LUC17-24-15

Submittal / unit summary

TAG: _____

PRODUCT NAME ComfortStar Air Handler - LUC17-24-15

LOCATION

ARCHITECT

ENGINEER

CONTRACTOR

SUBMITTED BY **DATE**

UNIT SUMMARY

Quantity	
Unit Designation	
Model No.	LUC17-24-15
Cooling Input	
Cooling Output	22,800 Btu/h
CFM / ESP	600 CFM / 145 Pa
Electrical	208-230 V / 1 phase / 60 Hz
Minimum Ampacity	4 A (without electric heat)
Max Overcurrent Protection	6 A (without electric heat)
Net Unit Weight	128 lb (54 kg)
Accessory	
Catalog Form Number	

ACCESSORIES

NOTES

Electric heat: see compatible heater kits on the final page.

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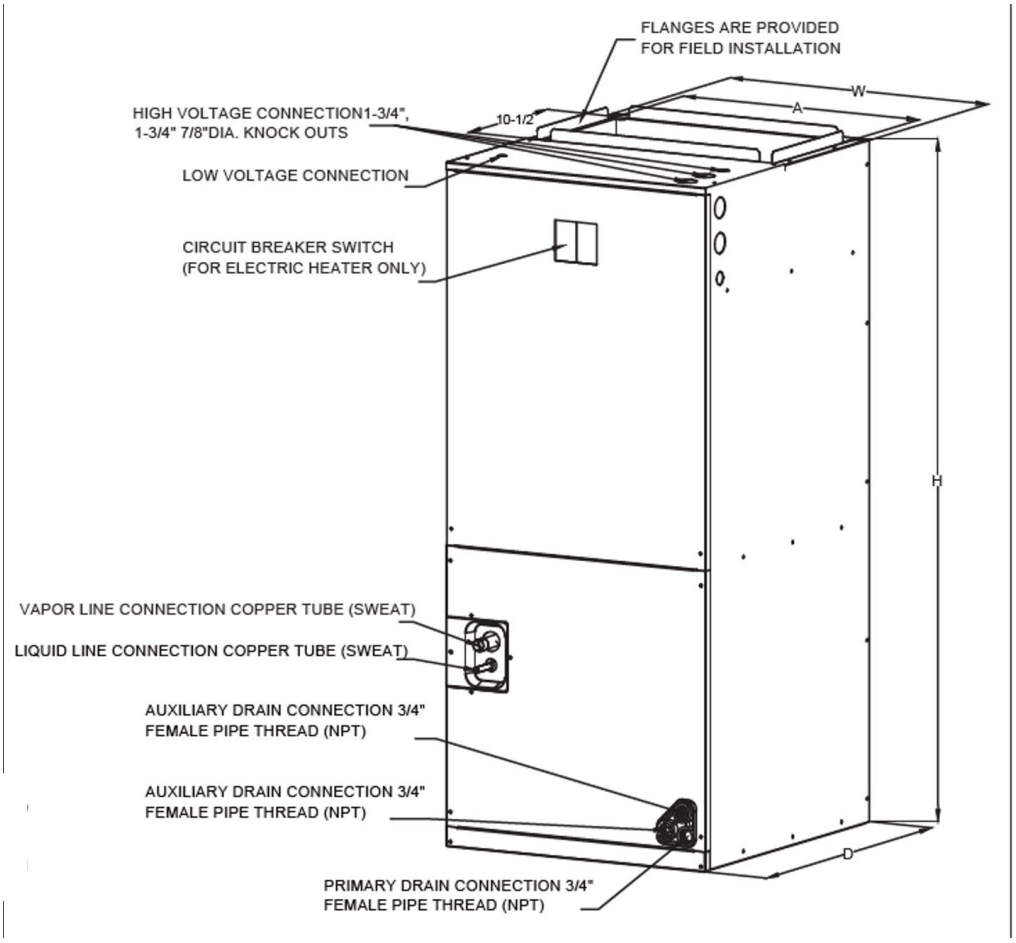
Individual specifications

