



**Industrial
Climate
Engineering™**
An **ACS** Brand

CFA3240A/CFA3300A/CFA3360A (20, 25 & 30 Ton) Vertical Wall Mount Air Conditioners



CFA3240 w/Economizer

General Description

Industrial Climate Engineering's CFA air conditioners are used primarily to cool electronic and mechanical equipment shelters (E-Houses). Due to the high internal heat load, these shelters require year-round cooling. ICE air conditioners have the necessary controls and components for operation during these temperatures. All models use the non-ozone depleting R-410A refrigerant.

ICE air conditioners are installed on the exterior of the building – no interior space is required. Two openings in the wall allow for the conditioned (supply) air to be discharged into the building and for the indoor air to return to the air conditioner.

A sealed condenser fan motor permits operation in hot, dusty environments.

The direct drive backward inclined motorized impeller evaporator motor provides high aerodynamic efficiency in a compact design. The optimized blade geometry provides excellent air flow at a minimum sound level. Direct drive eliminates all belts and pulleys. A scroll compressor with R-410A refrigerant ensures years of dependable service even in the harshest of operating conditions. When outside air is required to provide pressurization, optional fresh air dampers can be field installed in openings in both the left and right side panels. When no outside air is desired, these openings are covered with blank-off panels.

Safety Listed

ICE air conditioners are built to UL standard 1995, 4th edition and CAN/CSA C22.2, No. 236-2011 Ed.4. The units are tested in accordance to the ASHRAE standard. The air conditioners are commercial and industrial units and are not intended for use in residential applications.



Features and Benefits

High Efficiency

- Thermal Expansion Valve Improves Efficiency
- High Efficiency Scroll Compressor
- Lanced Fins On the Evaporator and Condenser Coils Improve Heat Transfer

Built-In Reliability

- High and Low Pressure Switch with Lockout
- Adjustable Short Cycle Protection
- Phase Monitor
- High Compressor Temperature Switch
- Internal Motor Overload Protection

Rugged Construction

- Copper Tube, Aluminum Fin Evaporator & Condenser Coil
- Field Or Factory Installed Heaters On Discharge Side of Evaporator Coil
- Baked On Finish Over Galvanneal Steel



Standard Features

Designed for Operation in High and Low Ambient Conditions

- Low ambient control cycles the condenser fan to maintain proper refrigerant pressures.
- Standard on all models, Hot Gas Bypass is typically used to create a false load on the system in low heat load conditions. Hot Gas Bypass is recommended for applications in which the heat load in the space is capable of deviating substantially below the design or if the end user intends on operating the HVAC to maintain low indoor setpoint (typically below 75°F).
- Three minute by-pass of the low pressure switch for start-up of compressor when outdoor temperatures are below 55°F (13°C).
- Designed for operation from 0°F (-8°C) up to 131°F (55°C). Economizer-equipped models can operate in ambient temps as low as -40°F (-40°C).
- A factory installed compressor crankcase heater for operation in low ambient temperatures.

High Efficiency

- Thermal Expansion Valve improves efficiency and cooling capacity at both high and low ambient temperatures.
- High efficiency scroll compressor.
- Lanced fins on the evaporator and condenser coils improve heat transfer.

Ease of Installation

- Sloped top with flashing eliminates need of rainhood.
- Built-in mounting flanges facilitate installation and minimize chance of water leaks.
- Supply and air return openings match many competitive models.
- Factory installed disconnect on all units.
- Single Point Power Entry complies with latest edition of U.L. Standard 1995.

Built-in Reliability

- High pressure switch and low pressure switch with lockout protects refrigerant circuit.
- Adjustable .03 to ten minute delay on make for short cycle protection.
- Phase Monitor - Continuously measures the voltage of each of the three phases. The monitor separately senses low and high voltage, voltage unbalance including phase loss and phase reversal. A red LED glows to indicate a fault. When all voltages are acceptable, a green LED glows. Automatically resets when voltages and phases are within operating tolerances.
Note: Not required on 1Ø units.
- High temperature switch on the compressor discharge line protects the compressor in the event of a complete loss of refrigerant.
- Internal motor overloads on the evaporator motor, the condenser motor and the compressor.

Remote Alarm Capability

- Dry contacts can be used for remote alarm or notification upon air conditioner lockout.

Rugged Construction

- Copper tube, aluminum fin evaporator & condenser coils.
- Field or factory installed heaters on discharge side of evaporator coil (optional)
- Baked on neutral gray finish over galvanneal steel for maximum cabinet life. (Other finishes are available.)

Ease of Service

- CFA3240/3300/3360 - Stainless steel hinges on the outer side of the two upper panels facilitate access to the control box and the evaporator motor and coil. As an option, these panels can be locked. Stainless steel hinges on the outer side of each lower panel allow access to the compressor compartment.
- Service access valves are standard.
- All major components are readily accessible.
- Front Control Panel allows easy access and complies with NEC clearance codes on redundant side-by-side systems.
- LEDs indicate operational status and fault conditions.

Standard Controls

► Programmable Logic Controller

Standard on all CFA air conditioners, a factory installed Programmable Logic Controller (PLC) controls the operation of the HVAC system. LEDs on the PLC show operational status and provide assistance with diagnosis if troubleshooting is ever required. Various control functions are field selectable and programmable. The PLC is also capable of communicating to other PLCs to allow run time leveling and does not require additional equipment to be installed. The PLC provides improved reliability because of the reduction of components. The components utilized are more durable and the control box wiring has been simplified. Pertinent statistical data about the life of the refrigeration system can be accessed through the PLC.

PLC equipped models include built in head pressure control.

- Advanced PID algorithm to ensure accurate automatic adjustment of condenser airflow.
- Quick-Safe prevention of low and high discharge pressures ensure the system operates well under any conditions.
- Modulating of the condenser fan reduces cycling, improving reliability.
- Energy efficient, achieving the most efficient use of the condenser fan.

The PLC is factory installed and tested, requires no adjustments or changes when the air conditioning system is installed.

Controllers and Thermostats

► Thermostats and Controllers for ICE Air Conditioners

See the *Marvair Thermostats and Controllers Product Data Sheet* for the thermostats and controllers for use with Marvair and ICE air conditioners.

Accessories

► Supply Grille

CFA3240/3300/3360 P/N 93190
54½" x 15½" (1,384 mm x 394 mm)

► Return Grille

CFA3240 P/N 93191
54½" x 21½" (1,384 mm x 546 mm)
CFA3300/3360 P/N 93192
54½" x 37½" (1,384 mm x 953 mm)

► Lifting Eye Kit

CFA3240..... P/N K/40026
CFA3300/3360 P/N K/40027



Options

ICE CFA air conditioners are designed and built to stringent requirements of electronics shelters, and other applications with special requirements. Numerous options are available to meet these needs.

► Protective Coating Packages

Coated Coils: Either the condenser or evaporator coil can be coated. For harsh conditions, e.g., power plants, paper mills or sites where the unit will be exposed to salt water, the coils should be coated. **Note:** Cooling capacity may be reduced by up to 5% on units with coated coils.

Coastal Environmental Package: This package includes:

- Corrosion resistant fasteners,
- Sealed or partially sealed condenser fan motor,
- In situ coating applied to all exposed internal copper and metal in the condenser section, and
- A protective coating on the condenser coil.

All Coat Package: Includes the same features as the Coastal Environmental Package and adds a coating on the evaporator coil and on all exterior and interior components and sheet metal.

Note 1: The insulated internal sheet metal and the internal control box are not coated.

Note 2: The corrosion prevention coating can not be applied to stainless steel.

► Dirty Filter Indicator

A factory installed option that measures the difference in pressure across the internal filter and illuminates an LED when the pressure exceeds the desired difference. Dry contacts can be used to remotely monitor filter status.

► Lockable Doors

Prevent unauthorized access to internal components and controls.

► Dual Compressors With Lead/Lag Operation with Optional Compatible Controller

Dual compressors are standard on the CFA3240/3300/3360. Dual compressor units are factory wired for maximum cooling operation utilizing both compressors. A factory installed jumper can be removed between terminals 1 and 2 of the low voltage terminal strip for 2 stage compressor operation.

➤ **Fresh Air Damper**

Allows introduction of outside air into the building to provide positive pressure and includes a prefilter. Field installed on the right, left, or both sides of the unit.

| Model Number | Fresh Air Damper Part # | Fresh Air Damper Filter Part # | Fresh Air Damper Filter Size In (mm) |
|---------------------|-------------------------|--------------------------------|--------------------------------------|
| CFA3240 | K/04757-xxx | 92127 | 91/4" x 37" x 3/8" (235 x 940 x 10) |
| CFA3300/3360 | K/10169-xxx | 92526 | 12" x 26" x 1" (305 x 660 x 25) |

xxx designates the color. 200 = Grey (standard). 100 = Beige. 500 = Stainless Steel

➤ **Cabinet Color**

ICE air conditioners are available in six different cabinet colors. The standard colors are Marvair® beige, white, gray and Carlsbad Canyon (brown). The standard cabinet’s sides, top and front panels are constructed of 20 gauge painted steel. Contact your ICE representative for color chips. Custom colors are also available; contact ICE for details.

Two stainless steel cabinet constructions are available:

Stainless Steel Exterior (Option “5”): This option replaces all standard exterior painted surfaces with stainless steel. This option also replaces the standard unpainted compressor base of the unit and exterior cabinet screws with stainless steel. No other standard construction surfaces are stainless steel in this option, unless listed in this description. Back panel is not stainless steel with this option. This option is designed to give a more economical alternative to full stainless steel, and still offer an enhanced level of protection. For further corrosion protection, please see our “A” offering at full stainless on all metal components.

Stainless Steel Unit (Option “A”): This option replaces all interior and exterior steel sheet metal parts with stainless steel. All galvanized and painted steel surfaces found in the standard unit are stainless steel with this option. All cabinet screws are stainless steel. No other standard construction surfaces are stainless steel, unless listed in this description. This option is designed to give our most robust protection against steel corrosion.

➤ **Filter Access From Return Air Opening (Optional on Select Models)**

Factory or field installed filter bracket allows access to the filters from the return air grille. See model ID, position #20, option code “F”.

➤ **Center Supply/Top Return Configuration**

Location of Supply and Return openings are reversed. See dimensional drawings.

➤ **Economizer**

The factory installed economizer saves energy and reduces the run time on the compressor and condenser fan motor by using outside air to cool the shelter – when ambient conditions are suitable.

On a signal from the wall mounted indoor thermostat that cooling is required, either mechanical cooling with the compressor or free cooling with the economizer is provided. A factory installed enthalpy controller determines whether the outside air is sufficiently cool and dry to be used for cooling. If suitable, the compressor is locked out and the economizer damper opens to bring in outside air through fresh air hoods located on both sides of the air conditioner. The outside air is filtered with prefilters in each of the outside air hoods. Integral pressure relief allows the interior air to exit the shelter, permitting outside air to enter the shelter. The temperature at which the economizer opens is adjustable from 63°F (17°C) at 50% Relative Humidity to 73°F (23°C) at 50% Relative Humidity. After the enthalpy control has activated and outside air is being brought into the building, the mixed air sensor measures the temperature of the air entering the indoor blower and then modulates the economizer damper to mix the right proportion of cool outside air with warm indoor air to maintain 50°-63°F (10° - 17°C) air being delivered to the building. This prevents shocking the electronic components with cold outside air.

