# Submittal

TAG:

**PRODUCT NAME** _____

**LOCATION** _____

**ARCHITECT** _____

**ENGINEER** _____

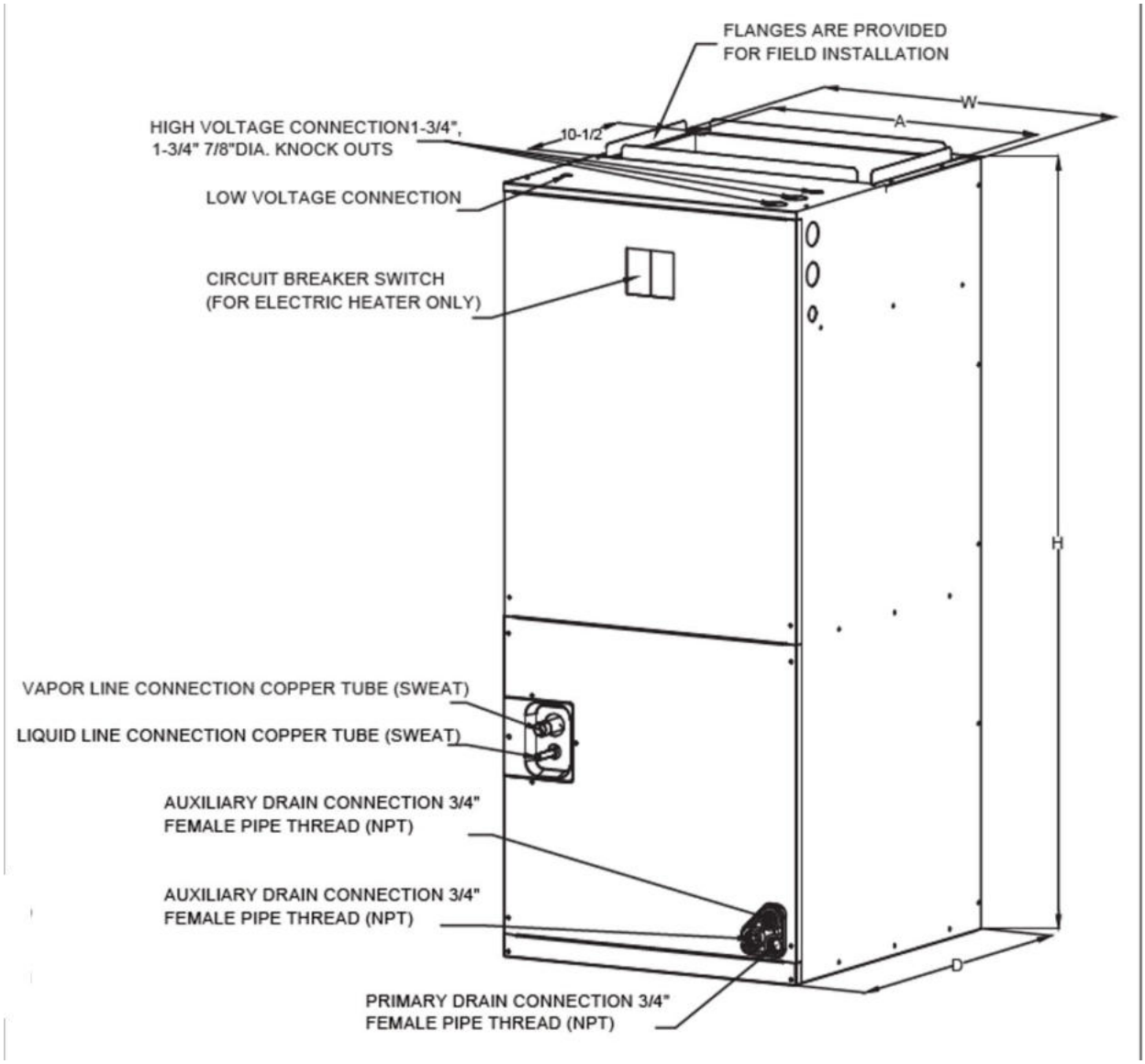
**CONTRACTOR** _____

**SUBMITTED BY** _____ **DATA** _____

| **UNIT SUMMARY** | | | | | | |
|---|---|---|---|---|---|---|
| Quantity | | | | | | |
| Unit Designation | | | | | | |
| Model No. | | | | | | |
| Cooling Input | | | | | | |
| Cooling Output | | | | | | |
| CFM/ESP | | | | | | |
| Electrical | | | | | | |
| Minimum Ampacity | | | | | | |
| Max Overcurrent Protection | | | | | | |
| Net Unit Weight | | | | | | |
| Accessory | | | | | | |
| Catalog Form Number | | | | | | |

| **ACCESSORIES** | **NOTES** |
|---|---|
| | |

# Air Handlers
# LUC17 Series
# Cooling capacity: 36 kBTU/h




| Model Size | Unit Height "H" in. [mm] | Unit Width "W" in. [mm] | Unit Length "D" in. [mm] | Supply Duct "A" | Unit Weight (lbs.[kg]) |
|---|---|---|---|---|---|
| **18** | 45-3/4 [1162] | 19-5/8 [500] | 22 [560] | 17-7/8 [454] | 119 [54] |
| **24** | 45-3/4 [1162] | 19-5/8 [500] | 22 [560] | 17-7/8 [454] | 128 [58] |
| **30** | 45-3/4 [1162] | 19-5/8 [500] | 22 [560] | 17-7/8 [454] | 129 [58.5] |
| **36** | 45-3/4 [1162] | 19-5/8 [500] | 22 [560] | 17-7/8 [454] | 129 [58.5] |

# Specifications

| | | | |
|---|---|---|---|
| **Market Model** | | | **LUC17-36-15** |
| **Power supply** | | **V/Ph/Hz** | 208~230V/1N/60Hz |
| **Cooling** | **Capacity** | **Btu/h** | 33000 |
