

Project Name:	
Location:	
Engineer:	
Submitted to:	
Submitted by:	
Reference:	

Approval:	
Date:	
Construction:	
Unit #:	
Drawing #:	

**Description: Hi-Ultra, 3.0 Ton Multi-Position Air Handler, Heat Pump**



**Air Handler Model:**  
AUH-36UX3SDH2



**Condensing Unit Model:**  
AUWR-36U3SA2

**KEY FEATURES**

**Air Handler Features**

- ❑ Highly efficient totally enclosed ECM motor.
- ❑ External static pressure: 0.80 In.W.C. for 2Ton-5Ton.
- ❑ Multi-position installation: horizontal (left or right), vertical (up or down).
- ❑ Optional electric heat kit for additional heat capacity.
- ❑ High anti-corrosion coils.
- ❑ Universal 24V 3<sup>rd</sup> party thermostat is available.

**Condensing Unit Features**

- ❑ Easy installation for new construction or retrofit application. Compatible with most of other brands air handler or A-coil. No need additional 24V interface module.
- ❑ Quieter outdoor with variable speed compressor.
- ❑ Low operating temp: -13°F(-25 °C) for heating, and 5 ° F(-15 ° C) for cooling.
- ❑ Standard with Base Pan Heater to melt the ice and snow.
- ❑ Rating with Aspen indoor units in AHRI: **LEW36C4, LEW36D4, LEM36F4**

## ESP - Air Flow Table

Airflow performance data is based on cooling performance with a coil and no filter in place. Check the performance table for appropriate unit size selection. External static pressure should stay within the minimum and maximum limits shown in the table below in order to ensure proper cooling, heating, and electric heating operation.



Bold outlined areas represent airflow outside of the required 300-450 cfm/ton range.

Air Flow Table

Air Handler Model	Motor Speed		External Static Pressure in.H2O[KPa]								
			0[0]	0.1[0.02]	0.18[0.045]	0.3[0.07]	0.4[0.1]	0.5[0.12]	0.6[0.15]	0.7[0.17]	0.8[0.20]
36K	Tap(1) -Default Setting	CFM	1264	1216	1172	1135	1096	1028	954	890	839
		Watts	215	222	233	238	244	254	261	266	274
	Tap(2)	CFM	1350	1314	1269	1206	1116	1082	1050	990	930
		Watts	257	264	274	282	292	297	302	309	316
	Tap(3)	CFM	1460	1409	1368	1323	1266	1192	1122	1060	999
		Watts	280	288	295	304	313	323	333	340	348
	Tap(4)	CFM	1526	1479	1441	1399	1350	1292	1221	1148	1088
		Watts	342	348	355	363	371	381	394	401	406

## Electric Heater

Air Handler Model	Electric Heat (kW)	MIN. Circuit Ampacity		MAX. Fuse or Breaker (HACR) Ampacity		Fan Speed Tap			
		230VAC	208VAC	230VAC	208VAC	2	3	4	5
36K BTU	HS-EH5	29.8	27.4	30	30	●	●	●	●
	HS-EH75	42.2	38.7	45	40	×	●	●	●
	HS-EH10	54.7	49.9	60	50	×	×	●	●
	HS-EH15	42.2+36.9	38.6+33.8	45+40	40+35	×	×	×	●

## Technical Spec.

### PERFORMANCE

#### DATA

Power supply	Ph-V-Hz	208-230V,1Ph,60Hz
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#### Cooling

Capacity	Btu/h	34000
Input	W	3370
Capacity(min-max)	Btu/h	11800-36800
EER2	Btu/w	10.1
SEER2	Btu/w	18

#### Heating

Capacity	Btu/h	35000
Input	W	3100
Capacity(min-max)	Btu/h	8900-38200
COP2(47°F)	W/W	3.5
HSPF2	Btu/w	9.5
COP @ 5F (@Max. Capacity)	W/W	2.1

#### Electrical

MINIMUM CIRCUIT AMPACITY	A	4.8
MAX. FUSE	A	10
Connection wiring		outdoor3x10,Indoor3x16 AWG

#### Compressor

Type		Twin ROTARY
Brand		GMCC
Rated current(RLA)	A	16.1
Locked rotor Amp(LRA)	A	---
Thermal protector		---
Thermal protector position		---
Refrigerant oil/oil charge	ml	VG74 /670

#### SYSTEM DATA

Design pressure	PSIG	550/240
Refrigerant type	oz	R410A/98.7
Refrigerant precharge	ft	25
Additional charge per ft.	oz	0.38
Liquid side/ Gas side	mm(in)	Φ9.52/Φ19.05(3/8'/3/4')
Max. refrigerant pipe length	ft	246
Max. difference in level	ft.	98

#### ESP

ESP range	In. wg.	0-0.8 (0-200)
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## Technical Spec.

