

Subtype Ecodan Zubadan (TR) 6/8/10 + 200D AA

| | |
|---------------------|---|
| Certificate Holder | Mitsubishi Electric Air Conditioning Systems Europe LTD |
| Address | Nettlehill Road, Houston Industrial Estate |
| ZIP | EH54 5EQ |
| City | Livingston |
| Country | GB |
| Certification Body | SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise) |
| Subtype title | Ecodan Zubadan (TR) 6/8/10 + 200D AA |
| Registration number | 037-0122-23 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R32 |
| Mass of Refrigerant | 1.8 kg |
| Certification Date | 26.04.2023 |
| Testing basis | HP Keymark scheme rules rev. no. 9 |
| Testing laboratory | SZU Brno, CZ |

Model PUZ-SHWM60VAA + EHST20D-*M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUZ-SHWM60VAA + EHST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 | 5 kW | 4 kW |
| El input | 0.99 kW | 1.63 kW |
| COP | 5.05 | 2.45 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

| | | |
|---------------------------|----------|----------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 184 % | 129 % |
| Prated | 6 kW | 6 kW |
| SCOP | 4.67 | 3.3 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.31 kW | 5.31 kW |
| COP Tj = -7°C | 3.39 | 2.28 |
| Cdh Tj = -7 °C | 0.99 | 0.994 |
| Pdh Tj = +2°C | 4.8 kW | 4.4 kW |
| COP Tj = +2°C | 4.76 | 3.21 |
| Cdh Tj = +2 °C | 0.985 | 0.989 |
| Pdh Tj = +7°C | 4.9 kW | 4.1 kW |
| COP Tj = +7°C | 5.9 | 4.2 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.7 kW |
| COP Tj = 12°C | 6.52 | 5.87 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 6 kW | 6 kW |
| COP Tj = Tbiv | 2.74 | 2 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6 kW | 6 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.74 | 2 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 2655 kWh | 3761 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |

| | | |
|-------------------------------|-----|-----|
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM80VAA + EHST20D-*M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUZ-SHWM80VAA + EHST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

| | | |
|---------------------------|----------|----------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 184 % | 132 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.68 | 3.37 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.993 | 0.995 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.984 | 0.989 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3530 kWh | 4904 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |

| | | |
|-------------------------------|-----|-----|
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM80YAA + EHST20D-*M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUZ-SHWM80YAA + EHST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

| | | |
|---------------------------|----------|----------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 182 % | 131 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.63 | 3.34 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 0.993 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.976 | 0.984 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.974 | 0.978 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3568 kWh | 4941 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |

| | | |
|-------------------------------|-----|-----|
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM100VAA + EHST20D-*M*D

| | |
|-------------------------------------|-------------------------------|
| Model name | PUZ-SHWM100VAA + EHST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

| | | |
|---------------------------|----------|----------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 183 % | 136 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.65 | 3.48 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.995 | 0.996 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.987 | 0.991 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.983 | 0.986 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.996 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4444 kWh | 5936 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |

| | | |
|-------------------------------|-----|-----|
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM100YAA + EHST20D-*M*D

| | |
|-------------------------------------|-------------------------------|
| Model name | PUZ-SHWM100YAA + EHST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|--|-----------------|--------------------|
|--|-----------------|--------------------|

| | | |
|---------------------------|----------|----------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 181 % | 135 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.61 | 3.46 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.992 | 0.995 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.981 | 0.986 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.975 | 0.979 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.996 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4480 kWh | 5972 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|----------------|------------|-------------|
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |

| | | |
|-------------------------------|-----|-----|
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM60VAA + EHSD-*M*D

