

Page 1 of 25

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

<u>Login</u>

| Summary of | DE DIETRICH Alezio S V200 R32 4.5 MR | Reg. No. | 21HK0009/00 |
|---------------------|---|----------|-------------|
| Certificate Holder | | | |
| Name | BDR Thermea FR (DE DIETRICH) | | |
| Address | 57 rue de la Gare | Zip | 67580 |
| City | Mertzwiller | Country | France |
| Certification Body | Kiwa Nederland B.V. | | |
| Subtype title | DE DIETRICH Alezio S V200 R32 4.5 MR | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R32 | | |
| Mass of Refrigerant | 1.2 kg | | |
| Certification Date | 12.11.2021 | | |
| Testing basis | ing basis European KEYMARK Scheme for Heat Pumps (v9) | | |

Model: AWHPR 4 MR + MIV-S/E 4-8 V200 R32

| Configure model | | |
|-------------------------------------|-----------------------------------|--|
| Model name | AWHPR 4 MR + MIV-S/E 4-8 V200 R32 | |
| Application | Heating + DHW + low temp | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) | +7°C/12°C and +18°C/+23°C | |

| General Data | | |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 4.60 kW | 4.10 kW |
| El input | 0.88 kW | 1.55 kW |
| СОР | 5.20 | 2.65 |

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

Cooling





| EN 14511-2 | | |
|------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| El input | 1.33 kW | 1.16 kW |
| Cooling capacity | 4.50 | 6.00 |
| EER | 3.39 | 5.18 |

EN 14825





| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.61 | 7.99 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.39 | 5.18 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Cdc | 0.990 | 0.980 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Cdc | 0.980 | 0.950 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Cdc | 0.950 | 0.940 |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | o w | o w |
| Annual energy consumption Qce | 586 kWh | 450 kWh |



| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 29 dB(A) | 29 dB(A) |
| Sound power level outdoor | 56 dB(A) | 56 dB(A) |

| EN 14825 | | |
|----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 176 % | 134 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 4.48 | 3.43 |
| Tbiv | -10 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 4.40 kW | 4.50 kW |
| COP Tj = -7°C | 3.18 | 2.15 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 2.70 kW | 2.70 kW |
| COP Tj = +2°C | 4.44 | 3.39 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW |
| COP Tj = +7°C | 5.37 | 4.44 |
| Cdh Tj = +7 °C | 0.970 | 0.970 |
| | | |

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|-------------|-------------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.960 | 0.960 |
| Pdh Tj = Tbiv | 5.00 kW | 4.50 kW |
| COP Tj = Tbiv | 3.00 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.00 kW | 4.30 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.00 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.70 kW |
| Annual energy consumption Qhe | 2305 kWh | 3009 kWh |

Domestic Hot Water (DHW)



| EN 16147 | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency ηDHW | 133 % |
| СОР | 3.17 |
| Heating up time | 1:37 h:min |
| Standby power input | 27.9 W |
| Reference hot water temperature | 53.8 °C |
| Mixed water at 40°C | 255 I |



Model: AWHPR 4 MR + MIV-S/H 4-8 V200 R32

| Configure model | | |
|---|-----------------------------------|--|
| Model name | AWHPR 4 MR + MIV-S/H 4-8 V200 R32 | |
| Application | Heating + DHW + low temp | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) +7°C/12°C and +18°C/+23°C | | |

| General Data | | |
|------------------|--|--|
| Power supply n/a | | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 4.60 kW | 4.10 kW |
| El input | 0.88 kW | 1.55 kW |
| СОР | 5.20 | 2.65 |

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

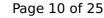
Cooling





| EN 14511-2 | | |
|------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| El input | 1.33 kW | 1.16 kW |
| Cooling capacity | 4.50 | 6.00 |
| EER | 3.39 | 5.18 |

EN 14825





| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.61 | 7.99 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.39 | 5.18 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Cdc | 0.990 | 0.980 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Cdc | 0.980 | 0.950 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Cdc | 0.950 | 0.940 |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | o w | o w |
| Annual energy consumption Qce | 586 kWh | 450 kWh |

