

ICExp™

Increased Safety for Hazardous Locations

Certified. Not Modified.



EXNA/EONA12-72 and EXNDA/EONDA90-240 12,000 BTUH (3.5Kw) to 240,000 BTUH (70.3Kw) Increased Safety Vertical Wall Mount Air Conditioners



EXNA60

General Description

The old approach to HVAC Safety in hazardous locations was to contain standard components in a big, heavy and expensive enclosure. The ICExp solution by Industrial Climate Engineering is designed to prevent an explosion by only using the latest technology in non-arcing components installed in our smaller and lighter NEC approved increased safety enclosure.

EXNA models are certified for use in Class I Division 2 outdoor/indoor environments, while EONA models are certified for use in Class I Division 2 outdoor environments with general purpose indoor environments.

Using this new and innovative strategy allows a more integrated, compact and reliable installation. And at a lower cost than previously possible.

Industrial Climate Engineering's third-party certified ICExp air conditioners are used primarily to cool buildings in Class I, Division II hazardous locations. ICExp increased safety air conditioners are available in capacities and configurations which can be used to cool equipment or people-occupied spaces. All models use the non-ozone depleting R-410A refrigerant.

ICExp 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. All models except the EXNA/EONA12 feature a scroll compressor which ensures years of dependable service even in the harshest of operating conditions. EXNA/EONA12 models feature a rotary compressor.

When outside air is required to provide pressurization, optional intake stacks 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.

- **ICExp EXNA/EONA12-72** Features & Benefits..... Page 5
- **ICExp EXNDA/EONDA90-240** Features & Benefits..... Page 6

Hazardous Location Certified

The ICExp EXNA/EONA air conditioners are built to UL standard 1995, current edition and CAN/CSA C22.2, No. 236-11. The units are tested in accordance to the ASHRAE standard and are Safety Certified by an internationally recognized leader in explosion proof certification. All EXNA models are ETL listed. EONA models are pending.

National Electric Code (NEC):
Class I, Division 2 – Group A, B, C, D
Temp Code T3



Features and Benefits

Certified. Not Modified.

- NEMA-4, IP65 Rated Increased Safety Enclosure
- Cable Raceways Inside Electrical Box
- Solid State Non-Arcing Electrical Controls
- Programmable Logic Controller (PLC)
- Non-Arcing Fan & Blower Motors
- Aluminum Condenser Fan & Indoor Blower Wheels
- All Wiring Outside Control Box Covered in Protective Sheathing
- Retaining Clip On Compressor Electrical Connection
- External Fault Indicator LED

Options

- Corrosion Resistant Coating On Condenser and Evaporator Coils
- 316 Stainless Steel Cabinet
- Room Pressurization



ICExp Increased Safety Features and Benefits

- Increased Safety Certified by an internationally recognized third party leader in explosion proof certification (*pending*)



National Electric Code (NEC):

Class I, Division 2 – Group A, B, C, D, Temp Code T3

- Available from 12,000 BTUH (3.5Kw) to 240,000 BTUH (70Kw)

- NEMA-4, IP65 Rated Increased Safety Enclosure**
Compact & less expensive enclosure for electrical components
- Cable Raceways Inside Electrical Box**
Neater and easier to trace wiring installation
- Solid State Non-Arcing Electrical Controls**
IEC IP20 "Finger Safe" with no moving parts, relays, or contactors
- Programmable Logic Controller (PLC)**
Solid state construction for safe and reliable operation
- Non-Arcing Fan & Blower Motors**
Sparkproof motor with overtemperature protection
- Aluminum Condenser Fan & Indoor Blower Wheels**
Will not create a spark if damaged or dislodged
- All Wiring Outside Control Box Covered in Protective Sheathing**
Prevents potential short circuits caused by chaffing
- Retaining Clip On Compressor Electrical Connection**
Can't vibrate loose and create a spark
- External Fault Indicator LED**
Flashing sequences indicate faults from outside of unit

Options

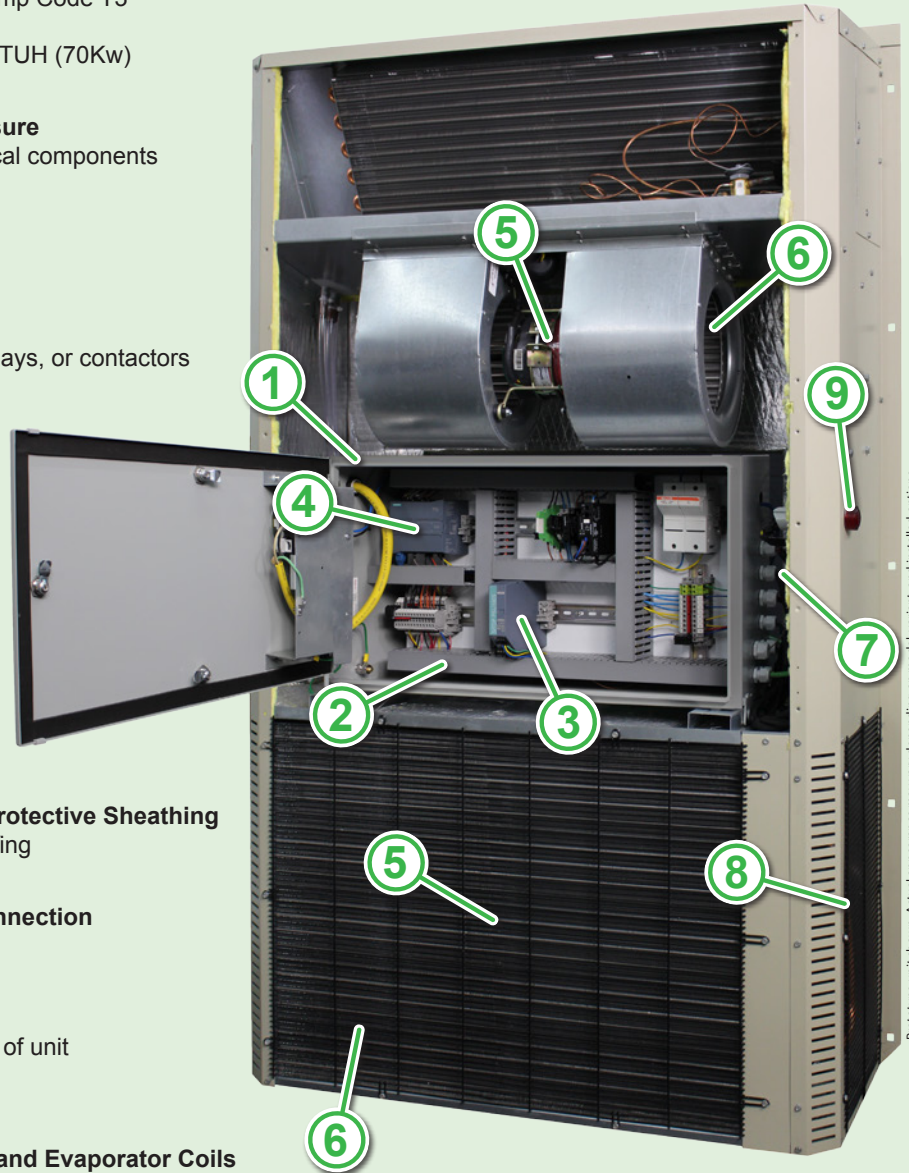
Corrosion Resistant Coating On Condenser and Evaporator Coils

Resists harsh environments to extend component life and efficiency

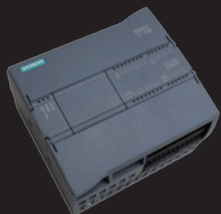
316 Stainless Steel Cabinet

Additional protection against harsh or corrosive environments

Electric Heat



Prototype unit shown. Actual appearance may vary depending on model, variant, and installed options.



Solid State PLC
Non-Arcing &
Reliable Operation



**Non-Arcing Fan &
Blower Motors**
Sparkproof Motor Protection



**Aluminum Fans
& Blower Wheels**
Prevents Sparking



Compressor Retainer Clip
Connector Can't Loosen
to Create a Spark



External Fault LED
Diagnose Faults from
Outside of Cabinet

Options

The ICExp air conditioners were designed and are built to stringent requirements of the electronic shelter. Applications occur that have special requirements. Numerous options are available for the air conditioners that meet these special needs.

► Protective Coating Packages

Two corrosion protection packages are offered - one for the condenser section (Coastal Environmental Package) and the other for the entire unit (Coat-All Package).

The Coastal Environmental Package includes:

- Corrosion resistant fasteners
- Sealed or partially sealed condenser fan motor
- Protective coating applied to all exposed internal copper and metal in the condenser section
- Protective coating on the condenser coil (Luvata Insitu®) contains ES2 (embedded stainless steel pigment) technology.

The Coat all Package includes all of the above, plus:

- Protective coating on the evaporator coil (Luvata Insitu®) contains ES2 (embedded stainless steel pigment) technology
- Protective coating on exterior and interior components and sheet metal.

Notes:

- The insulated internal sheet metal and the NEMA-4 Controls Enclosure are not coated
- The EXNA/EONA12 is available with the protective coatings and corrosion resistant fasteners, but does not have a sealed condenser fan motor.

► Color

ICE air conditioners are available in two cabinet colors - beige and gray (standard). The standard cabinet sides, top and front panels are constructed of 16 gauge painted steel. Contact your sales representative for color chips, custom colors and 316 stainless steel cabinets.

► Dirty Filter Indicator

A factory installed option that measures the difference in pressure across the internal filter and illuminates an LED or sends and alarm to a remote monitor/location when the pressure exceeds the desired difference.

► Filter Access From Return Air Grille

Factory or field installed filter bracket allows access to the filters from the return air grille. See model ID, special option code "I" (Standard on 1 ton - 6 ton models).

► Reverse Air Flow Configuration (90–240 Models)

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

► Room Pressurization

Preconfigured for 0.1" positive room pressure. EXNA/EONA air conditioners equipped with the optional pressurization module ship as a fully assembled unit.

► Fire Dampers

Return and/or supply fire dampers are available in a variety of configurations and sizes. Consult your sales representative for additional information.

Programmable Logic Controller (PLC)

The ICExp unit uses a factory installed PLC along with a touch screen interface to control 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 ICExp 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.

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



External LED Indicator Lights

Blink Count	Description
1	(HPS-A) High pressure switch has opened during call for cooling
2	(LPS-A) Low pressure switch has opened during call for cooling
3	(HPS-B) High pressure switch has opened during call for cooling (Dual Compressor)
4	(LPS-B) Low pressure switch has opened during call for cooling (Dual Compressor)
5	(PMF) Phase monitor fault has detected a phase fault (used only on 3 phase electrical systems)
6	(IBM-A) Indoor blower motor has faulted (only on EXNA/EONA90 – 240 units)
7	(OFM-A) Outdoor fan motor has faulted (only on EXNA/EONA90 – 240 units)
8	(IBM-B) Indoor blower motor has faulted (only on EXNA/EONA180 – 240 units)
9	(OFM-B) Outdoor fan motor has faulted (only on EXNA/EONA180 – 240 units)

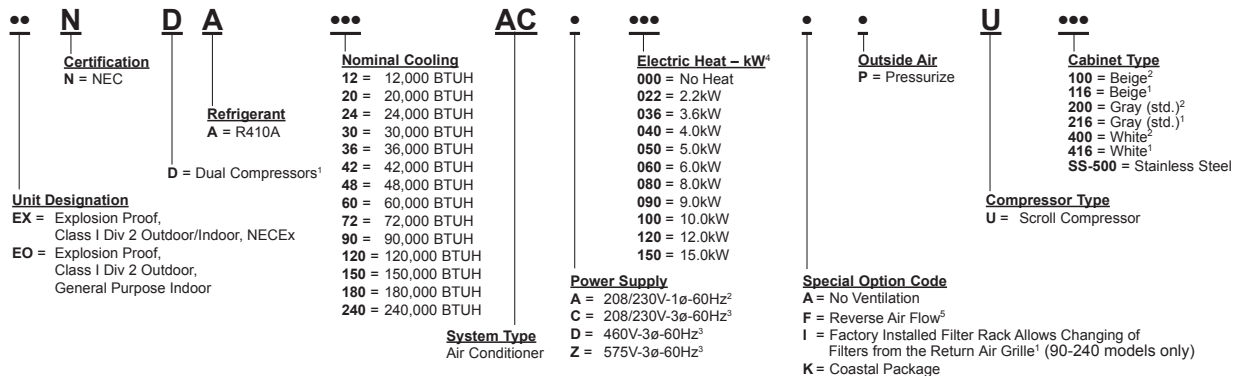
► Modes of Operation

Normal Start-up: On a call for cooling, and with the high pressure switch closed, the cooling system (compressor, indoor blower motor and outdoor fan motor) will be energized. (Note: See the Delay on Make feature). The cooling system will remain energized during the three minute low pressure switch bypass cycle. If the low pressure is closed, the cooling system will continue to operate after the three-minute bypass. If the low pressure switch is open after the three-minute bypass, the cooling system will be de-energized.

Lockout Mode: If either the high or low pressure switch opens on the same call for cooling, the PLC system enters into and indicates the lockout mode. In the lockout mode, the compressor is turned off, the alarm output is energized and the status LED's will blink to indicate which fault has occurred. If there is a call for air flow, the indoor blower will remain energized. When the lockout condition has cleared, the unit will reset if the demand of the thermostat is removed or when power is reset. The lockout circuit has a 3-second delay to prevent premature activation and is factory wired for normally open contacts. The user can select either normally closed or normally open remote alarm dry contacts.

