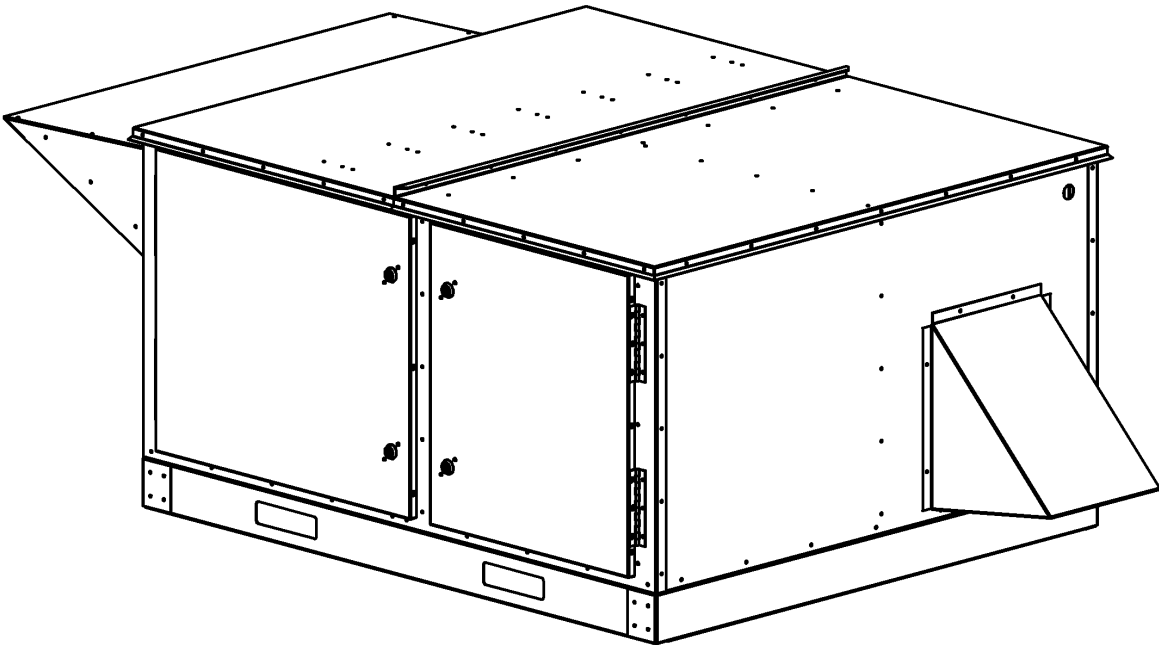


F Series Commercial Units

- Tailored solutions between 150 and 3,400 CFM
- Indoor and rooftop versions available
- Internal fans standard
- Heavy-duty steel construction
- Wide variety of options available for customized solutions
- AHRI Certified C510 Core and C700 Core



ver. 5.3

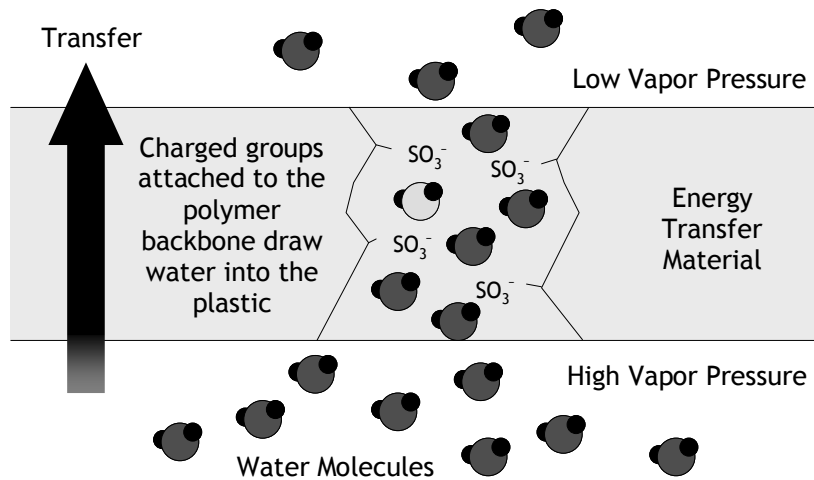
Breakthrough technology...

Dais Analytic Corporation manufactures and sells the high performance ConsERV™ energy recovery ventilation system we introduced in 2002. Our patented polymer materials, grown out of space-age fuel cell research, are the key component of our revolutionary ConsERV™ air-to-air fixed-plate enthalpy exchangers. These unique materials provide the technology breakthrough that brings our customers unprecedented performance and energy savings in a reliable fixed-plate design.

An energy recovery ventilator (“ERV”) features a heat exchanger combined with ventilation to provide pre-conditioned air into a building. Pre-conditioning the air saves energy – and money – by reducing the load on your HVAC system. During the summer, outside air is cooled and dehumidified before it enters the building and your air conditioning system. During winter, the opposite occurs as the outside air is heated and humidified by the outgoing exhaust air. In most applications, both sensible heat transfer (temperature exchange) and latent heat transfer (moisture exchange) within the exchanger are desired. Until now, energy recovery wheels have been the principal means of providing this total energy transfer, since fixed plate products did not have the ability to transfer latent heat very well.

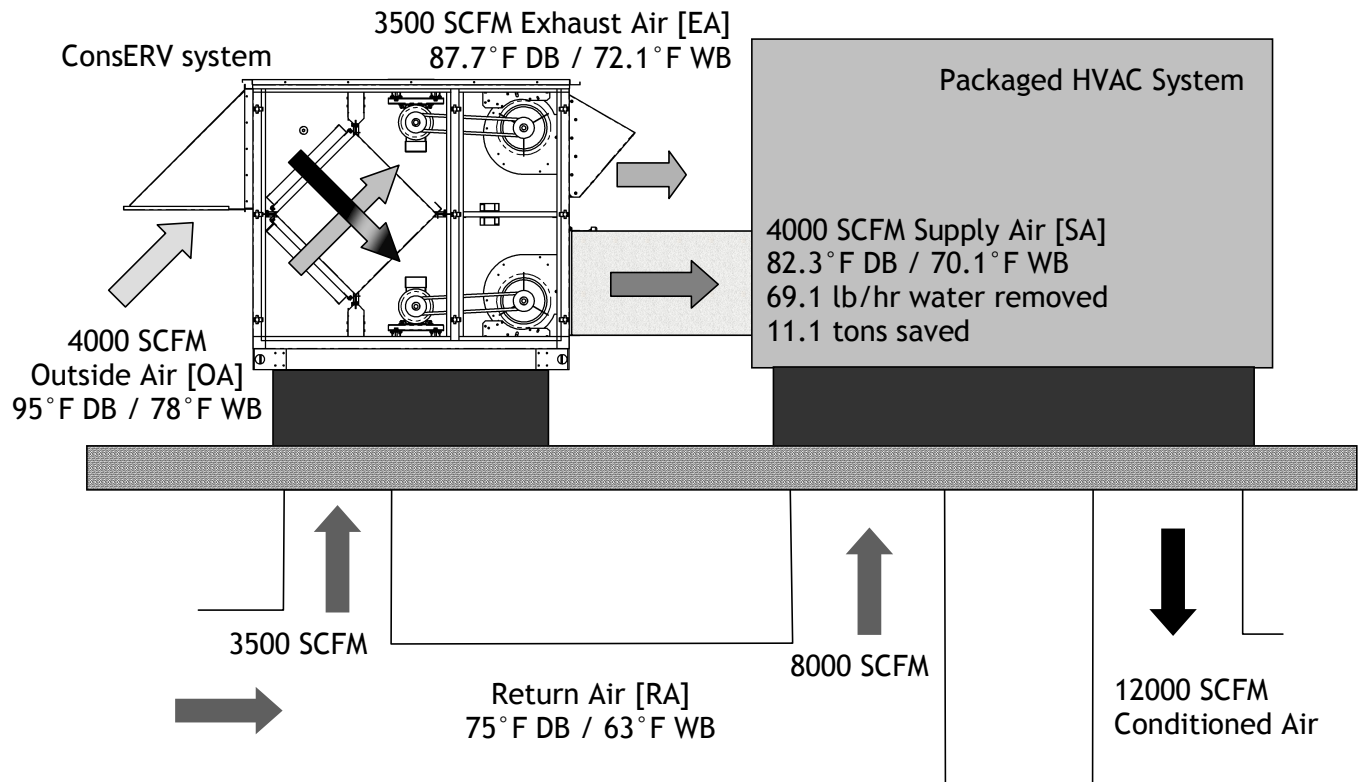
Enter Dais Analytic. Dais has developed the ConsERV™ energy exchanger, which transfers high levels of both sensible and latent heat and can reduce energy consumption and HVAC loads from fresh air ventilation by up to 80%. No rotating or moving parts in the exchanger mean less energy consumption by the ERV, lower maintenance costs, and peace of mind when downsizing HVAC equipment capacity.

Our ConsERV™ exchanger doesn't depend on open pores or fragile surface-mounted desiccants to transfer water from one air stream to the other. Instead, the polymer separating the air streams is organized at a nanometer level to create highly charged regions that draw water molecules into the material. There is no physical opening, so the polymer is hermetic and prevents crossover of air molecules. The water molecules move easily between charges along the polymer backbone, passing through the material from the side with higher vapor pressure to the side with lower vapor pressure.



About ConsERV™...

Offering energy savings, rapid return on investment, and ease of use to consumers by pre-treating ventilation air.



