

## Subtype DE DIETRICH STRATEO 6/8 MR/E R32

|                     |                                             |
|---------------------|---------------------------------------------|
| Certificate Holder  | BDR Thermea FR (DE DIETRICH)                |
| Address             | 57 rue de la Gare                           |
| ZIP                 | 67580                                       |
| City                | Mertzwiller                                 |
| Country             | FR                                          |
| Certification Body  | Kiwa Nederland B.V.                         |
| Subtype title       | DE DIETRICH STRATEO 6/8 MR/E R32            |
| Registration number | 007-DM0102                                  |
| Heat Pump Type      | Outdoor Air/Water                           |
| Refrigerant         | R32                                         |
| Mass of Refrigerant | 1.2 kg                                      |
| Certification Date  | 18.11.2022                                  |
| Testing basis       | European KEYMARK Scheme for Heat Pumps (v9) |

**Model AWHPR 6 MR + MIC-1C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 6 MR + MIC-1C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | M           |
| Efficiency $\eta_{DHW}$         | 123 %       |
| COP                             | 2.84        |
| Heating up time                 | 01:35 h:min |
| Standby power input             | 28.2 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 149 %       |
| COP                             | 3.50        |
| Heating up time                 | 01:28 h:min |
| Standby power input             | 36.5 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 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 | 6.40 kW         | 5.70 kW            |
| El input    | 1.28 kW         | 1.97 kW            |
| COP         | 5.00            | 2.90               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.30 kW    | 1.43 kW     |
| Cooling capacity | 6.50       | 7.00        |
| EER              | 2.83       | 4.88        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 34 dB(A)        | 34 dB(A)           |
| Sound power level outdoor | 58 dB(A)        | 58 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 177 %           | 132 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 4.50            | 3.37               |
| Tbiv                                                | -10 °C          | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 5.90 kW         | 5.50 kW            |
| COP Tj = -7°C                                       | 3.16            | 2.22               |
| Cdh Tj = -7 °C                                      | 0.99            | 0.99               |
| Pdh Tj = +2°C                                       | 3.50 kW         | 3.40 kW            |
| COP Tj = +2°C                                       | 4.48            | 3.37               |
| Cdh Tj = +2 °C                                      | 0.98            | 0.98               |
| Pdh Tj = +7°C                                       | 2.25 kW         | 2.10 kW            |
| COP Tj = +7°C                                       | 5.61            | 4.07               |
| Cdh Tj = +7 °C                                      | 0.96            | 0.97               |
| Pdh Tj = 12°C                                       | 2.50 kW         | 2.50 kW            |
| COP Tj = 12°C                                       | 6.92            | 6.58               |
| Cdh Tj = +12 °C                                     | 0.96            | 0.97               |
| Pdh Tj = Tbiv                                       | 6.60 kW         | 5.50 kW            |
| COP Tj = Tbiv                                       | 2.68            | 2.22               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.60 kW         | 5.30 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.68            | 1.82               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99            | 0.99               |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: PSUP                          | 0 kW            | 0.7 kW             |
| Annual energy consumption Qhe                       | 2986 kWh        | 3679 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 207 %           | 141 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 5.24            | 3.61               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = +2°C                                       | 3.40            | 2.27               |
| Cdh Tj = +2 °C                                      | 0.99            | 0.99               |
| Pdh Tj = +7°C                                       | 4.30 kW         | 4.05 kW            |
| COP Tj = +7°C                                       | 5.30            | 3.16               |
| Cdh Tj = +7 °C                                      | 0.98            | 0.99               |
| Pdh Tj = 12°C                                       | 1.86 kW         | 1.90 kW            |
| COP Tj = 12°C                                       | 6.07            | 4.70               |
| Cdh Tj = +12 °C                                     | 0.95            | 0.96               |
| Pdh Tj = Tbiv                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = Tbiv                                       | 3.40            | 2.27               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.50 kW         | 6.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.40            | 2.27               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99            | 0.99               |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: PSUP                          | 0 kW            | 0 kW               |
| Annual energy consumption Qhe                       | 1658 kWh        | 2222 kWh           |