Delay on Make: On initial power up or on resumption of power, the air conditioner will wait 3 minutes from a call for cooling before allowing the contactor to energize.

Model Identification



¹Applies to 90–240 models

²Applies to 12-72 models only

³Three wire

⁴Electric heat only available for EONA General Purpose/Ordinary location Indoor Environment. Not all heat options are available for all models. See Electrical Data tables.

⁵The standard configuration is with the supply (conditioned) air at the top of the unit and the return air below it. In the reverse air flow configuration, the return is at the top and the supply air below it. Available only on 90–240 models.

ICExp EXNA/EONA12-72 Standard Features & Benefits

- **Designed for Operation in a Wide Range of Ambient Conditions**
 - Low ambient control cycles the condenser fan to maintain proper refrigerant pressures. This allows operation of mechanical cooling (compressor) in ambient temperatures as low as 0°F (-18°C) with EXNA/EONA20-72 models. The low temperature for the EXNA/EONA12 is 20°F (-7°C). Note: low temperature operation is affected by ambient conditions, e.g. wind and humidity.
 - Operation in low/high ambient conditions from 0°F (-18°C) to 131°F (55°C) for EXNA/EONA20-72 models, and 20°F (-7°C) to 120°F (49°C) for the EXNA/EONA12.
 - Three minute by-pass of the low pressure switch for start-up of compressor when outdoor temperatures are below 55°F (13°C).
- **High Efficiency**
 - High efficiency compressor.
 - Lanced fins standard on all evaporator and condenser coils.
- **Remote Alarm Capability**
 - Dry contacts can be used for remote alarm or notification upon air conditioner lockout.
- **Built-in Reliability**
 - High pressure switch and low pressure switch with lockout protects refrigerant circuit.
 - 3 minute delay on make for short cycle protection.
 - Internal motor overtemperature protection on the evaporator motor, condenser motor and compressor.
- **Ease of Service**
 - 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.
 - External LED indicates operational status and fault conditions.
 - Foil backed insulation on the indoor air path.
- **Rugged Construction**
 - Copper tube, aluminum fin evaporator & condenser coils.
 - Baked on gray finish over galvanized steel for maximum cabinet life. (Other finishes are available.)
- **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 return openings exactly match previous models.
 - Factory installed disconnect on all units.
 - Single Point Power Entry complies with latest edition of U.L. Standard 1995.

ICExp EXNA/EONA12-72 Accessories

➤ Supply Grilles

For EXNA/EONA12 - 17" x 5" (432 mm x 127 mm).....	P/N 80682
For EXNA/EONA20/24 - 20" x 8" (508 mm x 203 mm).....	P/N 80674
For EXNA/EONA30/36 - 28" x 8" (711 mm x 203 mm).....	P/N 80675
For EXNA/EONA42/48/60/72 - 30" x 10" (762 mm x 254 mm).....	P/N 80676

➤ Return Filter Grilles

Note: Filter used in Return Filter Grille is 1" (25 mm) thick. Filter is not included with Grille, except for EXNA/EONA12.

For EXNA/EONA12 - 17" x 10" (432 mm x 254) Includes Washable Filter	P/N 80683
For EXNA/EONA20/24 - 20" x 12" (508 mm x 305 mm).....	P/N 80671
For EXNA/EONA30/36 - 28" x 14" (711 mm x 356 mm).....	P/N 80672
For EXNA/EONA42/48/60/72 - 30" x 16" (762 mm x 406 mm).....	P/N 80673

➤ Return Air Filters

For EXNA/EONA12 - 16½" x 9½" (419 mm x 241 mm) Optional Activated Charcoal Filter.....	P/N 93216
For EXNA/EONA20/24 - 19½" x 11½" (495 mm x 292 mm)	P/N 91983
Optional Activated Charcoal Filter.....	P/N 91994
For EXNA/EONA30/36 - 27½" x 13½" (699 mm x 343 mm)	P/N 80769
Optional Activated Charcoal Filter.....	P/N 92988
For EXNA/EONA42/48/60/72 - 29½" x 15½" (749 mm x 394 mm)	P/N 80140
Optional Activated Charcoal Filter.....	P/N 92979

ICExp EXNDA/EONDA90-240 Standard Features & Benefits

- **Designed for Operation in High and Low Ambient Conditions**
 - Hot gas bypass valve provides for precise capacity control in the cooling mode and to protect against coil freeze up during low load conditions.
 - Three minute by-pass of the low pressure switch for start-up of compressor when outdoor temperatures are below 55°F (13°C).
 - Standard low/high ambient conditions operation from 0°F (-17.8°C) to 131°F (55°C).
- **High Efficiency**
 - Aluminum saw tooth blades on condenser fan deliver both excellent efficiency and extremely quiet operation.
 - Aerodynamically efficient and compact direct drive backward inclined motorized impeller evaporator motor eliminates belts and pulleys and provides excellent air flow.
 - 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.
 - All 90-240 models feature dual compressors
- **Built-in Reliability**
 - High pressure switch and low pressure switch with lockout protects refrigerant circuit.
 - 3 minute delay on make for short cycle protection.
 - Internal motor overtemperature protection 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.
- **Ease of Installation**
 - Sloped top with flashing eliminates need of rainhood.
 - Built-in mounting flanges facilitate installation and minimize chance of water leaks.
 - Supply air and return openings match many competitive models.
 - Factory installed disconnect on all units.
 - Stainless Steel side plates with lifting eyes provide safe and secure method for lifting the unit.
- **Rugged Construction**
 - Copper tube, aluminum fin evaporator & condenser coils.
 - Baked on neutral gray finish over galvalume steel for maximum cabinet life. (Other finishes are available.)
- **Ease of Service**
 - EXNDA90/120/150 - the upper panel opens to either the left or the right to facilitate access to the control box and the evaporator motor and coil. This panel can also be easily removed. As an option, these panels can be locked. Stainless steel hinges on the right side of the lower panel allow access to the compressor compartment.
 - EXNDA180/240 - Stainless steel hinges on the outer side of the two upper panels facilitate access to the control box, 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.
 - Standard 2" (50 mm) pleated filter with a MERV rating of 8 changeable from outside.
 - All major components are readily accessible.
 - Front Control Panel allows easy access and complies with NEC clearance codes on redundant systems mounted side by side.
 - LEDs on the PLC indicate operational status and fault conditions.
 - Foiled backed insulation on the indoor air path.
 - Sight glass indicates proper refrigerant charge and, if ever required, facilitates charging the unit in the field.

ICExp EXNDA/EONDA90-240 Accessories

- **Supply Grille**
 - For EXNDA/EONDA90/120/150 – 42½" x 15¼" (1,080 mm x 387 mm)..... P/N 93189
 - For EXNDA/EONDA180/240/300/360 – 54½" x 15½" (1,384 mm x 394 mm) P/N 93190
- **Return Filter Grille**
 - For EXNDA/EONDA90/120/150 – 42½" x 21½" (1,080 mm x 546 mm)..... P/N 93188
 - For EXNDA/EONDA180/240 – 54½" x 21½" (1,384 mm x 546 mm) P/N 93191
 - For EXNDA/EONDA300/360 – 54½" x 37½" (1,384 mm x 953 mm) P/N 93192
- **Return Air Filters**
 - See Dimensional Drawings for filter details.

Capacity Ratings: EXNA/EONA Air Conditioners

Model Number	EXNA/EONA12	EXNA/EONA20	EXNA/EONA24			EXNA/EONA30			EXNA/EONA36			EXNA/EONA42			EXNA/EONA48			EXNA/EONA60			EXNA/EONA72					
	ACA	ACA	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD			
Cooling BTUH ¹	10,800	19,600	24,000			29,000			35,000			42,000			46,000			54,500			62,000			70,000		
EER ²	9.00	9.00	9.25			9.25			9.25			9.25			9.50			9.25			10.00			10.00		
ESP ³ @ Rated Conditions	0.10	0.10	0.10			0.15			0.15			.20			0.20			0.20			0.20			0.20		

¹Cooling rated at 95°F (35°C) outdoor and 80°F DB/67° 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, and 575 volts for "Z" models.
Operation of units at a different voltage from that of the rating point will affect performance and air flow.

Capacity Ratings: EXNDA/EONDA Air Conditioners

Model Number	EXNDA/EONDA90				EXNDA/EONDA120				EXNDA/EONDA150				EXNDA/EONDA180				EXNDA/EONDA240			
	ACC	ACD	ACE	ACZ	ACA	ACD	ACE	ACZ	ACC	ACD	ACE	ACZ	ACC	ACD	ACE	ACZ	ACC	ACD	ACE	ACZ
Cooling BTUH ¹	94,000				125,000				150,000				182,200				216,600			
Rated Air Flow (CFM ²)	3,500				4,000				5,000				5,000				7,500			
ESP ³ @ Rated Conditions	0.25				0.30				0.35				0.35				0.40			

¹Cooling rated at 95°F (35°C) outdoor and 80°F DB/67° 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, and 575 volts for "Z" 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°C) Outside Air Dry Bulb: EXNA/EONA

Model Number	EXNA/EONA12	EXNA/EONA20	EXNA/EONA24			EXNA/EONA30			EXNA/EONA36			EXNA/EONA42			EXNA/EONA48			EXNA/EONA60			EXNA/EONA72					
	ACA	ACA	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD	ACA	ACC	ACD			
Total Capacity	10,800	19,600	24,000			29,000			35,000			42,000			46,000			54,500			62,000			70,000		
Sensible Heat Ratio	0.74	0.76	0.75			0.75			0.69			0.76			0.76			0.73			0.71			0.67		
Sensible Capacity	8,000	14,800	18,000			21,740			24,155			31,900			34,940			39,800			43,815			46,800		
Rated Air Flow (CFM ¹)	400	755	840			1,000			1,100			1,575			1,725			1,850			1,925			1,925		

¹CFM=Cubic Feet per Minute
Sensible heat ratios based upon outdoor air conditions of 95°F (35°C) and 80°F DB/67° WB (26.5°C DB/19.5°C WB) return air.

Sensible Total Heat Ratio @ 95°F (35°C) Outside Air Dry Bulb: EXNDA/EONDA

Model Number	EXNDA/EONDA90				EXNDA/EONDA120				EXNDA/EONDA150				EXNDA/EONDA180				EXNDA/EONDA240			
	ACC	ACD	ACE	ACZ	ACA	ACD	ACE	ACZ	ACC	ACD	ACE	ACZ	ACC	ACD	ACE	ACZ	ACC	ACD	ACE	ACZ
Total Capacity	94,000				125,000				150,000				182,200				216,000			
Sensible Heat Ratio	0.72				0.75				0.75				0.75				0.75			
Sensible Capacity	67,680				93,750				112,500				136,650				162,000			
Rated Air Flow (CFM ¹)	3,500				4,000				5,000				5,000				7,500			

¹CFM=Cubic Feet per Minute
Sensible heat ratios based upon outdoor air conditions of 95°F (35°C) and 80°F DB/67° WB (26.5°C DB/19.5°C WB) return air.

Cooling Performance (BTUH) at Various Outdoor Temperatures: EXNA/EONA & EXNDA/EONDA Air Conditioners

Model Number	Outdoor Temperature											
	75°F/24°C	80°F/26.5°C	85°F/29°C	90°F/32°C	95°F/35°C	100°F/38°C	105°F/40.5°C	110°F/43.3°C	115°F/46°C	120°F/48.9°C	125°F/51.7°C	130°F/54.4°C
EXNA/EONA12AC	12,525	12,095	11,660	11,230	10,800	10,365	9,935	9,500	9,285	8,640	8,205	7,775
EXNA/EONA20AC	22,735	21,950	21,165	20,380	19,600	18,815	18,30	17,245	16,855	15,680	14,895	14,110
EXNA/EONA24AC	27,840	26,880	25,920	24,960	24,000	23,040	22,080	21,120	20,640	19,200	18,240	17,280
EXNA/EONA30AC	33,640	32,480	31,320	30,160	29,000	27,840	26,680	25,520	24,940	23,200	22,040	20,880
EXNA/EONA36AC	40,600	39,200	37,800	36,400	35,000	33,600	32,200	30,800	30,100	28,000	26,600	25,200
EXNA/EONA42AC	48,720	47,040	45,360	43,680	42,000	40,320	38,640	36,960	36,120	33,600	31,920	30,240
EXNA/EONA48AC	53,360	51,520	49,680	47,840	46,000	44,160	42,320	40,480	39,560	36,800	34,960	33,120
EXNA/EONA60AC	63,220	61,040	58,860	56,680	54,500	52,320	50,140	47,960	46,870	43,600	41,420	39,240
EXNA/EONA72ACA	71,920	69,440	66,960	64,480	62,000	59,520	57,040	54,560	53,320	49,600	47,120	44,640
EXNA/EONA72ACC, ACD, ACZ	81,200	78,400	75,600	72,800	70,000	67,200	64,400	61,600	60,200	56,000	53,200	50,400
EXNDA/EONDA90AC	109,040	105,280	101,520	97,760	94,000	90,240	86,480	82,720	80,840	79,148	77,456	75,764
EXNDA/EONDA120AC	145,000	140,000	135,000	130,000	125,000	120,000	115,000	110,000	107,500	105,250	103,000	100,750
EXNDA/EONDA150AC	174,000	168,000	162,000	156,000	150,000	144,000	138,000	132,000	129,000	126,300	123,600	120,900
EXNDA/EONDA180AC	211,120	203,840	196,560	189,280	182,000	174,720	167,440	160,160	156,520	153,244	149,968	146,692
EXNDA/EONDA240AC	250,560	241,920	233,280	224,640	216,000	207,360	198,720	190,080	185,760	181,872	177,980	174,000

Based upon ANSI/AHRI std. 390 return air conditions of 80°F DB/67° WB (26.5°C DB/19.5°C WB) at various outdoor temperatures.
Note: Operation of units above 120°F (48.9°C) requires the Desert Duty package.

