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Summary of	Bosch Compress 7000iAW 9 OR and IR, Compress 6000 AW-9, Bosch CS7400iAW 7, Bosch CS7001iAW 9	Reg. No.	011-1W0124
Certificate Holder			
Name	Bosch Thermotechnik GmbH		
Address	Junkersstraße 20 - 24	Zip	73249
City	Wernau	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Bosch Compress 7000iAW 9 OR and IR, Compress 6000 AW-9, Bosch CS7400iAW 7, Bosch CS7001iAW 9		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.35 kg		
Certification Date	18.07.2017		
Testing basis	HP KEYMARK certification scheme rules rev. 8		

## Model: Bosch CS7000iAW 9 IRMS-S

### Configure model

Model name	Bosch CS7000iAW 9 IRMS-S
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	3.03	2.29
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	4.19	3.56
Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.59	1.98
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.29 kW	5.99 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.98
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3365 kWh	3483 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3555 kWh	4677 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	5.49	2.07
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.61	2.07

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.31 kW	7.19 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	101 %
COP	2.37
Heating up time	02:24 h:min
Standby power input	54.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

## Warmer Climate



This information was generated by the HP KEYMARK database on 4 May 2022

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 l

## Model: Bosch CS7000iAW 9 IRM-S

### Configure model

Model name	Bosch CS7000iAW 9 IRM-S
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	3.03	2.29
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	4.19	3.56
Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.59	1.98
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.29 kW	5.99 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.98
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3365 kWh	3483 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3555 kWh	4677 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	5.49	2.07
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.61	2.07

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.31 kW	7.19 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
COP	2.31
Heating up time	02:37 h:min
Standby power input	53.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

## Warmer Climate



<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	270 l

## Model: Bosch CS7000iAW 9 IRB-S

### Configure model

Model name	Bosch CS7000iAW 9 IRB-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	3.03	2.29
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	4.19	3.56
Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.59	1.98
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.29 kW	5.99 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.98
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3365 kWh	3483 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3555 kWh	4677 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	5.49	2.07
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.61	2.07

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.31 kW	7.19 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh

## Model: Bosch CS7000iAW 9 IRE-S

### Configure model

Model name	Bosch CS7000iAW 9 IRE-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	3.03	2.29
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	4.19	3.56
Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.59	1.98
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.29 kW	5.99 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.98
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3365 kWh	3483 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3555 kWh	4677 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	5.49	2.07
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.61	2.07

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.31 kW	7.19 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh

## Model: Bosch CS7000iAW 9 ORMS-S

Configure model	
Model name	Bosch CS7000iAW 9 ORMS-S
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1924 kWh	2332 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
T <sub>biv</sub>	-20 °C	-18 °C
TOL	-20 °C	-18 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.44 kW	3.61 kW
COP T <sub>j</sub> = -7°C	3.87	2.77
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.27 kW	2.43 kW
COP T <sub>j</sub> = +2°C	5.43	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.59 kW	2.79 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.93	2.06
COP Tj = -15°C (if TOL<-20°C)	2.87	2.06

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	101 %
Heating up time	02:24 h:min
Standby power input	53.7 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l
COP	2.37

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.3 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 l

## Colder Climate

This information was generated by the HP KEYMARK database on 4 May 2022

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

## Model: Bosch CS7000iAW 9 ORM-S

Configure model	
Model name	Bosch CS7000iAW 9 ORM-S
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1924 kWh	2332 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
T <sub>biv</sub>	-20 °C	-18 °C
TOL	-20 °C	-18 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.44 kW	3.61 kW
COP T <sub>j</sub> = -7°C	3.87	2.77
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.27 kW	2.43 kW
COP T <sub>j</sub> = +2°C	5.43	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.59 kW	2.79 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.93	2.06
COP Tj = -15°C (if TOL<-20°C)	2.87	2.06

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
Heating up time	02:37 h:min
Standby power input	52.5 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l
COP	2.31

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.2 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	270 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

## Model: Bosch CS7000iAW 9 ORB-S

### Configure model

Model name	Bosch CS7000iAW 9 ORB-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>



This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Model: Bosch CS7000iAW 9 ORE-S

### Configure model

Model name	Bosch CS7000iAW 9 ORE-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW



This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Model: Bosch Compress 6000 AW-9 AWB

