Subtype Bosch CS5800iAW 4/5/7 OR210 MP-S

Certificate Holder	Bosch Thermotechnik GmbH
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Bosch CS5800iAW 4/5/7 OR210 MP-S
Registration number	011-1W0676
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.95 kg
Certification Date	28.08.2023
Testing basis	HP KEYMARK certification scheme rules V12

Model CS5800iAW 4 OR210 MP-S

Model name	CS5800iAW 4 OR210 MP-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 ηDHW	89 %
COP	2.06
Heating up time	2:39 h:min
Standby power input	88 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	300 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency ηDHW	70 %
COP	1.69
Heating up time	2:54 h:min
Standby power input	126.6 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	300 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency ηDHW	110 %
COP	2.59
Heating up time	2:45 h:min
Standby power input	93.2 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	300 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	40 dB(A)	40 dB(A)
Sound power level outdoor	40 dB(A)	40 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	162 %	121 %
Prated	4.40 kW	4.00 kW
SCOP	4.14	3.09
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.93 kW	3.48 kW
COP Tj = -7°C	2.65	2.15
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.50 kW	2.17 kW
COP Tj = +2°C	4.50	3.23
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	1.65 kW	1.55 kW
COP Tj = +7°C	6.00	4.38
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.97 kW	1.79 kW
COP Tj = 12°C	7.44	5.39
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	3.93 kW	3.48 kW
COP Tj = Tbiv	2.65	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.65 kW	2.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.82
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	0.75 kW	1.05 kW
Annual energy consumption Qhe	2198 kWh	2672 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	144 %	99 %
Prated	3.80 kW	3.20 kW
SCOP	3.68	2.55
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	2.27 kW	1.89 kW
COP Tj = -7°C	3.43	2.27
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	1.87 kW	1.76 kW
COP Tj = +2°C	4.60	2.98
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	1.60 kW	1.60 kW
COP Tj = +7°C	5.25	4.26
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.82 kW	1.80 kW
COP Tj = 12°C	6.64	5.23
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	3.14 kW	2.67 kW
COP Tj = Tbiv	2.52	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.24 kW	2.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.92	1.41
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	1.56 kW	1.09 kW
Annual energy consumption Qhe	2546 kWh	3095 kWh

Pdh Tj = -15°C (if TOL	3.14	2.67
COP Tj = -15°C (if TOL	2.52	1.83
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

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

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	178 %	124 %
Prated	4.30 kW	3.80 kW
SCOP	4.53	3.18
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.52 kW	3.82 kW
COP Tj = +2°C	3.36	2.17
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	2.80 kW	2.44 kW
COP Tj = +7°C	5.16	3.10
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	1.82 kW	1.82 kW
COP Tj = 12°C	6.72	5.00
Cdh Tj = +12 °C	0.950	0.960
Pdh Tj = Tbiv	4.52 kW	3.82 kW
COP Tj = Tbiv	3.36	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.52 kW	3.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.36	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1267 kWh	1596 kWh

Model CS5800iAW 5 OR210 MP-S

Model name	CS5800iAW 5 OR210 MP-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 ηDHW	86 %
COP	1.98
Heating up time	2:33 h:min
Standby power input	91 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	303 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency ηDHW	67 %
COP	1.6
Heating up time	2:48 h:min
Standby power input	127 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	303 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency ηDHW	97 %
COP	2.3
Heating up time	2:44 h:min
Standby power input	90.6 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	303 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	40 dB(A)	40 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	169 %	130 %
Prated	6.20 kW	6.20 kW
SCOP	4.30	3.33
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.50 kW	5.60 kW
COP Tj = -7°C	2.59	2.01
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.06 kW	3.54 kW
COP Tj = +2°C	4.64	3.41
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.29 kW	2.24 kW
COP Tj = +7°C	6.07	4.85
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	1.95 kW	1.90 kW
COP Tj = 12°C	7.23	5.83
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	5.50 kW	5.60 kW
COP Tj = Tbiv	2.59	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.47 kW	5.14 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	0.73 kW	1.06 kW
Annual energy consumption Qhe	2977 kWh	3851 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	162 %	121 %
Prated	5.40 kW	5.30 kW
SCOP	4.12	3.10
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.46 kW	3.20 kW
COP Tj = -7°C	3.44	2.65
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	2.08 kW	2.12 kW
COP Tj = +2°C	5.47	3.80
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	1.75 kW	1.73 kW
COP Tj = +7°C	6.40	5.19
Cdh Tj = +7 °C	0.940	0.950
Pdh Tj = 12°C	1.93 kW	1.92 kW
COP Tj = 12°C	7.01	5.89
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	4.64 kW	4.33 kW
COP Tj = Tbiv	2.42	1.92
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.04 kW	3.69 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	1.36 kW	1.61 kW
Annual energy consumption Qhe	3232 kWh	4211 kWh

