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

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

Description: Hi-Ultra, 4.0 Ton Multi-Position Air Handler, Heat **Pump**











Air Handler Model: AUH-48UX3SEH2



Condensing Unit Model: AUWR-48U3SP2

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 3rd 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: LEM48E4, LEM60B4, LEM60C4, LEM60D4



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	Motor Speed		External Static Pressure in.H2O[KPa]								
Model			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]
	Tap(1) -Default	CFM	1756	1701	1626	1579	1520	1468	1425	1386	1346
	Setting	Watts	348	357	369	378	387	395	407	410	424
48K	Tap(2)	CFM	1799	1746	1678	1634	1571	1522	1449	1402	1241
		Watts	366	377	388	398	410	419	428	444	440
48K	T-=(2)	CFM	1828	1794	1749	1719	1670	1633	1589	1553	1510
_	Tap(3)	Watts	376	387	401	413	428	437	452	465	482
	Tap(4)	CFM	1888	1855	1813	1782	1735	1701	1665	1626	1585
		Watts	415	428	445	456	469	481	495	510	525

Electric Heater

Model	Electric Heat Kit Model	Electric Heat (kW)	MIN. Circuit Ampacity		MAX. Fuse or Breaker (HACR) Ampacity		Fan Speed Tap			
			230VAC	208VAC	230VAC	208VAC	2	3	4	5
	HS-EH5	5	31.8	29.4	35	30	•	•	•	•
	HS-EH75	7.5	44.8	40.7	45	45	×	•	•	•
	HS-EH10	10	56.7	51.9	60	55	×	×	•	•
48K/60K	HS-EH15	15	44.8+36.9	40.7+33.8	50+40	50+35	×	×	•	•
	HS-EH20	20	56.7+49.9	51.9+45.2	60+50	60+50	×	×	×	•



Technical Spec.

PERFORMANCE

DATA		
Power supply	Ph-V-Hz	208-230V,1Ph,60Hz
Cooling		
Capacity	Btu/h	48000
Input	W	4750
Capacity(min-max)	Btu/h	18300-52000
EER2	Btu/w	10.1
SEER2	Btu/w	17.5
Heating		
Capacity	Btu/h	47000
Input	W	4170
Capacity(min-max)	Btu/h	17600-52000
COP2(47°F)	W/W	3.3
HSPF2	Btu/w	8.5
COP @ 5F (@Max. Capacity)	W/W	1.9
<u>Electrical</u>		
MINIMUM CIRCUIT AMPACITY	Α	6.8
MAX. FUSE	А	Outdoor50 / Indoor15
Connection wiring		outdoor3×8,Indoor3×16AWG
<u>Compressor</u>		
Туре		Twin ROTARY
Brand		GMCC
Rated current(RLA)	Α	26
Locked rotor Amp(LRA)	Α	
Thermal protector		
Thermal protector position		
Refrigerant oil/oil charge	ml	VG74 /1000
SYSTEM DATA		
Design pressure	PSIG	550/240
Refrigerant type	OZ	R410A/142.9
Refrigerant precharge	ft	25
Additional charge per ft.	OZ	0.6
Liquid side/ Gas side	mm(in)	Ф9.52/Ф22.22(3/8'/7/8')
Max. refrigerant pipe length	ft	246
Max. difference in level	ft.	98
ESP		
ESP range	ln. wg.	0-0.8 (0-200)



Technical Spec.