The compressor is not permitted to operate when the economizer is functioning.

If the outside air becomes too hot or humid, the economizer damper closes completely, or to a field selectable minimum open position, and mechanical cooling is activated.

Fresh air hoods with prefilters are field installed on each side of the air conditioner.

➤ **Condenser Coil Dust Protection**

Washable filter protects the condenser coils from dirt and debris.

CFA3240..... P/N S/12907-xxx

CFA3300/3360 P/N S/12908-xxx

xxx designates the color

Options for Outside Air for Ventilation

► Configuration “C”: Up to 100% Modulating Economizer

The economizer reduces the cost of air conditioning by using outside air when acceptable to cool the room (Free Cooling). The factory installed Marvair® economizer has integral pressure relief.

Control Board Logic: Upon a “Call for Cooling”, the economizer control board calculates whether the HVAC operates in economizer mode or mechanical cooling mode based on outdoor temperature (dry bulb) or temperature/humidity (enthalpy). When outdoor conditions are favorable for economizer cooling, the damper drives open and modulates to maintain a 55°F mixed air temperature through the supply grille. When outdoor conditions are not favorable for economizer cooling, the economizer damper remains closed, and the HVAC unit will operate in mechanical cooling mode.

Features Designed for Telecommunication applications:

Hydrogen Fault Input: When 24VAC is applied to the H_FLT input, the economizer board forces the damper to open 100% for emergency ventilation. The compressor does not operate during Hydrogen Fault/Emergency Ventilation. Thermostat must provide the fan “G” signal to HVAC to activate the indoor blower.

Forced Mechanical Cooling: When 24VAC is applied to the FC input of the economizer board, the economizer damper is forced closed, and the HVAC will operate in mechanical cooling mode. This is considered as economizer override in the event economizer cooling is not sufficient for the heat load. Thermostat must provide the fan “G” signal to HVAC to activate the indoor blower.

Economizer Status: The economizer board has contacts that when used with the Marvair CommStat 4 Telecom HVAC Controller, change state to provide feedback to the CommStat 4 to indicate when the HVAC is in economizer mode versus mechanical cooling mode. This feedback allows the CommStat 4 to initiate the forced cooling feature to override economizer cooling and force mechanical cooling.

When used with minimum position potentiometer (optional), the Marvair® economizer can meet requirements of ASHRAE Std. 62.

► Configuration “D”: Two-Position Motorized Fresh Air Damper w/Pressure Relief Ventilation

Factory Installed Relay Logic: Upon a “Call for indoor blower” via a 24V signal (G), the motorized damper opens to a maximum of 50% of the fully open position. The open position can be decreased from 50% by adjusting the rod position on the drive linkage. In this case, the damper will not open unless there’s a call for the indoor blower.

Note: This circuit does not interrupt the compressor or heater operation.

► Configuration “E”: Two-Position Motorized Fresh Air Damper w/Pressure Relief Ventilation & Independent Control

Factory Installed Relay Logic: Upon a “Call for Motorized damper” via a 24V signal from an external user-installed device, the motorized damper opens to a maximum of 50% of the fully open position. The open position can be decreased from 50% by adjusting the rod position on the drive linkage.

The motorized damper Does NOT open when there is a call for the indoor fan (G). A 24VAC signal {sourced from LVTB pin 10 and supplied through a user-provided Normally Open (NO) contact} activates (opens) the Motorized Damper and connected Relief Damper. When the 24VAC signal is removed, the Motorized Damper and connected Relief Damper close (spring return).

Note: This circuit does not interrupt the compressor or heater operation.

► Configuration “F”: No Free Cooling, 100%- Damper Opening, Emergency Ventilation Only w/Pressure Relief and Independent Control

Factory Installed Relay Logic: Upon a “Call for emergency ventilation”, from an external user-provided device; the motorized damper opens to 100% open position and the indoor blower is forced to operate. During “Emergency Ventilation mode”, the compressor and heater do not operate. The relay has a wire lead extended for the installer to connect their emergency ventilation control signal.

Note: This circuit interrupts the compressor and heater operation and forces the indoor blower and damper to operate during emergency ventilation mode.

Minimum Clearances:

Additional clearance is required in high ambient temperatures, greater than 120°F (49°C).

| MODEL | MIN. CLEARANCE AROUND SIDES (SINGLE UNIT) | MIN. CLEARANCE BETWEEN UNITS (TWO UNITS) | MIN. SPACE ABOVE UNIT | MIN. SPACE BEHIND UNIT |
|--------------|---|--|-----------------------|------------------------|
| CFA3240 | 24 in. (61 cm) | 24 in. (61 cm) | 24 in. (61 cm) | 120 in. (305 cm) |
| CFA3300/3360 | 96 in. (244 cm) | 96 in. (244 cm) | 24 in. (61 cm) | 42 in. (107 cm) |

Model Identification

| Example | C | F | A | 3 | 2 | 4 | 0 | A | D | 0 | 5 | 0 | D | R | H | + | + | 1 | C | A | + | A | 2 | 1 | + | + | + | + | + | + |
|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Position | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

| | | |
|----|--------------------------------------|---|
| 1 | Unit Designation/Family | C = Industrial Climate Engineering (ICE) |
| 2 | Energy Efficiency Ratio (EER) | F = EER <9 |
| 3 | Refrigerant Type | A = R-410a |
| 4 | Compressor Type/Quantity | 3 = Dual |
| 5 | Unit Capacity/Nominal Cooling (BTUH) | 240 = 240,000 |
| 6 | | 300 = 300,000 |
| 7 | | 360 = 360,000 |
| 8 | System Type | A = Air Conditioner |
| 9 | Power Supply (Volts-Hz-Phase) | C = 208/230-60-3 E = 380-50-3 (4 Wire) D = 460-60-3 Z = 575-60-3 |
| 10 | Heat Designation @ Rated Voltage | 000 = No Heat 150 = 15KW 090 = 9KW 180 = 18KW |
| 12 | KW = Kilowatt | |
| 13 | Ventilation Configuration | A = Solid Front Door C = Economizer D = Motorized Damper w/Pressure Relief E = Motorized Damper w/Pressure Relief & Independent Motorized Damper Control F = No Free Cooling, 100% Emergency Ventilation Only w/Independent Control |
| 14 | Dehumidification | R = Electric Reheat T = Electric Reheat w/Humidity Control + = None |
| 15 | Controls | F = PLC w/Summed Alarms H = PLC w/2-Stage Control 2 = PLC w/5-Stage Control + = None \$ = Special |
| 16 | Operating Condition | A = Evaporator Freeze Sensor (EFS) Standard on 7.5T & Larger Units C = EFS w/Hot Gas Bypass N = Hard Start P = Hard Start w/Low Ambient & CCH Q = Hard Start w/Low Ambient & Fan Cycle Control (FCC) R = Crank Case Heater (CCH) T = Hard Start w/EFS U = Hard Start w/Hot Gas Bypass V = Hard Start w/Low Ambient & CCH & EFS W = Low Ambient w/CCH X = Hot Gas Bypass Y = Low Ambient w/CCH & FCC Z = Low Ambient w/CCH & EFS 1 = Low Ambient w/FCC 2 = Low Ambient w/FCC & EFS 3 = CCH w/Hot Gas Bypass + = None |

Note: Not all options are available with all configurations. Contact your ICE sales representative for configuration details and feature compatibility.

| | | |
|----|-----------------------------|--|
| 17 | Indoor Air Quality Features | A = UV Light D = Dry Bulb Sensor E = Dry Bulb Sensor w/Dirty Filter G = Dirty Filter Sensor K = Bi-Polar Ionization M = Dry Bulb Sensor & CO2 Sensor (Only w/Economizer) + = None |
| 18 | Air Flow | 1 = Top Supply/Center Return (STD) 2 = Center Supply/Top Return |
| 19 | Compressor Location | C = Center |
| 20 | Filter Option | A = 2" Pleated (MERV 8, AC/HP-C) C = 2" Charcoal D = MERV 11 High Filtration Package E = MERV 13 High Filtration Package F = Filter Access Through Return Air Opening G = F + C H = F + D J = F + E K = F + W W = Aluminum Washable + = None |
| 21 | Corrosion Protection | A = Condenser Coil Only C = Evaporator Coil Only D = Both Coils Condenser & Evaporator E = All Coils Cond/Evap/Reheat F = Coat All K = Coastal Package + = None \$ = Special |
| 22 | Engineering Revision Level | A1 B2 A2 C2 |
| 24 | Cabinet Color | 1 = Marvailr Beige (STD) 2 = Gray (STD) 3 = Carlsbad Canyon (STD) 4 = White (STD) 5 = Stainless Steel Exterior 9 = Pebble Gray A = Stainless Steel - Unit \$ = Custom Color (Powder Coat) |
| 25 | Sound Attenuation | 2 = Compressor Blanket + = None |
| 26 | Security Option | A = Lockable Access Plate/Tamper Proof B = Lockable Latch/Hinge + = None |
| 27 | Fastener/Drain Pan Option | A = Stainless Steel Fasteners C = Stainless Steel Drain Pan D = Stainless Steel Fasteners & Drain Pan F = External Wire Chase Mounting Holes + = None |
| 28 | Special Variation | C = Copeland Compressor + = None \$ = Special Configuration Not Covered by Model Nomenclature |
| 29 | Unused | + = None \$ = Special |
| 30 | Unused | + = None \$ = Special |

Capacity Ratings: CFA Air Conditioners (Dual Compressor)

| Model Number | CFA3240A | | | | CFA3300A | | | | CFA3360A | | | |
|---|----------|---|---|---|----------|---|---|---|----------|---|---|---|
| | C | D | E | Z | C | D | E | Z | C | D | E | Z |
| Cooling BTUH¹ | 216,000 | | | | 300,000 | | | | 330,000 | | | |
| Rated Air Flow (CFM²) | 7,800 | | | | 12,000 | | | | 13,400 | | | |
| ESP³ @ Rated Conditions | 0.40 | | | | 0.45 | | | | 0.55 | | | |

¹Cooling rated at 95°F (35°C) outdoor and 80°F DB/67°F WB (26.5°C DB/19.5°C WB) return air. ²CFM=Cubic Feet per Minute
³ESP=External Static Pressure
Ratings are with no outside air. Performance will be affected by altitude. Ratings are at 230 volts for 208/230 volt units ("A" & "C" models), 460 volts for "D" models, 380 volts for "E" models, and 575 volts for "Z" models.
Derate performance by 17% for "E" (380v 3ø, 50Hz) models.
Operation of units at a different voltage from that of the rating point will affect performance and air flow.

