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Login

| Summary of | Vitocal 3xx-G C12 | Reg. No. | 011-1W0292 |
|---------------------|---|----------|------------|
| Certificate Holder | | | |
| Name | Viessmann Wärmepumpen GmbH | | |
| Address | Viessmannstr. 1 | Zip | 35107 |
| City | Allendorf/Eder | Country | Germany |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | |
| Subtype title | Vitocal 3xx-G C12 | | |
| Heat Pump Type | Brine/Water | | |
| Refrigerant | R410A | | |
| Mass of Refrigerant | 2.3 kg | | |
| Certification Date | 11.07.2019 | | |



Model: VITOCAL 300-G BWC 301.C12

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | VITOCAL 300-G BWC 301.C12 | |
| 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 | 5.31 kW | 4.74 kW | |
| El input | 1.11 kW | 1.68 kW | |
| СОР | 4.72 | 2.82 | |

| 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} | 201 % | 154 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.09 | 4.06 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 11.48 kW | 10.83 kW |
| COP Tj = +2°C | 4.08 | 2.91 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = +7°C | 10.97 kW | 7.97 kW |
| COP Tj = +7°C | 4.51 | 3.53 |
| Cdh Tj = +7 °C | 0.99 | 0.99 |
| Pdh Tj = 12°C | 6.74 kW | 3.50 kW |
| COP Tj = 12°C | 5.89 | 4.80 |
| Cdh Tj = +12 °C | 0.99 | 0.98 |
| Pdh Tj = Tbiv | 11.48 kW | 10.83 kW |

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| 1 | |
|-------------|---|
| 4.08 | 2.91 |
| 11.48 kW | 10.83 kW |
| 4.08 | 2.91 |
| 0.99 | 0.99 |
| 65 °C | 65 °C |
| 0 W | 0 W |
| 0 W | 0 W |
| 12 W | 12 W |
| 0 W | 0 W |
| Electricity | Electricity |
| 0.52 kW | 0.00 kW |
| 3150 kWh | 3951 kWh |
| | 11.48 kW 4.08 0.99 65 °C 0 W 0 W 12 W 0 W Electricity 0.52 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} | 211 % | 157 % |
| | I | |





| Prated | 12.00 kW | 12.00 kW |
|---|----------|----------|
| SCOP | 5.48 | 4.12 |
| Tbiv | -22 °C | -22 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 7.70 kW | 7.62 kW |
| COP Tj = -7°C | 5.18 | 3.71 |
| Cdh Tj = -7 °C | 0.99 | 0.99 |
| Pdh Tj = $+2$ °C | 4.56 kW | 4.52 kW |
| COP Tj = +2°C | 6.03 | 4.47 |
| Cdh Tj = +2 °C | 0.98 | 0.99 |
| Pdh Tj = $+7^{\circ}$ C | 3.02 kW | 3.02 kW |
| $COP Tj = +7^{\circ}C$ | 6.17 | 4.90 |
| Cdh Tj = $+7$ °C | 0.97 | 0.98 |
| Pdh Tj = 12°C | 2.43 kW | 2.40 kW |
| COP Tj = 12°C | 5.78 | 5.16 |
| Cdh Tj = +12 °C | 0.95 | 0.97 |
| Pdh Tj = Tbiv | 11.45 kW | 10.86 kW |
| COP Tj = Tbiv | 4.09 | 2.92 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.45 kW | 10.86 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |



| WTOL | 65 °C | 65 °C |
|--|-------------|-------------|
| Poff | o w | 0 W |
| РТО | o w | 0 W |
| PSB | 12 W | 12 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.55 kW | 0.14 kW |
| Annual energy consumption Qhe | 5324 kWh | 7182 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 9.70 | 9.35 |
| COP Tj = -15°C (if TOL $<$ -20°C) | 4.60 | 3.29 |
| Cdh Tj = -15 °C | 0.99 | 0.99 |