| | |
|-------------------------------------|---------------------------|
| Model name | PUZ-SHWM60VAA + EHSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 5 kW | 4 kW |
| El input | 0.99 kW | 1.63 kW |
| COP | 5.05 | 2.45 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 184 % | 129 % |
| Prated | 6 kW | 6 kW |
| SCOP | 4.67 | 3.3 |
| Tbiv | -10 °C | -10 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.31 kW | 5.31 kW |
| COP Tj = -7°C | 3.39 | 2.28 |
| Cdh Tj = -7 °C | 0.99 | 0.994 |
| Pdh Tj = +2°C | 4.8 kW | 4.4 kW |
| COP Tj = +2°C | 4.76 | 3.21 |
| Cdh Tj = +2 °C | 0.985 | 0.989 |
| Pdh Tj = +7°C | 4.9 kW | 4.1 kW |
| COP Tj = +7°C | 5.9 | 4.2 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.7 kW |
| COP Tj = 12°C | 6.52 | 5.87 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 6 kW | 6 kW |
| COP Tj = Tbiv | 2.74 | 2 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6 kW | 6 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.74 | 2 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 2655 kWh | 3761 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |

| | | |
|-------------------------------|-----|-----|
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM80VAA + EHSD-*M*D

| | |
|-------------------------------------|---------------------------|
| Model name | PUZ-SHWM80VAA + EHSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 6 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 184 % | 132 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.68 | 3.37 |
| Tbiv | -10 °C | -10 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.993 | 0.995 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.984 | 0.989 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3530 kWh | 4904 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |

| | | |
|-------------------------------|-----|-----|
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM80YAA + EHSD-*M*D

| | |
|-------------------------------------|---------------------------|
| Model name | PUZ-SHWM80YAA + EHSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 6 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 182 % | 131 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.63 | 3.34 |
| Tbiv | -10 °C | -10 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 0.993 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.976 | 0.984 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.974 | 0.978 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3568 kWh | 4941 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |

| | | |
|-------------------------------|-----|-----|
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM100VAA + EHSD-*M*D

| | |
|-------------------------------------|----------------------------|
| Model name | PUZ-SHWM100VAA + EHSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 183 % | 136 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.65 | 3.48 |
| Tbiv | -10 °C | -10 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.995 | 0.996 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.987 | 0.991 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.983 | 0.986 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.996 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4444 kWh | 5936 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |

| | | |
|-------------------------------|-----|-----|
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM100YAA + EHSD-*M*D

| | |
|-------------------------------------|----------------------------|
| Model name | PUZ-SHWM100YAA + EHSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | kW | kW |
| Cooling capacity | | |
| EER | | |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 181 % | 135 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.61 | 3.46 |
| Tbiv | -10 °C | -10 °C |

| | | |
|---|-------------|-------------|
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.992 | 0.995 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.981 | 0.986 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.975 | 0.979 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.996 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4480 kWh | 5972 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | kW | kW |
| SEER | | |
| Pdc Tj = 35°C | kW | kW |
| EER Tj = 35°C | | |
| Cdc Tj = 35 °C | | |
| Pdc Tj = 30°C | kW | kW |
| EER Tj = 30°C | | |
| Cdc Tj = 30 °C | | |
| Pdc Tj = 25°C | kW | kW |
| EER Tj = 25°C | | |
| Cdc Tj = 25 °C | | |
| Pdc Tj = 20°C | kW | kW |
| EER Tj = 20°C | | |
| Cdc Tj = 20 °C | | |

| | | |
|-------------------------------|-----|-----|
| Poff | W | W |
| PTO | W | W |
| PSB | W | W |
| PCK | W | W |
| Annual energy consumption Qce | kWh | kWh |