Configure model	
Model name	Bosch Compress 6000 AW-9 AWB
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

**EN 14825**

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C

This information was generated by the HP KEYMARK database on 4 May 2022

Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

# Model: Bosch Compress 6000 AW-9 AWM

Configure model	
Model name	Bosch Compress 6000 AW-9 AWM
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate



**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C

This information was generated by the HP KEYMARK database on 4 May 2022

Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
COP	2.31
Heating up time	02:37 h:min
Standby power input	52.5 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

## Warmer Climate

This information was generated by the HP KEYMARK database on 4 May 2022

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.2 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	270 l

# Model: Bosch Compress 6000 AW-9 AWMS

## Configure model

Model name	Bosch Compress 6000 AW-9 AWMS
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

## General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate



**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C

This information was generated by the HP KEYMARK database on 4 May 2022

Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	101 %
COP	2.37
Heating up time	02:24 h:min
Standby power input	53.7 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.3 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 l

## Model: Bosch Compress 6000 AW-9 AWE

### Configure model

Model name	Bosch Compress 6000 AW-9 AWE
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate



This information was generated by the HP KEYMARK database on 4 May 2022

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C

This information was generated by the HP KEYMARK database on 4 May 2022

Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Model: Bosch CS7400iAW 7 ORB

### Configure model

Model name	Bosch CS7400iAW 7 ORB
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature	+7°C/+12°C
Heat output	4.01 kW	2.60 kW	
El input	0.80 kW	0.91 kW	
COP	5.01	2.84	

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature	+7°C/+12°C
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

### EN 14825

	Low temperature	Medium temperature	+7°C/+12°C
$\eta_s$	198 %	140 %	
Prated	6.20 kW	5.91 kW	
SCOP	5.02	3.58	
Tbiv	-10 °C	-10 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	5.54 kW	5.21 kW	
COP Tj = -7°C	3.16	2.27	
Cdh Tj = -7 °C			
Pdh Tj = +2°C	3.31 kW	3.27 kW	
COP Tj = +2°C	4.86	3.56	
Cdh Tj = +2 °C			
Pdh Tj = +7°C	2.04 kW	2.84 kW	
COP Tj = +7°C	6.72	4.49	
Cdh Tj = +7 °C			

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2553 kWh	3413 kWh

## Colder Climate

<b>EN 14825</b>			
	<b>Low temperature</b>	<b>Medium temperature</b>	<b>+7°C/+12°C</b>
$\eta_s$	168 %	123 %	



This information was generated by the HP KEYMARK database on 4 May 2022

Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C

This information was generated by the HP KEYMARK database on 4 May 2022

Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3291 kWh	4288 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.96	4.76
COP Tj = -15°C (if TOL<-20°C)	2.44	1.82
Cdh Tj = -15 °C		

### EN 12102-1

	Low temperature	Medium temperature	+7°C/+12°C
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

## Warmer Climate

### EN 14825

	Low temperature	Medium temperature	+7°C/+12°C
$\eta_s$	242 %	164 %	
Prated	7.29 kW	7.25 kW	

This information was generated by the HP KEYMARK database on 4 May 2022

SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1591 kWh	2325 kWh

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**EN 12102-1**

	<b>Low temperature</b>	<b>Medium temperature</b>	<b>+7°C/+12°C</b>
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

## Model: Bosch CS7400iAW 7 ORMS

Configure model	
Model name	Bosch CS7400iAW 7 ORMS
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2553 kWh	3413 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

This information was generated by the HP KEYMARK database on 4 May 2022

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82



This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Qhe	3291 kWh	4288 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.96	1.82
COP Tj = -15°C (if TOL<-20°C)	2.44	1.82
Cdh Tj = -15 °C		

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

<b>EN 14825</b>
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This information was generated by the HP KEYMARK database on 4 May 2022

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1591 kWh	2325 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	101 %
COP	2.37
Heating up time	02:11 h:min
Standby power input	51.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	259 l

### Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	84 %
COP	2.00
Heating up time	02:48 h:min
Standby power input	58.0 W
Reference hot water temperature	51.8 °C
Mixed water at 40°C	252 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	112 %
COP	2.64
Heating up time	01:52 h:min
Standby power input	47.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	254 l

