

Page 1 of 23

Login

| Summary of | DE DIETRICH Alezio 4 | Reg. No. | 21HK0023/00 |
|---------------------|---|---------------------|-------------|
| Certificate Holder | <u> </u> | | |
| Name | BDR Thermea FR (DE DIETRIC | CH) | |
| Address | 57 rue de la Gare | Zip | 67580 |
| City | Mertzwiller | Country | France |
| Certification Body | Kiwa Nederland B.V. | Kiwa Nederland B.V. | |
| Subtype title | DE DIETRICH Alezio 4 | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R32 | | |
| Mass of Refrigerant | 1.2 kg | | |
| Certification Date | 03.12.2021 | | |
| Testing basis | European KEYMARK Scheme for Heat Pumps (v9) | | |



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

| Configure model | | |
|-------------------------------------|-------------------------------|--|
| Model name | AWHPR 4 MR + MIV-S 4-8/EM R32 | |
| Application | Heating (medium 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 | 4.40 kW |
| El input | 0.88 kW | 1.49 kW |
| СОР | 5.20 | 2.95 |

| 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 | 1.25 kW | 1.12 kW |
| Cooling capacity | 4.50 | 6.00 |
| EER | 3.60 | 5.35 |



This information was generated by the HP KEYMARK database on 23 Jun 2022 EN 14825 +7°C/+12°C +18°C/+23°C 6.00 kW **Pdesignc** 4.50 kW **SEER** 4.69 8.13 $Pdc Tj = 35^{\circ}C$ 4.50 kW 6.00 kW EER Tj = 35°C 3.60 5.35 $Pdc Tj = 30^{\circ}C$ 3.32 kW 4.50 kW EER Tj = 30°C 3.97 7.09 $Pdc Tj = 25^{\circ}C$ 2.30 kW 2.80 kW EER Tj = 25°C 5.23 9.20 $Pdc Tj = 20^{\circ}C$ 1.85 kW 2.85 kW EER Tj = 20°C 6.40 12.23 Poff 12 W 12 W PTO 12 W 12 W

Average Climate

Annual energy consumption Qce

PSB

PCK

12 W

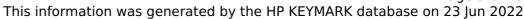
0 W

576 kWh

12 W

0 W

443 kWh





| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 33 dB(A) | 33 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

| EN 14825 | | |
|----------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 177 % | 135 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 4.50 | 3.44 |
| 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 | 0.980 | 0.980 |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW |
| COP Tj = +7°C | 5.37 | 4.44 |
| Cdh Tj = +7 °C | 0.960 | 0.960 |





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|----------|----------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| 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 | 12 W | 12 W |
| РТО | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | o w | o w |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.70 kW |
| Annual energy consumption Qhe | 2297 kWh | 3000 kWh |



Model: AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO

| Configure model | | |
|---|---|--|
| Model name | AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO | |
| 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 | 4.40 kW | |
| El input | 0.88 kW | 1.49 kW | |
| СОР | 5.20 | 2.95 | |

| 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 | 1.25 kW | 1.12 kW | |
| Cooling capacity | 4.50 | 6.00 | |
| EER | 3.60 | 5.35 | |



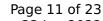
| EN 14825 | | |
|-------------------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.69 | 8.13 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.60 | 5.35 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Poff | 12 W | 12 W |
| РТО | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 576 kWh | 443 kWh |





| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 33 dB(A) | 33 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

| EN 14825 | | |
|------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 177 % | 135 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 4.50 | 3.44 |
| 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 | 0.980 | 0.980 |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW |
| $COP Tj = +7^{\circ}C$ | 5.37 | 4.44 |
| Cdh Tj = +7 °C | 0.960 | 0.960 |





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|----------|----------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| 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 | 12 W | 12 W |
| РТО | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.70 kW |
| Annual energy consumption Qhe | 2297 kWh | 3000 kWh |
| | | |

Domestic Hot Water (DHW)



| EN 16147 | |
|---------------------------------|------------|
| Declared load profile | M |
| Efficiency ηDHW | 118 % |
| СОР | 2.77 |
| Heating up time | 1:35 h:min |
| Standby power input | 24.1 W |
| Reference hot water temperature | 53.1 °C |
| Mixed water at 40°C | 250 I |

Model: AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO

| Configure model | | |
|---|--------------------------|--|
| Model name AWHPR 4 MR + MIV-S 4-8/EM R32 + HPSL180 EVO | | |
| Application | Heating + DHW + low temp | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | ersibility Yes | |
| Cooling mode application (optional) +7°C/12°C and +18°C/+23°C | | |