## EN 14825 | Cooling

|               | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc      | 6.5 kW     | 7.0 kW      |
| SEER          | 3.95       | 5.99        |
| Pdc Tj = 35°C | 6.50 kW    | 7.00 kW     |
| EER Tj = 35°C | 2.83       | 4.88        |
| Pdc Tj = 30°C | 4.90 kW    | 5.39 kW     |
| EER Tj = 30°C | 3.99       | 6.65        |
| Pdc Tj = 25°C | 3.10 kW    | 3.32 kW     |
| EER Tj = 25°C | 4.55       | 4.93        |
| Pdc Tj = 20°C | 1.37 kW    | 1.78 kW     |
| EER Tj = 20°C | 3.96       | 9.48        |
| Poff          | 15 W       | 15 W        |
| PTO           | 15 W       | 15 W        |
| PSB           | 15 W       | 15 W        |
| PCK           | 0 W        | 0 W         |

Annual energy consumption Qce

987 kWh

701 kWh

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**Model AWHPR 6 MR + MIC-2C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 6 MR + MIC-2C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | M           |
| Efficiency $\eta_{DHW}$         | 123 %       |
| COP                             | 2.84        |
| Heating up time                 | 01:35 h:min |
| Standby power input             | 28.2 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 149 %       |
| COP                             | 3.50        |
| Heating up time                 | 01:28 h:min |
| Standby power input             | 36.5 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 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 | 6.40 kW         | 5.70 kW            |
| El input    | 1.36 kW         | 2.05 kW            |
| COP         | 4.70            | 2.80               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.38 kW    | 1.51 kW     |
| Cooling capacity | 6.50       | 7.00        |
| EER              | 2.74       | 4.64        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 34 dB(A)        | 34 dB(A)           |
| Sound power level outdoor | 58 dB(A)        | 58 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 159 %           | 121 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 4.04            | 3.10               |
| Tbiv                                                | -10 °C          | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 5.90 kW         | 5.50 kW            |
| COP Tj = -7°C                                       | 3.04            | 2.15               |
| Cdh Tj = -7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +2°C                                       | 3.50 kW         | 3.40 kW            |
| COP Tj = +2°C                                       | 4.09            | 3.14               |
| Cdh Tj = +2 °C                                      | 0.980           | 0.980              |
| Pdh Tj = +7°C                                       | 2.25 kW         | 2.10 kW            |
| COP Tj = +7°C                                       | 4.73            | 3.55               |
| Cdh Tj = +7 °C                                      | 0.960           | 0.970              |
| Pdh Tj = 12°C                                       | 2.50 kW         | 2.50 kW            |
| COP Tj = 12°C                                       | 5.73            | 5.50               |
| Cdh Tj = +12 °C                                     | 0.960           | 0.970              |
| Pdh Tj = Tbiv                                       | 6.60 kW         | 5.50 kW            |
| COP Tj = Tbiv                                       | 2.60            | 2.15               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.60 kW         | 5.30 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.60            | 1.77               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 3321 kWh        | 4004 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 179 %           | 127 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 4.54            | 3.25               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = +2°C                                       | 3.27            | 2.21               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 4.30 kW         | 4.05 kW            |
| COP Tj = +7°C                                       | 4.85            | 2.99               |
| Cdh Tj = +7 °C                                      | 0.980           | 0.990              |
| Pdh Tj = 12°C                                       | 1.86 kW         | 1.90 kW            |
| COP Tj = 12°C                                       | 4.88            | 3.96               |
| Cdh Tj = +12 °C                                     | 0.950           | 0.960              |
| Pdh Tj = Tbiv                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = Tbiv                                       | 3.27            | 2.21               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.50 kW         | 6.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.27            | 2.21               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 1913 kWh        | 2466 kWh           |

## EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 6.50 kW    | 7.00 kW     |
| SEER           | 3.55       | 5.17        |
| Pdc Tj = 35°C  | 6.50 kW    | 7.00 kW     |
| EER Tj = 35°C  | 2.74       | 4.64        |
| Pdc Tj = 30°C  | 4.90 kW    | 5.39 kW     |
| EER Tj = 30°C  | 3.76       | 6.09        |
| Cdc Tj = 30 °C |            |             |
| Pdc Tj = 25°C  | 3.10 kW    | 3.32 kW     |
| EER Tj = 25°C  | 4.10       | 4.44        |
| Cdc Tj = 25 °C |            |             |
| Pdc Tj = 20°C  | 1.37 kW    | 1.78 kW     |
| EER Tj = 20°C  | 3.25       | 6.77        |

Cdc Tj = 20 °C

|                               |          |         |
|-------------------------------|----------|---------|
| Poff                          | 15 W     | 15 W    |
| PTO                           | 15 W     | 15 W    |
| PSB                           | 15 W     | 15 W    |
| PCK                           | 0 W      | 0 W     |
| Annual energy consumption Qce | 1099 kWh | 812 kWh |