Electrical Characteristics - Compressor, Fan & Blower Motors: EXNA/EONA & EXNDA/EONDA Air Conditioners (Single & Dual Compressors)

Model Number	Compressor			Outdoor Fan Motor	Indoor Blower Motor	
	Volts / Ph / Hz	RLA ¹	LRA ²	FLA ⁴	FLA ⁴	
EXNA/EONA12ACA	208/230-1-60	4.7	25.0	0.65	0.85	
EXNA/EONA20ACA		13.4	43.0	1.8	1.0	
EXNA/EONA24ACA		12.8	64.0	1.8	1.0	
EXNA/EONA30ACA		14.1	77.0	1.8	2.5	
EXNA/EONA36ACA		17.9	112.0	1.8	2.5	
EXNA/EONA42ACA		19.8	109.0	2.9	3.1	
EXNA/EONA48ACA		21.8	117.0	2.9	3.1	
EXNA/EONA60ACA		26.2	134.0	2.9	4.0	
EXNA/EONA72ACA		30.1	158.0	2.9	4.0	
EXNA/EONA24ACC	208/230-3-60	8.3	61.0	1.5	1.5	
EXNA/EONA30ACC		9.0	71.0	1.8	2.5	
EXNA/EONA36ACC		13.2	88.0	1.8	2.5	
EXNA/EONA42ACC		13.6	83.1	2.8	3.1	
EXNA/EONA48ACC		13.7	83.1	2.8	3.1	
EXNA/EONA60ACC		15.9	111.0	2.8	5.2	
EXNA/EONA72ACC		22.4	149.0	2.9	5.2	
EXNA/EONA24ACD	460-3-60	5.1	28.0	1.5	1.5	
EXNA/EONA30ACD		5.6	38.0	1.8	2.5	
EXNA/EONA36ACD		6.0	44.0	1.8	2.5	
EXNA/EONA42ACD		6.1	41.0	2.8	3.1	
EXNA/EONA48ACD		6.2	41.0	2.8	3.1	
EXNA/EONA60ACD		7.7	52.0	2.8	5.2	
EXNA/EONA72ACD		10.6	75.0	2.9	5.2	
EXNDA/EONDA90ACD		7.1 (14.2)	95.0	2.7 (5.4)	2.1 (4.2)	
EXNDA/EONDA120ACD		10.6 (21.2)	125.0	2.7 (5.4)	3.4 (6.8)	
EXNDA/EONDA150ACD		8.9 (17.8)	74.0	4.8 (9.6)	4.5 (9.0)	
EXNDA/EONDA180ACD		14.7 (29.4)	95.0	4.8 (9.6)	4.7 (9.4)	
EXNDA/EONDA240ACD		17.9 (35.8)	125.0	4.8 (9.6)	4.7 (9.4)	
EXNA/EONA24ACZ		575-3-60	3.3	23.7	1.5	1.5
EXNA/EONA30ACZ			4.7	36.5	1.5	1.5
EXNA/EONA36ACZ	4.2		30.0	1.8	2.5	
EXNA/EONA42ACZ	4.2		33.0	1.8	2.5	
EXNA/EONA48ACZ	4.8		33.0	2.8	3.1	
EXNA/EONA60ACZ	5.8		38.9	2.8	3.1	
EXNA/EONA72ACZ	7.7		54.0	2.8	5.2	
EXNDA/EONDA90ACZ	5.1 (10.2)		80.0	3.7 (7.4)	1.7 (3.4)	
EXNDA/EONDA120ACZ	7.7 (15.4)		54.0	4.8 (9.6)	4.7 (9.4)	
EXNDA/EONDA150ACZ	7.9 (15.8)		54.0	4.8 (9.6)	4.5 (9.0)	
EXNDA/EONDA180ACZ	12.2 (24.4)		80.0	2.2 (4.4)	1.7 (3.4)	
EXNDA/EONDA240ACZ	12.9 (25.8)		80.0	5.8 (11.6)	2.8 (5.6)	

¹RLA = Rated Load Amps ²LRA = Locked Rotor Amps ³FLA = Full Load Amps
Values in parentheses are for dual compressor air conditioners when both compressors are operating simultaneously.

Summary Electrical Ratings (Wire and Circuit Breaker Sizing): EXNA/EONA12-72 Single Compressor Air Conditioners Power Supply: "A" (208/230V-1Ø-60Hz)

Model Number	Heater (kW)	Circuit #1	Circuit #2	Circuit #1	Circuit #2	SPPE ³ MCA ¹	SPPE ³ MFS ²	Incoming Power		AC Power
		Cooling MCA ¹	Heating MCA ¹	Cooling MFS ²	Heating MFS ²			Overall MCA ¹	Bonding Conductors (Amps)	Bonding Conductors (AC - Amps)
EXNA/EONA12ACA 000	0	7.15		10		7.99	15	7.15	152	82
EONA12ACA 022	2.2	7.15	11.46	10	15	12.30	15	11.46	152	82
EONA12ACA 036	3.6	7.15	18.75	10	20	19.59	20	18.75	152	82
EONA12ACA 040	4	7.15	20.83	10	25	21.67	25	20.83	152	82
EONA12ACA 050	5	7.15	26.04	10	30	26.88	30	26.04	152	82
EXNA/EONA20ACA 000	0	18.80		30		19.64	30	18.80	152	82
EONA20ACA 036	3.6	18.80	18.75	30	20	19.75	30	18.80	152	82
EONA20ACA 040	4	18.80	20.83	30	25	21.83	30	20.83	152	82
EONA20ACA 050	5	18.80	26.04	30	30	27.04	30	26.04	152	82
EONA20ACA 060	6	18.80	31.25	30	35	32.25	35	31.25	152	82
EONA20ACA 080	8	18.80	41.67	30	45	42.67	45	41.67	152	82
EONA20ACA 100	10	18.80	52.08	30	55	53.08	55	52.08	152	82
EXNA/EONA24ACA 000	0	18.00		30		18.84	30	18.00	152	82
EONA24ACA 036	3.6	18.00	18.8	30	20	19.75	30	18.75	152	82
EONA24ACA 040	4	18.00	20.8	30	25	21.83	30	20.83	152	82
EONA24ACA 050	5	18.00	26.0	30	30	27.04	30	26.04	152	82
EONA24ACA 060	6	18.00	31.3	30	35	32.25	35	31.25	152	82
EONA24ACA 080	8	18.00	41.7	30	45	42.67	45	41.67	152	82
EONA24ACA 100	10	18.00	52.1	30	55	53.08	55	52.08	152	82
EXNA/EONA30ACA 000	0	21.90		35		22.74	35	21.90	152	82
EONA30ACA 036	3.6	21.90	18.8	35	20	22.74	35	21.90	152	82
EONA30ACA 040	4	21.90	20.8	35	25	23.33	35	21.90	152	82
EONA30ACA 050	5	21.90	26.0	35	30	28.54	35	26.04	152	82
EONA30ACA 060	6	21.90	31.3	35	35	33.75	35	31.25	152	82
EONA30ACA 080	8	21.90	41.7	35	45	44.17	45	41.67	152	82
EONA30ACA 100	10	21.90	52.1	35	55	54.58	55	52.08	152	82
EONA30ACA 120	12	21.90	62.5	35	65	65.00	70	62.50	152	82
EXNA/EONA36ACA 000	0	26.70		40		27.54	40	26.70	152	82
EONA36ACA 036	3.6	26.70	18.8	40	20	27.54	40	26.70	152	82
EONA36ACA 040	4	26.70	20.8	40	25	27.54	40	26.70	152	82
EONA36ACA 060	6	26.70	31.3	40	35	33.75	40	31.25	152	82
EONA36ACA 080	8	26.70	41.7	40	45	44.17	45	41.67	152	82
EONA36ACA 100	10	26.70	52.1	40	55	54.58	55	52.08	152	82
EONA36ACA 120	12	26.70	62.5	40	65	65.00	70	62.50	152	82
EXNA/EONA42ACA 000	0	31.10		50		31.94	50	31.10	152	82
EONA42ACA 040	4	31.10	20.8	50	25	31.94	50	31.10	152	82
EONA42ACA 060	6	31.10	31.3	50	35	34.95	50	31.25	152	82
EONA42ACA 080	8	31.10	41.7	50	45	45.37	50	41.67	152	82
EONA42ACA 100	10	31.10	52.1	50	55	55.78	60	52.08	152	82
EONA42ACA 120	12	31.10	62.5	50	65	66.20	70	62.50	152	82
EXNA/EONA48ACA 000	0	33.50		55		34.34	55	33.50	152	82
EONA48ACA 050	5	33.50	26.0	55	30	34.34	55	33.50	152	82
EONA48ACA 080	8	33.50	41.7	55	45	45.37	55	41.67	152	82
EONA48ACA 100	10	33.50	52.1	55	55	55.78	60	52.08	152	82
EONA48ACA 120	12	33.50	62.5	55	65	66.20	70	62.50	152	82
EXNA/EONA60ACA 000	0	39.40		65		40.24	65	39.40	152	82
EONA60ACA 040	4	39.40	20.8	65	25	40.24	65	39.40	152	82
EONA60ACA 050	5	39.40	26.0	65	30	40.24	65	39.40	152	82
EONA60ACA 060	6	39.40	31.3	65	35	40.24	65	39.40	152	82
EONA60ACA 080	8	39.40	41.7	65	45	45.67	65	41.67	152	82
EONA60ACA 100	10	39.40	52.1	65	55	56.08	65	52.08	152	82
EONA60ACA 120	12	39.40	62.5	65	65	66.50	70	62.50	152	82
EXNA/EONA72ACA 000	0	44.50		70		45.34	70	44.50	152	82
EONA72ACA 050	5	44.50	26.0	70	30	45.34	70	44.50	152	82
EONA72ACA 080	8	44.50	41.7	70	45	45.67	70	44.50	152	82
EONA72ACA 100	10	44.50	52.1	70	55	56.08	70	52.08	152	82
EONA72ACA 120	12	44.50	62.5	70	65	66.50	70	62.50	152	82

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 ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. 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 (Wire and Circuit Breaker Sizing):
EXNA/EONA24-72 Single Compressor Air Conditioners
Power Supply: "C" (208/230V-3Ø-60Hz)

Model Number	Heater (kW)	Circuit #1	Circuit #2	Circuit #1	Circuit #2	SPPE ³ MCA ¹	SPPE ³ MFS ²	Incoming Power		AC Power
		Cooling MCA ¹	Heating MCA ¹	Cooling MFS ²	Heating MFS ²			Overall MCA ¹	Bonding Conductors (Amps)	Bonding Conductors (AC - Amps)
EXNA/EONA24ACC 000	0	12.40		20		13.24	20	12.40	152	82
EONA24ACC 060	6	12.40	18.8	20	20	19.85	20	18.85	152	82
EONA24ACC 090	9	12.40	28.3	20	30	29.27	30	28.27	152	82
EONA24ACC 100	10	12.40	31.4	20	35	32.41	35	31.41	152	82
EXNA/EONA30ACC 000	0	15.50		20		16.34	20	15.50	152	82
EONA30ACC 060	6	15.50	18.8	20	20	21.35	25	18.85	152	82
EONA30ACC 090	9	15.50	28.3	20	30	30.77	35	28.27	152	82
EONA30ACC 100	10	15.50	31.4	20	35	33.91	35	31.41	152	82
EONA30ACC 120	12	15.50	37.7	20	40	40.20	45	37.70	152	82
EXNA/EONA36ACC 000	0	20.78		30		21.62	30	20.78	152	82
EONA36ACC 060	6	20.78	18.8	30	20	21.62	30	20.78	152	82
EONA36ACC 090	9	20.78	28.3	30	30	30.77	35	28.27	152	82
EONA36ACC 120	12	20.78	37.7	30	40	40.20	45	37.70	152	82
EXNA/EONA42ACC 000	0	23.26		35		24.10	35	23.26	152	82
EONA42ACC 060	6	23.26	18.8	35	20	24.10	35	23.26	152	82
EONA42ACC 090	9	23.26	28.3	35	30	31.97	35	28.27	152	82
EONA42ACC 120	12	23.26	37.7	35	40	41.40	45	37.70	152	82
EONA42ACC 150	15	23.26	47.1	35	50	50.82	55	47.12	152	82
EXNA/EONA48ACC 000	0	23.43		35		24.27	35	23.43	152	82
EONA48ACC 060	6	23.43	18.8	35	20	24.27	35	23.43	152	82
EONA48ACC 090	9	23.43	28.3	35	30	31.97	35	28.27	152	82
EONA48ACC 120	12	23.43	37.7	35	40	41.40	45	37.70	152	82
EXNA/EONA60ACC 000	0	26.13		40		26.97	40	26.13	152	82
EONA60ACC 060	6	26.13	18.8	40	20	26.97	40	26.13	152	82
EONA60ACC 090	9	26.13	28.3	40	30	32.27	40	28.27	152	82
EONA60ACC 120	12	26.13	37.7	40	40	41.70	45	37.70	152	82
EXNA/EONA72ACC 000	0	34.90		55		35.74	55	34.90	152	82
EONA72ACC 060	6	34.90	18.8	55	20	35.74	55	34.90	152	82
EONA72ACC 090	9	34.90	28.3	55	30	35.74	55	34.90	152	82
EONA72ACC 120	12	34.90	37.7	55	40	41.70	55	37.70	152	82
EONA72ACC 150	15	34.90	47.1	55	50	51.12	55	47.12	152	82