Example: D8R-FSE-xSHHVH system operating at AHRI Cooling conditions

Features and Benefits:

- Advanced materials = highest latent and total effectiveness of any fixed plate ERV
- No moving parts eliminates the most costly maintenance
- Savings of up to 30% on installed HVAC capital costs and up to 50% on operating costs
- Failsafe operation - transfers energy as long as there is airflow
- Reliability allows safer downsizing of attached HVAC equipment.
- Zero air stream leakage - core does not allow cross contamination
- No defrost needed in most climate zones
- Equally effective in both summer and winter = year-round savings
- Water stays in vapor phase = no liquid water
- Light, corrosion-resistant aluminum cabinets offer double wall construction, 5.7 R-value
- Steel cabinets offer single or double wall options
- Industry standard electrical and monitoring options
- Easy installation with flexible air flow configurations and a smaller installed footprint

Certifications and Awards:

- UL 900 Recognized, UL 1812 Ducted ERV
- AHRI 1060 certified performance
- 2006 AHR Ventilation Innovation Award winner

F Series

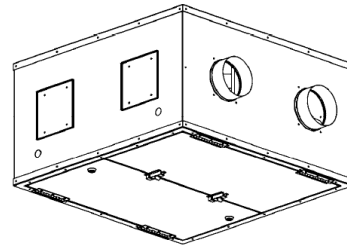
ConsERV™ F Series Energy Recovery Ventilators

F Series units are constructed of galvanized steel and provide a very cost effective solution. This core/box combination provides both indoor and rooftop units with a number of air flow direction configurations. These units offer a number of options including:

- Double walled cabinet
- Motorized dampers
- Fused or switched disconnects
- Filter maintenance indicator
- Low temperature lockout
- Motor maintenance indicator

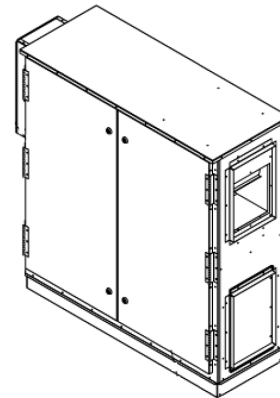
F01 - Single core ERV, 150 – 475 cfm

- C510 energy exchange core
- Indoor mounting only
- Direct drive blowers



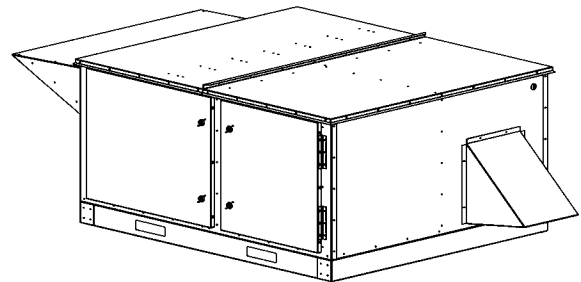
F01A - Single core ERV, 200 – 750 cfm

- C700 High Capacity energy exchange core
- Indoor or roof mounted units
- Direct drive blowers



F02 to F06 - Multi core ERV 400 – 3400 cfm

- Up to six C510 energy exchange cores
- Indoor or roof mounted units
- Belt drive blowers



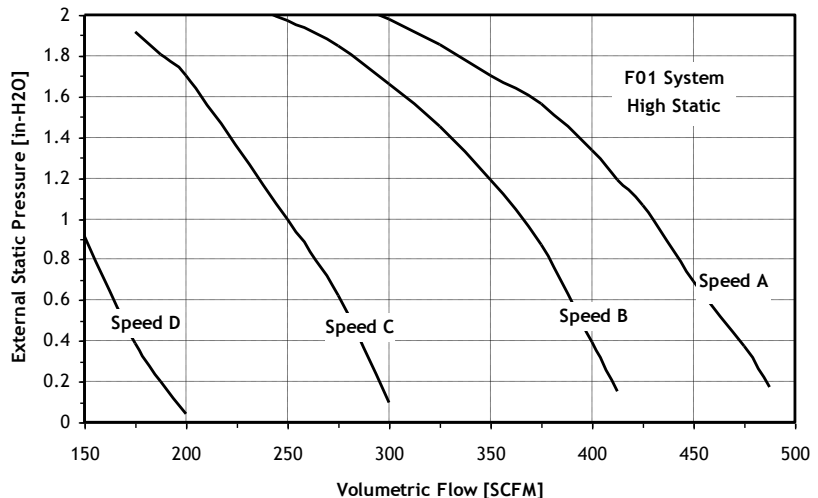
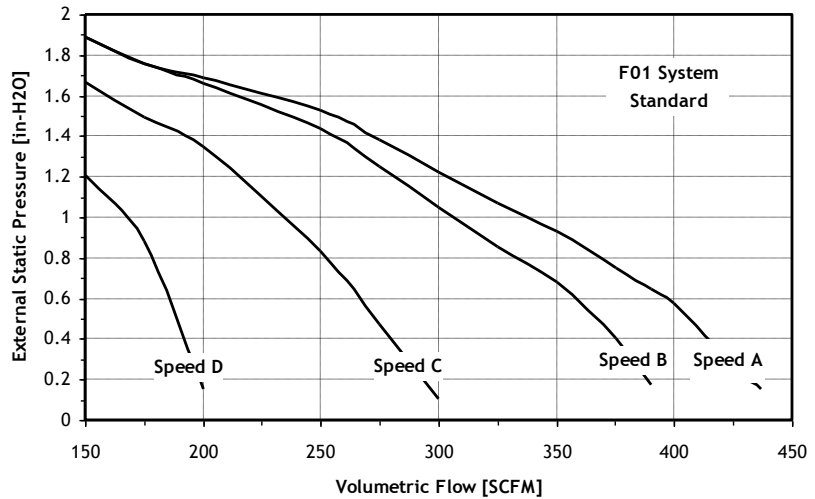
F01i Indoor System

F01i Indoor Systems offer a single C510 high-performance enthalpy exchange ConsERV™ core, making it suitable for flows ranging from 150 CFM to 475 CFM.

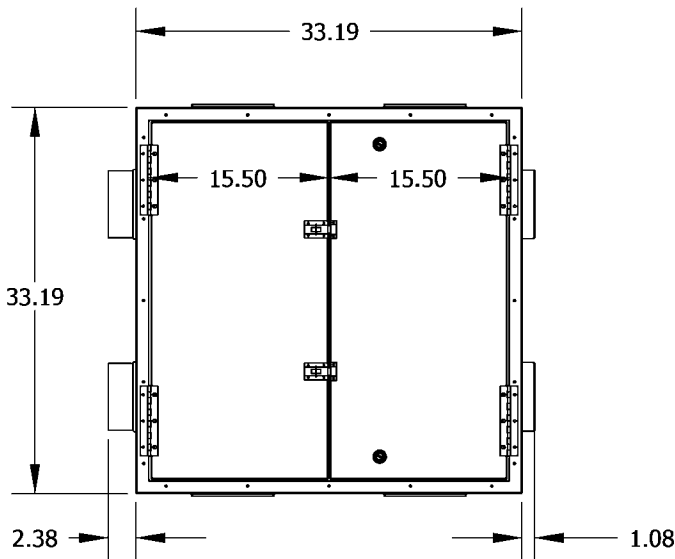
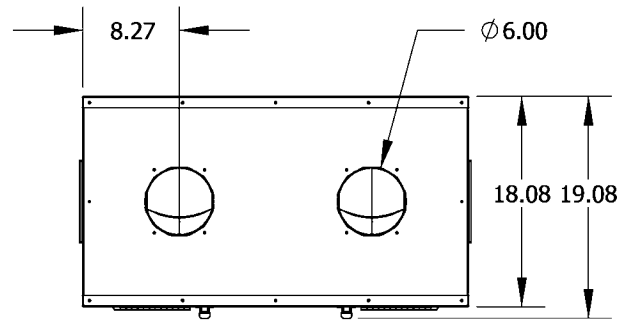
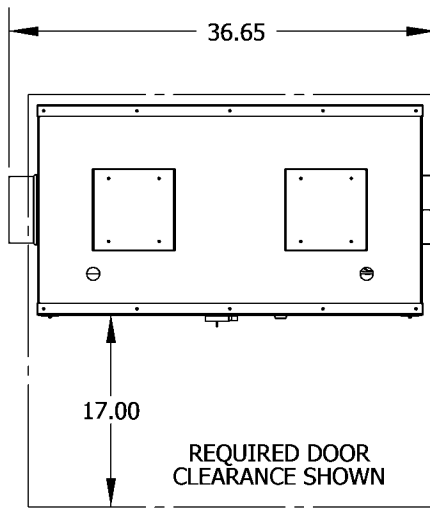
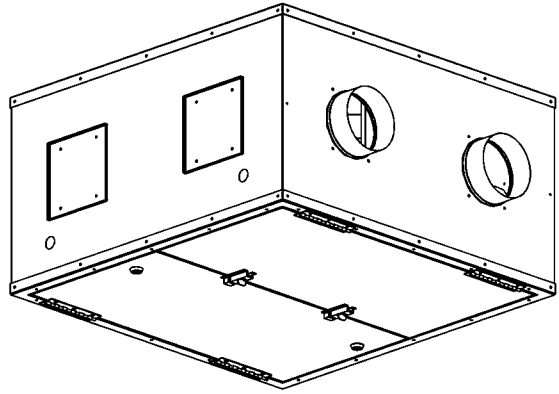
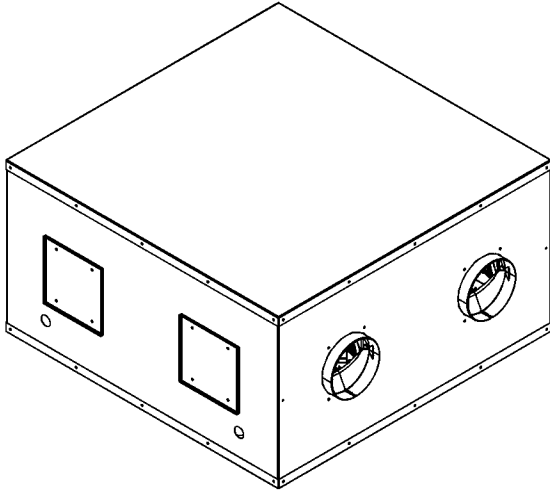
F01i Model Number Key		F	0	1	i	-	-	-
F = F series	Overall system type							
01	(1) C510 cores in system							
i = Indoor	Installation location							
S = Standard H = High Static	Blower capability							
1 = 115 V 2 = 208 V or 230 V 4 = 460 V 5 = 575 V	Electrical voltage							
1 = Single phase 3 = Three phase	Electrical service							

FlowControl Options:

The F01 system comes standard with 4-speed direct-drive forward-curved blowers. Blower speed is selected via the wiring connections chosen at installation. See the wiring schematic on page 44 for more information.