**Model AWHPR 8 MR + MIC-1C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 8 MR + MIC-1C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | M           |
| Efficiency $\eta_{DHW}$         | 108 %       |
| COP                             | 2.50        |
| Heating up time                 | 01:25 h:min |
| Standby power input             | 31.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 143 %       |
| COP                             | 3.40        |
| Heating up time                 | 01:20 h:min |
| Standby power input             | 30.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 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 | 7.6 kW          | 8.0 kW             |
| El input    | 1.66 kW         | 2.91 kW            |
| COP         | 4.57            | 2.75               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.33 kW    | 1.45 kW     |
| Cooling capacity | 6.50       | 7.10        |
| EER              | 2.79       | 4.88        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 36 dB(A)        | 36 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 176 %           | 125 %              |
| Prated                                              | 7.00 kW         | 7.00 kW            |
| SCOP                                                | 4.48            | 3.21               |
| Tbiv                                                | -7 °C           | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = -7°C                                       | 2.97            | 1.95               |
| Cdh Tj = -7 °C                                      | 0.99            | 0.99               |
| Pdh Tj = +2°C                                       | 4.12 kW         | 3.79 kW            |
| COP Tj = +2°C                                       | 4.46            | 3.24               |
| Cdh Tj = +2 °C                                      | 0.98            | 0.99               |
| Pdh Tj = +7°C                                       | 2.78 kW         | 2.49 kW            |
| COP Tj = +7°C                                       | 5.70            | 4.10               |
| Cdh Tj = +7 °C                                      | 0.97            | 0.97               |
| Pdh Tj = 12°C                                       | 2.67 kW         | 2.55 kW            |
| COP Tj = 12°C                                       | 7.80            | 6.10               |
| Cdh Tj = +12 °C                                     | 0.96            | 0.96               |
| Pdh Tj = Tbiv                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = Tbiv                                       | 2.97            | 1.95               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.64 kW         | 4.90 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.58            | 1.66               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99            | 0.99               |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: PSUP                          | 0.36 kW         | 2.1 kW             |
| Annual energy consumption Qhe                       | 3225 kWh        | 4504 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 214 %           | 149 %              |
| Prated                                              | 7.00 kW         | 6.60 kW            |
| SCOP                                                | 5.41            | 3.81               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = +2°C                                       | 3.25            | 2.12               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 4.70 kW         | 4.58 kW            |
| COP Tj = +7°C                                       | 5.11            | 3.36               |
| Cdh Tj = +7 °C                                      | 0.980           | 0.990              |
| Pdh Tj = 12°C                                       | 2.11 kW         | 2.00 kW            |
| COP Tj = 12°C                                       | 6.71            | 5.00               |
| Cdh Tj = +12 °C                                     | 0.950           | 0.960              |
| Pdh Tj = Tbiv                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = Tbiv                                       | 3.25            | 2.12               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.00 kW         | 6.60 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.25            | 2.12               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 1728 kWh        | 2315 kWh           |

## EN 14825 | Cooling

|               | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc      | 6.5 kW     | 7.1 kW      |
| SEER          | 4.32       | 5.82        |
| Pdc Tj = 35°C | 6.50 kW    | 7.10 kW     |
| EER Tj = 35°C | 2.79       | 4.88        |
| Pdc Tj = 30°C | 4.97 kW    | 5.65 kW     |
| EER Tj = 30°C | 3.96       | 6.71        |
| Pdc Tj = 25°C | 3.35 kW    | 3.18 kW     |
| EER Tj = 25°C | 4.74       | 5.26        |
| Pdc Tj = 20°C | 1.55 kW    | 1.67 kW     |
| EER Tj = 20°C | 5.50       | 7.40        |
| Poff          | 15 W       | 15 W        |
| PTO           | 15 W       | 15 W        |

|                               |         |         |
|-------------------------------|---------|---------|
| PSB                           | 15 W    | 15 W    |
| PCK                           | 0 W     | 0 W     |
| Annual energy consumption Qce | 904 kWh | 732 kWh |

