



Submittal Data Sheet

Indoor Unit Model#: ACiQ-36-AH32
 Outdoor Unit Model#: ACiQ-36-HP32

3-Ton Air Handler Heat Pump System

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

System Product Code: 810175552378
 Indoor Unit Product Code: 810175552293
 Outdoor Unit Product Code: 810175552330



EFFICIENCY RATINGS

Cooling		Heating	
SEER2	18.0	HSPF2	10.0
EER	12.0	COP (W/W)	3.3

COOLING PERFORMANCE

Cooling (Btu/hr)	
Rated Capacity	34000
Cooling Capacity Range (Min/Max)	18000 - 37000
Ambient Temperature Range (Cooling Operation)	
Indoor Unit °F (°C)	64.4°F ~ 89.6°F (18°C ~ 32°C)
Outdoor Unit °F (°C)	5°F ~ 129.2°F (-15°C ~ 54°C)
Rated Cooling Conditions:	Indoor: 80.1°F DB/66.9°F WB
	Outdoor: 95°F DB/75.0°F WB

HEATING PERFORMANCE

Heating (Btu/hr)	
Rated Capacity	34000
Heating Capacity Range (Min/Max)	18000 - 38000
Ambient Temperature Range (Heating Operation)	
Indoor Unit °F (°C)	50°F ~ 80.6°F (10°C ~ 27°C)
Outdoor Unit °F (°C)	-22°F ~ 75.2°F (-30°C ~ 24°C)
Rated Heating Conditions:	Indoor: 70.0°F DB/60.1°F WB
	Outdoor: 47.0°F DB/43.0°F WB

AIR FILTER SPECIFICATIONS (INDOOR UNIT)

Air Filter Material	Metal		
Air Filter Size (LxW/no. of Filters)	inch	19.3 x 20.3 / 1	
	mm	490 x 516 / 1	
Air Filter Size (Thickness)	inch	0.6	
	mm	15	

INDOOR UNIT SPECIFICATIONS

Evaporator Material	Inner Groove Copper Tube-Aluminum Fin	
ESP (inWG)	0.5	
Indoor Air Flow Volume (CFM)	1000	
Indoor Noise Level (dBA)	61	
System Operation Control	Thermostat	
Dimension (WxDxH)	inch	21.26 x 21.26 x 48.19
	mm	540 x 540 x 1224
Package (WxDxH)	inch	25.98 x 23.74 x 50.98
	mm	660 x 603 x 1295
Net/Gross Weight	lbs	163.1 / 178.6
	kg	74.0 / 81.0
Drainage Connection Size (O.D. x Wall Thickness)	inch	1 x 0.05
	mm	25.4 x 1.2

OUTDOOR UNIT SPECIFICATIONS

Compressor Type	Inverter Rotary	
Compressor Model	QXFT-F310zN450B	
Refrigerant Type	R32	
Refrigerant Oil Charge (L)	1.12	
Refrigerant Oil	FW68DA (FW68L)	
Condenser Material	Inner Groove Copper Tube-Aluminum Fin	
Outdoor Air Flow (Max) (CFM)	3176	
Outdoor Noise Level (dBA)	71	
Dimension (WxDxH)	inch	38.98 x 14.57 x 37.80
	mm	990 x 370 x 960
Package (WxDxH)	inch	45.39 x 18.82 x 43.70
	mm	1153 x 478 x 1110
Net/Gross Weight	lbs	187.4 / 211.6
	kg	85 / 96

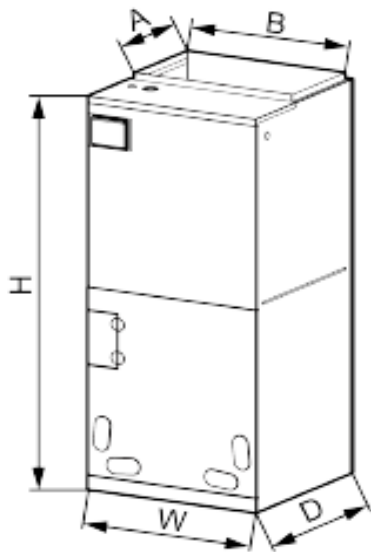
ELECTRICAL SPECIFICATIONS

Power Supply	208/230V, 60 Hz, 1 Ph	
Min/Max Voltage	187/253	
Indoor Unit MCA	5.3	
Indoor Unit MOP	15	
Indoor Unit Fuse Current (A)	3.15	
Outdoor MCA	30	
Outdoor MOP	27.7	
Outdoor Unit Fuse Capacity (A)	30	
Recommended Power Cable (Core) (N)	3	
Compressor RLA	19.7	
Outdoor Fan Motor FLA	3	
Outdoor Fan Motor Output (HP)	1/6	
Outdoor Fan Motor Speed (RPM)	800	
Indoor Fan Motor FLA	3.2	
Indoor Fan Motor Output (HP)	1/2	
Cooling Power Input (kW)	Indoor Unit: 0.25	
	Outdoor Unit: 2.98	
Heating Power Input (kW)	Indoor Unit: 0.20	
	Outdoor Unit: 3.02	
MCA: Min. circuit amps (A)	MOP: Max. over current protection (A)	
RLA: Rated load amps (A)	HP: Fan motor rated horsepower (HP)	
FLA: Full load amps (A)	RPM: Fan motor speed (revolutions/min)	