F01i Cabinet – Dimensions



UNIT WEIGHT = 145 LB

FLOW CONFIGURATIONS ARE SPECIFIED AT TIME OF ORDER AND CONFIGURED AT THE FACTORY

UNIT IS SHOWN AS IT WOULD BE INSTALLED IN A CEILING MOUNT APPLICATION, WITH ACCESS DOORS ON THE BOTTOM. THE UNIT CAN ALSO BE INSTALLED WITH ACCESS DOORS ON THE TOP OR SIDE.

UNIT IS INTENDED FOR INDOOR INSTALLATION

SIZE A	REV. 1	MODIFIED 1/8/2009	F01 Series Indoor System		MODEL F01i
www.conserv.com		DO NOT SCALE DRAWING	41	DIMENSIONS IN INCHES	www.conserv.com

F01i Electrical

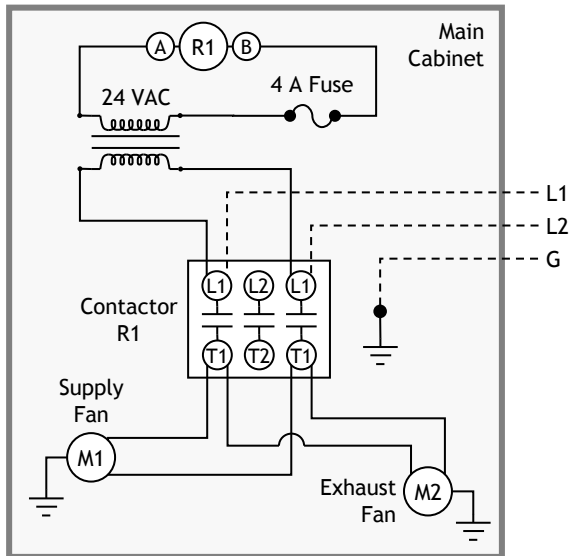
F01i Units

All F01i units use two direct-drive forward curved blowers. Fan speed is selected by choosing which of four wires is connected at installation and can be selected independently for each blower in the unit. Total fan capacity is selected at time of order by specifying the standard or high-static option, which will apply to both air streams in the unit.

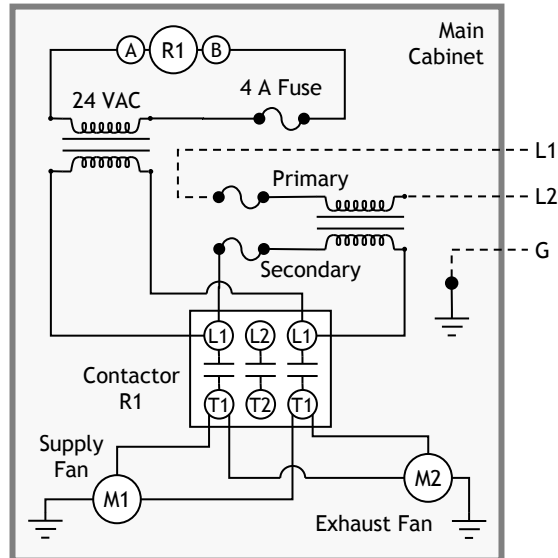
Schematic	Model Numbers
A	F01i-H11
	F01i-S21
	F01i-S23
B	F01i-H21
	F01i-H23
	F01i-S43

The key to the right identifies which of the two possible schematics matches a given model number.

Schematic A



Schematic B



----- Dashed lines indicate wiring supplied by others

Electrical Service	FLA	MCA	MOP
115V / 1 ϕ	8.2	10.3	15
208V / 1 ϕ or 208V / 3 ϕ	4.2	5.3	15
230V / 1 ϕ or 230V / 3 ϕ	3.8	4.8	15
460V / 3 ϕ	1.9	2.4	15
575V / 3 ϕ	1.5	1.9	15

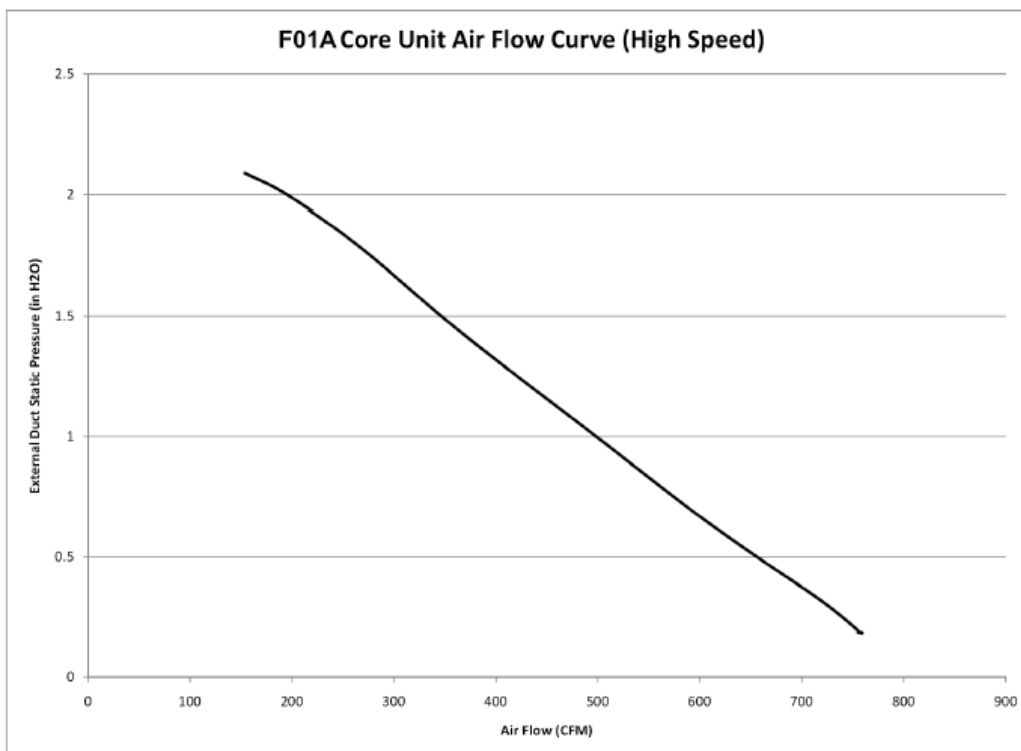
Model Number	Primary Voltage	Secondary Voltage	Primary Fuse	Secondary Fuse
F01i-H21	208 or 230	115	5	10
F01i-H23	208 or 230	115	5	10
F01i-S43	460	230	2.5	5

F01Ax System

F01A Systems offer a single C700 high-performance enthalpy exchange ConSERV™ core, making it suitable for flows ranging from 200 CFM to 750 CFM.

F01A Model Number Key		F	0	1	A	-	-	-	-	-	-
F = F series	Overall system type										
01A	(1) C700 cores in system										
i = Indoor R = Rooftop	Installation location										
1 = 115 V 2 = 208 V 3 = 230 V 4 = 460 V 5 = 575 V	Electrical voltage										
1 = Single phase 3 = Three phase	Electrical service										
H = Horizontal	Outside Air [OA] entrance direction										
H = Horizontal B = Bottom	Supply Air [SA] exit direction										
H = Horizontal B = Bottom	Return Air [RA] entrance direction										
H = Horizontal	Exhaust Air [EA] exit direction										

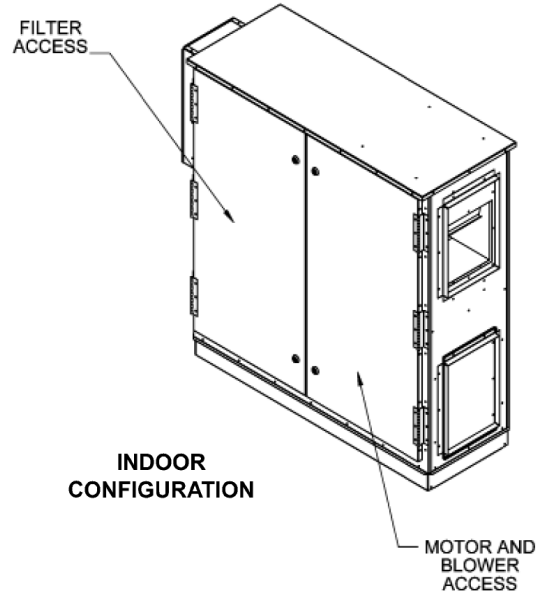
Fan System Performance:



