Subtype Buderus Logatherm WSW196i.2/186 -6 and -8

Certificate Holder	Bosch Thermotechnik GmbH (Buderus)
Address	Sophienstraße 30-32
ZIP	35576
City	Wetzlar
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Buderus Logatherm WSW196i.2/186 -6 and -8
Registration number	011-1W0434
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	R410A
Mass of Refrigerant	1.35 kg
Certification Date	08.12.2020
Testing basis	HP KEYMARK certification scheme rules rev. 10
Testing laboratory	RISE Research Institutes of Sweden

Model WSW196i.2-6 T180 (+W) / 186-6 T180	
Model name	WSW196i.2-6 T180 (+W) / 186-6 T180
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Water
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Brine/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	126 %
COP	3.06
Heating up time	1:35 h:min
Standby power input	30.9 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 l

EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	126 %
COP	3.06
Heating up time	1:35 h:min
Standby power input	30.9 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 l

EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	126 %
COP	3.06
Heating up time	1:35 h:min
Standby power input	30.9 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 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	5.85 kW	5.24 kW
El input	1.35 kW	1.91 kW
COP	4.33	2.75

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	202 %	145 %
Prated	5.85 kW	5.24 kW
SCOP	5.26	3.82
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	4.58 kW
COP Tj = -7°C	4.53	2.97
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.34 kW	3.04 kW
COP Tj = +2°C	5.39	3.87
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.12 kW	1.97 kW
COP Tj = +7°C	5.87	4.52
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	5.91	4.57
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.85 kW	5.24 kW
COP Tj = Tbiv	4.33	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2298 kWh	2835 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	210 %	151 %
Prated	5.85 kW	5.24 kW
SCOP	5.44	3.99
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.62 kW	3.29 kW
COP Tj = -7°C	5.29	3.71
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.34 kW	1.94 kW
COP Tj = +2°C	5.85	4.37
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.13 kW	1.98 kW
COP Tj = +7°C	5.86	4.69
Cdh Tj = +7 °C		
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	5.78	4.78
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	5.85 kW	5.24 kW
COP Tj = Tbiv	4.33	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.85 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2650 kWh	3241 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	200 %	141 %
Prated	5.85 kW	5.24 kW
SCOP	5.21	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.85 kW	5.24 kW
COP Tj = +2°C	4.33	2.75
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.98 kW	3.63 kW
COP Tj = +7°C	5.14	3.47
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	5.90	4.46
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.85 kW	5.24 kW
COP Tj = Tbiv	4.33	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.85 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	1500 kWh	1876 kWh

Water/Water

EN 16147 | Average Climate

Declared load profile	xl
Efficiency ηDHW	126 %
COP	3.06
Heating up time	1:35 h:min
Standby power input	30.9 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 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	7.80 kW	6.89 kW
El input	1.38 kW	2.03 kW
COP	5.66	3.40

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	300 %	202 %
Prated	7.80 kW	6.89 kW
SCOP	7.70	5.24
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.94 kW	6.22 kW
COP Tj = -7°C	6.07	3.78
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.34 kW	3.64 kW
COP Tj = +2°C	7.77	5.29
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.80 kW	2.61 kW
COP Tj = +7°C	9.40	6.44
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.80 kW	2.65 kW
COP Tj = 12°C	9.35	6.74
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	7.80 kW	6.89 kW
COP Tj = Tbiv	5.66	3.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.80 kW	6.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.66	3.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2092 kWh	2721 kWh

Model WSW196i.2-6 (+W) / 186-6	
Model name	WSW196i.2-6 (+W) / 186-6
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Brine
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Brine/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	5.85 kW	5.24 kW
El input	1.35 kW	1.91 kW
COP	4.33	2.75

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	202 %	145 %
Prated	5.85 kW	5.24 kW
SCOP	5.26	3.82
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.13 kW	4.85 kW
COP Tj = -7°C	4.53	2.97
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.34 kW	3.04 kW
COP Tj = +2°C	5.39	3.87
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.12 kW	1.97 kW

