## Subtype Acond Grandis-L

| | |
|---|---|
| Certificate Holder | Acond a.s. |
| Address | Štěrboholská 1434/102a |
| ZIP | 102 00 |
| City | Hostivař, Praha |
| Country | CZ |
| Certification Body | SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise) |
| Subtype title | Acond Grandis-L |
| Registration number | 037-0154-24 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R290 |
| Mass of Refrigerant | 2.6 kg |
| Certification Date | 31.01.2024 |
| Testing basis | HP Keymark scheme rules rev. no. 12 |
| Testing laboratory | SZU Brno, CZ |

| Model Acond Grandis-L16 | |
|---|---|
| Model name | Acond Grandis-L16 |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

| General data | |
|---|---|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|---|---|---|
| Heat output | 11.41 kW | 10.20 kW |
| El input | 2.22 kW | 3.22 kW |
| COP | 5.14 | 3.17 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---|---|---|
| Sound power level indoor | 0 dB(A) | 0 dB(A) |
| Sound power level outdoor | 0 dB(A) | 48 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|---|---|
| ηs | 217 % | 158 % |
| Prated | 15.50 kW | 16.00 kW |
| SCOP | 5.49 | 4.03 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 13.71 kW | 14.49 kW |
| COP Tj = -7°C | 3.34 | 2.52 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 8.35 kW | 8.62 kW |
| COP Tj = +2°C | 5.31 | 3.81 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |

| | | |
|---|---|---|
| Pdh Tj = +7°C | 6.03 kW | 5.54 kW |
| COP Tj = +7°C | 7.35 | 5.33 |
| Cdh Tj = +7 °C | 0.900 | 0.900 |
| Pdh Tj = 12°C | 7.12 kW | 7.04 kW |
| COP Tj = 12°C | 9.57 | 7.96 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 15.50 kW | 16.00 kW |
| COP Tj = Tbiv | 2.74 | 2.10 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 15.50 kW | 16.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.74 | 2.10 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 | 0.900 |
| WTOL | 75 °C | 75 °C |
| Poff | 12 W | 12 W |
| PTO | 13 W | 13 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 5835 kWh | 8201 kWh |

| Model Acond Grandis-L18 | |
|---|---|
| Model name | Acond Grandis-L18 |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

| General data | |
|---|---|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|---|---|---|
| Heat output | 13.15 kW | 11.77 kW |
| El input | 2.55 kW | 3.67 kW |
| COP | 5.16 | 3.21 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---|---|---|
| Sound power level indoor | 0 dB(A) | 0 dB(A) |
| Sound power level outdoor | 0 dB(A) | 50 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|---|---|
| ηs | 200 % | 158 % |
| Prated | 18.80 kW | 18.00 kW |
| SCOP | 5.07 | 4.02 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 16.70 kW | 15.92 kW |
| COP Tj = -7°C | 3.22 | 2.49 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 10.12 kW | 9.69 kW |
| COP Tj = +2°C | 4.59 | 3.79 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |

| | | |
|---|---|---|
| Pdh Tj = +7°C | 6.51 kW | 6.23 kW |
| COP Tj = +7°C | 7.38 | 5.35 |
| Cdh Tj = +7 °C | 0.900 | 0.900 |
| Pdh Tj = 12°C | 7.13 kW | 7.05 kW |
| COP Tj = 12°C | 9.58 | 7.97 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 18.80 kW | 18.00 kW |
| COP Tj = Tbiv | 2.71 | 2.08 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 18.80 kW | 18.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71 | 2.08 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 | 0.900 |
| WTOL | 75 °C | 75 °C |
| Poff | 12 W | 12 W |
| PTO | 13 W | 13 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 7650 kWh | 9259 kWh |

| Model Acond Grandis-L21 | |
|---|---|
| Model name | Acond Grandis-L21 |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

| General data | |
|---|---|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

| Outdoor Air/Water | |
|---|---|
| EN 14511-4 \| Heating | |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

| EN 14511-2 \| Heating | | |
|---|---|---|
| | Low temperature | Medium temperature |
| Heat output | 16.69 kW | 14.98 kW |
| El input | 3.24 kW | 4.57 kW |
| COP | 5.15 | 3.28 |

| EN 12102-1 \| Average Climate | | |
|---|---|---|
| | Low temperature | Medium temperature |
| Sound power level indoor | 0 dB(A) | 0 dB(A) |
| Sound power level outdoor | 0 dB(A) | 53 dB(A) |

| EN 14825 \| Average Climate | | |
|---|---|---|
| | Low temperature | Medium temperature |
| ηs | 195 % | 142 % |
| Prated | 21.00 kW | 22.00 kW |
| SCOP | 4.95 | 3.62 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 18.50 kW | 19.42 kW |
| COP Tj = -7°C | 2.74 | 2.24 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 10.50 kW | 11.85 kW |
| COP Tj = +2°C | 4.60 | 3.22 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |

| | | |
|---|---|---|
| Pdh Tj = +7°C | 7.38 kW | 7.62 kW |
| COP Tj = +7°C | 7.59 | 5.45 |
| Cdh Tj = +7 °C | 0.900 | 0.900 |
| Pdh Tj = 12°C | 7.14 kW | 7.05 kW |
| COP Tj = 12°C | 9.60 | 7.99 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 18.50 kW | 19.42 kW |
| COP Tj = Tbiv | 2.74 | 2.24 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 18.50 kW | 19.42 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.74 | 2.24 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 | 0.900 |
| WTOL | 75 °C | 75 °C |
| Poff | 12 W | 12 W |
| PTO | 13 W | 13 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 2.50 kW | 2.58 kW |
| Annual energy consumption Qhe | 8729 kWh | 12543 kWh |