**Model AWHPR 8 MR + MIC-2C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 8 MR + MIC-2C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | M           |
| Efficiency $\eta_{DHW}$         | 108 %       |
| COP                             | 2.50        |
| Heating up time                 | 01:25 h:min |
| Standby power input             | 31.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 143 %       |
| COP                             | 3.40        |
| Heating up time                 | 01:20 h:min |
| Standby power input             | 30.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 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 | 7.60 kW         | 8.00 kW            |
| El input    | 1.74 kW         | 2.99 kW            |
| COP         | 4.38            | 2.68               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.41 kW    | 1.53 kW     |
| Cooling capacity | 6.50       | 7.10        |
| EER              | 2.70       | 4.64        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 36 dB(A)        | 36 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 161 %           | 116 %              |
| Prated                                              | 7.00 kW         | 7.00 kW            |
| SCOP                                                | 4.09            | 2.99               |
| Tbiv                                                | -7 °C           | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = -7°C                                       | 2.87            | 1.90               |
| Cdh Tj = -7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +2°C                                       | 4.12 kW         | 3.79 kW            |
| COP Tj = +2°C                                       | 4.13            | 3.04               |
| Cdh Tj = +2 °C                                      | 0.980           | 0.990              |
| Pdh Tj = +7°C                                       | 2.78 kW         | 2.49 kW            |
| COP Tj = +7°C                                       | 4.94            | 3.65               |
| Cdh Tj = +7 °C                                      | 0.970           | 0.970              |
| Pdh Tj = 12°C                                       | 2.67 kW         | 2.55 kW            |
| COP Tj = 12°C                                       | 6.40            | 5.17               |
| Cdh Tj = +12 °C                                     | 0.960           | 0.960              |
| Pdh Tj = Tbiv                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = Tbiv                                       | 2.87            | 1.90               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.64 kW         | 4.90 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.51            | 1.62               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input          | n/a             | n/a                |
| Supplementary Heater: PSUP                          | 0.36 kW         | 2.10 kW            |
| Annual energy consumption Qhe                       | 3535 kWh        | 4843 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 186 %           | 134 %              |
| Prated                                              | 7.00 kW         | 6.60 kW            |
| SCOP                                                | 4.72            | 3.44               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = +2°C                                       | 3.14            | 2.07               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 4.70 kW         | 4.58 kW            |
| COP Tj = +7°C                                       | 4.72            | 3.18               |
| Cdh Tj = +7 °C                                      | 0.980           | 0.990              |
| Pdh Tj = 12°C                                       | 2.11 kW         | 2.00 kW            |
| COP Tj = 12°C                                       | 5.42            | 4.21               |
| Cdh Tj = +12 °C                                     | 0.950           | 0.960              |
| Pdh Tj = Tbiv                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = Tbiv                                       | 3.14            | 2.07               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.00 kW         | 6.60 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.14            | 2.07               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 1980 kWh        | 2566 kWh           |

## EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 6.50 kW    | 7.10 kW     |
| SEER           | 3.86       | 5.04        |
| Pdc Tj = 35°C  | 6.50 kW    | 7.10 kW     |
| EER Tj = 35°C  | 2.70       | 4.64        |
| Pdc Tj = 30°C  | 4.97 kW    | 5.65 kW     |
| EER Tj = 30°C  | 3.74       | 6.16        |
| Cdc Tj = 30 °C |            |             |
| Pdc Tj = 25°C  | 3.35 kW    | 3.18 kW     |
| EER Tj = 25°C  | 4.29       | 4.68        |
| Cdc Tj = 25 °C |            |             |
| Pdc Tj = 20°C  | 1.55 kW    | 1.67 kW     |
| EER Tj = 20°C  | 4.34       | 5.55        |

Cdc Tj = 20 °C

|                               |          |         |
|-------------------------------|----------|---------|
| Poff                          | 15 W     | 15 W    |
| PTO                           | 15 W     | 15 W    |
| PSB                           | 15 W     | 15 W    |
| PCK                           | 0 W      | 0 W     |
| Annual energy consumption Qce | 1010 kWh | 845 kWh |