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 |
| Pdesignh | 12.00 kW | | |
| ης | 205 % | 151 % | |





| | 1 | THE TIP KLIMAKK |
|---|----------|-----------------|
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.32 | 3.97 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.07 kW | 10.86 kW |
| COP Tj = -7°C | 4.26 | 3.05 |
| Cdh Tj = -7 °C | 0.99 | 0.99 |
| Pdh Tj = +2°C | 6.75 kW | 6.66 kW |
| $COP Tj = +2^{\circ}C$ | 5.28 | 3.91 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = +7°C | 4.56 kW | 4.41 kW |
| $COP Tj = +7^{\circ}C$ | 6.03 | 4.57 |
| Cdh Tj = +7 °C | 0.98 | 0.98 |
| Pdh Tj = 12°C | 2.46 kW | 2.37 kW |
| COP Tj = 12°C | 6.03 | 4.93 |
| Cdh Tj = +12 °C | 0.96 | 0.97 |
| Pdh Tj = Tbiv | 11.49 kW | 10.86 kW |
| COP Tj = Tbiv | 4.09 | 2.92 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.49 kW | 10.86 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 |





| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
|---|-------------|-------------|
| WTOL | 65 °C | 65 °C |
| Poff | o w | o w |
| РТО | o w | o w |
| PSB | 12 W | 12 W |
| PCK | 0 W | o w |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.51 kW | 1.14 kW |
| Backup Heater | 0.00 kW | |
| Annual energy consumption Qhe | 4661 kWh | 6242 kWh |



Model: VITOCAL 300-G BWC 301.C12 SC

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | VITOCAL 300-G BWC 301.C12 SC | |
| 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 | 5.31 kW | 4.74 kW | | |
| El input | 1.11 kW | 1.68 kW | | |
| СОР | 4.72 | 2.82 | | |

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

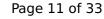
Warmer Climate



| 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} | 201 % | 154 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.09 | 4.06 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 11.48 kW | 10.83 kW |
| COP Tj = +2°C | 4.08 | 2.91 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = +7°C | 10.97 kW | 7.97 kW |
| COP Tj = +7°C | 4.51 | 3.53 |
| Cdh Tj = +7 °C | 0.99 | 0.99 |
| Pdh Tj = 12°C | 6.74 kW | 3.50 kW |
| COP Tj = 12°C | 5.89 | 4.80 |
| Cdh Tj = +12 °C | 0.99 | 0.98 |
| Pdh Tj = Tbiv | 11.48 kW | 10.83 kW |

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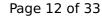


| 1 | |
|-------------|---|
| 4.08 | 2.91 |
| 11.48 kW | 10.83 kW |
| 4.08 | 2.91 |
| 0.99 | 0.99 |
| 65 °C | 65 °C |
| 0 W | 0 W |
| 0 W | 0 W |
| 12 W | 12 W |
| 0 W | 0 W |
| Electricity | Electricity |
| 0.52 kW | 0.00 kW |
| 3150 kWh | 3951 kWh |
| | 11.48 kW 4.08 0.99 65 °C 0 W 0 W 12 W 0 W Electricity 0.52 kW |

Colder Climate

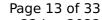
| EN 12102-1 | | | |
|------------------------------------|----------|----------|--|
| Low temperature Medium temperature | | | |
| Sound power level indoor | 41 dB(A) | 41 dB(A) | |

| EN 14825 | | |
|------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{S} | 211 % | 157 % |
| | | |





| This information was generated by the HF KETMAKK database on 22 Juli 2022 | | | |
|---|----------|----------|--|
| Prated | 12.00 kW | 12.00 kW | |
| SCOP | 5.48 | 4.12 | |
| Tbiv | -22 °C | -22 °C | |
| TOL | -22 °C | -22 °C | |
| Pdh Tj = -7°C | 7.70 kW | 7.62 kW | |
| $COP Tj = -7^{\circ}C$ | 5.18 | 3.71 | |
| Cdh Tj = -7 °C | 0.99 | 0.99 | |
| Pdh Tj = +2°C | 4.56 kW | 4.52 kW | |
| COP Tj = +2°C | 6.03 | 4.47 | |
| Cdh Tj = +2 °C | 0.98 | 0.99 | |
| Pdh Tj = $+7^{\circ}$ C | 3.02 kW | 3.02 kW | |
| $COPTj = +7^{\circ}C$ | 6.17 | 4.90 | |
| Cdh Tj = +7 °C | 0.97 | 0.98 | |
| Pdh Tj = 12°C | 2.43 kW | 2.40 kW | |
| COP Tj = 12°C | 5.78 | 5.16 | |
| Cdh Tj = +12 °C | 0.95 | 0.97 | |
| Pdh Tj = Tbiv | 11.45 kW | 10.86 kW | |
| COP Tj = Tbiv | 4.09 | 2.92 | |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.45 kW | 10.86 kW | |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 | |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 | |
| | • | • | |





| WTOL | 65 °C | 65 °C |
|--|-------------|-------------|
| Poff | o w | 0 W |
| РТО | 0 W | 0 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.55 kW | 0.14 kW |
| Annual energy consumption Qhe | 5324 kWh | 7182 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 9.70 | 9.35 |
| COP Tj = -15°C (if TOL $<$ -20°C) | 4.60 | 3.29 |
| Cdh Tj = -15 °C | 0.99 | 0.99 |