| | **EER2** | **Btu/h.W** | 11.7 |
| | **SEER2** | **Btu/h.W** | 14.3 |
| **Refer to Room Area** | **square feet** | | 516.00 |
| **Indoor external static pressure** | | **Pa** | 145 |
| **Throttle type** | | | piston |
| **MCA** | | **A** | 5 |
| **MOP** | | **A** | 6 |
| **Circuit breaker selection** | | **A** | 15 |
| **Indoor coil** | **Number of row** | | 4(row)×2(piece) |
| | **Tube pitch(a)xrow pitch(b)** | **in** | 0.83×0.53 |
| | **Fin spacing** | **in** | 0.059 |
| | **Fin material** | | Hydrophilic |
| | **Tube outside diameter** | **in** | Φ 0.276 |
| | **Tube material** | | inner grooved |
| **Indoor fan motor** | **Brand** | | Broad-Ocean |
| | **Type** | | ECM |
| | **Model** | | DZJ-373F-12 |
| | **Rate current** | **A** | 3.8 |
| | **Input** | **W** | 245.9 |
| | **Output** | **W** | 373 |
| | **Capacitor** | **μF** | / |
| | **Speed (Hi/Me Hi/Me/Me lo/Lo) 5/4/3/2/1** | **RPM** | 760/718/662/610/548 |
| **Blower** | **diameter** | **in** | 12 19/67 |
| | **width** | **in** | 13 3/95 |
| **Indoor air flow** | | **CFM** | 1020 |
| **Indoor noise level** | | **dB(A)** | 56 |
| **Indoor dimension** | **Unit (WxHxD)** | **in** | 19-5/8×45-3/4×22 |
| | | **mm** | 500×1162×560 |
| | **Packing (WxHxD)** | **in** | 22-5/6×47-5/8×25-3/5 |
| | | **mm** | 580×1210×650 |
| | **Net / Gross weight** | **kg** | 58.5/64 |
| | | **lbs** | 129/141 |
| **Shipping per STD 20/40/40HQ** | | | 30/60/120 |
| **Service code** | | | 401 |

