Engineering Manual

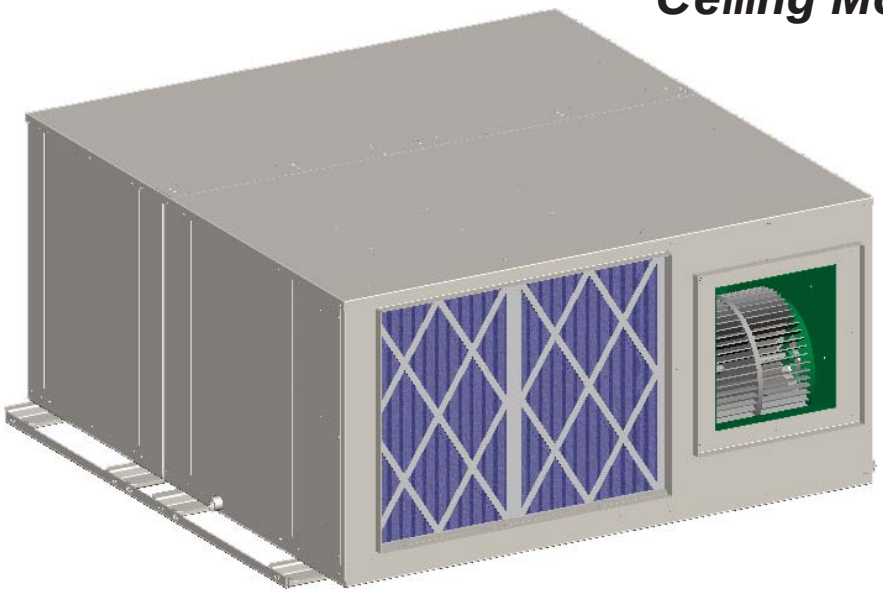
R410a

# HK™ Horizontal

## *High Static Packaged & Split*

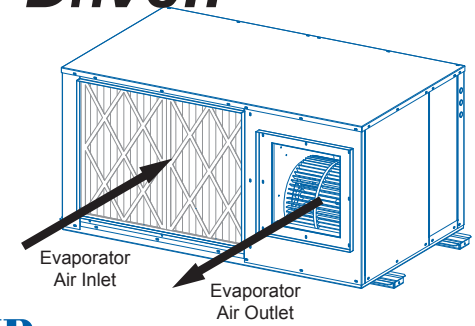
### *Ceiling Mounted Air Conditioners*

### *(DX & CW Systems)*



## *1 to 15 Tons*

## *Ducted, High-Static Belt-Driven*




### Features & Benefits

- 1 to 15 Ton Capacities
- *ComfortCool*™
  - General Office Spaces
  - Conference Rooms
  - Restaurants / Retail Stores
- *PrecisionCool*™
  - Computer / Server Rooms
  - Telecom Rooms
  - Labs / Hospitals
- Ducted, Same-Face, Straight-Thru & 90° Air Patterns
- DX Air, Water & Glycol Cooled, Chilled Water & Free-Cooling
- Total Temp & Humidity Control
  - Optional Steam Humidifier
  - Optional Heat/Reheat via Electric, Hot Gas, Hot Water, Steam or Heat Pump
- Microprocessor Controls & More!

AboveAir Technologies

ETL LISTED
CONFORMS TO
UL STD 1995
3091370
CERTIFIED TO
CAN/CSA STD C22.2 No. 236

**MEA230-06-E**

**HK™-Horizontal, above-the-ceiling air conditioners** (AHK-L30)

***AboveAir™*** ceiling mounted air conditioners are the space saving environmental control solution to your comfort and precision cooling needs. Available in a wide variety of cooling methods and cabinet configurations including a full range of options, ***AboveAir™*** ceiling A/C's are a step above!

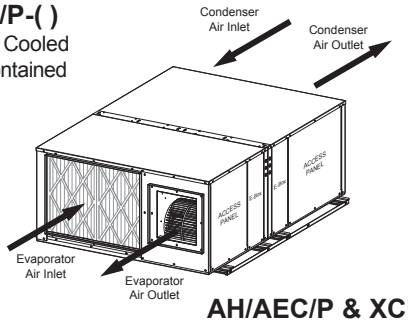
- ☑ **R410a Refrigerant**
- ☑ **Hidden above-the-ceiling installation**
- ☑ **Space saving air pattern options**
- ☑ **Variety of cooling methods**
- ☑ **Self-contained & split systems**
- ☑ **Flexible options and accessories**
- ☑ **Energy efficient operation**
- ☑ **Low sound operation**

## Contents

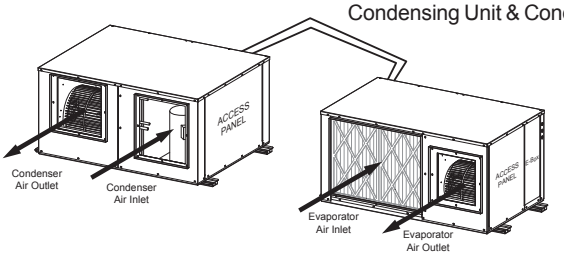


## Air Cooled

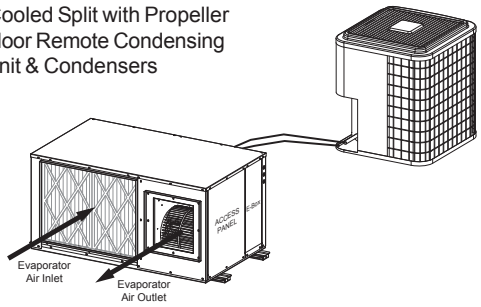
**AAC/P-( )**
DX - Air Cooled
Self-Contained




**AH/AEC/P & XCU/XCX-( )**
DX - Air Cooled Split with Centrifugal Blower Indoor / Outdoor Remote Condensing Unit & Condensers

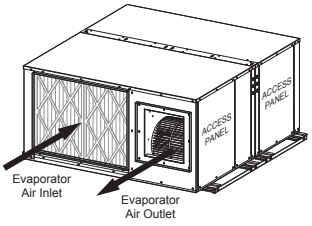



**AH/AEC/P & XPU/XP1-( )**
DX - Air Cooled Split with Propeller Fan Outdoor Remote Condensing Unit & Condensers



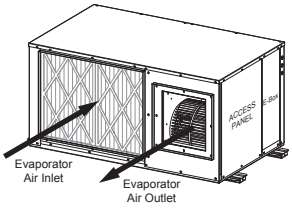

## Water/Glycol Cooled
(plus Free-Cooling)

**AWC/P & AGC/P-( )**
DX - Water/Glycol Cooled Self-Contained (split available)

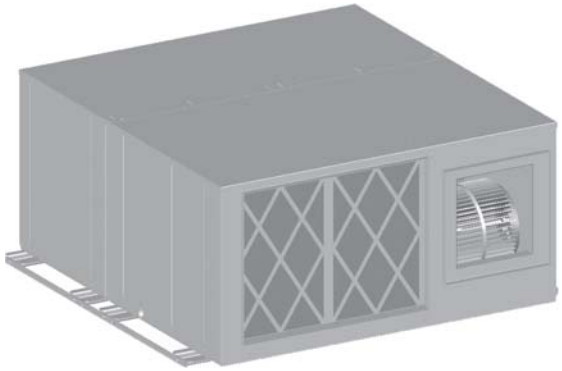



## Chilled Water Systems

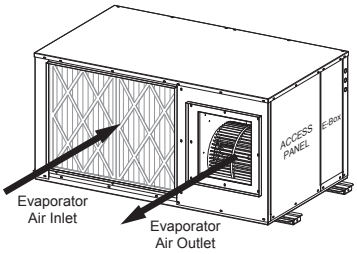
**ACC/P-( )**
Chilled Water Air Handling Units



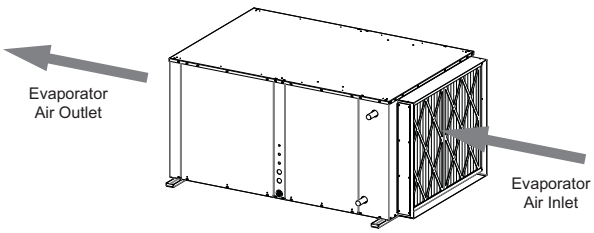
*AboveAir™* ducted high static belt-driven ceiling mounted air conditioners can be configured for various applications:



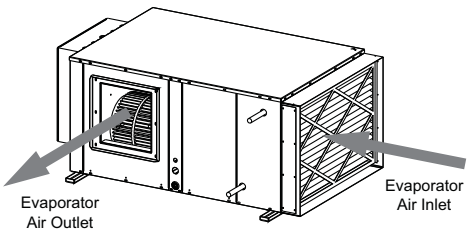
## Packaged & Split Systems




### Ducted Same-Face




### Ducted Straight-Thru




### Ducted 90° / Right-Angle

### Select Options:

- Digital Heat/Cool Thermostats
- Temp & Humid Microprocessor Controls with Alarms and Optional BMS Communications
- Steam Canister Humidifier
- Heating Mode with Electric, Hot Water, Steam or Heat Pump Heating
- Dehumidification Mode with Reheat
- High Efficiency Air Filtration
- Low Ambient Head Pressure Control
- 2 & 3-way 150 psig or 350 psig Water/Glycol Cooled Regulating Valves
- High Static Belt-Drive Blowers (up to 2" ESP)
- Hot Gas Bypass
- Free-Cooling: Air Side & Water/Glycol Side Economizer Systems

### Select Accessories:

- Condensate Pumps
- Main Power Electrical Disconnects
- Firestats
- Smoke Detectors
- Remote Water-Leak Detectors
- Compressor Sound Jackets
- Hanging Vibration Isolators
- Glycol Pump Packages & Drycoolers
- ... and more!

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CERTIFIED TO
CAN/CSA STD C22.2 No. 236
3091370

**MEA230-06-E**

# DX - Air Cooled, (HK1™, 1-5 Tons) - Performance Data

| | Nominal Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons |
|---|---|---|---|---|---|---|---|---|
| AIR COOLED DX Std CFM | *ComfortCool™* Model | | AAC/AEC/AHC-012 | AAC/AEC/AHC-018 | AAC/AEC/AHC-024 | AAC/AEC/AHC-036 | AAC/AEC/AHC-048 | AAC/AEC/AHC-060 |
| | **80°F DB / 67°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 14,500 | 20,300 | 27,800 | 40,700 | 53,700 | 67,700 |
| | Sensible | BTUH | 10,300 | 14,600 | 20,400 | 30,100 | 40,000 | 50,200 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,300 | 18,600 | 25,500 | 37,400 | 49,400 | 62,300 |
| | Sensible | BTUH | 10,100 | 14,300 | 20,000 | 29,600 | 39,300 | 49,300 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 12,700 | 17,700 | 24,400 | 35,800 | 47,100 | 59,600 |
| | Sensible | BTUH | 9,900 | 14,000 | 19,900 | 29,000 | 38,900 | 48,300 |
| AIR COOLED DX OPT CFM | *PrecisionCool™* Model | | AAP/AEP/AHP-012 | AAP/AEP/AHP-018 | AAP/AEP/AHP-024 | AAP/AEP/AHP-036 | AAP/AEP/AHP-048 | AAP/AEP/AHP-060 |
| | **80°F DB / 67°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 15,000 | 20,900 | 28,800 | 42,000 | 56,600 | 69,700 |
| | Sensible | BTUH | 11,400 | 16,200 | 23,200 | 33,600 | 48,600 | 56,100 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,800 | 19,200 | 26,500 | 38,900 | 52,200 | 64,700 |
| | Sensible | BTUH | 11,300 | 16,000 | 22,900 | 33,500 | 48,000 | 55,800 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,200 | 18,500 | 25,400 | 37,100 | 49,900 | 61,800 |
| | Sensible | BTUH | 11,200 | 16,000 | 22,500 | 32,800 | 47,000 | 54,700 |

**GENERAL SHARED DATA**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ALL DX MODELS | **Electric Heat and/or Reheat (Factory Installed)** - BTUH include standard evaporator motor heat, **(Optional)** | | | | | | | |
| | Capacity | BTUH | 17,675 | 17,675 | 18,245 | 36,490 | 36,490 | 37,635 |
| | | KW | 5.2 | 5.2 | 5.3 | 10.7 | 10.7 | 11.0 |
| | Stages | NO | 1 | 1 | 1 | 1 | 1 | 1 |
| | Type | TXT | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube |
| | **Hot Gas Reheat - (Optional)** | | | | | | | |
| | Capacity | BTUH | 10,110 | 14,140 | 19,380 | 28,430 | 37,550 | 47,350 |
| | **Hot Water & Steam Heating - (Optional)** | | | | | | | |
| | Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | | |
| | **Steam Canister Humidifier - (Optional)** | | | | | | | |
| | Steam Capacity | LBS/HR | 5 | 5 | 5 | 5 | 10 | 10 |
| | Power Input | KW | 1.79 | 1.79 | 1.79 | 1.79 | 3.4 | 3.4 |
| | **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | | |
| | Std Airflow Rate | CFM | 400 | 600 | 800 | 1,200 | 1,600 | 2,000 |
| | Std Blower Motor | HP | 1/3 | 1/3 | 1/2 | 3/4 | 3/4 | 1 |
| | *Opt Airflow Rate* | *CFM* | *500* | *750* | *1,000* | *1,500* | *2,250* | *2,500* |
| | *Opt Blower Motor* | *HP* | *1/3* | *1/3* | *1/2* | *3/4* | *1* | *1-1/2* |
| | E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Blower Diameter | IN | 10 X 8 | 10 X 8 | 10 X 8 | 10 X 8 | 12 X 9 | 12 X 9 |
| | **Evaporator Coil** - Aluminum Fin, Copper Tube | | | | | | | |
| | Rows | NO | 3 | 3 | 4 | 4 | 4 | 4 |
| | Face Area | $FT^2$ | 2.0 | 2.0 | 2.9 | 2.9 | 5.1 | 5.1 |
| | **Filters** - 30% Dust Spot Efficient | | | | | | | |
| | (Qty.) Nom. Size | (NO) IN | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (2) 16 x 24 x 2 | (2) 16 x 24 x 2 |
| | **Compressor** - *Heat Pump Duty Hermetic* | | | | | | | |
| | Type | TXT | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| | (Qty.) Horsepower | (NO) HP | (1) 1.25 | (1) 1.5 | (1) 2.0 | (1) 3.0 | (1) 4.0 | (1) 5.0 |
| | **Connection Sizes** | | | | | | | |
| | Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

## Heat Rejection Data

| Nominal Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons |
|---|---|---|---|---|---|---|---|
| Model Size | | 012 | 018 | 024 | 036 | 048 | 060 |
| **DX - AIR COOLED CONDENSER DATA** | | | | | | | |
| **AIR COOLED DX** | | | | | | | |
| **Indoor, Remote Centrifugal Blower Air Cooled Condenser & Condensing Unit Data** - (XCU & XCX Models) | | | | | | | |
| Remote Condensing Unit Model | | **XCU-012** | **XCU-018** | **XCU-024** | **XCU-036** | **XCU-048** | **XCU-060** |
| Remote Condenser Model | | **XCX-012** | **XCX-018** | **XCX-024** | **XCX-036** | **XCX-048** | **XCX-060** |
| Airflow Rate | CFM | 1,000 | 1,200 | 1,400 | 2,000 | 2,500 | 3,250 |
| | IN ESP | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Blower Motor | HP | 1/2 | 3/4 | 3/4 | 1 | 1-1/2 | 2 |
| Blower Diameter | IN | 10 x 8 | 10 x 8 | 10 x 8 | 12 x 9 | 15 x 10 | 15 x 10 |
| Blower Type | | BD - Centrifugal | BD - Centrifugal | BD - Centrifugal | BD - Centrifugal | BD - Centrifugal | BD - Centrifugal |
| Coil Face Area | $FT^2$ | 2.5 | 2.5 | 4.1 | 4.1 | 6.5 | 6.5 |
| Rows | NO | 4 | 4 | 4 | 4 | 4 | 4 |
| **Outdoor, Remote Propeller Fan Air Cooled Condensing Units & Condensers** - (XPU & XP1 models) | | | | | | | |
| Remote Condensing Unit Model | | **XPU-012** | **XPU-018** | **XPU-024** | **XPU-036** | **XPU-048** | **XPU-060** |
| Remote Condenser Model | | **XP1-012** | **XP1-018** | **XP1-024** | **XP1-036** | **XP1-048** | **XP1-060** |
| Airflow Rate | CFM | 1,792 | 2,218 | 2,218 | 3,167 | 3,365 | 3,365 |
| | IN ESP | Free Discharge | Free Discharge | Free Discharge | Free Discharge | Free Discharge | Free Discharge |
| Fan Motor | (NO) HP | (1) 1/12 | (1) 1/10 | (1) 1/10 | (1) 1/5 | (1) 1/4 | (1) 1/4 |
| Fan Type | | DD - Propeller | DD - Propeller | DD - Propeller | DD - Propeller | DD - Propeller | DD - Propeller |
| Coil Face Area | $FT^2$ | 8.4 | 8.4 | 9.8 | 17.25 | 19.4 | 15.09 |
| Rows | NO | 1 | 1 | 1 | 1 | 1 | 2 |

## Connection Data

| Nominal Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons |
|---|---|---|---|---|---|---|---|
| Model Size | | 012 | 018 | 024 | 036 | 048 | 060 |
| **DX - AIR COOLED REFRIGERANT (R407C & R410a) CONNECTION DATA** | | | | | | | |
| **AIR COOLED** | | | | | | | |
| **DX Split Air Handling Units & Indoor, Centrifugal Blower Remote Air Cooled Condensing Units** - (AHC/P & XCU models) | | | | | | | |
| Liquid Line | OD IN | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 |
| Suction Line | OD IN | (1) 3/4 | (1) 3/4 | (1) 3/4 | (1) 3/4 | (1) 7/8 | (1) 7/8 |
| **DX Split Evaporators & Indoor Remote Centrifugal Air Cooled Condensers** - (AEC/P & XCX models) | | | | | | | |
| Liquid Line | OD IN | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 |
| Hot Gas Line | OD IN | (1) 1/2 | (1) 1/2 | (1) 1/2 | (1) 1/2 | (1) 5/8 | (1) 5/8 |
| **Outdoor, Propeller Fan Remote Air Cooled Condensers & Condensing Units** - (XP1 w/ Liquid & Hot Gas Lines and XPU w/ Liquid & Suction Lines) | | | | | | | |
| Liquid Line | OD IN | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 | (1) 3/8 |
| Suction or Hot Gas Line | OD IN | (1) 3/4 | (1) 3/4 | (1) 3/4 | (1) 7/8 | (1) 7/8 | (1) 7/8 |

***Note:*** *DX Split systems ship from the factory with a dry-nitrogen holding charge and sweat (copper) connections ready for field refrigerant (R410a or R407c) charging.*

# DX - Air Cooled, (6-15 Tons HK) - Performance Data

| | Nominal Size | | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|---|---|
| | *ComfortCool™* Model | | AAC, AEC & AHC-072 | AAC, AEC & AHC-096 | AAC, AEC & AHC-120 | AAC, AEC & AHC-144 | AAC, AEC & AHC-180 |
| AIR COOLED DX STD CFM | **80°F DB / 67°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 82,700 | 104,600 | 132,100 | 156,600 | 199,700 |
| | Sensible | BTUH | 61,500 | 79,100 | 98,400 | 116,100 | 145,700 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 75,900 | 96,300 | 121,600 | 143,900 | 182,400 |
| | Sensible | BTUH | 60,500 | 77,900 | 96,800 | 114,200 | 143,300 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 72,800 | 91,900 | 116,000 | 137,200 | 173,800 |
| | Sensible | BTUH | 60,000 | 76,300 | 94,900 | 111,900 | 140,400 |
| | *PrecisionCool™* Model | | AAP, AEP & AHP-072 | AAP, AEP & AHP-096 | AAP, AEP & AHP-120 | AAP, AEP & AHP-144 | AAP, AEP & AHP-180 |
| AIR COOLED DX OPT CFM | **80°F DB / 67°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 85,700 | 107,800 | 136,000 | 159,900 | 199,700 |
| | Sensible | BTUH | 69,800 | 88,400 | 110,000 | 123,900 | 145,700 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 79,000 | 99,900 | 125,400 | 146,600 | 182,400 |
| | Sensible | BTUH | 68,400 | 87,700 | 108,000 | 122,400 | 143,300 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 75,500 | 95,400 | 120,100 | 139,800 | 173,800 |
| | Sensible | BTUH | 67,000 | 85,800 | 107,200 | 119,800 | 140,400 |

**GENERAL SHARED DATA**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ALL DX MODELS | **Electric Heat and/or Reheat (Factory Installed)** - includes standard evaporator motor heat, **(Optional)** | | | | | | |
| | Capacity | BTUH | 37,635 | 55,880 | 58,175 | 79,855 | 79,855 |
| | | KW | 11.0 | 16.4 | 17.0 | 23.4 | 23.4 |
| | Stages | NO | 1 | 2 | 2 | 2 | 2 |
| | Type | TXT | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube |
| | **Hot Gas Reheat - (Optional)** | | | | | | |
| | Capacity | BTUH | 30,360 | 38,520 | 48,640 | 57,560 | 72,960 |
| | **Hot Water & Steam Heating - (Optional)** | | | | | | |
| | Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | |
| | **Steam Canister Humidifier - (Optional)** | | | | | | |
| | Steam Canister | LBS/HR | 10 | 15 | 15 | 15 | 15 |
| | Power Input | KW | 3.4 | 5.1 | 5.1 | 5.1 | 5.1 |
| | **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | |
| | Std Airflow Rate | CFM | 2,400 | 3,200 | 4,000 | 4,800 | 5,500 |
| | Std Blower Motor | HP | 1-1/2 | 2 | 3 | 5 | 5 |
| | *Opt Airflow Rate* | *CFM* | *3,000* | *3,800* | *5,000* | *5,500* | *5,500* |
| | *Opt Blower Motor* | *HP* | *2* | *3* | *5* | *5* | *5* |
| | E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Blower Diameter | IN | 12 X 9 | 12 X 9 | 15 X 10 | 15 X 10 | 15 X 10 |
| | **Evaporator Coil** - Aluminum Fin, Copper Tube | | | | | | |
| | Rows | NO | 5 | 4 | 4 | 4 | 4 |
| | Face Area | $FT^2$ | 5.1 | 8.6 | 8.6 | 11.8 | 11.8 |
| | **Filters** - 30% Dust Spot Efficient | | | | | | |
| | (Qty.) Nom. Size | (NO) IN | (2) 16 x 24 x 2 | (3) 16 x 25 x 2 | (3) 16 x 25 x 2 | (4) 16 x 24 x 2 | (4) 16 x 24 x 2 |
| | **Compressor** - Heat Pump Duty Scroll | | | | | | |
| | (Qty.) Horsepower | (NO) HP | (2) 3.0 | (2) 4.0 | (2) 5.0 | (2) 6.0 | (2) 7.5 |
| | **Connection Sizes** | | | | | | |
| | Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

## Heat Rejection Data

| Nominal Size | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|
| Model Size | 072D | 096D | 120D | 144D | 180D |

