testing laboratory	Centro de Ensayos, Innovación y Servicios (CEIS), ES

Model RASM-4VTW2E & ATW-CBX-01 - Heating Only

Model name	RASM-4VTW2E & ATW-CBX-01 - Heating Only
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	143 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.20 kW

COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.20 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4561 kWh	5659 kWh

Model RASM-4TW2E & ATW-CBX-01 - Heating Only

Model name	RASM-4TW2E & ATW-CBX-01 - Heating Only
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	143 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW

COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4561 kWh	5659 kWh

Model RASM-4VTW2E & HWM-W2E - Heating Only

Model name	RASM-4VTW2E & HWM-W2E - Heating Only
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	143 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4561 kWh	5659 kWh

Model RASM-4TW2E & HWM-W2E - Heating Only

Model name	RASM-4TW2E & HWM-W2E - Heating Only
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	143 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4561 kWh	5659 kWh

Model RASM-4VTW2E & HWM-W2E-B - Heating Only

Model name	RASM-4VTW2E & HWM-W2E-B - Heating Only
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	143 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4561 kWh	5659 kWh

Model RASM-4TW2E & HWM-W2E-B - Heating Only

Model name	RASM-4TW2E & HWM-W2E-B - Heating Only
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	143 %
Prated	10.00 kW	10.00 kW
SCOP	4.53	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4561 kWh	5659 kWh

Model RASM-4VTW2E & HWD-W2E-220S(-K) - Heating Only

Model name	RASM-4VTW2E & HWD-W2E-220S(-K) - Heating Only
Application	Heating + DHW
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.88
Heating up time	1:30 h:min
Standby power input	41.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	288 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	58 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	179 %	143 %

Prated	10.00 kW	10.00 kW
SCOP	4.54	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.80	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.00 kW	5.00 kW
COP Tj = 12°C	8.92	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4552 kWh	5659 kWh

Model RASM-4TW2E & HWD-W2E-220S(-K) - Heating Only

Model name	RASM-4TW2E & HWD-W2E-220S(-K) - Heating Only
Application	Heating + DHW
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.88
Heating up time	1:30 h:min
Standby power input	41.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	288 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	58 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	179 %	143 %

Prated	10.00 kW	10.00 kW
SCOP	4.54	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.80	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.00 kW	5.00 kW
COP Tj = 12°C	8.92	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4552 kWh	5659 kWh

Model RASM-4VTW2E & ATW-CBX-01 - With Cooling Kit

Model name	RASM-4VTW2E & ATW-CBX-01 - With Cooling Kit
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.58	3.68
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4513 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W

PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4TW2E & ATW-CBX-01 - With Cooling Kit

Model name	RASM-4TW2E & ATW-CBX-01 - With Cooling Kit
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.58	3.68
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4513 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W

PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4VTW2E & HWM-W2E - With Cooling Kit

Model name	RASM-4VTW2E & HWM-W2E - With Cooling Kit
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.58	3.68
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4513 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900

Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4TW2E & HWM-W2E - With Cooling Kit

Model name	RASM-4TW2E & HWM-W2E - With Cooling Kit
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.58	3.68
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4513 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900

Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4VTW2E & HWM-W2E-B - With Cooling Kit

Model name	RASM-4VTW2E & HWM-W2E-B - With Cooling Kit
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.58	3.68
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4513 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900

Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4TW2E & HWM-W2E-B - With Cooling Kit

Model name	RASM-4TW2E & HWM-W2E-B - With Cooling Kit
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	180 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.58	3.68
Tbiv	-7 °C	-7 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.73	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.40 kW	5.00 kW
COP Tj = 12°C	9.21	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4513 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900

Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4VTW2E & HWD-W2E-220S(-K) - With Cooling Kit

Model name	RASM-4VTW2E & HWD-W2E-220S(-K) - With Cooling Kit
Application	Heating + DHW
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.88
Heating up time	1:30 h:min
Standby power input	41.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	288 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	61 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	179 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.54	3.68
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.80	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.00 kW	5.00 kW
COP Tj = 12°C	8.92	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4552 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900

Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh

Model RASM-4TW2E & HWD-W2E-220S(-K) - With Cooling Kit

Model name	RASM-4TW2E & HWD-W2E-220S(-K) - With Cooling Kit
Application	Heating + DHW
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.88
Heating up time	1:30 h:min
Standby power input	41.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	288 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	10.00 kW	10.00 kW
El input	2.21 kW	2.94 kW
COP	4.53	3.40

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.16 kW	2.99 kW
Cooling capacity	10.00	10.00
EER	3.16	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	61 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	179 %	144 %
Prated	10.00 kW	10.00 kW
SCOP	4.54	3.68
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	8.90 kW
COP Tj = -7°C	2.87	2.29
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.40 kW
COP Tj = +2°C	4.30	3.47
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.00 kW
COP Tj = +7°C	6.80	5.37
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.00 kW	5.00 kW
COP Tj = 12°C	8.92	7.69
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.90 kW	8.90 kW
COP Tj = Tbiv	2.87	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.90 kW	8.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	13 W	13 W
PTO	13 W	13 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	1.15 kW	1.15 kW
Annual energy consumption Qhe	4552 kWh	5611 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	10.00 kW	10.00 kW
SEER	3.90	5.73
Pdc Tj = 35°C	10.00 kW	10.00 kW
EER Tj = 35°C	3.16	3.35
Cdc Tj = 35 °C	0.900	0.900

Pdc Tj = 30°C	7.40 kW	7.40 kW
EER Tj = 30°C	3.81	5.48
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	4.20 kW	4.70 kW
EER Tj = 25°C	4.30	6.88
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.20 kW	4.70 kW
EER Tj = 20°C	4.34	6.78
Cdc Tj = 20 °C	0.900	0.900
Poff	13 W	13 W
PTO	0 W	0 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	1537 kWh	1048 kWh