Sensible Total Heat Ratio @ 95°F (35°F) Outside Air Dry Bulb: CFA Air Conditioners (Dual Compressors)

| Model Number | CFA3240A | | | | CFA3300A | | | | CFA3360A | | | |
|----------------------------|----------|---|---|---|----------|---|---|---|----------|---|---|---|
| | C | D | E | Z | C | D | E | Z | C | D | E | Z |
| Total Capacity | 216,000 | | | | 300,000 | | | | 330,000 | | | |
| Sensible Heat Ratio | 164,629 | | | | 233,357 | | | | 258,981 | | | |
| Sensible Capacity | 0.76 | | | | 0.78 | | | | 0.78 | | | |

Sensible heat ratios based upon outdoor air conditions of 80°F DB/67°F WB (26.5°C DB/19.5°C WB) return air.
Derate performance by 17% for "E" (380v 3ø, 50Hz) models.

SCFM @ Different Static Pressure

| Model Number | IWG Static | | | | | | | | | | | |
|-----------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| | 0 | 0.2 | 0.4 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.6 | 1.8 | 2.0 | 2.2 |
| CFA3240A | 8,400 | 7,892 | 7,413 | 6,966 | 6,545 | 6,149 | 5,777 | 5,427 | 5,099 | 4,790 | 4,500 | 4,228 |
| CFA3300A | 12,269 | 12,245 | 11,926 | 11,604 | 11,289 | 11,265 | 10,651 | 10,333 | 10,014 | 9,695 | 9,004 | N/A |
| CFA3360A | 13,283 | 12,219 | 10,934 | 9,650 | 8,366 | 6,766 | 5,798 | 4,514 | 3,230 | 1,946 | 662 | N/A |

¹Operation in the shaded area is not recommended.

Cooling Performance (BTUH) at Various Outdoor Temperatures CFA Air Conditioners (60Hz Power Supply, Dual Compressors)

| Model | Return Air DB/WB °F (°C) | Cooling Capacity BTUH | Outdoor Temperature | | | | | | | | | | | | |
|------------------|--------------------------------|-----------------------------|---------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------|
| | | | 75°F (24°C) | 80°F (27°C) | 85°F (30°C) | 90°F (32°C) | 95°F (35°C) | 100°F (38°C) | 105°F (41°C) | 110°F (43°C) | 115°F (46°C) | 120°F (49°C) | 125°F (52°C) | 130°F (54°C) | |
| CFA3240A | 72/61 (22/16) | Total | 224,208 | 216,432 | 208,872 | 201,096 | 193,320 | 185,544 | 177,768 | 170,208 | 166,320 | 162,432 | 158,544 | 154,656 | |
| | | Sensible | 164,473 | 161,259 | 158,154 | 154,979 | 151,825 | 148,690 | 145,574 | 142,563 | 141,022 | 139,485 | 137,954 | 136,426 | |
| | 76/63 (24/17) | Total | 233,064 | 225,072 | 216,864 | 208,872 | 200,880 | 192,888 | 184,896 | 176,688 | 172,800 | 168,912 | 165,024 | 161,136 | |
| | | Sensible | 178,570 | 175,376 | 172,117 | 168,964 | 165,831 | 162,718 | 159,624 | 156,466 | 154,977 | 153,493 | 152,013 | 150,538 | |
| | 80/67 (27/19) | Total | 250,560 | 241,920 | 233,280 | 224,640 | 216,000 | 207,360 | 198,720 | 190,080 | 185,760 | 181,872 | 177,984 | 174,096 | |
| | | Sensible | 177,370 | 174,153 | 170,957 | 167,783 | 164,629 | 161,496 | 158,383 | 155,291 | 153,752 | 152,372 | 150,995 | 149,623 | |
| | 84/71 (29/22) | Total | 268,056 | 258,768 | 249,696 | 240,408 | 231,120 | 221,832 | 212,544 | 203,472 | 198,720 | 194,832 | 190,944 | 187,056 | |
| | | Sensible | 175,287 | 172,080 | 168,968 | 165,804 | 162,661 | 159,539 | 156,439 | 153,430 | 151,863 | 150,584 | 149,309 | 148,037 | |
| | CFA3300A | 72/61 (22/16) | Total | 311,400 | 300,600 | 290,100 | 279,300 | 268,500 | 257,700 | 246,900 | 236,400 | 231,000 | 225,600 | 220,200 | 214,800 |
| | | | Sensible | 232,265 | 227,878 | 223,636 | 219,297 | 214,982 | 210,691 | 206,424 | 202,299 | 200,185 | 198,078 | 195,976 | 193,881 |
| 76/63 (24/17) | | Total | 323,700 | 312,600 | 301,200 | 290,100 | 279,000 | 267,900 | 256,800 | 245,400 | 240,000 | 234,600 | 229,200 | 223,800 | |
| | | Sensible | 252,615 | 248,257 | 243,807 | 239,498 | 235,214 | 230,954 | 226,718 | 222,392 | 220,352 | 218,317 | 216,287 | 214,263 | |
| 80/67 (27/19) | | Total | 348,000 | 336,000 | 324,000 | 312,000 | 300,000 | 288,000 | 276,000 | 264,000 | 258,000 | 252,600 | 247,200 | 241,800 | |
| | | Sensible | 250,749 | 246,362 | 242,002 | 237,666 | 233,357 | 229,072 | 224,813 | 220,579 | 218,471 | 216,579 | 214,691 | 212,809 | |
| 84/71 (29/22) | | Total | 372,300 | 359,400 | 346,800 | 333,900 | 321,000 | 308,100 | 295,200 | 282,600 | 276,000 | 270,600 | 265,200 | 259,800 | |
| | | Sensible | 247,654 | 243,283 | 239,039 | 234,720 | 230,427 | 226,160 | 221,919 | 217,802 | 215,655 | 213,903 | 212,155 | 210,412 | |
| CFA3360A | | 72/61 (22/16) | Total | 342,540 | 330,660 | 319,110 | 307,230 | 295,350 | 283,470 | 271,590 | 260,040 | 254,100 | 248,160 | 242,220 | 236,280 |
| | | | Sensible | 257,411 | 252,596 | 247,940 | 243,178 | 238,442 | 233,731 | 229,047 | 224,517 | 222,196 | 219,882 | 217,574 | 215,273 |
| | 76/63 (24/17) | Total | 356,070 | 343,860 | 331,320 | 319,110 | 306,900 | 294,690 | 282,480 | 269,940 | 264,000 | 258,060 | 252,120 | 246,180 | |
| | | Sensible | 280,154 | 275,371 | 270,487 | 265,759 | 261,056 | 256,380 | 251,730 | 246,980 | 244,739 | 242,505 | 240,276 | 238,054 | |
| | 80/67 (27/19) | Total | 382,800 | 369,600 | 356,400 | 343,200 | 330,000 | 316,800 | 303,600 | 290,400 | 283,800 | 277,860 | 271,920 | 265,980 | |
| | | Sensible | 278,067 | 273,254 | 268,469 | 263,711 | 258,981 | 254,279 | 249,603 | 244,954 | 242,640 | 240,562 | 238,490 | 236,424 | |
| | 84/71 (29/22) | Total | 409,530 | 395,340 | 381,480 | 367,290 | 353,100 | 338,910 | 324,720 | 310,860 | 303,600 | 297,660 | 291,720 | 285,780 | |
| | | Sensible | 274,629 | 269,833 | 265,176 | 260,436 | 255,725 | 251,042 | 246,387 | 241,867 | 239,510 | 237,586 | 235,668 | 233,754 | |

Cooling Performance (kW/BTUH) at Various Outdoor Temperatures: CFA Air Conditioners (50 Hz Power Supply, Dual Compressors)

