ACiQ

Submittal Data: ACiQ-12W-HP230 / ACiQ-12Z-HP230

Job Name	Location	Date
Purchaser	Engineer	
Submitted To	For ☐ Reference ☐ Approval ☐ Construction	
Unit Designation	Schedule No.	

General Features
- Intelligently high efficiency design
- Stealth and compact with quiet operation
- Durable and reliable engineering
- Golden Fin condenser coating
- Heating and cooling down to -5°F
- Included remote with LCD display
- On-handler LED display
- 5 year parts and 10 year limited compressor warranty with online registration

AHRI Certificate Reference No. 206315632
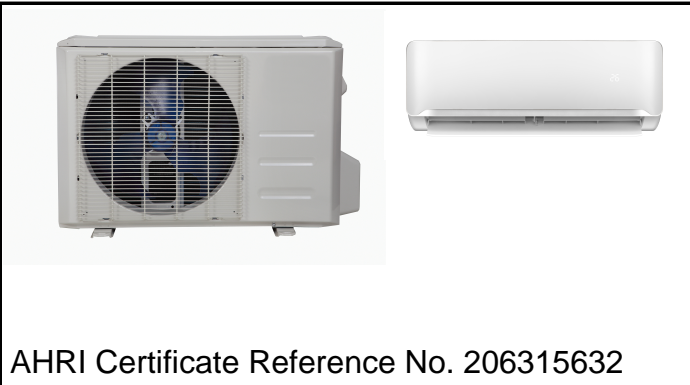
System Performance Ratings

Cooling

Capacity	Btu/h	12000
Input	W	1065
Rated current	A	4.5
EER	Btu/w	11.0
SEER	Btu/w	19.0

Heating at 47

Capacity	Btu/h	12000
Input	W	1025
Rated current	A	4.3
COP	W/W	3.43
HSPF4		9.5
HSPF5		8.0

Compressor

Model		KSK103D33UEZ3
Type		Rotary
Brand		GMCC
Capacity	Btu/h	10577.2
Input	W	790
Rated current(RLA)	A	5.6
Locked rotor Amp(LRA)	A	-
Thermal protector		-
Thermal protector position		-
Refrigerant oil/oil charge	ml	ESTER OIL VG74 310 ±15 ml

Refrigerant Piping Data

Design pressure	PSIG	550/340
Refrigerant type	oz	R410A/29.63
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.161
Liquid side/Gas side	mm(in)	Φ6.35/Φ12.7(1/4"/1/2")
Max. refrigerant pipe length	ft	82
Max. difference in level	ft.	33

Indoor Unit Data

Indoor fan motor

Model		ZKFP-20-8-6-7
Brand		Welling
Input		50
RLA	A	0.06
LRA	A	-
Winding Resistance	Ω	-
Capacitor	uF	-
Speed(Hi/Mi/Lo)	r/min	1100/900/750

Air flow & Noise level

Indoor air flow (Hi/Lo)	CFM	324/282/212
Indoor noise level (Hi/Lo)	dB(A)	38/32/24

Outdoor Unit Data

Outdoor fan motor

Model		ZKFN-34-8-1-3
Brand		Weiling
Input		58
RLA	A	0.39
LRA	A	-
Winding Resistance	Ω	77.3
Capacitor	uF	-
Speed	r/min	800/750/650

Air flow & Noise level

Outdoor air flow	CFM	1176
Outdoor noise level	dB(A)	55

Electrical Data

Power supply	Ph-V-Hz	208-230V, 1Ph, 60Hz
MINIMUM CIRCUIT AMPACITY	A	15
MAX. FUSE	A	15
Connection wiring		16*4 AWG

INVERTER R410A non ozone-depleting refrigerant AHRI CERTIFIED www.ahridirectory.org ETL LISTED

Features & Function Summary

SYSTEM FEATURES	
Inverter Type	GMCC
Ultra Low Frequency Torque Control	YES
Power Factor Correction	YES
Compressor Type	High Eff. Rotary
Refrigerant Type	R410A
Outdoor Fin Coating	Golden Fin
Intelligent Defrosting	YES
Intelligent Preheating	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Multi Fan Speeds	3 Speeds
Indoor Unit Display	YES

REMOTE CONTROLLER FUNCTIONS	
Auto Mode	YES
Auto Fan	YES
Vertical Auto Swing	YES
Clock on Remote Controller	YES
Dry Mode	YES
Energy Saving Mode	YES
I Feel Function	YES
Lock on Remote Controller	YES
Room Temperature Display	YES
Sleep Mode	YES
Timer Mode	YES
Turbo Mode	YES
Display On/Off Control	YES
Freeze Guard Mode	YES
Display On/Off Control	YES
Freeze Guard Mode	YES