**DX - AIR COOLED CONDENSER DATA**

**AIR COOLED DX**

| **Packaged or Split, Indoor (Optional Outdoor), Centrifugal Blower Air Cooled Condensing Unit Data** - (AAC/P & XCU Models) | | | | | | |
|---|---|---|---|---|---|---|
| Model | | **AAC/P, XCU-072D** | **AAC/P, XCU-096D** | **AAC/P, XCU-120D** | **AAC/P, XCU-144D** | **AAC/P, XCU-180D** |
| Airflow Rate | CFM | 3,800 | 4,500 | 6,000 | 7,500 | 7,500 |
| | IN ESP | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Blower Motor | HP | 2 | 3 | 5 | 7-1/2 | 7-1/2 |
| Blower Diameter | IN | 15 x 10 | 15 x 10 | 15 x 15 | 15 x 15 | 15 x 15 |
| Blower Type | | Centrifugal | Centrifugal | Centrifugal | Centrifugal | Centrifugal |
| Coil Face Area | $FT^2$ | 6.5 | 6.5 | 9.7 | 9.7 | 13.8 |
| Rows | NO | 5 | 5 | 6 | 6 | 6 |
| **Outdoor, Remote Propeller Fan Air Cooled Condenser** - (WP2 models) | | | | | | |
| Model (Qty.) | NO | **WP1-108D** (One) | **WP1-132D** (One) | **WP1-156D** (One) | **WP2-204D** (One) | **WP2-252D** (One) |
| Airflow Rate | CFM | 8,640 | 7,780 | 15,700 | 15,600 | 15,400 |
| | IN ESP | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Fan Motor | (NO) HP | (One) 1 | (One) 1 | (One) 1 | (Two) 1-1/2 | (Two) 1-1/2 |
| Fan Type | | Propeller | Propeller | Propeller | Propeller | Propeller |
| **Outdoor, Remote Propeller Fan Air Cooled Condensing Unit** - (XPU models) | | | | | | |
| Model (Qty.) | NO | **XPU-036** (Two) | **XPU-048** (Two) | **XPU-060** (Two) | **XPU-072** (Two) | **XPU-090** (Two) |
| Airflow Rate | (NO) CFM | (2) 3,167 | (2) 3,365 | (2) 3,365 | (2) 6,000 | (2) 6,000 |
| | IN ESP | Free Discharge | Free Discharge | Free Discharge | Free Discharge | Free Discharge |
| Fan Motor | (NO) HP | (2) 1/5 | (2) 1/4 | (2) 1/4 | (2) 3/4 | (2) 3/4 |
| Fan Type | | Propeller | Propeller | Propeller | Propeller | Propeller |

## Connection Data

| Nominal Size | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|
| Model Size | 072D | 096D | 120D | 144D | 180D |

**DX - AIR COOLED REFRIGERANT CONNECTION DATA**

**AIR COOLED**

| **DX Air Handling Units & Indoor, Centrifugal Blower Remote Air Cooled Condensing Units** - (AHC/P & XCU models) | | | | | | |
|---|---|---|---|---|---|---|
| Liquid Line | OD IN | (2) 3/8 | (2) 3/8 | (2) 3/8 | (2) 1/2 | (2) 1/2 |
| Suction Line | OD IN | (2) 3/4 | (2) 7/8 | (2) 7/8 | (2) 1-1/8 | (2) 1-1/8 |
| Type | TXT | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat |
| **DX Split Evaporators & Indoor Remote Centrifugal Air Cooled Condensers - (AEC/P & XCX models)** | | | | | | |
| Liquid Line | OD IN | (2) 3/8 | (2) 3/8 | (2) 3/8 | (2) 1/2 | (2) 1/2 |
| Hot Gas Line | OD IN | (2) 3/4 | (2) 7/8 | (2) 7/8 | (2) 1-1/8 | (2) 1-1/8 |
| Type | TXT | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat |
| **Outdoor, Propeller Fan Remote Air Cooled Condensers**- (WP2 models) | | | | | | |
| Model No (Qty.) | | **WP2-096D** (One) | **WP2-120D** (One) | **WP2-180D** (One) | **WP2-192D** (One) | **WP2-240D** (One) |
| Liquid Line | OD IN | (2) 5/8 | (2) 5/8 | (2) 5/8 | (2) 5/8 | (2) 5/8 |
| Hot Gas Line | OD IN | (2) 7/8 | (2) 7/8 | (2) 1-1/8 | (2) 1-1/8 | (2) 1-1/8 |
| Type | TXT | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat |
| **Outdoor, Propeller Fan Remote Air Cooled Condensing Units**- (XPU models) | | | | | | |
| Model No. (Qty.) | | **XPU-036** (Two) | **XPU-048** (Two) | **XPU-060** (Two) | **XPU-072** (Two) | **XPU-090** (Two) |
| Liquid Line | OD IN | (2) 3/8 | (2) 3/8 | (2) 3/8 | (2) 5/8 | (2) 5/8 |
| Suction Line | OD IN | (2) 7/8 | (2) 7/8 | (2) 7/8 | (2) 1-1/8 | (2) 1-1/8 |
| Type | TXT | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat | Copper Sweat |

***Note:*** *DX Split systems ship from the factory with a dry-nitrogen holding charge and sweat (copper) connections ready for field refrigerant (R410a or R407c) charging.*

# DX - Water Cooled, (1-5 Tons HK) - Performance Data

| | Nominal Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons |
|---|---|---|---|---|---|---|---|---|
| WATER COOLED DX STD CFM | *ComfortCool™* Model | | AWC-012 | AWC-018 | AWC-024 | AWC-036 | AWC-048 | AWC-060 |
| | **80°F DB / 67°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 15,400 | 21,000 | 29,500 | 43,300 | 56,900 | 71,700 |
| | Sensible | BTUH | 10,700 | 15,000 | 21,200 | 31,200 | 41,400 | 51,900 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 14,200 | 19,300 | 27,100 | 39,800 | 52,400 | 66,300 |
| | Sensible | BTUH | 10,500 | 14,700 | 20,800 | 30,700 | 40,700 | 51,300 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,500 | 18,400 | 25,900 | 38,000 | 50,000 | 63,400 |
| | Sensible | BTUH | 10,300 | 14,400 | 20,400 | 30,100 | 39,900 | 50,300 |
| WATER COOLED DX OPT CFM | *PrecisionCool™* Model | | AWP-012 | AWP-018 | AWP-024 | AWP-036 | AWP-048 | AWP-060 |
| | **80°F DB / 67°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 16,000 | 21,700 | 30,500 | 44,800 | 60,100 | 74,100 |
| | Sensible | BTUH | 11,800 | 16,600 | 23,700 | 34,700 | 50,000 | 57,900 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 14,600 | 19,900 | 28,200 | 41,100 | 55,500 | 68,500 |
| | Sensible | BTUH | 11,500 | 16,200 | 23,600 | 34,200 | 49,300 | 57,200 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,900 | 18,900 | 27,000 | 39,600 | 53,000 | 65,900 |
| | Sensible | BTUH | 11,400 | 16,000 | 23,200 | 34,000 | 48,300 | 56,900 |

**GENERAL SHARED DATA**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WATER COOLED DX | **Electric Heat and/or Reheat (Factory Installed)** - BTUH include standard evaporator motor heat, **(Optional)** | | | | | | | |
| | Capacity | BTUH (KW) | 17,675 (5.2) | 17,675 (5.2) | 18,245 (5.3) | 36,490 (10.7) | 36,490 (10.7) | 37,635 (11.0) |
| | Stages | NO | 1 | 1 | 1 | 1 | 1 | 1 |
| | **Hot Water & Steam Heating - (Optional)** | | | | | | | |
| | Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | | |
| | **Steam Canister Humidifier** - **(Optional)** | | | | | | | |
| | Steam Capacity | LBS/HR | 5 | 5 | 5 | 5 | 10 | 10 |
| | Power Input | KW | 1.79 | 1.79 | 1.79 | 1.79 | 3.4 | 3.4 |
| | **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | | |
| | Std Airflow Rate | CFM | 400 | 600 | 800 | 1,200 | 1,600 | 2,000 |
| | Std Blower Motor | HP | 1/3 | 1/3 | 1/2 | 3/4 | 3/4 | 1 |
| | *Opt Airflow Rate* | *CFM* | *500* | *750* | *1,000* | *1,500* | *2,250* | *2,500* |
| | *Opt Blower Motor* | *HP* | *1/3* | *1/3* | *1/2* | *3/4* | *1* | *1-1/2* |
| | E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Blower Diameter | IN | 10 X 8 | 10 X 8 | 10 X 8 | 10 X 8 | 12 X 9 | 12 X 9 |
| | **Evaporator Coil** - Aluminum Fin, Copper Tube | | | | | | | |
| | Rows | NO | 3 | 3 | 4 | 4 | 4 | 4 |
| | Face Area | $FT^2$ | 2.0 | 2.0 | 2.9 | 2.9 | 5.1 | 5.1 |
| | **Filters** - 30% Dust Spot Efficient | | | | | | | |
| | (Qty.) Nom. Size | (NO) IN | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (2) 16 x 24 x 2 | (2) 16 x 24 x 2 |
| | **Compressor** - *Heat Pump Duty Hermetic* | | | | | | | |
| | Type | TXT | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| | (Qty.) Horsepower | (NO) HP | (1) 1.0 | (1) 1.5 | (1) 2.0 | (1) 3.0 | (1) 4.0 | (1) 5.0 |
| | **Water Cooled Condenser Data** - 85°F EWT / 95°F LWT, 0% glycol solution (rated at 80°F DB/67°F WB EAT, Opt Evap CFM) | | | | | | | |
| | Total Heat of Rej. | BTUH | 19,045 | 25,900 | 35,900 | 52,855 | 71,100 | 88,150 |
| | Flow Rate | GPM | 3.8 | 5.2 | 7.2 | 10.6 | 14.2 | 17.6 |
| | Water Press Drop | FT WG | 11.3 | 12.2 | 15.0 | 20.0 | 18.4 | 29.9 |
| | Condenser Type | TXT | Coaxial | Coaxial | Coaxial | Coaxial | Coaxial | Coaxial |
| | Water Reg. Valve | | 2-Way, 150 psig - factory installed, *(3-way & High Pressure Valves are Optional)* | | | | | |
| | **Connection Data** | | | | | | | |
| | Water IN/OUT | IN OD | 5/8 | 5/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 |
| | Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

# DX - Water Cooled, (6-15 Tons HK) - Performance Data

| | Nominal Size | | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|---|---|
| | *ComfortCool™* Model | | AWC-072D | AWC-096D | AWC-120D | AWC-144D | AWC-180D |
| WATER COOLED DX STD CFM | **80°F DB / 67°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 87,900 | 111,000 | 140,100 | 166,300 | 212,200 |
| | Sensible | BTUH | 63,700 | 81,600 | 101,900 | 120,000 | 150,900 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 80,800 | 102,100 | 129,500 | 153,300 | 194,200 |
| | Sensible | BTUH | 62,700 | 80,600 | 100,500 | 118,600 | 148,900 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 77,100 | 97,600 | 123,800 | 146,400 | 185,300 |
| | Sensible | BTUH | 61,600 | 79,100 | 98,700 | 116,400 | 146,100 |
| | *PrecisionCool™* Model | | AWP-072 | AWP-096 | AWP-120 | AWP-144 | AWP-180 |
| WATER COOLED DX OPT CFM | **80°F DB / 67°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 90,700 | 114,400 | 144,900 | 170,100 | 212,200 |
| | Sensible | BTUH | 71,200 | 91,500 | 113,100 | 128,300 | 150,900 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 84,200 | 106,100 | 133,500 | 156,600 | 194,200 |
| | Sensible | BTUH | 71,000 | 90,900 | 111,900 | 126,700 | 148,900 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 80,600 | 101,500 | 127,800 | 149,300 | 185,300 |
| | Sensible | BTUH | 69,500 | 88,900 | 109,800 | 124,400 | 146,100 |

**GENERAL SHARED DATA**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WATER COOLED DX | **Electric Heat and/or Reheat (Fin-Tube, Factory Installed)** - BTUH include standard evaporator motor heat, **(Optional)** | | | | | | |
| | Capacity | BTUH (KW) | 37,635 (11.0) | 55,880 (16.4) | 58,175 (17.0) | 79,855 (23.4) | 79,855 (23.4) |
| | Stages | NO | 1 | 2 | 2 | 2 | 2 |
| | **Hot Water & Steam Heating - (Optional)** | | | | | | |
| | Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | |
| | **Steam Canister Humidifier - (Optional)** | | | | | | |
| | Steam Canister | LBS/HR | 10 | 15 | 15 | 15 | 15 |
| | Power Input | KW | 3.4 | 5.1 | 5.1 | 5.1 | 5.1 |
| | **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | |
| | Std Airflow Rate | CFM | 2,400 | 3,200 | 4,000 | 4,800 | 5,500 |
| | Std Blower Motor | HP | 1.5 | 2 | 3 | 5 | 5 |
| | *Opt Airflow Rate* | *CFM* | *3,000* | *3,800* | *5,000* | *5,500* | *5,500* |
| | *Opt Blower Motor* | *HP* | *2* | *3* | *5* | *5* | *5* |
| | E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Blower Diameter | IN | 12 X 9 | 12 X 9 | 15 X 10 | 15 X 10 | 15 X 10 |
| | **Evaporator Coil** - Aluminum Fin, Copper Tube | | | | | | |
| | Rows | NO | 5 | 4 | 4 | 4 | 4 |
| | Face Area | $FT^2$ | 5.1 | 8.6 | 8.6 | 11.8 | 11.8 |
| | **Filters** - 30% Dust Spot Efficient | | | | | | |
| | (Qty.) Nom. Size | (NO) IN | (2) 16 x 24 x 2 | (3) 16 x 25 x 2 | (3) 16 x 25 x 2 | (4) 16 x 24 x 2 | (4) 16 x 24 x 2 |
| | **Compressors** - Heat Pump Duty Hermetic | | | | | | |
| | Type | TXT | Scroll | Scroll | Scroll | Scroll | Scroll |
| | (Qty.) Horsepower | (NO) HP | (2) 3.0 | (2) 4.0 | (2) 5.0 | (2) 6.0 | (2) 7.5 |
| | **Water Cooled Condenser Data** - 85°F EWT / 95°F LWT, 0% glycol solution (rated at 80°F DB/67°F WB EAT, Opt Evap CFM) | | | | | | |
| | Total Heat of Rej. | BTUH | 106,800 | 13,590 | 172,875 | 203,550 | 255,200 |
| | Flow Rate | GPM | 21.4 | 27.1 | 34.6 | 40.7 | 51.0 |
| | Water Press Drop | FT WG | 20.3 | 16.7 | 29.9 | 14.5 | 19.5 |
| | Condenser Type | TXT | Coaxial | Coaxial | Coaxial | Coaxial | Coaxial |
| | Water Reg. Valve | | 2-Way, 150 psig - factory installed, *(3-way & High Pressure Valves are Optional)* | | | | |
| | **Connection Sizes** | | | | | | |
| | Water IN/OUT | OD | 1-1/8 | 1-1/8 | 1-3/8 | 1-3/8 | 1-5/8 |
| | Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

# DX - Glycol Cooled, (1-5 Tons HK) - Performance Data

| | Nominal Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons |
|---|---|---|---|---|---|---|---|---|
| GLYCOL COOLED DX STD CFM | *ComfortCool™* Model | | AGC-012 | AGC-018 | AGC-024 | AGC-036 | AGC-048 | AGC-060 |
| | **80°F DB / 67°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 14,200 | 19,400 | 27,200 | 39,800 | 52,600 | 66,200 |
| | Sensible | BTUH | 10,100 | 14,300 | 20,100 | 29,700 | 39,500 | 49,500 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,000 | 17,800 | 24,900 | 36,600 | 48,200 | 60,800 |
| | Sensible | BTUH | 9,900 | 14,000 | 19,800 | 29,100 | 38,900 | 48,600 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 12,400 | 17,000 | 23,900 | 34,800 | 46,200 | 57,800 |
| | Sensible | BTUH | 9,700 | 13,700 | 19,700 | 28,600 | 38,600 | 47,700 |
| GLYCOL COOLED DX OPT CFM | *PrecisionCool™* Model | | AGP-012 | AGP-018 | AGP-024 | AGP-036 | AGP-048 | AGP-060 |
| | **80°F DB / 67°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 14,700 | 20,000 | 28,200 | 41,000 | 55,400 | 68,200 |
| | Sensible | BTUH | 11,200 | 15,800 | 22,900 | 33,200 | 48,200 | 55,400 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 13,600 | 18,600 | 25,900 | 38,000 | 51,100 | 63,200 |
| | Sensible | BTUH | 11,300 | 16,000 | 22,700 | 33,100 | 47,500 | 55,100 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | | |
| | Total | BTUH | 12,900 | 17,700 | 24,700 | 36,300 | 48,800 | 60,300 |
| | Sensible | BTUH | 11,100 | 15,600 | 22,300 | 32,400 | 46,500 | 54,000 |

**GENERAL SHARED DATA**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GLYCOL COOLED DX | **Electric Heat and/or Reheat (Fin-Tube, Factory Installed)** - BTUH include standard evaporator motor heat, **(Optional)** | | | | | | | |
| | Capacity | BTUH (KW) | 17,675 (5.2) | 17,675 (5.2) | 18,245 (5.3) | 36,490 (10.7) | 36,490 (10.7) | 37,635 (11.0) |
| | Stages | NO | 1 | 1 | 1 | 1 | 1 | 1 |
| | **Hot Water & Steam Heating - (Optional)** | | | | | | | |
| | Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | | |
| | **Steam Canister Humidifier** - **(Optional)** | | | | | | | |
| | Steam Capacity | LBS/HR | 5 | 5 | 5 | 5 | 10 | 10 |
| | Power Input | KW | 1.79 | 1.79 | 1.79 | 1.79 | 3.4 | 3.4 |
| | **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | | |
| | Std Airflow Rate | CFM | 400 | 600 | 800 | 1,200 | 1,600 | 2,000 |
| | Std Blower Motor | HP | 1/3 | 1/3 | 1/2 | 3/4 | 3/4 | 1 |
| | *Opt Airflow Rate* | *CFM* | *500* | *750* | *1,000* | *1,500* | *2,250* | *2,500* |
| | *Opt Blower Motor* | *HP* | *1/3* | *1/3* | *1/2* | *3/4* | *1* | *1-1/2* |
| | E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Blower Diameter | IN | 10 X 8 | 10 X 8 | 10 X 8 | 10 X 8 | 12 X 9 | 12 X 9 |
| | **Evaporator Coil** - Aluminum Fin, Copper Tube | | | | | | | |
| | Rows | NO | 3 | 3 | 4 | 4 | 4 | 4 |
| | Face Area | $FT^2$ | 2.0 | 2.0 | 2.9 | 2.9 | 5.1 | 5.1 |
| | **Filters** - 30% Dust Spot Efficient | | | | | | | |
| | (Qty.) Nom. Size | (NO) IN | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (1) 18 x 24 x 2 | (2) 16 x 24 x 2 | (2) 16 x 24 x 2 |
| | **Compressor** - Heat Pump Duty Hermetic | | | | | | | |
| | Type | TXT | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| | (Qty.) Horsepower | (NO) HP | (1) 1.0 | (1) 1.5 | (1) 2.0 | (1) 3.0 | (1) 4.0 | (1) 5.0 |
| | **Glycol Cooled Condenser Data** - 110°F EGT / 120°F LGT, 40% Ethylene Glycol solution (rated at 80°F DB/67°F WB EAT, Opt Evap CFM) | | | | | | | |
| | Total Heat of Rej. | BTUH | 18,690 | 25,510 | 35,120 | 51,410 | 69,310 | 85,470 |
| | Flow Rate | GPM | 4.1 | 5.6 | 7.8 | 14.4 | 15.4 | 18.9 |
| | Glycol Press Drop | FT WG | 10.8 | 11.8 | 14.3 | 18.9 | 17.7 | 28.4 |
| | Condenser Type | TXT | Coaxial | Coaxial | Coaxial | Coaxial | Coaxial | Coaxial |
| | Glycol Reg. Valve | | 2-Way, 150 psig - factory installed, *(3-way & High Pressure Valves are Optional)* | | | | | |
| | **Connection Data** | | | | | | | |
| | Glycol IN/OUT | OD | 5/8 | 5/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 |
| | Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

# DX - Glycol Cooled, (6-15 Tons HK) - Performance Data

| | Nominal Size | | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|---|---|
| | *ComfortCool™* Model | | AGC-072D | AGC-096D | AGC-120D | AGC-144D | AGC-180D |
| GLYCOL COOLED DX STD CFM | **80°F DB / 67°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 80,900 | 102,400 | 129,200 | 153,100 | 189,500 |
| | Sensible | BTUH | 60,800 | 78,200 | 97,200 | 114,700 | 141,900 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 74,600 | 94,200 | 118,600 | 140,300 | 173,500 |
| | Sensible | BTUH | 60,400 | 76,900 | 95,400 | 112,400 | 139,100 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 71,200 | 89,900 | 112,900 | 133,800 | 165,200 |
| | Sensible | BTUH | 59,200 | 75,300 | 93,700 | 110,400 | 136,100 |
| | *PrecisionCool™* Model | | AGP-072 | AGP-096 | AGP-120 | AGP-144 | AGP-180 |
| GLYCOL COOLED DX OPT CFM | **80°F DB / 67°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 83,900 | 106,100 | 133,000 | 156,200 | 189,500 |
| | Sensible | BTUH | 68,800 | 88,600 | 108,700 | 122,800 | 141,900 |
| | **75°F DB / 62.5°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 77,300 | 97,700 | 122,800 | 142,900 | 173,500 |
| | Sensible | BTUH | 67,700 | 86,700 | 108,100 | 120,600 | 139,100 |
| | **72°F DB / 60°F WB, 50% RH** | | | | | | |
| | Total | BTUH | 73,900 | 93,100 | 117,000 | 136,200 | 165,200 |
| | Sensible | BTUH | 66,400 | 84,800 | 105,900 | 118,200 | 136,100 |

**GENERAL SHARED DATA**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GLYCOL COOLED DX | **Electric Heat and/or Reheat (Fin-Tube, Factory Installed)** - BTUH include standard evaporator motor heat, **(Optional)** | | | | | | |
| | Capacity | BTUH (KW) | 37,635 (11.0) | 55,880 (16.4) | 58,175 (17.0) | 79,855 (23.4) | 79,855 (23.4) |
| | Stages | NO | 1 | 2 | 2 | 2 | 2 |
| | **Hot Water & Steam Heating - (Optional)** | | | | | | |
| | Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | |
| | **Steam Canister Humidifier** - **(Optional)** | | | | | | |
| | Steam Canister | LBS/HR | 10 | 15 | 15 | 15 | 15 |
| | Power Input | KW | 3.4 | 5.1 | 5.1 | 5.1 | 5.1 |
| | **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | |
| | Std Airflow Rate | CFM | 2,400 | 3,200 | 4,000 | 4,800 | 5,500 |
| | Std Blower Motor | HP | 1.5 | 2 | 3 | 5 | 5 |
| | *Opt Airflow Rate* | *CFM* | *3,000* | *3,800* | *5,000* | *5,500* | *5,500* |
| | *Opt Blower Motor* | *HP* | *2* | *3* | *5* | *5* | *5* |
| | E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Blower Diameter | IN | 12 X 9 | 12 X 9 | 15 X 10 | 15 X 10 | 15 X 10 |
| | **Evaporator Coil** - Aluminum Fin, Copper Tube | | | | | | |
| | Rows | NO | 5 | 4 | 4 | 4 | 4 |
| | Face Area | $FT^2$ | 5.1 | 8.6 | 8.6 | 11.8 | 11.8 |
| | **Filters** - 30% Dust Spot Efficient | | | | | | |
| | (Qty.) Nom. Size | (NO) IN | (2) 16 x 24 x 2 | (3) 16 x 25 x 2 | (3) 16 x 25 x 2 | (4) 16 x 24 x 2 | (4) 16 x 24 x 2 |
| | **Compressors** - Heat Pump Duty Hermetic | | | | | | |
| | Type | TXT | Scroll | Scroll | Scroll | Scroll | Scroll |
| | (Qty.) Horsepower | (NO) HP | (2) 3.0 | (2) 4.0 | (2) 5.0 | (2) 6.2 | (2) 7.5 |
| | **Glycol Cooled Condenser Data** - 110°F EGT/120°F LGT, 40% EG solution (rated at 80°F DB/67°F WB EAT, Opt Evap CFM) | | | | | | |
| | Total Heat of Rej. | BTUH | 104,590 | 132,550 | 167,550 | 198,740 | 247,500 |
| | Flow Rate | GPM | 23.1 | 29.3 | 37.1 | 44.0 | 54.8 |
| | Glycol Press Drop | FT WG | 19.4 | 16.0 | 27.4 | 13.6 | 18.3 |
| | Condenser Type | TXT | Coaxial | Coaxial | Coaxial | Coaxial | Coaxial |
| | Glycol Reg. Valve | | 2-Way, 150 psig - factory installed, *(3-way & High Pressure Valves are Optional)* | | | | |
| | **Connection Sizes** | | | | | | |
| | Glycol IN/OUT | IN OD | 1-1/8 | 1-1/8 | 1-3/8 | 1-3/8 | 1-5/8 |
| | Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| | Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