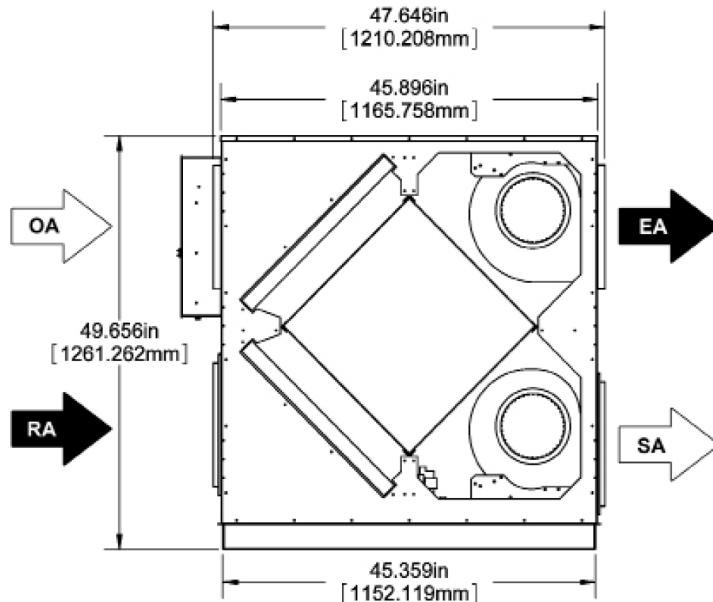
F01Ai Cabinet - Dimensions



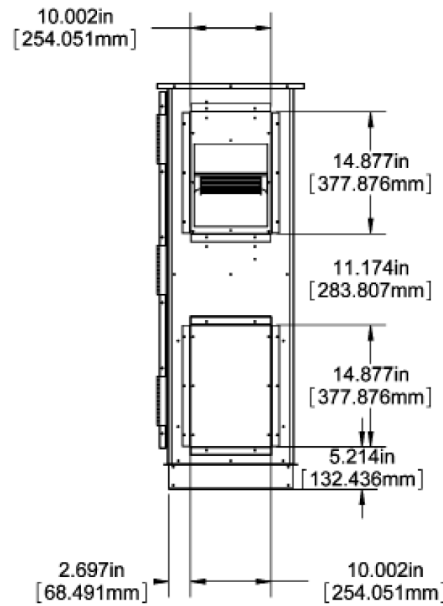
TOP VIEW



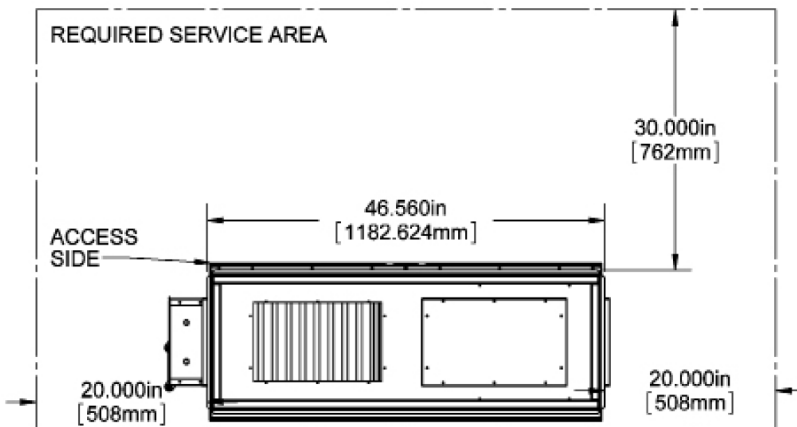
INDOOR CONFIGURATION



FRONT VIEW



LEFT VIEW



BOTTOM VIEW

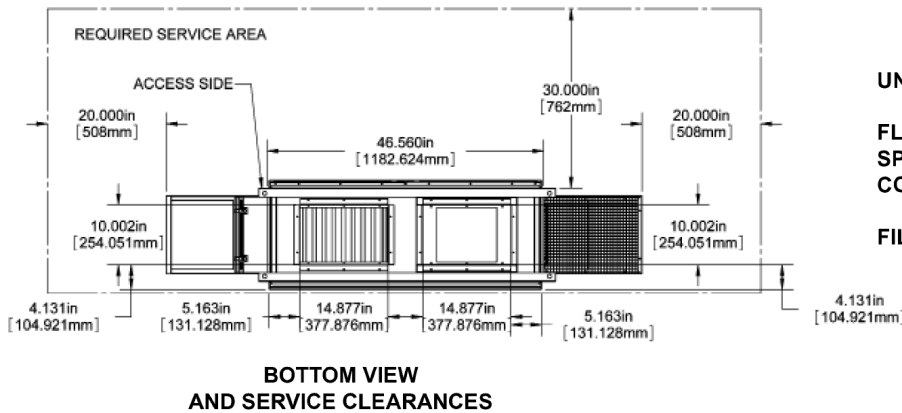
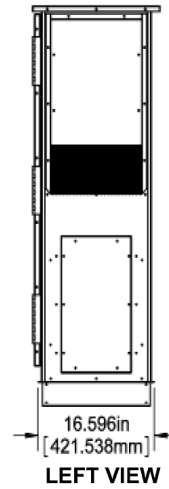
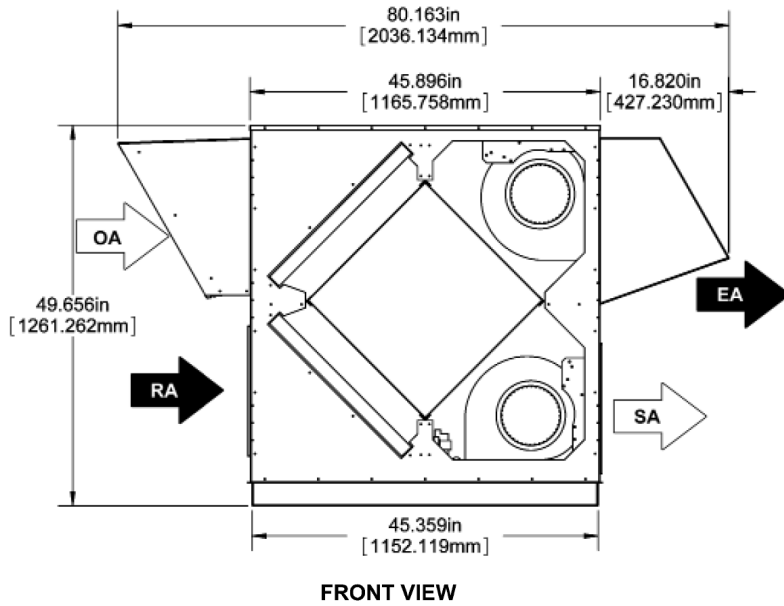
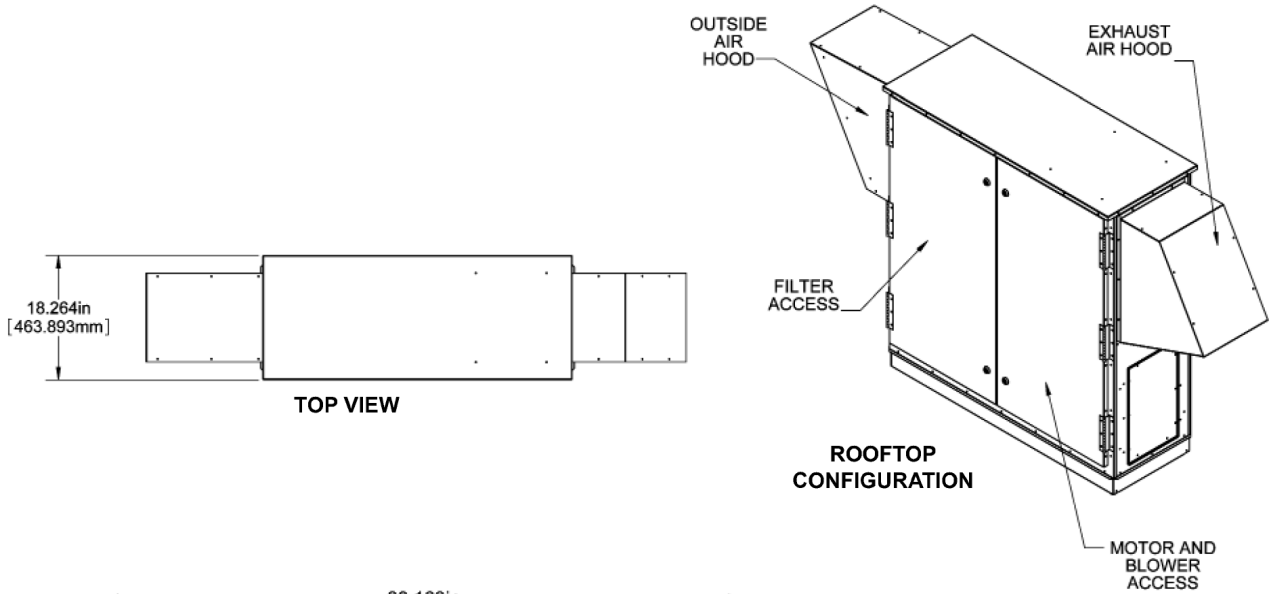
UNIT WEIGHT = 370 LBS

FLOW CONFIGURATIONS ARE SPECIFIED AT TIME OF ORDER AND CONFIGURED AT THE FACTORY

FILTERS: (2) 25" X 16" X 2"

SIZE A	REV. 1	MODIFIED 1/19/2010	F01Ax Series		MODEL F01Ax
www.conserv.com		DO NOT SCALE DRAWING		44	DIMENSIONS IN INCHES
					www.conserv.com

F01AR Cabinet - Dimensions



UNIT WEIGHT = 395 LBS

FLOW CONFIGURATIONS ARE SPECIFIED AT TIME OF ORDER AND CONFIGURED AT THE FACTORY

FILTERS: (2) 25" X 16" X 2"

SIZE A	REV. 1	MODIFIED 1/19/2010	F01Ax Series	MODEL F01Ax
www.conserv.com		DO NOT SCALE DRAWING	45	DIMENSIONS IN INCHES
				www.conserv.com

F01A Electrical

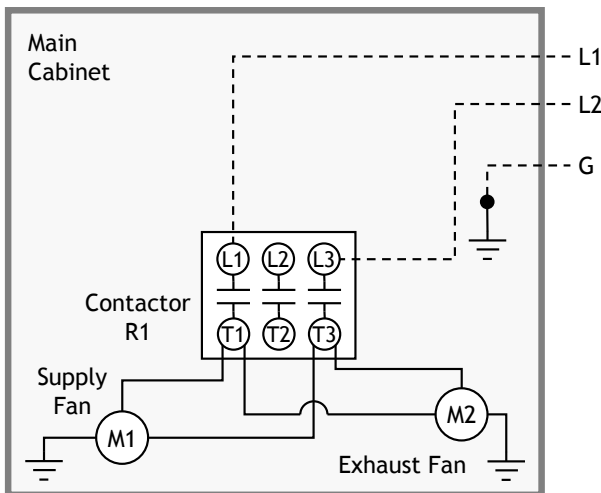
F01A Units

All F01A units use two direct-drive forward curved blowers. Fan speed is selected by choosing which of four wires is connected at installation and can be selected independently for each blower in the unit. Fans are wired for the highest speed when leaving the factory.

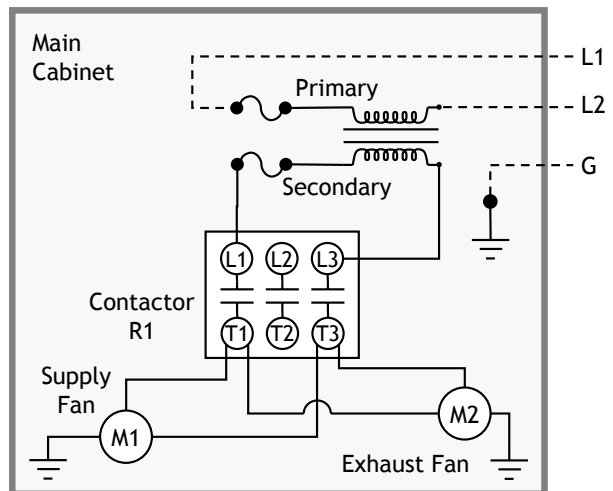
The key to the right identifies which of the two possible schematics matches a given model number.