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 |
| Pdesignh | 12.00 kW | | |
| η_{s} | 205 % | 151 % | |





| | 1 | y the HE KLIMAKK |
|---|----------|------------------|
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.32 | 3.97 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.07 kW | 10.86 kW |
| COP Tj = -7°C | 4.26 | 3.05 |
| Cdh Tj = -7 °C | 0.99 | 0.99 |
| Pdh Tj = +2°C | 6.75 kW | 6.66 kW |
| COP Tj = +2°C | 5.28 | 3.91 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = +7°C | 4.56 kW | 4.41 kW |
| $COP Tj = +7^{\circ}C$ | 6.03 | 4.57 |
| Cdh Tj = +7 °C | 0.98 | 0.98 |
| Pdh Tj = 12°C | 2.46 kW | 2.37 kW |
| COP Tj = 12°C | 6.03 | 4.93 |
| Cdh Tj = +12 °C | 0.96 | 0.97 |
| Pdh Tj = Tbiv | 11.49 kW | 10.86 kW |
| COP Tj = Tbiv | 4.09 | 2.92 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.49 kW | 10.86 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 |





| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
|---|-------------|-------------|
| WTOL | 65 °C | 65 °C |
| Poff | o w | o w |
| РТО | o w | o w |
| PSB | 12 W | 12 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.51 kW | 1.14 kW |
| Backup Heater | 0.00 kW | |
| Annual energy consumption Qhe | 4661 kWh | 6242 kWh |
| | | |



Model: VITOCAL 333-G BWT 331.C12

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | VITOCAL 333-G BWT 331.C12 | |
| 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 | Yes | |

Heating

| EN 14511-2 | | | |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature | | | |
| Heat output | 5.31 kW | 4.74 kW | |
| El input | 1.11 kW | 1.68 kW | |
| СОР | 4.72 | 2.82 | |

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

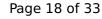
Warmer Climate



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

| EN 14825 | | |
|-----------------|---|--|
| Low temperature | Medium temperature | |
| 201 % | 154 % | |
| 12.00 kW | 12.00 kW | |
| 5.09 | 4.06 | |
| 2 °C | 2 °C | |
| 2 °C | 2 °C | |
| 11.48 kW | 10.83 kW | |
| 4.08 | 2.91 | |
| 0.99 | 0.99 | |
| 10.97 kW | 7.97 kW | |
| 4.51 | 3.53 | |
| 0.99 | 0.99 | |
| 6.74 kW | 3.50 kW | |
| 5.89 | 4.80 | |
| 0.99 | 0.98 | |
| 11.48 kW | 10.83 kW | |
| | Low temperature 201 % 12.00 kW 5.09 2 °C 2 °C 11.48 kW 4.08 0.99 10.97 kW 4.51 0.99 6.74 kW 5.89 0.99 | |

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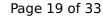


| COP Tj = Tbiv | 4.08 | 2.91 |
|---|-------------|-------------|
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.48 kW | 10.83 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.08 | 2.91 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
| WTOL | 65 °C | 65 °C |
| Poff | 0 W | 0 W |
| PTO | 0 W | 0 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.52 kW | 0.00 kW |
| Annual energy consumption Qhe | 3150 kWh | 3951 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 % | 157 % |
| | I | |





| Prated | 12.00 kW | 12.00 kW |
|---|----------|----------|
| SCOP | 5.48 | 4.12 |
| Tbiv | -22 °C | -22 °C |
| TOL | -22 °C | -22 °C |
| Pdh Tj = -7°C | 7.70 kW | 7.62 kW |
| $COP Tj = -7^{\circ}C$ | 5.18 | 3.71 |
| Cdh Tj = -7 °C | 0.99 | 0.99 |
| Pdh Tj = $+2$ °C | 4.56 kW | 4.52 kW |
| $COP Tj = +2^{\circ}C$ | 6.03 | 4.47 |
| Cdh Tj = +2 °C | 0.98 | 0.99 |
| Pdh Tj = $+7^{\circ}$ C | 3.02 kW | 3.02 kW |
| $COP Tj = +7^{\circ}C$ | 6.17 | 4.90 |
| Cdh Tj = $+7$ °C | 0.97 | 0.98 |
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| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.45 kW | 10.86 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |



| WTOL | 65 °C | 65 °C |
|--|-------------|-------------|
| Poff | o w | 0 W |
| РТО | o w | 0 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.55 kW | 0.14 kW |
| Annual energy consumption Qhe | 5324 kWh | 7182 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 9.70 | 9.35 |
| COP Tj = -15°C (if TOL $<$ -20°C) | 4.60 | 3.29 |
| Cdh Tj = -15 °C | 0.99 | 0.99 |