## Model: Bosch CS7400iAW 7 ORM

Configure model	
Model name	Bosch CS7400iAW 7 ORM
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2553 kWh	3413 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

This information was generated by the HP KEYMARK database on 4 May 2022

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82



This information was generated by the HP KEYMARK database on 4 May 2022

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	4.84 kW	4.62 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption $Q_{he}$	3291 kWh	4288 kWh
$P_{dh} T_j = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	4.96	1.82
$COP T_j = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.82
$C_{dh} T_j = -15^{\circ}C$		

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

<b>EN 14825</b>
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This information was generated by the HP KEYMARK database on 4 May 2022

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1591 kWh	2325 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	103 %
COP	2.42
Heating up time	02:26 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	269 l

### Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	88 %
COP	2.08
Heating up time	02:51 h:min
Standby power input	57.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	272 l

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	122 %
COP	2.86
Heating up time	01:55 h:min
Standby power input	45.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	268 l

## Model: Bosch CS7400iAW 7 ORE

### Configure model

Model name	Bosch CS7400iAW 7 ORE
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2553 kWh	3413 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

This information was generated by the HP KEYMARK database on 4 May 2022

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82



This information was generated by the HP KEYMARK database on 4 May 2022

$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	4.84 kW	4.62 kW
$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption $Q_{he}$	3291 kWh	4288 kWh
$P_{dh} T_j = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	4.96	4.76
$COP T_j = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.82
$C_{dh} T_j = -15^{\circ}C$		

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

<b>EN 14825</b>
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This information was generated by the HP KEYMARK database on 4 May 2022

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1591 kWh	2325 kWh

## Model: Bosch CS7001iAW 9 ORM-S

Configure model	
Model name	Bosch CS7001iAW 9 ORM-S
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1924 kWh	2332 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
T <sub>biv</sub>	-20 °C	-18 °C
TOL	-20 °C	-18 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.44 kW	3.61 kW
COP T <sub>j</sub> = -7°C	3.87	2.77
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.27 kW	2.43 kW
COP T <sub>j</sub> = +2°C	5.43	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.59 kW	2.79 kW



This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.93	2.06
COP Tj = -15°C (if TOL<-20°C)	2.87	2.06

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	98 %
Heating up time	02:37 h:min
Standby power input	52.5 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l
COP	2.31

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.2 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	270 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

## Model: Bosch CS7001iAW 9 ORMS-S

Configure model	
Model name	Bosch CS7001iAW 9 ORMS-S
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1924 kWh	2332 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
T <sub>biv</sub>	-20 °C	-18 °C
TOL	-20 °C	-18 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	3.44 kW	3.61 kW
COP T <sub>j</sub> = -7°C	3.87	2.77
P <sub>dh</sub> T <sub>j</sub> = +2°C	2.27 kW	2.43 kW
COP T <sub>j</sub> = +2°C	5.43	3.89
P <sub>dh</sub> T <sub>j</sub> = +7°C	1.59 kW	2.79 kW



This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.93	2.06
COP Tj = -15°C (if TOL<-20°C)	2.87	2.06

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	101 %
Heating up time	02:24 h:min
Standby power input	53.7 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l
COP	2.37

## Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.3 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

## Model: Bosch CS7001iAW 9 ORE-S

### Configure model

Model name	Bosch CS7001iAW 9 ORE-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW



This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Model: Bosch CS7001iAW 9 ORB-S

### Configure model

Model name	Bosch CS7001iAW 9 ORB-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3188 kWh	3631 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>

This information was generated by the HP KEYMARK database on 4 May 2022

$\eta_s$	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W

This information was generated by the HP KEYMARK database on 4 May 2022

PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Model: Bosch CSH7000iAW 9 OR

Configure model	
Model name	Bosch CSH7000iAW 9 OR
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.67	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.65 kW	6.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	2.03
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption $Q_{he}$	3188 kWh	3631 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	177 %	126 %

This information was generated by the HP KEYMARK database on 4 May 2022

Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3346 kWh	4594 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	4.93	2.06
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.87	2.06

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.02 kW	7.93 kW
COP T <sub>j</sub> = +2°C	2.96	2.28