# Chilled Water Systems, (1-15 Tons HK) - Performance Data

| Nominal Unit Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cooling Capacity** - BTUH @ 45°F EWT, 0% Glycol Solution | | | | | | | | | | | | |
| ***STD CFM, ComfortCool™*** | | **ACC-012** | **ACC-018** | **ACC-024** | **ACC-036** | **ACC-048** | **ACC-060** | **ACC-072** | **ACC-096** | **ACC-120** | **ACC-144** | **ACC-180** |
| **80°F DB / 67°F WB, 50% RH** | | | | | | | | | | | | |
| Total | BTUH | 13,300 | 18,300 | 29,800 | 40,300 | 58,600 | 69,100 | 91,700 | 111,500 | 127,500 | 149,600 | 211,300 |
| Sensible | BTUH | 9,600 | 13,500 | 20,800 | 29,000 | 41,000 | 49,200 | 63,500 | 79,600 | 93,600 | 110,100 | 146,800 |
| **75°F DB / 62.5°F WB, 50% RH** | | | | | | | | | | | | |
| Total | BTUH | 10,500 | 14,500 | 23,400 | 31,800 | 46,000 | 54,400 | 72,000 | 88,200 | 101,300 | 118,800 | 166,500 |
| Sensible | BTUH | 8,800 | 12,400 | 18,900 | 26,500 | 37,300 | 45,000 | 57,600 | 72,900 | 86,200 | 101,400 | 133,500 |
| **72°F DB / 60°F WB, 50% RH** | | | | | | | | | | | | |
| Total | BTUH | 9,100 | 12,600 | 20,100 | 27,500 | 39,500 | 46,900 | 61,800 | 76,200 | 87,800 | 103,000 | 143,300 |
| Sensible | BTUH | 8,200 | 11,700 | 17,600 | 24,800 | 34,800 | 42,100 | 53,700 | 68,200 | 81,000 | 95,300 | 124,500 |
| Flow Rate | GPM | 2.5 | 3.5 | 6.0 | 8.0 | 12.0 | 14.0 | 18.0 | 22.5 | 24.0 | 30.0 | 40.0 |
| Coil Press. Drop | FT H2O | 1.9 | 3.4 | 3.4 | 5.6 | 3.4 | 4.4 | 8.7 | 12.8 | 4.4 | 6.5 | 17.4 |

| ***OPT CFM, PrecisionCool™*** | | **ACP-012** | **ACP-018** | **ACP-024** | **ACP-036** | **ACP-048** | **ACP-060** | **ACP-072** | **ACP-096** | **ACP-120** | **ACP-144** | **ACP-180** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **80°F DB / 67°F WB, 50% RH** | | | | | | | | | | | | |
| Total | BTUH | 15,900 | 21,300 | 35,200 | 47,100 | 74,800 | 80,100 | 106,400 | 120,400 | 151,900 | 166,600 | 211,300 |
| Sensible | BTUH | 11,600 | 16,000 | 25,000 | 34,600 | 54,000 | 58,500 | 75,600 | 89,200 | 112,900 | 123,400 | 146,800 |
| **75°F DB / 62.5°F WB, 50% RH** | | | | | | | | | | | | |
| Total | BTUH | 12,600 | 17,000 | 27,700 | 37,400 | 59,100 | 63,500 | 84,100 | 96,400 | 121,000 | 132,500 | 166,500 |
| Sensible | BTUH | 10,600 | 14,800 | 22,800 | 31,900 | 49,500 | 53,800 | 69,100 | 82,600 | 104,300 | 113,900 | 133,500 |
| **72°F DB / 60°F WB, 50% RH** | | | | | | | | | | | | |
| Total | BTUH | 10,900 | 14,700 | 23,900 | 32,400 | 51,000 | 55,000 | 72,500 | 84,100 | 105,200 | 115,200 | 143,300 |
| Sensible | BTUH | 10,000 | 14,000 | 21,300 | 29,900 | 46,300 | 50,500 | 64,600 | 77,800 | 98,200 | 107,200 | 124,500 |
| Flow Rate | GPM | 3.0 | 4 | 7 | 9.5 | 15.0 | 16.0 | 21.0 | 24.0 | 30.0 | 36.0 | 40.0 |
| Coil Press. Drop | FT H2O | 2.6 | 4.3 | 4.4 | 7.6 | 5.0 | 5.6 | 11.3 | 14.3 | 6.5 | 8.9 | 17.4 |

| **Chilled Water Coil / Valve** - Aluminum Fin, Copper Tube | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rows | NO | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 |
| Face Area | $FT^2$ | 2.0 | 2.0 | 2.8 | 2.8 | 4.9 | 4.9 | 4.9 | 8.6 | 8.6 | 11.8 | 11.8 |
| Standard Valve | BTUH | 2-way, 300 psig - field installed *(3-way Valves are Optional)* | | | | | | | | | | |

**GENERAL SHARED DATA**

| **Electric Heat and/or Reheat (Factory Installed)** - includes standard evaporator motor heat, **(Optional)** | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity | BTUH | 17,675 | 17,675 | 18,245 | 36,490 | 36,490 | 37,635 | 37,635 | 55,880 | 58,175 | 79,855 | 79,855 |
| | KW | 5.2 | 5.2 | 5.3 | 10.7 | 10.7 | 11.0 | 11.0 | 16.4 | 17.0 | 23.4 | 23.4 |
| Stages | NO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| Type | TXT | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube | Fin-Tube |
| **Hot Water & Steam Heating - (Optional)** | | | | | | | | | | | | |
| Capacity | | See Page 13 for Complete Hot Water & Steam Heating Coil Performance Data | | | | | | | | | | |
| **Steam Canister Humidifier - (Optional)** | | | | | | | | | | | | |
| Steam Canister | LBS/HR | 5 | 5 | 5 | 5 | 10 | 10 | 10 | 15 | 15 | 15 | 15 |
| Power Input | KW | 1.79 | 1.79 | 1.79 | 1.79 | 3.4 | 3.4 | 3.4 | 5.1 | 5.1 | 5.1 | 5.1 |
| **Evaporator Blower / Motor** - Belt Drive, DWDI Centrifugal | | | | | | | | | | | | |
| Std Airflow Rate | CFM | 400 | 600 | 900 | 1,200 | 1,600 | 2,000 | 2,400 | 3,200 | 4,000 | 4,800 | 5,500 |
| Std Blower Motor | HP | 1/2 | 1/2 | 1/2 | 3/4 | 3/4 | 1 | 1-1/2 | 2 | 3 | 5 | 5 |
| *Opt Airflow Rate* | CFM | 500 | 750 | 1,000 | 1,500 | 2,250 | 2,500 | 3,000 | 3,800 | 5,000 | 5,500 | 5,500 |
| *Opt Blower Motor* | *HP* | *1/2* | *1/2* | *1/2* | *3/4* | *1* | *1-1/2* | *2* | *3* | *5* | *5* | *5* |
| E.S.P. | IN WG | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| Fan Diameter | IN | 10 X 8 | 10 X 8 | 10 X 8 | 10 X 8 | 12 X 9 | 12 X 9 | 12 X 9 | 12 X 9 | 15 X 10 | 15 X 10 | 15 X 10 |
| **Filters** - 2", 30% Dust Spot Efficient | | | | | | | | | | | | |
| (Qty.) Nom. Size | (NO) IN | (1) 18x24 | (1) 18x24 | (1) 18x24 | (1) 18x24 | (2) 16x24 | (2) 16x24 | (2) 16x24 | (3) 16x25 | (3) 16x25 | (4) 16x24 | (4) 16x24 |
| **Connection Sizes** - Copper | | | | | | | | | | | | |
| Chilled Water | IN OD | 5/8 | 5/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-3/8 | 1-3/8 | 1-5/8 | 1-5/8 |
| Condensate Drain | FPT IN | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 |
| Humidifier Inlet | IN OD | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

## HOT WATER HEATING COIL

| Nominal Unit Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hot Water Heating Coil** - @ 180°F EWT / 160 LWT, 70°F EAT, **(Optional)** | | | | | | | | | | | | |
| ***ComfortCool™* Model** | | **A_C-012** | **A_C-018** | **A_C-024** | **A_C-036** | **A_C-048** | **A_C-060** | **A_C-072** | **A_C-096** | **A_C-120** | **A_C-144** | **A_C-180** |
| Std Airflow Rate | CFM | 400 | 600 | 900 | 1,200 | 1,600 | 2,000 | 2,400 | 3,200 | 4,000 | 4,800 | 5,500 |
| Heating Capacity | BTUH | 19,310 | 25,250 | 36,060 | 46,290 | 67,750 | 78,440 | 87,510 | 102,290 | 150,950 | 167,280 | 180,750 |
| Flow Rate | GPM | 1.8 | 2.4 | 3.5 | 4.5 | 6.6 | 7.6 | 8.5 | 10.1 | 16.0 | 17.3 | 18.7 |
| *Fluid Press. Drop* | FT H2O | 1.7 | 2.8 | 2.5 | 3.8 | 2.8 | 3.6 | 4.3 | 5.8 | 4.0 | 4.5 | 5.2 |
| LAT | °F DB | 108.2 | 103.4 | 107.4 | 102.2 | 105.6 | 102.8 | 100.6 | 97.2 | 103.9 | 101.3 | 99.5 |
| ***PrecisionCool™ Model*** | | ***A_P-012*** | ***A_P-018*** | ***A_P-024*** | ***A_P-036*** | ***A_P-048*** | ***A_P-060*** | ***A_P-072*** | ***A_P-096*** | ***A_P-120*** | ***A_P-144*** | ***A_P-180*** |
| *Opt Airflow Rate* | *CFM* | *500* | *750* | *1,000* | *1,500* | *2,250* | *2,500* | *3,000* | *3,800* | *5,000* | *5,500* | *5,500* |
| *Heating Capacity* | *BTUH* | *22,470* | *28,810* | *41,680* | *52,850* | *83,570* | *89,580* | *98,620* | *112,480* | *171,650* | *180,750* | *180,750* |
| *Flow Rate* | *GPM* | *2.1* | *2.7* | *4.0* | *5.1* | *8.1* | *8.7* | *9.7* | *11.2* | *18.0* | *18.7* | *18.7* |
| *Fluid Press. Drop* | *FT H2O* | *2.2* | *3.4* | *3.1* | *4.8* | *4.0* | *4.5* | *5.4* | *7.0* | *4.9* | *5.2* | *5.2* |
| *LAT* | *°F DB* | *105.5* | *100.7* | *104.5* | *99.5* | *101.3* | *100.1* | *97.9* | *95.3* | *100.8* | *99.5* | *99.5* |
| **Hot Water Heating Coil Physical Data** | | | | | | | | | | | | |
| Rows | NO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Face Area | $FT^2$ | 2.0 | 2.0 | 2.8 | 2.8 | 4.9 | 4.9 | 4.9 | 8.6 | 8.6 | 11.8 | 11.8 |
| HW IN/OUT | IN OD | 5/8 | 5/8 | 5/8 | 5/8 | 7/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-1/8 |
| Standard Valve | TXT | 2-way - field installed *(3-way valves are optional)* | | | | | | | | | | |

## STEAM HEATING COIL

| Nominal Unit Size | | 1.0 Ton | 1.5 Tons | 2.0 Tons | 3.0 Tons | 4.0 Tons | 5.0 Tons | 6.0 Tons | 8.0 Tons | 10.0 Tons | 12.0 Tons | 15.0 Tons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Steam Heating Coil** - @ 5 PSIG (227.1°F) Supply Steam, 70°F EAT, **(Optional)** | | | | | | | | | | | | |
| ***ComfortCool™* Model** | | **A_C-012** | **A_C-018** | **A_C-024** | **A_C-036** | **A_C-048** | **A_C-060** | **A_C-072** | **A_C-096** | **A_C-120** | **A_C-144** | **A_C-180** |
| Std Airflow Rate | CFM | 400 | 600 | 800 | 1,200 | 1,600 | 2,000 | 2,400 | 3,200 | 4,000 | 4,800 | 5,500 |
| Heating Capacity | BTUH | 29,840 | 37,760 | 53,360 | 66,700 | 100,300 | 113,230 | 124,450 | 143,250 | 213,640 | 234,270 | 250,280 |
| Condensate | LB/HR | 31 | 39 | 56 | 69 | 104 | 118 | 130 | 149 | 223 | 244 | 113 |
| *Steam Pr. Drop* | FT H2O | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| LAT | °F DB | 139.8 | 128.9 | 132.4 | 122.0 | 128.6 | 122.9 | 118.5 | 111.9 | 119.9 | 115.6 | 112.6 |
| ***PrecisionCool™ Model*** | | ***A_P-012*** | ***A_P-018*** | ***A_P-024*** | ***A_P-036*** | ***A_P-048*** | ***A_P-060*** | ***A_P-072*** | ***A_P-096*** | ***A_P-120*** | ***A_P-144*** | ***A_P-180*** |
| *Opt Airflow Rate* | *CFM* | *500* | *750* | *1,000* | *1,500* | *2,250* | *2,500* | *3,000* | *3,800* | *5,000* | *5,500* | *5,500* |
| *Heating Capacity* | *BTUH* | *34,050* | *42,620* | *60,480* | *74,770* | *120,410* | *127,040* | *138,920* | *155,030* | *239,020* | *250,280* | *250,280* |
| *Condensate* | *LB/HR* | *35* | *44* | *63* | *78* | *125* | *132* | *145* | *162* | *249* | *113* | *113* |
| *Steam Pr. Drop* | *FT H2O* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* | *0.1* |
| *LAT* | *°F DB* | *133.7* | *123.1* | *126.6* | *116.6* | *120.0* | *117.5* | *113.3* | *108.2* | *114.7* | *112.6* | *112.6* |
| **Steam Heating Coil Physical Data** | | | | | | | | | | | | |
| Rows | NO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Face Area | $FT^2$ | 2.0 | 2.0 | 2.8 | 2.8 | 4.9 | 4.9 | 4.9 | 8.6 | 8.6 | 11.8 | 11.8 |
| STM IN/OUT | IN OD | 5/8 | 5/8 | 5/8 | 5/8 | 7/8 | 7/8 | 7/8 | 1-1/8 | 1-1/8 | 1-1/8 | 1-1/8 |
| Standard Valve | TXT | 2-way - field installed *(3-way valves are optional) - Steam Specialties by Others* | | | | | | | | | | |

## **STANDARD CFM,** DX-Air Cooled Self-Contained, 1 to 3 Tons

| MODEL | AAC-012-_ | | | | AAC-018-_ | | | | AAC-024-_ | | | | AAC-036-_ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 18.0 | 14.6 | - - - - | - - - - | 18.7 | 14.6 | - - - - | - - - - | 22.6 | 17.2 | 14.3 | 7.2 | 30.1 | 25.2 | 18.6 | 9. |
| **MCA** | 20.5 | 16.8 | | | 21.4 | 16.8 | | | 26.0 | 19.8 | 16.5 | 8.2 | 34.7 | 29.3 | 21.5 | 10.7 |
| **MOP** | 30 | 25 | | | 30 | 25 | | | 35 | 30 | 25 | 15 | 50 | 45 | 30 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | | | 35.1 | 26.4 | | | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | | | 40 | 30 | | | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 42.1 | 32.7 | - - - - | - - - - | 42.8 | 32.7 | - - - - | - - - - | 46.7 | 35.2 | 28.2 | 13.4 | 78.3 | 61.4 | 46.4 | 21.9 |
| **MCA** | 50.6 | 39.4 | | | 51.5 | 36.4 | | | 56.1 | 42.4 | 33.8 | 16.1 | 94.9 | 74.5 | 56.2 | 26.4 |
| **MOP** | 60 | 40 | | | 60 | 40 | | | 60 | 45 | 35 | 20 | 100 | 80 | 60 | 30 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 26.2 | 20.8 | - - - - | - - - - | 26.9 | 20.8 | - - - - | - - - - | 30.8 | 23.4 | 22.5 | 10.9 | 38.3 | 31.4 | 26.8 | 13.0 |
| **MCA** | 28.7 | 23.0 | | | 29.6 | 23.0 | | | 34.2 | 26.0 | 24.7 | 11.9 | 42.9 | 35.5 | 29.7 | 14.4 |
| **MOP** | 35 | 30 | | | 40 | 30 | | | 45 | 35 | 30 | 15 | 60 | 50 | 40 | 20 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | | | 43.3 | 32.6 | | | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | | | 45 | 35 | | | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 42.1 | 32.7 | - - - - | - - - - | 42.8 | 32.7 | - - - - | - - - - | 46.7 | 35.2 | 28.2 | 13.4 | 78.3 | 61.4 | 46.4 | 21.9 |
| **MCA** | 50.6 | 39.4 | | | 51.5 | 39.4 | | | 56.1 | 42.4 | 33.8 | 16.1 | 94.9 | 74.5 | 56.2 | 26.4 |
| **MOP** | 60 | 40 | | | 60 | 40 | | | 60 | 45 | 35 | 20 | 100 | 80 | 60 | 30 |

## **STANDARD CFM,** DX-Air Cooled Self-Contained, 6 to 15 Tons

| MODEL | AAC-048-_ | | AAC-060_ | | AAC-072-_ | | AAC-096-_ | | AAC-120-_ | | AAC-144-_ | | AAC-180-_ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | |
| **FLA** | 23.6 | 11.5 | 29.0 | 14.1 | 33.3 | 16.5 | 47.0 | 22.6 | 63.1 | 30.5 | 67.6 | 30.6 | 76.8 | 35.4 |
| **MCA** | 27.7 | 13.4 | 34.2 | 16.6 | 36.2 | 17.9 | 51.1 | 24.6 | 68.3 | 33.0 | 72.7 | 32.8 | 83.0 | 38.2 |
| **MOP** | 40 | 20 | 50 | 25 | 45 | 20 | 60 | 30 | 80 | 40 | 90 | 40 | 100 | 45 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.2 | 14.3 | 31.6 | 14.5 | 33.3 | 16.5 | 47.7 | 22.6 | 63.1 | 30.5 | 69.1 | 31.7 | 76.8 | 35.4 |
| **MCA** | 39.0 | 17.8 | 39.5 | 18.1 | 40.4 | 18.5 | 59.6 | 27.2 | 68.3 | 33.0 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 50 | 25 | 45 | 20 | 60 | 30 | 80 | 40 | 90 | 40 | 100 | 45 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 51.4 | 24.0 | 56.8 | 26.7 | 61.1 | 29.1 | 88.7 | 41.5 | 104.8 | 49.4 | 123.2 | 55.8 | 132.4 | 60.6 |
| **MCA** | 62.5 | 29.1 | 68.9 | 32.3 | 70.9 | 33.6 | 103.2 | 48.1 | 120.4 | 56.6 | 142.2 | 64.2 | 152.6 | 69.6 |
| **MOP** | 70 | 30 | 80 | 35 | 80 | 35 | 110 | 50 | 125 | 60 | 150 | 70 | 175 | 70 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | |
| **FLA** | 40.0 | 18.9 | 45.4 | 21.5 | 47.5 | 22.9 | 61.2 | 29.0 | 77.3 | 36.9 | 81.8 | 37.0 | 91.0 | 41.8 |
| **MCA** | 44.1 | 20.8 | 50.6 | 24.0 | 50.4 | 24.3 | 65.3 | 31.0 | 82.5 | 39.4 | 86.9 | 39.2 | 97.2 | 44.6 |
| **MOP** | 60 | 25 | 70 | 30 | 60 | 30 | 80 | 35 | 100 | 45 | 100 | 45 | 110 | 50 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 47.6 | 21.7 | 48.0 | 21.9 | 47.5 | 22.9 | 61.9 | 29.0 | 77.3 | 36.9 | 83.3 | 38.1 | 91.0 | 41.8 |
| **MCA** | 55.4 | 25.2 | 55.9 | 25.5 | 54.6 | 24.9 | 73.8 | 33.6 | 82.5 | 39.4 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 70 | 30 | 60 | 30 | 80 | 35 | 100 | 45 | 110 | 50 | 110 | 50 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 51.4 | 24.0 | 56.8 | 26.7 | 61.1 | 29.1 | 88.7 | 41.5 | 104.8 | 49.4 | 123.2 | 55.8 | 132.4 | 60.6 |
| **MCA** | 62.5 | 29.1 | 68.9 | 32.3 | 70.9 | 33.6 | 103.2 | 48.1 | 120.4 | 56.6 | 142.2 | 64.2 | 152.6 | 69.6 |
| **MOP** | 70 | 30 | 80 | 35 | 80 | 35 | 110 | 50 | 125 | 60 | 150 | 70 | 175 | 70 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection
2) *277V available via field installed step-down transformer.*

## **OPTIONAL CFM,** DX-Air Cooled Self-Contained, 1 to 3 Tons

| MODEL | AAP-012-_ | | | | AAP-018-_ | | | | AAP-024-_ | | | | AAP-036-_ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 18.0 | 14.6 | - - - - | - - - - | 18.7 | 14.6 | - - - - | - - - - | 22.6 | 17.2 | 14.3 | 7.2 | 30.1 | 25.2 | 18.6 | 9. |
| **MCA** | 20.5 | 16.8 | | | 21.4 | 16.8 | | | 26.0 | 19.8 | 16.5 | 8.2 | 34.7 | 29.3 | 21.5 | 10.7 |
| **MOP** | 30 | 25 | | | 30 | 25 | | | 35 | 30 | 25 | 15 | 50 | 45 | 30 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | | | 35.1 | 26.4 | | | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | | | 40 | 30 | | | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 42.1 | 32.7 | - - - - | - - - - | 42.8 | 32.7 | - - - - | - - - - | 46.7 | 35.2 | 28.2 | 13.4 | 78.3 | 61.4 | 46.4 | 21.9 |
| **MCA** | 50.6 | 39.4 | | | 51.5 | 36.4 | | | 56.1 | 42.4 | 33.8 | 16.1 | 94.9 | 74.5 | 56.2 | 26.4 |
| **MOP** | 60 | 40 | | | 60 | 40 | | | 60 | 45 | 35 | 20 | 100 | 80 | 60 | 30 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 26.2 | 20.8 | - - - - | - - - - | 26.9 | 20.8 | - - - - | - - - - | 30.8 | 23.4 | 22.5 | 10.9 | 38.3 | 31.4 | 26.8 | 13.0 |
| **MCA** | 28.7 | 23.0 | | | 29.6 | 23.0 | | | 34.2 | 26.0 | 24.7 | 11.9 | 42.9 | 35.5 | 29.7 | 14.4 |
| **MOP** | 35 | 30 | | | 40 | 30 | | | 45 | 35 | 30 | 15 | 60 | 50 | 40 | 20 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | | | 43.3 | 32.6 | | | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | | | 45 | 35 | | | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 42.1 | 32.7 | - - - - | - - - - | 42.8 | 32.7 | - - - - | - - - - | 46.7 | 35.2 | 28.2 | 13.4 | 78.3 | 61.4 | 46.4 | 21.9 |
| **MCA** | 50.6 | 39.4 | | | 51.5 | 39.4 | | | 56.1 | 42.4 | 33.8 | 16.1 | 94.9 | 74.5 | 56.2 | 26.4 |
| **MOP** | 60 | 40 | | | 60 | 40 | | | 60 | 45 | 35 | 20 | 100 | 80 | 60 | 30 |

