

Aquami Big Mono heat pump

AQM220X3 [R14]

























Device features



Environmentally friendly refrigerant R32



Efficient heating



Energy efficiency class at 35°C



Energy efficiency class at 55°C



Maximum COP 4,40



Operating range down to -25°C



Supply water temperature of 60°C



Integrated USB port for updates



Energy



Smart Grid



Twin rotary compressor



Outdoor unit drip tray heater



Compressor crankcase heater



Easy installation and maintenance



Silent mode



Wired controller



Daily operation schedule



Configurable weekly schedules



Vacation mode



Menu in English



Multilanguage menu



Integrated temperature sensor



Weather operating modes (climate curve)



2 heating control zones



Dedicated application



Disinfection



DHW circulation pump operation schedules



Maximum leaving water temperature of 60°C (in DHW mode)



Prepared to create a cascade system



Modbus Protocol



Specification outdoor unit

| | | | | AQM220X3 R14 |
|---|--|--|--|--|
| Model EAN Code | | | | |
| | | | | 5905567602245 |
| Power supply | | | V-Hz, Ø | 380-420-50, 3f |
| Heating | Capacity | | kW | 22,00 |
| (A7/W35) | Rated input | | kW | 5,00 |
| | COP | | | 4,40 |
| | Capacity | | kW | 22,00 |
| Heating | Rated input | | kW | 6,47 |
| (A7/W45) | COP | | | 3,40 |
| | Capacity | | kW | 22,00 |
| Heating | Rated input | | kW | 8,30 |
| (A7/W55) | COP | | N. V | 2,65 |
| | | | kW | |
| Cooling | Capacity | | | 23,00 |
| (A35/W18) | Rated input | | kW | 5,00 |
| | EER | | | 4,60 |
| Cooling | Capacity | | kW | 21,00 |
| (A35/W7) | Rated input | | kW | 7,12 |
| (//33/11/) | EER | | | 2,95 |
| | SCOP ⁽¹⁾ | | | 4,53 |
| Seasonal energy | Rated heat output | | kW | 22 |
| efficiency | Seasonal energy efficiency ratio (ηS) | | 96 | 178 |
| LWT at 35°C | Annual energy consumption | | kWh | 10108 |
| | | | KIVII | A+++ |
| | Seasonal space heating energy efficiency class ⁽¹⁾ | | | |
| | SCOP ⁽¹⁾ | | | 3,23 |
| Seasonal energy | Rated heat output | | kW | 22 |
| efficiency | Seasonal energy efficiency ratio (ηS) | | 96 | 126 |
| LWT at 55°C | Annual energy consumption | | kWh | 14390 |
| | Seasonal space heating energy efficiency class (1) | | | A++ |
| | LWT at 7°C | | | 4,70 |
| SEER | LWT at 18°C | | | 5,67 |
| Maximum overcurrent protection (MOP) | | | A | 25 |
| Minimum circuit am | | | A | 25 |
| | | | | Twin rotary inverter compressor DC |
| Compressor Type Fan Quantity | | | Brushless DC motor / BLDC | |
| | | | | |
| | | | 2 | |
| | Type / GWP | | | R32 / 675 |
| Refrigerant | | Quantity | kg | 5 |
| | | Quantity | TCO ₂ eq | 3,375 |
| Power cables: indoo | or unit | | pcs × mm² | 5×6 |
| | | (W1×W2×D) | | 668 x 206 x 494 |
| Bracket spacing | | | | |
| Bracket spacing Sound pressure leve | vel | | dB(A) | 59,8 |
| Sound pressure leve | | | dB(A) | 59,8 |
| Sound pressure level | | (M×D×H) | dB(A) | 59,8 73 |
| Sound pressure level Sound power level Net dimensions | | (W×D×H) | dB(A) mm | 59,8 73 1129×528×1558 |
| Sound pressure level Sound power level Net dimensions Gross dimensions | | (WxDxH) (WxDxH) | dB(A) mm mm | 59,8 73 1129×528×1558 1220×565×1735 |
| Sound pressure level Sound power level Net dimensions | weight | | dB(A) mm mm kg | 59,8 73 1129×528×1558 1220×565×1735 177/206 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v | weight Cooling | | dB(A) mm mm kg °C | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5~46 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor | weight Cooling Heating | | dB(A) mm mm kg oc | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v | weight Cooling | | dB(A) mm mm kg °C | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5~46 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor | weight Cooling Heating | | dB(A) mm mm kg oc | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes | weight Cooling Heating | | dB(A) mm mm kg oc | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 -25-43 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water | weight Cooling Heating DHW Space cooling | | dB(A) mm mm kg °C °C °C | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5>-46 -25-35 -25-43 Heating and cooling |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes | weight Cooling Heating DHW Space cooling Space heating | | dB(A) mm kg cc cc cc cc cc | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water | weight Cooling Heating DHW Space cooling Space heating DHW(tank) | | dB(A) mm kg oc oc oc oc | 59,8 73 1129×528×1558 1220×565×1735 1777/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply | | dB(A) mm mm kg oC oC oC C V-Hz, Ø | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross w Operating outdoor temperature Operation modes Leaving water | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power | | dB(A) mm kg °C °C °C °C V-Hz, Ø pcs / kW | 59,8 73 1129×528×1558 1129×558×1755 1220×565×1735 