| Model | Return Air DB/WB °F (°C) | Cooling Capacity kW / BTUH | Outdoor Temperature | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|--------------------------|----------------------------|---------------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|---------|
| | | | 75°F (24°C) | | 80°F (27°C) | | 85°F (30°C) | | 90°F (32°C) | | 95°F (35°C) | | 100°F (38°C) | | 105°F (41°C) | | 110°F (43°C) | | 115°F (46°C) | | 120°F (49°C) | | 125°F (52°C) | | 130°F (54°C) | | |
| | | | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | kW | BTUH | |
| CFA3240A | 72/61 (22/16) | Total | 54.5 | 186,093 | 52.6 | 179,639 | 50.8 | 173,364 | 48.9 | 166,910 | 47.0 | 160,456 | 45.1 | 154,002 | 43.2 | 147,547 | 41.4 | 141,273 | 40.4 | 138,046 | 39.5 | 134,819 | 38.6 | 131,592 | 37.6 | 128,364 | |
| | | Sensible | 40.0 | 136,513 | 39.2 | 133,845 | 38.5 | 131,268 | 37.7 | 128,633 | 36.9 | 126,014 | 36.2 | 123,412 | 35.4 | 120,826 | 34.7 | 118,328 | 34.3 | 117,048 | 33.9 | 115,773 | 33.5 | 114,501 | 33.2 | 113,234 | |
| | 76/63 (24/17) | Total | 56.7 | 193,443 | 54.7 | 186,810 | 52.7 | 179,997 | 50.8 | 173,364 | 48.9 | 166,730 | 46.9 | 160,097 | 45.0 | 153,464 | 43.0 | 146,651 | 42.0 | 143,424 | 41.1 | 140,197 | 40.1 | 136,970 | 39.2 | 133,743 | |
| | | Sensible | 43.4 | 148,213 | 42.6 | 145,562 | 41.9 | 142,857 | 41.1 | 140,240 | 40.3 | 137,640 | 39.6 | 135,056 | 38.8 | 132,488 | 38.1 | 129,867 | 37.7 | 128,631 | 37.3 | 127,399 | 37.0 | 126,171 | 36.6 | 124,947 | |
| | 80/67 (27/19) | Total | 60.9 | 207,965 | 58.8 | 200,794 | 56.7 | 193,622 | 54.6 | 186,451 | 52.5 | 179,280 | 50.4 | 172,109 | 48.3 | 164,938 | 46.2 | 157,766 | 45.2 | 154,181 | 44.2 | 150,954 | 43.3 | 147,727 | 42.3 | 144,500 | |
| | | Sensible | 43.1 | 147,217 | 42.4 | 144,547 | 41.6 | 141,895 | 40.8 | 139,260 | 40.0 | 136,642 | 39.3 | 134,042 | 38.5 | 131,458 | 37.8 | 128,892 | 37.4 | 127,614 | 37.1 | 126,469 | 36.7 | 125,326 | 36.4 | 124,187 | |
| | 84/71 (29/22) | Total | 65.2 | 222,486 | 62.9 | 214,777 | 60.7 | 207,248 | 58.5 | 199,539 | 56.2 | 191,830 | 53.9 | 184,121 | 51.7 | 176,412 | 49.5 | 168,882 | 48.3 | 164,938 | 47.4 | 161,711 | 46.4 | 158,484 | 45.5 | 155,256 | |
| | | Sensible | 42.6 | 145,488 | 41.8 | 142,826 | 41.1 | 140,243 | 40.3 | 137,617 | 39.6 | 135,008 | 38.8 | 132,418 | 38.0 | 129,844 | 37.3 | 127,347 | 36.9 | 126,046 | 36.6 | 124,985 | 36.3 | 123,926 | 36.0 | 122,871 | |
| | CFA3300A | 72/61 (22/16) | Total | 75.7 | 258,462 | 73.1 | 249,498 | 70.5 | 240,783 | 67.9 | 231,819 | 65.3 | 222,855 | 62.7 | 213,891 | 60.0 | 204,927 | 57.5 | 196,212 | 56.2 | 191,730 | 54.9 | 187,248 | 53.6 | 182,766 | 52.2 | 178,284 |
| | | | Sensible | 56.5 | 192,780 | 55.4 | 189,139 | 54.4 | 185,618 | 53.3 | 182,017 | 52.3 | 178,435 | 51.2 | 174,874 | 50.2 | 171,332 | 49.2 | 167,908 | 48.7 | 166,154 | 48.2 | 164,405 | 47.7 | 162,660 | 47.1 | 160,921 |
| | | 76/63 (24/17) | Total | 78.7 | 268,671 | 76.0 | 259,458 | 73.2 | 249,996 | 70.5 | 240,783 | 67.9 | 231,570 | 65.2 | 222,357 | 62.5 | 213,144 | 59.7 | 203,682 | 58.4 | 199,200 | 57.1 | 194,718 | 55.7 | 190,236 | 54.4 | 185,754 |
| | | | Sensible | 61.4 | 209,671 | 60.4 | 206,053 | 59.3 | 202,360 | 58.2 | 198,784 | 57.2 | 195,228 | 56.2 | 191,692 | 55.1 | 188,176 | 54.1 | 184,585 | 53.6 | 182,892 | 53.1 | 181,203 | 52.6 | 179,518 | 52.1 | 177,839 |
| 80/67 (27/19) | | Total | 84.6 | 288,840 | 81.7 | 278,880 | 78.8 | 268,920 | 75.9 | 258,960 | 73.0 | 249,000 | 70.0 | 239,040 | 67.1 | 229,080 | 64.2 | 219,120 | 62.7 | 214,140 | 61.4 | 209,658 | 60.1 | 205,176 | 58.8 | 200,694 | |
| | | Sensible | 61.0 | 208,122 | 59.9 | 204,481 | 58.9 | 200,861 | 57.8 | 197,263 | 56.8 | 193,686 | 55.7 | 190,130 | 54.7 | 186,595 | 53.6 | 183,080 | 53.1 | 181,331 | 52.7 | 179,760 | 52.2 | 178,194 | 51.8 | 176,632 | |
| 84/71 (29/22) | | Total | 90.5 | 309,009 | 87.4 | 298,302 | 84.3 | 287,844 | 81.2 | 277,137 | 78.1 | 266,430 | 74.9 | 255,723 | 71.8 | 245,016 | 68.7 | 234,558 | 67.1 | 229,080 | 65.8 | 224,598 | 64.5 | 220,116 | 63.2 | 215,634 | |
| | | Sensible | 60.2 | 205,553 | 59.2 | 201,925 | 58.1 | 198,402 | 57.1 | 194,817 | 56.0 | 191,254 | 55.0 | 187,713 | 54.0 | 184,193 | 53.0 | 180,776 | 52.4 | 178,993 | 52.0 | 177,539 | 51.6 | 176,089 | 51.2 | 174,642 | |
| CFA3360A | | 72/61 (22/16) | Total | 83.3 | 284,308 | 80.4 | 274,448 | 77.6 | 264,861 | 74.7 | 255,001 | 71.8 | 245,141 | 68.9 | 235,280 | 66.0 | 225,420 | 63.2 | 215,833 | 61.8 | 210,903 | 60.4 | 205,973 | 58.9 | 201,043 | 57.5 | 196,112 |
| | | | Sensible | 62.6 | 213,651 | 61.4 | 209,655 | 60.3 | 205,791 | 59.1 | 201,838 | 58.0 | 197,907 | 56.8 | 193,997 | 55.7 | 190,109 | 54.6 | 186,349 | 54.0 | 184,423 | 53.5 | 182,502 | 52.9 | 180,587 | 52.4 | 178,676 |
| | | 76/63 (24/17) | Total | 86.6 | 295,538 | 83.6 | 285,404 | 80.6 | 274,996 | 77.6 | 264,861 | 74.6 | 254,727 | 71.7 | 244,593 | 68.7 | 234,458 | 65.6 | 224,050 | 64.2 | 219,120 | 62.8 | 214,190 | 61.3 | 209,260 | 59.9 | 204,329 |
| | | | Sensible | 68.1 | 232,528 | 67.0 | 228,558 | 65.8 | 224,505 | 64.6 | 220,580 | 63.5 | 216,677 | 62.3 | 212,795 | 61.2 | 208,936 | 60.1 | 204,993 | 59.5 | 203,134 | 59.0 | 201,279 | 58.4 | 199,429 | 57.9 | 197,585 |
| | 80/67 (27/19) | Total | 93.1 | 317,724 | 89.9 | 306,768 | 86.7 | 295,812 | 83.5 | 284,856 | 80.3 | 273,900 | 77.0 | 262,944 | 73.8 | 251,988 | 70.6 | 241,032 | 69.0 | 235,554 | 67.6 | 230,624 | 66.1 | 225,694 | 64.7 | 220,763 | |
| | | Sensible | 67.6 | 230,796 | 66.5 | 226,801 | 65.3 | 222,829 | 64.1 | 218,881 | 63.0 | 214,955 | 61.8 | 211,051 | 60.7 | 207,171 | 59.6 | 203,312 | 59.0 | 201,391 | 58.5 | 199,667 | 58.0 | 197,947 | 57.5 | 196,232 | |
| | 84/71 (29/22) | Total | 99.6 | 339,910 | 96.1 | 328,132 | 92.8 | 316,628 | 89.3 | 304,851 | 85.9 | 293,073 | 82.4 | 281,295 | 79.0 | 269,518 | 75.6 | 258,014 | 73.8 | 251,988 | 72.4 | 247,058 | 70.9 | 242,128 | 69.5 | 237,197 | |
| | | Sensible | 66.8 | 227,942 | 65.6 | 223,961 | 64.5 | 220,096 | 63.3 | 216,162 | 62.2 | 212,252 | 61.1 | 208,365 | 59.9 | 204,501 | 58.8 | 200,750 | 58.2 | 198,793 | 57.8 | 197,197 | 57.3 | 195,604 | 56.8 | 194,016 | |

Electrical Characteristics - Compressor, Fan & Blower Motors: CFA Air Conditioners (Single and Dual Compressors)

| Basic Model | Compressor | | | Outdoor Fan Motor | | | Indoor Blower Motor | | | |
|---------------|------------|--------------|------------------|-------------------|--------------|------------------|---------------------|-------------|------------------|-----------------|
| | Type | Volts-Hz-Ph | RLA ¹ | LRA ² | Volts-Hz-PH | FLA ³ | HP ⁴ | Volts-Hz-PH | FLA ³ | HP ⁴ |
| CFA3240AC - C | Scroll | 208/230-60-3 | 33.3 (66.6) | 239.0 | 460-60-3 | 5.5 (11.0) | 3 1/2 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3300AC - B | | 208/230-60-3 | 51.3 (102.6) | 300.0 | 208/230-60-1 | 6.3 (25.2) | 3/4 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3360AC - B | | 208/230-60-3 | 55.8 (111.6) | 340.0 | 208/230-60-1 | 6.3 (25.2) | 3/4 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3240AD - C | Scroll | 460-60-3 | 17.9 (35.8) | 125.0 | 460-60-3 | 5.5 (11.0) | 3 1/2 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3300AD - B | | 460-60-3 | 23.1 (46.2) | 150.0 | 208/230-60-1 | 6.3 (25.2) | 3/4 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3360AD - B | | 460-60-3 | 26.9 (53.8) | 173.0 | 208/230-60-1 | 6.3 (25.2) | 3/4 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3240AE - C | Scroll | 380-50-3 | 17.9 (35.8) | 125.0 | 400-50-3 | 5.5 (11.0) | 3 1/2 | 380-50-3 | 4.3 (8.6) | 4 |
| CFA3300AE - B | | 380-50-3 | 21.8 (43.6) | 140.0 | 208/230-50-1 | 6.3 (25.2) | 3/4 | 380-50-3 | 4.3 (8.6) | 4 |
| CFA3360AE - B | | 380-50-3 | 25 (50) | 173.0 | 208/230-50-1 | 6.3 (25.2) | 3/4 | 380-50-3 | 4.3 (8.6) | 4 |
| CFA3240AZ - C | Scroll | 575-60-3 | 12.8 (25.6) | 80.0 | 460-60-3 | 5.5 (11.0) | 3 1/2 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3300AZ - B | | 575-60-3 | 19.9 (39.8) | 109.0 | 208/230-60-1 | 6.3 (25.2) | 3/4 | 460-60-3 | 5.2 (10.4) | 4 |
| CFA3360AZ - B | | 575-60-3 | 23.7 (47.4) | 132.0 | 208/230-60-1 | 6.3 (25.2) | 3/4 | 460-60-3 | 5.2 (10.4) | 4 |

¹RLA = Rated Load Amps ²LRA = Locked Rotor Amps ³FLA = Full Load Amps ⁴HP = Horsepower
The 575 volt units will have a step down transformer to accommodate the motors.