## **OPTIONAL CFM,** DX-Air Cooled Self-Contained, 6 to 15 Tons

| MODEL | AAP-048-_ | | AAP-060_ | | AAP-072-_ | | AAP-096-_ | | AAP-120-_ | | AAP-144-_ | | AAP-180-_ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | |
| **FLA** | 24.0 | 11.7 | 29.7 | 14.4 | 34.8 | 17.2 | 49.2 | 23.7 | 68.4 | 33.0 | 68.4 | 33.0 | 76.8 | 35.4 |
| **MCA** | 28.1 | 13.6 | 34.9 | 16.9 | 37.7 | 18.6 | 53.3 | 25.7 | 73.6 | 35.5 | 73.6 | 35.5 | 83.0 | 38.2 |
| **MOP** | 40 | 20 | 50 | 25 | 45 | 20 | 60 | 30 | 90 | 45 | 90 | 45 | 100 | 45 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.6 | 14.5 | 32.3 | 14.8 | 34.8 | 17.2 | 49.9 | 23.7 | 68.4 | 33.0 | 69.1 | 33.0 | 76.8 | 35.4 |
| **MCA** | 39.5 | 18.1 | 40.4 | 18.5 | 42.3 | 19.3 | 62.4 | 28.6 | 73.6 | 35.5 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 50 | 25 | 45 | 20 | 70 | 30 | 90 | 45 | 90 | 45 | 100 | 45 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 51.8 | 24.2 | 57.5 | 27.0 | 62.6 | 29.8 | 90.9 | 42.6 | 110.1 | 51.9 | 124.0 | 58.2 | 132.4 | 60.6 |
| **MCA** | 62.9 | 29.3 | 69.6 | 32.6 | 72.4 | 34.3 | 105.4 | 49.2 | 125.7 | 59.1 | 143.1 | 66.9 | 152.6 | 69.6 |
| **MOP** | 70 | 30 | 80 | 35 | 80 | 35 | 110 | 50 | 150 | 60 | 150 | 70 | 175 | 70 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | |
| **FLA** | 40.4 | 19.1 | 46.1 | 21.8 | 49.0 | 23.6 | 63.4 | 30.1 | 82.6 | 39.4 | 82.6 | 39.4 | 91.0 | 41.8 |
| **MCA** | 44.5 | 21.0 | 51.3 | 24.3 | 51.9 | 25.0 | 67.5 | 32.1 | 87.8 | 41.9 | 87.8 | 41.9 | 97.2 | 44.6 |
| **MOP** | 60 | 25 | 70 | 30 | 60 | 30 | 80 | 35 | 100 | 50 | 100 | 50 | 110 | 50 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 48.0 | 21.9 | 48.7 | 22.2 | 49.0 | 23.6 | 64.1 | 30.1 | 82.6 | 39.4 | 83.3 | 39.4 | 91.0 | 41.8 |
| **MCA** | 55.9 | 25.5 | 56.8 | 25.9 | 56.5 | 25.7 | 76.6 | 35.0 | 87.8 | 41.9 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 70 | 30 | 60 | 30 | 80 | 40 | 100 | 50 | 110 | 50 | 110 | 50 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 51.8 | 24.2 | 57.5 | 27.0 | 62.6 | 29.8 | 90.9 | 42.6 | 110.1 | 51.9 | 124.0 | 58.2 | 132.4 | 60.6 |
| **MCA** | 62.9 | 29.3 | 69.6 | 32.6 | 72.4 | 34.3 | 105.4 | 49.2 | 125.7 | 59.1 | 143.1 | 66.9 | 152.6 | 69.6 |
| **MOP** | 70 | 30 | 80 | 35 | 80 | 35 | 110 | 50 | 150 | 60 | 150 | 70 | 160 | 70 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection
2) *277V available via field installed step-down transformer.*

## **STD CFM,** DX - Split Evap & Water/Glycol Cooled Self-Contained, 1 to 3 Tons

| MODEL | AEC / AWC / AGC-012-_ | | | | AEC / AWC / AGC-018-_ | | | | AEC / AWC / AGC-024-_ | | | | AEC / AWC / AGC-036-_ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 14.0 | 11.6 | - - - - | - - - - | 14.7 | 11.6 | - - - - | - - - - | 17.6 | 13.4 | 10.9 | 5.5 | 23.4 | 20.2 | 14.8 | 7.4 |
| **MCA** | 16.5 | 13.8 | | | 17.4 | 13.8 | | | 21.0 | 16.0 | 13.1 | 6.5 | 28.0 | 24.3 | 17.7 | 8.8 |
| **MOP** | 25 | 20 | | | 25 | 20 | | | 30 | 25 | 20 | 15 | 45 | 40 | 25 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | | | 35.1 | 26.4 | | | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | | | 40 | 30 | | | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 38.1 | 29.7 | - - - - | - - - - | 38.8 | 29.7 | - - - - | - - - - | 41.7 | 31.5 | 24.8 | 11.7 | 71.6 | 56.3 | 42.6 | 20.0 |
| **MCA** | 46.6 | 36.4 | | | 47.5 | 36.4 | | | 51.1 | 38.6 | 30.4 | 14.4 | 88.2 | 69.5 | 52.4 | 24.5 |
| **MOP** | 50 | 40 | | | 50 | 40 | | | 60 | 40 | 35 | 15 | 90 | 70 | 60 | 25 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 22.2 | 17.8 | - - - - | - - - - | 22.9 | 17.8 | - - - - | - - - - | 25.8 | 19.6 | 19.1 | 9.2 | 31.6 | 26.4 | 23.0 | 11.1 |
| **MCA** | 24.7 | 20.0 | | | 25.6 | 20.0 | | | 29.2 | 22.2 | 21.3 | 10.2 | 36.2 | 30.5 | 25.9 | 12.5 |
| **MOP** | 30 | 25 | | | 35 | 25 | | | 40 | 30 | 25 | 15 | 50 | 45 | 35 | 15 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | | | 43.3 | 32.6 | | | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | | | 45 | 35 | | | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 38.1 | 29.7 | - - - - | - - - - | 38.8 | 29.7 | - - - - | - - - - | 41.7 | 31.5 | 24.8 | 11.7 | 71.6 | 56.3 | 42.6 | 20.0 |
| **MCA** | 46.6 | 36.4 | | | 47.5 | 36.4 | | | 51.1 | 38.6 | 30.4 | 14.4 | 88.2 | 69.5 | 52.4 | 24.5 |
| **MOP** | 50 | 40 | | | 50 | 40 | | | 60 | 40 | 35 | 15 | 90 | 70 | 60 | 25 |

## **STD CFM,** DX - Split Evap & Water/Glycol Cooled Self-Contained, 4 to 15 Tons

| MODEL | AEC/AWC/AGC-048-_ | | AEC/AWC/AGC-060_ | | AEC/AWC/AGC-072D-_ | | AEC/AWC/AGC-096D-_ | | AEC/AWC/AGC-120D-_ | | AEC/AWC/AGC-144D-_ | | AEC/AWC/AGC-180D-_ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | |
| **FLA** | 19.8 | 9.6 | 24.5 | 11.9 | 27.3 | 13.6 | 38.8 | 18.6 | 49.6 | 24.0 | 54.9 | 26.5 | 63.3 | 28.9 |
| **MCA** | 23.9 | 11.5 | 29.7 | 14.4 | 30.2 | 15.0 | 42.9 | 20.6 | 54.8 | 26.5 | 60.1 | 29.0 | 69.5 | 31.7 |
| **MOP** | 40 | 15 | 50 | 20 | 40 | 20 | 50 | 25 | 70 | 35 | 80 | 35 | 90 | 40 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.2 | 14.3 | 31.6 | 14.5 | 32.3 | 14.8 | 47.7 | 21.8 | 49.9 | 24.0 | 69.1 | 31.7 | 69.1 | 31.7 |
| **MCA** | 39.0 | 17.8 | 39.5 | 18.1 | 40.4 | 18.5 | 59.6 | 27.2 | 62.4 | 28.6 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 50 | 20 | 45 | 20 | 60 | 30 | 70 | 35 | 90 | 40 | 90 | 40 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 47.6 | 22.1 | 52.3 | 24.5 | 55.1 | 26.2 | 80.5 | 37.5 | 91.3 | 42.9 | 110.5 | 51.7 | 118.9 | 54.1 |
| **MCA** | 58.7 | 27.2 | 64.4 | 30.1 | 64.9 | 30.7 | 95.0 | 44.1 | 106.9 | 50.1 | 129.6 | 60.4 | 139.1 | 63.1 |
| **MOP** | 60 | 30 | 70 | 35 | 70 | 35 | 100 | 45 | 110 | 60 | 150 | 70 | 150 | 70 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | |
| **FLA** | 36.2 | 17.0 | 40.9 | 19.3 | 41.5 | 20.0 | 53.0 | 25.0 | 63.8 | 30.4 | 69.1 | 32.9 | 77.5 | 35.3 |
| **MCA** | 40.3 | 18.9 | 46.1 | 21.8 | 44.4 | 21.4 | 57.1 | 27.0 | 69.0 | 32.9 | 74.3 | 35.4 | 83.7 | 38.1 |
| **MOP** | 50 | 25 | 60 | 30 | 50 | 25 | 70 | 30 | 80 | 40 | 90 | 45 | 100 | 45 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 47.6 | 21.7 | 48.0 | 21.9 | 46.5 | 21.2 | 61.9 | 28.2 | 64.1 | 30.4 | 83.3 | 38.1 | 83.3 | 38.1 |
| **MCA** | 55.4 | 25.2 | 55.9 | 25.5 | 54.6 | 24.9 | 73.8 | 33.6 | 76.6 | 35.0 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 60 | 30 | 60 | 25 | 80 | 35 | 80 | 40 | 110 | 50 | 110 | 50 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 47.6 | 22.1 | 52.3 | 24.5 | 55.1 | 26.2 | 80.5 | 37.5 | 91.3 | 42.9 | 110.5 | 51.7 | 118.9 | 54.1 |
| **MCA** | 58.7 | 27.2 | 64.4 | 30.1 | 64.9 | 30.7 | 95.0 | 44.1 | 106.9 | 50.1 | 129.6 | 60.4 | 139.1 | 63.1 |
| **MOP** | 60 | 30 | 70 | 35 | 70 | 35 | 100 | 45 | 110 | 60 | 150 | 70 | 150 | 70 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) 277/1/60 systems may require factory provided field installed step-down transformer.
3) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

## **STD CFM,** DX - Split Evap & Water/Glycol Cooled Self-Contained, 1 to 3 Tons

| MODEL | AEP / AWP / AGP-012-_ | | | | AEP / AWP / AGP-018-_ | | | | AEP / AWP / AGP-024-_ | | | | AEP / AWP / AGP-036-_ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 14.0 | 11.6 | - - - - | - - - - | 14.7 | 11.6 | - - - - | - - - - | 17.6 | 13.4 | 10.9 | 5.5 | 23.4 | 20.2 | 14.8 | 7.4 |
| **MCA** | 16.5 | 13.8 | | | 17.4 | 13.8 | | | 21.0 | 16.0 | 13.1 | 6.5 | 28.0 | 24.3 | 17.7 | 8.8 |
| **MOP** | 25 | 20 | | | 25 | 20 | | | 30 | 25 | 20 | 15 | 45 | 40 | 25 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | - - - - | - - - - | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | | | 35.1 | 26.4 | | | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | | | 40 | 30 | | | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 38.1 | 29.7 | - - - - | - - - - | 38.8 | 29.7 | - - - - | - - - - | 41.7 | 31.5 | 24.8 | 11.7 | 71.6 | 56.3 | 42.6 | 20.0 |
| **MCA** | 46.6 | 36.4 | | | 47.5 | 36.4 | | | 51.1 | 38.6 | 30.4 | 14.4 | 88.2 | 69.5 | 52.4 | 24.5 |
| **MOP** | 50 | 40 | | | 50 | 40 | | | 60 | 40 | 35 | 15 | 90 | 70 | 60 | 25 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 22.2 | 17.8 | - - - - | - - - - | 22.9 | 17.8 | - - - - | - - - - | 25.8 | 19.6 | 19.1 | 9.2 | 31.6 | 26.4 | 23.0 | 11.1 |
| **MCA** | 24.7 | 20.0 | | | 25.6 | 20.0 | | | 29.2 | 22.2 | 21.3 | 10.2 | 36.2 | 30.5 | 25.9 | 12.5 |
| **MOP** | 30 | 25 | | | 35 | 25 | | | 40 | 30 | 25 | 15 | 50 | 45 | 35 | 15 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | - - - - | - - - - | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | | | 43.3 | 32.6 | | | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | | | 45 | 35 | | | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 38.1 | 29.7 | - - - - | - - - - | 38.8 | 29.7 | - - - - | - - - - | 41.7 | 31.5 | 24.8 | 11.7 | 71.6 | 56.3 | 42.6 | 20.0 |
| **MCA** | 46.6 | 36.4 | | | 47.5 | 36.4 | | | 51.1 | 38.6 | 30.4 | 14.4 | 88.2 | 69.5 | 52.4 | 24.5 |
| **MOP** | 50 | 40 | | | 50 | 40 | | | 60 | 40 | 35 | 15 | 90 | 70 | 60 | 25 |

## **OPT CFM,** DX - Split Evap & Water/Glycol Cooled Self-Contained, 4 to 15 Tons

| MODEL | AEP/AWP/AGP-048-_ | | AEP/AWP/AGP-060_ | | AEP/AWP/AGP-072D-_ | | AEP/AWP/AGP-096D-_ | | AEP/AWP/AGP-120D-_ | | AEP/AWP/AGP-144D-_ | | AEP/AWP/AGP-180D-_ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | |
| **FLA** | 20.2 | 9.8 | 25.2 | 12.2 | 28.8 | 14.3 | 41.0 | 19.7 | 54.9 | 26.5 | 54.9 | 26.5 | 63.3 | 28.9 |
| **MCA** | 24.3 | 11.7 | 30.4 | 14.7 | 31.7 | 15.7 | 45.1 | 21.7 | 60.1 | 29.0 | 60.1 | 29.0 | 69.5 | 31.7 |
| **MOP** | 40 | 15 | 50 | 20 | 40 | 20 | 60 | 25 | 80 | 35 | 80 | 35 | 90 | 40 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.6 | 14.5 | 32.3 | 14.8 | 33.8 | 15.5 | 49.9 | 22.9 | 55.2 | 26.5 | 69.1 | 31.7 | 69.1 | 31.7 |
| **MCA** | 39.5 | 18.1 | 40.4 | 18.5 | 42.3 | 19.3 | 62.4 | 28.6 | 69.0 | 31.7 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 50 | 20 | 45 | 20 | 70 | 30 | 80 | 35 | 90 | 40 | 90 | 40 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 48.0 | 22.3 | 53.0 | 24.8 | 56.6 | 26.9 | 82.7 | 38.6 | 96.6 | 45.4 | 110.5 | 51.7 | 118.9 | 54.1 |
| **MCA** | 59.1 | 27.4 | 65.1 | 30.4 | 66.4 | 31.4 | 97.2 | 45.2 | 112.2 | 52.6 | 129.6 | 60.4 | 139.1 | 63.1 |
| **MOP** | 60 | 30 | 70 | 35 | 70 | 35 | 100 | 50 | 125 | 60 | 150 | 70 | 150 | 70 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | |
| **FLA** | 36.6 | 17.2 | 41.6 | 19.6 | 43.0 | 20.7 | 55.2 | 26.1 | 69.1 | 32.9 | 69.1 | 32.9 | 77.5 | 35.3 |
| **MCA** | 40.7 | 19.1 | 46.8 | 22.1 | 45.9 | 22.1 | 59.3 | 28.1 | 74.3 | 35.4 | 74.3 | 35.4 | 83.7 | 38.1 |
| **MOP** | 50 | 25 | 60 | 30 | 50 | 25 | 70 | 35 | 90 | 45 | 90 | 45 | 100 | 45 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 48.0 | 21.9 | 48.7 | 22.2 | 48.0 | 21.9 | 64.1 | 29.3 | 69.4 | 32.9 | 83.3 | 38.1 | 83.3 | 38.1 |
| **MCA** | 55.9 | 25.5 | 56.8 | 25.9 | 56.5 | 25.7 | 76.6 | 35.0 | 83.2 | 38.1 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 60 | 30 | 60 | 30 | 80 | 40 | 90 | 45 | 110 | 50 | 110 | 50 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 48.0 | 22.3 | 53.0 | 24.8 | 56.6 | 26.9 | 82.7 | 38.6 | 96.6 | 45.4 | 110.5 | 51.7 | 118.9 | 54.1 |
| **MCA** | 59.1 | 27.4 | 65.1 | 30.4 | 66.4 | 31.4 | 97.2 | 45.2 | 112.2 | 52.6 | 129.6 | 60.4 | 139.1 | 63.1 |
| **MOP** | 60 | 30 | 70 | 35 | 70 | 30 | 100 | 50 | 125 | 60 | 150 | 70 | 150 | 70 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) 277/1/60 systems may require factory provided field installed step-down transformer.
3) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

## **STANDARD CFM,** DX-Split & Chilled Water Air Handling Evaps, 1 to 3 Tons

| MODEL | AHC & ACC-012-_ | | | | AHC & ACC-018-_ | | | | AHC & ACC-024-_ | | | | AHC & ACC-036-_ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 4.0 | 3.0 | 2.3 | 1.2 | 4.0 | 3.0 | 2.3 | 1.2 | 4.0 | 3.0 | 2.3 | 1.2 | 5.0 | 3.8 | 3.4 | 1.7 |
| **MCA** | 5.0 | 3.8 | 2.9 | 1.4 | 5.0 | 3.8 | 2.9 | 1.4 | 5.0 | 3.8 | 2.9 | 1.4 | 6.3 | 4.7 | 4.3 | 2.1 |
| **MOP** | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 12.2 | 9.2 | 10.5 | 4.9 | 12.2 | 9.2 | 10.5 | 4.9 | 12.2 | 9.2 | 10.5 | 4.9 | 13.2 | 10.0 | 11.6 | 5.4 |
| **MCA** | 13.2 | 10.0 | 11.1 | 5.1 | 13.2 | 10.0 | 11.1 | 5.1 | 13.2 | 10.0 | 11.1 | 5.1 | 14.5 | 10.9 | 12.5 | 5.8 |
| **MOP** | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |

## **STANDARD CFM,** DX-Split & Chilled Water Air Handling Evaps, 6 to 15 Tons

| MODEL | AHC/ACC-048-_ | | AHC/ACC-060_ | | AHC/ACC-072-_ | | AHC/ACC-096-_ | | AHC/ACC-120-_ | | AHC/ACC-144-_ | | AHC/ACC-180-_ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | |
| **FLA** | 3.4 | 1.7 | 3.8 | 1.9 | 4.5 | 2.2 | 6.0 | 2.9 | 8.2 | 4.0 | 13.5 | 6.5 | 13.5 | 6.5 |
| **MCA** | 4.3 | 2.1 | 4.8 | 2.4 | 5.6 | 2.8 | 7.5 | 3.6 | 10.3 | 5.0 | 16.9 | 8.1 | 16.9 | 8.1 |
| **MOP** | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 30 | 15 | 30 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.2 | 14.3 | 31.6 | 14.5 | 32.3 | 14.8 | 47.7 | 21.8 | 49.9 | 22.9 | 69.1 | 31.7 | 69.1 | 31.7 |
| **MCA** | 39.0 | 17.8 | 39.5 | 18.1 | 40.4 | 18.5 | 59.6 | 27.2 | 62.4 | 28.6 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 40 | 20 | 45 | 20 | 60 | 30 | 70 | 30 | 90 | 40 | 90 | 40 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.2 | 14.3 | 31.6 | 14.5 | 32.3 | 14.8 | 47.7 | 21.8 | 49.9 | 22.9 | 69.1 | 31.7 | 69.1 | 31.7 |
| **MCA** | 39.0 | 17.8 | 39.5 | 18.1 | 40.4 | 18.5 | 59.6 | 27.2 | 62.4 | 28.6 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 40 | 20 | 45 | 20 | 60 | 30 | 70 | 30 | 90 | 40 | 90 | 40 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | |
| **FLA** | 19.8 | 9.1 | 20.2 | 9.3 | 18.7 | 8.6 | 20.2 | 9.3 | 22.4 | 10.4 | 27.7 | 12.9 | 27.7 | 12.9 |
| **MCA** | 20.7 | 9.5 | 21.2 | 9.8 | 19.8 | 9.2 | 21.7 | 10.0 | 24.5 | 11.4 | 31.1 | 14.5 | 31.1 | 14.5 |
| **MOP** | 25 | 15 | 25 | 15 | 20 | 15 | 25 | 15 | 30 | 15 | 40 | 20 | 40 | 20 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 47.6 | 21.7 | 48.0 | 21.9 | 46.5 | 21.2 | 61.9 | 28.2 | 64.1 | 29.3 | 83.3 | 38.1 | 83.3 | 38.1 |
| **MCA** | 55.4 | 25.2 | 55.9 | 25.5 | 54.6 | 24.9 | 73.8 | 33.6 | 76.6 | 35.0 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 60 | 30 | 60 | 25 | 80 | 35 | 80 | 40 | 110 | 50 | 110 | 50 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 47.6 | 21.7 | 48.0 | 21.9 | 46.5 | 21.2 | 61.9 | 28.2 | 64.1 | 29.3 | 83.3 | 38.1 | 83.3 | 38.1 |
| **MCA** | 55.4 | 25.2 | 55.9 | 25.5 | 54.6 | 24.9 | 73.8 | 33.6 | 76.6 | 35.0 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 60 | 30 | 60 | 25 | 80 | 35 | 80 | 40 | 110 | 50 | 110 | 50 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

## **OPTIONAL CFM,** DX-Split & Chilled Water Air Handling Evaps, 1 to 3 Tons

| MODEL | AHP & ACP-012-_ | | | | AHP & ACP-018-_ | | | | AHP & ACP-024-_ | | | | AHP & ACP-036-_ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** | **208/1/60** | **277/1/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 4.0 | 3.0 | 2.3 | 1.2 | 4.0 | 3.0 | 2.3 | 1.2 | 4.0 | 3.0 | 2.3 | 1.2 | 5.0 | 3.8 | 3.4 | 1.7 |
| **MCA** | 5.0 | 3.8 | 2.9 | 1.4 | 5.0 | 3.8 | 2.9 | 1.4 | 5.0 | 3.8 | 2.9 | 1.4 | 6.3 | 4.7 | 4.3 | 2.1 |
| **MOP** | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | | | |
| **FLA** | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 28.1 | 21.1 | 16.2 | 7.4 | 53.2 | 39.9 | 31.2 | 14.3 |
| **MCA** | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 35.1 | 26.4 | 20.3 | 9.3 | 66.5 | 49.9 | 39.0 | 17.8 |
| **MOP** | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 40 | 30 | 25 | 15 | 70 | 50 | 40 | 20 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | | | |
| **FLA** | 12.2 | 9.2 | 10.5 | 4.9 | 12.2 | 9.2 | 10.5 | 4.9 | 12.2 | 9.2 | 10.5 | 4.9 | 13.2 | 10.0 | 11.6 | 5.4 |
| **MCA** | 13.2 | 10.0 | 11.1 | 5.1 | 13.2 | 10.0 | 11.1 | 5.1 | 13.2 | 10.0 | 11.1 | 5.1 | 14.5 | 10.9 | 12.5 | 5.8 |
| **MOP** | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | | | |
| **FLA** | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 36.3 | 27.3 | 24.4 | 11.1 | 61.4 | 46.1 | 39.4 | 18.0 |
| **MCA** | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 43.3 | 32.6 | 28.5 | 13.0 | 74.7 | 56.1 | 47.2 | 21.5 |
| **MOP** | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 45 | 35 | 30 | 15 | 80 | 60 | 50 | 25 |