COP Tj = +7°C	5.87	4.52
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	5.91	4.57
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.85 kW	5.24 kW
COP Tj = Tbiv	4.33	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.85 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2298 kWh	2835 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	210 %	151 %
Prated	5.85 kW	5.24 kW
SCOP	5.44	3.99
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.62 kW	3.29 kW
COP Tj = -7°C	5.29	3.71
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	2.34 kW	1.94 kW
COP Tj = +2°C	5.85	4.37
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	2.13 kW	1.98 kW
COP Tj = +7°C	5.86	4.69
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.11 kW	2.00 kW
COP Tj = 12°C	5.78	4.78
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.85 kW	5.24 kW

COP Tj = Tbiv	4.33	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.85 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2650 kWh	3241 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	200 %	141 %
Prated	5.85 kW	5.24 kW
SCOP	5.21	3.73
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.85 kW	5.24 kW
COP Tj = +2°C	4.33	2.75
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.98 kW	3.63 kW
COP Tj = +7°C	5.14	3.47
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	2.12 kW	1.97 kW
COP Tj = 12°C	5.90	4.46
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.85 kW	5.24 kW
COP Tj = Tbiv	4.33	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.85 kW	5.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.33	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	67 °C	67 °C
Poff	11 W	11 W

PTO	11 W	11 W
PSB	11 W	11 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	1500 kWh	1876 kWh

Water/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	7.80 kW	6.89 kW
El input	1.38 kW	2.03 kW
COP	5.66	3.40

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	300 %	202 %
Prated	7.80 kW	6.89 kW
SCOP	7.70	5.24
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.94 kW	6.22 kW
COP Tj = -7°C	6.07	3.78
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.34 kW	3.64 kW
COP Tj = +2°C	7.77	5.29
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.80 kW	2.61 kW
COP Tj = +7°C	9.24	6.44
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.80 kW	2.65 kW
COP Tj = 12°C	9.35	6.74
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	7.80 kW	6.89 kW
COP Tj = Tbiv	5.66	3.40
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.80 kW	6.89 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.66	3.40
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2092 kWh	2721 kWh

Model WSW196i.2-8 T180 (+W) / 186-8 T180	
Model name	WSW196i.2-8 T180 (+W) / 186-8 T180
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Brine
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Brine/Water	
EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	124 %
COP	3.01
Heating up time	1:31 h:min
Standby power input	87.0 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 l
EN 16147 | Colder Climate	
Declared load profile	XL
Efficiency ηDHW	124 %
COP	3.01
Heating up time	1:31 h:min
Standby power input	87.0 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 l
EN 16147 | Warmer Climate	
Declared load profile	XL
Efficiency ηDHW	124 %
COP	3.01
Heating up time	1:31 h:min
Standby power input	87.0 W
Reference hot water temperature	47.6 °C
Mixed water at 40°C	211 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	7.63 kW	6.74 kW
El input	1.87 kW	2.57 kW
COP	4.08	2.62

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	203 %	150 %
Prated	7.63 kW	6.74 kW
SCOP	5.28	3.95
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.06 kW	5.86 kW
COP Tj = -7°C	4.29	2.94
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.24 kW	3.76 kW
COP Tj = +2°C	5.37	4.01
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	2.67 kW	2.53 kW
COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.11 kW	1.99 kW
COP Tj = 12°C	6.12	4.86
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.63 kW	6.74 kW
COP Tj = Tbiv	4.08	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.62 kW	6.74 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2984 kWh	3530 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	214 %	157 %
Prated	7.62 kW	6.74 kW
SCOP	5.56	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.59 kW	4.22 kW
COP Tj = -7°C	5.35	3.77
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.01 kW	2.51 kW
COP Tj = +2°C	6.00	4.58
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.14 kW	2.02 kW
COP Tj = +7°C	6.21	5.06
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.11 kW	2.02 kW
COP Tj = 12°C	5.95	5.06
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.62 kW	6.74 kW
COP Tj = Tbiv	4.08	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.62 kW	6.74 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	3381 kWh	4024 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	202 %	144 %
Prated	7.62 kW	6.74 kW
SCOP	5.26	3.80
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.62 kW	6.74 kW
COP Tj = +2°C	4.08	2.62
Cdh Tj = +2 °C	0.990	1.000
Pdh Tj = +7°C	5.23 kW	4.15 kW
COP Tj = +7°C	5.07	3.58
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	2.67 kW	2.00 kW
COP Tj = 12°C	6.02	4.89
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.62 kW	6.74 kW
COP Tj = Tbiv	4.08	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.62 kW	6.74 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	1935 kWh	2369 kWh