Summary Electrical Ratings (Wire and Circuit Breaker Sizing): CFA Air Conditioners (Dual Compressors)

| Electric Heat | | 0 kW | 0 kW | 9.0 kW | 9.0 kW | 15.0 kW | 15.0 kW | 18.0 kW | 18.0 kW |
|---------------|--------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Basic Model | Volts-Hz-Ph | SPPE ³ | | SPPE ³ | | SPPE ³ | | SPPE ³ | |
| | | MCA ¹ | MFS ² | MCA ¹ | MFS ² | MCA ¹ | MFS ² | MCA ¹ | MFS ² |
| CFA3240AC - C | 208/230-60-3 | 126.1 | 150 | 126.1 | 150 | 126.1 | 150 | 126.1 | 150 |
| CFA3300AC - B | | 174.3 | 200 | 174.3 | 200 | 174.3 | 200 | 174.3 | 200 |
| CFA3360AC - B | | 185.5 | 225 | 185.5 | 225 | 185.5 | 225 | 185.5 | 225 |
| CFA3240AD - C | 460-60-3 | 66.2 | 70 | 66.2 | 70 | 66.2 | 70 | 66.2 | 70 |
| CFA3300AD - B | | 80.8 | 90 | 80.8 | 90 | 80.8 | 90 | 80.8 | 90 |
| CFA3360AD - B | | 90.3 | 110 | 90.3 | 110 | 90.3 | 110 | 90.3 | 110 |
| CFA3240AE - C | 380-50-3 | 64.4 | 70 | 64.4 | 70 | 64.4 | 70 | 64.4 | 70 |
| CFA3300AE - B | | 73.9 | 90 | 73.9 | 90 | 73.9 | 90 | 73.9 | 90 |
| CFA3360AE - B | | 81.9 | 100 | 81.9 | 100 | 81.9 | 100 | 81.9 | 100 |
| CFA3240AZ - C | 575-60-3 | 49.1 | 50 | 49.1 | 50 | 49.1 | 50 | 49.1 | 50 |
| CFA3300AZ - B | | 68.2 | 80 | 68.2 | 80 | 68.2 | 80 | 68.2 | 80 |
| CFA3360AZ - B | | 77.7 | 90 | 77.7 | 90 | 77.7 | 90 | 77.7 | 90 |

¹MCA = Minimum Circuit Ampacity (Wiring Size Amps) ²MFS = Maximum Fuse or HACR Breaker Size
³SPPE = Single Point Power Entry

MCA & MFS are calculated at 230 volts on the "A" & "C" models and 460v on the "D" mode. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

Summary Electrical Ratings With Electric Re-Heat (Wire and Circuit Breaker Sizing): CFA Air Conditioner (Dual Compressors)

| Electric Heat | | 0 kW | 0 kW | 9.0 kW | 9.0 kW | 15.0 kW | 15.0 kW | 18.0 kW | 18.0 kW |
|---------------|--------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|
| Basic Model | Volts-Hz-Ph | SPPE ³ | | SPPE ³ | | SPPE ³ | | SPPE ³ | |
| | | MCA ¹ | MFS ² | MCA ¹ | MFS ² | MCA ¹ | MFS ² | MCA ¹ | MFS ² |
| CFA3240AC - C | 208/230-60-3 | 126.1 | 150 | 153.1 | 175 | 171.2 | 175 | 180.2 | 200 |
| CFA3300AC - B | | 174.3 | 200 | 201.3 | 225 | 219.4 | 225 | 228.4 | 250 |
| CFA3360AC - B | | 185.5 | 225 | 212.6 | 225 | 230.6 | 250 | 239.6 | 250 |
| CFA3240AD - C | 460-60-3 | 66.2 | 70 | 79.7 | 90 | 88.7 | 90 | 93.2 | 100 |
| CFA3300AD - B | | 80.8 | 90 | 94.3 | 100 | 103.3 | 110 | 107.8 | 110 |
| CFA3360AD - B | | 90.3 | 110 | 103.8 | 110 | 112.8 | 125 | 117.3 | 125 |
| CFA3240AE - C | 380-50-3 | 64.4 | 70 | 80.6 | 90 | 91.4 | 100 | 96.8 | 100 |
| CFA3300AE - B | | 73.9 | 90 | 90.1 | 100 | 101.0 | 110 | 106.4 | 110 |
| CFA3360AE - B | | 81.9 | 100 | 98.1 | 110 | 109.0 | 110 | 114.4 | 125 |
| CFA3240AZ - C | 575-60-3 | 49.1 | 50 | 60.4 | 70 | 67.9 | 70 | 71.7 | 80 |
| CFA3300AZ - B | | 68.2 | 80 | 79.4 | 90 | 87.0 | 90 | 90.7 | 100 |
| CFA3360AZ - B | | 77.7 | 90 | 88.9 | 100 | 96.5 | 110 | 100.2 | 110 |

¹MCA = Minimum Circuit Ampacity (Wiring Size Amps)

²MFS = Maximum Fuse or HACR Breaker Size

³SPPE = Single Point Power Entry

MCA & MFS are calculated at 230 volts on the "A" & "C" models and 460v on the "D" mode. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

Unit Load Amps - CFA Air Conditioners (Dual Compressors)

| Basic Model Number | Volts-Hz-Ph | Current Amps | | Load of Resistive Heating - Elements Only (Amps) | | | Total Maximum Heating Amps | | |
|--------------------|--------------|-----------------|------------------|--|-------|-------|----------------------------|-------|-------|
| | | AC ¹ | IBM ² | 9 kW | 15 kW | 18 kW | 9 kW | 15 kW | 18 kW |
| CFA3240AC - C | 208/230-60-3 | 109.4 | 10.4 | 21.7 | 36.1 | 43.3 | 32.1 | 46.5 | 53.7 |
| CFA3300AC - B | | 148.6 | 10.4 | 21.7 | 36.1 | 43.3 | 32.1 | 46.5 | 53.7 |
| CFA3360AC - B | | 157.6 | 10.4 | 21.7 | 36.1 | 43.3 | 32.1 | 46.5 | 53.7 |
| CFA3240AD - C | 460-60-3 | 57.2 | 5.2 | 10.8 | 18.0 | 21.7 | 16.0 | 23.2 | 26.9 |
| CFA3300AD - B | | 69.2 | 5.2 | 10.8 | 18.0 | 21.7 | 16.0 | 23.2 | 26.9 |
| CFA3360AD - B | | 76.8 | 5.2 | 10.8 | 18.0 | 21.7 | 16.0 | 23.2 | 26.9 |
| CFA3240AE - C | 380-50-3 | 55.4 | 4.3 | 13.0 | 21.7 | 26.0 | 17.3 | 26.0 | 30.3 |
| CFA3300AE - B | | 63.0 | 4.3 | 13.0 | 21.7 | 26.0 | 17.3 | 26.0 | 30.3 |
| CFA3360AE - B | | 69.4 | 4.3 | 13.0 | 21.7 | 26.0 | 17.3 | 26.0 | 30.3 |
| CFA3240AZ - C | 575-60-3 | 42.7 | 4.2 | 9.0 | 15.1 | 18.1 | 13.2 | 19.2 | 22.2 |
| CFA3300AZ - B | | 58.2 | 4.2 | 9.0 | 15.1 | 18.1 | 13.2 | 19.2 | 22.2 |
| CFA3360AZ - B | | 65.8 | 4.2 | 9.0 | 15.1 | 18.1 | 13.2 | 19.2 | 22.2 |

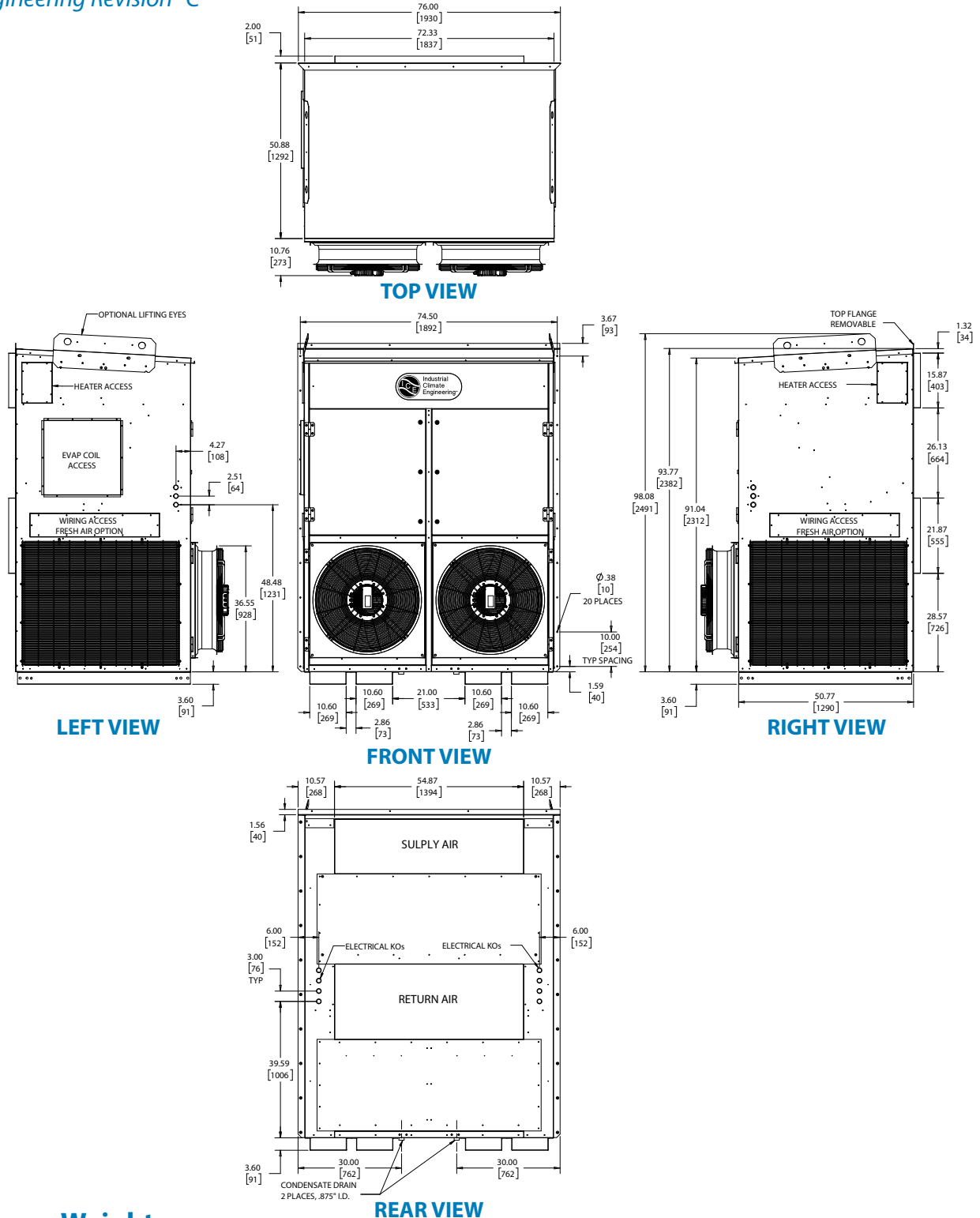
¹AC = Air Conditioner Unit Amps

²IBM = Indoor Blower Motor

Heating kW is rated at 240 volts on the ACA & ACC models. Derate heater output by 25% for operation at 208 volts. Heating kW is rated at 480 volts on the ACD models. Total heating and cooling amps includes all motors. Three phase models contain single phase motor loads. Loads are not equally balanced on each phase and values shown are maximum phase loads.

Dimensional Data: CFA3240 - Top Supply/Center Return

Engineering Revision "C"



Weight

| | LBS/KGS |
|---------|-----------|
| CFA3240 | 2523/1148 |



CFA3240 units require additional support if wall mounted. The mounting flanges alone are not adequate.

