



Submittal Data Sheet

Indoor Unit Model#: S-24W-ACDC230

Outdoor Unit Model#: S-24Z-ACDC230

24K (230V) 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	24000
Capacity Range	Btu/h	6100 - 25200
EER	Btu/W	11.7
SEER	W/W	20.5
SEER2	W/W	21.0
Input Power	W	2050
Rated Current	A	9.5
Heating Performance		
Nominal Capacity	Btu/h	24000
Capacity Range	Btu/h	6100 - 26000
COP	Btu/W	12.6
HSPF2-Region IV	W/W	10
HSPF2-Region V	W/W	7.9
Input Power	W	1900
Rated Current	A	8.35

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	208-230V, 1 Ph, 60 Hz
DC Power Supply (Solar Power Source Range)	V	150V ~ 380V
Rated Current of AC Power Supply	A	9.95 - 9.0
Rated Current of DC Solar Power Source	A	13.67 ~ 5.4
VOC of PV (Max. Open-Circuit Voltage of Solar Module)	V	≤380
ISC of PV (Max. Short-Circuit Current of Solar Module)	A	≤20
Minimum Circuit Ampacity (MCA)	A	16.33
Max. Fuse Size (AC Power Supply)	A	20
Max. Starting Current	A	6
Recommended Connection Wiring	Size x Core No.	4 x 18 AWG Stranded

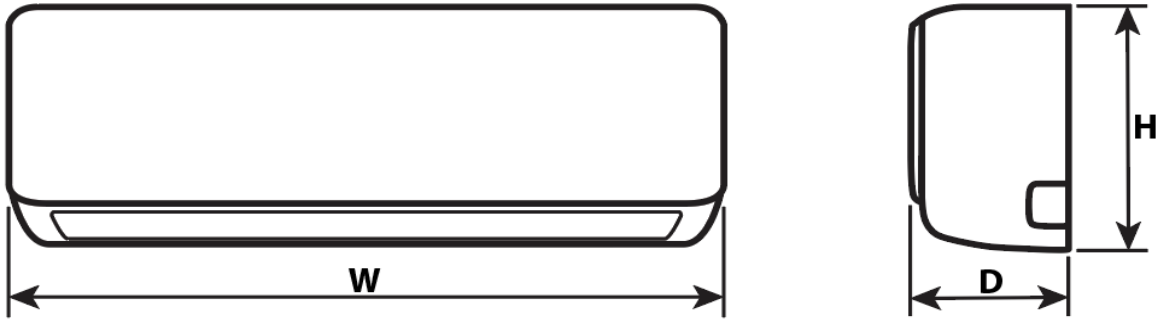
INDOOR UNIT SPECIFICATIONS		
Controller	Type	Remote
Indoor Fan Motor	Model	ZWR45-C51
Indoor Fan Speed (Fan Setting: Turbo / 5 / 4 / 3 / 2 / 1)	r/min	1350 / 1250 / 1100 / 1050 / 950 / 900
Indoor Airflow (Fan Setting: Turbo / 5 / 4 / 3 / 2 / 1)	CFM	700 / 625 / 560 / 526 / 462 / 430
Indoor Noise Level (sound pressure) (Fan Setting: Turbo / 5 / 4 / 3 / 2 / 1)	dB(A)	50 / 48.5 / 45.5 / 43.5 / 41 / 39
Output Power	W	45
Rated Load Amperage (RLA)	A	0.48
Moisture Removal/Dehumidification	pt/hr	4.5
Unit Dimensions (W×D×H)	in	42.51 x 9.33 x 12.99
	mm	1079.75 x 236.98 x 329.95
Packing Dimensions (W×D×H)	inch	44.88 x 11.81 x 14.25
	mm	1139.95 x 299.97 x 361.95
Net/Gross Weight	lbs	33.07 / 38.58
	kg	15.00 / 17.50

OUTDOOR UNIT SPECIFICATIONS		
Outdoor Fan Motor	Model	ZWB278L56A
Outdoor Fan Speed	r/min	850
Outdoor Airflow	CFM	1940
Outdoor Noise Level (sound pressure)	dB(A)	58
Output Power	W	75
Rated Load Amperage (RLA)	A	0.81
Unit Dimensions (W×D×H)	in	35.43 x 13.27 x 27.56
	mm	899.92 x 337.06 x 700.02
Packing Dimensions (W×D×H)	inch	39.61 x 16.46 x 29.72
	mm	1006.09 x 418.08 x 754.89
Net/Gross Weight	lbs	102.51 / 114.64
	kg	46.50 / 52.00

COMPRESSOR SPECIFICATIONS		
Compressor	Type	2"Rotary
	Model	9RD198ZADA21
Compressor Input Power	W	2105
Compressor Rated Load Amperage (RLA)	A	6.72

REFRIGERANT PIPING SPECIFICATIONS		
Refrigerant	Type	R32
Refrigerant Charge Amount	oz	40.57
	g	1150
Additional Refrigerant Charge Amount (per ft)	oz/ft	0.20
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	1/2"
	mm	12.7
Max. Piping Length	ft	82
	m	24.9
Max. Height Difference	ft	32
	m	9.8
Connection Method	Type	Pre-Vacuumed Line Set, Connector Fitting

