



Submittal Data Sheet

Indoor Unit Model#: S-12W-ACDC230

Outdoor Unit Model#: S-12Z-ACDC230

12K (115V) Solar Single-Zone Mini-Split System

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



SYSTEM PERFORMANCE			
Cooling Performance			
Nominal Capacity	Btu/h	12000	
Capacity Range	Btu/h	3000 - 12500	
EER	Btu/W	12.6	
SEER	WW	20.8	
SEER2	WW	22.5	
Input Power	W	950	
Rated Current	A	8.35	
Heating Performance			
Nominal Capacity	Btu/h	12000	
Capacity Range	Btu/h	3000 - 13000	
COP	Btu/W	12.25	
HSPF2-Region IV	WW	9.7	
HSPF2-Region V	WW	N/A	
Input Power	W	980	
Rated Current	A	8.6	

SYSTEM OPERATING TEMPERATURE RANGE			
Cooling Operation Temperature Range			
Indoor Unit (Room Temperature)	°F	61° ~ 90°	
	°C	16° ~ 32°	
Outdoor Unit (Outdoor Temperature)	°F	32° ~ 131°	
	°C	0° ~ 55°	
Heating Operation Temperature Range			
Indoor Unit (Room Temperature)	°F	32° ~ 90°	
	°C	0° ~ 32°	
Outdoor Unit (Outdoor Temperature)	°F	5° ~ 86°	
	°C	-15° ~ 30°	
Dry Mode Temperature Range			
Indoor Unit (Room Temperature)	°F	50° ~ 90°	
	°C	10° ~ 32°	
Outdoor Unit (Outdoor Temperature)	°F	32° ~ 122°	
	°C	0° ~ 50°	

FEATURES

- System can operate as 100% DC Solar or in combination with AC Electrical Power Supply (dependent on installation & operating conditions).
- Unit installs with a prevacuumed refrigerant line set to simplify installation procedures:
 - Connector fittings on each end of the line set allow it to be quickly connected to the condenser and air handler.
 - Line set is prevacuumed, once installed no vacuum evacuation is required.
- WiFi Smart Control allows user to control/monitor system and see energy savings.
- Wide Maximum Power Point Tracking (MPPT) range to track & utilize maximum power output from solar panel(s):
 - MPPT Tracking can reach 99.8% efficiency
 - Panel Maximum Power Voltage (VMP): 80V - 380V
 - Panel Open Circuit Voltage (VOC): 390V
- Equipped with multiple protection features to ensure a high level of safety:
 - Solar (PV) Input lightning protection
 - Residual current monitoring unit
 - Output over-current protection
 - Output over-voltage protection

ELECTRICAL SPECIFICATIONS

AC Power Supply (Electrical Connection)	V, Ph, Hz	115V, 1 Ph, 60 Hz
DC Power Supply (Solar Power Source Range)	V	90V ~ 380V
Rated Current of AC Power Supply	A	8.3
Rated Current of DC Solar Power Source	A	9.1 ~ 2.4
VOC of PV (Max. Open-Circuit Voltage of Solar Module)	V	≤380
ISC of PV (Max. Short-Circuit Current of Solar Module)	A	≤12
Minimum Circuit Ampacity (MCA)	A	19.05
Max. Fuse Size (AC Power Supply)	A	20
Max. Starting Current	A	4
Recommended Connection Wiring	Size x Core No.	4 x 18 AWG Stranded

INDOOR UNIT SPECIFICATIONS

Controller	Type	Remote
Indoor Fan Motor	Model	ZWR15-C52
Indoor Fan Speed (Fan Setting: Turbo / 5 / 4 / 3 / 2 / 1)	r/min	1250 / 1100 / 1000 / 900 / 800 / 750
Indoor Airflow (Fan Setting: Turbo / 5 / 4 / 3 / 2 / 1)	CFM	340 / 320 / 300 / 280 / 260 / 250
Indoor Noise Level (sound pressure) (Fan Setting: Turbo / 5 / 4 / 3 / 2 / 1)	dB(A)	41.5 / 37.5 / 34.5 / 32 / 30 / 29
Output Power	W	15
Rated Load Amperage (RLA)	A	0.4
Moisture Removal/Dehumidification	pt/hr	2.65
Unit Dimensions (W×D×H)	in	33.07 x 8.07 x 11.61
	mm	839.88 x 204.98 x 294.89
Packing Dimensions (W×D×H)	inch	36.22 x 11.42 x 14.17
	mm	919.99 x 290.07 x 359.92
Net/Gross Weight	lbs	20.94 / 26.01
	kg	9.50 / 11.80