## **OPTIONAL CFM,** DX-Split & Chilled Water Air Handling Evaps, 6 to 15 Tons

| MODEL | AHP/ACP-048-_ | | AHP/ACP-060_ | | AHP/ACP-072-_ | | AHP/ACP-096-_ | | AHP/ACP-120-_ | | AHP/ACP-144-_ | | AHP/ACP-180-_ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Power Supply** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** | **208/3/60** | **460/3/60** |
| **Cooling Only** *(or Cooling with Hot Water or Steam Heat)* | | | | | | | | | | | | | | |
| **FLA** | 3.8 | 1.9 | 4.5 | 2.2 | 6.0 | 2.9 | 8.2 | 4.0 | 13.5 | 6.5 | 13.5 | 6.5 | 13.5 | 6.5 |
| **MCA** | 4.8 | 2.4 | 5.6 | 2.8 | 7.5 | 3.6 | 10.3 | 5.0 | 16.9 | 8.1 | 16.9 | 8.1 | 16.9 | 8.1 |
| **MOP** | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 30 | 15 | 30 | 15 | 30 | 15 |
| **with Electric Heat** *(No Electric Reheat or Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.6 | 14.5 | 32.3 | 14.8 | 33.8 | 15.5 | 49.9 | 22.9 | 55.2 | 25.4 | 69.1 | 31.7 | 69.1 | 31.7 |
| **MCA** | 39.5 | 18.1 | 40.4 | 18.5 | 42.3 | 19.3 | 62.4 | 28.6 | 69.0 | 31.7 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 45 | 20 | 45 | 20 | 70 | 30 | 70 | 35 | 90 | 40 | 90 | 40 |
| **with Electric Reheat/Heat** *(No Humidifier)* | | | | | | | | | | | | | | |
| **FLA** | 31.6 | 14.5 | 32.3 | 14.8 | 33.8 | 15.5 | 49.9 | 22.9 | 55.2 | 25.4 | 69.1 | 31.7 | 69.1 | 31.7 |
| **MCA** | 39.5 | 18.1 | 40.4 | 18.5 | 42.3 | 19.3 | 62.4 | 28.6 | 69.0 | 31.7 | 86.4 | 39.6 | 86.4 | 39.6 |
| **MOP** | 40 | 20 | 45 | 20 | 45 | 20 | 70 | 30 | 70 | 35 | 90 | 40 | 90 | 40 |
| **with Humidifier with or without Hot Water/Steam Heat** *(No Electric Reheat/Heat)* | | | | | | | | | | | | | | |
| **FLA** | 20.2 | 9.3 | 20.9 | 9.6 | 20.2 | 9.3 | 22.4 | 10.4 | 27.7 | 12.9 | 27.7 | 12.9 | 27.7 | 12.9 |
| **MCA** | 21.2 | 9.8 | 22.0 | 10.2 | 21.7 | 10.0 | 24.5 | 11.4 | 31.1 | 14.5 | 31.1 | 14.5 | 31.1 | 14.5 |
| **MOP** | 25 | 15 | 25 | 15 | 25 | 15 | 30 | 15 | 40 | 20 | 40 | 20 | 40 | 20 |
| **with Electric Heat** *(No Electric Reheat)* **& Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 48.0 | 21.9 | 48.7 | 22.2 | 48.0 | 21.9 | 64.1 | 29.3 | 69.4 | 31.8 | 83.3 | 38.1 | 83.3 | 38.1 |
| **MCA** | 55.9 | 25.5 | 56.8 | 25.9 | 56.5 | 25.7 | 76.6 | 35.0 | 83.2 | 38.1 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 60 | 30 | 60 | 30 | 80 | 40 | 90 | 40 | 110 | 50 | 110 | 50 |
| **with Electric Reheat/Heat & Humidifier** | | | | | | | | | | | | | | |
| **FLA** | 48.0 | 21.9 | 48.7 | 22.2 | 48.0 | 21.9 | 64.1 | 29.3 | 69.4 | 31.8 | 83.3 | 38.1 | 83.3 | 38.1 |
| **MCA** | 55.9 | 25.5 | 56.8 | 25.9 | 56.5 | 25.7 | 76.6 | 35.0 | 83.2 | 38.1 | 100.6 | 46.0 | 100.6 | 46.0 |
| **MOP** | 60 | 30 | 60 | 30 | 60 | 30 | 80 | 40 | 90 | 40 | 110 | 50 | 110 | 50 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

# Outdoor Mtd - DX - Air Cooled, Remote Condensing Units

**XPU - SINGLE Compressor, Outdoor Propeller Fan Air Cooled Remote Condensing Units**

| Power Supply | 208/1/60 | 277/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|
| **XPU-012** | | | | |
| **FLA** | 9.5 | 7.1 | - - - - | - - - - |
| **MCA** | 11.8 | 8.8 | | |
| **MOP** | 20 | 15 | | |
| **XPU-018** | | | | |
| **FLA** | 10.4 | 7.8 | - - - - | - - - - |
| **MCA** | 17.6 | 13.2 | | |
| **MOP** | 30 | 20 | | |
| **XPU-024** | | | | |
| **FLA** | 13.6 | 10.2 | 9.1 | 5.2 |
| **MCA** | 16.8 | 12.6 | 11.2 | 6.3 |
| **MOP** | 25 | 20 | 20 | 15 |
| **XPU-036** | | | | |
| **FLA** | 19.0 | 14.3 | 14.6 | 6.6 |
| **MCA** | 23.5 | 17.6 | 18.0 | 8.1 |
| **MOP** | 40 | 30 | 30 | 15 |
| **XPU-048** | | | | |
| **FLA** | 21.3 | 16.0 | 15.1 | 7.1 |
| **MCA** | 26.2 | 19.7 | 18.4 | 8.6 |
| **MOP** | 40 | 35 | 30 | 15 |
| **XPU-060** | | | | |
| **FLA** | 27.6 | 20.7 | 18.0 | 8.8 |
| **MCA** | 34.2 | 25.7 | 22.0 | 10.8 |
| **MOP** | 50 | 45 | 30 | 15 |
| **XPU-072** | | | | |
| **FLA** | - - - - | - - - - | 22.0 | 11.2 |
| **MCA** | | | 26.8 | 13.7 |
| **MOP** | | | 45 | 20 |
| **XPU-090** | | | | |
| **FLA** | - - - - | - - - - | 28.0 | 13.7 |
| **MCA** | | | 34.2 | 16.9 |
| **MOP** | | | 50 | 25 |

**XPU - DUAL Compressors, Outdoor Propeller Fan Air Cooled Remote Condensing Units**

| Power Supply | 208/1/60 | 277/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|
| **XPU-096D** | | | | |
| **FLA** | - - - - | - - - - | 35.0 | 17.1 |
| **MCA** | | | 39.0 | 19.1 |
| **MOP** | | | 50 | 25 |
| **XPU-120D** | | | | |
| **FLA** | - - - - | - - - - | 35.0 | 17.1 |
| **MCA** | | | 39.0 | 19.1 |
| **MOP** | | | 50 | 25 |
| **XPU-144D** | | | | |
| **FLA** | - - - - | - - - - | 47.8 | 22.7 |
| **MCA** | | | 53.4 | 25.5 |
| **MOP** | | | 60 | 30 |
| **XPU-180D** | | | | |
| **FLA** | - - - - | - - - - | 53.0 | 25.9 |
| **MCA** | | | 60.7 | 29.8 |
| **MOP** | | | 80 | 40 |

**Qty. one XPU condensing unit is provided per circuit:**

- AHC/P-072 units are provided with qty. 2 x XPU-036 units
- AHC/P-096 units are provided with qty. 2 x XPU-048 units
- AHC/P-120 units are provided with qty. 2 x XPU-060 units
- AHC/P-144 units are provided with qty. 2 x XPU-072 units
- AHC/P-180 units are provided with qty. 2 x XPU-090 units

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) 277/1/60 systems may require factory provided field installed step-down transformer.
3) The above unit electrical data is reflective of the standard performance data and standard options as shown in this manual.
4) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

## Outdoor Mtd - DX - Air Cooled, Remote Condensing Units & Condensers

**XP1 & XP2 - ("Wrap-Around Coil") - Outdoor Propeller Fan Air Cooled Remote Condensers**

| Power Supply | 208/1/60 | 277/1/60 | 460/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|---|
| **XP1-012** | | | | | |
| **FLA** | 0.5 | 0.4 | 0.6 | - - - - | - - - - |
| **MCA** | 0.6 | 0.5 | 0.8 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-018** | | | | | |
| **FLA** | 0.8 | 0.6 | 0.6 | - - - - | - - - - |
| **MCA** | 1.0 | 0.8 | 0.8 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-024** | | | | | |
| **FLA** | 0.8 | 0.6 | 0.7 | - - - - | - - - - |
| **MCA** | 1.0 | 0.8 | 0.9 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-030** | | | | | |
| **FLA** | 1.1 | 0.8 | 0.6 | - - - - | - - - - |
| **MCA** | 1.4 | 1.0 | 0.8 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-036** | | | | | |
| **FLA** | 1.1 | 0.8 | 0.6 | - - - - | - - - - |
| **MCA** | 1.4 | 1.0 | 0.8 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-042** | | | | | |
| **FLA** | 2.0 | 1.5 | 1.0 | - - - - | - - - - |
| **MCA** | 2.5 | 1.9 | 1.3 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-048** | | | | | |
| **FLA** | 2.0 | 1.5 | 1.0 | - - - - | - - - - |
| **MCA** | 2.5 | 1.9 | 1.3 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-060** | | | | | |
| **FLA** | 2.0 | 1.5 | 1.0 | - - - - | - - - - |
| **MCA** | 2.5 | 1.9 | 1.3 | | |
| **MOP** | 15 | 15 | 15 | | |
| **XP1-072** | | | | | |
| **FLA** | 5.6 | 4.2 | 3.5 | - - - - | - - - - |
| **MCA** | 7.0 | 5.3 | 7.0 | | |
| **MOP** | 15 | 15 | 15 | | |

**WP1 & WP2 - ("Slab Coil") - Outdoor Propeller Fan Air Cooled Remote Condensers**

| Power Supply | 208/1/60 | 277/1/60 | 460/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|---|
| **WP1-108D** | | | | | |
| **FLA** | 4.4 | 3.3 | 2.2 | - - - - | - - - - |
| **MCA** | 5.5 | 4.1 | 5.4 | | |
| **MOP** | 15 | 15 | 15 | | |
| **WP1-132D** | | | | | |
| **FLA** | 4.4 | 3.3 | 2.2 | - - - - | - - - - |
| **MCA** | 5.5 | 4.1 | 5.4 | | |
| **MOP** | 15 | 15 | 15 | | |
| **WP1-156D** | | | | | |
| **FLA** | 4.4 | 3.3 | 2.2 | - - - - | - - - - |
| **MCA** | 5.5 | 4.1 | 5.4 | | |
| **MOP** | 15 | 15 | 15 | | |
| **WP2-204D** | | | | | |
| **FLA** | 9.4 | 7.1 | - - - - | 13.0 | 6.6 |
| **MCA** | 10.6 | 8.0 | | 14.6 | 7.4 |
| **MOP** | 15 | 15 | | 20 | 15 |
| **WP2-252D** | | | | | |
| **FLA** | 9.4 | 7.1 | - - - - | 13.0 | 6.6 |
| **MCA** | 10.6 | 8.0 | | 14.6 | 7.4 |
| **MOP** | 15 | 15 | | 20 | 15 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) 277/1/60 systems may require factory provided field installed step-down transformer.
3) The above unit electrical data is reflective of the standard performance data and standard options as shown in this manual.
4) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

## Indoor, Ceiling Mtd - DX - Air Cooled, Remote Condensing Units & Condensers

**XCU - Indoor (Ceiling Mtd), Centrifugal Blower Air Cooled Remote Condensing Units**

| Power Supply | 208/1/60 | 277/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|
| **XCU-012** | | | | |
| **FLA** | 14.0 | 11.6 | - - - - | - - - - |
| **MCA** | 16.5 | 13.8 | | |
| **MOP** | 25 | 20 | | |
| **XCU-018** | | | | |
| **FLA** | 14.7 | 11.6 | - - - - | - - - - |
| **MCA** | 17.4 | 13.8 | | |
| **MOP** | 25 | 20 | | |
| **XCU-024** | | | | |
| **FLA** | 18.6 | 14.2 | 12.0 | 6.0 |
| **MCA** | 22.0 | 16.8 | 14.2 | 7.1 |
| **MOP** | 35 | 25 | 20 | 15 |
| **XCU-036** | | | | |
| **FLA** | 25.1 | 21.4 | 15.2 | 7.6 |
| **MCA** | 29.7 | 25.5 | 18.1 | 9.0 |
| **MOP** | 45 | 40 | 25 | 15 |
| **XCU-048** | | | | |
| **FLA** | 31.0 | - - - - | 20.2 | 9.8 |
| **MCA** | 37.1 | | 24.3 | 11.7 |
| **MOP** | 60 | | 40 | 15 |
| **XCU-060** | | | | |
| **FLA** | 41.1 | - - - - | 25.2 | 12.2 |
| **MCA** | 49.1 | | 30.4 | 14.7 |
| **MOP** | 80 | | 50 | 20 |
| **XCU-072** | | | | |
| **FLA** | - - - - | - - - - | 28.8 | 14.3 |
| **MCA** | | | 31.7 | 15.7 |
| **MOP** | | | 40 | 20 |
| **XCU-096** | | | | |
| **FLA** | - - - - | - - - - | 41.0 | 19.7 |
| **MCA** | | | 45.1 | 21.7 |
| **MOP** | | | 60 | 25 |
| **XCU-120** | | | | |
| **FLA** | - - - - | - - - - | 54.9 | 26.5 |
| **MCA** | | | 60.1 | 29.0 |
| **MOP** | | | 80 | 35 |
| **XCU-144** | | | | |
| **FLA** | - - - - | - - - - | 54.9 | 26.5 |
| **MCA** | | | 60.1 | 29.0 |
| **MOP** | | | 80 | 35 |
| **XCU-180** | | | | |
| **FLA** | - - - - | - - - - | 63.3 | 28.9 |
| **MCA** | | | 69.5 | 31.7 |
| **MOP** | | | 90 | 40 |

**XCX - Indoor (Ceiling Mtd), Centrifugal Blower Air Cooled Remote Condensers**

| Power Supply | 208/1/60 | 277/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|
| **XCX-012** | | | | |
| **FLA** | 4.5 | 3.4 | 2.3 | 1.2 |
| **MCA** | 5.6 | 4.2 | 4.3 | 2.4 |
| **MOP** | 15 | 15 | 15 | 15 |
| **XCX-018** | | | | |
| **FLA** | 5.5 | 4.1 | 3.4 | 1.9 |
| **MCA** | 6.9 | 5.2 | 4.3 | 2.4 |
| **MOP** | 15 | 15 | 15 | 15 |
| **XCX-024** | | | | |
| **FLA** | 5.5 | 4.1 | 3.4 | 1.9 |
| **MCA** | 6.9 | 5.2 | 4.3 | 2.4 |
| **MOP** | 15 | 15 | 15 | 15 |
| **XCX-036** | | | | |
| **FLA** | 6.7 | 5.0 | 3.8 | 1.9 |
| **MCA** | 8.4 | 6.3 | 4.8 | 2.4 |
| **MOP** | 15 | 15 | 15 | 15 |
| **XCX-048** | | | | |
| **FLA** | 6.7 | 5.0 | 3.8 | 1.9 |
| **MCA** | 8.4 | 6.3 | 4.8 | 2.4 |
| **MOP** | 15 | 15 | 15 | 15 |
| **XCX-060** | | | | |
| **FLA** | 9.0 | 6.8 | 5.6 | 2.8 |
| **MCA** | 11.3 | 8.4 | 7.0 | 3.5 |
| **MOP** | 20 | 15 | 15 | 15 |
| **XCX-072** | | | | |
| **FLA** | - - - - | - - - - | 7.0 | 3.5 |
| **MCA** | | | 8.8 | 4.4 |
| **MOP** | | | 15 | 15 |
| **XCX-096** | | | | |
| **FLA** | - - - - | - - - - | 8.8 | 4.4 |
| **MCA** | | | 11.0 | 5.5 |
| **MOP** | | | 15 | 15 |
| **XCX-120** | | | | |
| **FLA** | - - - - | - - - - | 13.6 | 6.6 |
| **MCA** | | | 17.0 | 8.3 |
| **MOP** | | | 30 | 15 |
| **XCX-144** | | | | |
| **FLA** | - - - - | - - - - | 19.4 | 9.0 |
| **MCA** | | | 24.3 | 11.3 |
| **MOP** | | | 40 | 20 |
| **XCX-180** | | | | |
| **FLA** | - - - - | - - - - | 19.4 | 9.0 |
| **MCA** | | | 24.3 | 11.3 |
| **MOP** | | | 40 | 20 |

***Notes:***

1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) 277/1/60 systems may require factory provided field installed step-down transformer.
3) The above unit electrical data is reflective of the standard performance data and standard options as shown in this manual.
4) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

## Indoor, Ceiling Mtd - DX - Water / Glycol Cooled, Remote Condensing Units

**XWU & XGU - Indoor / (Optional Outdoor)**
**Water & Glycol Cooled Remote Condensing Units**

| Power Supply | 208/1/60 | 277/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|
| **XWU & XGU-012** | | | | |
| **FLA** | 10.0 | 8.6 | - - - - | - - - - |
| **MCA** | 12.5 | 10.8 | | |
| **MOP** | 20 | 15 | | |
| **XWU & XGU-018** | | | | |
| **FLA** | 10.7 | 8.6 | - - - - | - - - - |
| **MCA** | 13.4 | 10.8 | | |
| **MOP** | 20 | 15 | | |
| **XWU & XGU-024** | | | | |
| **FLA** | 13.6 | 10.4 | 8.6 | 4.3 |
| **MCA** | 17.0 | 13.0 | 10.8 | 5.4 |
| **MOP** | 30 | 20 | 15 | 15 |
| **XWU & XGU-036** | | | | |
| **FLA** | 18.4 | 16.4 | 11.4 | 5.7 |
| **MCA** | 23.0 | 20.5 | 14.3 | 7.1 |
| **MOP** | 40 | 35 | 25 | 15 |
| **XWU & XGU-048** | | | | |
| **FLA** | 24.3 | - - - - | 16.4 | 7.9 |
| **MCA** | 30.4 | | 20.5 | 9.8 |
| **MOP** | 50 | | 35 | 15 |
| **XWU & XGU-060** | | | | |
| **FLA** | 32.1 | - - - - | 20.7 | 10.0 |
| **MCA** | 40.1 | | 25.9 | 12.5 |
| **MOP** | 70 | | 45 | 20 |

| Power Supply | 208/1/60 | 277/1/60 | 208/3/60 | 460/3/60 |
|---|---|---|---|---|
| **XWU & XGU-072** | | | | |
| **FLA** | - - - - | - - - - | 22.8 | 11.4 |
| **MCA** | | | 25.7 | 12.8 |
| **MOP** | | | 35 | 15 |
| **XWU & XGU-096** | | | | |
| **FLA** | - - - - | - - - - | 32.8 | 15.7 |
| **MCA** | | | 36.9 | 17.7 |
| **MOP** | | | 50 | 25 |
| **XWU & XGU-120** | | | | |
| **FLA** | - - - - | - - - - | 41.4 | 20.0 |
| **MCA** | | | 46.6 | 22.5 |
| **MOP** | | | 60 | 30 |
| **XWU & XGU-144** | | | | |
| **FLA** | - - - - | - - - - | 41.4 | 20.0 |
| **MCA** | | | 46.6 | 22.5 |
| **MOP** | | | 60 | 30 |
| **XWU & XGU-180** | | | | |
| **FLA** | - - - - | - - - - | 49.8 | 22.4 |
| **MCA** | | | 56.0 | 25.2 |
| **MOP** | | | 80 | 35 |

***Notes:***
1) FLA = Full Load Amps; MCA = Min Circuit Amps; MOP = Max Overcurrent Protection (Max Fuse Size)
2) 277/1/60 systems may require factory provided field installed step-down transformer.
3) The above unit electrical data is reflective of the standard performance data and standard options as shown in this manual.
4) - - - - Consult local AboveAir Sales Representative for non-cataloged system power supply information.

# 1.0 General

## ☑ 1.1 Summary

These specifications describe the requirements for a horizontal ceiling mounted air conditioner. The system shall be designed to control space temperature and humidity.

The air conditioning manufacturer shall design and furnish all equipment in the quantities and configurations shown on the project plans and specifications.

The system shall be provided by AboveAir Technologies in Frederick, Maryland, USA. The system shall be listed by Intertek (ETL Semko), Inc. to conform with UL Std 1995 and be certified to CAN/CSA Std C22.2 No. 236 (Control No. 3091370). The system shall be NYC MEA230-06-E and Chicago Code Approved. The system model number shall be _____.

## ☑ 1.2 Design Requirements

The system shall be an AboveAir HK-Horizontal™ brand factory assembled and tested. Evaporator sections shall be designed for above the drop-ceiling installation. Remote condensing unit sections shall be designed for either outdoor or indoor above the drop-ceiling installation.

Evaporators and indoor remote condensing unit sections shall be designed for ducted same-face air distribution.

The system shall have a total cooling capacity of _____ BTU/H, and a sensible cooling capacity of _____ BTU/H, based on an entering air condition of _____ °F DB, and _____ °F WB, _____ % RH.

The evaporator section shall be designed for _____ Volt, _____ Phase, _____ Hertz main power supply. The remote condensing unit section (if applicable) shall be designed for _____ Volt, _____ Phase, _____ Hertz main power supply.

## ☑ 1.3 Submittals

Submittals shall be provided after manufacturer's receipt of a written purchase order and shall include: Detailed Performance and Electrical Data; Guide Specifications; and Dimensional Drawings.

## ☑ 1.4 Quality Assurance

The system shall be factory tested prior to shipment. Testing shall include, but shall not be limited to: system and component operational and functional testing; electrical "HiPot" insulation test; refrigerant and water piping circuit pressuring testing per UL 1995 Safety Standard for Heating and Cooling Equipment. The system shall be designed and manufactured according to world class quality standards.

# 2.0 Products

## ☑ 2.1 Standard Features / All Systems

### ☑ 2.1.1 Cabinet

The cabinet chassis and access panels shall be constructed of heavy gauge galvanized steel. Cabinet access panels shall rest in recessed pockets designed for minimum air leakage. The cabinet and access panels shall be lined with 2 lb/ft$^2$ high density sound and thermal insulation conforming to NFPA 90A and 90B.

### ☑ 2.1.2 Component Access

The unit shall be serviceable within the ceiling through large side access panels.

### ☑ 2.1.3 Electrical System

**General:**
The electrical system shall conform to National Electric Code (NEC) requirements according to UL 1995. The control circuit shall be a 24 VAC low voltage circuit.

The electrical system shall include, but not be limited to the following factory installed items: 24 VAC control transformer; terminal connections; grounding lug; overload protection; and starter/contactors for blower motor, compressor, humidifier and electric heater stage (if applicable).

**Packaged Systems:** (single point power) Self-Contained systems shall be designed for single point main power connection.

**Split DX Systems:** (separate power) Split systems shall require separate main power supplies to the evaporator and condensing unit sections. The evaporator and condensing unit sections shall be electrically interlocked by a field wired 24 volt control signal.

**Overflow Safety Float:**
The system shall be provided with a factory installed float type condensate pan overflow safety switch. The circuit shall be designed to shut down all system water producing operations in the event of an overflow condition.

### ☑ 2.1.4 Air Distribution

The system air distribution shall be configured for a draw-through air pattern to provide even air distribution and maximum coil performance.