Schematic	Model
A	F01Ax-1
	F01Ax-2
	F01Ax-3
B	F01Ax-4
	F01Ax-5

Schematic A



Schematic B



- - - - - Dashed lines indicate wiring supplied by others

System Voltage	System Phase	FLA	MCA	MOP
115	1	10.65	13.32	16.90
208	1	8.56	10.70	13.69
230	1	8.53	10.66	13.65
460	1	4.26	5.33	6.83
575	1	3.41	4.26	5.46

F01A Series Options

Electrical Disconnects

Factory installed electrical disconnects are available for all ERV units. Disconnects are sized to handle the ERV unit and pre-heater (when ordered together). Both switched and fused disconnects are available.

Motorized Dampers

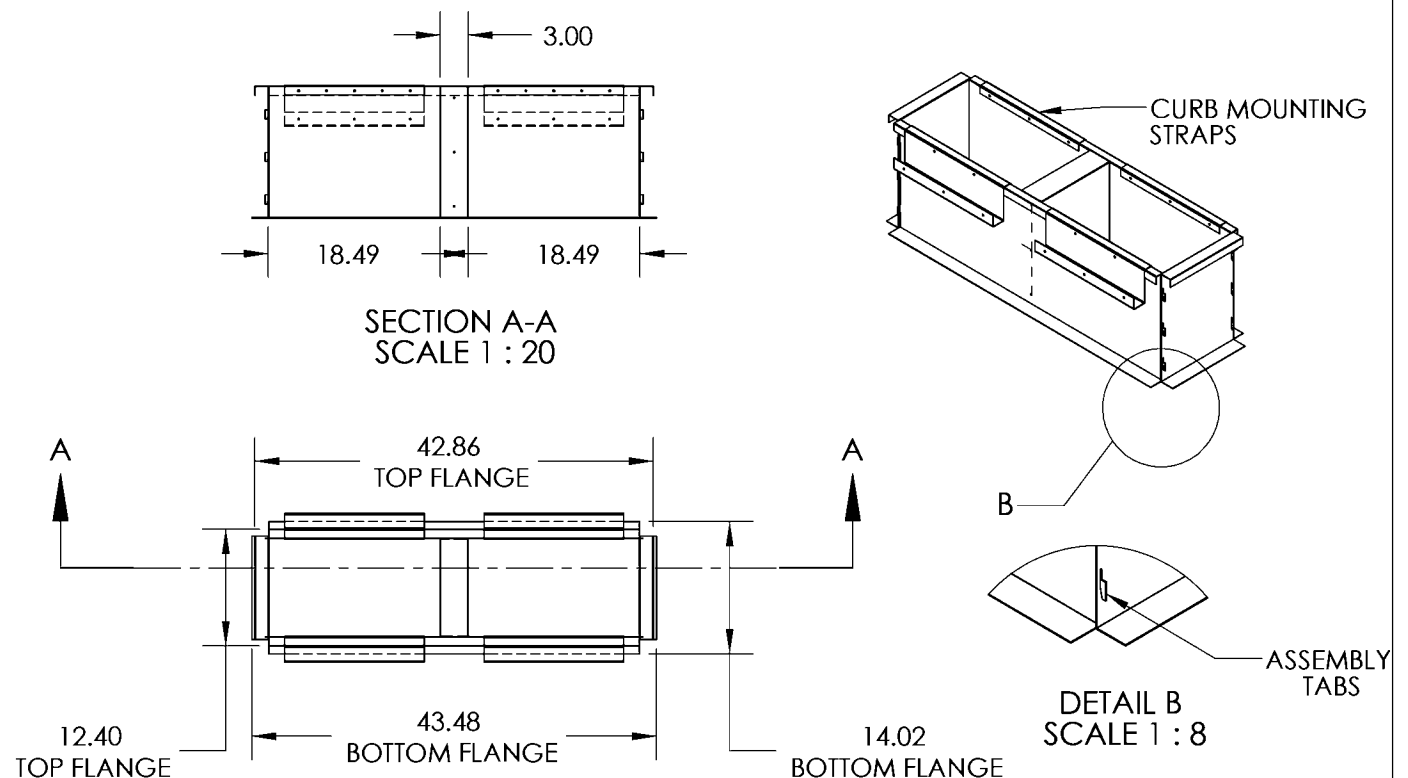
Two position motorized outside air and exhaust air dampers are available to eliminate the migration of unwanted outside air into the building space when the ERV unit is off. Motors are 24 volt and are factory installed and wired. Outside air and exhaust air dampers are ordered separately.

Roof Curbs

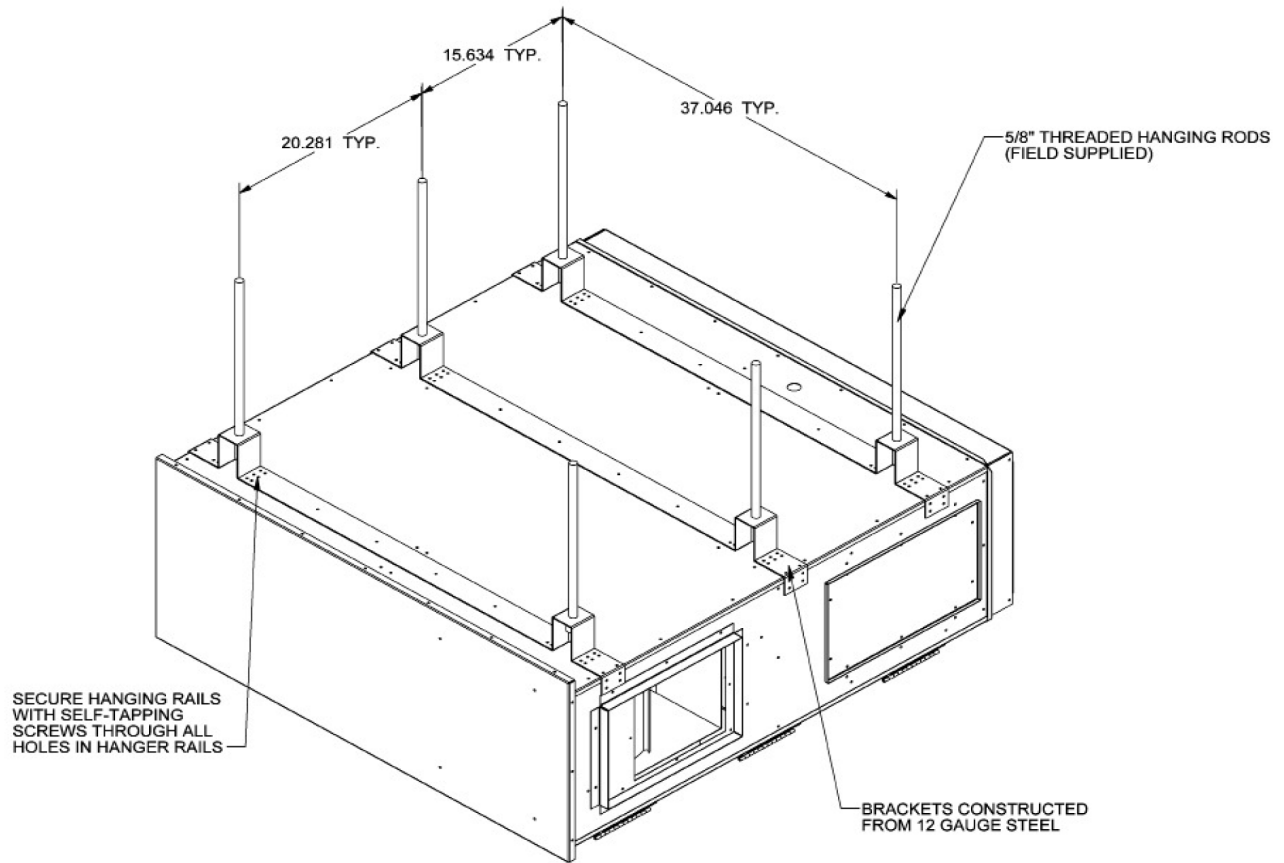
The ERV roof curbs are constructed of heavy gauge galvanized steel, and include a wood nailer and gasket package for a tight unit-to-curb seal. Standard curbs are 14" tall and are manufactured to NRCA specifications. Duct work can slide into the supply and return openings and hang from the top of the curb. Insulated deck pans and duct supports are provided. Vibration isolation curbs are available with 2" deflection springs and are shipped fully assembled.

NOTES:

- STANDARD 14" TALL FLAT-ROOF CURB
- 18 GA. GALVANIZED STEEL CONSTRUCTION
- KNOCKDOWN CURB, SHIPPED DISASSEMBLED
- FULL PERIMETER WOOD NAILER IS PROVIDED
- 0.25" x 1.50" FOAM GASKET TAPE IS PROVIDED



F01Ai - Hanging Bracket Option



SIZE A	REV. 1	MODIFIED 1/19/2010	F01Ax Series		MODEL F01Ax
www.conserv.com		DO NOT SCALE DRAWING	48	DIMENSIONS IN INCHES	www.conserv.com

F02x - F06x Systems

F02x to F06x systems offer 2 to 6 C510 high-performance enthalpy exchange Conserv[™] cores, making them suitable for flows ranging from 400 CFM to 3,400 CFM.