**Model AWHPR 6 MR + MIC-1C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 6 MR + MIC-1C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 135 %       |
| COP                             | 3.20        |
| Heating up time                 | 01:35 h:min |
| Standby power input             | 35.5 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 149 %       |
| COP                             | 3.50        |
| Heating up time                 | 01:28 h:min |
| Standby power input             | 36.5 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 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 | 6.40 kW         | 5.70 kW            |
| El input    | 1.28 kW         | 1.97 kW            |
| COP         | 5.00            | 2.90               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.30 kW    | 1.43 kW     |
| Cooling capacity | 6.50       | 7.00        |
| EER              | 2.83       | 4.88        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 34 dB(A)        | 34 dB(A)           |
| Sound power level outdoor | 58 dB(A)        | 58 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 177 %           | 132 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 4.50            | 3.37               |
| Tbiv                                                | -10 °C          | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 5.90 kW         | 5.50 kW            |
| COP Tj = -7°C                                       | 3.16            | 2.22               |
| Cdh Tj = -7 °C                                      | 0.99            | 0.99               |
| Pdh Tj = +2°C                                       | 3.50 kW         | 3.40 kW            |
| COP Tj = +2°C                                       | 4.48            | 3.37               |
| Cdh Tj = +2 °C                                      | 0.98            | 0.98               |
| Pdh Tj = +7°C                                       | 2.25 kW         | 2.10 kW            |
| COP Tj = +7°C                                       | 5.61            | 4.07               |
| Cdh Tj = +7 °C                                      | 0.96            | 0.97               |
| Pdh Tj = 12°C                                       | 2.50 kW         | 2.50 kW            |
| COP Tj = 12°C                                       | 6.92            | 6.58               |
| Cdh Tj = +12 °C                                     | 0.96            | 0.97               |
| Pdh Tj = Tbiv                                       | 6.60 kW         | 5.50 kW            |
| COP Tj = Tbiv                                       | 2.68            | 2.22               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.60 kW         | 5.30 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.68            | 1.82               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99            | 0.99               |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: PSUP                          | 0 kW            | 0.7 kW             |
| Annual energy consumption Qhe                       | 2986 kWh        | 3679 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 207 %           | 141 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 5.24            | 3.61               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = +2°C                                       | 3.40            | 2.27               |
| Cdh Tj = +2 °C                                      | 0.99            | 0.99               |
| Pdh Tj = +7°C                                       | 4.30 kW         | 4.05 kW            |
| COP Tj = +7°C                                       | 5.30            | 3.16               |
| Cdh Tj = +7 °C                                      | 0.98            | 0.99               |
| Pdh Tj = 12°C                                       | 1.86 kW         | 1.90 kW            |
| COP Tj = 12°C                                       | 6.07            | 4.70               |
| Cdh Tj = +12 °C                                     | 0.95            | 0.96               |
| Pdh Tj = Tbiv                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = Tbiv                                       | 3.40            | 2.27               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.50 kW         | 6.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.40            | 2.27               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99            | 0.99               |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: PSUP                          | 0 kW            | 0 kW               |
| Annual energy consumption Qhe                       | 1658 kWh        | 2222 kWh           |

## EN 14825 | Cooling

|               | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc      | 6.5 kW     | 7.0 kW      |
| SEER          | 3.95       | 5.99        |
| Pdc Tj = 35°C | 6.50 kW    | 7.00 kW     |
| EER Tj = 35°C | 2.83       | 4.88        |
| Pdc Tj = 30°C | 4.90 kW    | 5.39 kW     |
| EER Tj = 30°C | 3.99       | 6.65        |
| Pdc Tj = 25°C | 3.10 kW    | 3.32 kW     |
| EER Tj = 25°C | 4.55       | 4.93        |
| Pdc Tj = 20°C | 1.37 kW    | 1.78 kW     |
| EER Tj = 20°C | 3.96       | 9.48        |
| Poff          | 15 W       | 15 W        |
| PTO           | 15 W       | 15 W        |
| PSB           | 15 W       | 15 W        |
| PCK           | 0 W        | 0 W         |