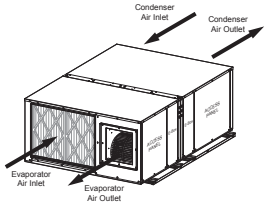
#### ☑ 2.1.4.1 Evaporator Blower/Motor

The evaporator blower assembly shall be designed for ____ CFM @ ____ inches external static pressure (e.s.p.)

The blower shall be the belt-driven centrifugal type, double width double inlet (DWDI), and statically and dynamically balanced to a minimum vibration level. The shaft shall be heavy duty steel with self-aligning ball bearings sized for an average 100,000 hours of service life.

The blower motor shall be ____ Hp at 1725 RPM (or 3450 RPM) and mounted on an adjustable base. Belts shall be sized for 200% of the motor horsepower rating. Motors shall have overload protection and a minimum NEMA service factor of 1.15.

#### ☑ 2.1.4.2 Air Patterns

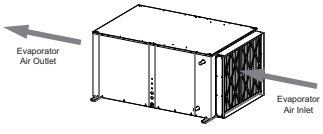



#### ☐ 2.1.4.2.1 Ducted Same-Face

The system shall be designed for ducted same-face evaporator (and/or indoor condenser) air pattern. Air inlet and outlet connections shall include factory provided turned-out duct flanges for each of field duct connection.

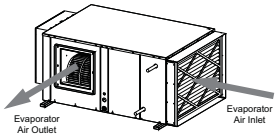
*(**Note-1:** Reverse/Mirror-Image Air Patterns are optionally available. Please consult your local sales representative for specification details.)*

#### ☐ 2.1.4.2.2 Ducted Straight-Thru



The system shall be designed for ducted straight-thru evaporator air pattern. Air inlet and outlet connections shall include factory provided turned-out duct flanges for each of field duct connection.

### ☐ 2.1.4.2.3 Ducted 90°/Right-Angle




The system shall be designed for ducted 90°/Right-Angle evaporator air pattern. Air inlet and outlet connections shall include factory provided turned-out duct flanges for each of field duct connection.

### ☑ 2.1.4.3 Air Filtration

The filter(s) shall be 2 inch thick pleated and rated for 30% dust spot efficiency (based on ASHRAE 52.1). The filter(s) shall be serviceable through a side access panel without shutting down the system.

### ☐ 2.2 Direct Expansion Systems

### ☐ 2.2.1 DX - Evaporator Coils

The DX evaporator coil shall be constructed of copper tubes and aluminum fins. The system shall be designed for a draw-through air pattern for maximum heat transfer. Coil end-plates shall be hot dipped galvanized. The evaporator coil shall be mounted in an insulated stainless steel condensate drain pan.

### ☐ 2.2.2 Compressors

Each compressor shall be the high efficiency, low sound power scroll type. Each compressor shall be mounted on vibration isolators. Each compressor shall be complete with reversible positive oil pump, charging and service ports, internal spring isolation, and discharge gas vibration eliminator.

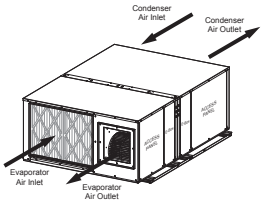
### ☐ 2.2.3 DX - Refrigeration Circuits

Each refrigeration circuit shall be pre-piped with refrigerant copper tubing. The refrigeration system shall include, but not be limited to: expansion valve with external equalizer; sight glass; refrigerant filter-drier; shraeder service valves and high & low refrigerant pressure safety switches.

### ☑ 2.3 Standard Features / Individual Systems

### ☐ 2.3.1 DX - Air Cooled Systems

### ☐ 2.3.1.1 DX - Air Cooled
(Self-Contained Systems)
*AAC/AAP-( )*

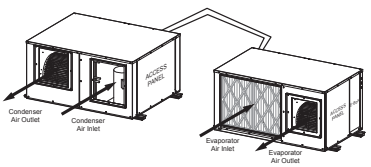



The system shall be a self-contained, ceiling mounted air conditioner with factory mounted integral dx air cooled condensing unit with belt-driven centrifugal blower. The condensing unit shall be sized for full heat of rejection at 95°F ambient and be capable of operation to ___ °F low ambient air temperature

The system shall require only single point main power supply and ship from the factory with a full operating refrigerant charge (1-8 Ton units). AAC/P-012/096 models shall ship from the factory as one-piece units, while AAC/P-120/180 models shall ship split from the factory and require field packaged unit assembly and refrigerant charging.

*(**Note-1:** Select 0°F Low Ambient Damper option or -30°F Flooded Condenser low ambient head pressure control as application requires - see options for more detail.)*

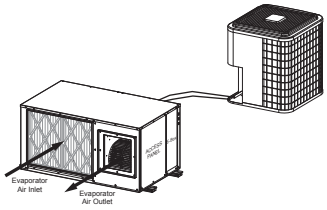
### ☐ 2.3.1.2 DX - Air Cooled Split
(Air Handler & Indoor Remote Condensing Unit)
*AHC/AHP-( ) & XCU-( )*




The system shall be a split configuration with indoor ceiling mounted dx air handling unit and remote indoor *(optional outdoor)* air cooled belt-driven centrifugal blower condensing unit. The compressor(s) shall be located in the condensing unit. The condensing unit shall be sized for full heat of rejection at 95°F ambient and be capable of operation to ___ °F low ambient air temperature.

The system shall factory tested prior to shipment. The air handling and condensing unit sections shall ship separately from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

### ☐ 2.3.1.3 DX - Air Cooled Split
(Air Handling & Outdoor Remote Condensing Units)
*AHC/AAP-( ) & XPU-( )*

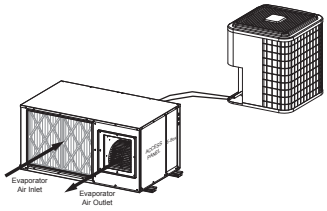



The system shall be a split configuration with indoor ceiling mounted dx air handling unit and a remote outdoor air cooled propeller fan condensing unit for each refrigerant circuit. Each compressor shall be located in the condensing unit. The condensing unit shall be sized for full heat of rejection at 95°F ambient and be capable of operation to ___ °F low ambient air temperature.

The system shall factory tested prior to shipment. The air handling and condensing unit sections shall ship separately from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

*(**Note-1:** Select 0°F Fan Cycling, -20°F Fan Speed or -30°F Flooded Condenser low ambient head pressure control as application requires - see options for more details.)*

### ☐ 2.3.1.4 DX - Air Cooled Split
(Split Evap & Outdoor Remote Condenser)
*AEC/AEP-( ) & XP1 or XP2-( )*

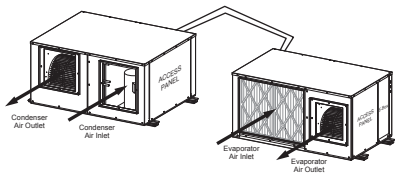


The system shall be a split configuration with iindoor ceiling mounted dx evaporator and outdoor dx air cooled propeller fan remote condenser. The compressor shall be located in the indoor evaporator section. The condenser shall be sized for full heat of rejection at 95°F ambient and be capable of operation to ___ °F low ambient air temperature.

The system shall be refrigerant charged and run tested at the factory prior to shipment. The evaporator and condenser sections shall ship separately with a dry-nitrogen charge ready for field refrigerant charging.

*(**Note-1:** See 2.4.1 pg 12 Low Amb. Options.)*

### ☐ 2.3.1.6 DX - Air Cooled Split
(Split Evap & Outdoor Remote Condenser)
*AEC/AEP-( ) & XCX-( )*

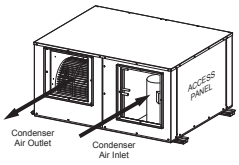



The system shall be a split configuration with iindoor ceiling mounted dx evaporator and indoor dx air cooled belt-driven centrifugal blower remote condenser. The compressor shall be located in the indoor evaporator section. The condenser shall be sized for full heat of rejection at 95°F ambient and be capable of operation to ___ °F low ambient air temperature.

The system shall be refrigerant charged and run tested at the factory prior to shipment. The evaporator and condenser sections shall ship separately with a dry-nitrogen charge ready for field refrigerant charging.

*(**Note-1:** See 2.4.1 pg 12 Low Amb. Options.)*

### ☐ 2.3.1.7 DX - Air Cooled Remote Condensing Unit
(Indoor/Outdoor Centrifugal Blower Configuration)
*XCU-( ) Only*



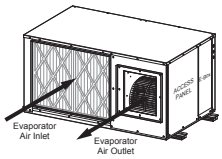

The system shall be a indoor horizontal ceiling mounted (optional outdoor) remote air cooled belt-driven centrifugal blower condensing unit. The remote condensing unit shall include, but not be limited to: condenser coil; centrifugal belt-driven blower and blower motor; compressor; sight glass; refrigerant filter-drier; shraeder service valves; high & low refrigerant pressure switches; grounding lug; 24 Vac control transformer; individual blower motor and compressor starters/contactors; and terminal strip.

The condensing unit shall be sized for full heat of rejection at 95°F ambient and be capable of operation to ___ °F low ambient air temperature.

The condensing unit shall ship from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

*(**Note-1:** Select 0°F Low Ambient Damper option or -30°F Flooded Condenser low ambient head pressure control as applications requires - see options for more detail.)*

### ☐ 2.3.2 DX - Air Handling Unit
*AHC/AHP-( ) Only*

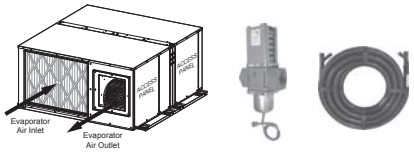



The system shall be a split indoor horizontal ceiling mounted dx air handling unit designed for field connection to the specified remote condensing unit (*air, water or glycol cooled)*. The air handling unit shall include, but not be limited to: evaporator coil; centrifugal belt-driven blower and blower motor; thermal expansion valve, shraeder service valves; grounding lug; 24 Vac control transformer; individual blower motor, humidifier, heater starters/contactors (if applicable); and terminal strip.

The air handling unit shall ship from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

### ☐ 2.3.3 DX - Water Cooled Systems

### ☐ 2.3.3.1 DX - Water Cooled
(Self-Contained Systems)
*AWC / AWP-( )*

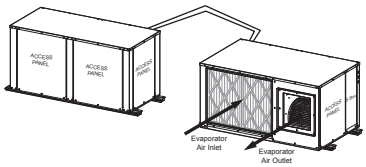



The system shall be a self-contained, ceiling mounted air conditioner with integral dx water cooled condensing unit. Each refrigerant circuit shall include a water cooled coaxial (or SS brazed-plate) condenser and factory installed head pressure controlling 2-way water regulating valve rated for 150 psi w.w.p. The water cooled condenser shall be designed to provide the total required system heat of rejection at 85°F entering water temperature and 95°F leaving water temperature. Source water shall be provided by a remote water source *(by others)*.

All models sizes shall ship from the factory as a one-piece unit as standard. The system shall require only single point main power supply and ship from the factory with a full operating refrigerant charge.

*(**Note:** Higher pressure and 3-way valves are optionally available, see option 2.4.2.)*

### ☐ 2.3.3.2 DX - Water Cooled Split
(Air Handling & Remote Condensing Unit)
*AHC/AHP-( ) & XWU-( )*




The system shall be a split configuration with indoor ceiling mounted dx air handling unit and remote indoor *(optional outdoor)* water cooled condensing unit. The compressor(s) shall be located in the condensing unit.

Each refrigerant circuit shall include a water cooled coaxial (or SS brazed-plate) condenser and factory installed head pressure controlling 2-way water regulating valve rated for 150 psi w.w.p. The water cooled condenser shall be designed to provide the total required system heat of rejection at 85°F entering water temperature and 95°F leaving water temperature. Source water shall be provided by a remote water source *(by others)*.

The system shall factory tested prior to shipment. The air handling and condensing unit sections shall ship separately from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

*(**Note-1:** Higher pressure and 3-way valves are optionally available, see option 2.4.2.)*

### ☐ 2.3.3.3 DX - Water Cooled
(Remote Condensing Units)
*XWU-( ) Only*


The system shall be an indoor horizontal

ceiling mounted *(optional outdoor)* remote water cooled condensing unit. The remote condensing unit shall include, but not be limited to: compressor; water cooled coaxial (or SS brazed-plate) condenser; factory installed 2-way water regulating valve rated for 150 psi w.w.p.; sight glass; refrigerant filter-drier; shraeder service valves; high & low refrigerant pressure switches; grounding lug; 24 Vac control transformer; individual compressor starters/contactors; and terminal strip.

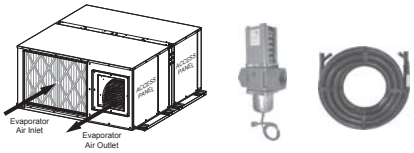
The water cooled condenser shall be designed to provide the total required system heat of rejection at 85°F entering water temperature and 95°F leaving water temperature. Source water shall be provided by a remote water source *(by others)*.

The condensing unit shall ship from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

*(**Note:** Higher pressure and 3-way valves are optionally available, see option 2.4.2.)*

### ☐ 2.3.4 DX - Glycol Cooled Systems

### ☐ 2.3.4.1 DX - Glycol Cooled
(Self-Contained Systems)
*AGC / AGP-( )*

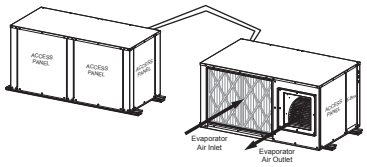



The system shall be a self-contained, ceiling mounted air conditioner with integral dx glycol cooled condensing unit. Each refrigerant circuit shall include a glycol cooled coaxial (or SS brazed-plate) condenser and factory installed head pressure controlling 2-way glycol regulating valve rated for 150 psi w.w.p. The condenser shall be designed to provide the total required system heat of rejection at 110°F entering glycol temperature and 120°F leaving glycol temperature based on 40% ethylene glycol solution. Source glycol shall be provided by a remote glycol drycooler source *(see AboveAir Technologies' FluidCool™ drycoolers)*.

All models sizes shall ship from the factory as a one-piece unit as standard. The system shall require only single point main power supply and ship from the factory with a full operating refrigerant charge.

*(**Note:** Higher pressure and 3-way valves are optionally available, see option 2.4.2.)*

### ☐ 2.3.4.2 DX - Glycol Cooled Split
(Air Handling & Remote Condensing Unit)
*AHC/AHP-( ) & XGU-( )*




The system shall be a split configuration with indoor ceiling mounted dx air handling unit and remote indoor *(optional outdoor)* glycol cooled condensing unit. The compressor(s) shall be located in the condensing unit.

Each refrigerant circuit shall include a glycol cooled coaxial (or SS brazed-plate) condenser and factory installed head pressure controlling 2-way glycol regulating valve rated for 150 psi w.w.p. The glycol cooled condenser shall be designed to provide the total required system heat of rejection at 110°F entering glycol temperature and 120°F leaving glycol temperature based on 40% ethylene glycol solution. Source glycol shall be provided by a remote glycol drycooler source *(see AboveAir Technologies' FluidCool™ drycoolers)*.

The system shall factory tested prior to shipment. The air handling and condensing unit sections shall ship separately from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

*(**Note-1:** Higher pressure and 3-way valves are optionally available, see option 2.4.2.)*

### ☐ 2.3.4.3 DX - Glycol Cooled
(Remote Condensing Units)
*XGU-( ) Only*


The system shall be an indoor horizontal ceiling mounted *(optional outdoor)* remote glycol cooled condensing unit. The remote condensing unit shall include, but not be limited to: compressor; glycol cooled coaxial (or SS brazed-plate) condenser; factory installed 2-way water regulating valve rated for 150 psi w.w.p.; sight glass; refrigerant filter-drier; shraeder service valves; high & low refrigerant pressure switches; grounding lug; 24 Vac control transformer; individual compressor starters/contactors; and terminal strip.

The glycol cooled condenser shall be designed to provide the total required system heat of rejection at 110°F entering glycol temperature and 120°F leaving glycol temperature based on 40% ethylene glycol solution. Source glycol shall be provided by a remote glycol drycooler source *(see AboveAir Technologies' FluidCool™ drycoolers)*.

The condensing unit shall ship from the factory with a dry-nitrogen holding charge for field sweat (copper) connection and refrigerant charging.

*(**Note:** Higher pressure and 3-way valves are optionally available, see option 2.4.2.)*

### ☐ 2.3.4.4 Glycol Pump Packages & Drycoolers
*FC_-( ) / PA-( )*

Glycol condenser source shall be provided by a FluidCool™ brand remote air cooled glycol drycooler and Pump-All™ brand pump package.

The glycol drycooler shall be the outdoor mounted propeller fan type complete with factory installed aquastat fan cycling controls, motor starters with overload protection and non-fused disconnect switch.

The glycol pump package shall be a (single or dual) pump package designed for outdoor installation complete with individual pump motor starters. Dual glycol pump packages shall be provided with manual lead-lag switch and field installed flow switch for automatic switchover to backup pump upon loss of flow.

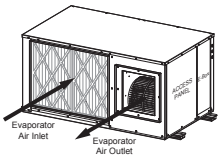
An expansion tank and automatic air purger-vent shall be factory provided for field installation.

The drycooler shall provide _____ BTUH total heat rejection at a flow rate of _____ GPM with ____ °F EGT and ____ °F LGT at ____ °F ambient air temperature. Each pump shall be ____ Hp and shall be sized to provide ____ GPM @ ____ Ft. w.g. total system head. The glycol solution shall be ___ % (*ethylene* or *propylene*) by volume.

The drycooler and pump package shall be designed for _____ Volt, _____ Phase, _____ Hertz main power supply.

*(**Note:** See AboveAir Technologies' Fluid-Cool™ indoor & outdoor glycol drycooler and PumpAll™ glycol pump packages engineering manuals for more information.)*

☐ **2.3.5 Chilled Water Systems**
*ACC/ACP-( )*




The system shall be a chilled water air handling unit with chilled water cooling coil and chilled water control valve.

The chilled water cooling coil shall be constructed of copper tubes and aluminum fins. The system shall be designed for a draw-through air pattern for maximum heat transfer. Coil end-plates shall be hot dipped galvanized. The cooling coil shall be mounted in an insulated stainless steel condensate drain pan.

Chilled water flow shall be controlled by a field installed slowly opening and closing 2-way (2-POS ON/OFF) motorized valve rated for a maximum 300 psig w.w.g.

*(**Note:** 3-Way, Modulating (0-10 Vdc) & higher pressure valves are optionally available.)*

## 2.4 Options

☐ **2.4.1 Air Cooled Condenser - Low Ambient Control**

☐ **2.4.1.1 0°F Ambient - Fan Cycling**
*(XP1, XP2 & XPU Models)*

Fan cycling controls shall be factory installed to the direct drive condenser fan to allow for low ambient operation to 0°F.

☐ **2.4.1.2 -20°F Ambient - Variable Speed Fan**
*(XCU, XP1/2 & XPU)*

Variable fan speed head pressure controls (*JCI P266 DD or BD VFD66 / VFD*) shall be factory installed to allow for low ambient operation to -20°F. Compressor cold start time delay relay and crankcase heater shall be factory installed with the -20°F low ambient control feature.

☐ **2.4.1.3 -30°F Flooded Condenser**
*(All Condensing/er Models)*

A flooded condenser system shall be provided to allow for low ambient condenser operation to -30°F. The flooded system shall include a factory installed liquid refrigerant receiver and modulating head pressure control valve. Compressor cold start time delay relay and crankcase heater shall be factory installed with the -30°F low ambient control feature.

☐ **2.4.2 DX - Water/Glycol Cooled Reg. Valves**

☐ **2.4.2.1 2-Way, 150 psig Reg. Valve**

☐ **2.4.2.2 3-Way, 150 psig Reg. Valve**

☐ **2.4.2.3 2-Way, 350 psig Reg. Valve**

☐ **2.4.2.4 3-Way, 350 psig Reg. Valve**

System head pressure shall be controlled by a factory provided __-way water / glycol regulating valve rated for ___psig w.w.p.

### 2.4.2 CONTROL OPTIONS

☐ **2.4.2.1 DT-201, 202 & 203™ - *Digital H/C Thermostat***
(7-day programmable)

A remote wall or unit mounted deluxe 7-day programmable heat pump ready thermostat with digital display shall be factory provided for field installation. The thermostat shall include FAN AUTO-ON, AUTO-COOL-OFF-HEAT-EM (emergency heat), SET and PROG/MAN selector switches.

*(**Note:** 201 = 1-Stg H/C; 202 = 2-Stg H/C; 203 = 3-Stg H/2-Stg C.)*

☐ **2.4.2.2 MC-2000™, Advanced Microprocessor T/H Controller w/ Alarms**

The system shall be provided with a MC-2000™ advanced microprocessor based temperature and humidity controller with alarms.

**Select Features/Benefits:**
- 4x20 Character Liquid Crystal Alpha-numerical Display
- User Configurable
- Run-Time Hours
- Current Unit Mode Status
- Alarm Status
- Digital & Analog Inputs / Outputs
- Temperature Anticipation
- Remote Stop / Start Contact
- Summary Alarm Contact
- Automatic or Manual (selectable) Restart After Power Loss
- Sequential Load After Restart
- Recovery Delay
- Compressor Short Cycle Timers
- Cold Start Time Delay
- Security Password Access
- Self-Diagnostics
- Service Mode

**Unit Status Display**
The control system shall display current unit functions and room status (if applicable):

- Current Dry Bulb Temp Set Point
- Current Relative Humidity Set Point
- System ON/OFF
- Cooling
- Heating
- Humidifying
- Dehumidifying
- Reheating
- Actual Room DB Temperature
- Actual Room Relative Humidity

**Alarm Conditions:**
Alarm conditions activate an audible and visual indicator plus close a summary alarm dry contact connection. The control system shall alert to the following alarm conditions (if applicable):

- High Temperature
- Low Temperature
- High Humidity
- Low Humidity
- Sensor Failure
- Summary Failure
- High Head Press
- Smoke Detection
- Firestat
- Leak Detection
- Sensor Failure
- Loss of Power
- Loss of Air Flow
- Dirty Filter

**Digital & Analog Control Inputs / Outputs:**
The control system shall be capable of both digital (ON/OFF) and analog (proportional integral, PI) input and output control.

### Select MC-2000 Options:

☐ Multi-Unit N+1 Sequencing

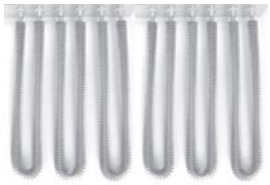
☐ BMS Communications Interface:

- ☐ ModBus RS485 Serial Connection
- ☐ BACnet over MS/TP (RS485 Serial)
- ☐ BACnet Over IP (Ethernet / EIA485)
- ☐ LonWorks FTT10 (RS485 Serial)

### 2.4.3 HEAT / REHEAT OPTIONS

☐ **2.4.3.1 Electric Reheat/Heat**

☐ **2.4.3.1.1 Electric Heat and/or Reheat** *(factory installed)*



An electric heating system shall be factory installed to provide:

- ☐ Electric Heat Only during heat mode
- ☐ Electric Reheat to offset sensible cooling during the dehumidification mode and to provide heating during heat mode.

Heater elements shall be the low-watt density finned-tubular type. The heater shall be complete with individual heater stage starter/contactor and overheat safeties. Systems incorporating factory installed electric heaters shall require only single point power to the main unit power distribution. The electric heat shall have a capacity of _____ BTU/H and a KW rating of ___ KW, controlled in ___ stages.

☐ **2.4.3.1.2 Electric Duct Heater** *(Large KW Requirements)*

An electric duct mounted heater shall be factory provided for field installation. The duct heater shall be configured for:

- ☐ Electric Heat Only during heat mode
- ☐ Electric Reheat to offset sensible cooling during the dehumidification mode and to provide heating during heat mode.