Model PUZ-SHWM60VAA + ERST20D-*M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUZ-SHWM60VAA + ERST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| 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 | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 | 5 kW | 4 kW |
| El input | 0.99 kW | 1.63 kW |
| COP | 5.05 | 2.45 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 1.5 kW | 1.14 kW |
| Cooling capacity | 5.1 | 6 |
| EER | 3.4 | 5.25 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 188 % | 131 % |
| Prated | 6 kW | 6 kW |
| SCOP | 4.77 | 3.34 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.31 kW | 5.31 kW |
| COP Tj = -7°C | 3.39 | 2.28 |
| Cdh Tj = -7 °C | 0.99 | 0.994 |
| Pdh Tj = +2°C | 4.8 kW | 4.4 kW |
| COP Tj = +2°C | 4.76 | 3.21 |
| Cdh Tj = +2 °C | 0.985 | 0.989 |
| Pdh Tj = +7°C | 4.9 kW | 4.1 kW |
| COP Tj = +7°C | 5.9 | 4.2 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.7 kW |
| COP Tj = 12°C | 6.52 | 5.87 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 6 kW | 6 kW |
| COP Tj = Tbiv | 2.74 | 2 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6 kW | 6 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.74 | 2 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 2600 kWh | 3706 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc | 5.1 kW | 6 kW |
| SEER | 3.88 | 5.91 |
| Pdc Tj = 35°C | 5.1 kW | 6 kW |
| EER Tj = 35°C | 3.4 | 5.25 |

| | | |
|-------------------------------|---------|---------|
| Cdc Tj = 35 °C | 0.99 | 0.987 |
| Pdc Tj = 30°C | 3.76 kW | 4.42 kW |
| EER Tj = 30°C | 3.84 | 5.95 |
| Cdc Tj = 30 °C | 0.985 | 0.98 |
| Pdc Tj = 25°C | 2.42 kW | 3.3 kW |
| EER Tj = 25°C | 4.07 | 6.38 |
| Cdc Tj = 25 °C | 0.975 | 0.971 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.57 | 7 |
| Cdc Tj = 20 °C | 0.973 | 0.97 |
| Poff | 15 W | 15 W |
| PTO | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 789 kWh | 609 kWh |

Model PUZ-SHWM80VAA + ERST20D-*M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUZ-SHWM80VAA + ERST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| 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 | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.22 kW | 1.63 kW |
| Cooling capacity | 7.1 | 8 |
| EER | 3.2 | 4.9 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 187 % | 133 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.76 | 3.41 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.993 | 0.995 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.984 | 0.989 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3475 kWh | 4849 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc | 7.1 kW | 8 kW |
| SEER | 4.12 | 5.74 |
| Pdc Tj = 35°C | 7.1 kW | 8 kW |
| EER Tj = 35°C | 3.2 | 4.9 |

| | | |
|-------------------------------|----------|---------|
| Cdc Tj = 35 °C | 0.993 | 0.991 |
| Pdc Tj = 30°C | 5.23 kW | 5.92 kW |
| EER Tj = 30°C | 3.85 | 5.7 |
| Cdc Tj = 30 °C | 0.989 | 0.986 |
| Pdc Tj = 25°C | 3.36 kW | 3.79 kW |
| EER Tj = 25°C | 4.55 | 6 |
| Cdc Tj = 25 °C | 0.98 | 0.976 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.69 | 6.75 |
| Cdc Tj = 20 °C | 0.972 | 0.971 |
| Poff | 15 W | 15 W |
| PTO | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1034 kWh | 836 kWh |

Model PUZ-SHWM80YAA + ERST20D-*M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUZ-SHWM80YAA + ERST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.22 kW | 1.63 kW |
| Cooling capacity | 7.1 | 8 |
| EER | 3.2 | 4.9 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 187 % | 133 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.74 | 3.4 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 0.993 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.976 | 0.984 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.974 | 0.978 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3487 kWh | 4860 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc | 7.1 kW | 8 kW |
| SEER | 4.06 | 5.62 |
| Pdc Tj = 35°C | 7.1 kW | 8 kW |
| EER Tj = 35°C | 3.2 | 4.9 |

| | | |
|-------------------------------|----------|---------|
| Cdc Tj = 35 °C | 0.99 | 0.987 |
| Pdc Tj = 30°C | 5.23 kW | 5.92 kW |
| EER Tj = 30°C | 3.85 | 5.7 |
| Cdc Tj = 30 °C | 0.984 | 0.979 |
| Pdc Tj = 25°C | 3.36 kW | 3.79 kW |
| EER Tj = 25°C | 4.55 | 6 |
| Cdc Tj = 25 °C | 0.97 | 0.965 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.69 | 6.75 |
| Cdc Tj = 20 °C | 0.959 | 0.958 |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1051 kWh | 853 kWh |

