Submittal Data Sheet

Indoor Unit Model#: ACiQ-24-AH32
Outdoor Unit Model#: ACiQ-24-HP32

2-Ton Air Handler Heat Pump System	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

EFFICIENCY RATINGS			
Cooling		Heating	
SEER2	18.0	HSPF2	10.0
EER2	12.5	COP (W/W)	3.5

COOLING PERFORMANCE	
Cooling (Btu/hr)	
Rated Capacity	24000
Cooling Capacity Range (Min/Max)	12000 - 30000
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
*Tested refrigerant piping length: 24.6 ft (7.5 m)	

HEATING PERFORMANCE	
Heating (Btu/hr)	
Rated Capacity	24000
Heating Capacity Range (Min/Max)	12000 - 30000
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
*Tested refrigerant piping length: 24.6 ft (7.5 m)	

AIR FILTER SPECIFICATIONS (INDOOR UNIT)		
Air Filter Material		Metal
Air Filter Size (LxW/no. of Filters)	inch	16.5 x 20.3/1
	mm	420 x 516/1
Air Filter Size (Thickness)	inch	0.6
	mm	15

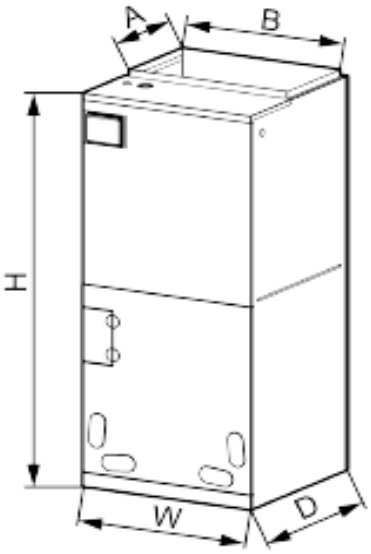
INDOOR UNIT SPECIFICATIONS		
Evaporator Material		Inner Groove Copper Tube-Aluminum Fin
ESP (inWG)		0.5
Indoor Air Flow Volume (CFM)		760
Indoor Noise Level (dBA)		60
Throttle Type		Electronic Expansion Valve (EEV)
System Operation Control		Thermostat
Dimension (W×D×H)	inch	18.11 x 21.26 x 43.5
	mm	460 x 540 x 1105
Package (W×D×H)	inch	25.98 x 20.59 x 46.26
	mm	660 x 523 x1175
Net/Gross Weight	lbs	135.6/144.4
	kg	61.5/65.5
Drainage Connection Size (O.D. x Wall Thickness)	inch	1 x 0.05
	mm	25.4 x 1.2

OUTDOOR UNIT SPECIFICATIONS		
Condenser Material		Inner Groove Copper Tube-Aluminum Fin
Compressor Type		Inverter Rotary
Compressor Model		QXFT-F310zN450B
Refrigerant Oil Charge (L)		1.12
Refrigerant Oil		FW68DA (FW68L)
Throttle Type		Electronic Expansion Valve (EEV)
Outdoor Air Flow (Max) (CFM)		3176
Outdoor Noise Level (dBA)		70
Dimension (W×D×H)	inch	38.98 x 14.57 x 37.80
	mm	990 x 370 x 960
Package (W×D×H)	inch	45.39 x 18.82 x 43.70
	mm	1153 x 478 x1110
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	4.7
Indoor Unit MOP	15
Indoor Unit Fuse Current (A)	3.15
Outdoor MCA	21
Outdoor MOP	25
Outdoor Unit Fuse Capacity (A)	25
Recommended Power Cable (Core) (N)	3
Compressor RLA	14
Outdoor Fan Motor FLA	3
Outdoor Fan Motor Output (HP)	1/6
Outdoor Fan Motor Speed (RPM)	800
Indoor Fan Motor FLA	1.2
Indoor Fan Motor Output (HP)	1/2
Cooling Power Input (kW)	Indoor Unit: 0.20
	Outdoor Unit: 2.05
Heating Power Input (kW)	Indoor Unit: 0.20
	Outdoor Unit: 2.01
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	
Refrigerant Type	R32
Liquid Side Size (in/mm)	3/8 (9.52)
Gas Side 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)	88.2/2.5
Additional Charge of Refrigerant ((oz/ft)/(g/m))	0.323/30
Connection Method	Flare Connection