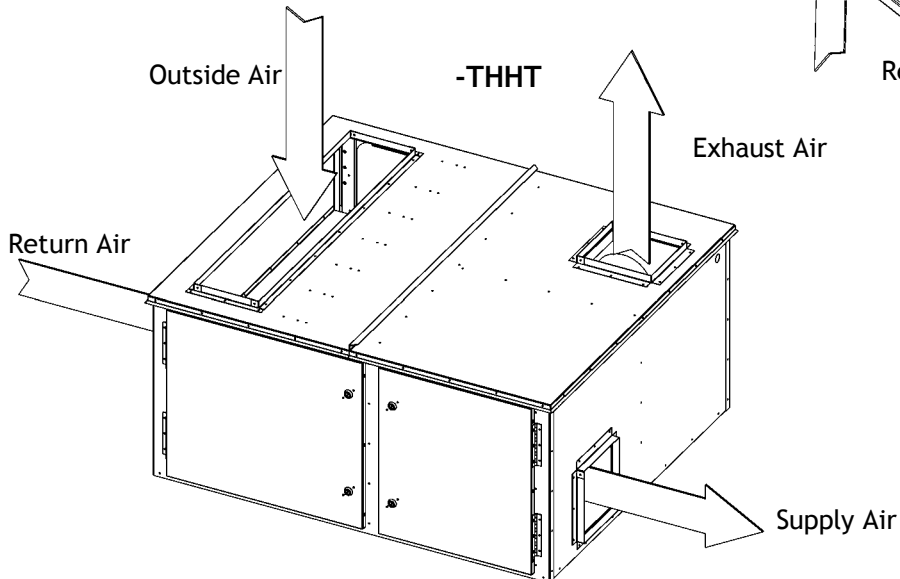
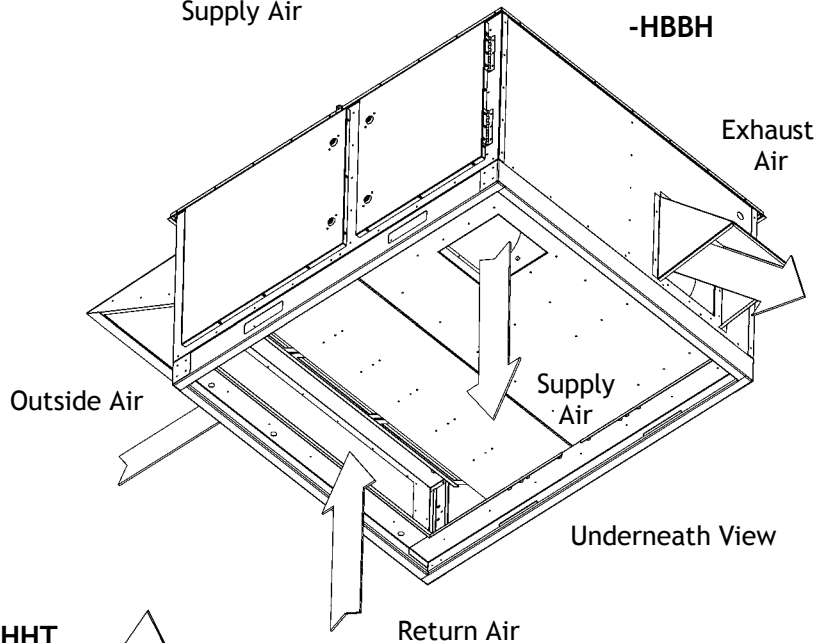
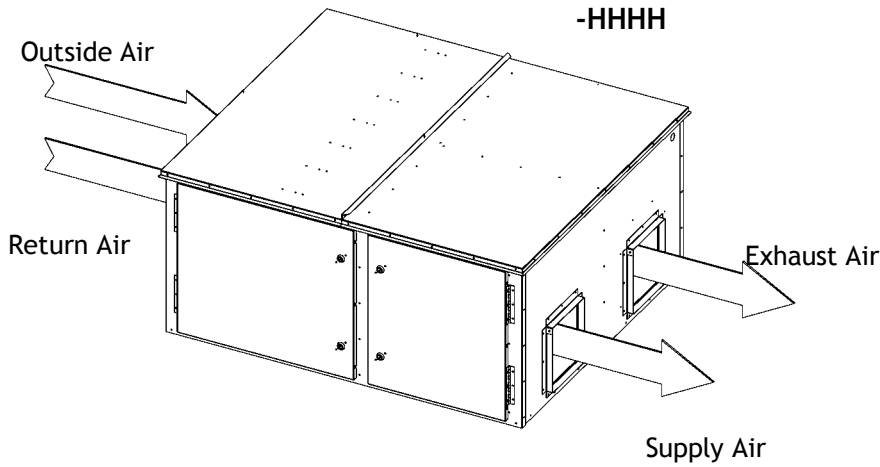
F02 - F06 Model Number Key		F	-	-	-	-	-	-	-	-	-	-
F = F series	Overall system type											
02 thru 06	# of C510 cores in system											
i = Indoor R = Rooftop	Installation location											
S = Standard H = High Static	Supply blower capability											
S = Standard H = High Static	Return blower capability											
1 = 115 V 2 = 208 V or 230 V 4 = 460 V 5 = 575 V	Electrical voltage											
1 = Single phase 3 = Three phase	Electrical service											
H = Horizontal T = Top	Outside Air [OA] entrance direction											
H = Horizontal T = Top B = Bottom	Supply Air [SA] exit direction											
H = Horizontal B = Bottom	Return Air [RA] entrance direction											
H = Horizontal T = Top B = Bottom	Exhaust Air [EA] exit direction											

Example: F03i-SS23-HHHH

This unit has 3 C510 cores for indoor installation. Both air streams use standard impellers, the power supply is 208 - 230V/3 ϕ , and all of the duct openings are in the horizontal direction.

F Series Flow Configuration Examples

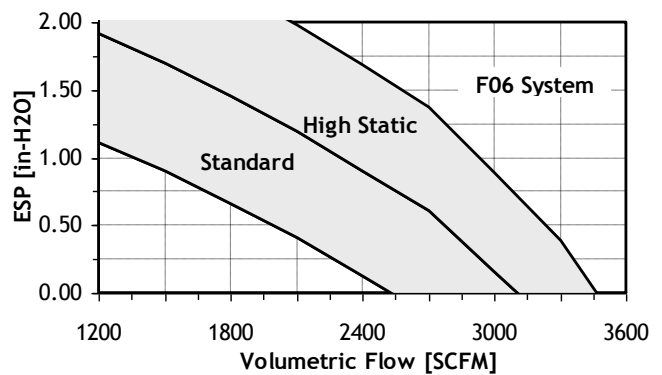
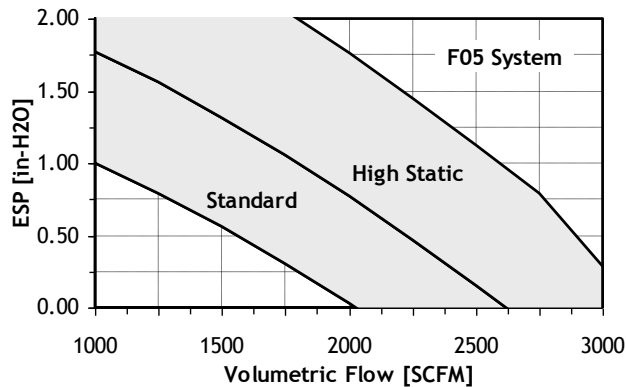
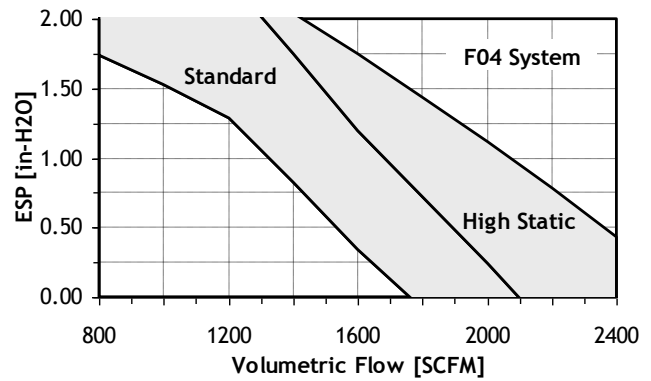
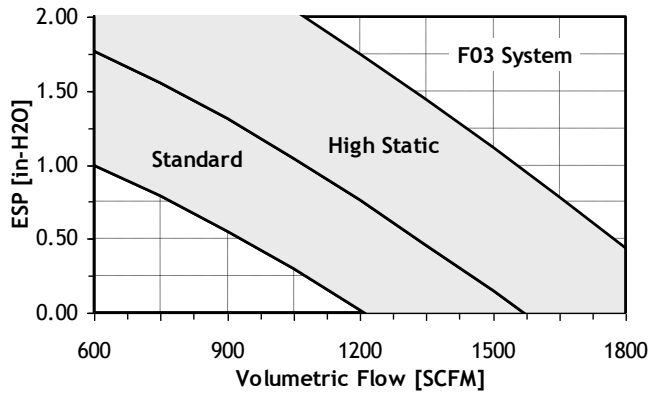
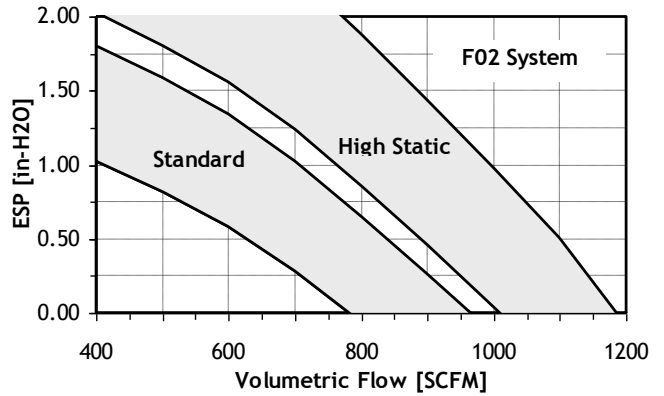
F Series 02 through F06 units have many combinations of flow configurations including the examples below:

