

Page 1 of 45

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Summary of	Bosch Compress CS3400iAWS 12,14 OR-S	Reg. No.	011-1W0537
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 CS3400iAWS 12,14 OR-S		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	3.2 kg		
Certification Date	10.06.2022		



Model: CS3400iAWS 12 ORB-S

Configure model		
Model name	CS3400iAWS 12 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	12.12 kW	9.15 kW	
El input	2.98 kW	3.62 kW	
СОР	4.07	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	

Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	42 dB(A)	42 dB(A)	
Sound power level outdoor	64 dB(A)	64 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	223 %	149 %
Prated	11 kW	11 kW
SCOP	5.65	3.81
Tbiv	2 °C	3 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.8 kW	9.82 kW
COP Tj = +2°C	2.87	2.07
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.48 kW	7.12 kW
$COP Tj = +7^{\circ}C$	5.09	3.26
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.12 kW	5.73 kW
COP Tj = 12°C	7.02	4.91
Cdh Tj = +12 °C	0.98	0.98





10.8 kW	10.45 kW
2.87	2.24
10.8 kW	9.82 kW
2.87	2.07
0.99	0.99
60 °C	60 °C
20 W	20 W
o w	0 W
20 W	20 W
o w	0 W
n/a	n/a
0 kW	1.18 kW
2599 kWh	3857 kWh
	2.87 10.8 kW 2.87 0.99 60 °C 20 W 0 W 20 W n/a 0 kW

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	42 dB(A)	42 dB(A)	
Sound power level outdoor	64 dB(A)	64 dB(A)	





	Low temperature	Medium temperature
ης	132 %	102 %
Prated	10 kW	10 kW
SCOP	3.37	2.64
Tbiv	-15 °C	-13 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	6.34 kW	6.3 kW
$COP Tj = -7^{\circ}C$	3.25	2.28
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.45 kW	4.17 kW
$COP Tj = +2^{\circ}C$	4.21	3.36
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.22 kW	4.98 kW
$COPTj = +7^{\circ}C$	5.15	4.14
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.12 kW	5.95 kW
COP Tj = 12°C	7.02	5.52
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.04 kW	7.21 kW
COP Tj = Tbiv	2.06	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.04 kW	6.63 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.06	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	o w	0 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	10 kW	10 kW
Annual energy consumption Qhe	7311 kWh	9349 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.04	6.63
COP Tj = -15°C (if TOL $<$ -20°C)	2.06	1.52
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	42 dB(A)	42 dB(A)	
Sound power level outdoor	64 dB(A)	64 dB(A)	





This information was gene	Low temperature	Medium temperature
η_{s}	166 %	119 %
Prated	11 kW	10.3 kW
SCOP	4.23	3.06
Tbiv	-8 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.10 kW	8.29 kW
$COP Tj = -7^{\circ}C$	2.48	1.73
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2^{\circ}$ C	6.07 kW	6.10 kW
$COPTj = +2^{\circ}C$	4.36	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	5.25 kW	4.84 kW
$COPTj = +7^{\circ}C$	5.22	3.90
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.15 kW	5.89 kW
COP Tj = 12°C	6.59	5.22
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	9.85 kW	8.29 kW
COP Tj = Tbiv	2.42	1.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.32 kW	6.25 kW



COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	0 W	0 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.68 kW	4.05 kW
Annual energy consumption Qhe	5371 kWh	6961 kWh



Model: CS3400iAWS 12 ORE-S

Configure model		
Model name	CS3400iAWS 12 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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	12.12 kW	9.15 kW
El input	2.98 kW	3.62 kW
СОР	4.07	2.53

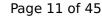
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	223 %	149 %
Prated	11 kW	11 kW
SCOP	5.65	3.81
Tbiv	2 °C	3 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.8 kW	9.82 kW
COP Tj = +2°C	2.87	2.07
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	7.48 kW	7.12 kW
COP Tj = +7°C	5.09	3.26
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.12 kW	5.73 kW
COP Tj = 12°C	7.02	4.91
Cdh Tj = +12 °C	0.98	0.98

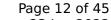




Pdh Tj = Tbiv	10.8 kW	10.45 kW
COP Tj = Tbiv	2.87	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.8 kW	9.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	o w
PSB	20 W	20 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	1.18 kW
Annual energy consumption Qhe	2599 kWh	3857 kWh

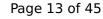
Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)





	Low temperature	Medium temperature
η_{s}	132 %	102 %
Prated	10 kW	10 kW
SCOP	3.37	2.64
Tbiv	-15 °C	-13 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	6.34 kW	6.3 kW
COP Tj = -7° C	3.25	2.28
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.45 kW	4.17 kW
COP Tj = +2°C	4.21	3.36
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.22 kW	4.98 kW
$COP Tj = +7^{\circ}C$	5.15	4.14
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.12 kW	5.95 kW
COP Tj = 12°C	7.02	5.52
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.04 kW	7.21 kW
COP Tj = Tbiv	2.06	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.04 kW	6.63 kW