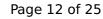




| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 29 dB(A) | 29 dB(A) |
| Sound power level outdoor | 56 dB(A) | 56 dB(A) |

| EN 14825 | | |
|------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 176 % | 134 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 4.48 | 3.43 |
| Tbiv | -10 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 4.40 kW | 4.50 kW |
| COP Tj = -7°C | 3.18 | 2.15 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 2.70 kW | 2.70 kW |
| COP Tj = +2°C | 4.44 | 3.39 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW |
| $COP Tj = +7^{\circ}C$ | 5.37 | 4.44 |
| Cdh Tj = +7 °C | 0.970 | 0.970 |

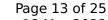
EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|-------------|-------------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.960 | 0.960 |
| Pdh Tj = Tbiv | 5.00 kW | 4.50 kW |
| COP Tj = Tbiv | 3.00 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.00 kW | 4.30 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.00 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.70 kW |
| Annual energy consumption Qhe | 2305 kWh | 3009 kWh |

Domestic Hot Water (DHW)





| EN 16147 | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency ηDHW | 133 % |
| СОР | 3.17 |
| Heating up time | 1:37 h:min |
| Standby power input | 27.9 W |
| Reference hot water temperature | 53.8 °C |
| Mixed water at 40°C | 255 I |

Model: AWHPR 4 MR + MIV-S/E 4-8 V200 R32

| Configure model | | |
|---|-----------------------------------|--|
| Model name | AWHPR 4 MR + MIV-S/E 4-8 V200 R32 | |
| Application | Heating + DHW + low temp | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) +7°C/12°C and +18°C/+23°C | | |

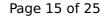
| General Data | | | |
|------------------|--|--|--|
| Power supply n/a | | | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Heat output | 4.60 kW | 4.10 kW |
| El input | 0.88 kW | 1.55 kW |
| СОР | 5.20 | 2.65 |

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

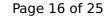
Cooling





| EN 14511-2 | | | |
|------------------------|---------|---------|--|
| +7°C/+12°C +18°C/+23°C | | | |
| El input | 1.33 kW | 1.16 kW | |
| Cooling capacity | 4.50 | 6.00 | |
| EER | 3.39 | 5.18 | |

EN 14825





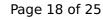
| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.61 | 7.99 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.39 | 5.18 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Cdc | 0.990 | 0.980 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Cdc | 0.980 | 0.950 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Cdc | 0.950 | 0.940 |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 586 kWh | 450 kWh |





| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 29 dB(A) | 29 dB(A) |
| Sound power level outdoor | 56 dB(A) | 56 dB(A) |

| EN 14825 | | |
|----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 176 % | 134 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 4.48 | 3.43 |
| Tbiv | -10 °C | -7 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 4.40 kW | 4.50 kW |
| COP Tj = -7°C | 3.18 | 2.15 |
| Cdh Tj = -7 °C | 0.990 | 0.990 |
| Pdh Tj = +2°C | 2.70 kW | 2.70 kW |
| COP Tj = +2°C | 4.44 | 3.39 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW |
| COP Tj = +7°C | 5.37 | 4.44 |
| Cdh Tj = +7 °C | 0.970 | 0.970 |





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|-------------|-------------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.960 | 0.960 |
| Pdh Tj = Tbiv | 5.00 kW | 4.50 kW |
| COP Tj = Tbiv | 3.00 | 2.15 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.00 kW | 4.30 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.00 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990 | 0.990 |
| WTOL | 60 °C | 60 °C |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0.00 kW | 0.70 kW |
| Annual energy consumption Qhe | 2305 kWh | 3009 kWh |

Domestic Hot Water (DHW)



| EN 16147 | |
|---------------------------------|------------|
| Declared load profile | М |
| Efficiency ηDHW | 127 % |
| СОР | 2.98 |
| Heating up time | 1:39 h:min |
| Standby power input | 20.9 W |
| Reference hot water temperature | 53.8 °C |
| Mixed water at 40°C | 260 I |