# Airflow Data

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30K | Tap (1) | SCFM | 955.3 | 897.8 | 839.5 | 739.4 | 655.3 | 575.9 | 511.5 | 432.4 | 392.2 |
| | | Watts | 91 | 96 | 102 | 110 | 115 | 121 | 127 | 138 | 140 |
| | Tap (2) | SCFM | 1080.7 | 1031.5 | 977.4 | 925.6 | 819.4 | 743.8 | 675.5 | 608.7 | 547.1 |
| | | Watts | 125 | 131 | 137 | 143 | 153 | 160 | 166 | 173 | 179 |
| | Tap (3) | SCFM | 1182.2 | 1138.1 | 1089.0 | 1042.9 | 986.9 | 879.5 | 811.4 | 749.5 | 689.2 |
| | | Watts | 158 | 165 | 172 | 177 | 185 | 197 | 203 | 212 | 221 |
| | Tap (4) | SCFM | 1305.6 | 1261.8 | 1220.9 | 1179.5 | 1132.2 | 1086.1 | 984.1 | 914.5 | 856.6 |
| | | Watts | 207 | 214 | 221 | 228 | 236 | 244 | 257 | 266 | 273 |
| | Tap (5) | SCFM | 1386.7 | 1350.0 | 1309.4 | 1274.6 | 1233.1 | 1186.6 | 1137.8 | 1031.5 | 970.0 |
| | | Watts | 245 | 253 | 262 | 270 | 277 | 285 | 295 | 309 | 318 |
| 36K | Tap (1) | SCFM | 955.3 | 897.8 | 839.5 | 739.4 | 65.5 | 575.9 | 511.5 | 432.4 | 392.2 |
| | | Watts | 91 | 96 | 102 | 110 | 115 | 121 | 127 | 138 | 140 |
| | Tap (2) | SCFM | 1080.7 | 1031.5 | 977.4 | 925.6 | 819.4 | 743.8 | 675.5 | 608.7 | 547.1 |
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| | Tap (3) | SCFM | 1182.2 | 1138.1 | 1089.0 | 1042.9 | 986.9 | 879.5 | 811.4 | 749.5 | 689.2 |
| | | Watts | 158 | 165 | 172 | 177 | 185 | 197 | 203 | 212 | 221 |
| | Tap (4) | SCFM | 1305.6 | 1261.8 | 1220.9 | 1179.5 | 1132.2 | 1086.1 | 984.1 | 914.5 | 856.6 |
| | | Watts | 207 | 214 | 221 | 228 | 236 | 244 | 257 | 266 | 273 |
| | Tap (5) | SCFM | 1386.7 | 1350.0 | 1309.4 | 1274.6 | 1233.1 | 1186.6 | 1137.8 | 1031.5 | 970.0 |
| | | Watts | 245 | 253 | 262 | 270 | 277 | 285 | 295 | 309 | 318 |

| 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] |
| 18K | 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 |
| 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 |

--- The highlighted area indicates the airflow within the required range of 300-450cfm/ton.

Note:

1. The advanced airflow must be used as the rated airflow for the full-load operation of the machine.
2. The rated airflow of a system without an electric heater kit requires 300 to 450 cubic feet of air per minute (CFM).
3. The rated airflow of a system with an electric heater kit requires 350 to 450 cubic feet of air per minute (CFM).
4. The air distribution system has the greatest influence on air flow. Therefore, the contractor should only use the procedures recognized by the industry.
5. The design and construction of air duct should be done carefully. Poor design or process will lead to a significant decline in system performance.

6. The air supply duct should be set along the periphery of the air-conditioned space with appropriate size. Improper location or insufficient airflow may lead to insufficient ventilation or noise in the ductwork.