The duct heater shall be the open wire nichrome element type complete with magnetic de-energizing contactors, differential air pressure switch, 24V Class-II control transformer, disc type automatic & manual reset thermal cutouts, door-interlock non-fused disconnect switch, over heat safeties, hinged lid and 1" duct insulation allowance. The control panel shall be position on the left as a standard.

The duct heater shall require a separate main power supply from the unit. The electric heat shall have a capacity of _____ BTUH and a KW rating of ___ KW, controlled in ___ stages. The duct heater dimensions shall be configured for a duct that is ____ " Wide X ____ " High with a 1" allowance for duct insulation.

☐ **2.4.3.1.3 SCR Fired Heat/Reheat** *(Requires MC-2000™)*

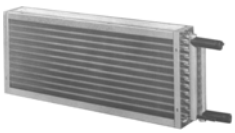
The electric heat/reheat shall be controlled through a "zero firing" silicon control rectifier (SCR) with an extruded aluminum heat sink and solid state logic system to provide close dry bulb temperature control of the leaving conditioned air temperature. The electric heat shall have a capacity of _____ BTUH and a KW rating of ___ KW.

☐ **2.4.3.2 Hot Gas Reheat**

The system shall be provided with a hot gas reheat (HGRH) coil with 3-way heat reclaim control valve and liquid refrigerant storage receiver. The hot gas reheat coil shall be sized to provide free-energy space neutral leaving air temperature by offsetting the sensible cooling during dx compressor operation.

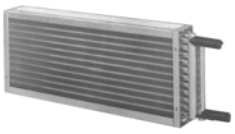
*(**Note:** For systems with compressor located in remote condensing unit section, HGRH is available, however, 40 Ft. max split.)*

☐ **2.4.3.3 Steam Heat**



A Steam Heating system shall be factory provided. The steam heating system shall be complete a factory installed aluminum fin, copper tube steam coil and field installed 2-way motorized steam rated control valve. Steam piping specialties shall be field provided. Steam shall be provided by a remote source at the specified temperature and pressure. The steam heating system shall have a rated capacity of _____ BTUH @ ____ psig saturated steam.

☐ **2.4.3.4 Hot Water Heat**



A Hot Water Heating system shall be factory provided. The hot water heating system shall be complete a factory installed aluminum fin, copper tube hot water coil and field installed 2-way motorized hot water control valve. Hot water shall be provided by a remote source at the specified flow rate and temperature. The hot water heating system shall have a rated capacity of _____ BTUH @ _____ GPM, _____°F EWT.

☐ **2.4.3.5 Heat Pump Option**

The system shall include a factory installed heat pump heating cycle including 4-way reversing valve, suction-line accumulator, automatic defrost cycle (air source hp) and remote wall mounted heat pump temperature controller with auxiliary heating control capability. The heat pump mode heating capacity shall be _____ BTUH.

☐ **2.4.4 Steam Humidification**

An electrode steam canister type humidification system shall be factory installed within the air conditioning system. The humidifier shall be complete with disposable canister, steam distributor, fill and drain valve, air gap, automatic flush cycle, manual humidity output adjustment and field installed remote wall mounted humidistat. The humidifier shall have a maximum output capacity of _____ lbs/hr.

*(**Note:** Remote wall mounted humidistat is not required with MC-2000™ combination temp & humid control option.)*

## 2.5 Accessories

☐ **2.5.1 Condensate Pump**

A condensate pump shall be factory provided for field installation. The condensate pump shall be provided with dual internal float switches: one for pump operation initiation and the other for pump reservoir overflow safety. The condensate pump shall require a separate main power supply.

*(**Note:** Condensate pumps can be powered through A/C unit main power via Optional "Condensate Pump Fused Powered Terminal Connection".)*

### ☐ 2.5.2 Hot Gas Bypass Systems

### ☐ 2.5.2.1 Hot Gas Bypass To Evaporator Inlet

*(HG Line Required on Splits)*

Each refrigerant circuit shall be provided with a factory installed hot gas (discharge) bypass valve. The hot gas bypass valve shall be designed to supply hot gas to evaporator inlet as required to provide coil freeze-protection and capacity modulation under low load conditions.

*(**Note**: 3rd Line - Each circuit of a Split DX system with compressor located in condensing unit shall require a field installed copper hot gas bypass refrigerant line between the evaporator and condensing unit sections.)*

### ☐ 2.5.2.2 Hot Gas Bypass To Suction Line with Quench Valve

*(XPU-XCU & XWU-XGU) Remote Condensing Units 3rd Line Not Required!)*

Each refrigerant circuit of the Split DX system shall be provided with a factory installed hot gas bypass system to include: hot gas (discharge) bypass and desuperheating quench. The hot gas bypass system shall be designed to supply hot gas and liquid refrigerant to the suction line as required to provide coil freeze-protection and capacity modulation under low load conditions. All hot gas bypass components shall be factory installed and shall not require additional field refrigerant lines on split DX systems.

### ☐ 2.5.3 Suction-Line Accumulators

Each refrigerant circuit shall be provided with a factory installed Suction-Line Accumulator to prevent liquid slugging of the compressor and excessive refrigerant dilution of the compressor oil during low load conditions. The accumulator shall return refrigerant and oil to the compressor at a sufficient rate to maintain both system operating efficiency and proper oil level. The accumulators shall be wrapped with a 1/2" closed-cell neoprene insulation to prevent sweating.

### ☐ 2.5.4 Main Power, Non-Fused Disconnect

A main power non-fused disconnect shall be factory provided for field installation. The disconnect shall be NEMA rated for indoor or outdoor installation as required.

### ☐ 2.5.5 Firestat

A Firestat shall be factory provided for field installation in the return air duct and wired to the A/C unit electrical control panel. The Firestat shall shut-down all A/C system operations upon sensing a high return air temperature condition.

### ☐ 2.5.6 Smoke Detector

A Smoke Detector shall be factory provided for field installation in the return air duct and wired to the A/C unit electrical control panel. The Smoke Detector shall shut-down all A/C system operations upon activation.

### ☐ 2.5.7 Remote Water-Leak Detector

A remote water-leak detector shall be factory provided for field installation. The remote water-leak detector shall be wired to shut down all A/C unit water producing functions upon sensing a water leak.

### ☐ 2.5.8 Flow Switch - Water/Glycol Condenser

A factory installed flow switch shall shut-down / lockout compressor operation prior to the high refrigerant pressure switch alarm upon sensing a loss or low dx condenser water/glycol flow. A flow switch alarm shall be indicated both via MC-2000 microprocessor display and auxililary dry-contact terminal connection.

### ☐ 2.5.9 VAV Supply Air Control

(VFD w/ Modulating HGBP)

*VFD Control*

The system shall be designed for Variable Air Volume (VAV) application. A factory installed evaporator blower motor Variable Frequency Drive (VFD) with Proportional-Integral (PI) capabilities shall be provided to automatically vary system evaporator air volume based on a signal from the factory provided field installed static air pressure transducer. The A/C system shall be designed to maintain a constant leaving air temperature based on user adjustable set point temperature (eg.: 55°F DB). A/C system cooling capacity shall modulate via a factory installed modulating Digital Scroll Compressor on the primary or lead refrigerant circuit. A field installed supply air temperature sensor shall provide input value signal to the MC-2000V micro-processor controller for automatic modulating control of the hot gas bypass valve. Dual compressor/ circuit systems shall also include a factory installed snap-acting type pressure regulating hot gas bypass system for capacity modulation and evaporator freeze-protection on the cir-2.

### ☐ 2.5.10 DX Water/Glycol Cooled with Free Cooling Cycle

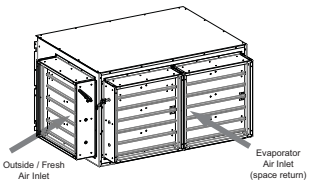
AWP / AGP-( )-FE

The system shall include a factory installed water/glycol free cooling cycle complete with economizer cooling coil, aquastat, automatic control logic and field installed 3-way control valve. The FE coil shall be capable of providing rated sensible capacity without compressor operation when entering water/glycol fluid temperatures are 45°F or below.

*(**Note:** 2-way DX/FE valve configurations are optionally available.)*

### ☐ 2.5.11 Air Side Economizer

*All Model Types*




The system shall be provided with an Air-Side Economizer to include factory provided and field installed air side economizer mixing box and controls per the following sequence of control:

On a call for cooling by the indoor space thermostat, the indoor fan and the economizer shall be energized. The outdoor air control shall determine whether the outdoor air is suitable for "free/economizer-cooling". If the outdoor air is suitable, mechanical cooling shall be locked out by the outdoor enthalpy control. The motor actuator shall be energized, operating the outdoor air and the return air dampers. The motor actuator shall be regulated by the mixed air sensor to maintain proper discharge air temperature.

When outdoor air is not suitable for "free/economizer-cooling", the Economizer shall be locked out and the outdoor air damper shall maintain minimum position while the indoor fan is operating. Upon unit shutdown or power loss, the spring return motor actuator shall close the outdoor air damper.

The Economizer shall be automatically locked out during the heat mode (if appl.).

The Air Side Economizer shall include: prewired modulating spring return motor actuator, compressor lockout, minimum position potentiometer, outdoor air control (enthalpy), mixed air sensor, multi-tap transformer and damper linkage.

The Air-Side Economizer and Controls shall ship separately from the unit for field installation.

### ☐ 2.5.12 Hanging Spring Vibration Isolators

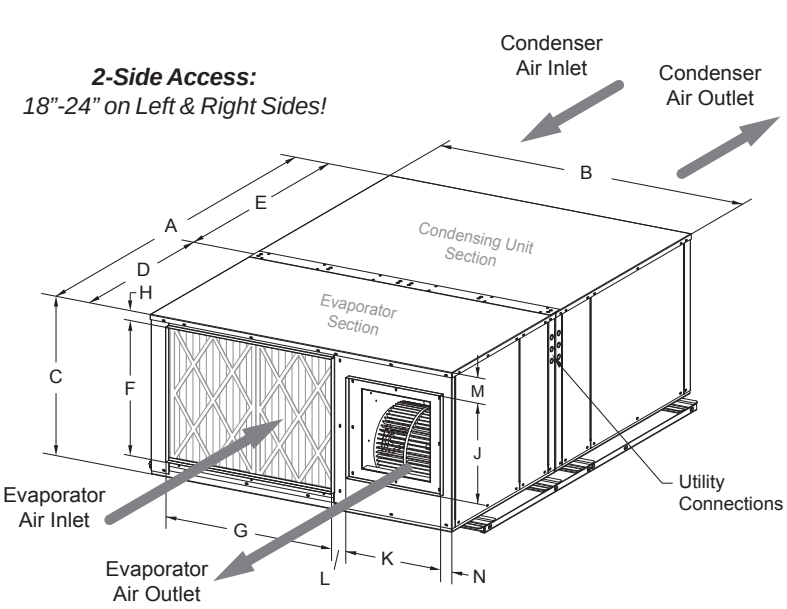
Each horizontal ceiling mounted section shall be provided with spring vibration hanging isolators sized for the total distributive weight of the unit.

### ☐ 2.5.13 Compressor Acoustic / Sound Jacket

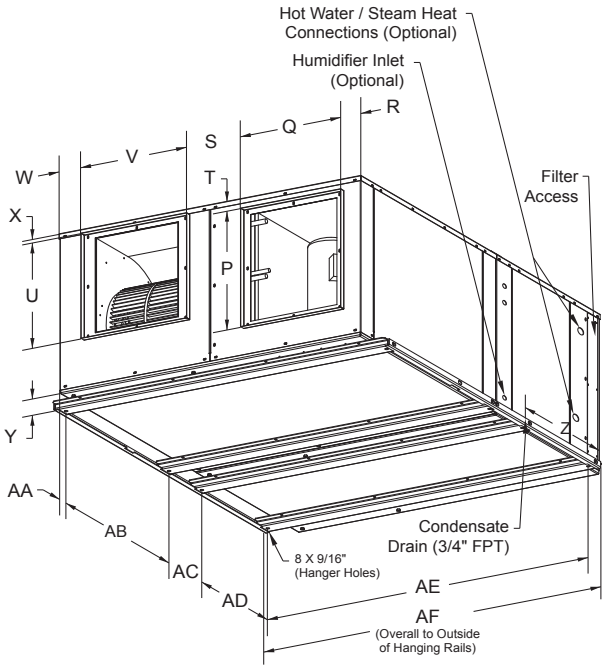
Each compressor shall be provided with a factory installed compressor sound jacket with snap closure system for ease of removal and reinstallation. Sound jackets shall have a noise reduction coefficient (NRC) of 85 per ASTM and C-423 and a sound transmission lost (STC) of 11 per ASTM E-90.

# DX - Air Cooled, Self-Contained

## Models: AAC & AAP-012 thru 180




**FRONT / RIGHT / TOP**
(Evaporator End)




**REAR / LEFT / BOTTOM**
(Condensing Unit End)

| DIMENSIONS (inches) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AAC & AAP-( ) Model No.** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **J** | **K** |
| **012, 018, 024 & 036** | 59 | 44 | 22 | 25 | 34 | 17-3/4 | 21-1/4 | 1-5/16 | 14 | 14 |
| **048, 060 & 072** | 74 | 54 | 27 | 32 | 42 | 22-1/4 | 29-3/4 | 1-5/8 | 17 | 15 |
| **096 & 120** | 96 | 74 | 29 | 38 | 58 | 24-1/8 | 45-5/8 | 1-5/8 | 20 | 18 |
| **144 & 180** | 108 | 82 | 36 | 40 | 68 | 35-1/4 | 50 | 0 | 20 | 18 |
| **AAC & AAP-( ) Model No.** | **L** | **M** | **N** | **P** | **Q** | **R** | **S** | **T** | **U** | **V** |
| **012, 018, 024 & 036** | 2-1/32 | 2-9/16 | 3-1/2 | 16 | 16 | 2-3/4 | 6-7/8 | 2 | 16 | 16 |
| **048, 060 & 072** | 2-3/4 | 4-1/4 | 3-1/8 | 20 | 18 | 3 | 9-5/8 | 2 | 17-3/8 | 19 |
| **096 & 120** | 3-3/8 | 2-1/4 | 3-1/2 | 24 | 30 | 2-3/4 | 14-1/8 | 2 | 18-1/4 | 23 |
| **144 & 180** | 4 | 8-1/2 | 6 | 31 | 34 | 2-5/8 | 14-1/4 | 1-11/16 | 18-1/4 | 23 |
| **AAC & AAP-( ) Model No.** | **W** | **X** | **Y** | **Z** | **AA** | **AB** | **AC** | **AD** | **AE** | **AF** |
| **012, 018, 024 & 036** | 2-3/8 | 1 | 1-1/8 | 17-1/4 | 5 | 24 | 8 | 17-1/2 | 47-1/2 | 50-1/2 |
| **048, 060 & 072** | 4-3/8 | 1-5/16 | 1-1/8 | 22-1/4 | 5 | 32 | 10 | 20-1/2 | 57-1/2 | 60-1/2 |
| **096 & 120** | 4-1/8 | 2-7/8 | 1-1/8 | 26-1/4 | 5 | 48 | 10 | 23-1/2 | 77-1/2 | 80-1/2 |
| **144 & 180** | 8-1/8 | 9-1/2 | 1-1/8 | 20 | 2-3/8 | 63-1/4 | 4-3/4 | 32-1/4 | 85-1/2 | 88 |

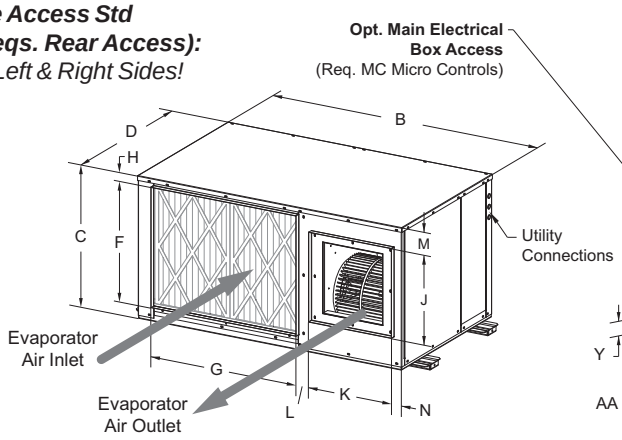
***Note:***

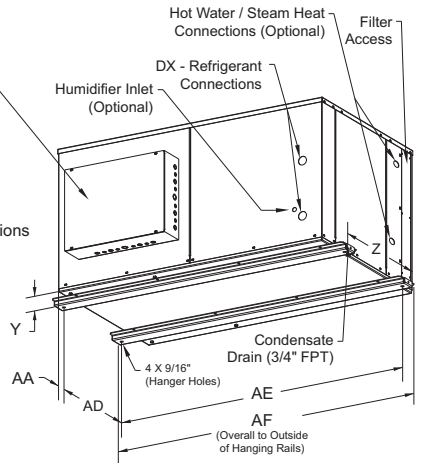
*1) 12-15 Ton AAC/AAP model systems ship split from the factory split with a field packaged unit assembly kit. As a standard, 1-10 Ton AAC/AAP model systems ship from the factory as a 1-piece unit.*

# DX Split, Horizontal Air Handling Units

## Models: AHC & AHP-012 thru 180

***2-Side Access Std***
***(MC Micro reqs. Rear Access):***
*18"-24" on Left & Right Sides!*



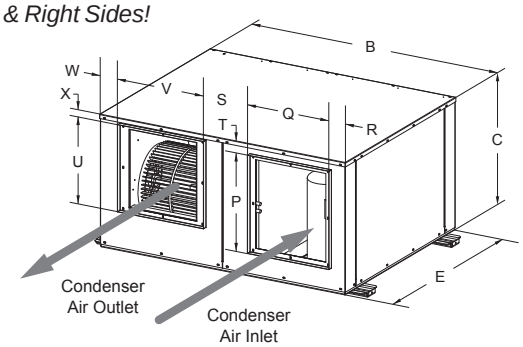

**FRONT / RIGHT / TOP** **REAR / LEFT / BOTTOM**

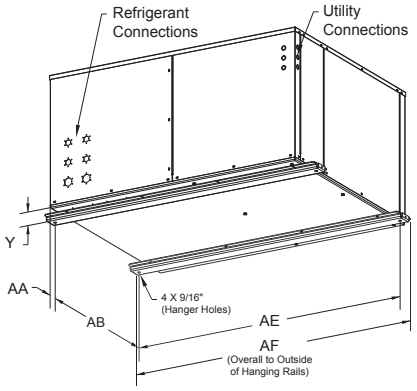
| DIMENSIONS (inches) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AHC & AHP-( ) Model No.** | **B** | **C** | **D** | **F** | **G** | **H** | **J** | **K** | **L** | **M** | **N** | **Y** | **Z** | **AA** | **AD** | **AE** | **AF** |
| **012, 018, 024 & 036** | 44 | 22 | 25 | 17-3/4 | 21-1/4 | 1-5/16 | 14 | 14 | 2-1/32 | 2-9/16 | 3-1/2 | 1 | 17-1/4 | 3 | 17-1/2 | 47-1/2 | 50 |
| **048, 060 & 072** | 54 | 27 | 32 | 22-1/4 | 29-3/4 | 1-5/8 | 17 | 15 | 2-3/4 | 4-1/4 | 3-1/8 | 1 | 22-1/4 | 5 | 20-1/2 | 57-1/2 | 60 |
| **096 & 120** | 74 | 29 | 38 | 24-1/8 | 45-5/8 | 1-5/8 | 20 | 18 | 3-3/8 | 2-1/4 | 3-1/2 | 1 | 26-1/4 | 5 | 23-1/2 | 77-1/2 | 80 |
| **144 & 180** | 82 | 36 | 40 | 35-1/4 | 50 | 0 | 20 | 18 | 4 | 8-1/2 | 6 | 1-1/8 | 20 | 2-3/8 | 32-1/4 | 85-1/2 | 88 |

# DX - Air Cooled, Indoor Horizontal Centrifugal Blower, Remote Condensing Units

## Models: XCU-012 thru 180

***2-Side Access:***
*18"-24" on Left & Right Sides!*

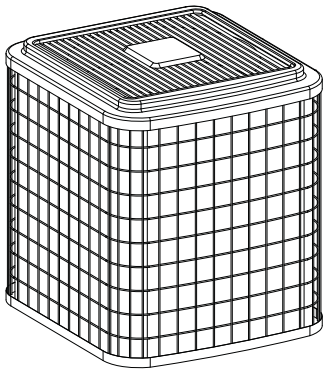


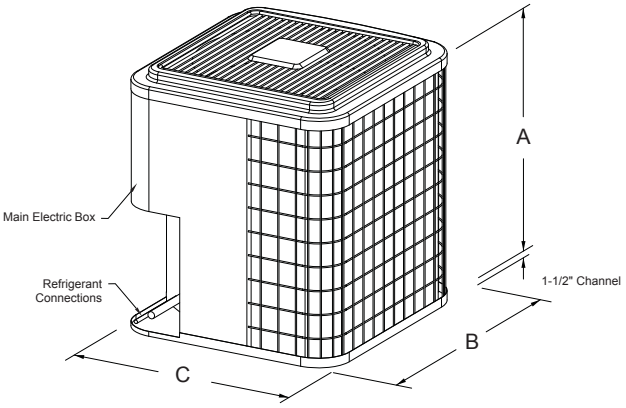

**FRONT / RIGHT / TOP** **REAR / LEFT / BOTTOM**

| DIMENSIONS(inches) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **XCU & XCX-( ) Model No.** | **B** | **C** | **E** | **P** | **Q** | **R** | **S** | **T** | **U** | **V** | **W** | **X** | **Y** | **AA** | **AB** | **AE** | **AF** |
| **018, 024 & 036** | 44 | 22 | 34 | 16 | 16 | 2-3/4 | 6-7/8 | 2 | 16 | 16 | 2-3/8 | 1 | 1 | 5 | 24 | 47-1/2 | 50 |
| **048, 060 & 072** | 54 | 27 | 42 | 20 | 18 | 3 | 9-5/8 | 2 | 17-3/8 | 19 | 4-3/8 | 1-5/16 | 1 | 5 | 32 | 57-1/2 | 60 |
| **096 & 120** | 74 | 29 | 58 | 24 | 30 | 2-3/4 | 14-1/8 | 2 | 18-1/4 | 23 | 4-1/8 | 2-7/8 | 1 | 5 | 48 | 77-1/2 | 80 |
| **144 & 180** | 82 | 36 | 68 | 31 | 34 | 2-5/8 | 14-1/4 | 1-11/16 | 18-1/4 | 23 | 8-1/8 | 9-1/2 | 1-1/8 | 2-3/8 | 63-1/4 | 85-1/2 | 88 |

## 1-5 Tons, Outdoor, DX - Air Cooled
## Propeller Fan, Remote Condensing Units & Condensers
Models: XPU & XP1-012 thru 120



FRONT / LEFT / TOP




REAR / LEFT / TOP

| XPU & XP1-( ) Model Size | Dimensions | | |
|---|---|---|---|
| | A | B | C |
| **XPU & XP1-012 & 018** | 25-5/16" | 23-1/8" | 23-1/8" |
| **XPU & XP1-024** | 28-11/16" | 23-1/8" | 23-1/8" |
| **XPU & XP1-030** | 31-3/16" | 25-3/4" | 25-3/4" |
| **XPU & XP1-036** | 32-5/16" | 31-3/16" | 31-3/16" |

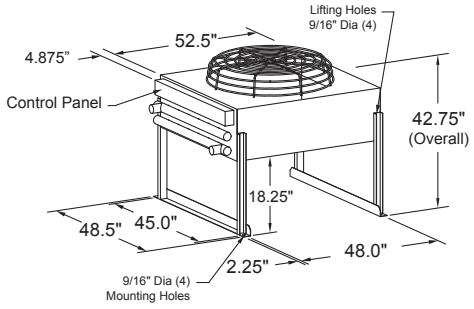
| XPU & XP1-( ) Model Size | Dimensions | | |
|---|---|---|---|
| | A | B | C |
| **XPU & XP1-048** | 35-3/4" | 31-3/16 | 31-3/16" |
| **XPU & XP1-060** | 28-15/16" | 31-3/16 | 31-3/16" |
| **XPU & XP1-072/120** | 35-1/2" | 35-1/2" | 41-1/2" |

