

Page 1 of 15

This information was generated by the HP KEYMARK database on 18 Mar 2022

Login

| Summary of | Buderus Logatherm WSW196i.2/186 -12 | Reg. No. | 011-1W0435 |
|---------------------|---|----------|------------|
| Certificate Holder | | | |
| Name | Bosch Thermotechnik GmbH (Buderus) | | |
| Address | Sophienstraße 30-32 | Zip | 35576 |
| City | Wetzlar | Country | Germany |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | |
| Subtype title | Buderus Logatherm WSW196i.2/186 -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: WSW196i.2-12 T180 (+W) / 186-12 T180

| Configure model | | | |
|-------------------------------------|--------------------------------------|--|--|
| Model name | WSW196i.2-12 T180 (+W) / 186-12 T180 | | |
| 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 | 12.53 kW | 11.31 kW | |
| El input | 3.11 kW | 4.30 kW | |
| СОР | 4.02 | 2.63 | |

| 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



| 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} | 214 % | 159 % | |
| Prated | 12.53 kW | 11.31 kW | |
| SCOP | 5.55 | 4.17 | |
| Tbiv | -10 °C | -10 °C | |
| TOL | -10 °C | -10 °C | |
| Pdh Tj = -7°C | 11.11 kW | 10.14 kW | |
| COP Tj = -7°C | 4.36 | 2.91 | |
| Pdh Tj = +2°C | 7.10 kW | 6.21 kW | |
| COP Tj = +2°C | 5.67 | 4.28 | |
| Pdh Tj = +7°C | 4.60 kW | 3.71 kW | |
| COP Tj = +7°C | 6.35 | 4.97 | |
| Pdh Tj = 12°C | 3.92 kW | 3.72 kW | |
| COP Tj = 12°C | 6.37 | 5.20 | |
| Pdh Tj = Tbiv | 12.53 kW | 11.31 kW | |
| COP Tj = Tbiv | 4.02 | 2.63 | |





| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.53 kW | 11.31 kW |
|---|-------------|-------------|
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.02 | 2.63 |
| WTOL | 71 °C | 71 °C |
| Poff | 14 W | 14 W |
| РТО | 14 W | 14 W |
| PSB | 14 W | 14 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 | 4660 kWh | 5606 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 | 226 % | 168 % |
| Prated | 12.53 kW | 11.31 kW |
| SCOP | 5.85 | 4.39 |





| This information was genera | | |
|---|-------------|-------------|
| Tbiv | -22 °C | -22 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 7.98 kW | 7.02 kW |
| $COPTj = -7^{\circ}C$ | 5.50 | 3.98 |
| Pdh Tj = +2°C | 4.53 kW | 4.30 kW |
| COP Tj = +2°C | 6.46 | 4.95 |
| Pdh Tj = $+7^{\circ}$ C | 3.89 kW | 3.72 kW |
| COP Tj = +7°C | 6.56 | 5.28 |
| Pdh Tj = 12°C | 3.87 kW | 3.73 kW |
| COP Tj = 12°C | 6.17 | 5.40 |
| Pdh Tj = Tbiv | 12.53 kW | 11.31 kW |
| COP Tj = Tbiv | 4.02 | 2.63 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.53 kW | 11.31 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.02 | 2.63 |
| WTOL | 71 °C | 71 °C |
| Poff | 14 W | 14 W |
| РТО | 14 W | 14 W |
| PSB | 14 W | 14 W |
| РСК | 0 W | o w |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| | | |



| Annual energy consumption Qhe | 5276 kWh | 6350 kWh | |
|-------------------------------|----------|----------|--|
| | | | |

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} | 214 % | 159 % |
| Prated | 12.53 kW | 11.31 kW |
| SCOP | 5.55 | 4.18 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = $+2^{\circ}$ C | 12.53 kW | 11.31 kW |
| COP Tj = +2°C | 4.02 | 2.63 |
| Pdh Tj = $+7^{\circ}$ C | 7.88 kW | 7.26 kW |
| $COP Tj = +7^{\circ}C$ | 5.27 | 3.73 |
| Pdh Tj = 12°C | 3.86 kW | 3.71 kW |
| COP Tj = 12°C | 6.38 | 5.17 |
| Pdh Tj = Tbiv | 12.53 kW | 11.31 kW |
| | | |





| COP Tj = Tbiv | 4.02 | 2.63 |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.53 kW | 11.31 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.02 | 2.63 |
| WTOL | 71 °C | 71 °C |
| Poff | 14 W | 14 W |
| PTO | 14 W | 14 W |
| PSB | 14 W | 14 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 | 3016 kWh | 3618 kWh |

Domestic Hot Water (DHW)

Average Climate



| EN 16147 | | |
|---------------------------------|-------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 129 % | |
| СОР | 3.11 | |
| Heating up time | 01:28 h:min | |
| Standby power input | 41.2 W | |
| Reference hot water temperature | 47.3 °C | |
| Mixed water at 40°C | 208 | |