7. The installer should balance the air distribution system to ensure that all rooms in the room have proper quiet airflow. The speedometer or airflow hood can be used to balance and verify the branch duct and system airflow (CFM)

# MCA/MOP Data of Electric Heat Kit

**Table 4.2 Applicable Heat Kits for AHU Multi Position Installation**

| Heat kit model | AHU model | electric heat(kW) 208/230VAC | Current (A) 208/230VAC | MCA (A) 208/230VAC | MAX. Fuse or Breaker (HACR) Ampacity | | Fan speed | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 208 VAC | 230 VAC | 1 | 2 | 3 | 4 | 5 |
| CHE6-05B | 18K | 3.8/5 | 19.66/21.74 | 25/29 | 30 | 35 | ● | ● | ● | ● | ● |
| CHE6-08B | | 5.6/7.5 | 29.50/32.61 | 37/43 | 40 | 45 | × | × | ● | ● | ● |
| CHE6-05B | 24K | 3.8/5 | 19.66/21.74 | 25/29 | 30 | 35 | ● | ● | ● | ● | ● |
| CHE6-08B | | 5.6/7.5 | 29.50/32.61 | 37/43 | 40 | 45 | × | × | ● | ● | ● |
| CHE6-10B | | 7.5/10 | 39.32/43.48 | 50/57 | 55 | 60 | × | × | × | ● | ● |
| CHE6-05B | 30K | 3.8/5 | 19.66/21.74 | 25/29 | 30 | 35 | ● | ● | ● | ● | ● |
| CHE6-08B | | 5.6/7.5 | 29.50/32.61 | 37/43 | 40 | 45 | × | ● | ● | ● | ● |
| CHE6-10B | | 7.5/10 | 39.32/43.48 | 50/57 | 55 | 60 | × | × | ● | ● | ● |
| CHE6-05B | 36K | 3.8/5 | 19.66/21.74 | 25/29 | 30 | 35 | ● | ● | ● | ● | ● |
| CHE6-08B | | 5.6/7.5 | 29.50/32.61 | 37/43 | 40 | 45 | × | ● | ● | ● | ● |
| CHE6-10B | | 7.5/10 | 39.32/43.48 | 50/57 | 55 | 60 | × | × | ● | ● | ● |
| CHE6-15B | | (5.6+5.6) /(7.5+7.5) | 29.50+29.50/32.61+32.61 | 37+37/43+43 | 40/40 | 45/45 | × | × | × | ● | ● |

**Table 4.3 Heater Kit Accessories**

| Heat kit model<br>Market Model/<br>Factory Model | Description | 18 | 24 | 30 | 36 |
|---|---|---|---|---|---|
| CHE6-05B | 5 kW heating kit, single-pole circuit breaker | ● | ● | ● | ● |
| CHE6-08B | 7.5 kW heating kit, single-pole circuit breaker | ● | ● | ● | ● |
| CHE6-10B | 10 kW heating kit, single/double pole circuit breaker | × | ● | ● | ● |
| CHE6-15B | 15 kW heating kit, double pole circuit breaker | × | × | × | ● |
| CHE6-20B | 20 kW heating kit, double pole circuit breaker | × | × | × | × |

## Features

- High heat-transfer efficiency and low static-pressure drop A-shaped coil.
- Foil-faced insulation to prevent energy loss through the cabinet.
- Multi-stage blower Speed Control to align with varying capacity demands.
- 4-position installation: Upflow, Horizontal Right, Downflow, Horizontal Left.
- Horizontal and vertical condensate drain pans standard, primary and secondary condensate fittings.
- Field-installed electric heater kits 5, 7.5, 10, 15, 20 kW available as accessories. Multiple electrical entry locations.
- Dual front panel, volute and coil with slide track.
- Integrated filter rack with toolless door access.
- Easy-to-braze copper evaporator connection.
- Advanced internal welding process to reduce potential corrosion.
- AHRI and ETL listed.
- Fully-insulated cabinet design.
- R32 refrigerant sensor ensures safe operation.
- R32 refrigerant sensor is factory-installed, making unit suitable for more room types and applications.

ComfortStar®

Add.: 12201 N W 107th Avenue Miami, FL 33178

1.866.524.9898 Toll Free

305.500.9898 Office

305.500.9896 Fax document.

http://www.comfortstarusa.com