Photon AC 24k BTU Standard Wall-Mounted Mini Split

Full Technical Specifications — AHRI Certified Data | Model DGA2-ACDC-24KR2(US)

High-efficiency solar-hybrid heating and cooling system. Seamlessly prioritizes DC power from solar panels, switching to standard AC only when needed.

ELECTRICAL DATA

Rated Voltage (AC)	**208V – 230V, 60Hz**
Rated Voltage (DC / Solar)	**150V – 380V DC**
Rated Current (AC)	**9.95A – 9.0A**
Rated Current (DC / Solar)	**13.67A – 5.4A**
PV VOC (Open Circuit Voltage)	**≤ 380V**
PV ISC (Short Circuit Current)	**≤ 20A**
Minimum Circuit Ampacity	**16.33A**
Maximum Fuse Size	**20A**
Maximum Starting Current	**6A**

COOLING PERFORMANCE

Nominal Capacity	**24,000 BTU/h**
Capacity Range	**6,100 – 25,200 BTU/h**
Input Power (AC)	**2050 W**
Rated Current (AC)	**9.5 A**
EER	**11.7 (BTU/W)**
SEER	**20.5 (W/W)**
SEER2	**21 (W/W)**

HEATING PERFORMANCE

Nominal Capacity	**24,000 BTU/h**
Capacity Range	**61,00 – 26,000 BTU/h**
Input Power (AC)	**1900 W**
Rated Current (AC)	**8.35 A**
COP	**12.6 (BTU/W)**
HSPF2-5	**7.9 (W/W)**
HSPF2-4	**10 (W/W)**

INDOOR UNIT — FAN MOTOR DATA

Fan Motor Model	**ZWR45-C51**
Brand	**KAIBANG**
Output Power	**45 W**
Rated Load Amperage (RLA)	**0.48 A**
Speed (Turbo / 5 / 4 / 3 / 2 / 1)	**1350 / 1250 / 1100 / 1050 / 950 / 900 RPM**
Air Flow (Turbo / 5 / 4 / 3 / 2 / 1)	**700 / 625 / 560 / 526 / 462 / 430 CFM**
Sound Pressure (Turbo / 5 / 4 / 3 / 2 / 1)	**50 / 48.5 / 45.5 / 43.5 / 41 / 39 dB(A)**
Moisture Removal	**4.5 pt/hr**

INDOOR UNIT — DIMENSIONS & WEIGHT

Unit Dimensions (W × D × H)	**42.51" × 9.33" × 12.99"**
Packaging (W × D × H)	**44.88" × 11.81" × 14.25"**
Net / Gross Weight	**33.07 / 38.58 lbs**

OUTDOOR UNIT — FAN MOTOR DATA

Fan Motor Model	**ZWB278L56A**
Brand	**WOLONG**
Output Power	**75 W**
Rated Load Amperage (RLA)	**0.81 A**
Speed (Hi)	**850 RPM**
Air Flow (Hi)	**1940 CFM**
Sound Pressure (Hi)	**58 dB(A)**

OUTDOOR UNIT — DIMENSIONS & WEIGHT

Unit Dimensions (W × D × H)	**35.43" × 13.27" × 27.56"**
Packaging (W × D × H)	**39.61" × 16.46" × 29.72"**
Net / Gross Weight	**102.51 / 114.64 lbs**

COMPRESSOR

Model	**9RD198ZAD21**
Type	**2 × Rotary**
Brand	**Panasonic**
Input Power	**2105 W**
Rated Load Amperage (RLA)	**6.72 A**
Locked Rotor Amperage (LRA)	**—**

OPERATING TEMPERATURE RANGES

Indoor — Cooling / Heating	**61°F – 90°F / 32°F – 90°F**
Outdoor — Cooling / Heating	**32°F – 131°F / 5°F – 86°F**

SYSTEM & INSTALLATION DATA

Design Pressure	**< 651 PSIG**
Refrigerant / Factory Charge	**R32 / 40.57 oz**
Pre-charge Pipe Length	**16.4 ft**
Additional Charge per Extra ft	**0.2 oz/ft**
Liquid Line Valve	**1/4" (6.35 mm)**
Gas Line Valve	**1/2" (12.7 mm)**
Max Refrigerant Pipe Length	**82 ft**
Max Elevation Difference	**32 ft**

ACCESSORIES

Control	**Remote**
Connection Cable	**18AWG × 4 Stranded**
Digital Cable	**—**
Installation Kit	**Copper Kit — 16.4 ft included**

CERTIFICATIONS & COMPLIANCE

AHRI Certified | DOE / ENERGY STAR Compliant | ETL Listed | R32 Refrigerant

All ratings per AHRI 210/240-2023 standard test conditions.

Specifications subject to change without notice. Performance data based on AHRI 210/240 standard test conditions. Solar performance varies by panel configuration and local solar irradiance. Installation must comply with all applicable local codes and NEC requirements. © Photon AC. All rights reserved.