Model PUZ-SHWM100VAA + ERST20D-*M*D

| | |
|-------------------------------------|-------------------------------|
| Model name | PUZ-SHWM100VAA + ERST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| 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 | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.05 kW | 2.2 kW |
| Cooling capacity | 9 | 10 |
| EER | 2.95 | 4.55 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 185 % | 138 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.71 | 3.51 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.995 | 0.996 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.987 | 0.991 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.983 | 0.986 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.996 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4389 kWh | 5881 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc | 9 kW | 10 kW |
| SEER | 3.97 | 5.73 |
| Pdc Tj = 35°C | 9 kW | 10 kW |
| EER Tj = 35°C | 2.95 | 4.55 |

| | | |
|-------------------------------|----------|----------|
| Cdc Tj = 35 °C | 0.995 | 0.993 |
| Pdc Tj = 30°C | 6.63 kW | 7.37 kW |
| EER Tj = 30°C | 3.82 | 5.66 |
| Cdc Tj = 30 °C | 0.991 | 0.988 |
| Pdc Tj = 25°C | 4.26 kW | 4.74 kW |
| EER Tj = 25°C | 4.43 | 6.05 |
| Cdc Tj = 25 °C | 0.984 | 0.981 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.23 | 6.55 |
| Cdc Tj = 20 °C | 0.975 | 0.972 |
| Poff | 15 W | 15 W |
| PTO | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1359 kWh | 1047 kWh |

Model PUZ-SHWM100YAA + ERST20D-*M*D

| | |
|-------------------------------------|-------------------------------|
| Model name | PUZ-SHWM100YAA + ERST20D-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 16147 | Average Climate

| | |
|---------------------------------|------------|
| Declared load profile | L |
| Efficiency η_{DHW} | 134 % |
| COP | 3.2 |
| Heating up time | 2:09 h:min |
| Standby power input | 43 W |
| Reference hot water temperature | 51.5 °C |
| Mixed water at 40°C | 274 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 | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.05 kW | 2.2 kW |
| Cooling capacity | 9 | 10 |
| EER | 2.95 | 4.55 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|---|-----------------|--------------------|
| η_s | 185 % | 137 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.7 | 3.51 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.992 | 0.995 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.981 | 0.986 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.975 | 0.979 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.996 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4399 kWh | 5891 kWh |

EN 14825 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|---------------|------------|-------------|
| Pdesignc | 9 kW | 10 kW |
| SEER | 3.93 | 5.64 |
| Pdc Tj = 35°C | 9 kW | 10 kW |
| EER Tj = 35°C | 2.95 | 4.55 |

| | | |
|-------------------------------|----------|----------|
| Cdc Tj = 35 °C | 0.993 | 0.99 |
| Pdc Tj = 30°C | 6.63 kW | 7.37 kW |
| EER Tj = 30°C | 3.82 | 5.66 |
| Cdc Tj = 30 °C | 0.987 | 0.983 |
| Pdc Tj = 25°C | 4.26 kW | 4.74 kW |
| EER Tj = 25°C | 4.43 | 6.05 |
| Cdc Tj = 25 °C | 0.977 | 0.972 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.23 | 6.55 |
| Cdc Tj = 20 °C | 0.963 | 0.959 |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1375 kWh | 1064 kWh |