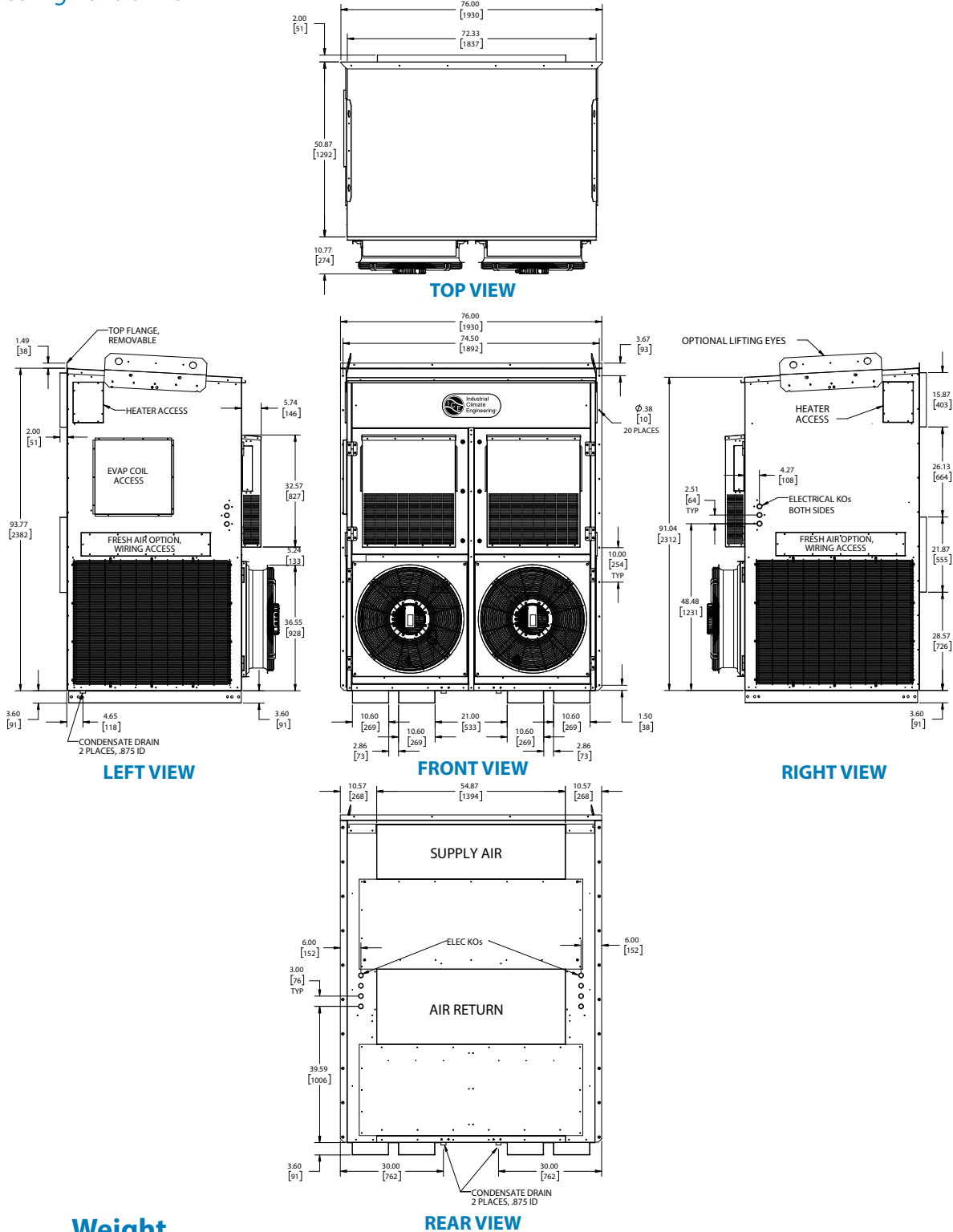
Filter Size

| CFA3240 | INCHES | MILLIMETERS | PART NUMBER | FILTERS PER UNIT | MERV RATING |
|--|-------------|----------------|-------------|------------------|-------------|
| ¹ Exterior Access Return Air Filter | 25 x 16 x 2 | 635 x 406 x 51 | 80137 | 4 | 8 (STD) |
| ² Interior Access Return Air Filter | 24 x 18 x 2 | 610 x 457 x 51 | 81257 | 4 | 8 (STD) |

¹Standard Configuration ²Optional (can not be combined)
Note: All overall outside dimensions are given with +/- .250" (6mm) tolerance.

Dimensional Data: CFA3240 - Top Supply/Center Return w/Economizer

Engineering Revision "C"



Weight

| | LBS/KGS |
|---------|-----------|
| CFA3240 | 2663/1208 |



CFA3240 units require additional support if wall mounted. The mounting flanges alone are not adequate.

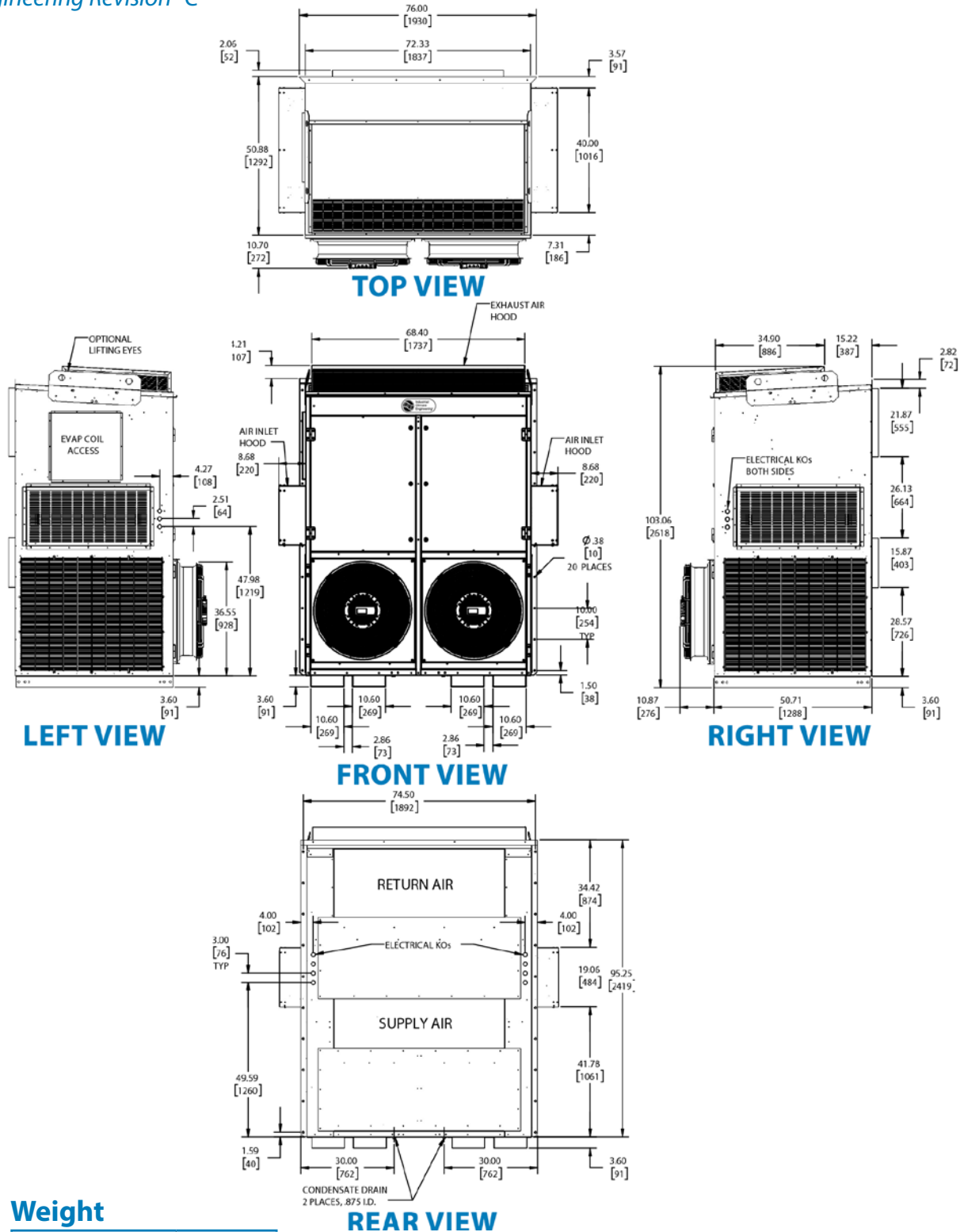
Filter Size

| CFA3240 | INCHES | MILLIMETERS | PART NUMBER | FILTERS PER UNIT | MERV RATING |
|--|----------------|----------------|-------------|------------------|-------------|
| ¹ Exterior Access Return Air Filter | 25 x 16 x 2 | 635 x 406 x 51 | 80137 | 4 | 8 (STD) |
| ² Interior Access Return Air Filter | 24 x 18 x 2 | 610 x 457 x 51 | 81257 | 3 | 8 (STD) |
| Fresh Air Hood Pre-filters | 26" x 12" x 1" | 660 x 305 x 25 | 92526 | 2 | N/A |

¹Standard Configuration ²Optional (can not be combined) **Note:** All overall outside dimensions are given with +/- .250" (6mm) tolerance.

Dimensional Data: CFA3240 - Center Supply/Top Return w/Economizer

Engineering Revision "C"



Weight

| | LBS/KGS |
|---------|-----------|
| CFA3240 | 2345/1063 |



CFA3240 units require additional support if wall mounted. The mounting flanges alone are not adequate.

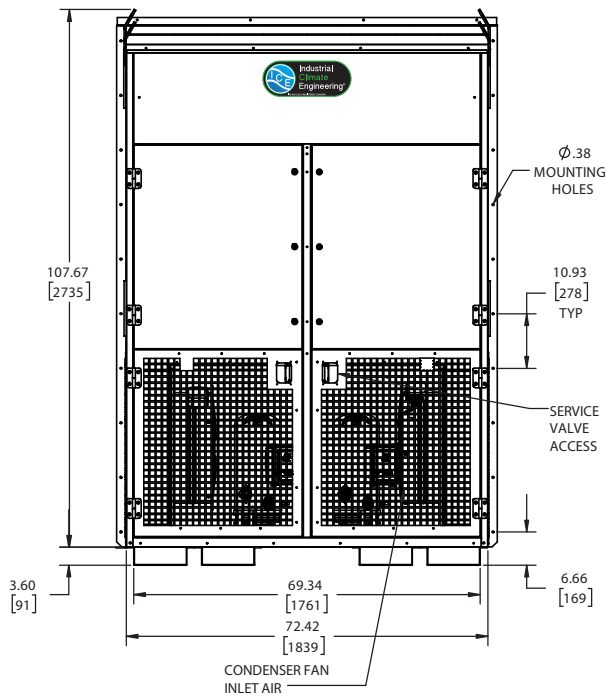
Filter Size

| CFA3240 | INCHES | MILLIMETERS | PART NUMBER | FILTERS PER UNIT | MERV RATING |
|-----------------------------------|---------------------|----------------|-------------|------------------|-------------|
| Interior Access Return Air Filter | 24 x 18 x 2 | 610 x 457 x 51 | 81257 | 3 | 8 (STD) |
| Mist Eliminator Filter | 15 5/8 x 24 5/8 x 1 | 397 x 625 x 25 | 92971 | 4 | N/A |
| Fresh Air Hood Pre-filters | 14 x 32 x 1 | 356 x 813 x 25 | 93187 | 2 | N/A |

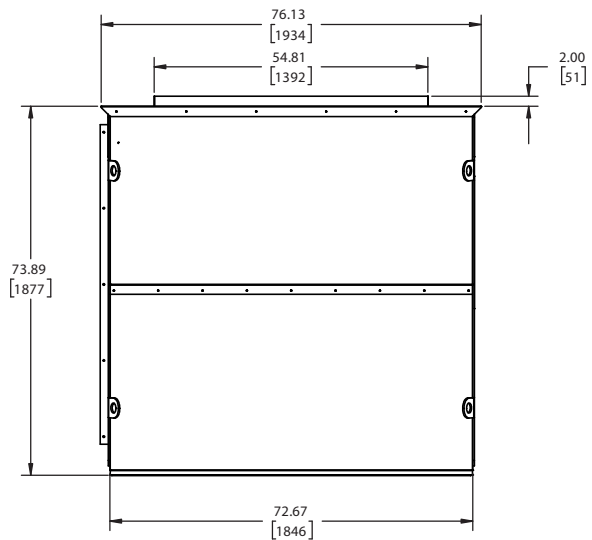
Note: All overall outside dimensions are given with +/- .250" (6mm) tolerance.

