

Subtype Ecodan Zubadan 14-300D

| | |
|---------------------|---|
| 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 14-300D |
| Registration number | 037-0014-20 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R410A |
| Mass of Refrigerant | 5.5 kg |
| Certification Date | 14.02.2020 |
| Testing basis | HP Keymark scheme rules rev. no. 6 |
| Testing laboratory | SZU Brno, CZ |

Model PUHZ-SHW140YHA + EHST30C-M*D

| | |
|-------------------------------------|------------------------------|
| Model name | PUHZ-SHW140YHA + EHST30C-M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| 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 | XL |
| Efficiency η_{DHW} | 118 % |
| COP | 2.84 |
| Heating up time | 02:12 h:min |
| Standby power input | 43.0 W |
| Reference hot water temperature | 52.5 °C |
| Mixed water at 40°C | 417 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 | 14.00 kW | 14.00 kW |
| El input | 3.32 kW | 5.62 kW |
| COP | 4.22 | 2.49 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 40 dB(A) | 40 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_s | 163 % | 127 % |
| Prated | 17.00 kW | 15.80 kW |

| | | |
|---|-------------|-------------|
| SCOP | 4.16 | 3.25 |
| Tbiv | -7 °C | -7 °C |
| TOL | -28 °C | -28 °C |
| Pdh Tj = -7°C | 15.00 kW | 14.00 kW |
| COP Tj = -7°C | 2.59 | 1.84 |
| Cdh Tj = -7 °C | 0.990 | 1.000 |
| Pdh Tj = +2°C | 9.10 kW | 8.50 kW |
| COP Tj = +2°C | 4.01 | 3.10 |
| Cdh Tj = +2 °C | 0.990 | 0.990 |
| Pdh Tj = +7°C | 5.90 kW | 5.50 kW |
| COP Tj = +7°C | 5.71 | 4.67 |
| Cdh Tj = +7 °C | 0.980 | 0.980 |
| Pdh Tj = 12°C | 7.30 kW | 7.00 kW |
| COP Tj = 12°C | 7.47 | 6.62 |
| Cdh Tj = +12 °C | 0.980 | 0.980 |
| Pdh Tj = Tbiv | 15.00 kW | 14.00 kW |
| COP Tj = Tbiv | 2.59 | 1.84 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 14.10 kW | 13.90 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.42 | 1.83 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | | |
| 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 | 2.90 kW | 1.90 kW |
| Annual energy consumption Qhe | 8446 kWh | 10054 kWh |

Model PUHZ-SHW140YHA + EHST30C-*M*D

| | |
|-------------------------------------|-------------------------------|
| Model name | PUHZ-SHW140YHA + EHST30C-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

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| SCOP | 4.16 | 3.25 |
| Tbiv | -7 °C | -7 °C |
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| COP Tj = Tbiv | 2.59 | 1.84 |
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| 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 | 2.90 kW | 1.90 kW |
| Annual energy consumption Qhe | 8446 kWh | 10054 kWh |

Model PUHZ-SHW140YHA + ERST30C-*M*D

| | |
|-------------------------------------|-------------------------------|
| Model name | PUHZ-SHW140YHA + ERST30C-*M*D |
| Application | Heating + DHW + low temp |
| Units | Indoor, Outdoor |
| Climate zone (for heating) | n/a |
| Reversibility | Yes |
| Cooling mode application (optional) | n/a |
| Any additional heat sources | n/a |

General data

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

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| Sound power level indoor | 40 dB(A) | 40 dB(A) |
| Sound power level outdoor | 70 dB(A) | 70 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_S | 165 % | 128 % |

| | | |
|---|-------------|-------------|
| Prated | 17.00 kW | 15.80 kW |
| SCOP | 4.21 | 3.27 |
| Tbiv | -7 °C | -7 °C |
| TOL | -28 °C | -28 °C |
| Pdh Tj = -7°C | 15.00 kW | 14.00 kW |
| COP Tj = -7°C | 2.59 | 1.84 |
| Cdh Tj = -7 °C | 0.990 | 1.000 |
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| Cdh Tj = +2 °C | 0.990 | 0.990 |
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| 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 | 2.90 kW | 1.90 kW |
| Annual energy consumption Qhe | 8344 kWh | 9973 kWh |