Model: AWHPR 4 MR + MIV-S/H 4-8 V200 R32

| Configure model | | |
|---|-----------------------------------|--|
| Model name | AWHPR 4 MR + MIV-S/H 4-8 V200 R32 | |
| Application Heating + DHW + low temp | | |
| Units Indoor + Outdoor | | |
| limate Zone n/a | | |
| Reversibility Yes | | |
| Cooling mode application (optional) +7°C/12°C and +18°C/+23°C | | |

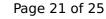
| General Data | | |
|--------------|-----|--|
| Power supply | n/a | |

Heating

| EN 14511-2 | | |
|------------------------------------|---------|--------------------|
| Low temperature Medium temperature | | Medium temperature |
| Heat output | 4.60 kW | 4.10 kW |
| El input | 0.88 kW | 1.55 kW |
| СОР | 5.20 | 2.65 |

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

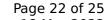
Cooling





| EN 14511-2 | | | |
|------------------------|---------|---------|--|
| +7°C/+12°C +18°C/+23°C | | | |
| El input | 1.33 kW | 1.16 kW | |
| Cooling capacity | 4.50 | 6.00 | |
| EER | 3.39 | 5.18 | |

EN 14825





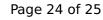
| | +7°C/+12°C | +18°C/+23°C |
|-------------------------------|------------|-------------|
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.61 | 7.99 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.39 | 5.18 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Cdc | 0.990 | 0.980 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Cdc | 0.980 | 0.950 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Cdc | 0.950 | 0.940 |
| Poff | 15 W | 15 W |
| РТО | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | o w | o w |
| Annual energy consumption Qce | 586 kWh | 450 kWh |



| EN 12102-1 | | | | |
|---------------------------|-----------------|--------------------|--|--|
| | Low temperature | Medium temperature | | |
| Sound power level indoor | 29 dB(A) | 29 dB(A) | | |
| Sound power level outdoor | 56 dB(A) | 56 dB(A) | | |

| EN 14825 | | | |
|------------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| η_{s} | 176 % | 134 % | |
| Prated | 5.00 kW | 5.00 kW | |
| SCOP | 4.48 | 3.43 | |
| Tbiv | -10 °C | -7 °C | |
| TOL | -10 °C | -10 °C | |
| Pdh Tj = -7°C | 4.40 kW | 4.50 kW | |
| COP Tj = -7 °C | 3.18 | 2.15 | |
| Cdh Tj = -7 °C | 0.990 | 0.990 | |
| Pdh Tj = $+2$ °C | 2.70 kW | 2.70 kW | |
| COP Tj = +2°C | 4.44 | 3.39 | |
| Cdh Tj = +2 °C | 0.990 | 0.990 | |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW | |
| COP Tj = +7°C | 5.37 | 4.44 | |
| Cdh Tj = +7 °C | 0.970 | 0.970 | |

EHPA Secretariat | Rue dArlon 63-67 | Phone: +32 2 400 10 17 | Email: secretariat@heatpumpkeymark.com | www.heatpumpkeymark.com





| 2.70 kW | 2.10 kW |
|-------------|--|
| 8.78 | 7.29 |
| 0.960 | 0.960 |
| 5.00 kW | 4.50 kW |
| 3.00 | 2.15 |
| 5.00 kW | 4.30 kW |
| 3.00 | 1.83 |
| 0.990 | 0.990 |
| 60 °C | 60 °C |
| 15 W | 15 W |
| 15 W | 15 W |
| 15 W | 15 W |
| 0 W | 0 W |
| Electricity | Electricity |
| 0.00 kW | 0.70 kW |
| 2305 kWh | 3009 kWh |
| | 8.78 0.960 5.00 kW 3.00 5.00 kW 3.00 0.990 60 °C 15 W 15 W 0 W Electricity 0.00 kW |

Domestic Hot Water (DHW)



| EN 16147 | | |
|---------------------------------|------------|--|
| Declared load profile | М | |
| Efficiency ηDHW | 127 % | |
| СОР | 2.98 | |
| Heating up time | 1:39 h:min | |
| Standby power input | 20.9 W | |
| Reference hot water temperature | 53.8 °C | |
| Mixed water at 40°C | 260 I | |