Dimensional Data: CFA3300/3360 - Top Supply/Center Return

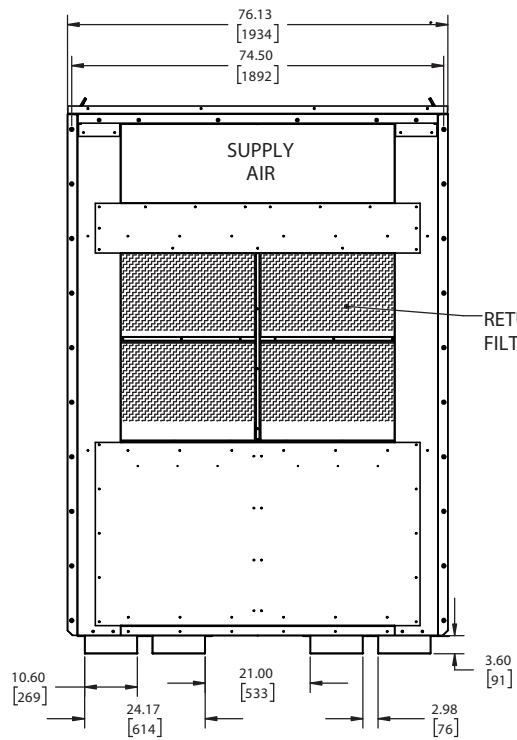
Engineering Revision "B"



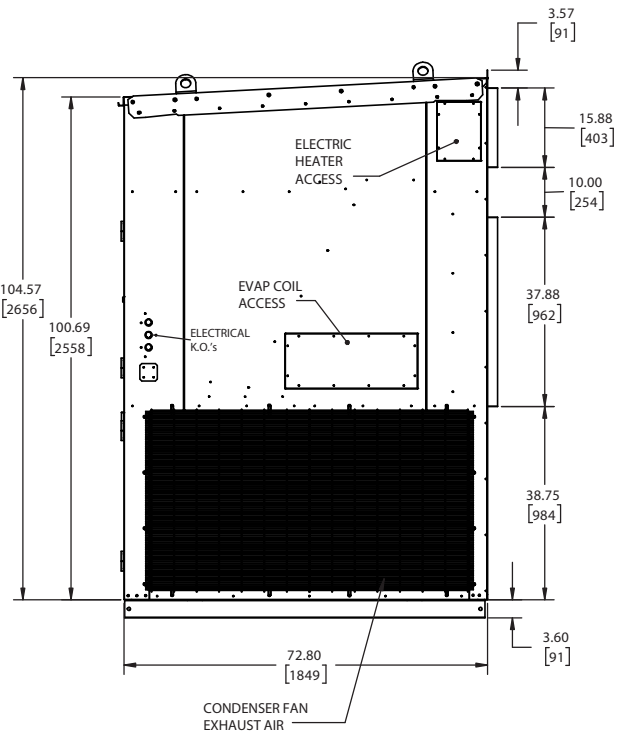
FRONT VIEW



TOP VIEW



REAR VIEW



RIGHT VIEW

Weight

| | LBS/KGS |
|----------------|-----------|
| CFA3360 | 3055/1386 |



CFA3300 & 3360 units require additional support if wall mounted. The mounting flanges alone are not adequate.

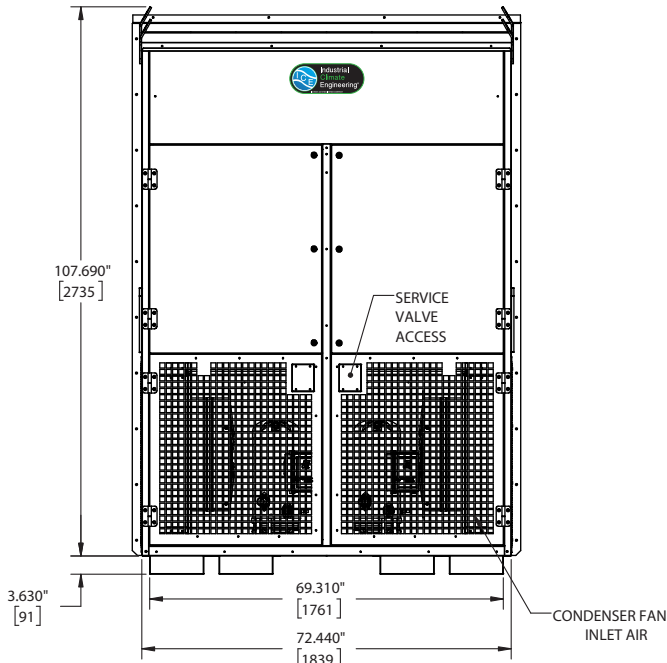
Filter Size

| CFA3360 | INCHES | MILLIMETERS | PART NUMBER | FILTERS PER UNIT | MERV RATING |
|------------------------------------|-------------|----------------|-------------|------------------|-------------|
| Interior Access Return Air Filter | 30 x 20 x 2 | 762 x 508 x 51 | 92545 | 4 | N/A |
| Fresh Air Filter (Economizer Only) | 15 x 26 x 1 | 381 x 660 x 25 | 92982 | 2 | 8 (STD) |

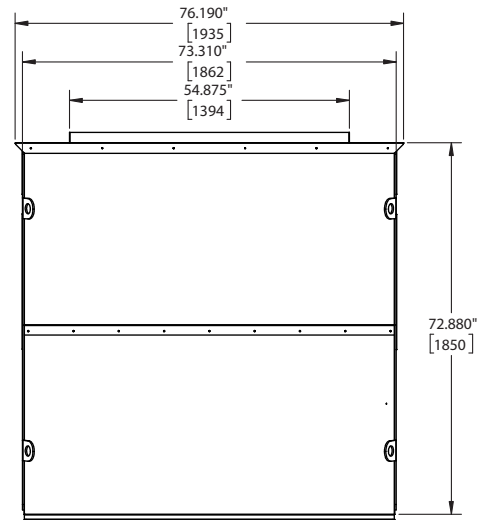
Note: All overall outside dimensions are given with +/- .250" (6mm) tolerance.

Dimensional Data: CFA3300/3360 - Center Supply/Top Return

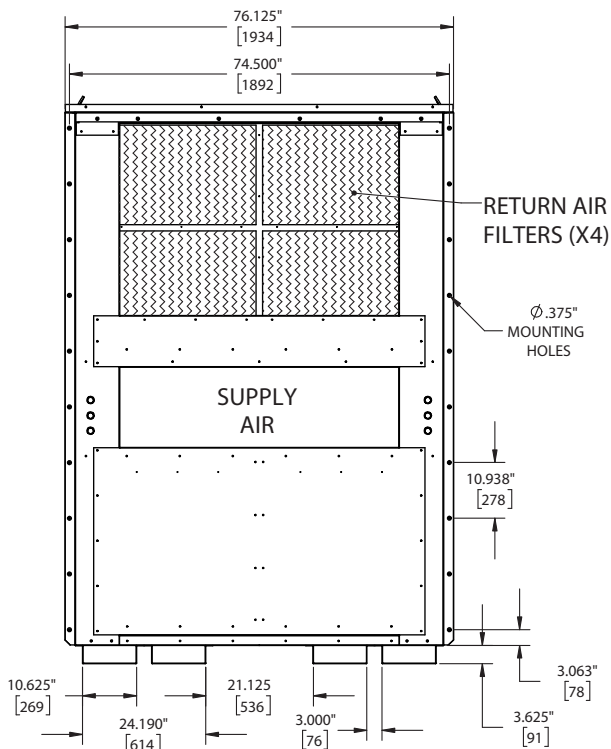
Engineering Revision "B"



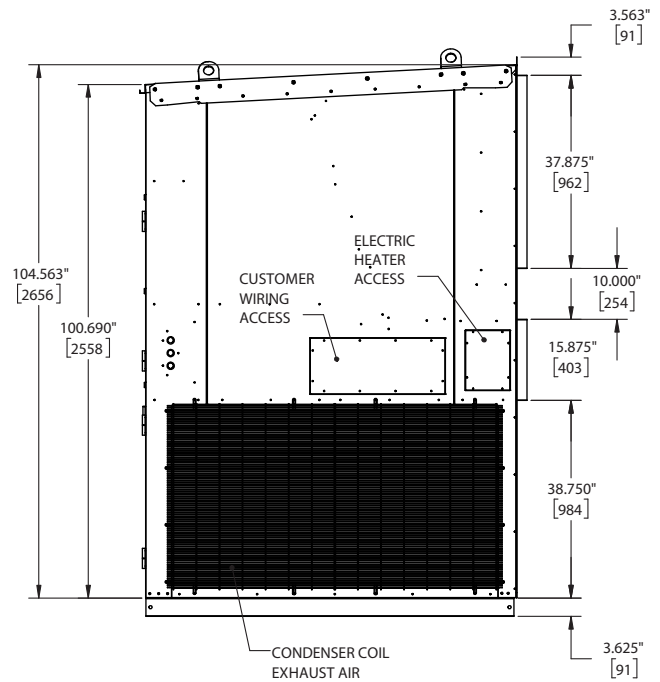
FRONT VIEW



TOP VIEW



REAR VIEW



RIGHT VIEW

Weight

| | LBS/KGS |
|--------------|-----------|
| CFA3300/3360 | 3055/1386 |



CFA3300 & 3360 units require additional support if wall mounted. The mounting flanges alone are not adequate.

