

Subtype Bosch CS5800i/6800iAW 4/5/7 OR

Certificate Holder	Bosch Thermotechnik GmbH
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Bosch CS5800i/6800iAW 4/5/7 OR
Registration number	011-1W0581
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.95 kg
Certification Date	30.03.2023
Testing basis	HP KEYMARK certification scheme rules rev. 14

**Model CS5800iAW 4 ORM-S (60°C)**

Model name	CS5800iAW 4 ORM-S (60°C)
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	85 %
COP	1.94
Heating up time	03:08 h:min
Standby power input	93.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	73 %
COP	1.65
Heating up time	03:25 h:min
Standby power input	120.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
COP	2.21
Heating up time	03:08 h:min
Standby power input	92.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	1.97 kW
El input	0.59 kW	0.8 kW
COP	4.81	2.47

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	127 %
P <sub>rated</sub>	4.4 kW	4 kW
SCOP	4.55	3.25
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.89 kW	3.51 kW
COP T <sub>j</sub> = -7°C	2.88	2.10
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.48 kW	2.23 kW
COP T <sub>j</sub> = +2°C	4.46	3.19
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.97	0.98
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.73 kW	1.53 kW
COP T <sub>j</sub> = +7°C	6.12	4.26
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.96 kW	1.82 kW
COP T <sub>j</sub> = 12°C	7.37	5.30
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	3.89 kW	3.51 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.88	2.10
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.61 kW	3.10 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.69	1.81
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W

PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.79 kW	0.90 kW
Annual energy consumption Qhe	1999 kWh	2539 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	157 %	108 %
Prated	3.8 kW	3.2 kW
SCOP	3.99	2.76
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.25 kW	1.84 kW
COP Tj = -7°C	3.4	2.21
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.46 kW	1.26 kW
COP Tj = +2°C	4.98	3.41
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	1.6 kW	1.56 kW
COP Tj = +7°C	5.72	4.17
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.8 kW	1.77 kW
COP Tj = 12°C	6.57	5.14
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.11 kW	2.6 kW
COP Tj = Tbiv	2.49	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.2 kW	2.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	1.18 kW
Annual energy consumption Qhe	2345 kWh	2855 kWh

Pdh Tj = -15°C (if TOL)	3.11	2.6
COP Tj = -15°C (if TOL)	2.49	1.78
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	209 %	141 %
Prated	4.3 kW	3.8 kW
SCOP	5.29	3.59
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.3 kW	3.88 kW
COP Tj = +2°C	3.2	2.09
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.63 kW	2.38 kW
COP Tj = +7°C	4.92	3.03
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.67	4.91
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.3 kW	3.88 kW
COP Tj = Tbiv	3.2	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.3 kW	3.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.2	2.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1085 kWh	1414 kWh

**Model CS6800iAW 4 ORM-S**

Model name	CS6800iAW 4 ORM-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	85 %
COP	1.94
Heating up time	3:08 h:min
Standby power input	93.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	73 %
COP	1.65
Heating up time	3:25 h:min
Standby power input	120.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
COP	2.21
Heating up time	3:08 h:min
Standby power input	92.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	1.97 kW
El input	0.59 kW	0.8 kW
COP	4.81	2.47

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	127 %
P <sub>rated</sub>	4.4 kW	4 kW
SCOP	4.55	3.25
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.89 kW	3.51 kW
COP T <sub>j</sub> = -7°C	2.88	2.10
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.48 kW	2.23 kW
COP T <sub>j</sub> = +2°C	4.46	3.19
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.97	0.98
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.73 kW	1.53 kW
COP T <sub>j</sub> = +7°C	6.12	4.26
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.96 kW	1.82 kW
COP T <sub>j</sub> = 12°C	7.37	5.30
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	3.89 kW	3.51 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.88	2.10
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.61 kW	3.10 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.69	1.81
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	75 °C	75 °C
P <sub>off</sub>	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W

PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.79 kW	0.90 kW
Annual energy consumption Qhe	1999 kWh	2539 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	157 %	108 %
Prated	3.8 kW	3.2 kW
SCOP	3.99	2.76
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.25 kW	1.84 kW
COP Tj = -7°C	3.4	2.21
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.46 kW	1.26 kW
COP Tj = +2°C	4.98	3.41
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	1.6 kW	1.56 kW
COP Tj = +7°C	5.72	4.17
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.8 kW	1.77 kW
COP Tj = 12°C	6.57	5.14
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.11 kW	2.6 kW
COP Tj = Tbiv	2.49	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.2 kW	2.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	1.18 kW
Annual energy consumption Qhe	2345 kWh	2855 kWh

Pdh Tj = -15°C (if TOL)	3.11	2.6
COP Tj = -15°C (if TOL)	2.49	1.78
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	209 %	141 %
Prated	4.3 kW	3.8 kW
SCOP	5.29	3.59
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.3 kW	3.88 kW
COP Tj = +2°C	3.2	2.09
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.63 kW	2.38 kW
COP Tj = +7°C	4.92	3.03
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.67	4.91
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.3 kW	3.88 kW
COP Tj = Tbiv	3.2	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.3 kW	3.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.2	2.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1085 kWh	1414 kWh

**Model CS5800iAW 4 ORE-S (60°C)**

Model name	CS5800iAW 4 ORE-S (60°C)
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	2.02 kW
El input	0.59 kW	0.79 kW
COP	4.85	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	130 %
Prated	4.4 kW	4 kW
SCOP	4.58	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.91 kW	3.55 kW
COP Tj = -7°C	2.89	2.12
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.26 kW
COP Tj = +2°C	4.48	3.24

Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.73 kW	1.55 kW
COP Tj = +7°C	6.17	4.37
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.43	5.41
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.91 kW	3.55 kW
COP Tj = Tbiv	2.89	3.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.63 kW	3.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.85 kW
Annual energy consumption Qhe	1987 kWh	2492 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	158 %	109 %
Prated	3.8 kW	3.2 kW
SCOP	4.03	2.81
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.87 kW
COP Tj = -7°C	3.42	2.27
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.46 kW	1.27 kW
COP Tj = +2°C	5.03	3.43
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	1.61 kW	1.58 kW
COP Tj = +7°C	5.76	4.29
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.81 kW	1.78 kW

COP Tj = 12°C	6.63	5.25
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.12 kW	2.64 kW
COP Tj = Tbiv	2.51	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.91	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.13 kW
Annual energy consumption Qhe	2327 kWh	2807 kWh
Pdh Tj = -15°C (if TOL	3.12	2.64
COP Tj = -15°C (if TOL	2.51	1.8
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	210 %	143 %
Prated	4.3 kW	3.8 kW
SCOP	5.33	3.66
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.31 kW	3.92 kW
COP Tj = +2°C	3.21	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.41 kW
COP Tj = +7°C	4.95	3.09
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.82 kW	1.79 kW
COP Tj = 12°C	6.72	5.01
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.31 kW	3.92 kW
COP Tj = Tbiv	3.21	2.12

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.31 kW	3.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1077 kWh	1389 kWh

**Model CS6800iAW 4 ORE-S**

Model name	CS6800iAW 4 ORE-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	2.02 kW
El input	0.59 kW	0.79 kW
COP	4.85	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	130 %
Prated	4.4 kW	4 kW
SCOP	4.58	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.91 kW	3.55 kW
COP Tj = -7°C	2.89	2.12
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.26 kW
COP Tj = +2°C	4.48	3.24

Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.73 kW	1.55 kW
COP Tj = +7°C	6.17	4.37
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.43	5.41
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.91 kW	3.55 kW
COP Tj = Tbiv	2.89	3.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.63 kW	3.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.85 kW
Annual energy consumption Qhe	1987 kWh	2492 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	158 %	109 %
Prated	3.8 kW	3.2 kW
SCOP	4.03	2.81
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.87 kW
COP Tj = -7°C	3.42	2.27
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.46 kW	1.27 kW
COP Tj = +2°C	5.03	3.43
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	1.61 kW	1.58 kW
COP Tj = +7°C	5.76	4.29
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.81 kW	1.78 kW

COP Tj = 12°C	6.63	5.25
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.12 kW	2.64 kW
COP Tj = Tbiv	2.51	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.91	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.13 kW
Annual energy consumption Qhe	2327 kWh	2807 kWh
Pdh Tj = -15°C (if TOL	3.12	2.64
COP Tj = -15°C (if TOL	2.51	1.8
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	210 %	143 %
Prated	4.3 kW	3.8 kW
SCOP	5.33	3.66
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.31 kW	3.92 kW
COP Tj = +2°C	3.21	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.41 kW
COP Tj = +7°C	4.95	3.09
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.82 kW	1.79 kW
COP Tj = 12°C	6.72	5.01
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.31 kW	3.92 kW
COP Tj = Tbiv	3.21	2.12

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.31 kW	3.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1077 kWh	1389 kWh

**Model CS5800iAW 5 ORE-S (60°C)**

Model name	CS5800iAW 5 ORE-S (60°C)
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	137 %
Prated	6.2 kW	6.2 kW
SCOP	4.57	3.5
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.47 kW	5.57 kW
COP Tj = -7°C	2.59	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.05 kW	3.52 kW
COP Tj = +2°C	4.64	3.39

Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.07	4.84
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.95 kW	1.88 kW
COP Tj = 12°C	7.26	5.83
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.47 kW	5.57 kW
COP Tj = Tbiv	2.59	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.45 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.10 kW
Annual energy consumption Qhe	2803 kWh	3657 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	167 %	124 %
Prated	5.4 kW	5.3 kW
SCOP	4.25	3.17
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.45 kW	3.18 kW
COP Tj = -7°C	3.44	2.64
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.1 kW
COP Tj = +2°C	5.47	3.8
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.25	5.18
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.92 kW	1.9 kW

COP Tj = 12°C	6.87	5.92
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.62 kW	4.3 kW
COP Tj = Tbiv	2.41	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.1	1.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.65 kW
Annual energy consumption Qhe	3135 kWh	4116 kWh
Pdh Tj = -15°C (if TOL	4.62	4.3
COP Tj = -15°C (if TOL	2.41	1.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	219 %	157 %
Prated	6.4 kW	5.9 kW
SCOP	5.56	4
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.93 kW
COP Tj = +2°C	2.91	2.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.14 kW	3.84 kW
COP Tj = +7°C	4.79	3.51
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.95 kW	1.78 kW
COP Tj = 12°C	7.38	5.15
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.43 kW	5.93 kW
COP Tj = Tbiv	2.91	2.15

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1538 kWh	1969 kWh

**Model CS5800iAW 5 ORM-S (60°C)**

Model name	CS5800iAW 5 ORM-S (60°C)
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	92 %
COP	2.17
Heating up time	2:54 h:min
Standby power input	87.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	75 %
COP	1.75
Heating up time	3:11 h:min
Standby power input	131.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	106 %
COP	2.48
Heating up time	2:54 h:min
Standby power input	87.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	3.18 kW
El input	0.59 kW	1.18 kW
COP	4.81	2.7

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
P <sub>rated</sub>	6.2 kW	6.2 kW
SCOP	4.55	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	5.46 kW	5.52 kW
COP T <sub>j</sub> = -7°C	2.58	2.09
C <sub>d</sub> h T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>d</sub> h T <sub>j</sub> = +2°C	3.04 kW	3.49 kW
COP T <sub>j</sub> = +2°C	4.61	3.36
C <sub>d</sub> h T <sub>j</sub> = +2 °C	0.98	0.98
P <sub>d</sub> h T <sub>j</sub> = +7°C	2.28 kW	2.20 kW
COP T <sub>j</sub> = +7°C	6.04	4.77
C <sub>d</sub> h T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>d</sub> h T <sub>j</sub> = 12°C	1.94 kW	1.87 kW
COP T <sub>j</sub> = 12°C	7.20	5.72
C <sub>d</sub> h T <sub>j</sub> = +12 °C	0.94	0.95
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	5.46 kW	5.52 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.58	2.09
P <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.43 kW	5.05 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.58	1.87
C <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W

PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	1.15 kW
Annual energy consumption Qhe	2818 kWh	3699 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	166 %	122 %
Prated	5.4 kW	5.3 kW
SCOP	4.22	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.44 kW	3.15 kW
COP Tj = -7°C	3.42	2.61
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.08 kW
COP Tj = +2°C	5.44	3.73
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.7 kW
COP Tj = +7°C	6.21	5.08
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.91 kW	1.89 kW
COP Tj = 12°C	6.81	5.81
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.61 kW	4.26 kW
COP Tj = Tbiv	2.4	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	1.7 kW
Annual energy consumption Qhe	3152 kWh	4177 kWh

Pdh Tj = -15°C (if TOL)	4.61	4.26
COP Tj = -15°C (if TOL)	2.4	1.89
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	218 %	155 %
Prated	6.4 kW	5.9 kW
SCOP	5.53	3.95
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.42 kW	5.89 kW
COP Tj = +2°C	2.9	2.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.13 kW	3.81 kW
COP Tj = +7°C	4.77	3.47
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.94 kW	1.77 kW
COP Tj = 12°C	7.32	5.05
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.42 kW	5.89 kW
COP Tj = Tbiv	2.9	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.42 kW	5.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1547 kWh	1998 kWh

**Model CS6800iAW 5 ORE-S**

Model name	CS6800iAW 5 ORE-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	137 %
Prated	6.2 kW	6.2 kW
SCOP	4.57	3.5
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.47 kW	5.57 kW
COP Tj = -7°C	2.59	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.05 kW	3.52 kW
COP Tj = +2°C	4.64	3.39

Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.07	4.84
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.95 kW	1.88 kW
COP Tj = 12°C	7.26	5.83
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.47 kW	5.57 kW
COP Tj = Tbiv	2.59	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.45 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.10 kW
Annual energy consumption Qhe	2803 kWh	3657 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	167 %	124 %
Prated	5.4 kW	5.3 kW
SCOP	4.25	3.17
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.45 kW	3.18 kW
COP Tj = -7°C	3.44	2.64
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.1 kW
COP Tj = +2°C	5.47	3.8
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.25	5.18
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.92 kW	1.9 kW

COP Tj = 12°C	6.87	5.92
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.62 kW	4.3 kW
COP Tj = Tbiv	2.41	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.1	1.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.65 kW
Annual energy consumption Qhe	3135 kWh	4116 kWh
Pdh Tj = -15°C (if TOL	4.62	4.3
COP Tj = -15°C (if TOL	2.41	1.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	219 %	157 %
Prated	6.4 kW	5.9 kW
SCOP	5.56	4
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.93 kW
COP Tj = +2°C	2.91	2.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.14 kW	3.84 kW
COP Tj = +7°C	4.79	3.51
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.95 kW	1.78 kW
COP Tj = 12°C	7.38	5.15
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.43 kW	5.93 kW
COP Tj = Tbiv	2.91	2.15

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1538 kWh	1969 kWh

**Model CS6800iAW 5 ORM-S**

Model name	CS6800iAW 5 ORM-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	92 %
COP	2.17
Heating up time	2:54 h:min
Standby power input	87.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	75 %
COP	1.75
Heating up time	3:11 h:min
Standby power input	131.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	106 %
COP	2.48
Heating up time	2:54 h:min
Standby power input	87.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	3.18 kW
El input	0.59 kW	1.18 kW
COP	4.81	2.7

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
P <sub>rated</sub>	6.2 kW	6.2 kW
SCOP	4.55	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	5.46 kW	5.52 kW
COP T <sub>j</sub> = -7°C	2.58	2.09
C <sub>d</sub> h T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>d</sub> h T <sub>j</sub> = +2°C	3.04 kW	3.49 kW
COP T <sub>j</sub> = +2°C	4.61	3.36
C <sub>d</sub> h T <sub>j</sub> = +2 °C	0.98	0.98
P <sub>d</sub> h T <sub>j</sub> = +7°C	2.28 kW	2.20 kW
COP T <sub>j</sub> = +7°C	6.04	4.77
C <sub>d</sub> h T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>d</sub> h T <sub>j</sub> = 12°C	1.94 kW	1.87 kW
COP T <sub>j</sub> = 12°C	7.20	5.72
C <sub>d</sub> h T <sub>j</sub> = +12 °C	0.94	0.95
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	5.46 kW	5.52 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.58	2.09
P <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.43 kW	5.05 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.58	1.87
C <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	75 °C	75 °C
P <sub>off</sub>	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W

PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	1.15 kW
Annual energy consumption Qhe	2818 kWh	3699 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	166 %	122 %
Prated	5.4 kW	5.3 kW
SCOP	4.22	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.44 kW	3.15 kW
COP Tj = -7°C	3.42	2.61
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.08 kW
COP Tj = +2°C	5.44	3.73
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.7 kW
COP Tj = +7°C	6.21	5.08
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.91 kW	1.89 kW
COP Tj = 12°C	6.81	5.81
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.61 kW	4.26 kW
COP Tj = Tbiv	2.4	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	1.7 kW
Annual energy consumption Qhe	3152 kWh	4177 kWh

Pdh Tj = -15°C (if TOL)	4.61	4.26
COP Tj = -15°C (if TOL)	2.4	1.89
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	218 %	155 %
Prated	6.4 kW	5.9 kW
SCOP	5.53	3.95
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.42 kW	5.89 kW
COP Tj = +2°C	2.9	2.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.13 kW	3.81 kW
COP Tj = +7°C	4.77	3.47
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.94 kW	1.77 kW
COP Tj = 12°C	7.32	5.05
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.42 kW	5.89 kW
COP Tj = Tbiv	2.9	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.42 kW	5.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1547 kWh	1998 kWh

**Model CS5800iAW 7 ORE-S (60°C)**

Model name	CS5800iAW 7 ORE-S (60°C)
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	138 %
Prated	6.6 kW	6.6 kW
SCOP	4.58	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.94 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.53 kW
COP Tj = +2°C	4.68	3.49

Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.09	4.68
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.23	5.75
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.42 kW	5.94 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.39 kW
Annual energy consumption Qhe	2975 kWh	3878 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	161 %	117 %
Prated	7.3 kW	6.6 kW
SCOP	4.09	3.01
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.07 kW	3.72 kW
COP Tj = -7°C	3.3	2.39
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.2	3.67
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.84 kW
COP Tj = +7°C	6.24	4.72
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.84 kW	1.79 kW

