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Summary of	Bosch Compress CS3400iAWS 4 OR-S	Reg. No.	011-1W0534		
Certificate Holder	Certificate Holder				
Name	Bosch Thermotechnik GmbH	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 CS3400iAWS 4 OR-S				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R32				
Mass of Refrigerant	1.1 kg				
Certification Date	10.06.2022				
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 9 (as of 2021-03)				



Model: CS3400iAWS 4 ORM-S

Configure model			
Model name	CS3400iAWS 4 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	1x230V 50Hz	

Heating

COP

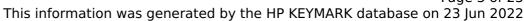
EN 14511-2				
Low temperature Medium temperature				
Heat output	5.21 kW	3.90 kW		
El input	1.12 kW	1.44 kW		

2.70

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

Warmer Climate

4.67





EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	61 dB(A)	61 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	240 %	150 %
Prated	5 kW	5 kW
SCOP	6.07	3.84
Tbiv	4 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.94 kW	3.71 kW
COP Tj = +2°C	3.55	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.3 kW	3.28 kW
COP Tj = +7°C	5.52	3.39
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.76 kW	2.32 kW
COP Tj = 12°C	7.7	5.03
Cdh Tj = +12 °C	0.97	0.98





<u> </u>	
4.23 kW	4.02 kW
3.96	2.28
3.94 kW	3.71 kW
3.55	2.12
0.99	0.99
60 °C	60 °C
11 W	11 W
o w	0 W
11 W	11 W
o w	o w
Electricity	Electricity
1.06 kW	1.29 kW
1101 kWh	1741 kWh
	3.96 3.94 kW 3.55 0.99 60 °C 11 W 0 W 11 W 0 W Electricity 1.06 kW

Colder Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	61 dB(A)	61 dB(A)	





	Low temperature	Medium temperature
η_{s}	148 %	108 %
Prated	5 kW	5 kW
SCOP	3.77	2.76
Tbiv	-12 °C	-11 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.15 kW	3.18 kW
$COP Tj = -7^{\circ}C$	3.4	2.44
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	1.9 kW	1.89 kW
COP Tj = +2°C	4.61	3.55
Cdh Tj = +2 °C	0.97	0.98
Pdh Tj = $+7^{\circ}$ C	2.27 kW	1.62 kW
$COP Tj = +7^{\circ}C$	6.12	4.27
Cdh Tj = $+7$ °C	0.97	0.97
Pdh Tj = 12°C	2.09 kW	1.79 kW
COP Tj = 12°C	5.97	5.18
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	3.69 kW	3.39 kW
COP Tj = Tbiv	3	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.24 kW	2.45 kW



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.59	1.4
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	o w	o w
PSB	11 W	11 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5 kW	5 kW
Annual energy consumption Qhe	3267 kWh	4461 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.26	2.77
COP Tj = -15°C (if TOL $<$ -20°C)	2.43	1.59
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	40 dB(A)	40 dB(A)	
Sound power level outdoor	61 dB(A)	61 dB(A)	





	Low temperature	Medium temperature
ης	186 %	125 %
Prated	5.00 kW	5.60 kW
SCOP	4.72	3.20
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.36 kW	3.80 kW
COP Tj = -7°C	2.96	1.92
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.73 kW	3.30 kW
COP Tj = +2°C	4.68	3.27
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.34 kW	2.01 kW
$COP Tj = +7^{\circ}C$	6.07	4.24
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.77 kW	2.51 kW
COP Tj = 12°C	8.02	5.80
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.36 kW	4.15 kW
COP Tj = Tbiv	2.96	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.93 kW	2.58 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	0 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	3.00 kW
Annual energy consumption Qhe	2186 kWh	3613 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	152 %
СОР	3.68
Heating up time	02:30 h:min
Standby power input	33 W
Reference hot water temperature	53.6 °C
Mixed water at 40°C	277



Colder Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	100 %
СОР	2.42
Heating up time	02:44 h:min
Standby power input	41 W
Reference hot water temperature	53.5 °C
Mixed water at 40°C	270

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	125 %
СОР	3.02
Heating up time	02:34 h:min
Standby power input	38 W
Reference hot water temperature	53.7 °C
Mixed water at 40°C	279 I

Model: CS3400iAWS 4 ORB-S

Configure model		
Model name	CS3400iAWS 4 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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.21 kW	3.90 kW
El input	1.12 kW	1.44 kW
СОР	4.67	2.70

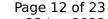
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	240 %	150 %
Prated	5 kW	5 kW
SCOP	6.07	3.84
Tbiv	4 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.94 kW	3.71 kW
COP Tj = +2°C	3.55	2.12
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	3.3 kW	3.28 kW
COP Tj = +7°C	5.52	3.39
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	2.76 kW	2.32 kW
COP Tj = 12°C	7.7	5.03
Cdh Tj = +12 °C	0.97	0.98





This information was generated by the HP KEYMARK database on 23 Jun 2022 Pdh Tj = Tbiv4.23 kW 4.02 kW COP Tj = Tbiv 3.96 2.28 Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 3.94 kW 3.71 kW COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 3.55 2.12 Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 0.99 0.99 WTOL 60 °C 60 °C 11 W Poff 11 W PTO 0 W 0 W **PSB** 11 W 11 W **PCK** 0 W 0 W n/a Supplementary Heater: Type of energy input n/a