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 ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. 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 (Wire and Circuit Breaker Sizing): EXNA/EONA24-72 Single Compressor Air Conditioners Power Supply: "D" (460V-3Ø-60Hz)

Model Number	Heater (kW)	Circuit #1	Circuit #2	Circuit #1	Circuit #2	SPPE ³ MCA ¹	SPPE ³ MFS ²	Incoming Power		AC Power
		Cooling MCA ¹	Heating MCA ¹	Cooling MFS ²	Heating MFS ²			Overall MCA ¹	Bonding Conductors (Amps)	Bonding Conductors (AC - Amps)
EXNA/EONA24ACD 000	0	7.40		10		7.82	15	7.40	152	82
EONA24ACD 050	5	7.40	7.9	10	15	8.85	15	7.85	152	82
EONA24ACD 060	6	7.40	9.4	10	15	10.42	15	9.42	152	82
EONA24ACD 090	9	7.40	14.1	10	15	15.14	20	14.14	152	82
EONA24ACD 100	10	7.40	15.7	10	20	16.71	20	15.71	152	82
EXNA/EONA30ACD 000	0	9.19		15		9.61	15	9.19	152	82
EONA30ACD 060	6	9.19	9.4	15	15	11.92	15	9.42	152	82
EONA30ACD 090	9	9.19	14.1	15	15	16.64	20	14.14	152	82
EONA30ACD 120	12	9.19	18.8	15	20	21.35	25	18.85	152	82
EXNA/EONA36ACD 000	0	9.59		15		10.01	15	9.59	152	82
EONA36ACD 060	6	9.59	9.4	15	15	11.92	15	9.59	152	82
EONA36ACD 090	9	9.59	14.1	15	15	16.64	20	14.14	152	82
EONA36ACD 120	12	9.59	18.8	15	20	21.35	25	18.85	152	82
EONA36ACD 150	15	9.59	23.6	15	25	26.06	30	23.56	152	82
EXNA/EONA42ACD 000	0	10.75		15		11.17	15	10.75	152	82
EONA42ACD 060	6	10.75	9.4	15	15	13.12	15	10.75	152	82
EONA42ACD 090	9	10.75	14.1	15	15	17.84	20	14.14	152	82
EONA42ACD 120	12	10.75	18.8	15	20	22.55	25	18.85	152	82
EONA42ACD 150	15	10.75	23.6	15	25	27.26	30	23.56	152	82
EXNA/EONA48ACD 000	0	10.91		20		11.33	20	10.91	152	82
EONA48ACD 060	6	10.91	9.4	20	15	13.12	20	10.91	152	82
EONA48ACD 090	9	10.91	14.1	20	15	17.84	20	14.14	152	82
EONA48ACD 120	12	10.91	18.8	20	20	22.55	25	18.85	152	82
EONA48ACD 150	15	10.91	23.6	20	25	27.26	30	23.56	152	82
EXNA/EONA60ACD 000	0	12.98		20		13.40	20	12.98	152	82
EONA60ACD 060	6	12.98	9.4	20	15	13.42	20	12.98	152	82
EONA60ACD 090	9	12.98	14.1	20	15	18.14	20	14.14	152	82
EONA60ACD 120	12	12.98	18.8	20	20	22.85	25	18.85	152	82
EONA60ACD 150	15	12.98	23.6	20	25	27.56	30	23.56	152	82
EXNA/EONA72ACD 000	0	16.65		30		17.07	30	16.65	152	82
EONA72ACD 060	6	16.65	9.4	30	15	17.07	30	16.65	152	82
EONA72ACD 090	9	16.65	14.1	30	15	18.14	30	16.65	152	82
EONA72ACD 120	12	16.65	18.8	30	20	22.85	30	18.85	152	82
EONA72ACD 150	15	16.65	23.6	30	25	27.56	30	23.56	152	82

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 ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. 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 (Wire and Circuit Breaker Sizing): EXNA/EONA24-72 Single Compressor Air Conditioners Power Supply: "Z" (575V-3Ø-60Hz)

Model Number	Heater (kW)	Circuit #1	Circuit #2	Circuit #1	Circuit #2	SPPE ³ MCA ¹	SPPE ³ MFS ²	Incoming Power		AC Power
		Cooling MCA ¹	Heating MCA ¹	Cooling MFS ²	Heating MFS ²			Overall MCA ¹	Bonding Conductors (Amps)	Bonding Conductors (AC - Amps)
EXNA/EONA24ACZ 000	0	4.96		5		5.30	15	4.96	152	82
EONA24ACZ 060	6	4.96	7.5	5	15	8.54	15	7.54	152	82
EONA24ACZ 060	9	4.96	11.3	5	15	12.31	15	11.31	152	82
EONA24ACZ 120	12	4.96	15.1	5	20	16.08	20	15.08	152	82
EXNA/EONA30ACZ 000	0	7.56		10		7.89	15	7.56	152	82
EONA30ACZ 060	6	7.56	7.5	10	15	10.04	15	7.56	152	82
EONA30ACZ 090	9	7.56	11.3	10	15	13.81	15	11.31	152	82
EONA30ACZ 120	12	7.56	15.1	10	20	17.58	20	15.08	152	82
EXNA/EONA36ACZ 000	0	6.92		10		7.26	15	6.92	152	82
EONA36ACZ 060	6	6.92	7.5	10	15	10.04	15	7.54	152	82
EONA36ACZ 090	9	6.92	11.3	10	15	13.81	15	11.31	152	82
EONA36ACZ 120	12	6.92	15.1	10	20	17.58	20	15.08	152	82
EONA36ACZ 150	15	6.92	18.8	10	20	21.35	25	18.85	152	82
EXNA/EONA42ACZ 000	0	7.72		15		8.06	15	7.72	152	82
EONA42ACZ 060	6	7.72	7.5	15	15	11.24	15	7.72	152	82
EONA42ACZ 090	9	7.72	11.3	15	15	15.01	20	11.31	152	82
EONA42ACZ 120	12	7.72	15.1	15	20	18.78	20	15.08	152	82
EONA42ACZ 150	15	7.72	18.8	15	20	22.55	25	18.85	152	82
EXNA/EONA48ACZ 000	0	8.52		15		8.86	15	8.52	152	82
EONA48ACZ 060	6	8.52	7.5	15	15	11.24	15	8.52	152	82
EONA48ACZ 090	9	8.52	11.3	15	15	15.01	20	11.31	152	82
EONA48ACZ 120	12	8.52	15.1	15	20	18.78	20	15.08	152	82
EONA48ACZ 150	15	8.52	18.8	15	20	22.55	25	18.85	152	82
EXNA/EONA60ACZ 000	0	9.92		15		10.25	15	9.92	152	82
EONA60ACZ 060	6	9.92	7.5	15	15	11.54	15	9.92	152	82
EONA60ACZ 090	9	9.92	11.3	15	15	15.31	20	11.31	152	82
EONA60ACZ 120	12	9.92	15.1	15	20	19.08	20	15.08	152	82
EONA60ACZ 150	15	9.92	18.8	15	20	22.85	25	18.85	152	82
EXNA/EONA72ACZ 000	0	12.36		20		12.70	20	12.36	152	82
EONA72ACZ 090	9	12.36	11.3	20	15	15.31	20	12.36	152	82
EONA72ACZ 120	12	12.36	15.1	20	20	19.08	20	15.08	152	82
EONA72ACZ 150	15	12.36	18.8	20	20	22.85	25	18.85	152	82

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 ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. 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 (Wire and Circuit Breaker Sizing): EXNDA/EONDA90-240 Dual Compressor Air Conditioners Power Supply: "D" (460V-3Ø-60Hz) & "Z" (575V-3Ø-60Hz)

Model Number	Heater (kW)	Circuit #1	Circuit #2	Circuit #1	Circuit #2	SPPE ³ MCA ¹	SPPE ³ MFS ²	Incoming Power		AC Power
		Cooling MCA ¹	Heating MCA ¹	Cooling MFS ²	Heating MFS ²			Overall MCA ¹	Bonding Conductors (Amps)	Bonding Conductors (AC - Amps)
EXNDA/EONDA90ACD 000	0	24.24		30		24.24	30	24.24	152	82
EONDA90ACD 060	6	24.24	9.42	30	10	24.24	30	24.24	152	82
EONDA90ACD 090	9	24.24	14.14	30	15	24.24	30	24.24	152	82
EONDA90ACD 120	12	24.24	18.85	30	20	24.24	30	24.24	152	82
EONDA90ACD 150	15	24.24	23.56	30	25	28.26	30	24.24	152	82
EXNDA/EONDA120ACD 000	0	32.02		40		32.44	40	32.02	152	82
EONDA120ACD 060	6	32.02	9.42	40	15	32.44	40	32.02	152	82
EONDA120ACD 090	9	32.02	14.14	40	15	32.44	40	32.02	152	82
EONDA120ACD 120	12	32.02	18.85	40	20	32.44	40	32.02	152	82
EONDA120ACD 150	15	32.02	23.56	40	25	32.96	40	32.02	152	82
EXNDA/EONDA150ACD 000	0	28.25		35		28.67	35	28.25	152	82
EONDA150ACD 060	6	28.25	9.42	35	15	28.67	35	28.25	152	82
EONDA150ACD 090	9	28.25	14.14	35	15	28.67	35	28.25	152	82
EONDA150ACD 120	12	28.25	18.85	35	20	28.67	35	28.25	152	82
EONDA150ACD 150	15	28.25	23.56	35	25	32.56	35	28.25	152	82
EXNDA/EONDA180ACD 000	0	49.64		65		50.06	65	49.64	152	82
EONDA180ACD 060	6	49.64	9.42	65	15	50.06	65	49.64	152	82
EONDA180ACD 090	9	49.64	14.14	65	15	50.06	65	49.64	152	82
EONDA180ACD 120	12	49.64	18.85	65	20	50.06	65	49.64	152	82
EONDA180ACD 150	15	49.64	23.56	65	25	50.06	65	49.64	152	82
EXNDA/EONDA240ACD 000	0	56.84		80		57.26	80	56.84	152	82
EONDA240ACD 060	6	56.84	9.42	80	15	57.26	80	56.84	152	82
EONDA240ACD 090	9	56.84	14.14	80	15	57.26	80	56.84	152	82
EONDA240ACD 120	12	56.84	18.85	80	20	57.26	80	56.84	152	82
EONDA240ACD 150	15	56.84	23.56	80	25	57.26	80	56.84	152	82
EXNDA/EONDA90ACZ 000	0	18.07		20		18.07	20	18.07	152	82
EONDA90ACZ 060	6	18.07	7.54	20	10	18.07	20	18.07	152	82
EONDA90ACZ 090	9	18.07	11.31	20	15	18.07	20	18.07	152	82
EONDA90ACZ 120	12	18.07	15.08	20	20	19.78	20	18.07	152	82
EONDA90ACZ 150	15	18.07	18.85	20	20	23.55	20	18.07	152	82
EXNDA/EONDA120ACZ 000	0	23.88		30		24.21	30	23.88	152	82
EONDA120ACZ 060	6	23.88	7.54	30	15	24.21	30	23.88	152	82
EONDA120ACZ 090	9	23.88	11.31	30	15	24.21	30	23.88	152	82
EONDA120ACZ 120	12	23.88	15.08	30	20	24.21	30	23.88	152	82
EONDA120ACZ 150	15	23.88	18.85	30	20	28.25	30	23.88	152	82
EXNDA/EONDA150ACZ 000	0	25.86		30		26.28	30	25.86	152	82
EONDA150ACZ 060	6	25.86	7.54	30	15	26.28	30	25.86	152	82
EONDA150ACZ 090	9	25.86	11.31	30	15	26.28	30	25.86	152	82
EONDA150ACZ 120	12	25.86	15.08	30	20	26.28	30	25.86	152	82
EONDA150ACZ 150	15	25.86	18.85	30	20	27.85	30	25.86	152	82
EXNDA/EONDA180ACZ 000	0	40.55		50		40.89	50	40.55	152	82
EONDA180ACZ 060	6	40.55	7.54	50	15	40.89	50	40.55	152	82
EONDA180ACZ 090	9	40.55	11.31	50	15	40.89	50	40.55	152	82
EONDA180ACZ 120	12	40.55	15.08	50	20	40.89	50	40.55	152	82
EONDA180ACZ 150	15	40.55	18.85	50	20	40.89	50	40.55	152	82
EXNDA/EONDA240ACZ 000	0	42.31		60		42.65	60	42.31	152	82
EONDA240ACZ 060	6	42.31	7.54	60	15	42.65	60	42.31	152	82
EONDA240ACZ 090	9	42.31	11.31	60	15	42.65	60	42.31	152	82
EONDA240ACZ 120	12	42.31	15.08	60	20	42.65	60	42.31	152	82
EONDA240ACZ 150	15	42.31	18.85	60	20	42.65	60	42.31	152	82

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 ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. 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: EXNA/EONA & EXNDA/EONDA Air Conditioners