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 |
| Pdesignh | 12.00 kW | | |
| η_{s} | 205 % | 151 % | |





| | 90 | ,, |
|---|----------|----------|
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.32 | 3.97 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.07 kW | 10.86 kW |
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| $COP Tj = +7^{\circ}C$ | 6.03 | 4.57 |
| Cdh Tj = +7 °C | 0.98 | 0.98 |
| Pdh Tj = 12°C | 2.46 kW | 2.37 kW |
| COP Tj = 12°C | 6.03 | 4.93 |
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| Pdh Tj = Tbiv | 11.49 kW | 10.86 kW |
| COP Tj = Tbiv | 4.09 | 2.92 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.49 kW | 10.86 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 |
| | | |





| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 |
|--|-------------|-------------|
| WTOL | 65 °C | 65 °C |
| Poff | o w | 0 W |
| РТО | o w | 0 W |
| PSB | 12 W | 12 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.51 kW | 1.14 kW |
| Backup Heater | 0.00 kW | |
| Annual energy consumption Qhe | 4661 kWh | 6242 kWh |

Domestic Hot Water (DHW)

Warmer Climate



| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 131 % | |
| СОР | 3.16 | |
| Heating up time | 1:17 h:min | |
| Standby power input | 51.0 W | |
| Reference hot water temperature | 54.9 °C | |
| Mixed water at 40°C | 315 | |

Colder Climate

| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 131 % | |
| СОР | 3.16 | |
| Heating up time | 1:17 h:min | |
| Standby power input | 51.0 W | |
| Reference hot water temperature | 54.9 °C | |
| Mixed water at 40°C | 315 | |

Average Climate



| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 131 % | |
| СОР | 3.16 | |
| Heating up time | 1:17 h:min | |
| Standby power input | 51.0 W | |
| Reference hot water temperature | 54.9 °C | |
| Mixed water at 40°C | 315 I | |



Model: VITOCAL 333-G BWT 331.C12 SC

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | VITOCAL 333-G BWT 331.C12 SC | |
| 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 | Yes | |

Heating

| EN 14511-2 | | | |
|-------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Heat output | 5.31 kW | 4.74 kW | |
| El input | 1.11 kW | 1.68 kW | |
| СОР | 4.72 | 2.82 | |

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

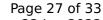
Warmer Climate



| 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} | 201 % | 154 % |
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.09 | 4.06 |
| Tbiv | 2 °C | 2 °C |
| TOL | 2 °C | 2 °C |
| Pdh Tj = +2°C | 11.48 kW | 10.83 kW |
| COP Tj = +2°C | 4.08 | 2.91 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = +7°C | 10.97 kW | 7.97 kW |
| COP Tj = +7°C | 4.51 | 3.53 |
| Cdh Tj = +7 °C | 0.99 | 0.99 |
| Pdh Tj = 12°C | 6.74 kW | 3.50 kW |
| COP Tj = 12°C | 5.89 | 4.80 |
| Cdh Tj = +12 °C | 0.99 | 0.98 |
| Pdh Tj = Tbiv | 11.48 kW | 10.83 kW |

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| 4.08 | 2.91 |
|-------------|---|
| 11.48 kW | 10.83 kW |
| 4.08 | 2.91 |
| 0.99 | 0.99 |
| 65 °C | 65 °C |
| 0 W | 0 W |
| o w | 0 W |
| 12 W | 12 W |
| 0 W | 0 W |
| Electricity | Electricity |
| 0.52 kW | 0.00 kW |
| 3150 kWh | 3951 kWh |
| | 11.48 kW 4.08 0.99 65 °C 0 W 0 W 12 W 0 W Electricity 0.52 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} | 211 % | 157 % |
| | I | |





