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

Login

| Summary of | Bosch Compress 7800i LW 12 | Reg. No. | 011-1W0432 | |
|---------------------|---|----------|------------|--|
| 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 12 | | | |
| Heat Pump Type | Brine/Water | | | |
| Refrigerant | R410A | | | |
| Mass of Refrigerant | 2 kg | | | |
| Certification Date | 08.12.2020 | | | |
| Testing basis | HP KEYMARK certification scheme rules rev. 7 | | | |

Model: CS7800i LW 12 M (+MF)

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | CS7800i LW 12 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 | 12.54 kW | 11.32 kW | |
| El input | 3.14 kW | 4.32 kW | |
| СОР | 4.00 | 2.62 | |

| 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 | 41 dB(A) | 41 dB(A) |

| EN 14825 | | |
|-------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 206 % | 158 % |
| Prated | 12.54 kW | 11.32 kW |
| SCOP | 5.34 | 4.15 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 12.54 kW | 11.32 kW |
| COP Tj = +2°C | 4 | 2.62 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = $+7^{\circ}$ C | 7.89 kW | 7.27 kW |
| $COPTj = +7^{\circ}C$ | 5.21 | 3.71 |
| Cdh Tj = +7 °C | 0.99 | 0.99 |
| Pdh Tj = 12°C | 3.87 kW | 3.71 kW |
| COP Tj = 12°C | 6.18 | 5.07 |
| Cdh Tj = +12 °C | 0.98 | 0.98 |
| Pdh Tj = Tbiv | 12.54 kW | 11.32 kW |

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| COP Tj = Tbiv | 4 | 2.62 |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.54 kW | 11.32 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4 | 2.62 |
| 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 | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0 kW |
| Annual energy consumption Qhe | 3135 kWh | 3648 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} | 220 % | 165 % |
| | | |





| This information was gener | ated by the HE KLIMA | NK database on 23 Juli 2022 |
|---|----------------------|-----------------------------|
| Prated | 12.54 kW | 11.32 kW |
| SCOP | 5.70 | 4.34 |
| Tbiv | -22 °C | -22 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 7.99 kW | 7.02 kW |
| $COPTj = -7^{\circ}C$ | 5.43 | 3.94 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = $+2^{\circ}$ C | 4.54 kW | 4.31 kW |
| $COPTj = +2^{\circ}C$ | 6.30 | 4.87 |
| Cdh Tj = +2 °C | 0.980 | 0.990 |
| Pdh Tj = $+7^{\circ}$ C | 3.89 kW | 3.72 kW |
| $COPTj = +7^{\circ}C$ | 6.35 | 5.15 |
| Cdh Tj = +7 °C | 0.980 | 0.980 |
| Pdh Tj = 12°C | 3.87 kW | 3.73 kW |
| COP Tj = 12°C | 5.99 | 5.31 |
| Cdh Tj = +12 °C | 0.980 | 0.980 |
| Pdh Tj = Tbiv | 12.53 kW | 11.32 kW |
| COP Tj = Tbiv | 4.00 | 2.62 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.54 kW | 11.32 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.00 | 2.62 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000 | 1.000 |
| | • | |





| | , | <u>, </u> |
|---|--------------------------------|--|
| WTOL | 62 °C | 62 °C |
| Poff | 11 W | 11 W |
| РТО | 11 W | 11 W |
| PSB | 11 W | 11 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 5419 kWh | 6437 kWh |
| Cdh Tj = -15 °C | 1.00 | 1.00 |
| Supplementary Heater: Type of energy input Supplementary Heater: PSUP Annual energy consumption Qhe | Electricity 0.00 kW 5419 kWh | Electricity 0.00 kW 6437 kWh |