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

## Model: Bosch CSH7400iAW 7 OR

### Configure model

Model name	Bosch CSH7400iAW 7 OR
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature	+7°C/+12°C
Heat output	4.01 kW	2.60 kW	
El input	0.80 kW	0.91 kW	
COP	5.01	2.84	

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature	+7°C/+12°C
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

### EN 14825

	Low temperature	Medium temperature	+7°C/+12°C
$\eta_s$	198 %	140 %	
Prated	6.20 kW	5.91 kW	
SCOP	5.02	3.58	
Tbiv	-10 °C	-10 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	5.54 kW	5.21 kW	
COP Tj = -7°C	3.16	2.27	
Cdh Tj = -7 °C			
Pdh Tj = +2°C	3.31 kW	3.27 kW	
COP Tj = +2°C	4.86	3.56	
Cdh Tj = +2 °C			
Pdh Tj = +7°C	2.04 kW	2.84 kW	
COP Tj = +7°C	6.05	4.65	
Cdh Tj = +7 °C			

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2553 kWh	3413 kWh

## Colder Climate

<b>EN 14825</b>			
	<b>Low temperature</b>	<b>Medium temperature</b>	<b>+7°C/+12°C</b>
$\eta_s$	168 %	123 %	



This information was generated by the HP KEYMARK database on 4 May 2022

Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3291 kWh	4288 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	4.96	1.82
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.44	1.82

### EN 12102-1

	Low temperature	Medium temperature	+7°C/+12°C
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

## Warmer Climate

### EN 14825

	Low temperature	Medium temperature	+7°C/+12°C
$\eta_s$	242 %	164 %	
Prated	7.29 kW	7.25 kW	
SCOP	6.12	4.17	
T <sub>biv</sub>	2 °C	2 °C	
TOL	2 °C	2 °C	
P <sub>dh</sub> T <sub>j</sub> = +2°C	7.29 kW	7.25 kW	
COP T <sub>j</sub> = +2°C	3.06	2.19	

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1591 kWh	2325 kWh

<b>EN 12102-1</b>			
	<b>Low temperature</b>	<b>Medium temperature</b>	<b>+7°C/+12°C</b>
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

## Model: Bosch GCH7000iFAW 9 OR

Configure model	
Model name	Bosch GCH7000iFAW 9 OR
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.65 kW	2.85 kW
El input	0.76 kW	1.16 kW
COP	4.81	2.46

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	172 %	132 %
Prated	7.60 kW	6.50 kW
SCOP	4.38	3.39
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.44 kW	5.79 kW
COP Tj = -7°C	3.02	2.17
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.77 kW	3.43 kW
COP Tj = +2°C	4.06	3.29
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.46 kW	2.62 kW
COP Tj = +7°C	5.99	4.47
Cdh Tj = +7 °C	1.000	0.960

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.97 kW	3.23 kW
COP Tj = 12°C	7.26	5.80
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	7.25 kW	5.79 kW
COP Tj = Tbiv	2.56	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.25 kW	2.26 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.68
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	4.24 kW
Annual energy consumption Qhe	3587 kWh	3966 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

This information was generated by the HP KEYMARK database on 4 May 2022

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	162 %	117 %
Prated	6.10 kW	6.00 kW
SCOP	4.12	3.00
Tbiv	-17 °C	-15 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.52 kW	3.70 kW
COP Tj = -7°C	3.19	2.55
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.26 kW	2.17 kW
COP Tj = +2°C	5.00	3.33
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.44 kW	2.63 kW
COP Tj = +7°C	6.25	4.65
Cdh Tj = +7 °C	1.000	0.960
Pdh Tj = 12°C	1.97 kW	3.24 kW
COP Tj = 12°C	7.00	5.96
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	5.30 kW	5.02 kW
COP Tj = Tbiv	2.74	1.85



This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.46 kW	2.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.01
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.64 kW	3.38 kW
Annual energy consumption Qhe	3653 kWh	4923 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	238 %	157 %
Prated	9.00 kW	7.90 kW

This information was generated by the HP KEYMARK database on 4 May 2022

SCOP	6.03	4.00
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.10 kW	7.44 kW
COP Tj = +2°C	3.71	1.98
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	5.90 kW	4.88 kW
COP Tj = +7°C	5.43	3.25
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.69 kW	3.22 kW
COP Tj = 12°C	7.35	5.66
Cdh Tj = +12 °C	1.000	0.960
Pdh Tj = Tbiv	8.10 kW	7.44 kW
COP Tj = Tbiv	3.71	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.10 kW	7.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	1.98
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	1995 kWh	2640 kWh