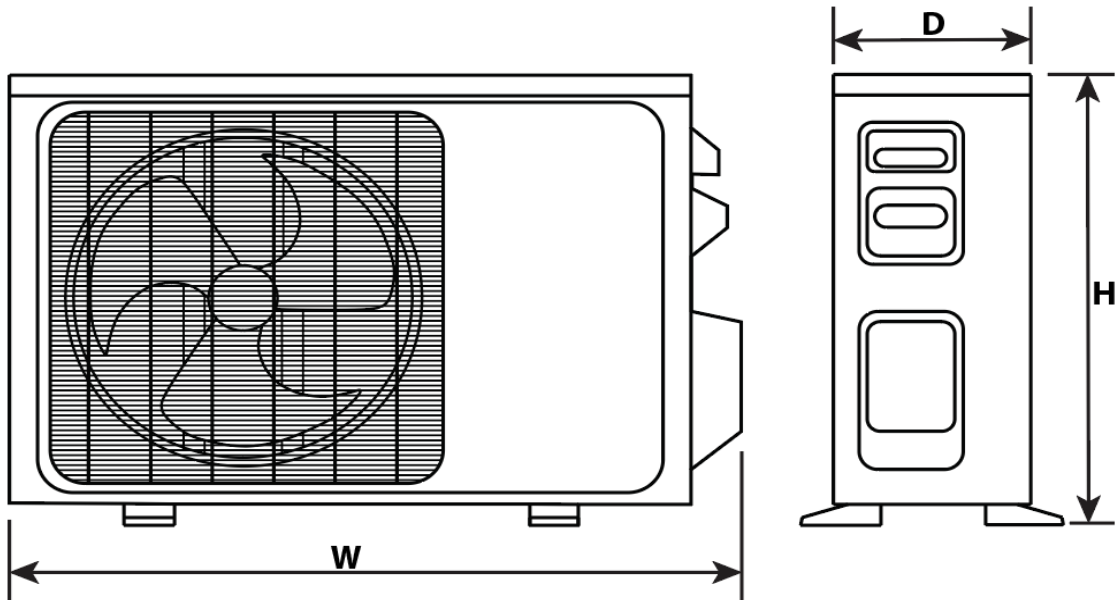
Indoor Unit Dimensions



Capacity	W (Width)	D (Depth)	H (Height)
24K	42.51 in (1079.75 mm)	9.33 in (236.98 mm)	12.99 in (329.95 mm)

Units: Inch (Millimeter)

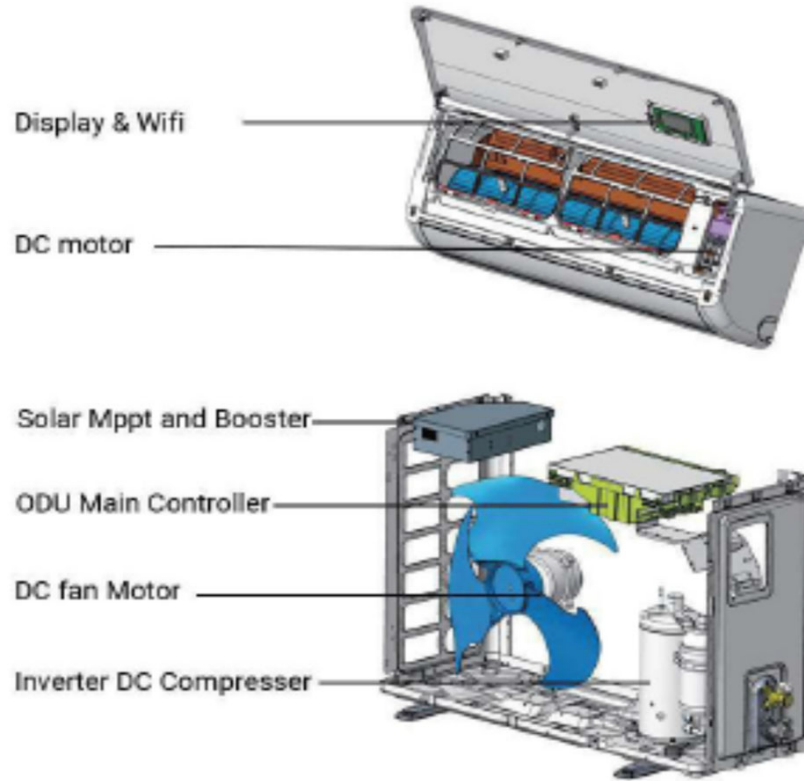
Outdoor Unit Dimensions



Capacity	W (Width)	D (Depth)	H (Height)
24K	35.43 in (899.92 mm)	13.27 in (337.06 mm)	27.56 in (700.02 mm)

Units: Inch (Millimeter)

Indoor & Outdoor Unit Main Parts Diagram



Installation Diagram