REFRIGERANT PIPING SPECIFICATIONS

Throttle type (Indoor)	Electronic Expansion Valve (EEV)
Throttle type (Outdoor)	Electronic Expansion Valve (EEV)
Liquid Size (in/mm)	3/8 (9.52)
Gas Size (in/mm)	3/4 (19)
Max. Piping Length (ft/m)	164 / 50
Max. Height Difference (ft/m)	98.4 / 30
Max. Allowable Pressure (MPa)	5.83
Refrigerant Charge Amount (oz/kg)	102.3 / 2.9
Additional Charge of Refrigerant ((oz/ft)/(g/m))	0.323 / 30
Connection Method	Flare Connection

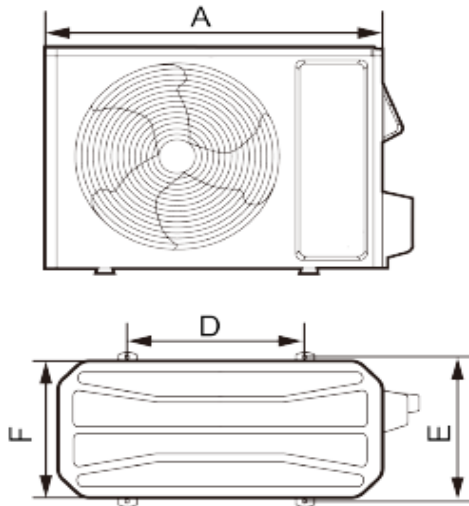
Indoor Unit Dimensions



Unit: inch(mm)

Model	Dimension				
	W	D	H	A	B
ACIQ-24-AH32	18-1/8 (460)	21-1/4 (540)	43-1/2 (1105)	11-5/8 (295)	16-3/4 (426)
ACIQ-36-AH32	21-1/4 (540)	21-1/4 (540)	48-3/16 (1224)	11-5/8 (295)	20 (508)
ACIQ-48-AH32	24-13/16 (630)	21-1/4 (540)	52 (1320)	11-5/8 (295)	20 (508)
ACIQ-60-AH32					

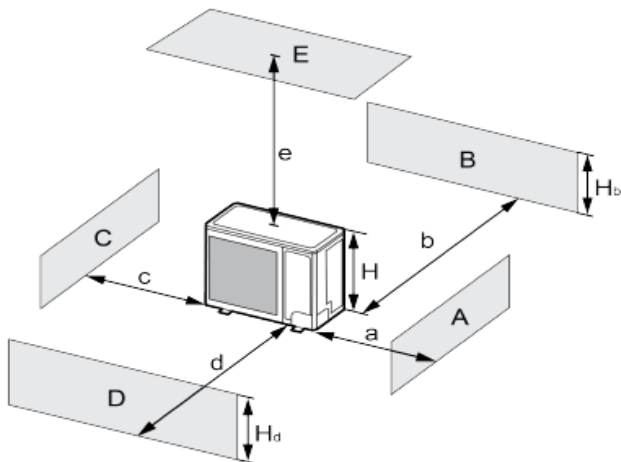
Outdoor Unit Dimensions



Unit: inch(mm)

Model	A	B	C	D	E	F
ACIQ-24-HP32	39 (990)	16-13/16 (427)	37-13/16 (960)	29-3/4 (755)	15-9/16 (396)	14-9/16 (370)
ACIQ-36-HP32						

Outdoor Unit Clearance Requirements



A-E	H _b	H _d	H	(mm)				
				a	b	c	d	e
B	—	—	—	≥100	—	—	—	—
A,B,C,	—	—	—	≥300	≥100	≥100	—	—
B,E	—	—	—	—	≥100	—	—	≥1000
A,B,C,E	—	—	—	≥300	≥150	≥150	—	≥1000
D	—	—	—	—	—	—	≥1000	—
D,E	—	—	—	—	—	—	≥1000	≥1000
B,D	H _b < H _d	H _d > H	—	≥100	—	—	≥1000	—
	H _b > H _d	H _d < H	—	≥100	—	—	≥1000	—
B,D,E	H _b < H _d	H _b ≤ 1/2H	—	≥250	—	—	≥2000	≥1000
		1/2H < H _b ≤ H	—	≥250	—	—	≥2000	≥1000
	H _b > H	Prohibited						
	H _b > H _d	H _d ≤ 1/2H	—	≥100	—	—	≥2000	≥1000
		1/2H < H _d ≤ H	—	≥200	—	—	≥2000	≥1000
		H _d > H	Prohibited					

Cooling Performance Table

Outdoor Temperature °F	Indoor temperature °F								
	60			70			80		
	TC (Btu/h)	SHC (Btu/h)	PI (W)	TC (Btu/h)	SHC (Btu/h)	PI (W)	TC (Btu/h)	SHC (Btu/h)	PI (W)
50	22600	16020	1950	28000	21360	2160	31500	23560	2380
65	23200	16180	2160	29000	22360	2350	33000	24130	2450
75	23600	15880	2380	30000	21150	2580	34000	23900	2630
85	24500	15860	2560	31000	22840	2720	35000	24560	2840
95	23600	16850	2710	30000	23560	2860	34000	25530	2980
105	23600	15990	2840	30000	23120	3020	34000	24100	3160
115	23000	15900	3040	29500	22530	3190	33500	24030	3390

Heating Performance Table

Outdoor Temperature °F	Indoor Temperature °F					
	60		70		80	
	TC (Btu/h)	PI (W)	TC (Btu/h)	PI (W)	TC (Btu/h)	PI (W)
-22	19000	4020	18600	4120	18000	4430
-15	20600	4350	20500	4460	20000	4660
-5	25000	5480	24500	5670	24000	5790
5	30600	5120	29000	5260	27000	5540
17	34000	3060	33000	3170	29200	3540
32	34000	3190	33000	3320	31400	3400
47	35000	2970	34000	3020	31800	3030
60	39000	3350	38000	3440	36000	3480

Indoor Unit Fan Performance Chart