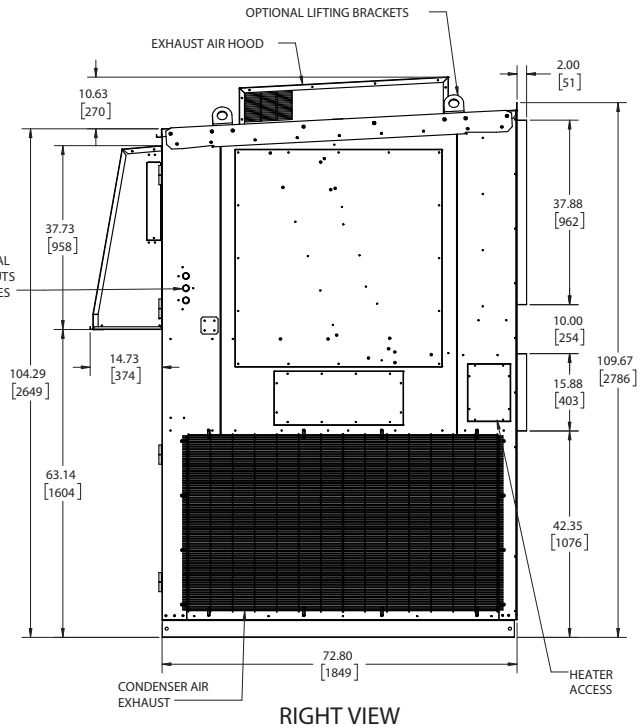
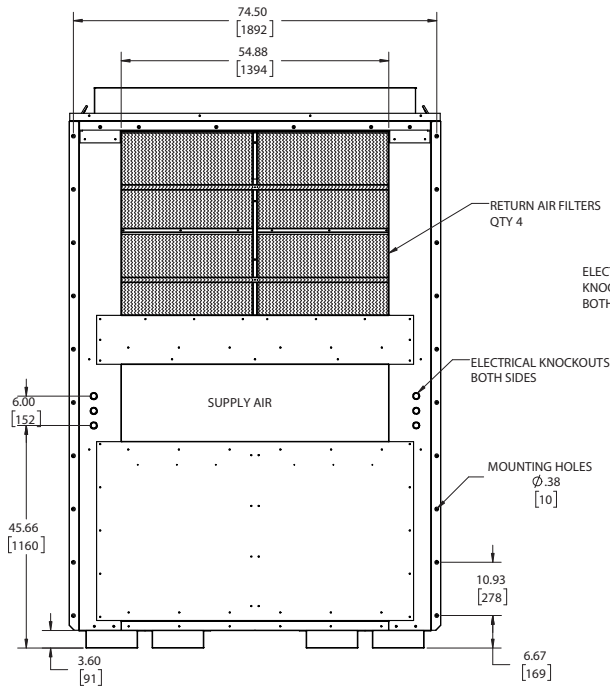
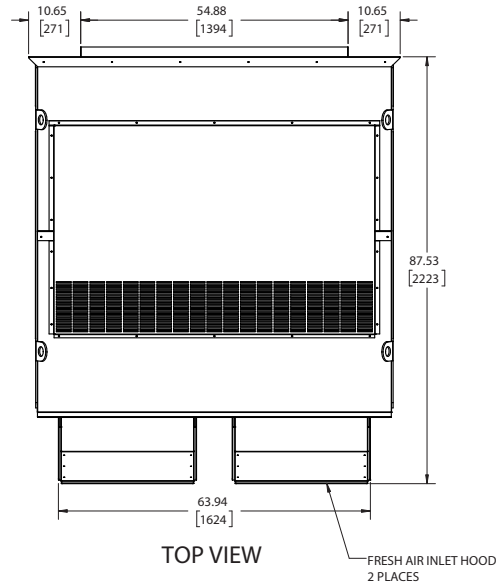
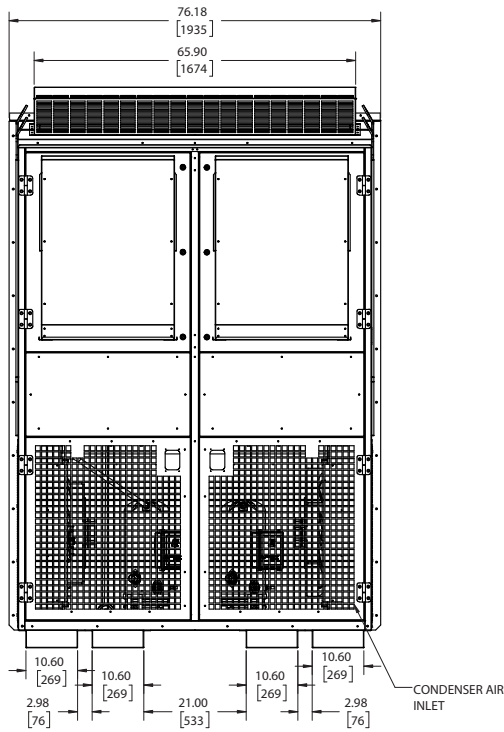
Filter Size

| CFA3300/3360 | INCHES | MILLIMETERS | PART NUMBER | FILTERS PER UNIT | MERV RATING |
|-----------------------------------|-------------|------------------|-------------|------------------|-------------|
| Interior Access Return Air Filter | 30 x 20 x 2 | 762 x 508 x 51 | 92545 | 4 | N/A |
| Mist Eliminator Filter | 33 x 40 x 2 | 838 x 1,016 x 51 | 93269 | 2 | N/A |

Note: All overall outside dimensions are given with +/- .250" (6mm) tolerance.

Dimensional Data: CFA3300/3360 - Center Supply/Top Return w/Economizer

Engineering Revision "B"



Weight

REAR VIEW

| | LBS/KGS |
|--------------|-----------|
| CFA3300/3360 | 3150/1429 |



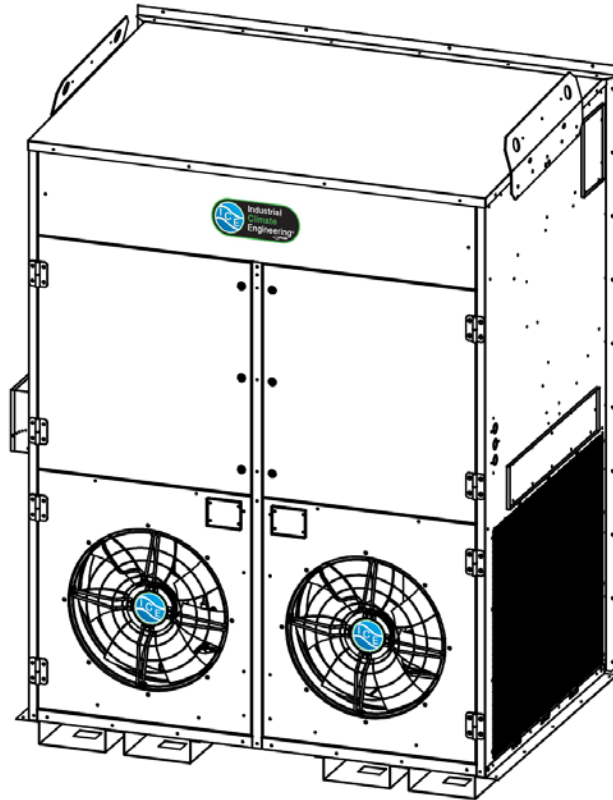
CFA3300 & 3360 units require additional support if wall mounted. The mounting flanges alone are not adequate.

Filter Size

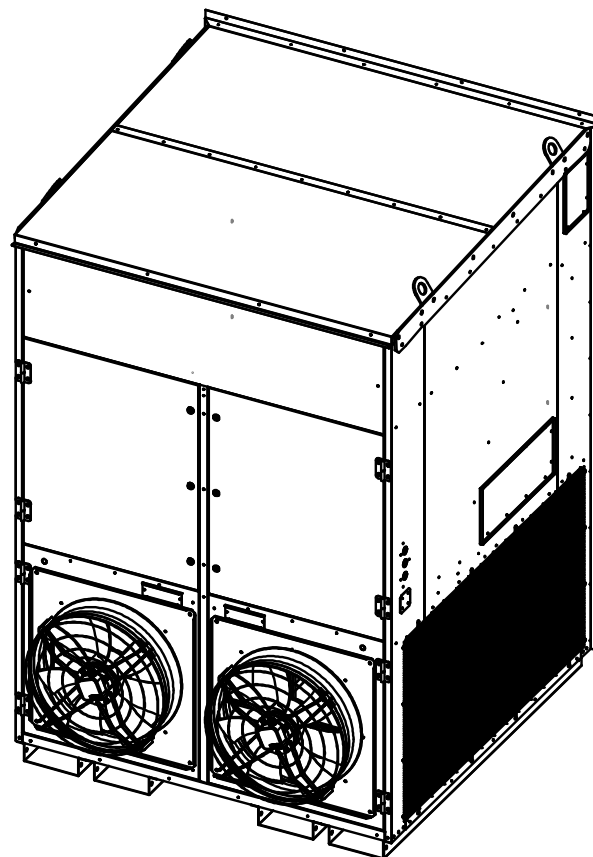
| CFA3300/3360 | INCHES | MILLIMETERS | PART NUMBER | FILTERS PER UNIT | MERV RATING |
|-----------------------------------|-------------|----------------|-------------|------------------|-------------|
| Interior Access Return Air Filter | 20 x 30 x 2 | 508 x 762 x 51 | 92545 | 4 | N/A |
| Mist Eliminator Filter | 15 x 26 x 1 | 381 x 660 x 25 | 92982 | 2 | N/A |

Note: All overall outside dimensions are given with +/- .250" (6mm) tolerance.

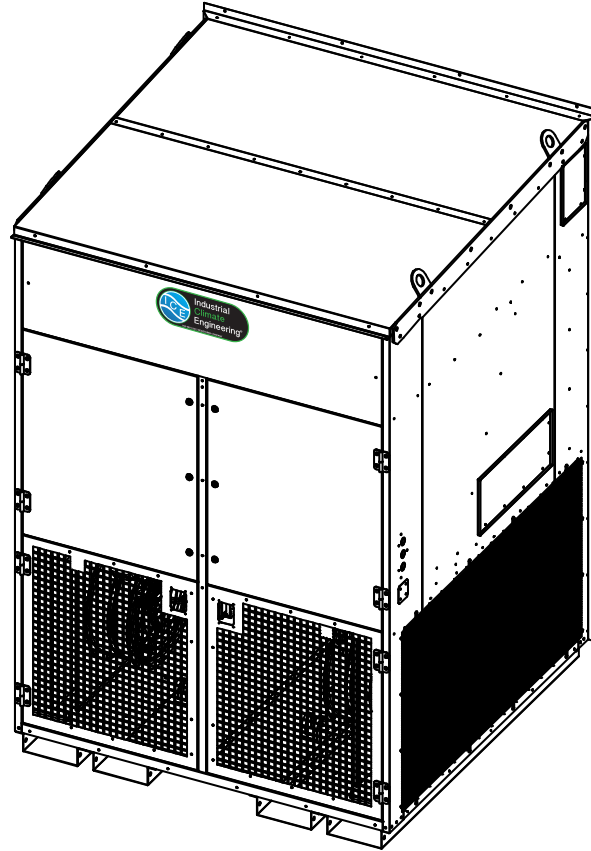
CFA3240 Isometric View



CFA3300 Isometric View



CFA3360 Isometric View



Please consult the Industrial Climate Engineering website at www.acice.com for the latest product literature. Detailed dimensional data is available upon request. A complete warranty statement can be found in each product's Installation/Operation Manual, on our website. As part of the ICE continuous improvement program, specifications are subject to change without notice.



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