Subtype HA 7-8.2 OS 230V with Tower

Certificate Holder	Saunier Duval Brand Group
Address	SDECCI SAS - 17 rue de la Petite Baratte
ZIP	44300
City	Nantes
Country	FR
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	HA 7-8.2 OS 230V with Tower
Registration number	011-1W0953
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.5 kg
Certification Date	11.12.2024
Testing basis	HP KEYMARK certification scheme rules rev. 14

Model HA 7-8.2 OS 230V + HA 7-8.2 STB	
Model name	HA 7-8.2 OS 230V + HA 7-8.2 STB
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.40 kW	1.87 kW
Cooling capacity	4.26	7.29
EER	3.04	3.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	203 %	142 %
Prated	6.61 kW	5.67 kW
SCOP	5.15	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.20	2.27
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	5.22	3.52
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	6.31	4.68
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	8.36	6.42
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.20	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.90

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2649 kWh	3230 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	122 %
Prated	6.88 kW	5.69 kW
SCOP	4.44	3.12
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.76	2.66
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.57	3.97
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.78	5.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	8.06	6.73
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.61	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W

PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	3816 kWh	4499 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64
COP Tj = -15°C (if TOL	2.61	2.02
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	257 %	176 %
Prated	6.80 kW	6.79 kW
SCOP	6.51	4.47
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.42	2.37
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.94	3.84
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.87	5.72
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.42	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	1397 kWh	2028 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.09 kW	6.63 kW
SEER	5.05	7.02
Pdc Tj = 35°C	6.09 kW	6.63 kW
EER Tj = 35°C	2.96	4.05
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	4.52 kW	4.93 kW
EER Tj = 30°C	4.17	6.00
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	2.98 kW	3.95 kW
EER Tj = 25°C	5.72	8.20
Cdc Tj = 25 °C	0.991	0.990
Pdc Tj = 20°C	3.27 kW	4.03 kW
EER Tj = 20°C	7.26	9.64
Cdc Tj = 20 °C	0.990	0.989
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	723 kWh	567 kWh

Model HA 7-8.2 OS 230V + HA 7-8.2 STB B5	
Model name	HA 7-8.2 OS 230V + HA 7-8.2 STB B5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.40 kW	1.87 kW
Cooling capacity	4.26	7.29
EER	3.04	3.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	203 %	142 %
Prated	6.61 kW	5.67 kW
SCOP	5.15	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.20	2.27
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	5.22	3.52
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	6.31	4.68
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	8.36	6.42
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.20	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.90

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2649 kWh	3230 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	122 %
Prated	6.88 kW	5.69 kW
SCOP	4.44	3.12
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.76	2.66
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.57	3.97
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.78	5.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	8.06	6.73
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.61	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W

PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	3816 kWh	4499 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64
COP Tj = -15°C (if TOL	2.61	2.02
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	257 %	176 %
Prated	6.80 kW	6.79 kW
SCOP	6.51	4.47
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.42	2.37
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.94	3.84
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.87	5.72
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.42	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	1397 kWh	2028 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.09 kW	6.63 kW
SEER	5.05	7.02
Pdc Tj = 35°C	6.09 kW	6.63 kW
EER Tj = 35°C	2.96	4.05
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	4.52 kW	4.93 kW
EER Tj = 30°C	4.17	6.00
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	2.98 kW	3.95 kW
EER Tj = 25°C	5.72	8.20
Cdc Tj = 25 °C	0.991	0.990
Pdc Tj = 20°C	3.27 kW	4.03 kW
EER Tj = 20°C	7.26	9.64
Cdc Tj = 20 °C	0.990	0.989
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	723 kWh	567 kWh

Model HA 7-8.2 OS 230V + HA 7-8.2 STB C2	
Model name	HA 7-8.2 OS 230V + HA 7-8.2 STB C2
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.40 kW	1.87 kW
Cooling capacity	4.26	7.29
EER	3.04	3.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	190 %	135 %
Prated	6.61 kW	5.67 kW
SCOP	4.83	3.44
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.12	2.23
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	4.88	3.34
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	5.79	4.37
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	7.59	5.94
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.12	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2829 kWh	3400 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	165 %	116 %
Prated	6.88 kW	5.69 kW
SCOP	4.19	2.98
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.62	2.58
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.11	3.72
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.20	4.93
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	7.34	6.21
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.56	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W

PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	4044 kWh	4704 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64
COP Tj = -15°C (if TOL	2.56	1.98
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	240 %	167 %
Prated	6.80 kW	6.79 kW
SCOP	6.06	4.25
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.35	2.33
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.62	3.70
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.17	5.32
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.35	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	1499 kWh	2132 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.09 kW	6.63 kW
SEER	4.74	6.53
Pdc Tj = 35°C	6.09 kW	6.63 kW
EER Tj = 35°C	2.90	3.94
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	4.52 kW	4.93 kW
EER Tj = 30°C	4.00	5.69
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	2.98 kW	3.95 kW
EER Tj = 25°C	5.26	7.50
Cdc Tj = 25 °C	0.991	0.990
Pdc Tj = 20°C	3.27 kW	4.03 kW
EER Tj = 20°C	6.60	8.70
Cdc Tj = 20 °C	0.990	0.989
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	772 kWh	609 kWh

