

Subtype Bosch CS5000AW 38 O

Certificate Holder	Bosch Thermotechnik GmbH
Address	Junkersstraße 20 - 24
ZIP	73249
City	Wernau
Country	DE
Certification Body	VDE Prüf- und Zertifizierungsinstitut GmbH
Subtype title	Bosch CS5000AW 38 O
Registration number	40054438
Heat Pump Type	Outdoor Air/Water
Refrigerant	R407c
Mass of Refrigerant	15.7 kg
Certification Date	14.12.2021
Testing basis	DIN EN 14511-1:2019-07; EN 14511-1:2018 DIN EN 14511-2:2019-07; EN 14511-2:2018 DIN EN 14511-3:2019-07; EN 14511-3:2018 DIN EN 14511-4:2019-07; EN 14511-4:2018 DIN EN 14825:2019-07; EN 14825:2018 DIN EN 12102-1:2018-02; EN 12102-1:2017
Testing laboratory	VDE Prüf- und Zertifizierungsinstitut GmbH, DE

Model Bosch CS5000AW 38 O

Model name	Bosch CS5000AW 38 O
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

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

Outdoor Air/Water**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	35.40 kW	31.70 kW
EI input	7.89 kW	10.00 kW
COP	4.48	3.16

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	154 %	130 %
Prated	36.00 kW	36.00 kW
SCOP	3.91	3.33
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.10 kW	38.10 kW
COP Tj = -7°C	3.02	2.41
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	27.50 kW	26.50 kW
COP Tj = +2°C	3.89	3.30
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	35.20 kW	33.80 kW
COP Tj = +7°C	4.79	4.19

Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	41.30 kW	39.70 kW
COP Tj = 12°C	5.41	4.76
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	35.60 kW	36.00 kW
COP Tj = Tbiv	2.85	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	35.60 kW	36.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	30 W	30 W
PTO	29 W	29 W
PSB	30 W	30 W
PCK	95 W	95 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.42 kW	1.00 kW
Annual energy consumption Qhe	19007 kWh	16840 kWh

Model Bosch CS5000AW 38 OR

Model name	Bosch CS5000AW 38 OR
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	35.40 kW	31.70 kW
El input	7.89 kW	10.00 kW
COP	4.48	3.16

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	72 dB(A)	72 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	157 %	133 %
Prated	36.00 kW	36.00 kW
SCOP	4.01	3.40
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	38.10 kW	39.00 kW
COP Tj = -7°C	3.02	2.41
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	27.50 kW	26.50 kW
COP Tj = +2°C	3.89	3.30
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	35.20 kW	33.80 kW

COP Tj = +7°C	4.79	4.19
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	41.30 kW	39.70 kW
COP Tj = 12°C	5.41	4.76
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	35.60 kW	36.00 kW
COP Tj = Tbiv	2.85	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	35.60 kW	35.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.22
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	30 W	30 W
PTO	29 W	29 W
PSB	30 W	30 W
PCK	95 W	95 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.42 kW	1.00 kW
Annual energy consumption Qhe	18548 kWh	16564 kWh