EXTENDED RATINGS

COOLING PERFORMANCE (BtuH)*

Indoor			-5F (-20.6C)	5F (-15C)	15F (-9.4C)	35F (1.7C)	45F (7.2C)	75F (23.9C)	85F (29.4C)	95F (35C)	122F (50C)
DB	WB										
65F (18.3C)	54F	TC	9.24	10.33	10.35	10.68	10.64	11.20	11.40	11.60	7.92
		SC	6.38	7.43	7.54	7.74	7.86	7.85	8.06	9.05	7.21
70F (21.1C)	59F	TC	9.68	10.89	10.92	11.13	11.09	11.81	11.96	12.16	8.25
		SC	6.69	7.83	7.95	8.07	8.20	8.28	8.45	9.49	7.51
75F (23.9C)	63F	TC	10.46	11.77	11.73	12.08	12.05	12.69	12.99	13.29	9.02
		SC	7.23	8.46	8.55	8.76	8.91	8.90	9.18	10.36	8.20
80F (26.7C)	67F	TC	11.13	12.45	12.55	12.79	12.82	13.57	13.82	14.06	9.54
		SC	7.69	8.95	9.14	9.27	9.48	9.51	9.77	10.97	8.68

HEATING PERFORMANCE (BtuH)*

Indoor (DB)		-5F (-20.6C)	5F (-15C)	17F (-8.3C)	32F (0C)	39.2F (4C)	44.6F (7C)	47F (8.3C)	53.6F (12C)	57F (13.9C)
60F (15.6C)	TC	7.06	8.74	10.26	12.86	14.09	15.08	15.79	16.37	16.88
	Input	1.13	1.25	1.29	1.43	1.43	1.45	1.44	1.41	1.39
65F (18.3C)	TC	6.78	8.38	9.86	12.36	13.58	14.54	15.17	15.73	16.22
	Input	1.15	1.27	1.31	1.45	1.45	1.47	1.46	1.43	1.42
70F (21.1C)	TC	6.49	8.02	9.43	11.79	12.96	13.86	14.50	15.02	15.47
	Input	1.17	1.29	1.33	1.47	1.47	1.49	1.49	1.45	1.44
75F (23.9C)	TC	6.27	7.70	8.96	11.26	12.50	13.30	13.78	14.20	14.70
	Input	1.18	1.31	1.35	1.49	1.49	1.52	1.51	1.47	1.46

* Maximum system capacity

DB - Dry Bulb TC - Total Net Capacity (1,000 BTU/hour)
WB - Wet Bulb SC - Sensible Capacity (1,000 BTU/hour) Input - Total Power (kW) COP - W/W

MINIMUM SPACING REQUIREMENTS

Units: inch (mm)

INDOOR

6 (152) From Ceiling

6 (152) From Wall

6 (152) From Wall

60 (1520) From Floor

ACiQ-12Z-HP230

Units: inch (mm)

OUTDOOR

20 (508) From Any Structure

12 (305) From Any Structure

20 (508) From Any Structure

78 (1980) Discharge

12 (305) Inlet
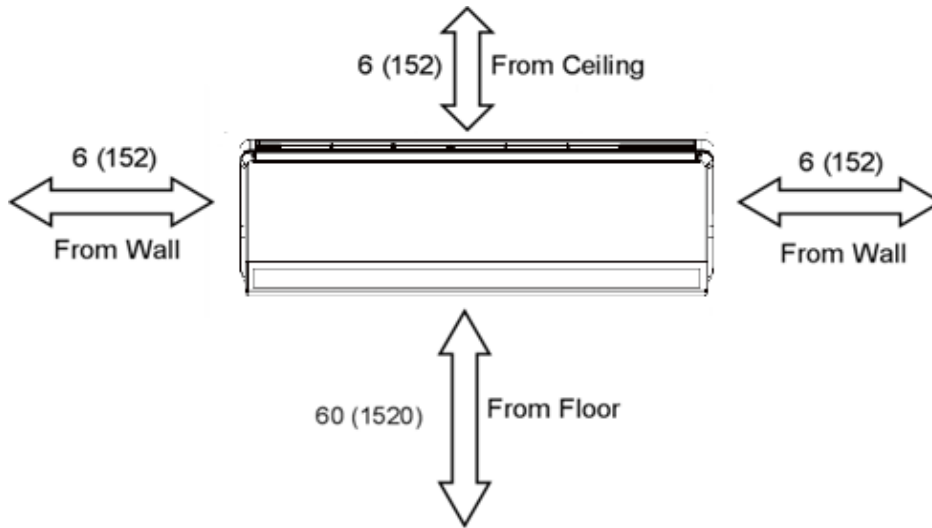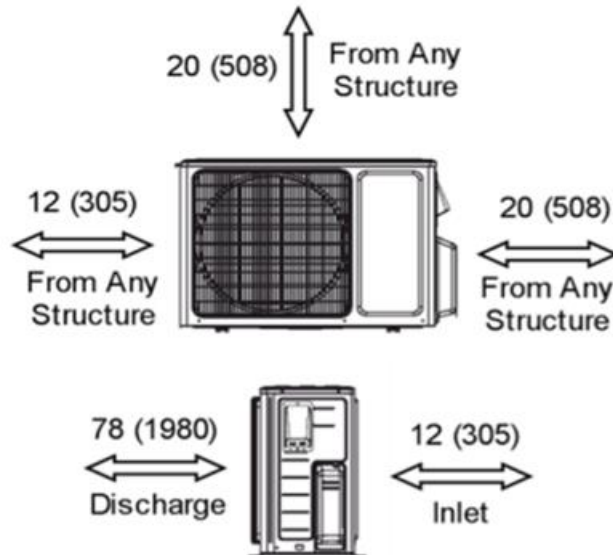
DIMENSIONAL SPECIFICATIONS