OUTDOOR UNIT SPECIFICATIONS

Outdoor Fan Motor	Model	ZWR35-A51
Outdoor Fan Speed	r/min	800
Outdoor Airflow	CFM	1060
Outdoor Noise Level (sound pressure)	dB(A)	52
Output Power	W	35
Rated Load Amperage (RLA)	A	0.42
Unit Dimensions (W×D×H)	in	31.57 x 12.72 x 22.20
	mm	801.88 x 323.09 x 563.88
Packing Dimensions (W×D×H)	inch	35.83 x 15.94 x 24.49
	mm	910.08 x 404.88 x 622.05
Net/Gross Weight	lbs	70.55 / 81.57
	kg	32.00 / 37.00

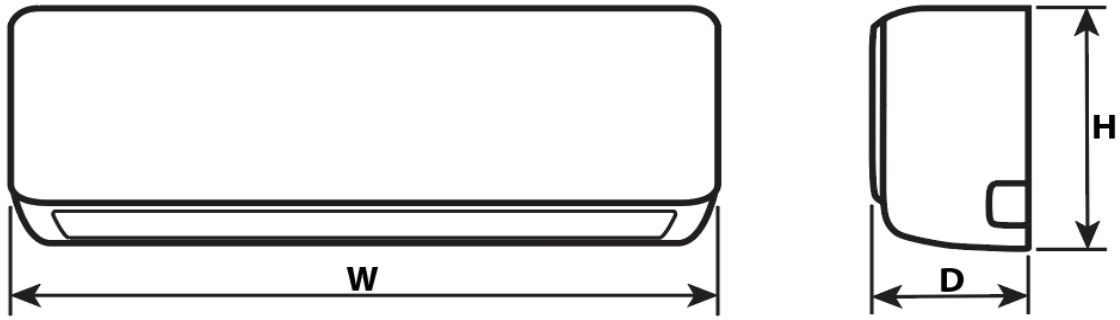
COMPRESSOR SPECIFICATIONS

Compressor	Type	Rotary
	Model	KSK103D33UEZ3
Compressor Input Power	W	834
Compressor Rated Load Amperage (RLA)	A	5.7

REFRIGERANT PIPING SPECIFICATIONS

Refrigerant	Type	R32
Refrigerant Charge Amount	oz	27.52
	g	780
Additional Refrigerant Charge Amount (per ft)	oz/ft	0.16
Refrigerant Precharge	ft	16.4
Design Pressure (Max. Allowable Pressure)	PSIG	<651
	kPa	4500
Liquid Piping Size	in	1/4"
	mm	6.35
Gas Piping Size	in	3/8"
	mm	9.52
Max. Piping Length	ft	49
	m	14.9
Max. Height Difference	ft	26
	m	7.9
Connection Method	Type	Pre-Vacuumed Line Set, Connector Fitting