Annual energy consumption Qce

987 kWh

701 kWh

---

**Model AWHPR 6 MR + MIC-2C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 6 MR + MIC-2C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 135 %       |
| COP                             | 3.20        |
| Heating up time                 | 01:35 h:min |
| Standby power input             | 35.5 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 149 %       |
| COP                             | 3.50        |
| Heating up time                 | 01:28 h:min |
| Standby power input             | 36.5 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 277 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 | 6.40 kW         | 5.70 kW            |
| El input    | 1.36 kW         | 2.05 kW            |
| COP         | 4.70            | 2.80               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.38 kW    | 1.51 kW     |
| Cooling capacity | 6.50       | 7.00        |
| EER              | 2.74       | 4.64        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 34 dB(A)        | 34 dB(A)           |
| Sound power level outdoor | 58 dB(A)        | 58 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 159 %           | 121 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 4.04            | 3.10               |
| Tbiv                                                | -10 °C          | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 5.90 kW         | 5.50 kW            |
| COP Tj = -7°C                                       | 3.04            | 2.15               |
| Cdh Tj = -7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +2°C                                       | 3.50 kW         | 3.40 kW            |
| COP Tj = +2°C                                       | 4.09            | 3.14               |
| Cdh Tj = +2 °C                                      | 0.980           | 0.980              |
| Pdh Tj = +7°C                                       | 2.25 kW         | 2.10 kW            |
| COP Tj = +7°C                                       | 4.73            | 3.55               |
| Cdh Tj = +7 °C                                      | 0.960           | 0.970              |
| Pdh Tj = 12°C                                       | 2.50 kW         | 2.50 kW            |
| COP Tj = 12°C                                       | 5.73            | 5.50               |
| Cdh Tj = +12 °C                                     | 0.960           | 0.970              |
| Pdh Tj = Tbiv                                       | 6.60 kW         | 5.50 kW            |
| COP Tj = Tbiv                                       | 2.60            | 2.15               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.60 kW         | 5.30 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.60            | 1.77               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 3321 kWh        | 4004 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 179 %           | 127 %              |
| Prated                                              | 6.50 kW         | 6.00 kW            |
| SCOP                                                | 4.54            | 3.25               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = +2°C                                       | 3.27            | 2.21               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 4.30 kW         | 4.05 kW            |
| COP Tj = +7°C                                       | 4.85            | 2.99               |
| Cdh Tj = +7 °C                                      | 0.980           | 0.990              |
| Pdh Tj = 12°C                                       | 1.86 kW         | 1.90 kW            |
| COP Tj = 12°C                                       | 4.88            | 3.96               |
| Cdh Tj = +12 °C                                     | 0.950           | 0.960              |
| Pdh Tj = Tbiv                                       | 6.50 kW         | 6.00 kW            |
| COP Tj = Tbiv                                       | 3.27            | 2.21               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.50 kW         | 6.00 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.27            | 2.21               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 1913 kWh        | 2466 kWh           |

## EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 6.50 kW    | 7.00 kW     |
| SEER           | 3.55       | 5.17        |
| Pdc Tj = 35°C  | 6.50 kW    | 7.00 kW     |
| EER Tj = 35°C  | 2.74       | 4.64        |
| Pdc Tj = 30°C  | 4.90 kW    | 5.39 kW     |
| EER Tj = 30°C  | 3.76       | 6.09        |
| Cdc Tj = 30 °C |            |             |
| Pdc Tj = 25°C  | 3.10 kW    | 3.32 kW     |
| EER Tj = 25°C  | 4.10       | 4.44        |
| Cdc Tj = 25 °C |            |             |
| Pdc Tj = 20°C  | 1.37 kW    | 1.78 kW     |
| EER Tj = 20°C  | 3.25       | 6.77        |

Cdc Tj = 20 °C

|                               |          |         |
|-------------------------------|----------|---------|
| Poff                          | 15 W     | 15 W    |
| PTO                           | 15 W     | 15 W    |
| PSB                           | 15 W     | 15 W    |
| PCK                           | 0 W      | 0 W     |
| Annual energy consumption Qce | 1099 kWh | 812 kWh |