Model Number	Volts / Ph / Hz	AC Unit Amps			Optional Heating Element Amps (kW, Maximum) ⁴									
		AC ¹	IBM ²	OFM ³	2.2	3.6	4.0	5.0	6.0	8.0	9.0	10.0	12.0	15.0
EXNA/EONA12ACA	208/230-1-60	7.5	1.4	0.6	9.2	15.0	16.7	20.8						
EXNA/EONA20ACA		17.8	1.0	1.0		15.0	16.7	20.8	25.0	33.3		41.7		
EXNA/EONA24ACA		17.1	1.0	1.0		15.0	16.7	20.8	25.0	33.3		41.7		
EXNA/EONA30ACA		20.8	2.5	1.8		15.0	16.7	20.8	25.0	33.3		41.7	50.0	
EXNA/EONA36ACA		25.1	2.5	1.8		15.0	16.7		25.0	33.3		41.7	50.0	
EXNA/EONA42ACA		29.2	3.7	2.6			16.7		25.0	33.3		41.7	50.0	
EXNA/EONA48ACA		31.4	3.7	2.6				20.8		33.3		41.7	50.0	
EXNA/EONA60ACA		36.7	4.0	2.6			16.7	20.8	25.0	33.3		41.7	50.0	
EXNA/EONA72ACA		41.3	4.0	2.9				20.8		33.3		41.7	50.0	
EXNA/EONA24ACC	230-3-60	12.1	1.0	1.0					15.1		22.6	25.1		
EXNA/EONA30ACC		15.1	2.5	1.8					15.1		22.6	25.1	30.2	
EXNA/EONA36ACC		19.8	2.5	1.8					15.1		22.6		30.2	
EXNA/EONA42ACC		22.2	3.7	2.6					15.1		22.6		30.2	37.7
EXNA/EONA48ACC		22.7	3.7	2.6					15.1		22.6		30.2	
EXNA/EONA60ACC		24.8	4.0	2.6					15.1		22.6		30.2	
EXNA/EONA72ACC		32.7	4.0	2.9					15.1		22.6		30.2	37.7
EXNA/EONA24ACD	460-3-60	8.54	1.0	1.0				6.3	7.5		11.3	12.6		
EXNA/EONA30ACD		11.4	2.5	1.8					7.5		11.3		15.1	
EXNA/EONA36ACD		11.7	2.5	1.8					7.5		11.3		15.1	18.8
EXNA/EONA42ACD		13.9	3.7	2.6					7.5		11.3		15.1	18.8
EXNA/EONA48ACD		14.0	3.7	2.6					7.5		11.3		15.1	18.8
EXNA/EONA60ACD		16.0	4.0	2.6					7.5		11.3		15.1	18.8
EXNA/EONA72ACD		19.5	4.0	2.9					7.5		11.3		15.1	18.8
EXNDA/EONDA90ACD		26.7	4.7 (9.4)	4.8 (9.6)					7.5		11.3		15.1	18.8
EXNDA/EONDA120ACD		30.3	4.7 (9.4)	4.8 (9.6)					7.5		11.3		15.1	18.8
EXNDA/EONDA150ACD		35.8	4.7 (9.4)	4.8 (9.6)					7.5		11.3		15.1	18.8
EXNDA/EONDA180ACD		52.6	4.7 (9.4)	4.8 (9.6)					7.5		11.3		15.1	18.8
EXNDA/EONDA240ACD		59.8	4.7 (9.4)	4.8 (9.6)					7.5		11.3		15.1	18.8
EXNA/EONA24ACZ		575-3-60	6.5	1.0	1.0					6.0		9.0		12.1
EXNA/EONA30ACZ	9.3		2.5	1.8					6.0		9.0		12.1	
EXNA/EONA36ACZ	9.7		2.5	1.8					6.0		9.0		12.1	15.1
EXNA/EONA42ACZ	11.7		3.7	2.6					6.0		9.0		12.1	15.1
EXNA/EONA48ACZ	11.9		3.7	2.6					6.0		9.0		12.1	15.1
EXNA/EONA60ACZ	13.9		4.0	2.6					6.0		9.0		12.1	15.1
EXNA/EONA72ACZ	16.3		4.0	2.9							9.0		12.1	15.1
EXNDA/EONDA90ACZ	21.0		4.7 (9.4)	4.8 (9.6)					6.0		9.0		12.1	15.1
EXNDA/EONDA120ACZ	24.7		4.7 (9.4)	4.8 (9.6)					6.0		9.0		12.1	15.1
EXNDA/EONDA150ACZ	32.2		4.7 (9.4)	4.8 (9.6)					6.0		9.0		12.1	15.1
EXNDA/EONDA180ACZ	41.2		4.7 (9.4)	4.8 (9.6)					6.0		9.0		12.1	15.1
EXNDA/EONDA240ACZ	48.6		4.7 (9.4)	4.8 (9.6)					6.0		9.0		12.1	15.1

¹AC = Air Conditioner Unit Amps

²IBM = Indoor Blower Motor

³OFM = Outdoor Fan Motor

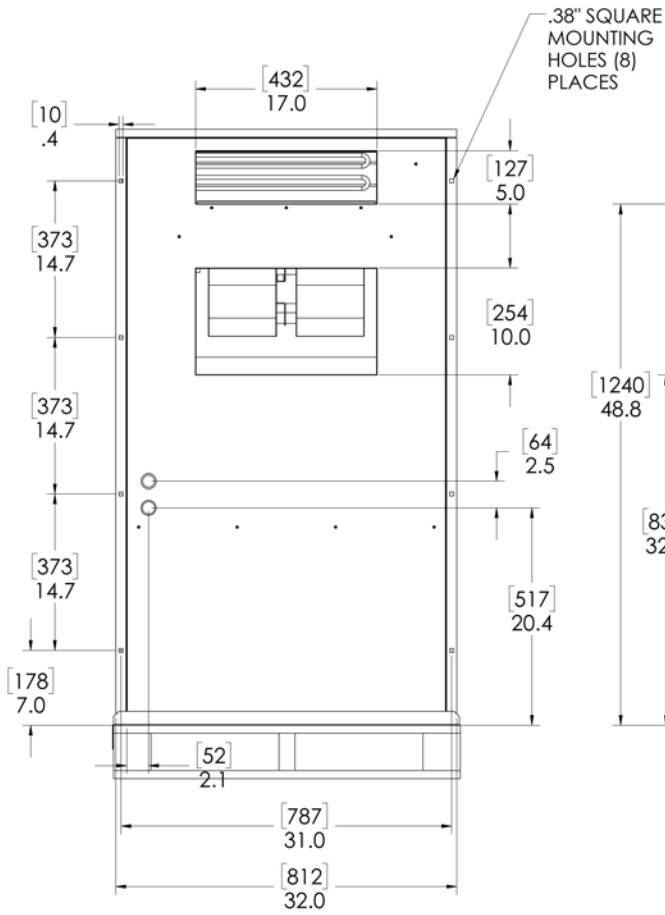
⁴Electric Heat is optional on EONA/EONDA models only. Electric heat is not available for EXNA/EXNDA models.

Unit Shipping Weights

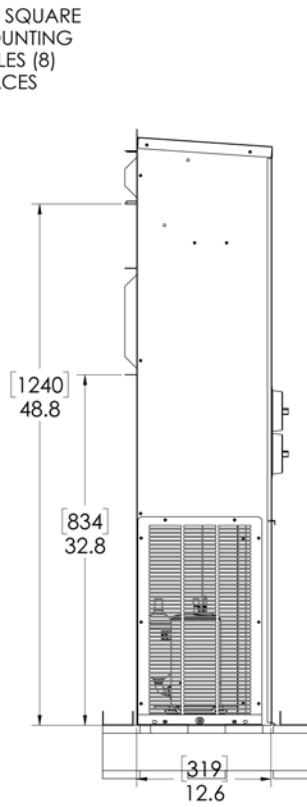
Model Number	Pounds	Kilograms
EXNA/EONA12	185	84
EXNA/EONA20/24	350	159
EXNA/EONA30/36	420	191
EXNA/EONA42/48/60	540	246
EXNA/EONA72	680	309

Model Number	Pounds	Kilograms
EXNA/EONA90	1053	479
EXNA/EONA120	1160	527
EXNA/EONA150	1166	530
EXNA/EONA180	2307	1049
EXNA/EONA240	2523	1148

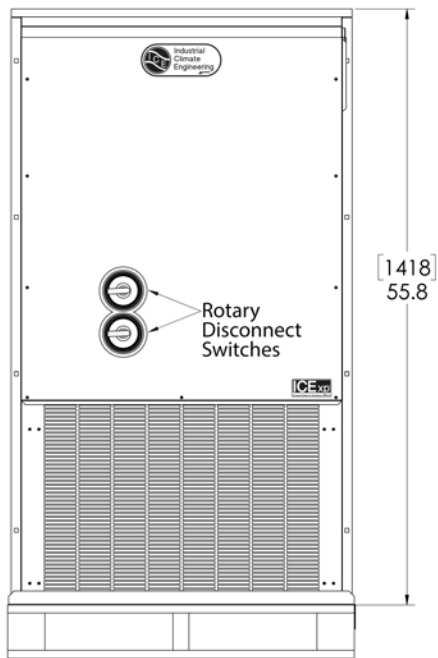
Dimensional Data - EXNA/EONA12 Air Conditioners



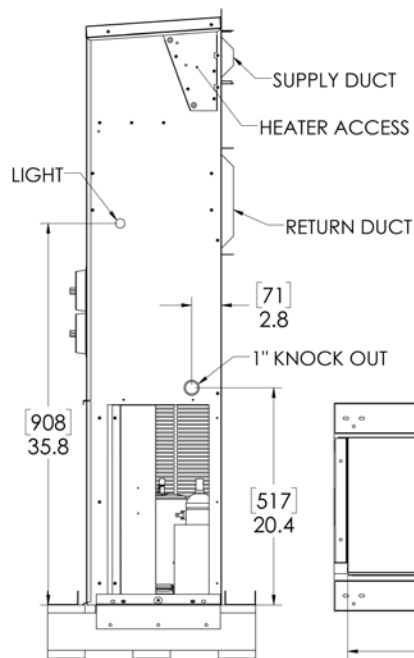
FRONT VIEW



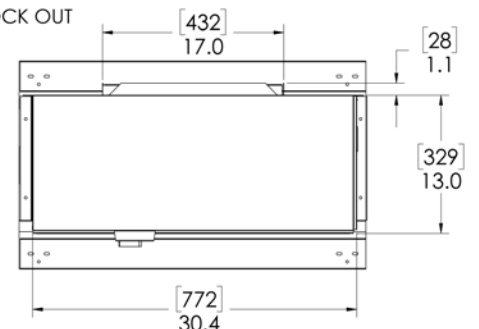
LH SIDE VIEW



REAR VIEW

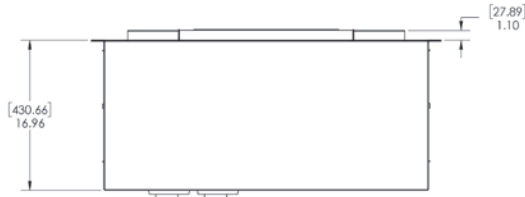


RH SIDE VIEW

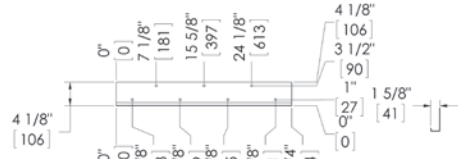


TOP VIEW

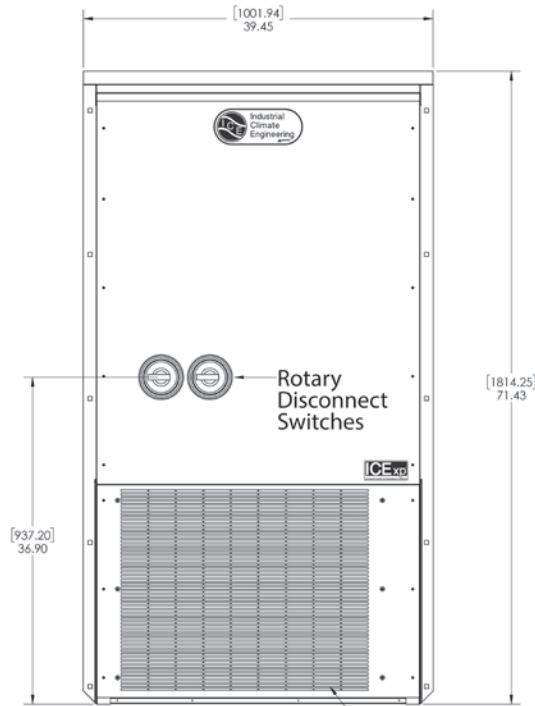
Dimensional Data - EXNA/EONA20/24 Air Conditioners