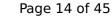




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.06	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	o w	0 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10 kW	10 kW
Annual energy consumption Qhe	7311 kWh	9349 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.04	6.63
COP Tj = -15°C (if TOL $<$ -20°C)	2.06	1.52
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	42 dB(A)	42 dB(A)	
Sound power level outdoor	64 dB(A)	64 dB(A)	





This information was gene	Low temperature	Medium temperature
η_{s}	166 %	119 %
Prated	11 kW	10.3 kW
SCOP	4.23	3.06
Tbiv	-8 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.10 kW	8.29 kW
$COP Tj = -7^{\circ}C$	2.48	1.73
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2^{\circ}$ C	6.07 kW	6.10 kW
$COPTj = +2^{\circ}C$	4.36	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	5.25 kW	4.84 kW
$COPTj = +7^{\circ}C$	5.22	3.90
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.15 kW	5.89 kW
COP Tj = 12°C	6.59	5.22
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	9.85 kW	8.29 kW
COP Tj = Tbiv	2.42	1.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.32 kW	6.25 kW



Page 15 of 45

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	o w
PSB	20 W	20 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	4.05 kW
Annual energy consumption Qhe	5371 kWh	6961 kWh



Model: CS3400iAWS 12 ORM-S

Configure model		
Model name	CS3400iAWS 12 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

EN 14511-2			
Low temperature Medium temperature			
Heat output	12.12 kW	9.15 kW	
El input	2.98 kW	3.62 kW	
СОР	4.07	2.53	

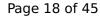
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	223 %	149 %
Prated	11 kW	11 kW
SCOP	5.65	3.81
Tbiv	2 °C	3 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.8 kW	9.82 kW
COP Tj = +2°C	2.87	2.07
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	7.48 kW	7.12 kW
$COP Tj = +7^{\circ}C$	5.09	3.26
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.12 kW	5.73 kW
COP Tj = 12°C	7.02	4.91
Cdh Tj = +12 °C	0.98	0.98

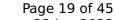




Pdh Tj = Tbiv	10.8 kW	10.45 kW
COP Tj = Tbiv	2.87	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.8 kW	9.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	0 W
PSB	20 W	20 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	1.18 kW
Annual energy consumption Qhe	2599 kWh	3857 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	
Sound power level outdoor	64 dB(A)	64 dB(A)	





	Low temperature	Medium temperature
ης	132 %	102 %
Prated	10 kW	10 kW
SCOP	3.37	2.64
Tbiv	-15 °C	-13 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	6.34 kW	6.3 kW
$COP Tj = -7^{\circ}C$	3.25	2.28
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.45 kW	4.17 kW
$COPTj = +2^{\circ}C$	4.21	3.36
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.22 kW	4.98 kW
$COPTj = +7^{\circ}C$	5.15	4.14
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.12 kW	5.95 kW
COP Tj = 12°C	7.02	5.52
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	8.04 kW	7.21 kW
COP Tj = Tbiv	2.06	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.04 kW	6.63 kW

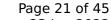




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.06	1.52
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	0 W
PSB	20 W	20 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10 kW	10 kW
Annual energy consumption Qhe	7311 kWh	9349 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.04	6.63
COP Tj = -15°C (if TOL $<$ -20°C)	2.06	1.52
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
Low temperature Medium temperature		
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)





	Low temperature	Medium temperature
η_{s}	166 %	119 %
Prated	11 kW	10.3 kW
SCOP	4.23	3.06
Tbiv	-8 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.10 kW	8.29 kW
COP $Tj = -7$ °C	2.48	1.73
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.07 kW	6.10 kW
$COP Tj = +2^{\circ}C$	4.36	3.15
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	5.25 kW	4.84 kW
$COPTj = +7^{\circ}C$	5.22	3.90
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.15 kW	5.89 kW
COP Tj = 12°C	6.59	5.22
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	9.85 kW	8.29 kW
COP Tj = Tbiv	2.42	1.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.32 kW	6.25 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.26	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	0 W	0 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	4.05 kW
Annual energy consumption Qhe	5371 kWh	6961 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	128 %	
СОР	3.09	
Heating up time	01:33 h:min	
Standby power input	41.7 W	
Reference hot water temperature	51.9 °C	
Mixed water at 40°C	264 I	



Colder Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	79 %	
СОР	1.93	
Heating up time	02:03 h:min	
Standby power input	51.2 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	266 I	

Average Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	104 %	
СОР	2.52	
Heating up time	01:46 h:min	
Standby power input	48.3 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	265 I	