**Model AWHPR 8 MR + MIC-1C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 8 MR + MIC-1C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 120 %       |
| COP                             | 2.85        |
| Heating up time                 | 01:25 h:min |
| Standby power input             | 34.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 143 %       |
| COP                             | 3.40        |
| Heating up time                 | 01:20 h:min |
| Standby power input             | 30.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 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 | 7.6 kW          | 8.0 kW             |
| El input    | 1.66 kW         | 2.91 kW            |
| COP         | 4.57            | 2.75               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.33 kW    | 1.45 kW     |
| Cooling capacity | 6.50       | 7.10        |
| EER              | 2.79       | 4.88        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 36 dB(A)        | 36 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 176 %           | 125 %              |
| Prated                                              | 7.00 kW         | 7.00 kW            |
| SCOP                                                | 4.48            | 3.21               |
| Tbiv                                                | -7 °C           | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = -7°C                                       | 2.97            | 1.95               |
| Cdh Tj = -7 °C                                      | 0.99            | 0.99               |
| Pdh Tj = +2°C                                       | 4.12 kW         | 3.79 kW            |
| COP Tj = +2°C                                       | 4.46            | 3.24               |
| Cdh Tj = +2 °C                                      | 0.98            | 0.99               |
| Pdh Tj = +7°C                                       | 2.78 kW         | 2.49 kW            |
| COP Tj = +7°C                                       | 5.70            | 4.10               |
| Cdh Tj = +7 °C                                      | 0.97            | 0.97               |
| Pdh Tj = 12°C                                       | 2.67 kW         | 2.55 kW            |
| COP Tj = 12°C                                       | 7.80            | 6.10               |
| Cdh Tj = +12 °C                                     | 0.96            | 0.96               |
| Pdh Tj = Tbiv                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = Tbiv                                       | 2.97            | 1.95               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.64 kW         | 4.90 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.58            | 1.66               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.99            | 0.99               |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: PSUP                          | 0.36 kW         | 2.1 kW             |
| Annual energy consumption Qhe                       | 3225 kWh        | 4504 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 214 %           | 149 %              |
| Prated                                              | 7.00 kW         | 6.60 kW            |
| SCOP                                                | 5.41            | 3.81               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = +2°C                                       | 3.25            | 2.12               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 4.70 kW         | 4.58 kW            |
| COP Tj = +7°C                                       | 5.11            | 3.36               |
| Cdh Tj = +7 °C                                      | 0.980           | 0.990              |
| Pdh Tj = 12°C                                       | 2.11 kW         | 2.00 kW            |
| COP Tj = 12°C                                       | 6.71            | 5.00               |
| Cdh Tj = +12 °C                                     | 0.950           | 0.960              |
| Pdh Tj = Tbiv                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = Tbiv                                       | 3.25            | 2.12               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.00 kW         | 6.60 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.25            | 2.12               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 1728 kWh        | 2315 kWh           |

## EN 14825 | Cooling

|               | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc      | 6.5 kW     | 7.1 kW      |
| SEER          | 4.32       | 5.82        |
| Pdc Tj = 35°C | 6.50 kW    | 7.10 kW     |
| EER Tj = 35°C | 2.79       | 4.88        |
| Pdc Tj = 30°C | 4.97 kW    | 5.65 kW     |
| EER Tj = 30°C | 3.96       | 6.71        |
| Pdc Tj = 25°C | 3.35 kW    | 3.18 kW     |
| EER Tj = 25°C | 4.74       | 5.26        |
| Pdc Tj = 20°C | 1.55 kW    | 1.67 kW     |
| EER Tj = 20°C | 5.50       | 7.40        |
| Poff          | 15 W       | 15 W        |
| PTO           | 15 W       | 15 W        |

|                               |         |         |
|-------------------------------|---------|---------|
| PSB                           | 15 W    | 15 W    |
| PCK                           | 0 W     | 0 W     |
| Annual energy consumption Qce | 904 kWh | 732 kWh |

**Model AWHPR 8 MR + MIC-2C V190 R32**

|                                     |                              |
|-------------------------------------|------------------------------|
| Model name                          | AWHPR 8 MR + MIC-2C V190 R32 |
| Application                         | Heating + DHW + low temp     |
| Units                               | Indoor, Outdoor              |
| Climate zone (for heating)          | Warmer, Warmer Climate       |
| Reversibility                       | Yes                          |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C       |
| Any additional heat sources         | n/a                          |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | No          |

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

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 120 %       |
| COP                             | 2.85        |
| Heating up time                 | 01:25 h:min |
| Standby power input             | 34.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 l       |

**EN 16147 | Warmer Climate**

|                                 |             |
|---------------------------------|-------------|
| Declared load profile           | L           |
| Efficiency $\eta_{DHW}$         | 143 %       |
| COP                             | 3.40        |
| Heating up time                 | 01:20 h:min |
| Standby power input             | 30.9 W      |
| Reference hot water temperature | 53.1 °C     |
| Mixed water at 40°C             | 278 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 | 7.60 kW         | 8.00 kW            |
| El input    | 1.74 kW         | 2.99 kW            |
| COP         | 4.38            | 2.68               |

**EN 14511-2 | Cooling**

|                  | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input         | 2.41 kW    | 1.53 kW     |
| Cooling capacity | 6.50       | 7.10        |
| EER              | 2.70       | 4.64        |

## EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 36 dB(A)        | 36 dB(A)           |
| Sound power level outdoor | 59 dB(A)        | 59 dB(A)           |