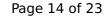
| General Data | | |
|--------------------------|--|--|
| Power supply 1x230V 50Hz | | |

Heating

| EN 14511-2 | | |
|------------------------------------|---------|--------------------|
| Low temperature Medium temperature | | Medium temperature |
| Heat output | 4.60 kW | 4.40 kW |
| El input | 0.88 kW | 1.49 kW |
| СОР | 5.20 | 2.95 |

| 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

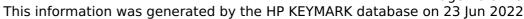




| EN 14511-2 | | | |
|------------------------|---------|---------|--|
| +7°C/+12°C +18°C/+23°C | | | |
| El input | 1.25 kW | 1.12 kW | |
| Cooling capacity | 4.50 | 6.00 | |
| EER | 3.60 | 5.35 | |



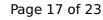
| EN 14825 | | |
|-------------------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.69 | 8.13 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.60 | 5.35 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Poff | 12 W | 12 W |
| РТО | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 576 kWh | 443 kWh |





| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 33 dB(A) | 33 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

| EN 14825 | | |
|------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| η_{s} | 177 % | 135 % |
| Prated | 5.00 kW | 5.00 kW |
| SCOP | 4.50 | 3.44 |
| 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 | 0.980 | 0.980 |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW |
| $COP Tj = +7^{\circ}C$ | 5.37 | 4.44 |
| Cdh Tj = +7 °C | 0.960 | 0.960 |





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|----------|----------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| 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 | 12 W | 12 W |
| РТО | 12 W | 12 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 | 0.70 kW |
| Annual energy consumption Qhe | 2297 kWh | 3000 kWh |
| | | |

Domestic Hot Water (DHW)



| EN 16147 | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency ηDHW | 133 % |
| | |
| COP | 3.19 |
| Heating up time | 1:35 h:min |
| Standby power input | 26.6 W |
| Reference hot water temperature | 53.1 °C |
| Mixed water at 40°C | 250 I |

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

| Configure model | | |
|-------------------------------------|------------------------------|--|
| Model name | AWHPR 4 MR + MIV-S 4-8/H R32 | |
| Application | Heating (medium 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 | 4.40 kW | |
| El input | 0.88 kW | 1.49 kW | |
| СОР | 5.20 | 2.95 | |

| 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 | 1.25 kW | 1.12 kW |
| Cooling capacity | 4.50 | 6.00 |
| EER | 3.60 | 5.35 |

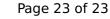


| EN 14825 | | |
|-------------------------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 4.50 kW | 6.00 kW |
| SEER | 4.69 | 8.13 |
| Pdc Tj = 35°C | 4.50 kW | 6.00 kW |
| EER Tj = 35°C | 3.60 | 5.35 |
| Pdc Tj = 30°C | 3.32 kW | 4.50 kW |
| EER Tj = 30°C | 3.97 | 7.09 |
| Pdc Tj = 25°C | 2.30 kW | 2.80 kW |
| EER Tj = 25°C | 5.23 | 9.20 |
| Pdc Tj = 20°C | 1.85 kW | 2.85 kW |
| EER Tj = 20°C | 6.40 | 12.23 |
| Poff | 12 W | 12 W |
| РТО | 12 W | 12 W |
| PSB | 12 W | 12 W |
| РСК | o w | 0 W |
| Annual energy consumption Qce | 576 kWh | 443 kWh |



| EN 12102-1 | | |
|---------------------------|-----------------|--------------------|
| | Low temperature | Medium temperature |
| Sound power level indoor | 33 dB(A) | 33 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

| EN 14825 | | | |
|----------------|-----------------|--------------------|--|
| | Low temperature | Medium temperature | |
| η_{s} | 177 % | 135 % | |
| Prated | 5.00 kW | 5.00 kW | |
| SCOP | 4.50 | 3.44 | |
| 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 | 0.980 | 0.980 | |
| Pdh Tj = +7°C | 1.75 kW | 1.74 kW | |
| COP Tj = +7°C | 5.37 | 4.44 | |
| Cdh Tj = +7 °C | 0.960 | 0.960 | |





| Pdh Tj = 12°C | 2.70 kW | 2.10 kW |
|---|----------|----------|
| COP Tj = 12°C | 8.78 | 7.29 |
| Cdh Tj = +12 °C | 0.950 | 0.950 |
| 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 | 12 W | 12 W |
| РТО | 12 W | 12 W |
| PSB | 12 W | 12 W |
| PCK | o w | 0 W |
| Supplementary Heater: Type of energy input | n/a | n/a |
| Supplementary Heater: PSUP | 0.00 kW | 0.70 kW |
| Annual energy consumption Qhe | 2297 kWh | 3000 kWh |