Model: CS3400iAWS 14 ORB-S

Configure model		
Model name CS3400iAWS 14 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	13.81 kW	9.15 kW
El input	3.68 kW	3.62 kW
СОР	3.75	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

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	217 %	147 %
Prated	13 kW	13 kW
SCOP	5.5	3.75
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	11.38 kW	9.82 kW
COP Tj = +2°C	2.77	2.07
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	8.1 kW	8.48 kW
COP Tj = +7°C	4.9	3.2
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.12 kW	5.73 kW
COP Tj = 12°C	7.02	4.91
Cdh Tj = +12 °C	0.98	0.98

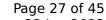




11.74 kW	10.99 kW
2.93	2.41
11.38 kW	9.82 kW
2.77	2.07
0.99	0.99
60 °C	60 °C
20 W	20 W
0 W	o w
20 W	20 W
0 W	o w
n/a	n/a
1.62 kW	3.18 kW
3158 kWh	4627 kWh
	2.93 11.38 kW 2.77 0.99 60 °C 20 W 0 W 20 W n/a 1.62 kW

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)





	Low temperature	Medium temperature
η_{s}	131 %	103 %
Prated	11 kW	11 kW
SCOP	3.36	2.64
Tbiv	-15 °C	-12 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	6.25 kW	6.75 kW
COP Tj = -7°C	3.21	2.24
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.45 kW	4.22 kW
COP Tj = +2°C	4.26	3.43
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.19 kW	4.99 kW
$COP Tj = +7^{\circ}C$	4.88	4.17
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.12 kW	5.96 kW
COP Tj = 12°C	7.02	5.55
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	9.35 kW	7.76 kW
COP Tj = Tbiv	2.02	1.7
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.35 kW	6.92 kW

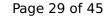




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.53
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	0 W	0 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	11 kW	11 kW
Annual energy consumption Qhe	8067 kWh	10280 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.35	6.92
COP Tj = -15°C (if TOL $<$ -20°C)	2.02	1.53
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)





	1	1
η_{s}	166 %	117 %
Prated	11.6 kW	12 kW
SCOP	4.23	3
Tbiv	-9 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7° C	10.10 kW	8.29 kW
COP Tj = -7 °C	2.48	1.73
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.07 kW	6.40 kW
COP Tj = +2°C	4.36	3.08
Cdh Tj = $+2$ °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	5.25 kW	4.93 kW
$COP Tj = +7^{\circ}C$	5.22	4.03
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.15 kW	5.91 kW
COP Tj = 12°C	6.59	5.40
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	10.51 kW	8.80 kW
COP Tj = Tbiv	2.25	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.24 kW	6.25 kW



Page 30 of 45

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	o w
PSB	20 W	20 W
PCK	o w	o w
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	1.36 kW	5.75 kW
Annual energy consumption Qhe	5667 kWh	8259 kWh

Model: CS3400iAWS 14 ORE-S

Configure model		
Model name	CS3400iAWS 14 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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.81 kW	9.15 kW
El input	3.68 kW	3.62 kW
СОР	3.75	2.53

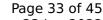
EN 14511-4	
Shutting off the heat transfer medium flow	naccod
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	217 %	147 %
Prated	13 kW	13 kW
SCOP	5.5	3.75
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	11.38 kW	9.82 kW
COP Tj = +2°C	2.77	2.07
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	8.1 kW	8.48 kW
COP Tj = +7°C	4.9	3.2
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.12 kW	5.73 kW
COP Tj = 12°C	7.02	4.91
Cdh Tj = +12 °C	0.98	0.98

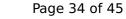




Pdh Tj = Tbiv	11.74 kW	10.99 kW
COP Tj = Tbiv	2.93	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.38 kW	9.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	0 W	0 W
PSB	20 W	20 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	3.18 kW
Annual energy consumption Qhe	3158 kWh	4627 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)





	Low temperature	Medium temperature
η_{s}	131 %	103 %
Prated	11 kW	11 kW
SCOP	3.36	2.64
Tbiv	-15 °C	-12 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7° C	6.25 kW	6.75 kW
COP Tj = -7° C	3.21	2.24
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = $+2$ °C	4.45 kW	4.22 kW
$COP Tj = +2^{\circ}C$	4.26	3.43
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = $+7^{\circ}$ C	5.19 kW	4.99 kW
$COPTj = +7^{\circ}C$	4.88	4.17
Cdh Tj = $+7$ °C	0.98	0.98
Pdh Tj = 12°C	6.12 kW	5.96 kW
COP Tj = 12°C	7.02	5.55
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	9.35 kW	7.76 kW
COP Tj = Tbiv	2.02	1.7
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.35 kW	6.92 kW

