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Summary of	Bosch Compress 7800i LW 16	Reg. No.	011-1W0433
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 7800i LW 16		
Heat Pump Type	Brine/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.3 kg		
Certification Date	08.12.2020		
Testing basis	HP KEYMARK certification scheme rules rev. 7		

Model: CS7800i LW 16 M (+MF)

Configure model	
Model name	CS7800i LW 16 M (+MF)
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz
Off-peak product	No

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.54 kW	14.19 kW
El input	4.14 kW	5.68 kW
COP	3.75	2.5

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

This information was generated by the HP KEYMARK database on 23 Jun 2022

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	204 %	155 %
Prated	15.53 kW	14.18 kW
SCOP	5.30	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.54 kW	14.19 kW
COP Tj = +2°C	3.75	2.46
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	9.99 kW	9.32 kW
COP Tj = +7°C	5.05	3.63
Cdh Tj = +7 °C	0.99	1.00
Pdh Tj = 12°C	4.89 kW	4.71 kW
COP Tj = 12°C	5.98	4.98
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	14.19 kW

This information was generated by the HP KEYMARK database on 23 Jun 2022

COP Tj = Tbiv	3.75	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.54 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.75	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	62 °C	62 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0 kW
Annual energy consumption Qhe	3916 kWh	4658 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	211 %	161 %

This information was generated by the HP KEYMARK database on 23 Jun 2022

Prated	15.53 kW	14.18 kW
SCOP	5.47	4.24
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	10.06 kW	8.96 kW
COP Tj = -7°C	5.18	3.86
Cdh Tj = -7 °C	0.99	1.00
Pdh Tj = +2°C	6.2 kW	5.42 kW
COP Tj = +2°C	5.97	4.74
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	4.91 kW	4.76 kW
COP Tj = +7°C	6.07	5.09
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.88 kW	4.75 kW
COP Tj = 12°C	5.89	5.19
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.53 kW	14.19 kW
COP Tj = Tbiv	3.75	2.5
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.54 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.75	2.5
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	0.99

This information was generated by the HP KEYMARK database on 23 Jun 2022

WTOL	62 °C	62 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0 kW
Annual energy consumption Q _{he}	6995 kWh	8251 kWh
C _{dh} T _j = -15 °C	1.00	1.00

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	203 %	154 %
Prated	15.53 kW	14.18 kW
SCOP	5.28	4.06
T _{biv}	-10 °C	-10 °C

This information was generated by the HP KEYMARK database on 23 Jun 2022

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.91 kW	12.81 kW
COP Tj = -7°C	4.07	2.81
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	8.93 kW	7.91 kW
COP Tj = +2°C	5.39	4.21
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.72 kW	5.4 kW
COP Tj = +7°C	6.04	4.72
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.89 kW	4.7 kW
COP Tj = 12°C	5.98	4.97
Cdh Tj = +12 °C	0.99	0.99
Pdh Tj = Tbiv	15.54 kW	14.19 kW
COP Tj = Tbiv	3.75	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.54 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.75	2.50
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	62 °C	62 °C
Poff	11 W	11 W
PTO	11 W	11 W

This information was generated by the HP KEYMARK database on 23 Jun 2022

PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Q _{he}	6074 kWh	7218 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	127 %
COP	3.05
Heating up time	1:09 h:min
Standby power input	43.1 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	206 l

Colder Climate

This information was generated by the HP KEYMARK database on 23 Jun 2022

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	127 %
COP	3.05
Heating up time	1:09 h:min
Standby power input	43.1 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	206 l

Average Climate

EN 16147	
Declared load profile	XL
Efficiency η_{DHW}	127 %
COP	3.05
Heating up time	1:09 h:min
Standby power input	43.1 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	206 l

Model: CS7800i LW 16 (+F)

Configure model	
Model name	CS7800i LW 16 (+F)
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	15.54 kW	14.19 kW
El input	4.14 kW	5.68 kW
COP	3.75	2.5

EN 14511-4	
Shutting off the heat transfer medium flow	passed
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Warmer Climate

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COP $T_j = T_{biv}$	3.75	2.46
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	15.54 kW	14.19 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.75	2.46
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	62 °C	62 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0 kW
Annual energy consumption Q_{he}	3916 kWh	4658 kWh

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Cdh Tj = -15 °C	1.00	1.00

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Supplementary Heater: Type of energy input	Electricity	Electricity
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