

WPL A2W Premium Cold Climate Heat Pumps

Engineering technical specifications

| | WPL 15 A2W Premium | WPL 25 A2W Premium |
|---|-------------------------------|-------------------------------|
| Item No. | 203252 | 203253 |
| Heating output | | |
| Full load capacity | 23.04 kBtu/hr | 50.4 kBtu/hr |
| A 47/LWT 105 °F (min/max) | 11.26 kBtu/hr / 22.86 kBtu/hr | 26.95 kBtu/hr / 41.18 kBtu/hr |
| A 17/LWT 105 °F (min/max) | 8.19 kBtu/hr / 22.86 kBtu/hr | 20.13 kBtu/hr / 43.16 kBtu/hr |
| A 5/LWT 110 °F (min/max) | 7.51 kBtu/hr / 21.38 kBtu/hr | 17.63 kBtu/hr / 45.34 kBtu/hr |
| A -4/LWT 149 °F (min/max) | 15.28 kBtu/hr / 18.80 kBtu/hr | 29.37 kBtu/hr / 36.17 kBtu/hr |
| Cooling output | | |
| Full load capacity | 2.13 ton | 4.09 ton |
| Full load efficiency | 1.65 kW/ton | 1.51 kW/ton |
| A 95/LWT 44.6 °F (min/max) | 0.61 ton / 2.13 ton | 1.92 ton / 4.1 ton |
| A 80/LWT 44.6 °F (min/max) | 0.72 ton / 2.38 ton | 2.09 ton / 4.51 ton |
| Power consumption, heating | | |
| A 47/LWT 105 °F (min/max) | 0.87 kW / 1.73 kW | 1.76 kW / 2.85 kW |
| A 17/LWT 105 °F (min/max) | 0.92 kW / 2.29 kW | 1.79 kW / 3.92 kW |
| A 5/LWT 110 °F (min/max) | 1.07 kW / 2.50 kW | 1.83 kW / 4.80 kW |
| A -4/LWT 149 °F (min/max) | 2.97 kW / 3.65 kW | 5.25 kW / 7.53 kW |
| Power consumption, emergency/booster heater | 6.75 kW @ 240 V | 6.75 kW @ 240 V |
| Power consumption, cooling | | |
| A 95/LWT 44.6 °F (min/max) | 0.9 kW / 3.52 kW | 2.31 kW / 6.21 kW |
| A 80/LWT 44.6 °F (min/max) | 0.73 kW / 2.71 kW | 1.98 kW / 4.96 kW |
| COP heating (maximum capacity) | | |
| A 47/LWT 105 °F | 3.86 | 4.24 |
| A 17/LWT 105 °F | 2.93 | 3.22 |
| A 5/LWT 110 °F | 2.51 | 2.77 |
| A -4/LWT 149 °F | 1.51 | 1.79 |
| IPLV cooling* | | |
| IPLV | 15.68 | 16.83 |
| IPLV kW/ton | 0.76 | 0.71 |
| Sound output | | |
| Sound Power Level (SWL), max. capacity | 61 dB(A) | 66 dB(A) |
| Sound Power Level (SWL), silent mode | 50 dB(A) | 54 dB(A) |
| Application limits | | |
| Min. application limit, heat source | -4 °F (-20 °C) | -4 °F (-20 °C) |
| Max. application limit, heat source | 104 °F (40 °C) | 104 °F (40 °C) |
| Min. application limit on the heating side | 59 °F (15 °C) | 59 °F (15 °C) |
| Max. application limit on the heating side | 149 °F (65 °C) | 149 °F (65 °C) |
| Application limit, heat source at LWT 149 °F | -4 °F (-20 °C) | -4 °F (-20 °C) |
| Min. cooling mode application limit for outside temperature | 59 °F (15 °C) | 59 °F (15 °C) |
| Max. cooling mode application limit for outside temperature | 104 °F (40 °C) | 104 °F (40 °C) |
| LWT min. in cooling mode | 44.6 °F (7 °C) | 44.6 °F (7 °C) |
| Water hardness | 143-152 ppm | 143-152 ppm |
| Conductivity (softening water) | < 1000 µS/cm | < 1000 µS/cm |
| Conductivity (desalination) | 20-100 µS/cm | 20-100 µS/cm |
| Chloride | < 30 mg/l | < 30 mg/l |
| Oxygen 8-12 weeks after filling (softening) | < 0.02 mg/l | < 0.02 mg/l |
| Oxygen 8-12 weeks after filling (desalination) | < 0.1 mg/l | < 0.1 mg/l |

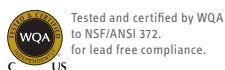
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WPL A2W Premium Cold Climate Heat Pumps

Engineering technical specifications

| | WPL 15 A2W Premium | WPL 25 A2W Premium |
|---|---|---|
| Electrical data | | |
| Rated voltage | 220-240 V | 220-240 V |
| Breaker size, compressor (DP) | 20 A | 35 A |
| Breaker size, controller (DP) | 15 A | 15 A |
| Breaker size, backup element (DP) | 30 A | 30 A |
| Starting current | 7 A | 10 A |
| Locked rotor current | 17 A | 35 A |
| Max. operating current | 19.5 A | 30 A |
| Refrigerant data | | |
| Type | R410A | R410A |
| Charge | 9.26 lb (4.2 kg) | 12.13 lb (5.5 kg) |
| IP rating | IP 14B | IP 14B |
| Condenser material | 1.4401 Cu | 1.4401 Cu |
| Evaporator material | Aluminum/copper | Aluminum/copper |
| Dimensions | | |
| Height | 35 ³ / ₈ " (900 mm) | 41 ¹ / ₈ " (1045 mm) |
| Width | 50" (1270 mm) | 58 ¹¹ / ₁₆ " (1490 mm) |
| Depth | 23 ³ / ₈ " (593 mm) | 23 ³ / ₈ " (593 mm) |
| Weight | 309 lb (140 kg) | 386 lb (175 kg) |
| Connection size tube expanded to 29.1 mm diam. | 28 mm (adapter expanded to 1" coupling size) | 28 mm (adapter expanded to 1" coupling size) |
| Miscellaneous | | |
| Min heating flow rate at A 45F/LWT 95F and 9F delta | 3.1 gpm (11.7 l/min) | 4.4 gpm (16.7 l/min) |
| Max operating pressure, heating circuit | 43.5 psi (0.3 MPa) | 43.5 psi (0.3 MPa) |
| Circulation rate, heat source side | 1354 cfm (2300 m ³ /hr) | 2354 cfm (4000 m ³ /hr) |
| Internal pressure difference | 0.87 psi (60 hPa) | 1.6 psi (110 hPa) |
| Installation location | | |
| Maximum altitude for installation | 6,562 ft (2000 m) | 6,562 ft (2000 m) |
| Minimum distance to salt water body | > 1640 ft (> 500 m) | > 1640 ft (> 500 m) |

* According to AHRI Standard 550/590 Energy Star performance test
 [A45: Ambient air temperature = 45°F (7.2°C)]
 [LWT95: Leaving water temperature = 95°F (35°C)]



The performance data apply for new appliances with no fouling (dirt) on the heat exchanger. The power consumption data are maximum values and may vary due to the operation condition, auxiliary consumption for components like circulation pump are not included. The performance data are based on 100% water for heat transfer. The usage of polypropylene glycol with a minimum concentration of 30% is required. Depending on the glycol concentration the performance values may vary.