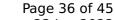




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.53
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	o w
PSB	20 W	20 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	11 kW	11 kW
Annual energy consumption Qhe	8067 kWh	10280 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.35	6.92
COP Tj = -15°C (if TOL<-20°C)	2.02	1.53
Cdh Tj = -15 °C	0.99	0.99

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)





	1	1
η_{s}	166 %	117 %
Prated	11.6 kW	12 kW
SCOP	4.23	3
Tbiv	-9 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7° C	10.10 kW	8.29 kW
COP Tj = -7 °C	2.48	1.73
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.07 kW	6.40 kW
COP Tj = +2°C	4.36	3.08
Cdh Tj = $+2$ °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	5.25 kW	4.93 kW
$COP Tj = +7^{\circ}C$	5.22	4.03
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.15 kW	5.91 kW
COP Tj = 12°C	6.59	5.40
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	10.51 kW	8.80 kW
COP Tj = Tbiv	2.25	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.24 kW	6.25 kW



Page 37 of 45

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	0 W
PSB	20 W	20 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.36 kW	5.75 kW
Annual energy consumption Qhe	5667 kWh	8259 kWh



Model: CS3400iAWS 14 ORM-S

Configure model		
Model name	CS3400iAWS 14 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

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	13.81 kW	9.15 kW	
El input	3.68 kW	3.62 kW	
СОР	3.75	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

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	217 %	147 %
Prated	13 kW	13 kW
SCOP	5.5	3.75
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.38 kW	9.82 kW
COP Tj = +2°C	2.77	2.07
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	8.1 kW	8.48 kW
COP Tj = +7°C	4.9	3.2
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	6.12 kW	5.73 kW
COP Tj = 12°C	7.02	4.91
Cdh Tj = +12 °C	0.98	0.98

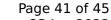




Pdh Tj = Tbiv	11.74 kW	10.99 kW
COP Tj = Tbiv	2.93	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.38 kW	9.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	2.07
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	0 W	0 W
PSB	20 W	20 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.62 kW	3.18 kW
Annual energy consumption Qhe	3158 kWh	4627 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	45 dB(A)	45 dB(A)	
Sound power level outdoor	65 dB(A)	65 dB(A)	





	Low temperature	Medium temperature
η_{s}	131 %	103 %
Prated	11 kW	11 kW
SCOP	3.36	2.64
Tbiv	-15 °C	-12 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	6.25 kW	6.75 kW
COP Tj = -7°C	3.21	2.24
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.45 kW	4.22 kW
COP Tj = +2°C	4.26	3.43
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.19 kW	4.99 kW
$COP Tj = +7^{\circ}C$	4.88	4.17
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.12 kW	5.96 kW
COP Tj = 12°C	7.02	5.55
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	9.35 kW	7.76 kW
COP Tj = Tbiv	2.02	1.7
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.35 kW	6.92 kW

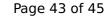




COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.02	1.53
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	o w	o w
PSB	20 W	20 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	11 kW	11 kW
Annual energy consumption Qhe	8067 kWh	10280 kWh
Pdh Tj = -15°C (if TOL<-20°C)	9.35	6.92
COP Tj = -15°C (if TOL $<$ -20°C)	2.02	1.53
Cdh Tj = -15 °C	0.99	0.99

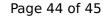
Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)





	1	1
η_{s}	166 %	117 %
Prated	11.6 kW	12 kW
SCOP	4.23	3
Tbiv	-9 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7° C	10.10 kW	8.29 kW
COP Tj = -7 °C	2.48	1.73
Cdh Tj = -7 °C	1	1
Pdh Tj = $+2$ °C	6.07 kW	6.40 kW
COP Tj = +2°C	4.36	3.08
Cdh Tj = $+2$ °C	0.99	0.99
Pdh Tj = $+7^{\circ}$ C	5.25 kW	4.93 kW
$COP Tj = +7^{\circ}C$	5.22	4.03
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	6.15 kW	5.91 kW
COP Tj = 12°C	6.59	5.40
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	10.51 kW	8.80 kW
COP Tj = Tbiv	2.25	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.24 kW	6.25 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.18	1.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	o w	0 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.36 kW	5.75 kW
Annual energy consumption Qhe	5667 kWh	8259 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	128 %	
СОР	3.09	
Heating up time	01:33 h:min	
Standby power input	41.7 W	
Reference hot water temperature	51.9 °C	
Mixed water at 40°C	264 I	



Colder Climate

EN 16147		
Declared load profile	XL	
Efficiency ηDHW	79 %	
СОР	1.93	
Heating up time	02:03 h:min	
Standby power input	51.2 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	266 I	

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	104 %
СОР	2.52
Heating up time	01:46 h:min
Standby power input	48.3 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	265 I