

Subtype THERMOR Alf  a Extensa A.I. 8 R32

| | |
|---------------------|-----------------------------------|
| Certificate Holder | Groupe Atlantic |
| Address | Rue des Fondeurs BP 64 |
| ZIP | 59660 |
| City | Merville |
| Country | FR |
| Certification Body | RISE CERT |
| Subtype title | THERMOR Alf  a Extensa A.I. 8 R32 |
| Registration number | 012-C700011 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R32 |
| Mass of Refrigerant | 1.02 kg |
| Certification Date | 04.03.2020 |
| Testing basis | HP Keymark Scheme Rules rev 7 |
| Testing laboratory | CETIAT, FR |

Model THERMOR Alf  a Extensa A.I. 8 R32

| | |
|-------------------------------------|-----------------------------------|
| Model name | THERMOR Alf  a Extensa A.I. 8 R32 |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 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 | 7.50 kW | 7.00 kW |
| EI input | 1.69 kW | 2.63 kW |
| COP | 4.43 | 2.66 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 40 dB(A) | 40 dB(A) |
| Sound power level outdoor | 60 dB(A) | 60 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 177 % | 128 % |
| Prated | 6.50 kW | 6.20 kW |
| SCOP | 4.50 | 3.28 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.80 kW | 5.50 kW |
| COP Tj = -7°C | 2.70 | 1.91 |
| Cdh Tj = -7 °C | 0.990 | 1.000 |
| Pdh Tj = +2°C | 3.50 kW | 3.30 kW |
| COP Tj = +2°C | 4.35 | 3.18 |
| Cdh Tj = +2 °C | 0.980 | 0.990 |
| Pdh Tj = +7°C | 2.30 kW | 2.10 kW |

| | | |
|---|-------------|-------------|
| COP Tj = +7°C | 6.32 | 4.60 |
| Cdh Tj = +7 °C | 0.960 | 0.970 |
| Pdh Tj = 12°C | 2.50 kW | 2.40 kW |
| COP Tj = 12°C | 8.07 | 6.37 |
| Cdh Tj = +12 °C | 0.950 | 0.960 |
| Pdh Tj = Tbiv | 5.80 kW | 5.50 kW |
| COP Tj = Tbiv | 2.70 | 1.91 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.60 kW | 5.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.35 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 1.000 |
| WTOL | 55 °C | 55 °C |
| Poff | 4 W | 4 W |
| PTO | 14 W | 14 W |
| PSB | 10 W | 10 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.90 kW | 1.20 kW |
| Annual energy consumption Qhe | 2982 kWh | 3903 kWh |

Model THERMOR Alf  a Extensa Duo A.I. 8 R32

| | |
|-------------------------------------|---------------------------------------|
| Model name | THERMOR Alf  a Extensa Duo A.I. 8 R32 |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 1x230V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water**EN 16147 | Average Climate**

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 130 % |
| COP | 3.10 |
| Heating up time | 1:35 h:min |
| Standby power input | 30.0 W |
| Reference hot water temperature | 54.0 °C |
| Mixed water at 40°C | 245 l |

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 | 7.50 kW | 7.00 kW |
| El input | 1.69 kW | 2.63 kW |
| COP | 4.43 | 2.66 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 40 dB(A) | 40 dB(A) |
| Sound power level outdoor | 60 dB(A) | 60 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 177 % | 128 % |
| Prated | 6.50 kW | 6.20 kW |

| | | |
|---|-------------|-------------|
| SCOP | 4.50 | 3.28 |
| Tbiv | -7 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.80 kW | 5.50 kW |
| COP Tj = -7°C | 2.70 | 1.91 |
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| Pdh Tj = Tbiv | 5.80 kW | 5.50 kW |
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| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.60 kW | 5.00 kW |
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| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 1.000 |
| WTOL | 55 °C | 55 °C |
| Poff | 4 W | 4 W |
| PTO | 14 W | 14 W |
| PSB | 10 W | 10 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.90 kW | 1.20 kW |
| Annual energy consumption Qhe | 2982 kWh | 3903 kWh |