Model HA 7-8.2 OS 230V B2 + HA 7-8.2 STB	
Model name	HA 7-8.2 OS 230V B2 + HA 7-8.2 STB
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l

EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l

EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	199 %	140 %
Prated	6.61 kW	5.67 kW
SCOP	5.06	3.57
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.20	2.27
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	5.22	3.52
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	6.31	4.68
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	8.36	6.42
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.20	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2698 kWh	3279 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	173 %	121 %
Prated	6.88 kW	5.69 kW
SCOP	4.41	3.10
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.76	2.66
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.57	3.97
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.78	5.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	8.06	6.73
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.61	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	3845 kWh	4529 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64

COP Tj = -15°C (if TOL	2.61	2.02
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	247 %	171 %
Prated	6.80 kW	6.79 kW
SCOP	6.24	4.35
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.42	2.37
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.94	3.84
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.87	5.72
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.42	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1456 kWh	2086 kWh

Model HA 7-8.2 OS 230V B2 + HA 7-8.2 STB C2	
Model name	HA 7-8.2 OS 230V B2 + HA 7-8.2 STB C2
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l

EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l

EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	187 %	133 %
Prated	6.61 kW	5.67 kW
SCOP	4.75	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.12	2.23
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	4.88	3.34
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	5.79	4.37
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	7.59	5.94
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.12	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2878 kWh	3449 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	163 %	115 %
Prated	6.88 kW	5.69 kW
SCOP	4.16	2.96
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.62	2.58
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.11	3.72
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.20	4.93
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	7.34	6.21
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.56	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	4074 kWh	4734 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64

COP Tj = -15°C (if TOL	2.56	1.98
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	230 %	163 %
Prated	6.80 kW	6.79 kW
SCOP	5.84	4.14
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.35	2.33
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.62	3.70
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.17	5.32
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.35	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1557 kWh	2191 kWh

Model HA 8-8.2 OS 230V B3 + HA 8-8.2 STB	
Model name	HA 8-8.2 OS 230V B3 + HA 8-8.2 STB
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.40 kW	1.87 kW
Cooling capacity	4.26	7.29
EER	3.04	3.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	203 %	142 %
Prated	6.61 kW	5.67 kW
SCOP	5.15	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.20	2.27
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	5.22	3.52
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	6.31	4.68
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	8.36	6.42
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.20	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.90

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2649 kWh	3230 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	122 %
Prated	6.88 kW	5.69 kW
SCOP	4.44	3.12
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.76	2.66
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.57	3.97
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.78	5.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	8.06	6.73
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.61	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W

PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	3816 kWh	4499 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64
COP Tj = -15°C (if TOL	2.61	2.02
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	257 %	176 %
Prated	6.80 kW	6.79 kW
SCOP	6.51	4.47
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.42	2.37
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.94	3.84
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.87	5.72
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.42	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	1397 kWh	2028 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.09 kW	6.63 kW
SEER	5.05	7.02
Pdc Tj = 35°C	6.09 kW	6.63 kW
EER Tj = 35°C	2.96	4.05
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	4.52 kW	4.93 kW
EER Tj = 30°C	4.17	6.00
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	2.98 kW	3.95 kW
EER Tj = 25°C	5.72	8.20
Cdc Tj = 25 °C	0.991	0.990
Pdc Tj = 20°C	3.27 kW	4.03 kW
EER Tj = 20°C	7.26	9.64
Cdc Tj = 20 °C	0.990	0.989
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	723 kWh	567 kWh

Model HA 8-8.2 OS 230V B3 + HA 8-8.2 STB B5	
Model name	HA 8-8.2 OS 230V B3 + HA 8-8.2 STB B5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.40 kW	1.87 kW
Cooling capacity	4.26	7.29
EER	3.04	3.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	203 %	142 %
Prated	6.61 kW	5.67 kW
SCOP	5.15	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.20	2.27
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	5.22	3.52
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	6.31	4.68
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	8.36	6.42
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.20	2.27
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.90

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2649 kWh	3230 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	122 %
Prated	6.88 kW	5.69 kW
SCOP	4.44	3.12
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.76	2.66
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.57	3.97
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.78	5.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	8.06	6.73
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.61	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	2.02
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W

PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	3816 kWh	4499 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64
COP Tj = -15°C (if TOL	2.61	2.02
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	257 %	176 %
Prated	6.80 kW	6.79 kW
SCOP	6.51	4.47
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.42	2.37
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.94	3.84
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.87	5.72
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.42	2.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.42	2.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	1397 kWh	2028 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.09 kW	6.63 kW
SEER	5.05	7.02
Pdc Tj = 35°C	6.09 kW	6.63 kW
EER Tj = 35°C	2.96	4.05
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	4.52 kW	4.93 kW
EER Tj = 30°C	4.17	6.00
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	2.98 kW	3.95 kW
EER Tj = 25°C	5.72	8.20
Cdc Tj = 25 °C	0.991	0.990
Pdc Tj = 20°C	3.27 kW	4.03 kW
EER Tj = 20°C	7.26	9.64
Cdc Tj = 20 °C	0.990	0.989
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	723 kWh	567 kWh

Model HA 8-8.2 OS 230V B3 + HA 8-8.2 STB C2	
Model name	HA 8-8.2 OS 230V B3 + HA 8-8.2 STB C2
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer
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 ηDHW	148 %
COP	3.69
Heating up time	01:05 h:min
Standby power input	44.7 W
Reference hot water temperature	53 °C
Mixed water at 40°C	249 l
EN 16147 | Colder Climate	
Declared load profile	L
Efficiency ηDHW	128 %
COP	3.19
Heating up time	01:11 h:min
Standby power input	53.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	248 l
EN 16147 | Warmer Climate	
Declared load profile	L
Efficiency ηDHW	172 %
COP	4.31
Heating up time	00:57 h:min
Standby power input	38.4 W
Reference hot water temperature	52 °C
Mixed water at 40°C	249 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	5.07 kW	6.45 kW
El input	1.01 kW	2.16 kW
COP	5.00	2.98

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	1.40 kW	1.87 kW
Cooling capacity	4.26	7.29
EER	3.04	3.90

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	190 %	135 %
Prated	6.61 kW	5.67 kW
SCOP	4.83	3.44
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.85 kW	5.01 kW
COP Tj = -7°C	3.12	2.23
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.34 kW	2.91 kW
COP Tj = +2°C	4.88	3.34
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	3.14 kW	2.97 kW
COP Tj = +7°C	5.79	4.37
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.71 kW	3.57 kW
COP Tj = 12°C	7.59	5.94
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.85 kW	5.01 kW
COP Tj = Tbiv	3.12	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.78 kW	4.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	1.86

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.83 kW	0.94 kW
Annual energy consumption Qhe	2829 kWh	3400 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	165 %	116 %
Prated	6.88 kW	5.69 kW
SCOP	4.19	2.98
Tbiv	-15 °C	-15 °C
TOL	-20 °C	-15 °C
Pdh Tj = -7°C	4.51 kW	3.69 kW
COP Tj = -7°C	3.62	2.58
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	2.82 kW	2.58 kW
COP Tj = +2°C	5.11	3.72
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.24 kW	3.06 kW
COP Tj = +7°C	6.20	4.93
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	3.69 kW	3.60 kW
COP Tj = 12°C	7.34	6.21
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	5.61 kW	4.64 kW
COP Tj = Tbiv	2.56	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.12 kW	4.64 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W

PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.88 kW	5.69 kW
Annual energy consumption Qhe	4044 kWh	4704 kWh
Pdh Tj = -15°C (if TOL	5.61	4.64
COP Tj = -15°C (if TOL	2.56	1.98
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	240 %	167 %
Prated	6.80 kW	6.79 kW
SCOP	6.06	4.25
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.80 kW	6.79 kW
COP Tj = +2°C	3.35	2.33
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.68 kW	4.82 kW
COP Tj = +7°C	5.62	3.70
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	3.66 kW	3.49 kW
COP Tj = 12°C	7.17	5.32
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	6.80 kW	6.79 kW
COP Tj = Tbiv	3.35	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.80 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.35	2.33
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	1499 kWh	2132 kWh
EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.09 kW	6.63 kW
SEER	4.74	6.53
Pdc Tj = 35°C	6.09 kW	6.63 kW
EER Tj = 35°C	2.90	3.94
Cdc Tj = 35 °C	1.000	1.000
Pdc Tj = 30°C	4.52 kW	4.93 kW
EER Tj = 30°C	4.00	5.69
Cdc Tj = 30 °C	1.000	1.000
Pdc Tj = 25°C	2.98 kW	3.95 kW
EER Tj = 25°C	5.26	7.50
Cdc Tj = 25 °C	0.991	0.990
Pdc Tj = 20°C	3.27 kW	4.03 kW
EER Tj = 20°C	6.60	8.70
Cdc Tj = 20 °C	0.990	0.989
Poff	13 W	13 W
PTO	5 W	5 W
PSB	13 W	13 W
PCK	0 W	0 W
Annual energy consumption Qce	772 kWh	609 kWh