**Qty. one XPU condensing unit is provided per circuit:**

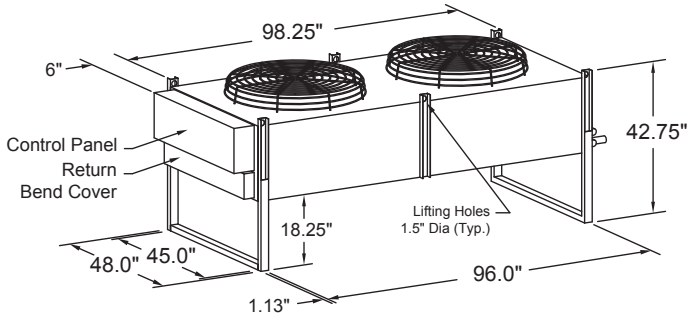
- AHC/P-072 units are provided w/ qty. 2 x XPU-036
- AHC/P-096 units are provided w/ qty. 2 x XPU-048
- AHC/P-120 units are provided w/ qty. 2 x XPU-060 or 1 x XPU-120D (consult facory for dimensional information)
- AHC/P-144 units are provided w/ qty. 2 x XPU-072 or 1 x XPU-144D (consult facory for dimensional information)
- AHC/P-180 units are provided w/ qty. 2 x XPU-090 or 1 x XPU-180D (consult facory for dimensional information)

## Remote Outdoor Propeller Fan, Air Cooled Condensers
(for Models AEC & AEP-072D thru 180D DX-Evaps)

### Models: WP1-108D, 132D & 156D




### Models: WP2-204D & 252D

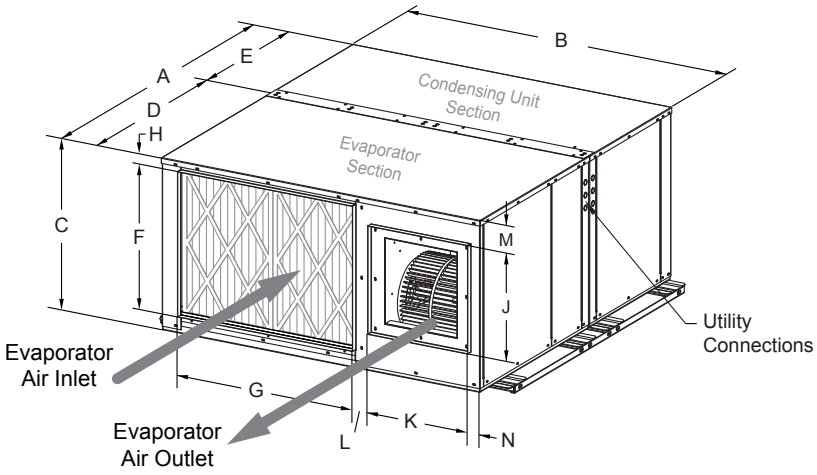


# DX - Split DX Evap & Water/Glycol Self-Contained

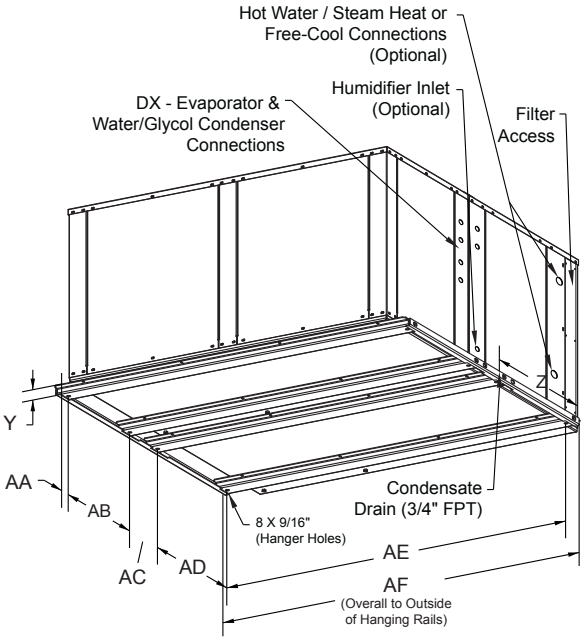
## Model: AEC/AEP, AWC/AWP & AGC/AGP-012 thru 180

*(Also AWC/AWP & AGP/AGP-012/180-_-FE Free-Cooling Economizer)*

***3-Side Access:***
*18"-24" on Rear, Left & Right Sides!*




**FRONT / RIGHT / TOP**
(Evaporator End)




**REAR / LEFT / BOTTOM**
(Condensing Unit End)

| DIMENSIONS (inches) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **AEC/AEP & AWC/AWP_-( ) Model No.** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **J** | **K** | **L** |
| **012, 018, 024 & 036** | 45 | 44 | 22 | 25 | 20 | 17-3/4 | 21-1/4 | 1-5/16 | 14 | 14 | 2-1/32 |
| **048, 060 & 072** | 56 | 54 | 27 | 32 | 24 | 22-1/4 | 29-3/4 | 1-5/8 | 17 | 15 | 2-3/4 |
| **096 & 120** | 62 | 74 | 29 | 38 | 24 | 24-1/8 | 45-5/8 | 1-5/8 | 20 | 18 | 3-3/8 |
| **144 & 180** | 70 | 82 | 36 | 40 | 30 | 35-1/4 | 50 | 0 | 20 | 18 | 4 |
| **AEC/AEP & AWC/AWP_-( ) Model No.** | **M** | **N** | **Y** | **Z** | **AA** | **AB** | **AC** | **AD** | **AE** | **AF** | |
| **012, 018, 024 & 036** | 2-9/16 | 3-1/2 | 1-1/8 | 17-1/4 | 3 | 14 | 6 | 17-1/2 | 47-1/2 | 50-1/2 | |
| **048, 060 & 072** | 4-1/4 | 3-1/8 | 1-1/8 | 22-1/4 | 3 | 18 | 8 | 20-1/2 | 57 1/2 | 60-1/2 | |
| **096 & 120** | 2-1/4 | 3-1/2 | 1-1/8 | 26-1/4 | 3 | 18 | 8 | 23-1/2 | 77-1/2 | 80-1/2 | |
| **144 & 180** | 8-1/2 | 6 | 1-1/8 | 20 | 2-3/8 | 25-1/4 | 4-3/4 | 32-1/4 | 85-1/2 | 88 | |

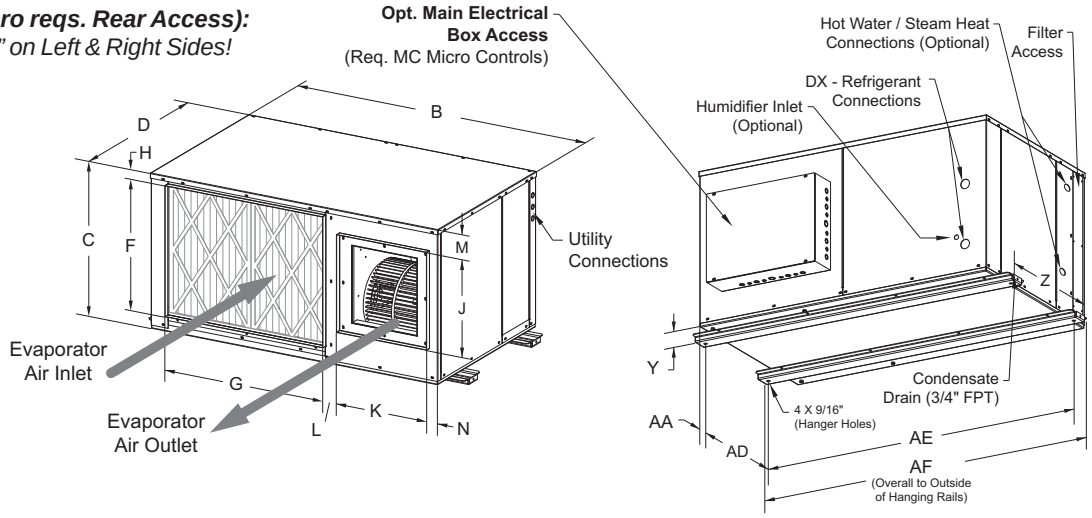
***Note:***

*1) As standard, all 1-15 Ton Horizontal Water/Glycol Self-Contained systems ship from the factory as 1-piece units. DX Water/Glycol Cooled systems are also available for split installation - see page 36 for details.*

# DX Split, Horizontal Air Handling Units

## Models: AHC & AHP-012 thru 180

***2-Side Access Std***
***(MC Micro reqs. Rear Access):***
*18"-24" on Left & Right Sides!*

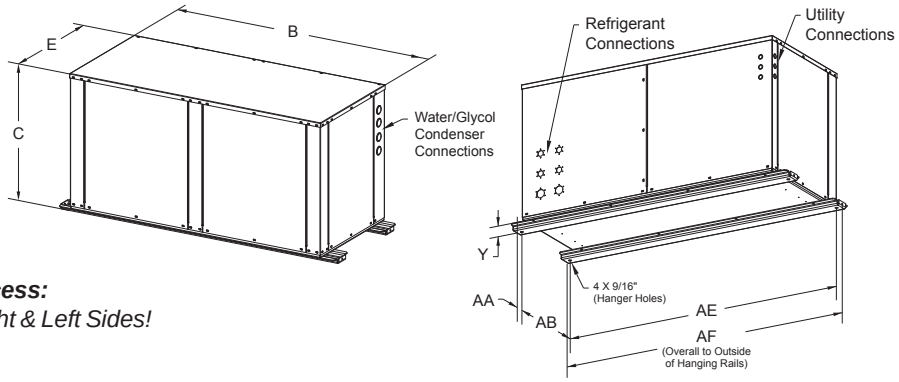



**FRONT / RIGHT / TOP** **REAR / LEFT / BOTTOM**

| DIMENSIONS (inches) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AHC & AHP-( ) Model No.** | **B** | **C** | **D** | **F** | **G** | **H** | **J** | **K** | **L** | **M** | **N** | **Y** | **Z** | **AA** | **AD** | **AE** | **AF** |
| **012, 018, 024 & 036** | 44 | 22 | 25 | 17-3/4 | 21-1/4 | 1-5/16 | 14 | 14 | 2-1/32 | 2-9/16 | 3-1/2 | 1 | 17-1/4 | 3 | 17-1/2 | 47-1/2 | 50 |
| **048, 060 & 072** | 54 | 27 | 32 | 22-1/4 | 29-3/4 | 1-5/8 | 17 | 15 | 2-3/4 | 4-1/4 | 3-1/8 | 1 | 22-1/4 | 5 | 20-1/2 | 57-1/2 | 60 |
| **096 & 120** | 74 | 29 | 38 | 24-1/8 | 45-5/8 | 1-5/8 | 20 | 18 | 3-3/8 | 2-1/4 | 3-1/2 | 1 | 26-1/4 | 5 | 23-1/2 | 77-1/2 | 80 |
| **144 & 180** | 82 | 36 | 40 | 35-1/4 | 50 | 0 | 20 | 18 | 4 | 8-1/2 | 6 | 1-1/8 | 20 | 2-3/8 | 32-1/4 | 85-1/2 | 88 |

# DX - Water/Glycol Cooled, Indoor Horizontal, Remote Condensing Units

## Models: XWU & XGU-012 thru 180




***3-Side Access:***
*18"-24" on Front, Right & Left Sides!*

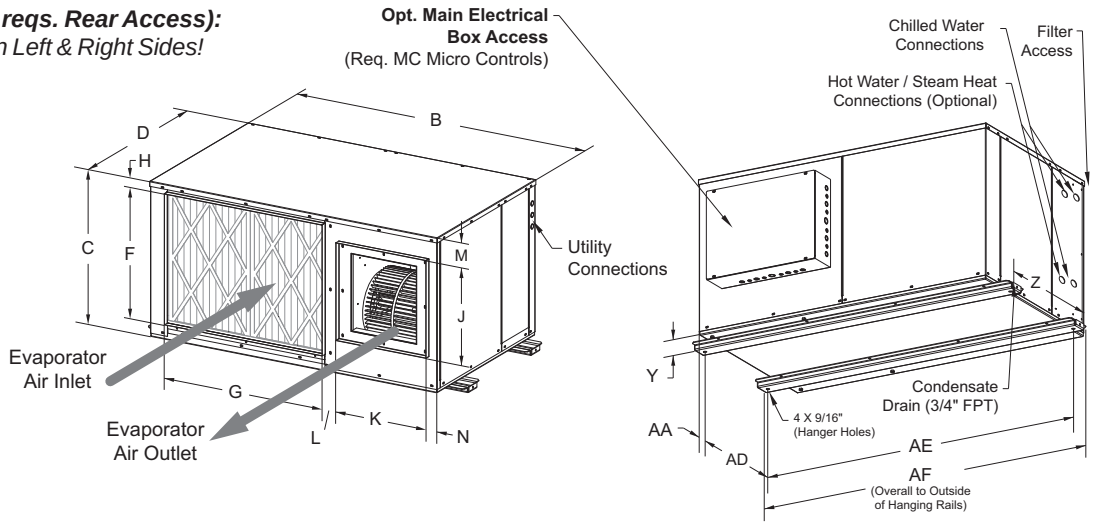
**FRONT / RIGHT / TOP** **REAR / LEFT / BOTTOM**

| DIMENSIONS(inches) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **XWU & XGU-( ) Model No.** | **B** | **C** | **E** | **Y** | **AA** | **AB** | **AE** | **AF** |
| **012 thru 036** | 44 | 22 | 20 | 1 | 3 | 14 | 47-1/2 | 50 |
| **048 thru 120** | 54 | 27 | 24 | 1 | 3 | 18 | 57-1/2 | 60 |
| **144 & 180** | 74 | 29 | 24 | 1 | 3 | 18 | 77-1/2 | 80 |

# Chilled Water, Horizontal Air Handling Units

## Models: ACC & ACP-012 thru 180

***2-Side Access Std***
***(MC Micro reqs. Rear Access):***
*18"-24" on Left & Right Sides!*




**FRONT / RIGHT / TOP** **REAR / LEFT / BOTTOM**

| DIMENSIONS (inches) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ACC & ACP-( ) Model No.** | **B** | **C** | **D** | **F** | **G** | **H** | **J** | **K** | **L** | **M** | **N** | **Y** | **Z** | **AA** | **AD** | **AE** | **AF** |
| **012, 018, 024 & 036** | 44 | 22 | 25 | 17-3/4 | 21-1/4 | 1-5/16 | 14 | 14 | 2-1/32 | 2-9/16 | 3-1/2 | 1 | 17-1/4 | 3 | 17-1/2 | 47-1/2 | 50 |
| **048, 060 & 072** | 54 | 27 | 32 | 22-1/4 | 29-3/4 | 1-5/8 | 17 | 15 | 2-3/4 | 4-1/4 | 3-1/8 | 1 | 22-1/4 | 5 | 20-1/2 | 57-1/2 | 60 |
| **096 & 120** | 74 | 29 | 38 | 24-1/8 | 45-5/8 | 1-5/8 | 20 | 18 | 3-3/8 | 2-1/4 | 3-1/2 | 1 | 26-1/4 | 5 | 23-1/2 | 77-1/2 | 80 |
| **144 & 180** | 82 | 36 | 40 | 35-1/4 | 50 | 0 | 20 | 18 | 4 | 8-1/2 | 6 | 1-1/8 | 20 | 2-3/8 | 32-1/4 | 85-1/2 | 88 |

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# Model Nomenclature

## Packaged Systems & Split Evaporators

| A | G | C | - | 120 | D | - | 4 | - | E1 | H | - | FE | - | 00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a | b | c | - | d | e | - | f | - | g | h | - | i | - | j |

**a:** **A** - **Above**Air™ Horizontal HK Series

**b:**
- **A** - DX, Air Cooled
- **C** - Chilled Water
- **E** - DX, Evaporator with Compressor
- **G** - DX, Glycol Cooled
- **H** - DX, Air Handling Unit
- **W** - DX, Water Cooled

**c:**
- **C** - **Comfort**COOL™ Series (Standard CFM)
- **P** - **Precision**COOL™ Series (Optional CFM)

**d:** **D** - Dual Circuit/Compressor DX System

**e:** **012** = 1 Ton; **018** = 1.5 Tons; **024** = 2.0 Tons; **030** = 2.5 Tons; **036** = 3.0 Tons; **048** = 4.0 Tons; **060** = 5.0 Tons; **072** = 6.0 Tons; **096** = 8.0 Tons; **120** = 10.0 Tons; **144** = 12.0 Tons; **180** = 15.0 Tons

**f:**
- **1** - 208-230V / 1 Ph / 60 Hz
- **3** - 208-230V / 3 Ph / 60 Hz
- **4** - 460-480V / 3 Ph / 60 Hz
- **5** - 575V / 3 Ph / 60 Hz
- **7** - 277V / 1 Ph / 60 Hz

**g:**
- **00** - No Heat
- **E1** - Electric Heat 1-Stage
- **E2** - Electric Heat 2-Stages
- **ES** - SCR Fired Electric Heat
- **HE** - Heat Pump with Auxiliary Electric Heat
- **HG** - Hot Gas Reheat
- **HP** - Heat Pump w/o Auxiliary Electric Heat
- **HW** - Hot Water Heat
- **ES** - SCR Fired Electric Heat
- **ST** - Steam Heat

**h:**
- **0** - No Humidifier
- **H** - Electrode Canister Humidifier

**i:**
- **00** - No Economizer
- **AE** - Air Side Economizer
- **DC** - Dual Cool / Alternate Water Source
- **FE** - Water/Glycol Side Free Cooling Economizer

**j:**
- **00** - None
- **OA** - 100% Outside-Air System

## Remote Condensing Units

| X | C | U | - | 120 | D | - | 4 | - | 00 | - | 00 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| a | b | c | - | d | e | - | f | - | g | - | h |

**a:**
- **X** - Remote Condenser or Condensing Unit (wrap-around coil type)
- **W** - Remote Condenser or Condensing Unit (slab coil type)

**b:**
- **C** - DX, Air Cooled, Centrifugal Blower Type
- **G** - DX, Glycol Cooled
- **P** - DX, Air Cooled, Propeller Fan Type
- **W** - DX, Water Cooled

**c:**
- **U** - Outdoor DX Condensing Unit
- **X** - Indoor DX Condenser
- **1** - Single-Circuit Condenser
- **2** - Dual-Circuit Condenser

**d:** **D** - Dual Circuit/Compressor DX System

**e:** **012** = 1 Ton; **018** = 1.5 Tons; **024** = 2.0 Tons; **036** = 3.0 Tons; **048** = 4.0 Tons; **060** = 5.0 Tons; **072** = 6.0 Tons; **090** = 7.5 Tons; **096** = 8.0 Tons; **120** = 10.0 Tons; **144** = 12.0 Tons; **180** = 15.0 Tons

**f:**
- **1** - 208-230V / 1 Ph / 60 Hz
- **3** - 208-230V / 3 Ph / 60 Hz
- **4** - 460-480V / 3 Ph / 60 Hz
- **5** - 575V / 3 Ph / 60 Hz
- **7** - 277V / 1 Ph / 60 Hz

**g:**
- **00** - None
- **HP** - Heat Pump Option

**h:**
- **00** - None
- **OA** - 100% Outside-Air System

**i:**
- **A** - Indoor Mounted
- **B** - Outdoor Mounted

## Approximate Shipping Weights (lbs.)

| UNIT SIZE | MODEL TYPE | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AAC/P | | | AHC/P | XCU | XPU | AWC/P & AGC/P | | | AWC/P & AGC/P-FE | XWU & XGU | ACC & ACP |
| | Evap | Cond | Packaged System | | | | Evap | Cond | Packaged System | | | |
| **012** | 235 | 325 | 570 | 235 | 325 | 130 | 235 | 195 | 440 | 455 | 195 | 240 |
| **018** | 235 | 345 | 590 | 235 | 345 | 135 | 235 | 215 | 460 | 475 | 215 | 240 |
| **024** | 250 | 355 | 610 | 250 | 355 | 135 | 250 | 215 | 470 | 495 | 215 | 245 |
| **036** | 250 | 360 | 620 | 250 | 360 | 140 | 250 | 225 | 480 | 505 | 225 | 245 |
| **048** | 340 | 475 | 820 | 340 | 475 | 200 | 340 | 290 | 640 | 680 | 290 | 340 |
| **060** | 340 | 515 | 865 | 340 | 515 | 210 | 340 | 325 | 675 | 715 | 325 | 340 |
| **072** | 370 | 585 | 960 | 370 | 585 | 140 x 2 | 370 | 375 | 745 | 795 | 375 | 360 |
| **096** | 385 | 590 | 985 | 385 | 590 | 200 x 2 | 385 | 400 | 795 | 845 | 400 | 370 |
| **120** | 550 | 895 | 1,475 | 550 | 895 | 210 x 2 | 550 | 535 | 1,105 | 1,175 | 535 | 550 |
| **144** | 560 | 940 | 1,515 | 560 | 940 | 425 x 2 | 560 | 570 | 1,145 | 1,215 | 570 | 550 |
| **180** | 560 | 940 | 1,515 | 560 | 940 | 450 x 2 | 560 | 580 | 1,155 | 1,225 | 580 | 550 |

***Notes:***

*1) AAC/P, AWC/P & AGC/P-012/120 systems ship from the factory as a 1-piece, packaged unit as a standard. AAC/P-144/180 systems ship from the factory split for field rigging purposes.*

# Innovative HVAC Solutions

# AboveAir Technologies

## Ceiling Air Conditioners

***SpotCool***™ - 2x4 T-Bar "Spot-Cool & Ducted" Comfort & Precision Ceiling Mounted A/C's

***HK***™ **Horizontal** - Hi-Static Ducted Comfort & Precision Ceiling Mounted A/C's

***HK-OA***™ - Horizontal Up to 100% DOAS High-Percentage Outside Air Ceiling Mounted A/C's

## Floor Air Conditioners

***MissionCritical***™ - Precision Vertical Floor Mounted Computer Room A/C's

***VK***™ **Vertical** - SCAV, Vertical Floor Mounted Self-Contained & Split Comfort Constant Air Volume and Variable Air Volume (VAV) A/C's & Heat Pumps

***VK-OA***™ - Vertical Up to 100% DOAS High-Percentage Outside Air Vertical Floor Mounted A/C's

***VK***™ **Console** - Vertical Floor Console Mounted Self-Contained & Split A/C's & Heat Pumps

## Remote Heat Rejection

***FluidCool***™ - Indoor & Outdoor Remote Glycol Drycoolers

***PumpAll***™ - Single, Dual & Triplex Standard & Variable (VFD) Speed Glycol Pump Packages

**2x4 "Spot-Cool & Ducted" Ceiling Mounted A/C's**
(1 to 3 Tons)

**High-Static BD "Ducted" Ceiling Mounted A/C's**
(1 to 30 Tons)

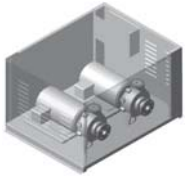
**Comfort - Packaged & Split Vertical Floor Mounted Air Conditioners**
(1 to 45 Tons)

**Precision - Vertical Floor Console Mounted Air Conditioners**
(1 to 30 Tons)

***VK-MissionCritical***™ **- Up-Flow & Down-Flow Vertical Floor Mounted Computer Room Air Conditioners**
(1 to 30 Tons)

**Remote Air Cooled Condensers, Condensing Units & Glycol Drycoolers**
(1 to 180 Tons of THR)

**Single, Dual & Triplex Glycol Pump Packages**
(1/2 to 50 HP)



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