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 | |
| 212 % | 154 % | |
| 12.54 kW | 11.32 kW | |
| 5.49 | 4.05 | |
| -10 °C | -10 °C | |
| | Low temperature 212 % 12.54 kW 5.49 | |





| This information was genera | | |
|---|----------|----------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7° C | 11.12 kW | 10.14 kW |
| $COPTj = -7^{\circ}C$ | 4.33 | 2.9 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = $+2$ °C | 7.12 kW | 6.21 kW |
| COP Tj = +2°C | 5.61 | 4.23 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = $+7^{\circ}$ C | 4.60 kW | 3.72 kW |
| $COP Tj = +7^{\circ}C$ | 6.23 | 4.88 |
| Cdh Tj = +7 °C | 0.98 | 0.99 |
| Pdh Tj = 12°C | 3.92 kW | 3.72 kW |
| COP Tj = 12°C | 6.15 | 5.1 |
| Cdh Tj = +12 °C | 0.98 | 0.98 |
| Pdh Tj = Tbiv | 12.54 kW | 11.32 kW |
| COP Tj = Tbiv | 4 | 2.62 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.54 kW | 11.32 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.00 | 2.62 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 62 °C | 62 °C |
| Poff | 11 W | 11 W |
| РТО | 11 W | 11 W |
| | - | • |



| This information was genera | ted by the HP KEYMAI | RK database on 23 | Jun 2022 |
|-----------------------------|----------------------|-------------------|----------|
| | | | |

| PSB | 11 W | 11 W |
|--|-------------|-------------|
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4721 kWh | 5773 kWh |

Domestic Hot Water (DHW)

Warmer Climate

| EN 16147 | |
|---------------------------------|------------|
| | |
| Declared load profile | XL |
| Efficiency ηDHW | 129 % |
| СОР | 3.11 |
| Heating up time | 1:28 h:min |
| Standby power input | 41.2 W |
| Reference hot water temperature | 47.3 °C |
| Mixed water at 40°C | 208 I |

Colder Climate



| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 129 % | |
| СОР | 3.11 | |
| Heating up time | 1:28 h:min | |
| Standby power input | 41.2 W | |
| Reference hot water temperature | 47.3 °C | |
| Mixed water at 40°C | 208 | |

Average Climate

| EN 16147 | | |
|---------------------------------|------------|--|
| | | |
| Declared load profile | XL | |
| Efficiency ηDHW | 129 % | |
| СОР | 3.11 | |
| Heating up time | 1:28 h:min | |
| Standby power input | 41.2 W | |
| Reference hot water temperature | 47.3 °C | |
| Mixed water at 40°C | 208 | |



Model: CS7800i LW 12 (+F)

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | CS7800i LW 12 (+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 | 12.54 kW | 11.32 kW | |
| El input | 3.14 kW | 4.32 kW | |
| СОР | 4.00 | 2.62 | |

| 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 | 41 dB(A) | 41 dB(A) |

| EN 14825 | | |
|-----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 206 % | 158 % |
| Prated | 12.54 kW | 11.32 kW |
| SCOP | 5.34 | 4.15 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 12.54 kW | 11.32 kW |
| COP Tj = +2°C | 4 | 2.62 |
| Cdh Tj = +2 °C | 1.00 | 1.00 |
| Pdh Tj = +7°C | 7.89 kW | 7.27 kW |
| COP Tj = +7°C | 5.21 | 3.71 |
| Cdh Tj = +7 °C | 0.99 | 0.99 |
| Pdh Tj = 12°C | 3.87 kW | 3.71 kW |
| COP Tj = 12°C | 6.18 | 5.07 |
| Cdh Tj = +12 °C | 0.98 | 0.98 |
| Pdh Tj = Tbiv | 12.54 kW | 11.32 kW |

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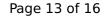


| 4 | 2.62 |
|-------------|---|
| 12.54 kW | 11.32 kW |
| 4 | 2.62 |
| 1.00 | 1.00 |
| 62 °C | 62 °C |
| 11 W | 11 W |
| 11 W | 11 W |
| 11 W | 11 W |
| 0 W | 0 W |
| Electricity | Electricity |
| 0.00 kW | 0 kW |
| 3135 kWh | 3648 kWh |
| | 12.54 kW 4 1.00 62 °C 11 W 11 W 0 W Electricity 0.00 kW |