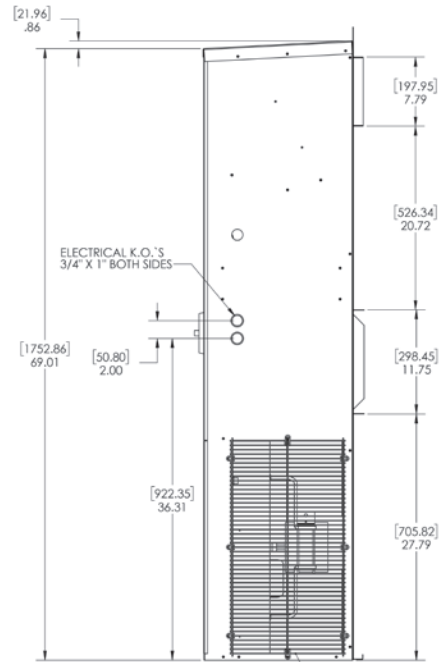
TOP VIEW



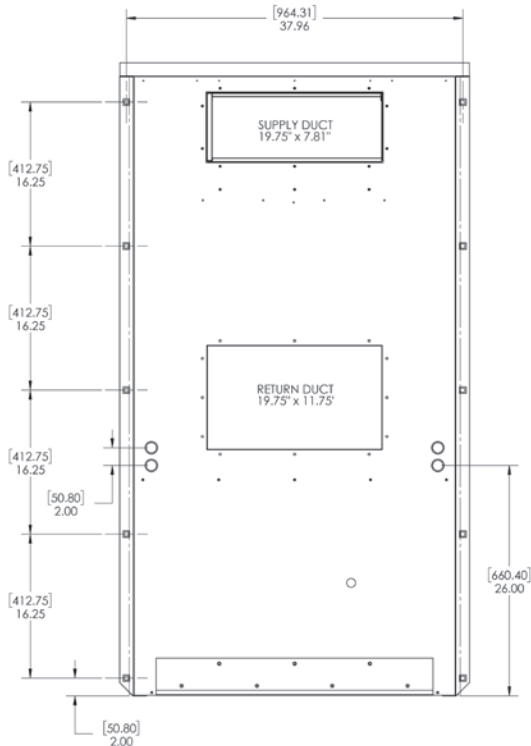
BOTTOM MOUNTING BRACKET



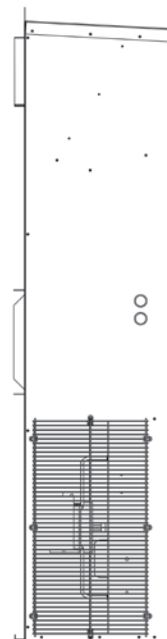
FRONT VIEW



RIGHT SIDE VIEW

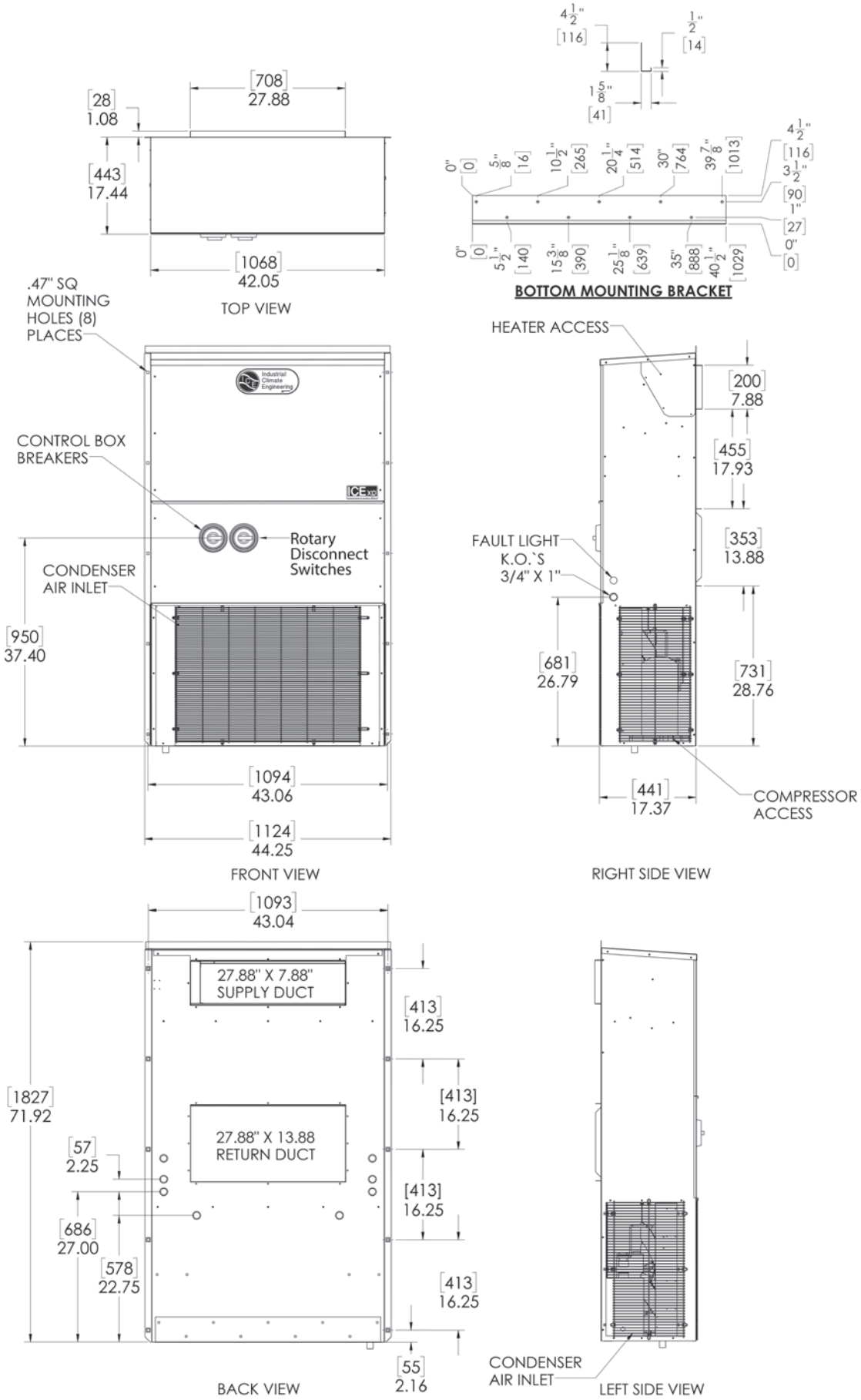


BACK VIEW

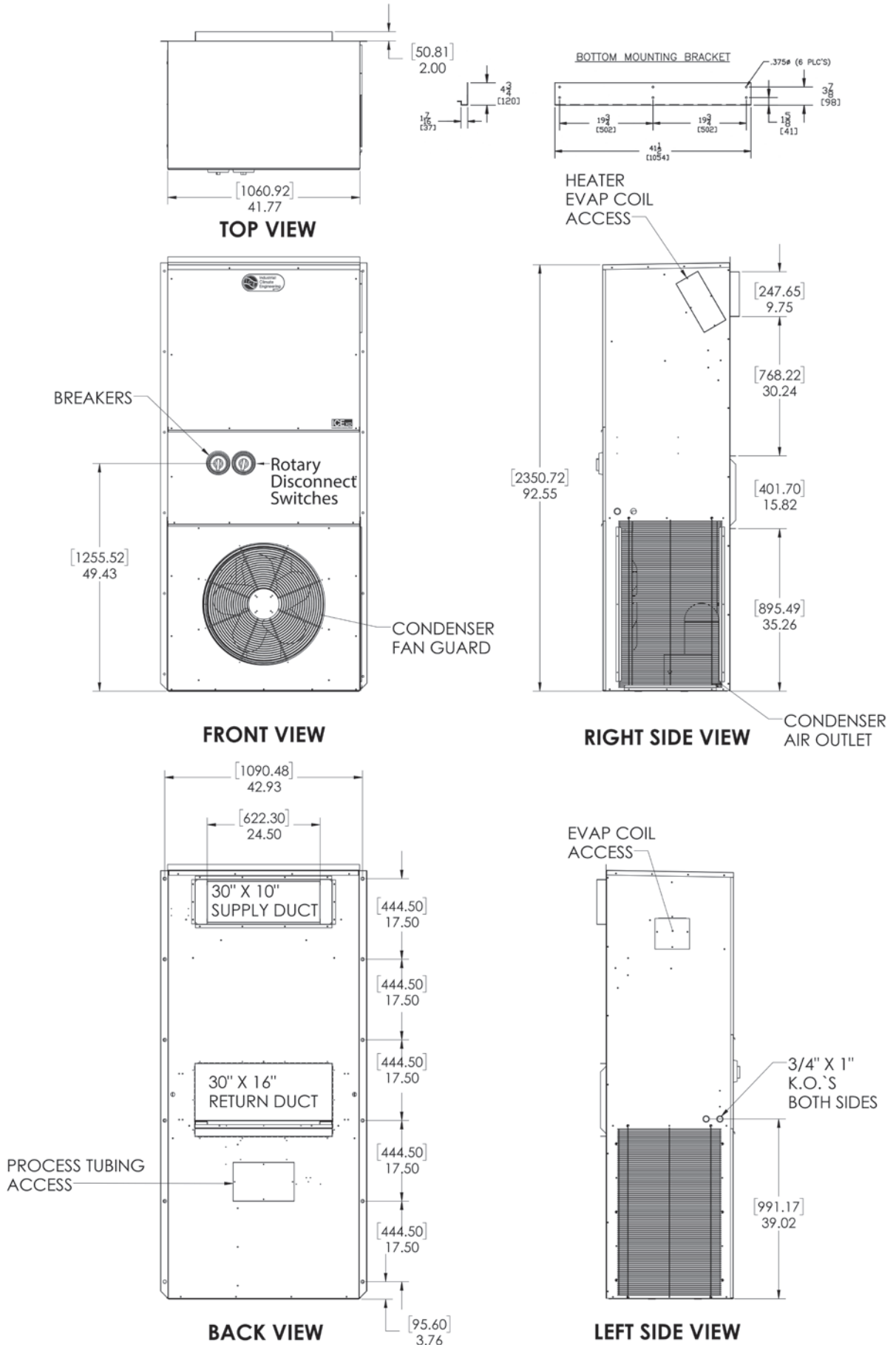


LEFT SIDE VIEW

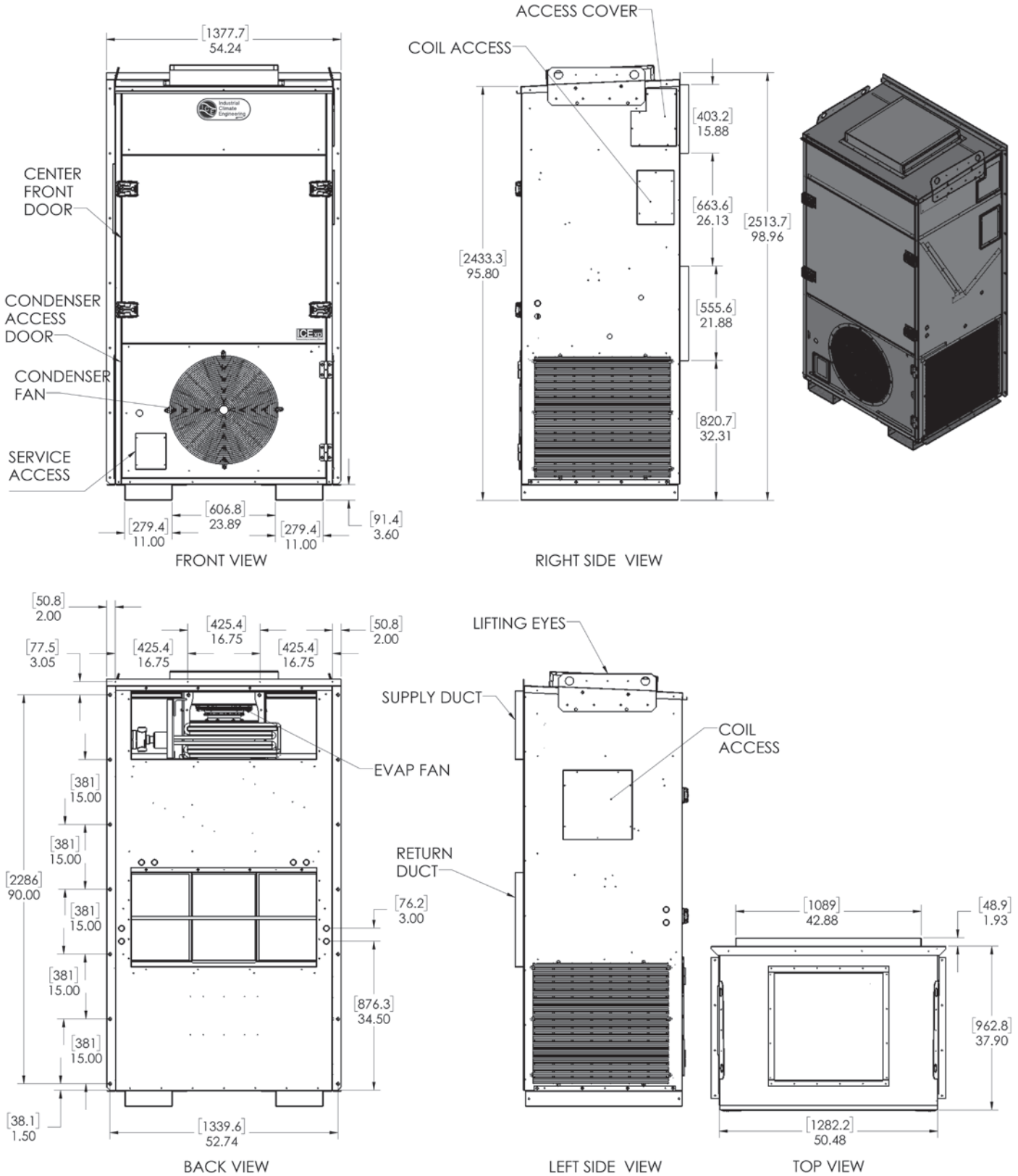
Dimensional Data - EXNA/EONA30/36 Air Conditioners