COP Tj = 12°C	7	5.53
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.01 kW	5.37 kW
COP Tj = Tbiv	2.38	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	3.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	3.32 kW
Annual energy consumption Qhe	4397 kWh	5410 kWh
Pdh Tj = -15°C (if TOL	6.01	5.37
COP Tj = -15°C (if TOL	2.38	1.96
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	207 %	161 %
Prated	7.1 kW	5.7 kW
SCOP	5.25	4.09
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.72 kW
COP Tj = +2°C	2.83	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.67 kW
COP Tj = +7°C	4.23	3.41
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.37	5.59
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.08 kW	5.72 kW
COP Tj = Tbiv	2.83	2.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1807 kWh	1860 kWh

**Model CS5800iAW 7 ORM-S (60°C)**

Model name	CS5800iAW 7 ORM-S (60°C)
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	92 %
COP	2.17
Heating up time	2:39 h:min
Standby power input	92.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	75 %
COP	1.75
Heating up time	3:11 h:min
Standby power input	131.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	106 %
COP	2.49
Heating up time	2:39 h:min
Standby power input	86.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	3.18 kW
El input	0.59 kW	1.18 kW
COP	4.81	2.7

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
P <sub>rated</sub>	6.6 kW	6.6 kW
SCOP	4.56	3.48
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.41 kW	5.90 kW
COP T <sub>j</sub> = -7°C	2.60	2.07
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.50 kW	3.50 kW
COP T <sub>j</sub> = +2°C	4.66	3.46
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.98	0.99
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.20 kW	2.44 kW
COP T <sub>j</sub> = +7°C	6.05	4.62
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.85 kW	1.79 kW
COP T <sub>j</sub> = 12°C	7.17	5.64
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.94	0.95
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.41 kW	5.90 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.60	2.07
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.85 kW	5.16 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.22	1.81
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	60 °C	60 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W

PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.44 kW
Annual energy consumption Qhe	2990 kWh	3917 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	160 %	116 %
Prated	7.3 kW	6.6 kW
SCOP	4.07	2.97
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.06 kW	3.69 kW
COP Tj = -7°C	3.29	2.36
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.37 kW
COP Tj = +2°C	5.17	3.62
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.83 kW
COP Tj = +7°C	6.21	4.64
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.83 kW	1.78 kW
COP Tj = 12°C	6.95	5.42
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6 kW	5.33 kW
COP Tj = Tbiv	2.37	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.01 kW	3.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.29 kW	3.37 kW
Annual energy consumption Qhe	4418 kWh	5475 kWh

Pdh Tj = -15°C (if TOL)	6	5.33
COP Tj = -15°C (if TOL)	2.37	1.95
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	206 %	158 %
Prated	7.1 kW	5.7 kW
SCOP	5.21	4.04
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.68 kW
COP Tj = +2°C	2.81	2.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.64 kW
COP Tj = +7°C	4.2	3.38
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.82 kW
COP Tj = 12°C	7.31	5.48
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.08 kW	5.68 kW
COP Tj = Tbiv	2.81	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.81	2.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1820 kWh	1887 kWh

**Model CS6800iAW 7 ORE-S**

Model name	CS6800iAW 7 ORE-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	138 %
Prated	6.6 kW	6.6 kW
SCOP	4.58	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.94 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.53 kW
COP Tj = +2°C	4.68	3.49

Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.09	4.68
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.23	5.75
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.42 kW	5.94 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.39 kW
Annual energy consumption Qhe	2975 kWh	3878 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	161 %	117 %
Prated	7.3 kW	6.6 kW
SCOP	4.09	3.01
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.07 kW	3.72 kW
COP Tj = -7°C	3.3	2.39
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.2	3.67
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.84 kW
COP Tj = +7°C	6.24	4.72
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.84 kW	1.79 kW

COP Tj = 12°C	7	5.53
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.01 kW	5.37 kW
COP Tj = Tbiv	2.38	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	3.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	3.32 kW
Annual energy consumption Qhe	4397 kWh	5410 kWh
Pdh Tj = -15°C (if TOL	6.01	5.37
COP Tj = -15°C (if TOL	2.38	1.96
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	207 %	161 %
Prated	7.1 kW	5.7 kW
SCOP	5.25	4.09
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.72 kW
COP Tj = +2°C	2.83	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.67 kW
COP Tj = +7°C	4.23	3.41
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.37	5.59
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.08 kW	5.72 kW
COP Tj = Tbiv	2.83	2.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1807 kWh	1860 kWh

**Model CS6800iAW 7 ORM-S**

Model name	CS6800iAW 7 ORM-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	92 %
COP	2.17
Heating up time	2:39 h:min
Standby power input	92.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	75 %
COP	1.75
Heating up time	3:11 h:min
Standby power input	131.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	106 %
COP	2.49
Heating up time	2:39 h:min
Standby power input	86.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	3.18 kW
El input	0.59 kW	1.18 kW
COP	4.81	2.7

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
P <sub>rated</sub>	6.6 kW	6.6 kW
SCOP	4.56	3.48
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	5.41 kW	5.90 kW
COP T <sub>j</sub> = -7°C	2.60	2.07
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>dh</sub> T <sub>j</sub> = +2°C	3.50 kW	3.50 kW
COP T <sub>j</sub> = +2°C	4.66	3.46
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.98	0.99
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.20 kW	2.44 kW
COP T <sub>j</sub> = +7°C	6.05	4.62
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>dh</sub> T <sub>j</sub> = 12°C	1.85 kW	1.79 kW
COP T <sub>j</sub> = 12°C	7.17	5.64
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.94	0.95
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	5.41 kW	5.90 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.60	2.07
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.85 kW	5.16 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.22	1.81
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	75 °C	75 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W

PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.44 kW
Annual energy consumption Qhe	2990 kWh	3917 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	160 %	116 %
Prated	7.3 kW	6.6 kW
SCOP	4.07	2.97
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.06 kW	3.69 kW
COP Tj = -7°C	3.29	2.36
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.37 kW
COP Tj = +2°C	5.17	3.62
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.83 kW
COP Tj = +7°C	6.21	4.64
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.83 kW	1.78 kW
COP Tj = 12°C	6.95	5.42
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6 kW	5.33 kW
COP Tj = Tbiv	2.37	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.01 kW	3.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.29 kW	3.37 kW
Annual energy consumption Qhe	4418 kWh	5475 kWh

Pdh Tj = -15°C (if TOL)	6	5.33
COP Tj = -15°C (if TOL)	2.37	1.95
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	206 %	158 %
Prated	7.1 kW	5.7 kW
SCOP	5.21	4.04
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.68 kW
COP Tj = +2°C	2.81	2.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.64 kW
COP Tj = +7°C	4.2	3.38
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.82 kW
COP Tj = 12°C	7.31	5.48
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.08 kW	5.68 kW
COP Tj = Tbiv	2.81	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.81	2.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1820 kWh	1887 kWh

**Model CS5800iAW 4 ORMB-S (60°C)**

Model name	CS5800iAW 4 ORMB-S (60°C)
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	1.99 kW
El input	0.59 kW	0.8 kW
COP	4.82	2.51

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	128 %
Prated	4.4 kW	4 kW
SCOP	4.55	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.90 kW	3.53 kW
COP Tj = -7°C	2.88	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.25 kW
COP Tj = +2°C	4.47	3.21

Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.73 kW	1.54 kW
COP Tj = +7°C	6.13	4.27
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.38	5.32
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.90 kW	3.53 kW
COP Tj = Tbiv	2.88	3.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.62 kW	3.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.78 kW	0.87 kW
Annual energy consumption Qhe	1996 kWh	2526 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	154 %	105 %
Prated	3.8 kW	3.2 kW
SCOP	3.93	2.71
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.85 kW
COP Tj = -7°C	3.41	2.23
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.86 kW	1.77 kW
COP Tj = +2°C	4.78	3.26
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.61 kW	1.56 kW
COP Tj = +7°C	5.73	4.18
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.81 kW	1.78 kW

COP Tj = 12°C	6.58	5.16
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.14 kW	2.63 kW
COP Tj = Tbiv	2.56	1.79
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.21 kW	2.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.9	1.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.59 kW	1.15 kW
Annual energy consumption Qhe	2385 kWh	2911 kWh
Pdh Tj = -15°C (if TOL	3.14	2.63
COP Tj = -15°C (if TOL	2.56	1.79
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	209 %	142 %
Prated	4.3 kW	3.8 kW
SCOP	5.30	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.3 kW	3.79 kW
COP Tj = +2°C	3.2	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.4 kW
COP Tj = +7°C	4.93	3.05
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.68	4.93
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.3 kW	3.79 kW
COP Tj = Tbiv	3.2	2.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.3 kW	3.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.2	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1083 kWh	1402 kWh

**Model CS5800iAW 5 ORMB-S (60°C)**

Model name	CS5800iAW 5 ORMB-S (60°C)
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.2 kW
El input	0.59 kW	1.18 kW
COP	4.82	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
Prated	6.2 kW	6.2 kW
SCOP	4.55	3.47
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.46 kW	5.53 kW
COP Tj = -7°C	2.58	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.04 kW	3.50 kW
COP Tj = +2°C	4.62	3.37

Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.05	4.79
Cdh Tj = + 7 °C	0.96	0.97
Pdh Tj = 12°C	1.94 kW	1.88 kW
COP Tj = 12°C	7.21	5.74
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.46 kW	5.53 kW
COP Tj = Tbiv	2.58	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.44 kW	5.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	1.12 kW
Annual energy consumption Qhe	2814 kWh	3686 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	167 %	123 %
Prated	5.4 kW	5.3 kW
SCOP	4.24	3.14
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.44 kW	3.16 kW
COP Tj = -7°C	3.43	2.62
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.09 kW
COP Tj = +2°C	5.45	3.75
Cdh Tj = + 2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.22	5.1
Cdh Tj = + 7 °C	0.94	0.95
Pdh Tj = 12°C	1.91 kW	1.9 kW

COP Tj = 12°C	6.82	5.83
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.64 kW	4.28 kW
COP Tj = Tbiv	2.45	1.9
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.63 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.67 kW
Annual energy consumption Qhe	3138 kWh	4159 kWh
Pdh Tj = -15°C (if TOL	4.64	4.28
COP Tj = -15°C (if TOL	2.45	1.9
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	218 %	155 %
Prated	6.4 kW	5.9 kW
SCOP	5.53	3.96
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.91 kW
COP Tj = +2°C	2.9	2.14
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.13 kW	3.83 kW
COP Tj = +7°C	4.78	3.49
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.94 kW	1.78 kW
COP Tj = 12°C	7.31	5.06
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.43 kW	5.91 kW
COP Tj = Tbiv	2.9	2.14

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1547 kWh	1990 kWh

**Model CS6800iAW 4 ORMB-S**

Model name	CS6800iAW 4 ORMB-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	1.99 kW
El input	0.59 kW	0.8 kW
COP	4.82	2.51

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	128 %
Prated	4.4 kW	4 kW
SCOP	4.55	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.90 kW	3.53 kW
COP Tj = -7°C	2.88	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.25 kW
COP Tj = +2°C	4.47	3.21

Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.73 kW	1.54 kW
COP Tj = +7°C	6.13	4.27
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.38	5.32
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.90 kW	3.53 kW
COP Tj = Tbiv	2.88	3.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.62 kW	3.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.78 kW	0.87 kW
Annual energy consumption Qhe	1996 kWh	2526 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	154 %	105 %
Prated	3.8 kW	3.2 kW
SCOP	3.93	2.71
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.85 kW
COP Tj = -7°C	3.41	2.23
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.86 kW	1.77 kW
COP Tj = +2°C	4.78	3.26
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.61 kW	1.56 kW
COP Tj = +7°C	5.73	4.18
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.81 kW	1.78 kW

COP Tj = 12°C	6.58	5.16
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.14 kW	2.63 kW
COP Tj = Tbiv	2.56	1.79
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.21 kW	2.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.9	1.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.59 kW	1.15 kW
Annual energy consumption Qhe	2385 kWh	2911 kWh
Pdh Tj = -15°C (if TOL	3.14	2.63
COP Tj = -15°C (if TOL	2.56	1.79
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	209 %	142 %
Prated	4.3 kW	3.8 kW
SCOP	5.30	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.3 kW	3.79 kW
COP Tj = +2°C	3.2	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.4 kW
COP Tj = +7°C	4.93	3.05
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.68	4.93
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.3 kW	3.79 kW
COP Tj = Tbiv	3.2	2.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.3 kW	3.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.2	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1083 kWh	1402 kWh

**Model CS6800iAW 5 ORMB-S**

Model name	CS6800iAW 5 ORMB-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.2 kW
El input	0.59 kW	1.18 kW
COP	4.82	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
Prated	6.2 kW	6.2 kW
SCOP	4.55	3.47
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.46 kW	5.53 kW
COP Tj = -7°C	2.58	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.04 kW	3.50 kW
COP Tj = +2°C	4.62	3.37

Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.05	4.79
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.94 kW	1.88 kW
COP Tj = 12°C	7.21	5.74
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.46 kW	5.53 kW
COP Tj = Tbiv	2.58	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.44 kW	5.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	1.12 kW
Annual energy consumption Qhe	2814 kWh	3686 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	167 %	123 %
Prated	5.4 kW	5.3 kW
SCOP	4.24	3.14
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.44 kW	3.16 kW
COP Tj = -7°C	3.43	2.62
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.09 kW
COP Tj = +2°C	5.45	3.75
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.22	5.1
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.91 kW	1.9 kW

COP Tj = 12°C	6.82	5.83
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.64 kW	4.28 kW
COP Tj = Tbiv	2.45	1.9
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.63 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.67 kW
Annual energy consumption Qhe	3138 kWh	4159 kWh
Pdh Tj = -15°C (if TOL	4.64	4.28
COP Tj = -15°C (if TOL	2.45	1.9
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	218 %	155 %
Prated	6.4 kW	5.9 kW
SCOP	5.53	3.96
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.91 kW
COP Tj = +2°C	2.9	2.14
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.13 kW	3.83 kW
COP Tj = +7°C	4.78	3.49
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.94 kW	1.78 kW
COP Tj = 12°C	7.31	5.06
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.43 kW	5.91 kW
COP Tj = Tbiv	2.9	2.14

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1547 kWh	1990 kWh

**Model CS5800iAW 7 ORMB-S (60°C)**

Model name	CS5800iAW 7 ORMB-S (60°C)
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.2 kW
El input	0.59 kW	1.18 kW
COP	4.82	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	136 %
Prated	6.6 kW	6.6 kW
SCOP	4.56	3.49
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.98 kW
COP Tj = -7°C	2.60	2.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.51 kW
COP Tj = +2°C	4.67	3.47

Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.06	4.63
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.14	5.66
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.42 kW	5.98 kW
COP Tj = Tbiv	2.60	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.41 kW
Annual energy consumption Qhe	2987 kWh	3912 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	161 %	117 %
Prated	7.3 kW	6.6 kW
SCOP	4.09	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.06 kW	3.7 kW
COP Tj = -7°C	3.29	2.37
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.18	3.63
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.59 kW
COP Tj = +7°C	6.21	4.81
Cdh Tj = +7 °C	0.95	0.95
Pdh Tj = 12°C	1.84 kW	1.79 kW

COP Tj = 12°C	6.99	5.43
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.03 kW	5.35 kW
COP Tj = Tbiv	2.41	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	3.26 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	3.34 kW
Annual energy consumption Qhe	4400 kWh	5436 kWh
Pdh Tj = -15°C (if TOL	6.03	5.35
COP Tj = -15°C (if TOL	2.41	1.95
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	206 %	159 %
Prated	7.1 kW	5.7 kW
SCOP	5.22	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.09 kW	5.7 kW
COP Tj = +2°C	2.82	2.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.66 kW
COP Tj = +7°C	4.2	3.39
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.32	5.5
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.09 kW	5.7 kW
COP Tj = Tbiv	2.82	2.17

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.09 kW	5.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1818 kWh	1880 kWh

**Model CS6800iAW 7 ORMB-S**

Model name	CS6800iAW 7 ORMB-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.2 kW
El input	0.59 kW	1.18 kW
COP	4.82	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	136 %
Prated	6.6 kW	6.6 kW
SCOP	4.56	3.49
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.98 kW
COP Tj = -7°C	2.60	2.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.51 kW
COP Tj = +2°C	4.67	3.47

Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.06	4.63
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.14	5.66
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.42 kW	5.98 kW
COP Tj = Tbiv	2.60	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.41 kW
Annual energy consumption Qhe	2987 kWh	3912 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	161 %	117 %
Prated	7.3 kW	6.6 kW
SCOP	4.09	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.06 kW	3.7 kW
COP Tj = -7°C	3.29	2.37
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.18	3.63
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.59 kW
COP Tj = +7°C	6.21	4.81
Cdh Tj = +7 °C	0.95	0.95
Pdh Tj = 12°C	1.84 kW	1.79 kW

COP Tj = 12°C	6.99	5.43
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.03 kW	5.35 kW
COP Tj = Tbiv	2.41	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	3.26 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	3.34 kW
Annual energy consumption Qhe	4400 kWh	5436 kWh
Pdh Tj = -15°C (if TOL	6.03	5.35
COP Tj = -15°C (if TOL	2.41	1.95
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	206 %	159 %
Prated	7.1 kW	5.7 kW
SCOP	5.22	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.09 kW	5.7 kW
COP Tj = +2°C	2.82	2.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.66 kW
COP Tj = +7°C	4.2	3.39
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.32	5.5
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.09 kW	5.7 kW
COP Tj = Tbiv	2.82	2.17

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.09 kW	5.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1818 kWh	1880 kWh

**Model CS5800iAW 4 ORE-S**

Model name	CS5800iAW 4 ORE-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	2.02 kW
El input	0.59 kW	0.79 kW
COP	4.85	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	130 %
Prated	4.4 kW	4 kW
SCOP	4.58	3.32
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.91 kW	3.55 kW
COP Tj = -7°C	2.89	2.12
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.26 kW
COP Tj = +2°C	4.48	3.24

Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.73 kW	1.55 kW
COP Tj = +7°C	6.17	4.37
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.43	5.41
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.91 kW	3.55 kW
COP Tj = Tbiv	2.89	3.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.63 kW	3.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.85 kW
Annual energy consumption Qhe	1987 kWh	2492 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	158 %	109 %
Prated	3.8 kW	3.2 kW
SCOP	4.03	2.81
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.87 kW
COP Tj = -7°C	3.42	2.27
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.46 kW	1.27 kW
COP Tj = +2°C	5.03	3.43
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	1.61 kW	1.58 kW
COP Tj = +7°C	5.76	4.29
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.81 kW	1.78 kW

COP Tj = 12°C	6.63	5.25
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.12 kW	2.64 kW
COP Tj = Tbiv	2.51	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.91	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.13 kW
Annual energy consumption Qhe	2327 kWh	2807 kWh
Pdh Tj = -15°C (if TOL	3.12	2.64
COP Tj = -15°C (if TOL	2.51	1.8
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	210 %	143 %
Prated	4.3 kW	3.8 kW
SCOP	5.33	3.66
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.31 kW	3.92 kW
COP Tj = +2°C	3.21	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.41 kW
COP Tj = +7°C	4.95	3.09
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.82 kW	1.79 kW
COP Tj = 12°C	6.72	5.01
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.31 kW	3.92 kW
COP Tj = Tbiv	3.21	2.12

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.31 kW	3.92 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1077 kWh	1389 kWh

**Model CS5800iAW 4 ORM-S**

Model name	CS5800iAW 4 ORM-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	85 %
COP	1.94
Heating up time	3:08 h:min
Standby power input	93.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	73 %
COP	1.65
Heating up time	3:25 h:min
Standby power input	120.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
COP	2.21
Heating up time	3:08 h:min
Standby power input	92.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	1.97 kW
El input	0.59 kW	0.8 kW
COP	4.81	2.47

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	127 %
P <sub>rated</sub>	4.4 kW	4 kW
SCOP	4.55	3.25
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	3.89 kW	3.51 kW
COP T <sub>j</sub> = -7°C	2.88	2.10
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>d</sub> h T <sub>j</sub> = +2°C	2.48 kW	2.23 kW
COP T <sub>j</sub> = +2°C	4.46	3.19
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	0.97	0.98
P <sub>d</sub> h T <sub>j</sub> = +7°C	1.73 kW	1.53 kW
COP T <sub>j</sub> = +7°C	6.12	4.26
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	0.95	0.96
P <sub>d</sub> h T <sub>j</sub> = 12°C	1.96 kW	1.82 kW
COP T <sub>j</sub> = 12°C	7.37	5.30
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	0.95	0.96
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	3.89 kW	3.51 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.88	2.10
P <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.61 kW	3.10 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.69	1.81
Cd <sub>h</sub> T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	75 °C	75 °C
P <sub>off</sub>	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W

PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.79 kW	0.90 kW
Annual energy consumption Qhe	1999 kWh	2539 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	157 %	108 %
Prated	3.8 kW	3.2 kW
SCOP	3.99	2.76
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.25 kW	1.84 kW
COP Tj = -7°C	3.4	2.21
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.46 kW	1.26 kW
COP Tj = +2°C	4.98	3.41
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	1.6 kW	1.56 kW
COP Tj = +7°C	5.72	4.17
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.8 kW	1.77 kW
COP Tj = 12°C	6.57	5.14
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.11 kW	2.6 kW
COP Tj = Tbiv	2.49	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.2 kW	2.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.35
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	1.18 kW
Annual energy consumption Qhe	2345 kWh	2855 kWh

Pdh Tj = -15°C (if TOL)	3.11	2.6
COP Tj = -15°C (if TOL)	2.49	1.78
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	209 %	141 %
Prated	4.3 kW	3.8 kW
SCOP	5.29	3.59
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.3 kW	3.88 kW
COP Tj = +2°C	3.2	2.09
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.63 kW	2.38 kW
COP Tj = +7°C	4.92	3.03
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.67	4.91
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.3 kW	3.88 kW
COP Tj = Tbiv	3.2	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.3 kW	3.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.2	2.09
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1085 kWh	1414 kWh

**Model CS5800iAW 4 ORMB-S**

Model name	CS5800iAW 4 ORMB-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	1.99 kW
El input	0.59 kW	0.8 kW
COP	4.82	2.51

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	128 %
Prated	4.4 kW	4 kW
SCOP	4.55	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.90 kW	3.53 kW
COP Tj = -7°C	2.88	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.25 kW
COP Tj = +2°C	4.47	3.21

Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.73 kW	1.54 kW
COP Tj = +7°C	6.13	4.27
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.38	5.32
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.90 kW	3.53 kW
COP Tj = Tbiv	2.88	3.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.62 kW	3.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.78 kW	0.87 kW
Annual energy consumption Qhe	1996 kWh	2526 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	154 %	105 %
Prated	3.8 kW	3.2 kW
SCOP	3.93	2.71
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.85 kW
COP Tj = -7°C	3.41	2.23
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	1.86 kW	1.77 kW
COP Tj = +2°C	4.78	3.26
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.61 kW	1.56 kW
COP Tj = +7°C	5.73	4.18
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.81 kW	1.78 kW

COP Tj = 12°C	6.58	5.16
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	3.14 kW	2.63 kW
COP Tj = Tbiv	2.56	1.79
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.21 kW	2.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.9	1.37
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.59 kW	1.15 kW
Annual energy consumption Qhe	2385 kWh	2911 kWh
Pdh Tj = -15°C (if TOL	3.14	2.63
COP Tj = -15°C (if TOL	2.56	1.79
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	209 %	142 %
Prated	4.3 kW	3.8 kW
SCOP	5.30	3.62
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.3 kW	3.79 kW
COP Tj = +2°C	3.2	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.4 kW
COP Tj = +7°C	4.93	3.05
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.68	4.93
Cdh Tj = +12 °C	0.95	0.96
Pdh Tj = Tbiv	4.3 kW	3.79 kW
COP Tj = Tbiv	3.2	2.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.3 kW	3.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.2	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	14 W	14 W
PSB	15 W	15 W
PCK	33 W	33 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1083 kWh	1402 kWh

**Model CS5800iAW 5 ORE-S**

Model name	CS5800iAW 5 ORE-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	137 %
Prated	6.2 kW	6.2 kW
SCOP	4.57	3.5
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.47 kW	5.57 kW
COP Tj = -7°C	2.59	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.05 kW	3.52 kW
COP Tj = +2°C	4.64	3.39

Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.07	4.84
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.95 kW	1.88 kW
COP Tj = 12°C	7.26	5.83
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.47 kW	5.57 kW
COP Tj = Tbiv	2.59	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.45 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.10 kW
Annual energy consumption Qhe	2803 kWh	3657 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	167 %	124 %
Prated	5.4 kW	5.3 kW
SCOP	4.25	3.17
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.45 kW	3.18 kW
COP Tj = -7°C	3.44	2.64
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.1 kW
COP Tj = +2°C	5.47	3.8
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.25	5.18
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.92 kW	1.9 kW

COP Tj = 12°C	6.87	5.92
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.62 kW	4.3 kW
COP Tj = Tbiv	2.41	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.1	1.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.65 kW
Annual energy consumption Qhe	3135 kWh	4116 kWh
Pdh Tj = -15°C (if TOL	4.62	4.3
COP Tj = -15°C (if TOL	2.41	1.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	219 %	157 %
Prated	6.4 kW	5.9 kW
SCOP	5.56	4
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.93 kW
COP Tj = +2°C	2.91	2.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.14 kW	3.84 kW
COP Tj = +7°C	4.79	3.51
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.95 kW	1.78 kW
COP Tj = 12°C	7.38	5.15
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.43 kW	5.93 kW
COP Tj = Tbiv	2.91	2.15

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1538 kWh	1969 kWh

**Model CS5800iAW 5 ORM-S**

Model name	CS5800iAW 5 ORM-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	92 %
COP	2.17
Heating up time	2:54 h:min
Standby power input	87.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	75 %
COP	1.75
Heating up time	3:11 h:min
Standby power input	131.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	106 %
COP	2.48
Heating up time	2:54 h:min
Standby power input	87.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	3.18 kW
El input	0.59 kW	1.18 kW
COP	4.81	2.7

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
P <sub>rated</sub>	6.2 kW	6.2 kW
SCOP	4.55	3.46
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	5.46 kW	5.52 kW
COP T <sub>j</sub> = -7°C	2.58	2.09
C <sub>d</sub> h T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>d</sub> h T <sub>j</sub> = +2°C	3.04 kW	3.49 kW
COP T <sub>j</sub> = +2°C	4.61	3.36
C <sub>d</sub> h T <sub>j</sub> = +2 °C	0.98	0.98
P <sub>d</sub> h T <sub>j</sub> = +7°C	2.28 kW	2.20 kW
COP T <sub>j</sub> = +7°C	6.04	4.77
C <sub>d</sub> h T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>d</sub> h T <sub>j</sub> = 12°C	1.94 kW	1.87 kW
COP T <sub>j</sub> = 12°C	7.20	5.72
C <sub>d</sub> h T <sub>j</sub> = +12 °C	0.94	0.95
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	5.46 kW	5.52 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.58	2.09
P <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.43 kW	5.05 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.58	1.87
C <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	75 °C	75 °C
P <sub>off</sub>	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W

PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	1.15 kW
Annual energy consumption Qhe	2818 kWh	3699 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	166 %	122 %
Prated	5.4 kW	5.3 kW
SCOP	4.22	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.44 kW	3.15 kW
COP Tj = -7°C	3.42	2.61
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.08 kW
COP Tj = +2°C	5.44	3.73
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.7 kW
COP Tj = +7°C	6.21	5.08
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.91 kW	1.89 kW
COP Tj = 12°C	6.81	5.81
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.61 kW	4.26 kW
COP Tj = Tbiv	2.4	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	1.7 kW
Annual energy consumption Qhe	3152 kWh	4177 kWh

Pdh Tj = -15°C (if TOL)	4.61	4.26
COP Tj = -15°C (if TOL)	2.4	1.89
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	218 %	155 %
Prated	6.4 kW	5.9 kW
SCOP	5.53	3.95
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.42 kW	5.89 kW
COP Tj = +2°C	2.9	2.13
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.13 kW	3.81 kW
COP Tj = +7°C	4.77	3.47
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.94 kW	1.77 kW
COP Tj = 12°C	7.32	5.05
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.42 kW	5.89 kW
COP Tj = Tbiv	2.9	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.42 kW	5.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.13
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1547 kWh	1998 kWh

**Model CS5800iAW 5 ORMB-S**

Model name	CS5800iAW 5 ORMB-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.2 kW
El input	0.59 kW	1.18 kW
COP	4.82	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
Prated	6.2 kW	6.2 kW
SCOP	4.55	3.47
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.46 kW	5.53 kW
COP Tj = -7°C	2.58	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.04 kW	3.50 kW
COP Tj = +2°C	4.62	3.37

Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.05	4.79
Cdh Tj = + 7 °C	0.96	0.97
Pdh Tj = 12°C	1.94 kW	1.88 kW
COP Tj = 12°C	7.21	5.74
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.46 kW	5.53 kW
COP Tj = Tbiv	2.58	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.44 kW	5.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.76 kW	1.12 kW
Annual energy consumption Qhe	2814 kWh	3686 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	167 %	123 %
Prated	5.4 kW	5.3 kW
SCOP	4.24	3.14
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.44 kW	3.16 kW
COP Tj = -7°C	3.43	2.62
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.09 kW
COP Tj = +2°C	5.45	3.75
Cdh Tj = + 2 °C	0.96	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.22	5.1
Cdh Tj = + 7 °C	0.94	0.95
Pdh Tj = 12°C	1.91 kW	1.9 kW

COP Tj = 12°C	6.82	5.83
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	4.64 kW	4.28 kW
COP Tj = Tbiv	2.45	1.9
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.63 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.09	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.67 kW
Annual energy consumption Qhe	3138 kWh	4159 kWh
Pdh Tj = -15°C (if TOL	4.64	4.28
COP Tj = -15°C (if TOL	2.45	1.9
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	218 %	155 %
Prated	6.4 kW	5.9 kW
SCOP	5.53	3.96
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.91 kW
COP Tj = +2°C	2.9	2.14
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.13 kW	3.83 kW
COP Tj = +7°C	4.78	3.49
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	1.94 kW	1.78 kW
COP Tj = 12°C	7.31	5.06
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.43 kW	5.91 kW
COP Tj = Tbiv	2.9	2.14

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.9	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	16 W	16 W
PTO	16 W	16 W
PSB	16 W	16 W
PCK	31 W	31 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1547 kWh	1990 kWh

**Model CS5800iAW 7 ORE-S**

Model name	CS5800iAW 7 ORE-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	138 %
Prated	6.6 kW	6.6 kW
SCOP	4.58	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.94 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.53 kW
COP Tj = +2°C	4.68	3.49

Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.09	4.68
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.23	5.75
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.42 kW	5.94 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.39 kW
Annual energy consumption Qhe	2975 kWh	3878 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	161 %	117 %
Prated	7.3 kW	6.6 kW
SCOP	4.09	3.01
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.07 kW	3.72 kW
COP Tj = -7°C	3.3	2.39
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.2	3.67
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.84 kW
COP Tj = +7°C	6.24	4.72
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.84 kW	1.79 kW

COP Tj = 12°C	7	5.53
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.01 kW	5.37 kW
COP Tj = Tbiv	2.38	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	3.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	3.32 kW
Annual energy consumption Qhe	4397 kWh	5410 kWh
Pdh Tj = -15°C (if TOL	6.01	5.37
COP Tj = -15°C (if TOL	2.38	1.96
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	207 %	161 %
Prated	7.1 kW	5.7 kW
SCOP	5.25	4.09
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.72 kW
COP Tj = +2°C	2.83	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.67 kW
COP Tj = +7°C	4.23	3.41
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.37	5.59
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.08 kW	5.72 kW
COP Tj = Tbiv	2.83	2.18

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.72 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1807 kWh	1860 kWh

**Model CS5800iAW 7 ORM-S**

Model name	CS5800iAW 7 ORM-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	92 %
COP	2.17
Heating up time	2:39 h:min
Standby power input	92.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	75 %
COP	1.75
Heating up time	3:11 h:min
Standby power input	131.0 W
Reference hot water temperature	51.9 °C
Mixed water at 40°C	234 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	106 %
COP	2.49
Heating up time	2:39 h:min
Standby power input	86.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	235 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	2.83 kW	3.18 kW
El input	0.59 kW	1.18 kW
COP	4.81	2.7

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	179 %	136 %
P <sub>rated</sub>	6.6 kW	6.6 kW
SCOP	4.56	3.48
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	5.41 kW	5.90 kW
COP T <sub>j</sub> = -7°C	2.60	2.07
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	0.99	0.99
P <sub>d</sub> h T <sub>j</sub> = +2°C	3.50 kW	3.50 kW
COP T <sub>j</sub> = +2°C	4.66	3.46
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	0.98	0.99
P <sub>d</sub> h T <sub>j</sub> = +7°C	2.20 kW	2.44 kW
COP T <sub>j</sub> = +7°C	6.05	4.62
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	0.96	0.97
P <sub>d</sub> h T <sub>j</sub> = 12°C	1.85 kW	1.79 kW
COP T <sub>j</sub> = 12°C	7.17	5.64
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	0.94	0.95
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	5.41 kW	5.90 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.60	2.07
P <sub>d</sub> h T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	5.85 kW	5.16 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.22	1.81
Cd <sub>h</sub> T <sub>j</sub> = TOL or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	0.99	0.99
WTOL	75 °C	75 °C
P <sub>off</sub>	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W

PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.44 kW
Annual energy consumption Qhe	2990 kWh	3917 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	160 %	116 %
Prated	7.3 kW	6.6 kW
SCOP	4.07	2.97
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.06 kW	3.69 kW
COP Tj = -7°C	3.29	2.36
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.37 kW
COP Tj = +2°C	5.17	3.62
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.83 kW
COP Tj = +7°C	6.21	4.64
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.83 kW	1.78 kW
COP Tj = 12°C	6.95	5.42
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6 kW	5.33 kW
COP Tj = Tbiv	2.37	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.01 kW	3.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.29 kW	3.37 kW
Annual energy consumption Qhe	4418 kWh	5475 kWh

Pdh Tj = -15°C (if TOL)	6	5.33
COP Tj = -15°C (if TOL)	2.37	1.95
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	206 %	158 %
Prated	7.1 kW	5.7 kW
SCOP	5.21	4.04
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.68 kW
COP Tj = +2°C	2.81	2.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.64 kW
COP Tj = +7°C	4.2	3.38
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.82 kW
COP Tj = 12°C	7.31	5.48
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.08 kW	5.68 kW
COP Tj = Tbiv	2.81	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.81	2.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1820 kWh	1887 kWh

**Model CS5800iAW 7 ORMB-S**

Model name	CS5800iAW 7 ORMB-S
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	No

**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	2.84 kW	3.2 kW
El input	0.59 kW	1.18 kW
COP	4.82	2.72

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	180 %	136 %
Prated	6.6 kW	6.6 kW
SCOP	4.56	3.49
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.98 kW
COP Tj = -7°C	2.60	2.05
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.51 kW
COP Tj = +2°C	4.67	3.47

Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.06	4.63
Cdh Tj = +7 °C	0.96	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.14	5.66
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	5.42 kW	5.98 kW
COP Tj = Tbiv	2.60	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.41 kW
Annual energy consumption Qhe	2987 kWh	3912 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	161 %	117 %
Prated	7.3 kW	6.6 kW
SCOP	4.09	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.06 kW	3.7 kW
COP Tj = -7°C	3.29	2.37
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.18	3.63
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = +7°C	1.86 kW	1.59 kW
COP Tj = +7°C	6.21	4.81
Cdh Tj = +7 °C	0.95	0.95
Pdh Tj = 12°C	1.84 kW	1.79 kW