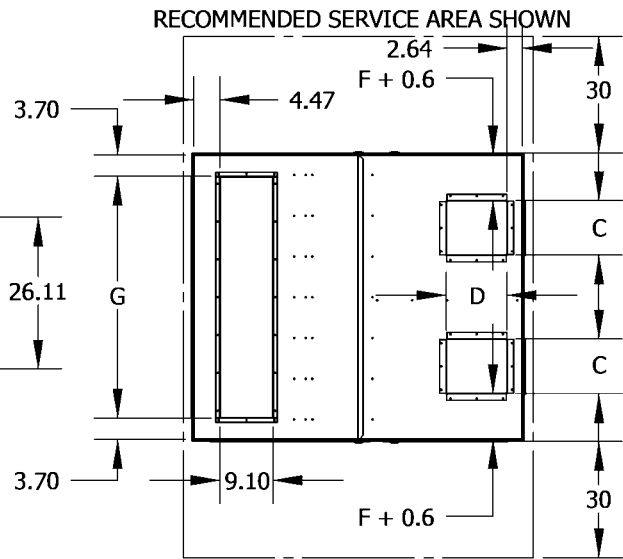
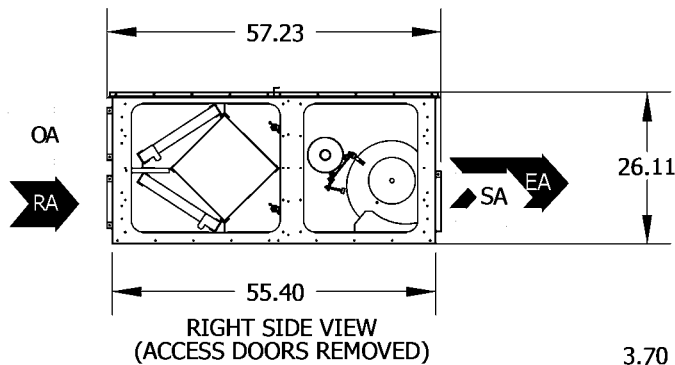
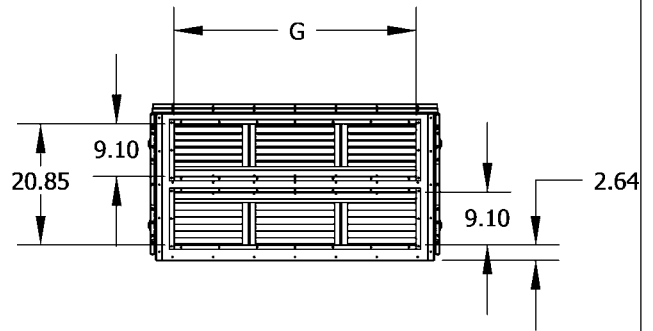
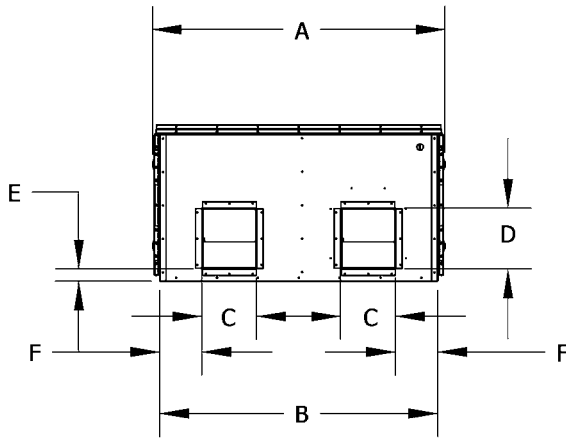
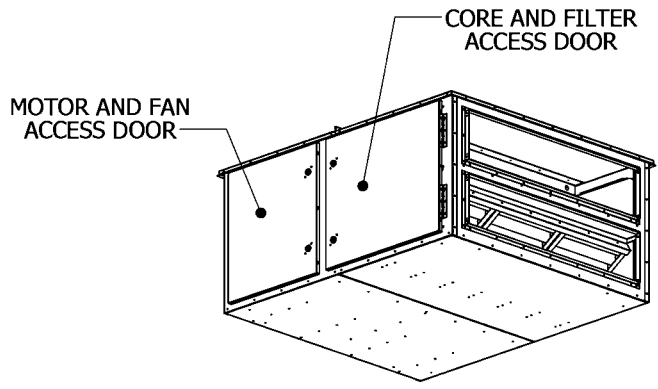
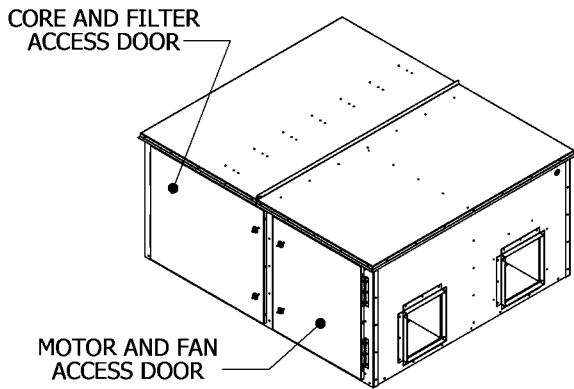


F02x - F06x Systems

All F02x thru F06x systems are equipped with a belt and pulley centrifugal fan / motor assembly. If the standard operating envelope is not sufficient, each unit has a high static pressure option available as a factory option.

Model	Static Pressure Option	Motor HP	Fan RPM Range
F02x	Standard	1 HP	1333 - 1750
	High Static	2 HP	1703 - 2176
F03x	Standard	2 HP	1182 - 1577
	High Static	2 HP	1577 - 2160
F04x	Standard	2 HP	1232 - 1650
	High Static	3 HP	1400 - 1825
F05x	Standard	3 HP	853 - 1150
	High Static	3 HP	1150 - 1550
F06x	Standard	3 HP	877 - 1169
	High Static	3 HP	1053 - 1425





NOTES:

SYSTEM IS INTENDED FOR INDOOR USE ONLY

- OA - OUTSIDE AIR INTAKE
- SA - SUPPLY AIR EXIT
- RA - RETURN AIR INTAKE
- EA - EXHAUST AIR EXIT

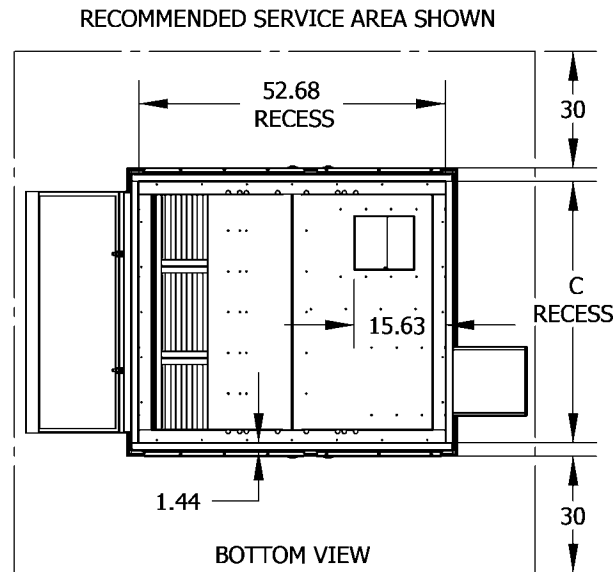
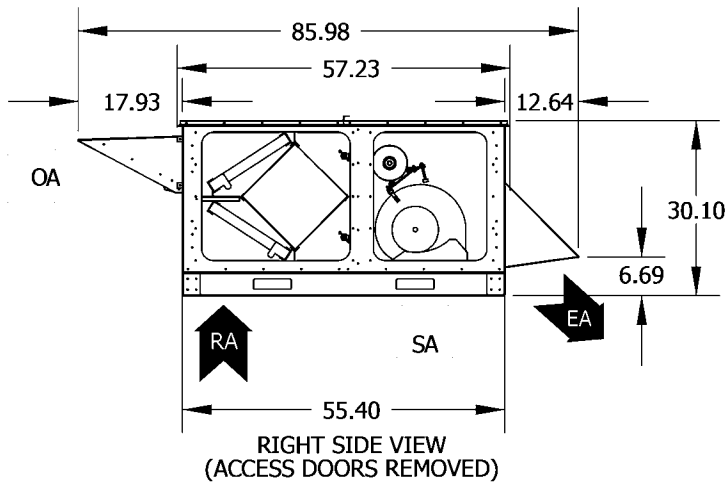
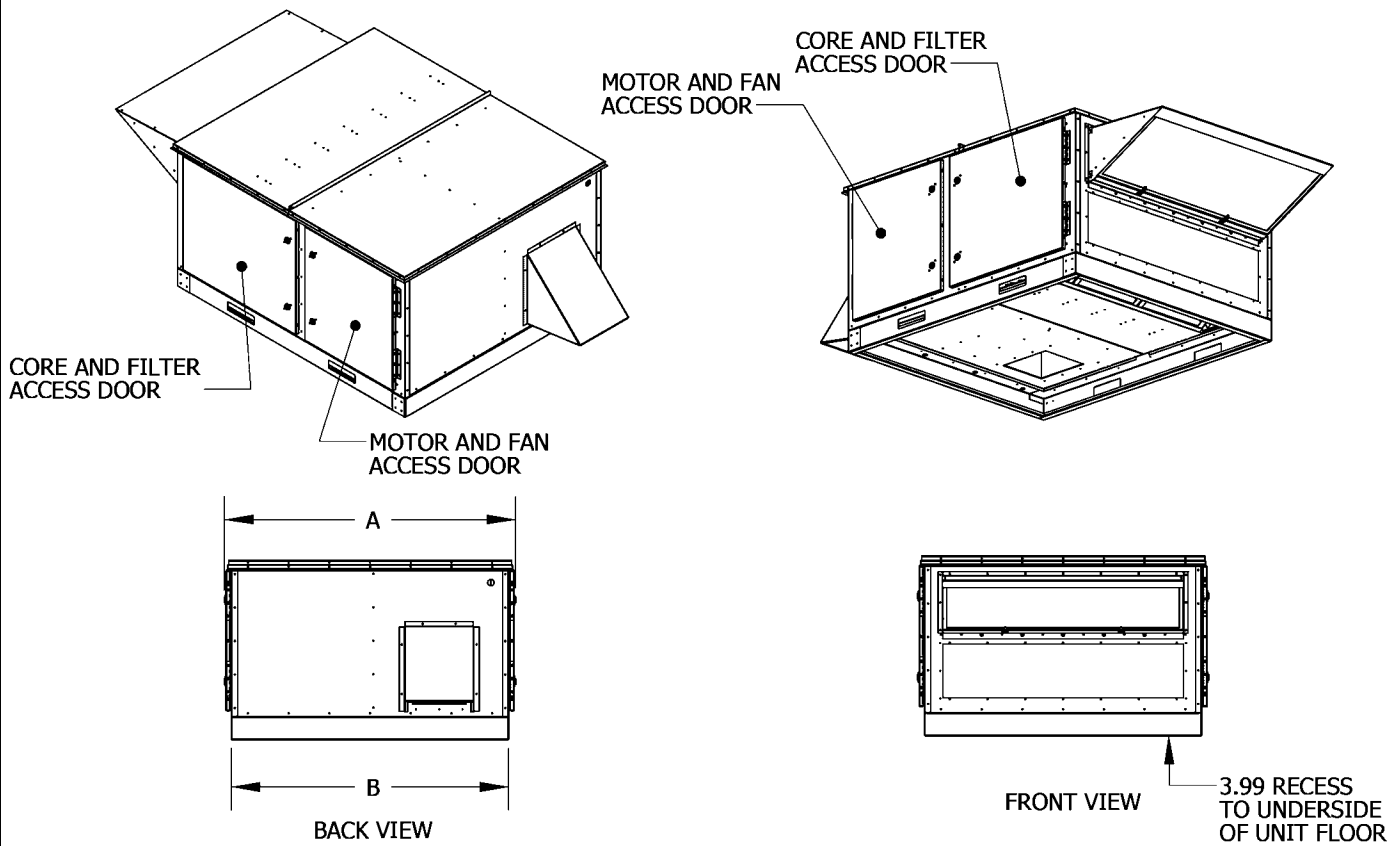
OA & RA INPUTS CAN BE SWITCHED UPON REQUEST, CAUSING SA & EA TO REVERSE POSITIONS