Model PUZ-SHWM60VAA + ERSD-*M*D

| | |
|-------------------------------------|---------------------------|
| Model name | PUZ-SHWM60VAA + ERSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| 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 | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 5 kW | 4 kW |
| El input | 0.99 kW | 1.63 kW |
| COP | 5.05 | 2.45 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 1.5 kW | 1.14 kW |
| Cooling capacity | 5.1 | 6 |
| EER | 3.4 | 5.25 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 188 % | 131 % |
| Prated | 6 kW | 6 kW |
| SCOP | 4.77 | 3.34 |

| | | |
|---|-------------|-------------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.31 kW | 5.31 kW |
| COP Tj = -7°C | 3.39 | 2.28 |
| Cdh Tj = -7 °C | 0.99 | 0.994 |
| Pdh Tj = +2°C | 4.8 kW | 4.4 kW |
| COP Tj = +2°C | 4.76 | 3.21 |
| Cdh Tj = +2 °C | 0.985 | 0.989 |
| Pdh Tj = +7°C | 4.9 kW | 4.1 kW |
| COP Tj = +7°C | 5.9 | 4.2 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.7 kW |
| COP Tj = 12°C | 6.52 | 5.87 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 6 kW | 6 kW |
| COP Tj = Tbiv | 2.74 | 2 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 6 kW | 6 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.74 | 2 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 2600 kWh | 3706 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 5.1 kW | 6 kW |
| SEER | 3.88 | 5.91 |
| Pdc Tj = 35°C | 5.1 kW | 6 kW |
| EER Tj = 35°C | 3.4 | 5.25 |
| Cdc Tj = 35 °C | 0.99 | 0.987 |
| Pdc Tj = 30°C | 3.76 kW | 4.42 kW |
| EER Tj = 30°C | 3.84 | 5.95 |
| Cdc Tj = 30 °C | 0.985 | 0.98 |
| Pdc Tj = 25°C | 2.42 kW | 3.3 kW |
| EER Tj = 25°C | 4.07 | 6.38 |
| Cdc Tj = 25 °C | 0.975 | 0.971 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.57 | 7 |

| | | |
|-------------------------------|---------|---------|
| Cdc Tj = 20 °C | 0.973 | 0.97 |
| Poff | 15 W | 15 W |
| PTO | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 789 kWh | 609 kWh |

Model PUZ-SHWM80VAA + ERSD-*M*D

| | |
|-------------------------------------|---------------------------|
| Model name | PUZ-SHWM80VAA + ERSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| 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 | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 6 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.22 kW | 1.63 kW |
| Cooling capacity | 7.1 | 8 |
| EER | 3.2 | 4.9 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 187 % | 133 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.76 | 3.41 |

| | | |
|---|-------------|-------------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.993 | 0.995 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.984 | 0.989 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.982 | 0.985 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3475 kWh | 4849 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 7.1 kW | 8 kW |
| SEER | 4.12 | 5.74 |
| Pdc Tj = 35°C | 7.1 kW | 8 kW |
| EER Tj = 35°C | 3.2 | 4.9 |
| Cdc Tj = 35 °C | 0.993 | 0.991 |
| Pdc Tj = 30°C | 5.23 kW | 5.92 kW |
| EER Tj = 30°C | 3.85 | 5.7 |
| Cdc Tj = 30 °C | 0.989 | 0.986 |
| Pdc Tj = 25°C | 3.36 kW | 3.79 kW |
| EER Tj = 25°C | 4.55 | 6 |
| Cdc Tj = 25 °C | 0.98 | 0.976 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.69 | 6.75 |

| | | |
|-------------------------------|----------|---------|
| Cdc Tj = 20 °C | 0.972 | 0.971 |
| Poff | 15 W | 15 W |
| PTO | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1034 kWh | 836 kWh |