Colder Climate

| EN 16147 | | |
|---------------------------------|-------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 129 % | |
| СОР | 3.11 | |
| Heating up time | 01:28 h:min | |
| Standby power input | 41.2 W | |
| Reference hot water temperature | 47.3 °C | |
| Mixed water at 40°C | 208 | |

Warmer Climate



| EN 16147 | |
|---------------------------------|-------------|
| Declared load profile | XL |
| Efficiency ηDHW | 129 % |
| СОР | 3.11 |
| Heating up time | 01:28 h:min |
| Standby power input | 41.2 W |
| Reference hot water temperature | 47.3 °C |
| Mixed water at 40°C | 208 |



Model: WSW196i.2-12 (+W) / 186-12

| Configure model | | |
|---------------------------------------|---------------------------------|--|
| Model name WSW196i.2-12 (+W) / 186-12 | | |
| 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 | 12.53 kW | 11.31 kW |
| El input | 3.11 kW | 4.30 kW |
| СОР | 4.02 | 2.63 |

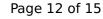
| EN 14511-4 | | |
|--|--------|--|
| Shutting off the heat transfer medium flow | passed | |
| Complete power supply failure | passed | |
| Defrost test | passed | |
| Starting and operating test | passed | |

Average Climate



| 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} | 214 % | 159 % |
| Prated | 12.53 kW | 11.31 kW |
| SCOP | 5.55 | 4.17 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.11 kW | 10.14 kW |
| COP Tj = -7°C | 4.36 | 2.91 |
| Pdh Tj = +2°C | 7.10 kW | 6.21 kW |
| COP Tj = +2°C | 5.67 | 4.28 |
| Pdh Tj = +7°C | 4.60 kW | 3.71 kW |
| COP Tj = +7°C | 6.35 | 4.97 |
| Pdh Tj = 12°C | 3.92 kW | 3.72 kW |
| COP Tj = 12°C | 6.37 | 5.20 |
| Pdh Tj = Tbiv | 12.53 kW | 11.31 kW |
| COP Tj = Tbiv | 4.02 | 2.63 |



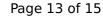


| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.53 kW | 11.31 kW |
|---|-------------|-------------|
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.02 | 2.63 |
| WTOL | 71 °C | 71 °C |
| Poff | 14 W | 14 W |
| РТО | 14 W | 14 W |
| PSB | 14 W | 14 W |
| PCK | o w | o w |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4660 kWh | 5606 kWh |

Colder Climate

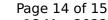
| EN 12102-1 | | |
|--------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 41 dB(A) | 41 dB(A) |

| EN 14825 | | |
|----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η _s | 226 % | 168 % |
| Prated | 12.53 kW | 11.31 kW |
| SCOP | 5.85 | 4.39 |





| | ted by the fit RETINA | TR database on 10 Mai 2022 |
|---|-----------------------|----------------------------|
| Tbiv | -22 °C | -22 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 7.98 kW | 7.02 kW |
| $COPTj = -7^{\circ}C$ | 5.50 | 3.98 |
| Pdh Tj = +2°C | 4.53 kW | 4.30 kW |
| $COPTj = +2^{\circ}C$ | 6.46 | 4.95 |
| Pdh Tj = $+7^{\circ}$ C | 3.89 kW | 3.72 kW |
| $COPTj = +7^{\circ}C$ | 6.56 | 5.28 |
| Pdh Tj = 12°C | 3.87 kW | 3.73 kW |
| COP Tj = 12°C | 6.17 | 5.40 |
| Pdh Tj = Tbiv | 12.53 kW | 11.31 kW |
| COP Tj = Tbiv | 4.02 | 2.63 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.53 kW | 11.31 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.02 | 2.63 |
| WTOL | 71 °C | 71 °C |
| Poff | 14 W | 14 W |
| РТО | 14 W | 14 W |
| PSB | 14 W | 14 W |
| PCK | 0 W | o w |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| | | |





|--|

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} | 214 % | 159 % |
| Prated | 12.53 kW | 11.31 kW |
| SCOP | 5.55 | 4.18 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = $+2^{\circ}$ C | 12.53 kW | 11.31 kW |
| COP Tj = +2°C | 4.02 | 2.63 |
| Pdh Tj = $+7^{\circ}$ C | 7.88 kW | 7.26 kW |
| $COP Tj = +7^{\circ}C$ | 5.27 | 3.73 |
| Pdh Tj = 12°C | 3.86 kW | 3.71 kW |
| COP Tj = 12°C | 6.38 | 5.17 |
| Pdh Tj = Tbiv | 12.53 kW | 11.31 kW |
| | | |



$$\operatorname{\textit{Page}}\ 15$$ of 15 This information was generated by the HP KEYMARK database on 18 Mar 2022

| COP Tj = Tbiv | 4.02 | 2.63 |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.53 kW | 11.31 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.02 | 2.63 |
| WTOL | 71 °C | 71 °C |
| Poff | 14 W | 14 W |
| РТО | 14 W | 14 W |
| PSB | 14 W | 14 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 | 3016 kWh | 3618 kWh |