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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: CS7800iLW 16 M (+MF)

Configure model	
Model name	CS7800iLW 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	15.53 kW	14.19 kW
El input	4.12 kW	5.66 kW
COP	3.77	2.51

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

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### EN 12102-1

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

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	205 %	156 %
Prated	15.53 kW	14.19 kW
SCOP	5.33	4.10
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.90 kW	12.81 kW
COP Tj = -7°C	4.08	2.82
Pdh Tj = +2°C	8.92 kW	7.91 kW
COP Tj = +2°C	5.43	4.23
Pdh Tj = +7°C	5.71 kW	5.39 kW
COP Tj = +7°C	6.09	4.79
Pdh Tj = 12°C	4.88 kW	4.69 kW
COP Tj = 12°C	6.07	5.07
Pdh Tj = Tbiv	15.53 kW	14.19 kW
COP Tj = Tbiv	3.77	2.51

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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
WTOL	71 °C	71 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	6018 kWh	7154 kWh

## Colder Climate

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

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	214 %	163 %
Prated	15.53 kW	14.19 kW
SCOP	5.55	4.28

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Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	10.06 kW	8.96 kW
COP Tj = -7°C	5.22	3.88
Pdh Tj = +2°C	6.20 kW	5.41 kW
COP Tj = +2°C	6.08	4.80
Pdh Tj = +7°C	4.91 kW	4.75 kW
COP Tj = +7°C	6.16	5.15
Pdh Tj = 12°C	4.88 kW	4.74 kW
COP Tj = 12°C	5.96	5.25
Pdh Tj = Tbiv	15.53 kW	14.19 kW
COP Tj = Tbiv	3.77	2.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
WTOL	71 °C	71 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW

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Annual energy consumption $Q_{he}$	6898 kWh	8176 kWh
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## Warmer Climate

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

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	207 %	157 %
Prated	15.53 kW	14.19 kW
SCOP	5.38	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.53 kW	14.19 kW
COP Tj = +2°C	3.77	2.51
Pdh Tj = +7°C	9.98 kW	9.31 kW
COP Tj = +7°C	5.10	3.65
Pdh Tj = 12°C	4.89 kW	4.71 kW
COP Tj = 12°C	6.10	5.04
Pdh Tj = Tbiv	15.53 kW	14.19 kW

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COP Tj = Tbiv	3.77	2.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.53 kW	14.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.77	2.51
WTOL	71 °C	71 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	3856 kWh	4609 kWh

## Domestic Hot Water (DHW)

### Average Climate

<b>EN 16147</b>	
Declared load profile	XL
Efficiency $\eta_{DHW}$	127 %
COP	3.05
Heating up time	01:09 h:min
Standby power input	43.0 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	206 l

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Efficiency $\eta_{DHW}$	127 %
COP	3.05
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Standby power input	43.0 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	206 l

## Warmer Climate



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Declared load profile	XL
Efficiency $\eta_{DHW}$	127 %
COP	3.05
Heating up time	01:09 h:min
Standby power input	43.0 W
Reference hot water temperature	46.9 °C
Mixed water at 40°C	206 l

## Model: CS7800iLW 16 (+F)

Configure model	
Model name	CS7800iLW 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	15.53 kW	14.19 kW
El input	4.12 kW	5.66 kW
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EN 14511-4	
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	6018 kWh	7154 kWh

## Colder Climate

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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW

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Annual energy consumption $Q_{he}$	6898 kWh	8176 kWh
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## Warmer Climate

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

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	207 %	157 %
Prated	15.53 kW	14.19 kW
SCOP	5.38	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	15.53 kW	14.19 kW
COP Tj = +2°C	3.77	2.51
Pdh Tj = +7°C	9.98 kW	9.31 kW
COP Tj = +7°C	5.10	3.65
Pdh Tj = 12°C	4.89 kW	4.71 kW
COP Tj = 12°C	6.10	5.04
Pdh Tj = Tbiv	15.53 kW	14.19 kW

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COP $T_j = T_{biv}$	3.77	2.51
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	15.53 kW	14.19 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	3.77	2.51
WTOL	71 °C	71 °C
P <sub>off</sub>	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 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 <sub>he</sub>	3856 kWh	4609 kWh