Model PUZ-SHWM80YAA + ERSD-*M*D

| | |
|-------------------------------------|---------------------------|
| Model name | PUZ-SHWM80YAA + ERSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 6 kW | 4 kW |
| El input | 1.19 kW | 1.6 kW |
| COP | 5.05 | 2.5 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 2.22 kW | 1.63 kW |
| Cooling capacity | 7.1 | 8 |
| EER | 3.2 | 4.9 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 54 dB(A) | 54 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 187 % | 133 % |
| Prated | 8 kW | 8 kW |
| SCOP | 4.74 | 3.4 |

| | | |
|---|-------------|-------------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 7.08 kW | 7.08 kW |
| COP Tj = -7°C | 3.22 | 2.31 |
| Cdh Tj = -7 °C | 0.99 | 0.993 |
| Pdh Tj = +2°C | 4.4 kW | 4.4 kW |
| COP Tj = +2°C | 4.75 | 3.21 |
| Cdh Tj = +2 °C | 0.976 | 0.984 |
| Pdh Tj = +7°C | 5 kW | 4.4 kW |
| COP Tj = +7°C | 5.9 | 4.4 |
| Cdh Tj = +7 °C | 0.974 | 0.978 |
| Pdh Tj = 12°C | 3 kW | 2.8 kW |
| COP Tj = 12°C | 6.52 | 6.09 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 8 kW | 8 kW |
| COP Tj = Tbiv | 2.65 | 1.83 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8 kW | 8 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.65 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.993 | 0.995 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 3487 kWh | 4860 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 7.1 kW | 8 kW |
| SEER | 4.06 | 5.62 |
| Pdc Tj = 35°C | 7.1 kW | 8 kW |
| EER Tj = 35°C | 3.2 | 4.9 |
| Cdc Tj = 35 °C | 0.99 | 0.987 |
| Pdc Tj = 30°C | 5.23 kW | 5.92 kW |
| EER Tj = 30°C | 3.85 | 5.7 |
| Cdc Tj = 30 °C | 0.984 | 0.979 |
| Pdc Tj = 25°C | 3.36 kW | 3.79 kW |
| EER Tj = 25°C | 4.55 | 6 |
| Cdc Tj = 25 °C | 0.97 | 0.965 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.69 | 6.75 |

| | | |
|-------------------------------|----------|---------|
| Cdc Tj = 20 °C | 0.959 | 0.958 |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1051 kWh | 853 kWh |

Model PUZ-SHWM100VAA + ERSD-*M*D

| | |
|-------------------------------------|----------------------------|
| Model name | PUZ-SHWM100VAA + ERSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| 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 | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.05 kW | 2.2 kW |
| Cooling capacity | 9 | 10 |
| EER | 2.95 | 4.55 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 185 % | 138 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.71 | 3.51 |

| | | |
|---|-------------|-------------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.995 | 0.996 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.987 | 0.991 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.983 | 0.986 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.967 | 0.967 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.996 | 0.997 |
| 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 | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4389 kWh | 5881 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 9 kW | 10 kW |
| SEER | 3.97 | 5.73 |
| Pdc Tj = 35°C | 9 kW | 10 kW |
| EER Tj = 35°C | 2.95 | 4.55 |
| Cdc Tj = 35 °C | 0.995 | 0.993 |
| Pdc Tj = 30°C | 6.63 kW | 7.37 kW |
| EER Tj = 30°C | 3.82 | 5.66 |
| Cdc Tj = 30 °C | 0.991 | 0.988 |
| Pdc Tj = 25°C | 4.26 kW | 4.74 kW |
| EER Tj = 25°C | 4.43 | 6.05 |
| Cdc Tj = 25 °C | 0.984 | 0.981 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.23 | 6.55 |

| | | |
|-------------------------------|----------|----------|
| Cdc Tj = 20 °C | 0.975 | 0.972 |
| Poff | 15 W | 15 W |
| PTO | 15 W | 15 W |
| PSB | 15 W | 15 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1359 kWh | 1047 kWh |