Water/Water

EN 16147 | Average Climate

Declared load profile	XL
Efficiency ηDHW	148 %
COP	3.59
Heating up time	1:11 h:min
Standby power input	30.3 W
Reference hot water temperature	47.1 °C
Mixed water at 40°C	204 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	10.03 kW	9.09 kW
El input	1.99 kW	2.87 kW
COP	5.04	3.17

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	288 %	201 %
Prated	9.09 kW	9.09 kW
SCOP	7.40	5.23
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.31 kW	7.85 kW
COP Tj = -7°C	5.37	3.60
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.50 kW	4.98 kW
COP Tj = +2°C	7.38	5.25
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.53 kW	3.36 kW
COP Tj = +7°C	9.18	6.53
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.80 kW	2.65 kW
COP Tj = 12°C	9.60	7.00
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	10.03 kW	9.09 kW
COP Tj = Tbiv	5.04	3.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.03 kW	9.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.04	3.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2800 kWh	3591 kWh

Model WSW196i.2-8 (+W) / 186-8	
Model name	WSW196i.2-8 (+W) / 186-8
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Brine
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Brine/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	7.63 kW	6.74 kW
El input	1.87 kW	2.57 kW
COP	4.08	2.62

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	203 %	150 %
Prated	7.63 kW	6.74 kW
SCOP	5.28	3.95
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.06 kW	5.86 kW
COP Tj = -7°C	4.29	2.94
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.24 kW	3.76 kW
COP Tj = +2°C	5.37	4.01
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	2.67 kW	2.53 kW

COP Tj = +7°C	6.00	4.70
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.11 kW	1.99 kW
COP Tj = 12°C	6.12	4.86
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.63 kW	6.74 kW
COP Tj = Tbiv	4.08	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.62 kW	6.74 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2984 kWh	3530 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	214 %	157 %
Prated	7.62 kW	6.74 kW
SCOP	5.56	4.13
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.59 kW	4.22 kW
COP Tj = -7°C	5.35	3.77
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.01 kW	2.51 kW
COP Tj = +2°C	6.00	4.58
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.14 kW	2.02 kW
COP Tj = +7°C	6.21	5.06
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	2.11 kW	2.02 kW
COP Tj = 12°C	5.95	5.06
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.62 kW	6.74 kW

COP Tj = Tbiv	4.08	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.62 kW	6.74 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	3381 kWh	4024 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	36 dB(A)	36 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	202 %	144 %
Prated	7.62 kW	6.74 kW
SCOP	5.26	3.80
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.62 kW	6.74 kW
COP Tj = +2°C	4.08	2.62
Cdh Tj = +2 °C	0.990	1.000
Pdh Tj = +7°C	5.23 kW	4.15 kW
COP Tj = +7°C	5.07	3.58
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	2.67 kW	2.00 kW
COP Tj = 12°C	6.02	4.89
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.62 kW	6.74 kW
COP Tj = Tbiv	4.08	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.62 kW	6.74 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.08	2.62
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	67 °C	67 °C
Poff	11 W	11 W

PTO	11 W	11 W
PSB	11 W	11 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	1935 kWh	2369 kWh

Water/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	10.03 kW	9.09 kW
El input	1.99 kW	2.87 kW
COP	5.04	3.17

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	288 %	201 %
Prated	9.09 kW	9.09 kW
SCOP	7.40	5.23
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.31 kW	7.85 kW
COP Tj = -7°C	5.37	3.60
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.50 kW	4.98 kW
COP Tj = +2°C	7.38	5.25
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.53 kW	3.36 kW
COP Tj = +7°C	9.18	6.53
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.80 kW	2.65 kW
COP Tj = 12°C	9.60	7.00
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	10.03 kW	9.09 kW
COP Tj = Tbiv	5.04	3.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.03 kW	9.09 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.04	3.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	67 °C	67 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 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	2800 kWh	3591 kWh