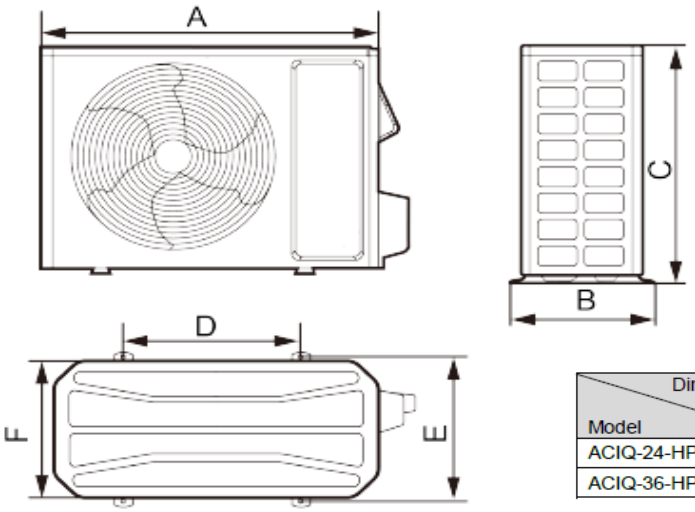
Indoor Unit Dimensions



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					

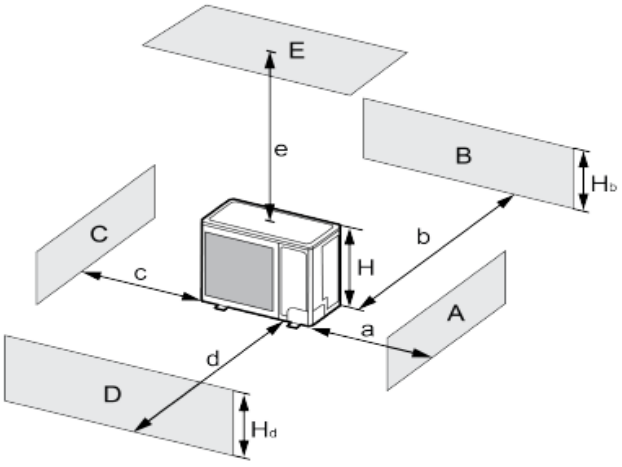
Outdoor Unit Dimensions



Unit: inch(mm)

Dimensions / 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	$H_b < H_d$	$H_b \leq 1/2H$	—	≥250	—	≥2000	≥1000
		$1/2H < H_b \leq H$	—	≥250	—	≥2000	≥1000
		$H_b > H$	Prohibited				
	$H_b > H_d$	$H_d \leq 1/2H$	—	≥100	—	≥2000	≥1000
		$1/2H < H_d \leq H$	—	≥200	—	≥2000	≥1000
		$H_d > H$	Prohibited				

Cooling Performance Table

Outdoor Temperature	Indoor Temperature °F								
	60			70			80		
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
°F	(Btu/h)	(Btu/h)	(W)	(Btu/h)	(Btu/h)	(W)	(Btu/h)	(Btu/h)	(W)
50	13500	13690	1060	18000	17690	1240	23000	18450	1280
65	14200	13500	1120	19000	17500	1380	24000	18500	1450
75	15200	14100	1290	20000	18100	1540	24000	18980	1640
85	17600	14220	1520	21680	18220	1750	25000	19290	1890
95	15200	14550	1640	20000	18550	1860	24000	19380	2150
105	15600	14220	1860	20500	18220	2080	24000	19250	2260
115	16400	14620	2230	20600	17950	2260	23500	18800	2540

Heating Performance Table

Outdoor Temperature	Indoor Temperature °F					
	60		70		80	
	TC	PI	TC	PI	TC	PI
°F	(Btu/h)	(W)	(Btu/h)	(W)	(Btu/h)	(W)
-22	14800	4020	14000	4120	13200	4310
-15	16500	4350	15000	4460	15600	4680
-5	17500	5480	16200	5670	16700	5770
5	20000	5120	19800	5260	19300	5420
17	24000	2040	23000	3170	20400	3340
32	24000	2190	23000	2320	20500	2470
47	25000	1970	24000	2020	21000	2150
60	28800	2280	28000	2340	26500	24300

Indoor Unit Fan Performance Chart