Dimensional Data - EXNA/EONA72 Air Conditioners



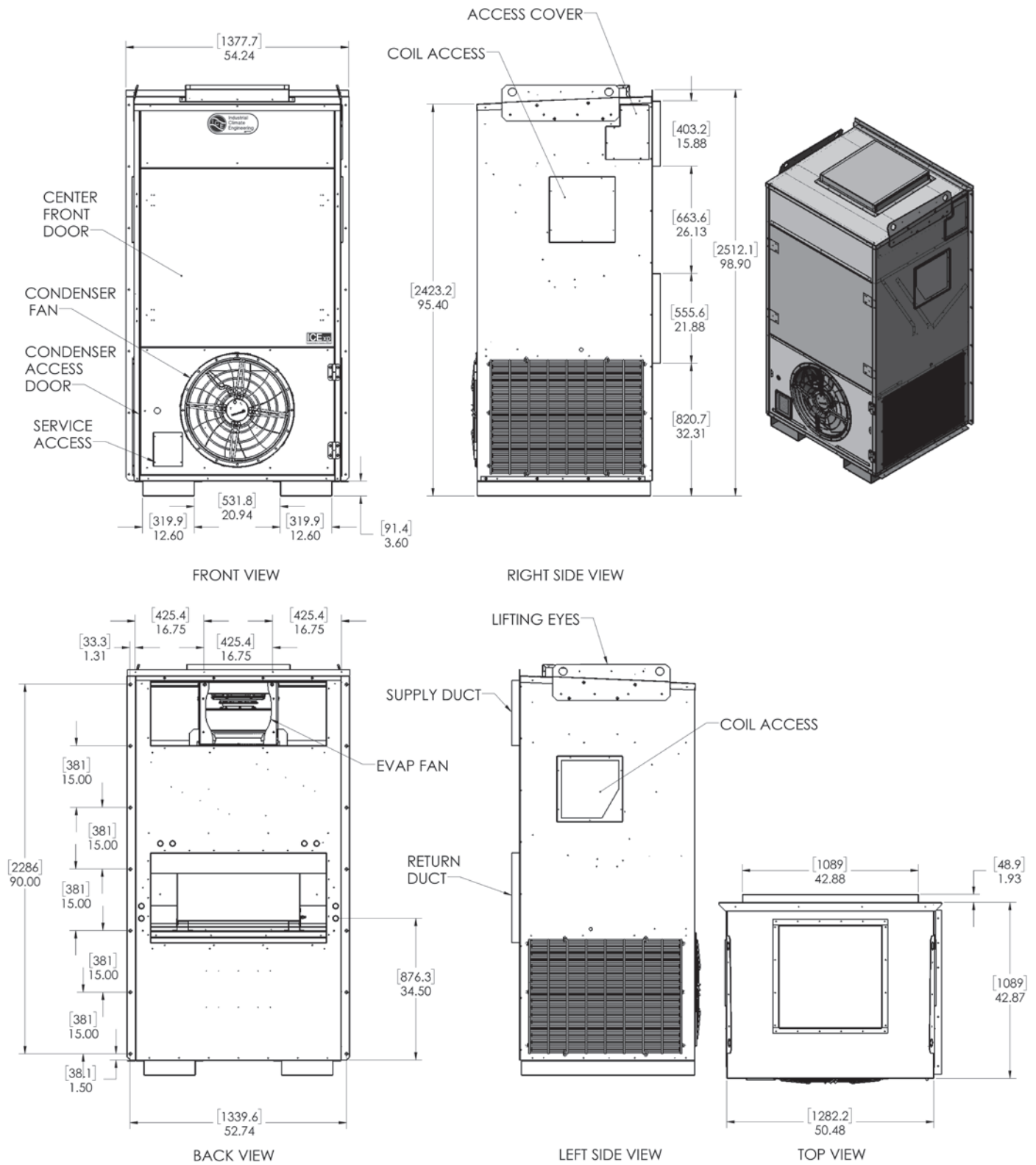
Dimensional Data - EXNDA/EONDA90 Air Conditioner



Filter Size

EXNDA/EONDA90	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
Exterior Access Return Air Filter	25" x 16" x 2"	635 x 406 x 51	80137	3	8
Interior Access Return Air Filter	15" x 20" x 2"	381 x 508 x 51	92365	3	8

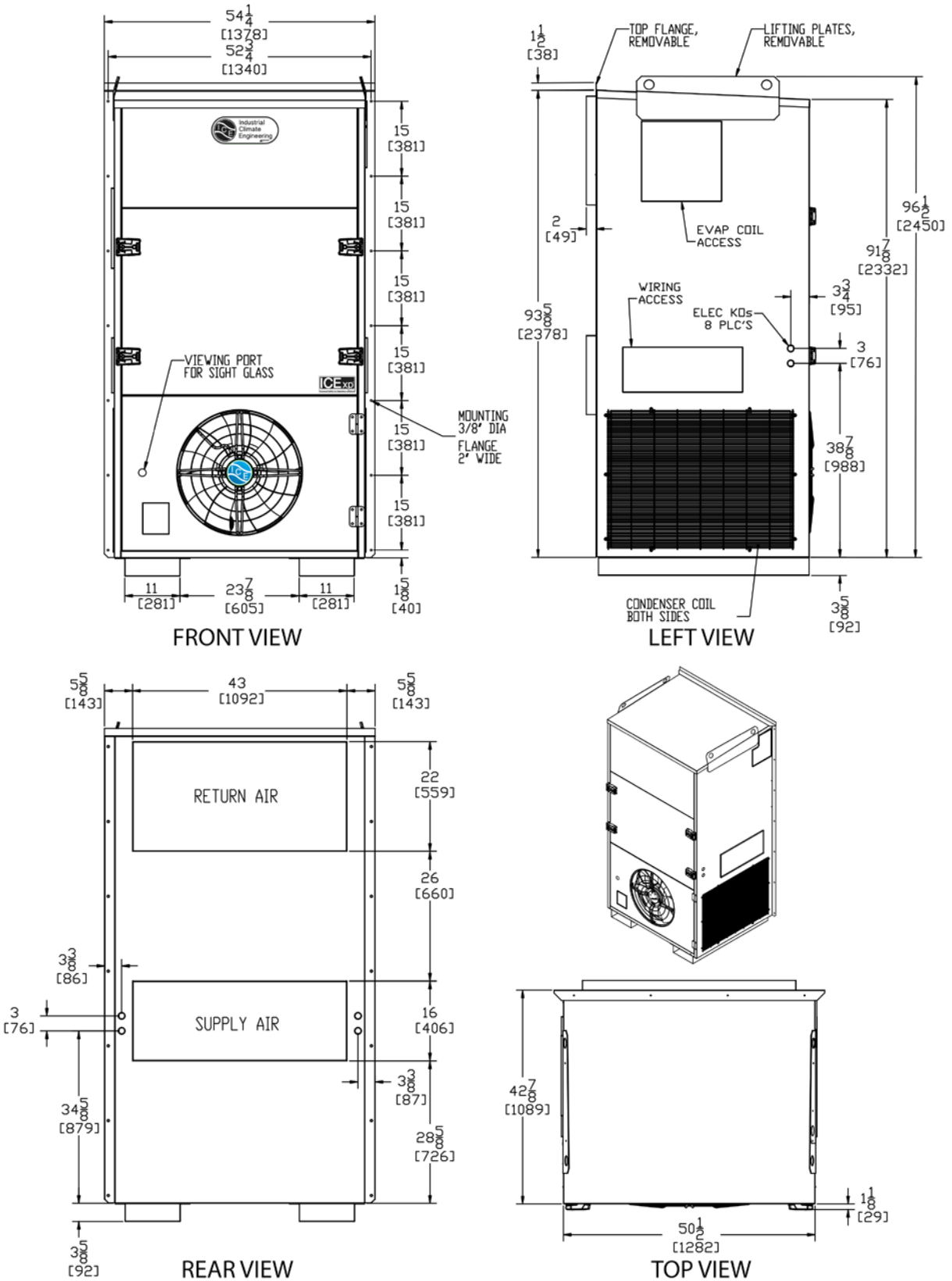
Dimensional Data - EXNDA/EONDA120 & 150 Air Conditioner



Filter Size

EXNA/EONA120/150	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
Exterior Access Return Air Filter	25" x 16" x 2"	635 x 406 x 51	80137	3	8
Interior Access Return Air Filter	15" x 20" x 2"	381 x 508 x 51	92365	3	8

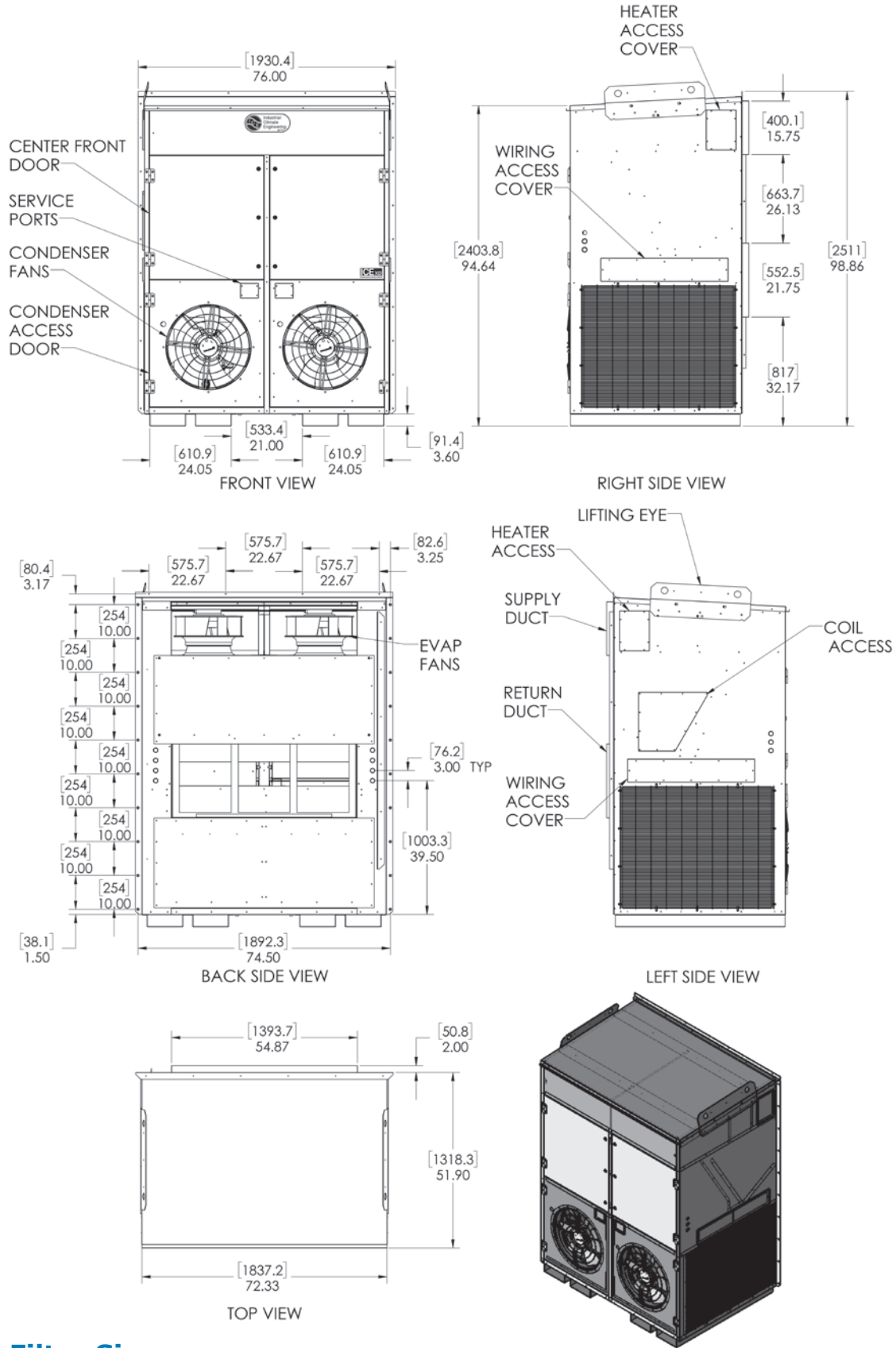
Dimensional Data - EXNDA/EONDA120 & 150 Air Conditioner - Reverse Air Flow



Filter Size

EXNA/EONA120/150	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
Exterior Access Return Air Filter	25" x 16" x 2"	635 x 406 x 51	80137	3	8
Interior Access Return Air Filter	15" x 20" x 2"	381 x 508 x 51	92365	3	8

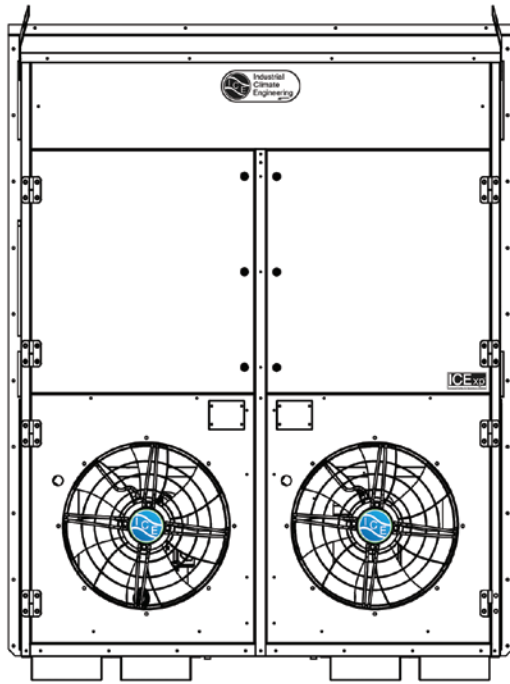
Dimensional Data - EXNDA/EONDA180 & 240 Air Conditioner