Colder Climate

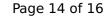
| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 41 dB(A) | 41 dB(A) |

| EN 14825 | | |
|------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 220 % | 165 % |
| | | |





| This information was generated by the HF KLIMAKK database on 25 Juli 2022 | | | |
|---|----------|-------------|--|
| Prated | 12.54 kW | 11.32 kW | |
| SCOP | 5.70 | 4.34 | |
| Tbiv | -22 °C | -22 °C | |
| TOL | -22 °C | -22 °C | |
| Pdh Tj = -7° C | 7.99 kW | 7.02 kW | |
| $COPTj = -7^{\circ}C$ | 5.43 | 3.94 | |
| Cdh Tj = -7 °C | 0.990 | 0.990 | |
| Pdh Tj = +2°C | 4.54 kW | 4.31 kW | |
| COP Tj = +2°C | 6.30 | 4.87 | |
| Cdh Tj = +2 °C | 0.980 | 0.990 | |
| Pdh Tj = $+7^{\circ}$ C | 3.89 kW | 3.72 kW | |
| $COPTj = +7^{\circ}C$ | 6.35 | 5.15 | |
| Cdh Tj = +7 °C | 0.980 | 0.980 | |
| Pdh Tj = 12°C | 3.87 kW | 3.73 kW | |
| COP Tj = 12°C | 5.99 | 5.31 | |
| Cdh Tj = +12 °C | 0.980 | 0.980 | |
| Pdh Tj = Tbiv | 12.53 kW | 11.32 kW | |
| COP Tj = Tbiv | 4.00 | 2.62 | |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.54 kW | 11.32 kW | |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.00 | 2.62 | |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.000 | 1.000 | |
| | | | |



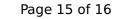


| WTOL | 62 °C | 62 °C |
|--|-------------|-------------|
| Poff | 11 W | 11 W |
| РТО | 11 W | 11 W |
| PSB | 11 W | 11 W |
| PCK | o w | o w |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 5419 kWh | 6437 kWh |
| Cdh Tj = -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} | 212 % | 154 % |
| Prated | 12.54 kW | 11.32 kW |
| SCOP | 5.49 | 4.05 |
| Tbiv | -10 °C | -10 °C |





| This information was gener | ated by the HI KETMA | NK database on 23 Juli 2022 |
|---|----------------------|-----------------------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7° C | 11.12 kW | 10.14 kW |
| $COP Tj = -7^{\circ}C$ | 4.33 | 2.9 |
| Cdh Tj = -7 °C | 1.00 | 1.00 |
| Pdh Tj = $+2$ °C | 7.12 kW | 6.21 kW |
| COP Tj = +2°C | 5.61 | 4.23 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = $+7^{\circ}$ C | 4.60 kW | 3.72 kW |
| $COPTj = +7^{\circ}C$ | 6.23 | 4.88 |
| Cdh Tj = $+7$ °C | 0.98 | 0.99 |
| Pdh Tj = 12°C | 3.92 kW | 3.72 kW |
| COP Tj = 12°C | 6.15 | 5.1 |
| Cdh Tj = +12 °C | 0.98 | 0.98 |
| Pdh Tj = Tbiv | 12.54 kW | 11.32 kW |
| COP Tj = Tbiv | 4 | 2.62 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh | 12.54 kW | 11.32 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.00 | 2.62 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 1.00 | 1.00 |
| WTOL | 62 °C | 62 °C |
| Poff | 11 W | 11 W |
| РТО | 11 W | 11 W |
| | • | |



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| PSB | 11 W | 11 W |
|--|-------------|-------------|
| PCK | o w | o w |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4721 kWh | 5773 kWh |