INDOOR UNIT DIMENSIONS

Units: inch

Model No: ACiQ-12W-HP230
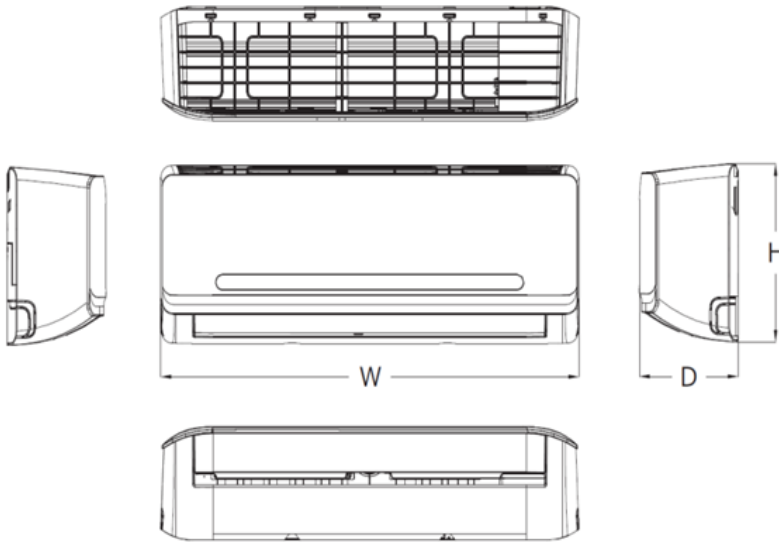
Dimensions	
W	31.57
D	7.44
H	11.69

Weight (Net/Gross)   18.96/24.91 lbs

Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	1/2-in OD Flared
Drain Connector	5/8-in OD

OUTDOOR UNIT DIMENSIONS

Units: inch

Model No: ACiQ-12Z-HP230
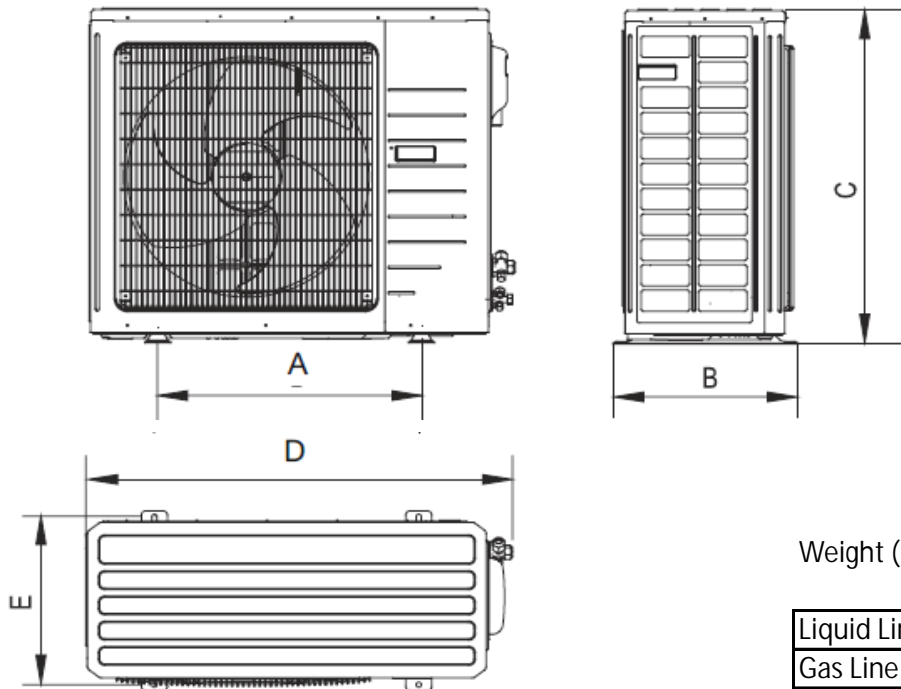
Dimensions	
A	20.24
B	13.39
C	31.50
D	34.25
E	13.11

Weight (Net/Gross)   67/72.75 lbs

Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	1/2-in OD Flared