Pdh Tj = -15°C (if TOL	4.64	4.33
COP Tj = -15°C (if TOL	2.42	1.92
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	183 %	139 %
Prated	6.40 kW	5.90 kW
SCOP	4.65	3.55
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.43 kW	5.98 kW
COP Tj = +2°C	2.87	2.16
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.16 kW	3.87 kW
COP Tj = +7°C	4.24	3.22
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	1.95 kW	1.81 kW
COP Tj = 12°C	7.36	5.33
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	6.43 kW	5.98 kW
COP Tj = Tbiv	2.87	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.43 kW	5.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.16
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2221 kWh

Model CS5800iAW 7 OR210 MP-S

Model name	CS5800iAW 7 OR210 MP-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 ηDHW	85 %
COP	1.96
Heating up time	2:32 h:min
Standby power input	90 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	300 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency ηDHW	65 %
COP	1.58
Heating up time	2:48 h:min
Standby power input	125.9 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	300 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency ηDHW	100 %
COP	2.37
Heating up time	2:44 h:min
Standby power input	91.1 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	300 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	40 dB(A)	40 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	161 %	131 %
Prated	6.60 kW	6.60 kW
SCOP	4.11	3.35
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.45 kW	5.98 kW
COP Tj = -7°C	2.61	2.09
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.52 kW	3.55 kW
COP Tj = +2°C	4.17	3.51
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.22 kW	2.34 kW
COP Tj = +7°C	6.15	4.51
Cdh Tj = +7 °C	0.960	0.970
Pdh Tj = 12°C	1.85 kW	1.82 kW
COP Tj = 12°C	7.09	5.71
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	5.45 kW	5.98 kW
COP Tj = Tbiv	2.61	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.89 kW	5.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.23	1.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	0.71 kW	1.35 kW
Annual energy consumption Qhe	3319 kWh	4076 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	152 %	115 %
Prated	7.30 kW	6.60 kW
SCOP	3.88	2.96
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.08 kW	3.74 kW
COP Tj = -7°C	3.00	2.39
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.53 kW	2.41 kW
COP Tj = +2°C	5.20	3.68
Cdh Tj = +2 °C	0.970	0.980
Pdh Tj = +7°C	1.87 kW	1.85 kW
COP Tj = +7°C	6.23	4.70
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	1.84 kW	1.81 kW
COP Tj = 12°C	7.00	5.49
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	6.03 kW	5.40 kW
COP Tj = Tbiv	2.38	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.05 kW	3.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.04	1.60
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	2.25 kW	3.28 kW
Annual energy consumption Qhe	4638 kWh	5505 kWh

Pdh Tj = -15°C (if TOL	6.03	5.40
COP Tj = -15°C (if TOL	2.38	1.97
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	42 dB(A)	42 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	188 %	140 %
Prated	7.10 kW	5.70 kW
SCOP	4.77	3.57
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.44 kW	5.94 kW
COP Tj = +2°C	3.00	2.15
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.32 kW	3.70 kW
COP Tj = +7°C	4.33	3.13
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	1.89 kW	1.86 kW
COP Tj = 12°C	7.35	5.65
Cdh Tj = +12 °C	0.940	0.950
Pdh Tj = Tbiv	6.44 kW	5.94 kW
COP Tj = Tbiv	3.00	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	5.94 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
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	0.00 kW	0.00 kW
Annual energy consumption Qhe	1988 kWh	2135 kWh