### INDOOR UNIT

#### DATA

Indoor fan motor		
Model		ZWK702B500026
Type		DC
Input		1/2
RLA	A	3.6~3.8
LRA	A	---
Winding Resistance	$\Omega$	---
Capacitor	$\mu\text{F}$	---
Speed(Hi/Mi/Lo)	r/min	350~1400
Air flow & Noise level		
Indoor air flow (Hi)	CFM	1120
Indoor noise level (Hi)	dB(A)	57

#### Indoor unit

Dimension(W*H*D)	inch	19-5/8 × 46-1/8 × 21-5/8
Packing (W*H*D)	inch	22-1/2 × 49-5/8 × 25-3/8
Net/Gross weight	lbs.	140/163.1

### OUTDOOR UNIT DATA

Outdoor fan motor		
Model		SIC-71FW-D8121-1
Type		DC
Input		121
RLA	A	1
LRA	A	---
Winding Resistance	$\Omega$	---
Capacitor	$\mu\text{F}$	---
Speed	r/min	810
Air flow & Noise level		
Outdoor air flow	CFM	2350
Outdoor noise level	dB(A)	57

#### Outdoor unit

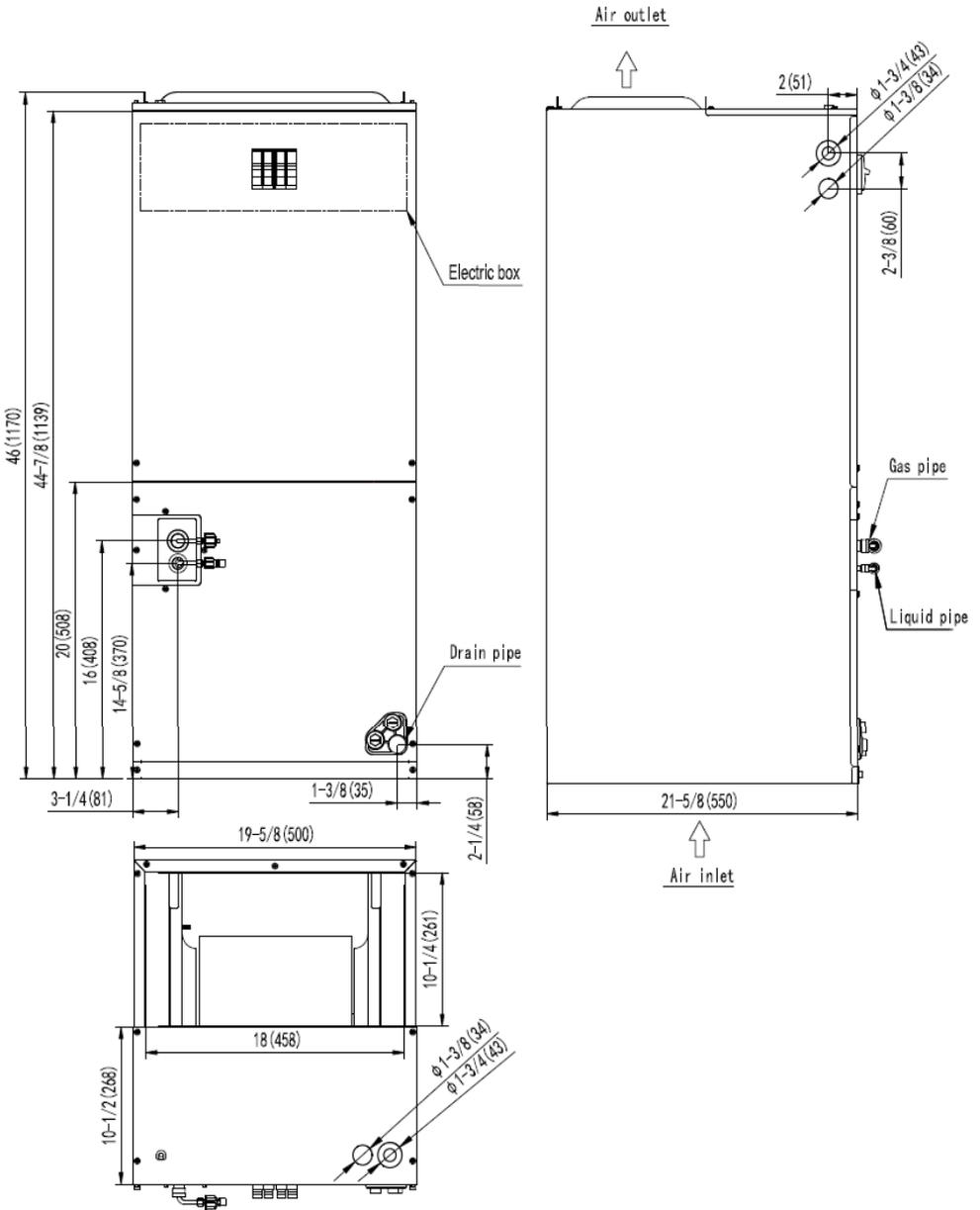
Dimension(W*D*H)	inch	37-3/8x33x13-3/8
Packing (W*D*H)	inch	43-3/4x36-1/4x18-1/8
Net/Gross weight	lbs.	147.7/158.7

#### Operation temperature

Indoor(cooling/ heating)	Deg. F	62~90/32~86
Outdoor(cooling/heating)	Deg. F	5~118/ -4~75

**DIMENSIONAL DRAWING**  
**Air Handler**

**Unit: inch(mm)**



**DIMENSIONAL DRAWING**  
**Condensing Units**

Unit: inch(mm)