## Model: Bosch GCH7400iFAW 7 OR

### Configure model

Model name	Bosch GCH7400iFAW 7 OR
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

### General Data

Power supply	1x230V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	3.47 kW	2.89 kW
El input	0.73 kW	1.14 kW
COP	4.76	2.53

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	182 %	129 %
Prated	6.20 kW	5.90 kW
SCOP	4.61	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.46 kW	5.07 kW
COP Tj = -7°C	2.92	2.12
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.29 kW	2.95 kW
COP Tj = +2°C	4.60	3.26
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.01 kW	2.55 kW
COP Tj = +7°C	6.01	4.24
Cdh Tj = +7 °C	1.000	0.970

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = 12°C	1.55 kW	3.06 kW
COP Tj = 12°C	6.99	5.54
Cdh Tj = +12 °C	0.910	0.960
Pdh Tj = Tbiv	5.76 kW	5.07 kW
COP Tj = Tbiv	2.57	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.76 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.57	1.84
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2778 kWh	3694 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

This information was generated by the HP KEYMARK database on 4 May 2022

**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	160 %	115 %
Prated	5.70 kW	5.50 kW
SCOP	4.06	2.94
Tbiv	-17 °C	-15 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.64 kW	3.29 kW
COP Tj = -7°C	3.19	2.23
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.11 kW	2.24 kW
COP Tj = +2°C	4.91	3.47
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.35 kW	2.71 kW
COP Tj = +7°C	5.91	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.02 kW	3.32 kW
COP Tj = 12°C	6.74	5.73
Cdh Tj = +12 °C	1.000	0.970
Pdh Tj = Tbiv	4.95 kW	4.68 kW
COP Tj = Tbiv	2.80	2.10

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.59 kW	2.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.30
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	1.16 kW	2.82 kW
Annual energy consumption Qhe	3461 kWh	4613 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	225 %	156 %
Prated	7.30 kW	7.20 kW



This information was generated by the HP KEYMARK database on 4 May 2022

SCOP	5.70	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.57 kW	7.31 kW
COP Tj = +2°C	3.57	2.15
Pdh Tj = +7°C	4.67 kW	5.00 kW
COP Tj = +7°C	5.14	3.31
Pdh Tj = 12°C	2.03 kW	3.29 kW
COP Tj = 12°C	6.97	5.44
Pdh Tj = Tbiv	6.57 kW	7.31 kW
COP Tj = Tbiv	3.57	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.57 kW	7.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.57	2.15
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1710 kWh	2423 kWh

## Model: Bosch CS7400iAW 7 ORMB

### Configure model

Model name	Bosch CS7400iAW 7 ORMB
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	4.01 kW	2.60 kW
El input	0.84 kW	0.94 kW
COP	4.78	2.77

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	186 %	135 %
Prated	6.20 kW	5.91 kW
SCOP	4.73	3.45
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.07	2.24
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.64	3.47
Pdh Tj = +7°C	2.05 kW	2.84 kW
COP Tj = +7°C	6.21	4.33
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.18	5.72
Pdh Tj = Tbiv	6.20 kW	5.91 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.65	1.91
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.20 kW	5.91 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.65	1.91
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	2707 kWh	3535 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	119 %

This information was generated by the HP KEYMARK database on 4 May 2022

Prated	5.72 kW	5.48 kW
SCOP	4.07	3.04
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.52	2.61
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.09	3.73
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.15	4.52
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	6.53	5.91
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.39	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	1.74
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Q <sub>he</sub>	3463 kWh	4440 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	4.96	4.76
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.39	1.80

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	226 %	158 %
Prated	7.29 kW	7.25 kW
SCOP	5.72	4.02
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	7.29 kW	7.25 kW
COP T <sub>j</sub> = +2°C	2.95	2.16

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.31	3.67
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	7.44	5.10
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	2.95	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.95	2.16
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1703 kWh	2407 kWh

## Model: Bosch CS7001iAW 9 ORMB-S

Configure model	
Model name	Bosch CS7001iAW 9 ORMB-S
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.78 kW	2.41 kW
El input	0.79 kW	0.93 kW
COP	4.78	2.60