Colder Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe

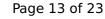
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

1.06 kW

1101 kWh

1.29 kW

1741 kWh





	Low temperature	Medium temperature
η_{s}	148 %	108 %
Prated	5 kW	5 kW
SCOP	3.77	2.76
Tbiv	-12 °C	-11 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.15 kW	3.18 kW
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Pdh Tj = 12°C	2.09 kW	1.79 kW
COP Tj = 12°C	5.97	5.18
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	3.69 kW	3.39 kW
COP Tj = Tbiv	3	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.24 kW	2.45 kW

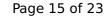




1.59	1.4
0.99	0.99
60 °C	60 °C
11 W	11 W
o w	o w
11 W	11 W
o w	o w
n/a	n/a
5 kW	5 kW
3267 kWh	4461 kWh
3.26	2.77
2.43	1.59
0.99	0.99
	0.99 60 °C 11 W 0 W 11 W 0 W n/a 5 kW 3267 kWh 3.26 2.43

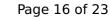
Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	
Sound power level outdoor	61 dB(A)	61 dB(A)	





	Low temperature	Medium temperature
ης	186 %	125 %
Prated	5.00 kW	5.60 kW
SCOP	4.72	3.20
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Cdh Tj = +2 °C	0.980	0.990
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$COP Tj = +7^{\circ}C$	6.07	4.24
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	2.77 kW	2.51 kW
COP Tj = 12°C	8.02	5.80
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	4.36 kW	4.15 kW
COP Tj = Tbiv	2.96	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.93 kW	2.58 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	0 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.07 kW	3.00 kW
Annual energy consumption Qhe	2186 kWh	3613 kWh



Model: CS3400iAWS 4 ORE-S

Configure model		
Model name	CS3400iAWS 4 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 1x230V 50Hz		

Heating

COP

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.21 kW	3.9 kW	
El input	1.12 kW	1.44 kW	

2.7

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

Warmer Climate

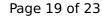
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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	240 %	150 %
Prated	5 kW	5 kW
SCOP	6.07	3.84
Tbiv	4 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	3.94 kW	3.71 kW
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COP Tj = 12°C	7.7	5.03
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	1	
Pdh Tj = Tbiv	4.23 kW	4.02 kW
COP Tj = Tbiv	3.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.94 kW	3.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.55	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	o w	0 W
PSB	11 W	11 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.06 kW	1.29 kW
Annual energy consumption Qhe	1101 kWh	1741 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	
Sound power level outdoor	61 dB(A)	61 dB(A)	





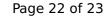
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Tbiv	-12 °C	-11 °C
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Pdh Tj = Tbiv	3.69 kW	3.39 kW
COP Tj = Tbiv	3	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	2.24 kW	2.45 kW



	-
1.59	1.4
0.99	0.99
60 °C	60 °C
11 W	11 W
0 W	0 W
11 W	11 W
o w	0 W
Electricity	Electricity
5 kW	5 kW
3267 kWh	4461 kWh
3.26	2.77
2.43	1.59
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	0.99 60 °C 11 W 0 W 11 W 0 W Electricity 5 kW 3267 kWh 3.26 2.43

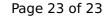
Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	
Sound power level outdoor	61 dB(A)	61 dB(A)	





Prated 5 k² SCOP 4.7 Tbiv -7 ° TOL -10 Pdh Tj = -7 °C 4.3 COP Tj = -7 °C 2.9	kW .72 7 °C 10 °C .36 kW .96	125 % 5.6 kW 3.20 -5 °C -10 °C 3.80 kW 1.92 0.99
SCOP 4.7 Tbiv -7° TOL -10 Pdh Tj = -7°C 4.3 COP Tj = -7°C 2.9	.72 7 °C 10 °C .36 kW .96	3.20 -5 °C -10 °C 3.80 kW
Tbiv -7° TOL -10° Pdh Tj = -7°C 4.3° COP Tj = -7°C 2.9°	7 °C 10 °C .36 kW .96	-5 °C -10 °C 3.80 kW
TOL -10 Pdh Tj = -7°C 4.3 COP Tj = -7°C 2.9	.36 kW .96	-10 °C 3.80 kW 1.92
Pdh Tj = -7°C 4.3 COP Tj = -7°C 2.9	.36 kW .96	3.80 kW 1.92
COP Tj = -7°C 2.9	.96	1.92
	.99	
Cdh Tj = -7 °C		0.99
$Pdh Tj = +2^{\circ}C$ 2.7	.73 kW	3.30 kW
$COP Tj = +2^{\circ}C$ 4.6	.68	3.27
Cdh Tj = +2 °C 0.9	.98	0.99
$Pdh Tj = +7^{\circ}C$ 2.3	.34 kW	2.01 kW
$COP Tj = +7^{\circ}C$.07	4.24
Cdh Tj = +7 °C 0.9	.97	0.98
Pdh Tj = 12°C 2.7	.77 kW	2.51 kW
COP Tj = 12°C 8.0	.02	5.80
Cdh Tj = +12 °C 0.9	.97	0.97
Pdh Tj = Tbiv 4.3	.36 kW	4.15 kW
COP Tj = Tbiv 2.9	.96	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh 3.9	.93 kW	2.58 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.48
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	11 W	11 W
РТО	0 W	0 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.07 kW	3.00 kW
Annual energy consumption Qhe	2186 kWh	3613 kWh