| | | This information was generated by the HF KLIMAKK database on 22 juli 2022 | | | | |
|---|----------|---|--|--|--|--|
| Prated | 12.00 kW | 12.00 kW | | | | |
| SCOP | 5.48 | 4.12 | | | | |
| Tbiv | -22 °C | -22 °C | | | | |
| TOL | -22 °C | -22 °C | | | | |
| Pdh Tj = -7°C | 7.70 kW | 7.62 kW | | | | |
| $COP Tj = -7^{\circ}C$ | 5.18 | 3.71 | | | | |
| Cdh Tj = -7 °C | 0.99 | 0.99 | | | | |
| Pdh Tj = +2°C | 4.56 kW | 4.52 kW | | | | |
| COP Tj = +2°C | 6.03 | 4.47 | | | | |
| Cdh Tj = +2 °C | 0.98 | 0.99 | | | | |
| Pdh Tj = $+7^{\circ}$ C | 3.02 kW | 3.02 kW | | | | |
| $COP Tj = +7^{\circ}C$ | 6.17 | 4.90 | | | | |
| Cdh Tj = +7 °C | 0.97 | 0.98 | | | | |
| Pdh Tj = 12°C | 2.43 kW | 2.40 kW | | | | |
| COP Tj = 12°C | 5.78 | 5.16 | | | | |
| Cdh Tj = +12 °C | 0.95 | 0.97 | | | | |
| Pdh Tj = Tbiv | 11.45 kW | 10.86 kW | | | | |
| COP Tj = Tbiv | 4.09 | 2.92 | | | | |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.45 kW | 10.86 kW | | | | |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 | | | | |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 | | | | |
| | • | • | | | | |

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| WTOL | 65 °C | 65 °C |
|--|-------------|-------------|
| Poff | o w | 0 W |
| РТО | o w | 0 W |
| PSB | 12 W | 12 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.55 kW | 0.14 kW |
| Annual energy consumption Qhe | 5324 kWh | 7182 kWh |
| Pdh Tj = -15°C (if TOL<-20°C) | 9.70 | 9.35 |
| COP Tj = -15°C (if TOL $<$ -20°C) | 4.60 | 3.29 |
| Cdh Tj = -15 °C | 0.99 | 0.99 |

Average Climate

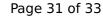
| EN 12102-1 | | | |
|--------------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| Sound power level indoor | 41 dB(A) | 41 dB(A) | |

| EN 14825 | | | |
|------------|----------|--------------------|-----------------------|
| | | Low temperature | Medium temperature |
| Pdesignh | 12.00 kW | | - |
| η_{s} | 205 % | 151 % | |





| | | y ene in Remindre |
|---|----------|-------------------|
| Prated | 12.00 kW | 12.00 kW |
| SCOP | 5.32 | 3.97 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 11.07 kW | 10.86 kW |
| COP Tj = -7°C | 4.26 | 3.05 |
| Cdh Tj = -7 °C | 0.99 | 0.99 |
| Pdh Tj = +2°C | 6.75 kW | 6.66 kW |
| COP Tj = +2°C | 5.28 | 3.91 |
| Cdh Tj = +2 °C | 0.99 | 0.99 |
| Pdh Tj = +7°C | 4.56 kW | 4.41 kW |
| $COP Tj = +7^{\circ}C$ | 6.03 | 4.57 |
| Cdh Tj = +7 °C | 0.98 | 0.98 |
| Pdh Tj = 12°C | 2.46 kW | 2.37 kW |
| COP Tj = 12°C | 6.03 | 4.93 |
| Cdh Tj = +12 °C | 0.96 | 0.97 |
| Pdh Tj = Tbiv | 11.49 kW | 10.86 kW |
| COP Tj = Tbiv | 4.09 | 2.92 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.49 kW | 10.86 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 4.09 | 2.92 |





| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99 | 0.99 | |
|---|-------------|-------------|--|
| WTOL | 65 °C | 65 °C | |
| Poff | o w | o w | |
| PTO | o w | o w | |
| PSB | 12 W | 12 W | |
| PCK | o w | 0 W | |
| Supplementary Heater: Type of energy input | Electricity | Electricity | |
| Supplementary Heater: PSUP | 0.51 kW | 1.14 kW | |
| Backup Heater | 0.00 kW | | |
| Annual energy consumption Qhe | 4661 kWh | 6242 kWh | |

Domestic Hot Water (DHW)

Warmer Climate

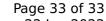


| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | XL | |
| Efficiency ηDHW | 131 % | |
| СОР | 3.16 | |
| Heating up time | 1:17 h:min | |
| Standby power input | 51.0 W | |
| Reference hot water temperature | 54.9 °C | |
| Mixed water at 40°C | 315 | |

Colder Climate

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| Declared load profile | XL | |
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| Heating up time | 1:17 h:min | |
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Average Climate





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