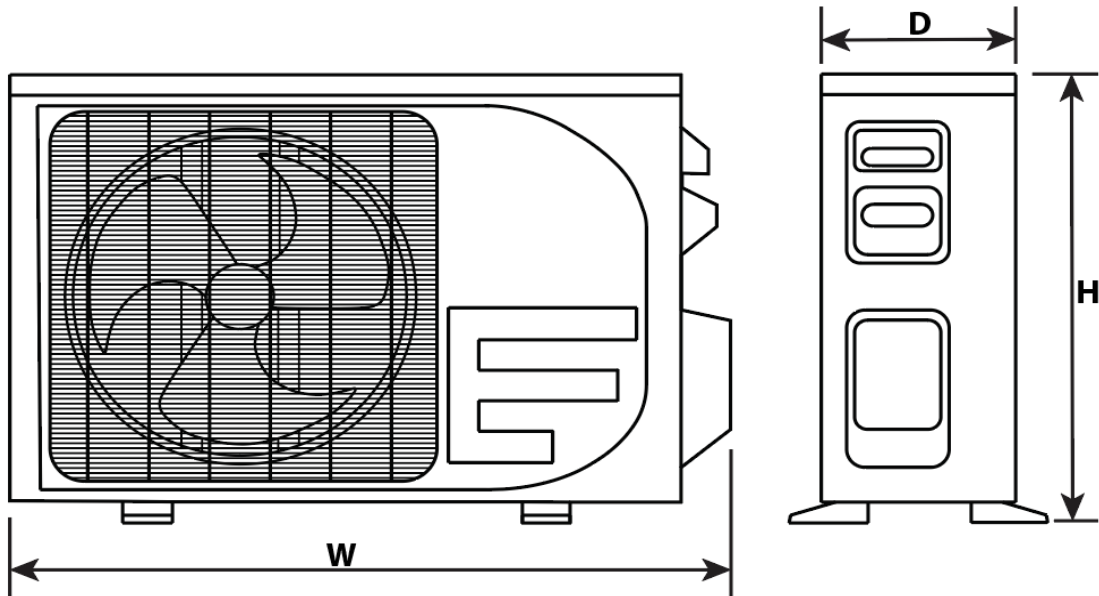
Indoor Unit Dimensions



Capacity	W (Width)	D (Depth)	H (Height)
12K	33.07 in (839.88 mm)	8.07 in (204.98 mm)	11.61 in (294.89 mm)

Units: Inch (Millimeter)

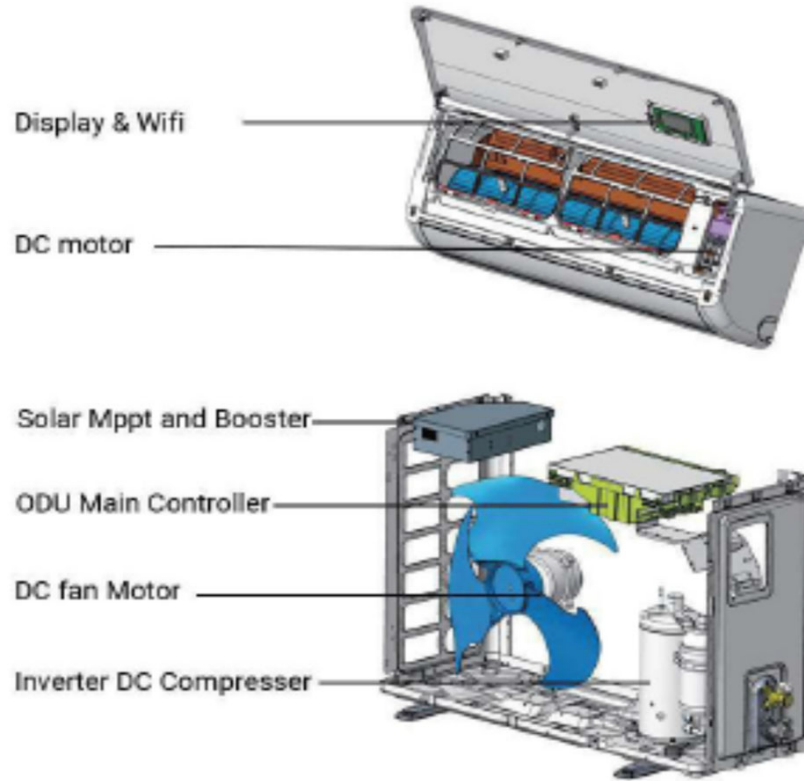
Outdoor Unit Dimensions



Capacity	W (Width)	D (Depth)	H (Height)
12K	31.57 in (801.88 mm)	12.72 in (323.09 mm)	22.20 in (563.88 mm)

Units: Inch (Millimeter)

Indoor & Outdoor Unit Main Parts Diagram



Installation Diagram