## EN 14825 | Average Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 161 %           | 116 %              |
| Prated                                              | 7.00 kW         | 7.00 kW            |
| SCOP                                                | 4.09            | 2.99               |
| Tbiv                                                | -7 °C           | -7 °C              |
| TOL                                                 | -10 °C          | -10 °C             |
| Pdh Tj = -7°C                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = -7°C                                       | 2.87            | 1.90               |
| Cdh Tj = -7 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +2°C                                       | 4.12 kW         | 3.79 kW            |
| COP Tj = +2°C                                       | 4.13            | 3.04               |
| Cdh Tj = +2 °C                                      | 0.980           | 0.990              |
| Pdh Tj = +7°C                                       | 2.78 kW         | 2.49 kW            |
| COP Tj = +7°C                                       | 4.94            | 3.65               |
| Cdh Tj = +7 °C                                      | 0.970           | 0.970              |
| Pdh Tj = 12°C                                       | 2.67 kW         | 2.55 kW            |
| COP Tj = 12°C                                       | 6.40            | 5.17               |
| Cdh Tj = +12 °C                                     | 0.960           | 0.960              |
| Pdh Tj = Tbiv                                       | 6.19 kW         | 6.19 kW            |
| COP Tj = Tbiv                                       | 2.87            | 1.90               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6.64 kW         | 4.90 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.51            | 1.62               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 W               |
| PCK                                                 | 0 W             | 0 W                |
| Supplementary Heater: Type of energy input          | n/a             | n/a                |
| Supplementary Heater: PSUP                          | 0.36 kW         | 2.10 kW            |
| Annual energy consumption Qhe                       | 3535 kWh        | 4843 kWh           |

## EN 14825 | Warmer Climate

|                                                     | Low temperature | Medium temperature |
|-----------------------------------------------------|-----------------|--------------------|
| $\eta_s$                                            | 186 %           | 134 %              |
| Prated                                              | 7.00 kW         | 6.60 kW            |
| SCOP                                                | 4.72            | 3.44               |
| Tbiv                                                | 2 °C            | 2 °C               |
| TOL                                                 | 2 °C            | 2 °C               |
| Pdh Tj = +2°C                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = +2°C                                       | 3.14            | 2.07               |
| Cdh Tj = +2 °C                                      | 0.990           | 0.990              |
| Pdh Tj = +7°C                                       | 4.70 kW         | 4.58 kW            |
| COP Tj = +7°C                                       | 4.72            | 3.18               |
| Cdh Tj = +7 °C                                      | 0.980           | 0.990              |
| Pdh Tj = 12°C                                       | 2.11 kW         | 2.00 kW            |
| COP Tj = 12°C                                       | 5.42            | 4.21               |
| Cdh Tj = +12 °C                                     | 0.950           | 0.960              |
| Pdh Tj = Tbiv                                       | 7.00 kW         | 6.60 kW            |
| COP Tj = Tbiv                                       | 3.14            | 2.07               |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 7.00 kW         | 6.60 kW            |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 3.14            | 2.07               |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.990           | 0.990              |
| WTOL                                                | 60 °C           | 60 °C              |
| Poff                                                | 15 W            | 15 W               |
| PTO                                                 | 15 W            | 15 W               |
| PSB                                                 | 15 W            | 15 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                       | 1980 kWh        | 2566 kWh           |

## EN 14825 | Cooling

|                | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc       | 6.50 kW    | 7.10 kW     |
| SEER           | 3.86       | 5.04        |
| Pdc Tj = 35°C  | 6.50 kW    | 7.10 kW     |
| EER Tj = 35°C  | 2.70       | 4.64        |
| Pdc Tj = 30°C  | 4.97 kW    | 5.65 kW     |
| EER Tj = 30°C  | 3.74       | 6.16        |
| Cdc Tj = 30 °C |            |             |
| Pdc Tj = 25°C  | 3.35 kW    | 3.18 kW     |
| EER Tj = 25°C  | 4.29       | 4.68        |
| Cdc Tj = 25 °C |            |             |
| Pdc Tj = 20°C  | 1.55 kW    | 1.67 kW     |
| EER Tj = 20°C  | 4.34       | 5.55        |

Cdc Tj = 20 °C

|                               |          |         |
|-------------------------------|----------|---------|
| Poff                          | 15 W     | 15 W    |
| PTO                           | 15 W     | 15 W    |
| PSB                           | 15 W     | 15 W    |
| PCK                           | 0 W      | 0 W     |
| Annual energy consumption Qce | 1010 kWh | 845 kWh |