PERFORMANCE / ELECTRICAL	SPECIFICATION
Cooling capacity	22,800 Btu/h
Power supply	208-230 V / 1 phase / 60 Hz
MCA / MOP - without electric heater	4 A / 6 A
Indoor airflow / noise	600 CFM / 50 dB(A)
Throttling type	Piston
SEER2 / EER2	14.3 / 11.7 Btu/h.W
Reference room area	362 sq ft
Indoor external static pressure	145 Pa
Circuit breaker selection	15 A
INDOOR MOTOR / BLOWER	
Motor type	ECM
Motor brand / model	BROAD-OCEAN / DR-310-249-12-8
Rated current	2.6 A
Motor input / output	142.4 / 249 W
Speed - taps 5 / 4 / 3 / 2 / 1	643 / 593 / 556 / 476 / 412 rpm
Blower diameter / width	12-19/67 in. / 13-3/95 in.
INDOOR COIL	
Fin material / tube material	Hydrophilic / Inner grooved
Coil rows / pieces	3 rows x 2 pieces
Tube pitch x row pitch	0.83 x 0.53 in.
Fin spacing / tube outside diameter	0.059 in. / 0.276 in.
Number of circuits	6

OUTDOOR UNIT MODEL NO.	INDOOR UNIT MODEL NO.	COOLING CAPACITY (BTU/H)	SEER2 (BTU/H/W)	EER2 (BTU/H/W)
CUC24-15-S	LUC17-24-15	22800	14.3	11.7

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Dimensions and connection details



DIMENSION / PACKAGING	DATA
Height H / width W	45-3/4 in. [1162 mm] / 19-5/8 in. [500 mm]
Depth D / supply duct A	22 in. [560 mm] / 17-7/8 in. [454 mm]
Packing W x H x D (in.)	22-5/6 x 47-5/8 x 25-3/5
Packing W x H x D (mm)	580 x 1210 x 650
Net / gross weight - specification data	128 / 140 lb; 54 / 60 kg
Unit weight - dimensional data	119 lb [54 kg]

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Model-specific blower airflow data

Model size of air processor	Motor speed		SCFM								
			External Static Pressure-Inch Water Column [kPa]								
			0[0]	0.1[.025]	0.2[.050]	0.3[.075]	0.4[.100]	0.5[.125]	0.6[.150]	0.7[.175]	0.8[.200]
24K	Tap (1)	SCFM	669.9	571.8	490.9	394.3	269.5	-	-	-	-
		Watts	41	47	52	57	61	-	-	-	-
	Tap (2)	SCFM	792.2	708.6	615.9	548.5	474.2	371.5	265.1	-	-
		Watts	59	67	73	77	83	88	93	-	-
	Tap (3)	SCFM	948.8	887.5	809.6	723.6	671.6	597.0	504.2	410.2	-
		Watts	96	102	109	115	129	126	132	141	-
	Tap (4)	SCFM	1020.9	966.5	887.1	798.4	738.8	697.9	672.3	572.8	490.1
		Watts	118	127	136	144	150	156	160	167	177
	Tap (5)	SCFM	1115.2	1059.2	995.0	906.5	842.5	791.4	727.2	707.0	652.5
		Watts	148	157	167	178	186	191	198	205	211

Gray shading identifies the 300-450 CFM/ton range. Airflow is SCFM; power is watts. External static pressure is in. w.c., with kPa in brackets.

Airflow application notes

1. Use the advanced airflow as the rated airflow for full-load operation.

2. Airflow requirement: 300-450 CFM per ton without an electric heater kit; 350-450 CFM per ton with an electric heater kit.

3. Air distribution has the greatest influence on airflow. The contractor should use industry-recognized procedures.

4. Carefully design and construct air ducts; poor design or workmanship can significantly reduce system performance.

5. Locate and size supply ducts appropriately around the conditioned space. Insufficient airflow or improper placement may cause inadequate ventilation or duct noise.

6. Balance airflow to all rooms. Use an airflow hood or speedometer to verify branch duct and system airflow.

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Features and compatible electric heater kits

- High heat-transfer efficiency A-shaped coil with low static-pressure drop.
- Foil-faced insulation and fully insulated cabinet.
- Factory-sealed cabinet with 2% or less air leakage at 1.0 in. w.c.
- Multi-stage blower speed control.
- Four-position installation: upflow, horizontal right, downflow and horizontal left.
- Standard horizontal and vertical condensate drain pans with primary and secondary fittings.
- Multiple electrical entry locations.
- Dual front panels; blower scroll and coil mounted on slide tracks.
- Integrated filter rack with tool-free door access.
- Copper evaporator connections for brazing.
- Advanced internal welding process to reduce potential corrosion.
- AHRI certified and ETL listed.
- Factory-installed R32 refrigerant sensor.

Compatible electric heater kits

HEATER KIT PART NO.	NOMINAL CAPACITY
CHE6-05B	5 kW
CHE6-08B	8 kW
CHE6-10B	10 kW