Photon AC 12k BTU Solar Mini Split

Full Technical Specifications — AHRI Certified Data | Model DGWA3-ACDC1-12KR2(US)

Compact, high-efficiency solar-hybrid heating and cooling system for spaces up to 650 sq ft. Seamlessly prioritizes DC power from solar panels, switching to standard AC only when needed.

ELECTRICAL DATA

Rated Voltage (AC)	**115V, 60Hz**
Rated Voltage (DC / Solar)	**90V – 380V DC**
Rated Current (AC)	**8.3A**
Rated Current (DC / Solar)	**9.1A – 2.4A**
PV VOC (Open Circuit Voltage)	**≤ 380V**
PV ISC (Short Circuit Current)	**≤ 12A**
Minimum Circuit Ampacity	**19.05A**
Maximum Fuse Size	**20A**
Maximum Starting Current	**4A**

COOLING PERFORMANCE

Nominal Capacity	**12,000 BTU/h**
Capacity Range	**3,000 – 12,500 BTU/h**
Input Power (AC)	**950 W**
Rated Current (AC)	**8.35 A**
EER	**12.6 (BTU/W)**
SEER	**20.8 (W/W)**
SEER2	**22.5 (W/W)**

HEATING PERFORMANCE

Nominal Capacity	**12,000 BTU/h**
Capacity Range	**3,000 – 13,000 BTU/h**
Input Power (AC)	**980 W**
Rated Current (AC)	**8.6 A**
COP	**12.25 (BTU/W)**
HSPF2-5	**—**
HSPF2-4	**9.7 (W/W)**

INDOOR UNIT — FAN MOTOR DATA

Fan Motor Model	**ZWR15-C52**
Brand	**KAIBANG**
Output Power	**15 W**
Rated Load Amperage (RLA)	**0.4 A**
Speed (Turbo / 5 / 4 / 3 / 2 / 1)	**1,250 / 1,100 / 1,000 / 900 / 800 / 750 RPM**
Air Flow (Turbo / 5 / 4 / 3 / 2 / 1)	**340 / 320 / 300 / 280 / 260 / 250 CFM**
Sound Pressure (Turbo / 5 / 4 / 3 / 2 / 1)	**41.5 / 37.5 / 34.5 / 32 / 30 / 29 dB(A)**
Moisture Removal	**2.65 pt/hr**

INDOOR UNIT — DIMENSIONS & WEIGHT

Unit Dimensions (W × D × H)	**33.07" × 8.07" × 11.61"**
Packaging (W × D × H)	**36.22" × 11.42" × 14.17"**
Net / Gross Weight	**20.94 / 26.01 lbs**

OUTDOOR UNIT — FAN MOTOR DATA

Fan Motor Model	**ZWR35-A51**
Brand	**KAIBANG**
Output Power	**35 W**
Rated Load Amperage (RLA)	**0.42 A**
Speed (Hi / Med / Lo)	**800 RPM**
Air Flow (Hi / Med / Lo)	**1,060 CFM**
Sound Pressure (Hi/Med/Lo)	**52 dB(A)**

OUTDOOR UNIT — DIMENSIONS & WEIGHT

Unit Dimensions (W × D × H)	**31.57" × 12.72" × 22.2"**
Packaging (W × D × H)	**35.83" × 15.94" × 24.49"**
Net / Gross Weight	**70.55 / 81.57 lbs**

COMPRESSOR

Model	**KSK103D33UEZ3**
Type	**Rotary**
Brand	**GMCC**
Input Power	**834 W**
Rated Load Amperage (RLA)	**5.7 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 / 27.52 oz**
Pre-charge Pipe Length	**16.4 ft**
Additional Charge per Extra ft	**0.16 oz/ft**
Liquid Line Valve	**1/4" (6.35 mm)**
Gas Line Valve	**3/8" (9.52 mm)**
Max Refrigerant Pipe Length	**49 ft**
Max Elevation Difference	**26 ft**

ACCESSORIES

Control	**Remote**
Connection Cable	**18AWG × 4 Stranded**
Digital Cable	**16AWG × 4 Stranded**
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.