177/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating current | | dB(A) mm mm kg eC eC eC c C v-C v-Hz, Ø pcs / kW A | 59,8 73 1129×528×1558 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating current Water connections | | dB(A) mm mm kg ºC ºC °C °C °C °C °C °C | 59,8 73 1129x528x1558 1120x565x1735 1177/206 -5-46 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak brak 41,91 mm (G5/4* BSP) external |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW(tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve | | dB(A) mm mm kg eC eC eC c C v-C v-Hz, Ø pcs / kW A | 59,8 73 1129×528×1558 1120×565×1735 1127/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak brak 41,91 mm (55/4* BSP) external 0.3 |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating current Water connections | | dB(A) mm mm kg ºC ºC °C °C °C °C °C °C | 59,8 73 1129×528×1558 1120×565×1735 1177/206 -5-46 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak brak 41,91 mm (G5/4* BSP) external |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve Condensate drain | | dB(A) mm mm kg eC eC eC C C V-Hz, Ø pcs / kW A mm (inch) | 59,8 73 1129×528×1558 1120×565×1735 1127/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak brak 41,91 mm (55/4* BSP) external 0.3 |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature Electric heater | weight Cooling Heating DHW Space cooling Space heating DHW(tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve | (W×D×H) | dB(A) mm mm kg °C °C °C °C V-Hz, Ø pcs / kW A mm (inch) MPa | 59,8 73 1129*528*1558 1129*528*1558 1220*565*1735 1777206 |
| Sound pressure leve Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating stages remediately stages of the stage | (W>D>H) Total volume / Actual volume Maximum pressure / Initial pressure | dB(A) mm mm kg eC eC eC vC vC V-Hz, Ø pcs / kW A mm (inch) MPa mm | 59,8 73 1129×528×1558 1220×565×1735 177/206 15-46 25-35 25-43 Heating and cooling 5-25-60 30-60 brak brak brak 41,91 mm (c5/4* BSP) external 0.3 16 8 / 4/8 1 / 0.1 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature Electric heater | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve Condensate drain | (W×D×H) Total volume / Actual volume Maximum pressure / Initial pressure Type | dB(A) mm mm kg eC eC eC v-C v-Hz, Ø pcs / kW A mm (inch) MPa mm | 59,8 73 1129×528×1558 1220×565×1735 177/206 -5-46 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak brak 41,91 mm (G5/4* BSP) external 0.3 16 8 / 4,8 1 / 0.1 PHE / plate heat exchanger |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature Electric heater | weight Cooling Heating DHW Space cooling Space heating DHW(tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve Condensate drain Expansion tank Heat exchanger | (W>D>H) Total volume / Actual volume Maximum pressure / Initial pressure | dB(A) mm mm kg °C °C °C °C V-Hz, Ø pcs / kW A mm (inch) MPa mm I MPa | 59,8 73 1129×528×1558 1129×528×1558 1220×565×1735 177/206 |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature Electric heater | weight Cooling Heating DHW Space cooling Space heating DHW (tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve Condensate drain Expansion tank Heat exchanger Water pump head | (W×D×H) Total volume / Actual volume Maximum pressure / Initial pressure Type | dB(A) mm mm kg eC eC eC v-C v-Hz, Ø pcs / kW A mm (inch) MPa mm | 59,8 73 1129×528×1558 1129×528×1558 1220×565×1735 177/206 -5-46 -25-35 -25-43 Heating and cooling 5-25 25-60 30-60 brak brak brak brak 41,91 mm (GS/4* BSP) external 0.3 16 8 / 4,8 1 / 0,1 PHE / plate heat exchanger |
| Sound pressure level Sound power level Net dimensions Gross dimensions Net weight / Gross v Operating outdoor temperature Operation modes Leaving water temperature Electric heater | weight Cooling Heating DHW Space cooling Space heating DHW(tank) Power supply Number of heating stages / Power Maximum operating current Water connections Pressure relief valve Condensate drain Expansion tank Heat exchanger | (W×D×H) Total volume / Actual volume Maximum pressure / Initial pressure Type | dB(A) mm mm kg °C °C °C °C V-Hz, Ø pcs / kW A mm (inch) MPa mm I MPa | 59,8 73 1129×528×1558 1129×528×1558 1220×565×1735 177/206 |

Notes: DHW – Domestic hot water, LWT – Leaving water temperature

The sound pressure level is measured 1m in front of the unit and (1+H)2m (where H is the height of the unit) above the floor in semi-anechoic room. During on-site operation sound pressure levels can be higher as a result of ambient noise. Sound pressure level and sound power level reflect the maximum value tested under three conditions specified respectively in notes A7W35, ΔT=5; A7W45, ΔT=5; A7W45, ΔT=5; A7W55 ΔT=8; relative humidity 85%. The figures specified above refer to the following standards: EN14511; EN14825; EN50564; EN12102; (EU) Np. 811/2013; (EU) Np. 813/2013; Journal of Laws 2014 / C 207/02: 2014.