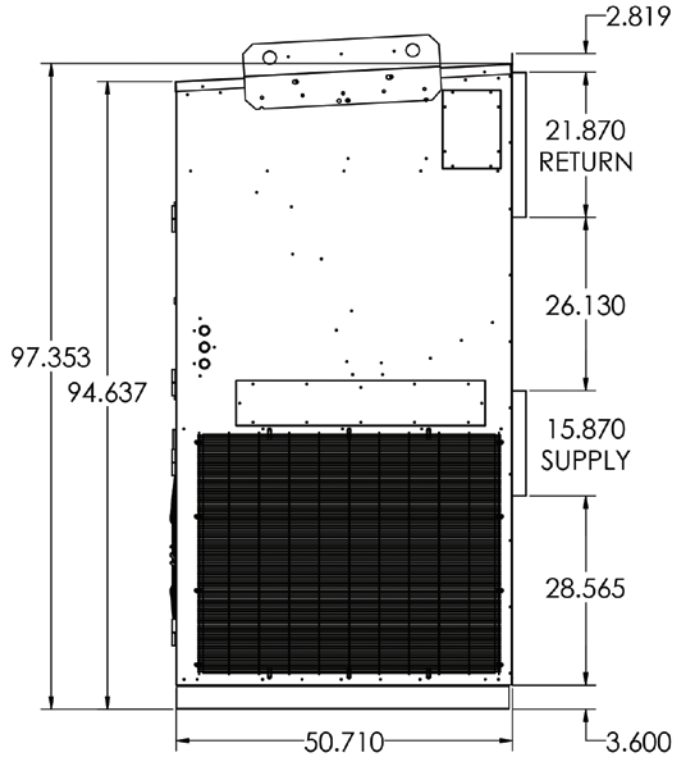
Filter Size

EXNDA/EONDA180/240	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
Exterior Access Return Air Filter	25" x 16" x 2"	635 x 406 x 51	80137	4	8
Interior Access Return Air Filter	24" x 18" x 2"	610 x 457 x 51	81257	4	8

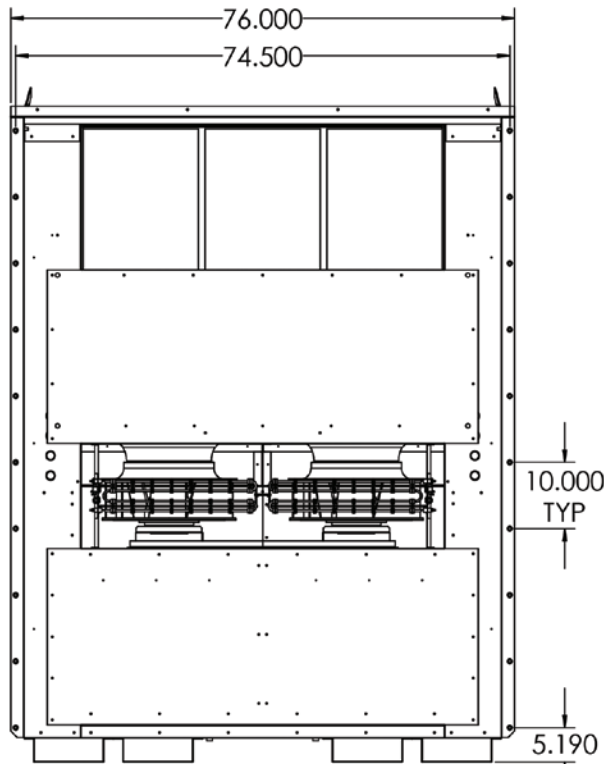
Dimensional Data - EXNDA/EONDA180 & 240 Air Conditioner - Reverse Air Flow



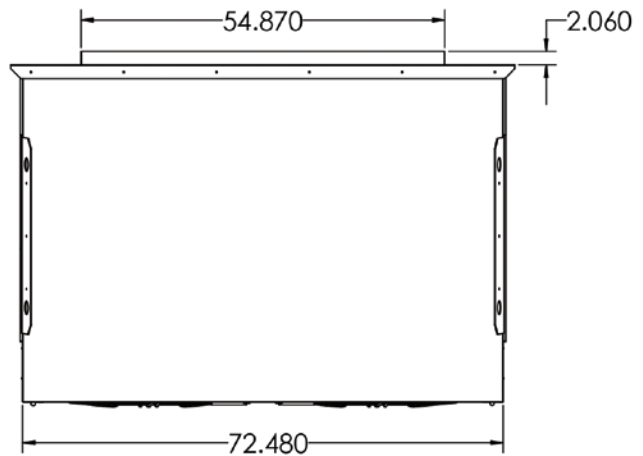
FRONT VIEW



RIGHT SIDE VIEW



REAR VIEW

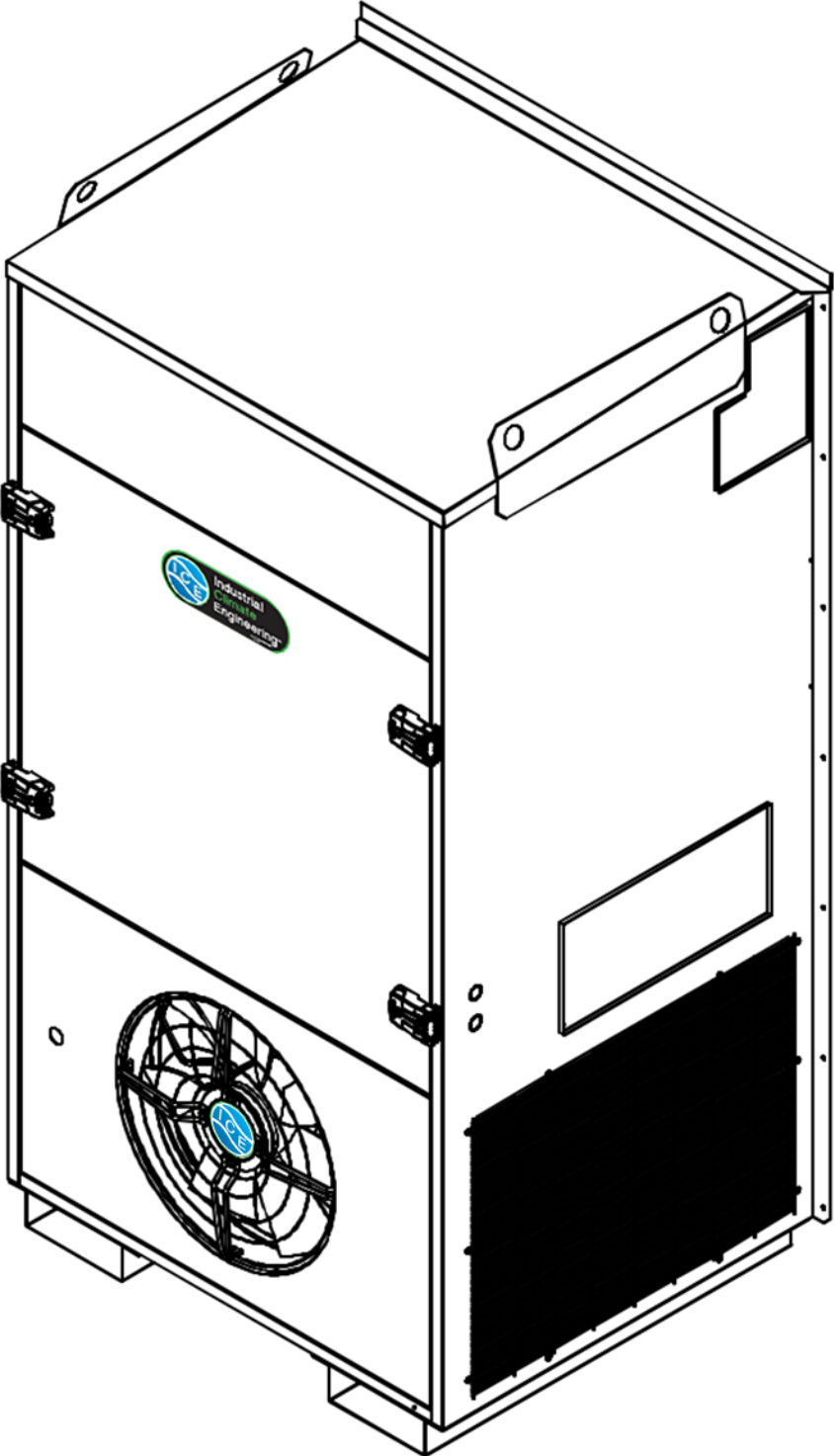


TOP VIEW

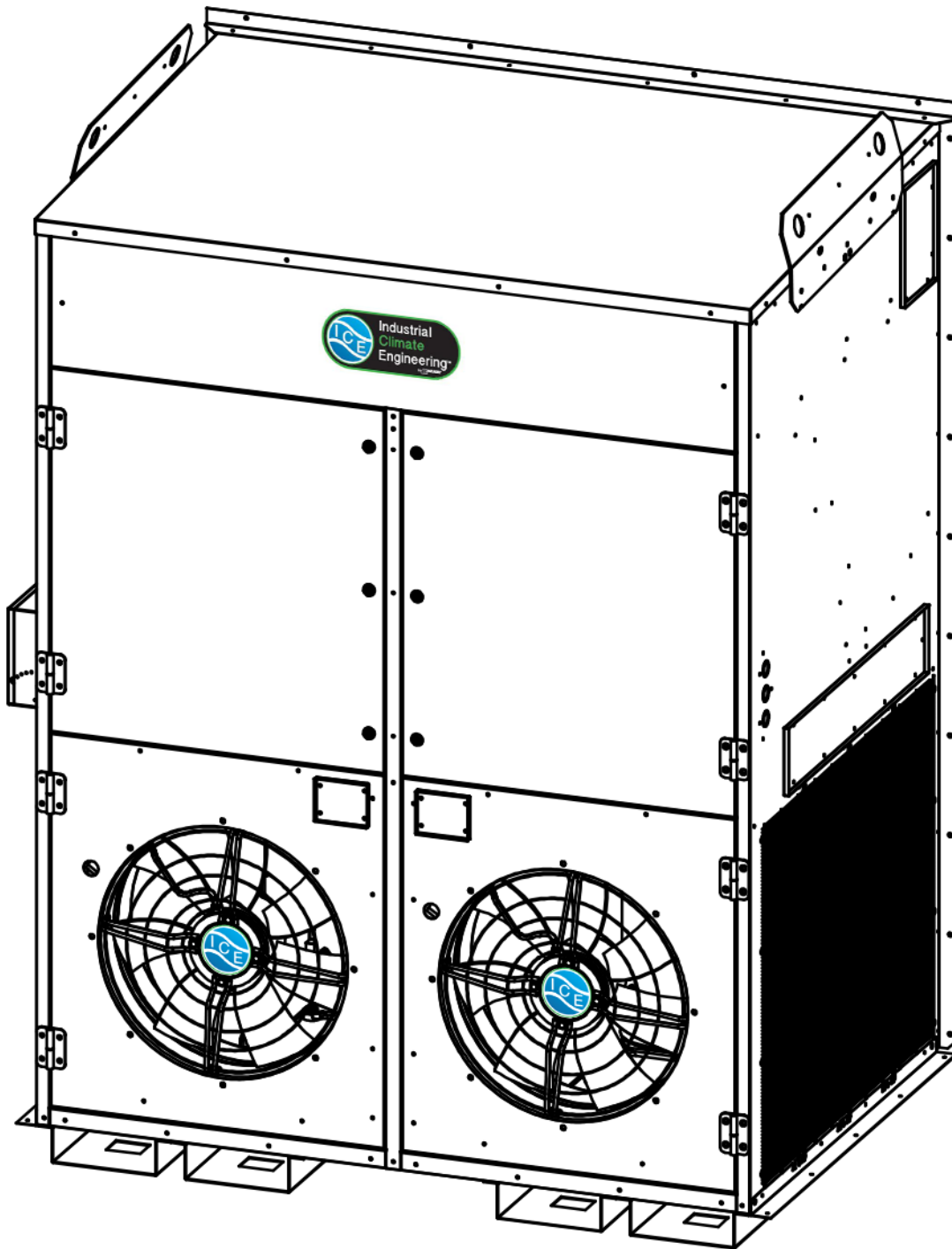
Filter Size

EXNDA/EONDA180/240	INCHES	MILLIMETERS	PART NUMBER	FILTERS PER UNIT	MERV RATING
Exterior Access Return Air Filter	25" x 16" x 2"	635 x 406 x 51	80137	4	8
Interior Access Return Air Filter	24" x 18" x 2"	610 x 457 x 51	81257	4	8

EXNDA/EONDA90, 120 & 150 Air Conditioner Isometric View



EXNDA/EONDA180 & 240 Air Conditioner 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.



P.O. Box 5104 • Cordele, GA 31010-5104
2002 Hoover St • Cordele, GA 31015
(229) 273-9558
Email: ice@airxcel.com • Internet: www.acice.com