INDOOR UNIT DATA Indoor fan motor

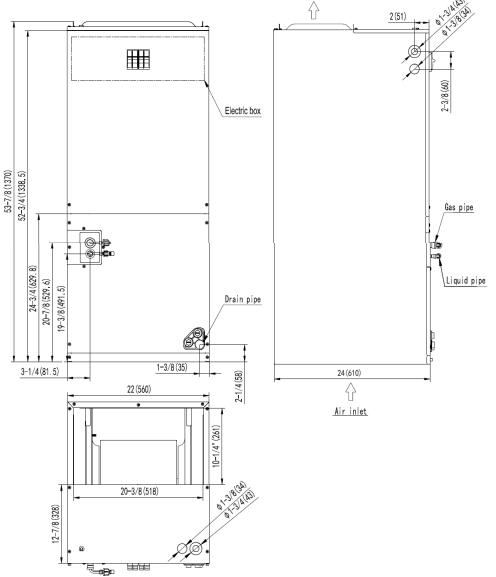
Model ZKSD-560-8-50-14 Type DC Input 3/4 RLA A 5.0~5.4 LRA A 5.0~5.4 LRA A Winding Resistance Ω Capacitor uF Speed(Hi/Mi/Lo) r/min 350~1400 Air flow & Noise level Indoor air flow (Hi/Lo) dB(A) 64 Indoor noise level (Hi/Lo) dB(A) 64 Indoor unit Dimension(W*H*D) inch 22×53-7/8×24 Packing (W*H*D) inch 25-1/4×55-1/2×28 Net/Gross weight Ibs. 187.2/214 OUTDOOR UNIT DATA Outdoor fan motor UTDOOR UNIT DATA Outdoor fan motor I21 RLA A 1.00 LRA A 1.00 LRA A 1.00 LRA A A I.00 LRA A 1.00 1.0 LRA A 1.00 1.0 LRA A 1.00 1.0	Indoor fan motor							
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Capacitor uF Speed(Hi/Mi/Lo) r/min 350~1400 Air flow & Noise level Indoor air flow (Hi/Lo) CFM 1588 Indoor noise level (Hi/Lo) dB(A) 64 Indoor unit Dimension(W*H*D) inch 22×53-7/8 ×24 Packing (W*H*D) inch 25-1/4×55-1/2×28 Net/Gross weight lbs. 187.2/214 OUTDOR UNIT DATA DUTDOOR UNIT DATA Outdoor fan motor SIC-71FW-D8121-1/SIC-71FW-D8121-1/SIC-71FW-D8121-2 Type DC Input 121 RLA A 1.00 LRA A Winding Resistance Ω Capacitor uF Speed r/min 850 Air flow & Noise level Outdoor air flow CFM 3525 Outdoor noise level dB(A) 59 Outdoor unit Dimension(W*H*D) inch 37-3/8 × 54-5/8 × 13-3/8 Packing (W*H*D) inch 43-3/4 × 60-1/4 × 18-1/8	LRA	Α						
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Indoor air flow (Hi/Lo)	Speed(Hi/Mi/Lo)	r/min	350~1400					
Indoor noise level (Hi/Lo) dB(A) 64 Indoor unit Dimension(W*H*D) inch 22×53-7/8×24 Packing (W*H*D) inch 25-1/4×55-1/2×28 Net/Gross weight lbs. 187.2/214 OUTDOOR UNIT DATA Outdoor fan motor Model SIC-71FW-D8121-1/SIC-71FW-D8121-2 Type DC Input 121 RLA A 1.00 LRA A Winding Resistance Ω Capacitor uF Speed r/min 850 Air flow & Noise level Outdoor in flow CFM 3525 Outdoor unit Dimension(W*H*D) inch 37-3/8×54-5/8×13-3/8 Packing (W*H*D) inch 43-3/4×60-1/4×18-1/8 Net/Gross weight lbs. 227.1/253.5 Operation temperature Indoor(cooling/ heating) Deg. F 62~90/32~86	Air flow & Noise level							
Indoor unit	Indoor air flow (Hi/Lo)	CFM	1588					
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Net/Gross weight Ibs.	Dimension(W*H*D)	inch	22×53-7/8 ×24					
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Dimension(W*H*D) inch 37-3/8 × 54-5/8 × 13-3/8 Packing (W*H*D) inch 43-3/4 × 60-1/4 × 18-1/8 Net/Gross weight lbs. 227.1/253.5 Operation temperature Indoor(cooling/ heating) Deg. F 62∼90/32~86		dB(A)	59					
Packing (W*H*D)inch $43-3/4\times60-1/4\times18-1/8$ Net/Gross weightlbs. $227.1/253.5$ Operation temperatureIndoor(cooling/ heating)Deg. F $62\sim90/32\sim86$								
Net/Gross weightlbs.227.1/253.5Operation temperatureDeg. F62~90/32~86								
Operation temperature Indoor(cooling/ heating) Deg. F 62∼90/32~86		inch						
Indoor(cooling/ heating) Deg. F 62~90/32~86		lbs.	227.1/253.5					
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Outdoor(cooling/heating) Deg. F 5~118/ -4~75	`							
	Outdoor(cooling/heating)	Deg. F	5~118/ -4~75					

DIMENSIONAL DRAWING Air Handler

48K/60K

Unit: in.(mm)

Air outlet





DIMENSIONAL DRAWING Condensing Units

Unit: inch(mm)