COP Tj = 12°C	6.99	5.43
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	6.03 kW	5.35 kW
COP Tj = Tbiv	2.41	1.95
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	3.26 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.57
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	3.34 kW
Annual energy consumption Qhe	4400 kWh	5436 kWh
Pdh Tj = -15°C (if TOL	6.03	5.35
COP Tj = -15°C (if TOL	2.41	1.95
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	206 %	159 %
Prated	7.1 kW	5.7 kW
SCOP	5.22	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.09 kW	5.7 kW
COP Tj = +2°C	2.82	2.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.66 kW
COP Tj = +7°C	4.2	3.39
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.32	5.5
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.09 kW	5.7 kW
COP Tj = Tbiv	2.82	2.17

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.09 kW	5.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	32 W	32 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1818 kWh	1880 kWh

**Model CSH5800iAW 4 O**

Model name	CSH5800iAW 4 O
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	2.02 kW
El input	0.59 kW	0.79 kW
COP	4.85	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	173 %	126 %
Prated	4.4 kW	4 kW
SCOP	4.34	3.18
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.91 kW	3.55 kW
COP Tj = -7°C	2.89	2.12
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.26 kW
COP Tj = +2°C	4.48	3.24
Cdh Tj = +2 °C	0.97	0.97

Pdh Tj = +7°C	1.73 kW	1.55 kW
COP Tj = +7°C	6.17	4.37
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.43	5.41
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	3.91 kW	3.55 kW
COP Tj = Tbiv	2.89	3.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.63 kW	3.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.85 kW
Annual energy consumption Qhe	2093 kWh	2599 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	152 %	107 %
Prated	3.8 kW	3.2 kW
SCOP	3.82	2.69
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.87 kW
COP Tj = -7°C	3.42	2.27
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	1.86 kW	1.78 kW
COP Tj = +2°C	4.8	3.32
Cdh Tj = +2 °C	0.95	0.97
Pdh Tj = +7°C	1.61 kW	1.58 kW
COP Tj = +7°C	5.76	4.29
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.63	5.25

Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	3.12 kW	2.64 kW
COP Tj = Tbiv	2.51	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.84	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.13 kW
Annual energy consumption Qhe	2451 kWh	2932 kWh
Pdh Tj = -15°C (if TOL	3.12	2.64
COP Tj = -15°C (if TOL	2.51	1.8
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	191 %	133 %
Prated	4.3 kW	3.8 kW
SCOP	4.79	3.36
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.31 kW	3.92 kW
COP Tj = +2°C	3.21	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.41 kW
COP Tj = +7°C	4.95	3.09
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.82 kW	1.79 kW
COP Tj = 12°C	6.72	5.01
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	4.31 kW	3.92 kW
COP Tj = Tbiv	3.21	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.31 kW	3.92 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1511 kWh

**Model CSH5800iAW 5 O**

Model name	CSH5800iAW 5 O
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	135 %
Prated	6.2 kW	6.2 kW
SCOP	4.41	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.47 kW	5.57 kW
COP Tj = -7°C	2.59	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.05 kW	3.52 kW
COP Tj = +2°C	4.64	3.39
Cdh Tj = +2 °C	0.97	0.98

Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.07	4.84
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.95 kW	1.88 kW
COP Tj = 12°C	7.26	5.83
Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	5.47 kW	5.57 kW
COP Tj = Tbiv	2.59	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.45 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.10 kW
Annual energy consumption Qhe	2906 kWh	3758 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	165 %	124 %
Prated	5.4 kW	5.3 kW
SCOP	4.16	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.45 kW	3.18 kW
COP Tj = -7°C	3.44	2.64
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.1 kW
COP Tj = +2°C	5.47	3.8
Cdh Tj = +2 °C	0.95	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.25	5.18
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.92 kW	1.9 kW
COP Tj = 12°C	6.87	5.92

Cdh Tj = +12 °C	0.94	0.94
Pdh Tj = Tbiv	4.62 kW	4.3 kW
COP Tj = Tbiv	2.41	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.65 kW
Annual energy consumption Qhe	3199 kWh	4180 kWh
Pdh Tj = -15°C (if TOL)	4.62	4.3
COP Tj = -15°C (if TOL)	2.41	1.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	205 %	150 %
Prated	6.4 kW	5.9 kW
SCOP	5.16	3.78
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.93 kW
COP Tj = +2°C	2.91	2.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.14 kW	3.84 kW
COP Tj = +7°C	4.79	3.51
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	1.95 kW	1.78 kW
COP Tj = 12°C	7.38	5.15
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	6.43 kW	5.93 kW
COP Tj = Tbiv	2.91	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.93 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1656 kWh	2087 kWh

**Model CSH5800iAW 7 O**

Model name	CSH5800iAW 7 O
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	136 %
Prated	6.6 kW	6.6 kW
SCOP	4.43	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.94 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.53 kW
COP Tj = +2°C	4.68	3.49
Cdh Tj = +2 °C	0.98	0.98

Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.09	4.68
Cdh Tj = +7 °C	0.95	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.23	5.75
Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	5.42 kW	5.94 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.39 kW
Annual energy consumption Qhe	3079 kWh	3981 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	160 %	118 %
Prated	7.3 kW	6.6 kW
SCOP	4.03	2.97
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.07 kW	3.72 kW
COP Tj = -7°C	3.3	2.39
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.2	3.67
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.86 kW	1.84 kW
COP Tj = +7°C	6.24	4.72
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.84 kW	1.79 kW
COP Tj = 12°C	7	5.53

Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	6.01 kW	5.37 kW
COP Tj = Tbiv	2.38	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	3.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.83	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	3.32 kW
Annual energy consumption Qhe	4460 kWh	5474 kWh
Pdh Tj = -15°C (if TOL)	6.01	5.37
COP Tj = -15°C (if TOL)	2.38	1.96
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	196 %	153 %
Prated	7.1 kW	5.7 kW
SCOP	4.93	3.85
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.72 kW
COP Tj = +2°C	2.83	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.67 kW
COP Tj = +7°C	4.23	3.41
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.37	5.59
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	7.08 kW	5.72 kW
COP Tj = Tbiv	2.83	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.72 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1926 kWh	1979 kWh

**Model CSH5800iAW 4**

Model name	CSH5800iAW 4
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	2.02 kW
El input	0.59 kW	0.79 kW
COP	4.85	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	173 %	126 %
Prated	4.4 kW	4 kW
SCOP	4.34	3.18
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.91 kW	3.55 kW
COP Tj = -7°C	2.89	2.12
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.26 kW
COP Tj = +2°C	4.48	3.24
Cdh Tj = +2 °C	0.97	0.97

Pdh Tj = +7°C	1.73 kW	1.55 kW
COP Tj = +7°C	6.17	4.37
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.43	5.41
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	3.91 kW	3.55 kW
COP Tj = Tbiv	2.89	3.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.63 kW	3.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.85 kW
Annual energy consumption Qhe	2093 kWh	2599 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	152 %	107 %
Prated	3.8 kW	3.2 kW
SCOP	3.82	2.69
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.87 kW
COP Tj = -7°C	3.42	2.27
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	1.86 kW	1.78 kW
COP Tj = +2°C	4.8	3.32
Cdh Tj = +2 °C	0.95	0.97
Pdh Tj = +7°C	1.61 kW	1.58 kW
COP Tj = +7°C	5.76	4.29
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.63	5.25

Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	3.12 kW	2.64 kW
COP Tj = Tbiv	2.51	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.84	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.13 kW
Annual energy consumption Qhe	2451 kWh	2932 kWh
Pdh Tj = -15°C (if TOL	3.12	2.64
COP Tj = -15°C (if TOL	2.51	1.8
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	191 %	133 %
Prated	4.3 kW	3.8 kW
SCOP	4.79	3.36
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.31 kW	3.92 kW
COP Tj = +2°C	3.21	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.41 kW
COP Tj = +7°C	4.95	3.09
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.82 kW	1.79 kW
COP Tj = 12°C	6.72	5.01
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	4.31 kW	3.92 kW
COP Tj = Tbiv	3.21	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.31 kW	3.92 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1511 kWh

**Model CSH5800iAW 5**

Model name	CSH5800iAW 5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	135 %
Prated	6.2 kW	6.2 kW
SCOP	4.41	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.47 kW	5.57 kW
COP Tj = -7°C	2.59	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.05 kW	3.52 kW
COP Tj = +2°C	4.64	3.39
Cdh Tj = +2 °C	0.97	0.98

Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.07	4.84
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.95 kW	1.88 kW
COP Tj = 12°C	7.26	5.83
Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	5.47 kW	5.57 kW
COP Tj = Tbiv	2.59	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.45 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.10 kW
Annual energy consumption Qhe	2906 kWh	3758 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	165 %	124 %
Prated	5.4 kW	5.3 kW
SCOP	4.16	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.45 kW	3.18 kW
COP Tj = -7°C	3.44	2.64
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.1 kW
COP Tj = +2°C	5.47	3.8
Cdh Tj = +2 °C	0.95	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.25	5.18
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.92 kW	1.9 kW
COP Tj = 12°C	6.87	5.92