Model PUZ-SHWM100YAA + ERSD-*M*D

| | |
|-------------------------------------|----------------------------|
| Model name | PUZ-SHWM100YAA + ERSD-*M*D |
| Application | Heating (medium temp) |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Heat Source | Outdoor Air |
| Reversibility | Yes |
| Cooling mode application (optional) | +7°C/12°C, +18°C/+23°C |
| Any additional heat sources | n/a |

General data

| | |
|------------------|-------------|
| Power supply | 3x400V 50Hz |
| Off-peak product | n/a |

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

| | |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |

EN 14511-2 | Heating

| | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 8 kW | 7 kW |
| El input | 1.6 kW | 2.59 kW |
| COP | 5 | 2.7 |

EN 14511-2 | Cooling

| | +7°C/+12°C | +18°C/+23°C |
|------------------|------------|-------------|
| El input | 3.05 kW | 2.2 kW |
| Cooling capacity | 9 | 10 |
| EER | 2.95 | 4.55 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 41 dB(A) | 41 dB(A) |
| Sound power level outdoor | 58 dB(A) | 58 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 185 % | 137 % |
| Prated | 10 kW | 10 kW |
| SCOP | 4.7 | 3.51 |

| | | |
|---|-------------|-------------|
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 8.85 kW | 8.85 kW |
| COP Tj = -7°C | 3.1 | 2.19 |
| Cdh Tj = -7 °C | 0.992 | 0.995 |
| Pdh Tj = +2°C | 5.4 kW | 5.4 kW |
| COP Tj = +2°C | 4.62 | 3.38 |
| Cdh Tj = +2 °C | 0.981 | 0.986 |
| Pdh Tj = +7°C | 5.2 kW | 4.8 kW |
| COP Tj = +7°C | 6 | 4.62 |
| Cdh Tj = +7 °C | 0.975 | 0.979 |
| Pdh Tj = 12°C | 3.2 kW | 2.9 kW |
| COP Tj = 12°C | 6.96 | 6.3 |
| Cdh Tj = +12 °C | 0.952 | 0.952 |
| Pdh Tj = Tbiv | 10 kW | 10 kW |
| COP Tj = Tbiv | 2.49 | 1.69 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW | 10 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.49 | 1.69 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.995 | 0.996 |
| WTOL | 60 °C | 60 °C |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Supplementary Heater: Type of energy input | Electricity | Electricity |
| Supplementary Heater: PSUP | 0 kW | 0 kW |
| Annual energy consumption Qhe | 4399 kWh | 5891 kWh |

EN 14825 | Cooling

| | | |
|----------------|------------|-------------|
| | +7°C/+12°C | +18°C/+23°C |
| Pdesignc | 9 kW | 10 kW |
| SEER | 3.93 | 5.64 |
| Pdc Tj = 35°C | 9 kW | 10 kW |
| EER Tj = 35°C | 2.95 | 4.55 |
| Cdc Tj = 35 °C | 0.993 | 0.99 |
| Pdc Tj = 30°C | 6.63 kW | 7.37 kW |
| EER Tj = 30°C | 3.82 | 5.66 |
| Cdc Tj = 30 °C | 0.987 | 0.983 |
| Pdc Tj = 25°C | 4.26 kW | 4.74 kW |
| EER Tj = 25°C | 4.43 | 6.05 |
| Cdc Tj = 25 °C | 0.977 | 0.972 |
| Pdc Tj = 20°C | 2.5 kW | 3.5 kW |
| EER Tj = 20°C | 4.23 | 6.55 |

| | | |
|-------------------------------|----------|----------|
| Cdc Tj = 20 °C | 0.963 | 0.959 |
| Poff | 22 W | 22 W |
| PTO | 22 W | 22 W |
| PSB | 22 W | 22 W |
| PCK | 0 W | 0 W |
| Annual energy consumption Qce | 1375 kWh | 1064 kWh |