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Average Climate



### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	181 %	133 %
Prated	7.60 kW	6.34 kW
SCOP	4.61	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.58 kW	5.69 kW
COP Tj = -7°C	3.05	2.19
Pdh Tj = +2°C	4.09 kW	3.29 kW
COP Tj = +2°C	4.64	3.40
Pdh Tj = +7°C	2.60 kW	2.78 kW
COP Tj = +7°C	5.67	4.32
Pdh Tj = 12°C	1.69 kW	3.32 kW
COP Tj = 12°C	6.36	5.55
Pdh Tj = Tbiv	7.55 kW	6.34 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.60	1.87
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.55 kW	6.34 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.60	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption $Q_{he}$	3406 kWh	3842 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	157 %	118 %

This information was generated by the HP KEYMARK database on 4 May 2022

Prated	6.50 kW	6.80 kW
SCOP	4.00	3.02
Tbiv	-17 °C	-17 °C
TOL	-17 °C	-17 °C
Pdh Tj = -7°C	3.83 kW	4.47 kW
COP Tj = -7°C	3.56	2.63
Pdh Tj = +2°C	2.36 kW	2.49 kW
COP Tj = +2°C	5.16	3.72
Pdh Tj = +7°C	1.61 kW	2.85 kW
COP Tj = +7°C	5.93	4.64
Pdh Tj = 12°C	1.69 kW	3.36 kW
COP Tj = 12°C	6.17	5.85
Pdh Tj = Tbiv	5.64 kW	5.82 kW
COP Tj = Tbiv	2.29	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.64 kW	5.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.72
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.50 kW	6.80 kW
Annual energy consumption Q <sub>he</sub>	4001 kWh	5544 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	5.44	5.14
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.43	1.80

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	235 %	166 %
Prated	9.00 kW	7.90 kW
SCOP	5.94	4.24
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	9.10 kW	7.44 kW
COP T <sub>j</sub> = +2°C	2.99	2.23

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = +7°C	6.17 kW	4.92 kW
COP Tj = +7°C	5.36	3.74
Pdh Tj = 12°C	2.67 kW	3.31 kW
COP Tj = 12°C	7.40	5.47
Pdh Tj = Tbiv	9.10 kW	7.44 kW
COP Tj = Tbiv	2.99	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.10 kW	7.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.99	2.23
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2023 kWh	2491 kWh

## Model: Bosch CS7000iAW 9 IRMB

### Configure model

Model name	Bosch CS7000iAW 9 IRMB
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-2

	Low temperature	Medium temperature
Heat output	2.85 kW	2.41 kW
El input	0.65 kW	0.93 kW
COP	4.41	2.58

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

## Average Climate

### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	168 %	135 %
Prated	7.30 kW	6.00 kW
SCOP	4.27	3.44
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	2.95	2.26
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	5.10	3.47
Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.67	4.24
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	6.63	5.37
Pdh Tj = Tbiv	7.29 kW	5.99 kW

This information was generated by the HP KEYMARK database on 4 May 2022

COP $T_j = T_{biv}$	2.53	1.96
P <sub>dh</sub> $T_j = TOL$ or P <sub>dh</sub> $T_j = T_{designh}$ if $TOL < T_{designh}$	7.29 kW	5.99 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.53	1.96
WTOL	60 °C	60 °C
P <sub>off</sub>	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3534 kWh	3602 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	120 %



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Prated	6.20 kW	6.00 kW
SCOP	4.08	3.07
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.29	2.65
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.10	3.78
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.02	4.44
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	6.59	5.46
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.25	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.89
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W

This information was generated by the HP KEYMARK database on 4 May 2022

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Q <sub>he</sub>	3744 kWh	4819 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL < -20°C)	5.49	4.72
COP T <sub>j</sub> = -15°C (if TOL < -20°C)	2.55	2.04

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	226 %	160 %
Prated	8.30 kW	7.20 kW
SCOP	5.73	4.08
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	8.31 kW	7.19 kW
COP T <sub>j</sub> = +2°C	2.75	2.15

This information was generated by the HP KEYMARK database on 4 May 2022

Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.00	3.61
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.39	5.24
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.75	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	2.15
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1937 kWh	2360 kWh