Cdh Tj = +12 °C	0.94	0.94
Pdh Tj = Tbiv	4.62 kW	4.3 kW
COP Tj = Tbiv	2.41	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.65 kW
Annual energy consumption Qhe	3199 kWh	4180 kWh
Pdh Tj = -15°C (if TOL)	4.62	4.3
COP Tj = -15°C (if TOL)	2.41	1.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	205 %	150 %
Prated	6.4 kW	5.9 kW
SCOP	5.16	3.78
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.93 kW
COP Tj = +2°C	2.91	2.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.14 kW	3.84 kW
COP Tj = +7°C	4.79	3.51
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	1.95 kW	1.78 kW
COP Tj = 12°C	7.38	5.15
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	6.43 kW	5.93 kW
COP Tj = Tbiv	2.91	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.93 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1656 kWh	2087 kWh

**Model CSH5800iAW 7**

Model name	CSH5800iAW 7
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	136 %
Prated	6.6 kW	6.6 kW
SCOP	4.43	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.94 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.53 kW
COP Tj = +2°C	4.68	3.49
Cdh Tj = +2 °C	0.98	0.98

Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.09	4.68
Cdh Tj = +7 °C	0.95	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.23	5.75
Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	5.42 kW	5.94 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.39 kW
Annual energy consumption Qhe	3079 kWh	3981 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	160 %	118 %
Prated	7.3 kW	6.6 kW
SCOP	4.03	2.97
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.07 kW	3.72 kW
COP Tj = -7°C	3.3	2.39
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.2	3.67
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.86 kW	1.84 kW
COP Tj = +7°C	6.24	4.72
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.84 kW	1.79 kW
COP Tj = 12°C	7	5.53

Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	6.01 kW	5.37 kW
COP Tj = Tbiv	2.38	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	3.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.83	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	3.32 kW
Annual energy consumption Qhe	4460 kWh	5474 kWh
Pdh Tj = -15°C (if TOL	6.01	5.37
COP Tj = -15°C (if TOL	2.38	1.96
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	196 %	153 %
Prated	7.1 kW	5.7 kW
SCOP	4.93	3.85
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.72 kW
COP Tj = +2°C	2.83	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.67 kW
COP Tj = +7°C	4.23	3.41
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.37	5.59
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	7.08 kW	5.72 kW
COP Tj = Tbiv	2.83	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.72 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1926 kWh	1979 kWh

**Model CSH5800iAW 4 O LF**

Model name	CSH5800iAW 4 O LF
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	2.02 kW
El input	0.59 kW	0.79 kW
COP	4.85	2.55

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	173 %	126 %
Prated	4.4 kW	4 kW
SCOP	4.34	3.18
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.91 kW	3.55 kW
COP Tj = -7°C	2.89	2.12
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.48 kW	2.26 kW
COP Tj = +2°C	4.48	3.24
Cdh Tj = +2 °C	0.97	0.97

Pdh Tj = +7°C	1.73 kW	1.55 kW
COP Tj = +7°C	6.17	4.37
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.97 kW	1.83 kW
COP Tj = 12°C	7.43	5.41
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	3.91 kW	3.55 kW
COP Tj = Tbiv	2.89	3.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.63 kW	3.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.77 kW	0.85 kW
Annual energy consumption Qhe	2093 kWh	2599 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	152 %	107 %
Prated	3.8 kW	3.2 kW
SCOP	3.82	2.69
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.26 kW	1.87 kW
COP Tj = -7°C	3.42	2.27
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	1.86 kW	1.78 kW
COP Tj = +2°C	4.8	3.32
Cdh Tj = +2 °C	0.95	0.97
Pdh Tj = +7°C	1.61 kW	1.58 kW
COP Tj = +7°C	5.76	4.29
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.81 kW	1.78 kW
COP Tj = 12°C	6.63	5.25

Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	3.12 kW	2.64 kW
COP Tj = Tbiv	2.51	1.8
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.22 kW	2.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.84	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.58 kW	1.13 kW
Annual energy consumption Qhe	2451 kWh	2932 kWh
Pdh Tj = -15°C (if TOL	3.12	2.64
COP Tj = -15°C (if TOL	2.51	1.8
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	191 %	133 %
Prated	4.3 kW	3.8 kW
SCOP	4.79	3.36
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.31 kW	3.92 kW
COP Tj = +2°C	3.21	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.64 kW	2.41 kW
COP Tj = +7°C	4.95	3.09
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	1.82 kW	1.79 kW
COP Tj = 12°C	6.72	5.01
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	4.31 kW	3.92 kW
COP Tj = Tbiv	3.21	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.31 kW	3.92 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.21	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1511 kWh

**Model CSH5800iAW 5 O LF**

Model name	CSH5800iAW 5 O LF
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	135 %
Prated	6.2 kW	6.2 kW
SCOP	4.41	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.47 kW	5.57 kW
COP Tj = -7°C	2.59	2.11
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.05 kW	3.52 kW
COP Tj = +2°C	4.64	3.39
Cdh Tj = +2 °C	0.97	0.98

Pdh Tj = +7°C	2.28 kW	2.21 kW
COP Tj = +7°C	6.07	4.84
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	1.95 kW	1.88 kW
COP Tj = 12°C	7.26	5.83
Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	5.47 kW	5.57 kW
COP Tj = Tbiv	2.59	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.45 kW	5.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	1.10 kW
Annual energy consumption Qhe	2906 kWh	3758 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	165 %	124 %
Prated	5.4 kW	5.3 kW
SCOP	4.16	3.13
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.45 kW	3.18 kW
COP Tj = -7°C	3.44	2.64
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	2.07 kW	2.1 kW
COP Tj = +2°C	5.47	3.8
Cdh Tj = +2 °C	0.95	0.97
Pdh Tj = +7°C	1.74 kW	1.71 kW
COP Tj = +7°C	6.25	5.18
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.92 kW	1.9 kW
COP Tj = 12°C	6.87	5.92

Cdh Tj = +12 °C	0.94	0.94
Pdh Tj = Tbiv	4.62 kW	4.3 kW
COP Tj = Tbiv	2.41	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.01 kW	3.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.89	1.58
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.39 kW	1.65 kW
Annual energy consumption Qhe	3199 kWh	4180 kWh
Pdh Tj = -15°C (if TOL)	4.62	4.3
COP Tj = -15°C (if TOL)	2.41	1.91
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	205 %	150 %
Prated	6.4 kW	5.9 kW
SCOP	5.16	3.78
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.93 kW
COP Tj = +2°C	2.91	2.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.14 kW	3.84 kW
COP Tj = +7°C	4.79	3.51
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	1.95 kW	1.78 kW
COP Tj = 12°C	7.38	5.15
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	6.43 kW	5.93 kW
COP Tj = Tbiv	2.91	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.93 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1656 kWh	2087 kWh

**Model CSH5800iAW 7 O LF**

Model name	CSH5800iAW 7 O LF
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	No

**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	2.84 kW	3.23 kW
El input	0.59 kW	1.18 kW
COP	4.85	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	136 %
Prated	6.6 kW	6.6 kW
SCOP	4.43	3.42
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.42 kW	5.94 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	3.51 kW	3.53 kW
COP Tj = +2°C	4.68	3.49
Cdh Tj = +2 °C	0.98	0.98

Pdh Tj = +7°C	2.20 kW	2.45 kW
COP Tj = +7°C	6.09	4.68
Cdh Tj = +7 °C	0.95	0.97
Pdh Tj = 12°C	1.85 kW	1.80 kW
COP Tj = 12°C	7.23	5.75
Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	5.42 kW	5.94 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.86 kW	5.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.74 kW	1.39 kW
Annual energy consumption Qhe	3079 kWh	3981 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	160 %	118 %
Prated	7.3 kW	6.6 kW
SCOP	4.03	2.97
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.07 kW	3.72 kW
COP Tj = -7°C	3.3	2.39
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	2.52 kW	2.38 kW
COP Tj = +2°C	5.2	3.67
Cdh Tj = +2 °C	0.96	0.97
Pdh Tj = +7°C	1.86 kW	1.84 kW
COP Tj = +7°C	6.24	4.72
Cdh Tj = +7 °C	0.94	0.95
Pdh Tj = 12°C	1.84 kW	1.79 kW
COP Tj = 12°C	7	5.53

Cdh Tj = +12 °C	0.93	0.94
Pdh Tj = Tbiv	6.01 kW	5.37 kW
COP Tj = Tbiv	2.38	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	3.28 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.83	1.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.27 kW	3.32 kW
Annual energy consumption Qhe	4460 kWh	5474 kWh
Pdh Tj = -15°C (if TOL)	6.01	5.37
COP Tj = -15°C (if TOL)	2.38	1.96
Cdh Tj = -15 °C	0.99	0.99

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	31 dB(A)	31 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	196 %	153 %
Prated	7.1 kW	5.7 kW
SCOP	4.93	3.85
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.08 kW	5.72 kW
COP Tj = +2°C	2.83	2.18
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.25 kW	3.67 kW
COP Tj = +7°C	4.23	3.41
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	1.88 kW	1.83 kW
COP Tj = 12°C	7.37	5.59
Cdh Tj = +12 °C	0.93	0.95
Pdh Tj = Tbiv	7.08 kW	5.72 kW
COP Tj = Tbiv	2.83	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.08 kW	5.72 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.18
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	75 °C	75 °C
Poff	6 W	6 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	22 W	22 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1926 kWh	1979 kWh