TOP VIEW
(OPTIONAL TOP DUCT CONNECTIONS SHOWN, BOTTOM CONNECTIONS ARE SAME SIZE)

F03i MODEL PICTURED

Filters:
16" X 16" X 2"
2 filters per core

CORES	MODEL #	WEIGHT [LB]	A	B	C	D	E	F	G
2	F02i	415	34.36	31.89	9.46	10.42	2.10	3.32	25.79
3	F03i	490	50.11	47.64	9.46	10.42	2.12	7.25	41.54
4	F04i	585	65.86	63.39	13.39	11.55	2.60	9.23	57.29
5	F05i	655	81.61	79.14	15.94	13.66	2.10	11.89	73.04
6	F06i	730	97.36	94.89	15.94	13.66	2.08	15.82	88.79



NOTES:

SYSTEM IS INTENDED FOR OUTDOOR USE

- OA - OUTSIDE AIR INTAKE
- SA - SUPPLY AIR EXIT
- RA - RETURN AIR INTAKE
- EA - EXHAUST AIR EXIT

FOLLOW ALL APPLICABLE CODES AND PROPER DESIGN PRACTICES TO ANCHOR SYSTEM TO ROOF AND CURB

F03R MODEL PICTURED

CORES	MODEL #	WEIGHT [LB]	A	B	C
2	F02R	460	34.36	31.96	29.08
3	F03R	545	50.11	47.71	44.83
4	F04R	645	65.86	63.46	60.58
5	F05R	730	81.61	79.21	76.33
6	F06R	815	97.36	94.96	92.08

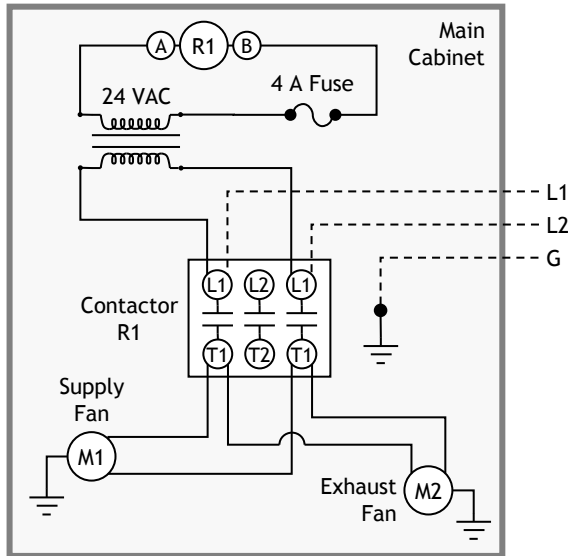
F02x-F06x Electrical

All F02x-F06x units use a belt and pulley system for the fresh air and exhaust air fans. Each box size has a standard (S) and a high static (H) option for each fan. The fan system used can be determined from the fan curves on page 51.

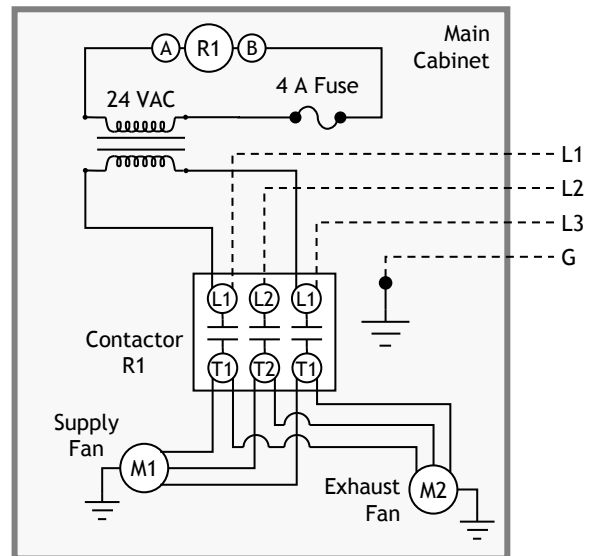
The F02x-F06x Series System can be wired for either Single-Phase or Three-Phase.

Model	Motor Configuration	208V / 1 ϕ			208V / 3 ϕ			230V / 1 ϕ			230V / 3 ϕ			460V / 3 ϕ			575V / 3 ϕ		
		FLA	MCA	MOP	FLA	MCA	MOP	FLA	MCA	MOP	FLA	MCA	MOP	FLA	MCA	MOP	FLA	MCA	MOP
F02x S = 1 HP H = 2 HP	F02x-SS	18.0	22.5	29.0	9.4	11.8	15.2	16.3	20.4	26.3	8.6	10.7	13.8	4.3	5.4	6.9	3.5	4.3	5.6
	F02x-HH	26.8	33.5	43.3	15.2	19.0	24.6	24.3	30.4	39.3	13.8	17.2	22.3	6.9	8.6	11.1	5.5	6.8	8.9
	F02x-SH (or HS)	22.4	28.0	38.9	12.3	15.4	21.7	20.3	25.4	35.3	11.2	14.0	19.7	5.6	7.0	9.8	4.5	5.6	7.9
F03x S = 2 HP H = 2 HP	F03x-SS	26.8	33.5	43.3	15.2	19.0	24.6	24.3	30.4	39.3	13.8	17.2	22.3	6.9	8.6	11.1	5.5	6.8	8.9
	F03x-HH	26.8	33.5	43.3	15.2	19.0	24.6	24.3	30.4	39.3	13.8	17.2	22.3	6.9	8.6	11.1	5.5	6.8	8.9
	F03x-SH (or HS)	26.8	33.5	43.3	15.2	19.0	24.6	24.3	30.4	39.3	13.8	17.2	22.3	6.9	8.6	11.1	5.5	6.8	8.9
F04x S = 2 HP H = 3 HP	F04x-SS	26.8	33.5	43.3	15.2	19.0	24.6	24.3	30.4	39.3	13.8	17.2	22.3	6.9	8.6	11.1	5.5	6.8	8.9
	F04x-HH	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8
	F04x-SH (or HS)	32.3	40.3	55.6	18.3	22.9	31.6	29.3	36.7	50.6	16.6	20.7	28.6	8.3	10.4	14.3	6.7	8.3	11.6
F05x S = 3 HP H = 3 HP	F05x-SS	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8
	F05x-HH	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8
	F05x-SH (or HS)	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8
F06x S = 3 HP H = 3 HP	F06x-SS	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8
	F06x-HH	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8
	F06x-SH (or HS)	34.3	42.9	55.6	21.4	26.8	34.7	34.3	42.9	55.6	19.4	24.2	31.4	9.7	12.1	15.7	7.9	9.8	12.8

Single-Phase



Three-Phase



F Series Options (for F02x-F06x)

Electrical Disconnects

Factory installed electrical disconnects are available for all ERV units. Disconnects are sized to handle the ERV unit. Both switched and fused disconnects are available.

Motorized Dampers

Two position motorized outside air and exhaust air dampers are available to eliminate the migration of unwanted outside air into the building space when the ERV unit is off. Motors are 24 volt and are factory installed and wired. Outside air and exhaust air dampers are ordered separately.

ERV Control Timers

If the ERV unit is to be activated at only certain times of the day or week, an ERV control timer option should be ordered. Set timer to planned occupancy periods. Two types are available; the 24 volt timer is factory installed in the ERV unit while the 115 volt timer is to be field mounted and wired.

Airflow Monitoring

Airflow monitoring gauges measure the outside air intake and exhaust air pressure across the ConsERV™ core. This allows for easier setup, balancing and monitoring.

Frost Protection

Applications with extremely cold climates may use the frost protection option as a means of eliminating frost build up on the ConsERV™ core. When frost builds up on the ConsERV™ core, the outside air blower is temporarily shut off and the warmer exhaust air “defrosts” the core. Once the frost build up is eliminated, the outside air blower is reactivated. Note: frost protection is not recommended on units with pre-heaters.

Low Temperature Lockout

For applications where the ERV unit is to be locked out in extremely cold temperatures, the low temperature lockout option should be used. When outside air temperature is below set point the ERV unit is completely shutdown. Thermostat range goes down to minus 30 degrees F.

ERV Filter Maintenance Indicator Switch

Senses static pressure across outside air intake filters. Rising static pressure indicates filters need service. Connect to field supplied 24 volt indicator light.

NOTE: By request, the indicator can be set up for the return air filters (contact factory).

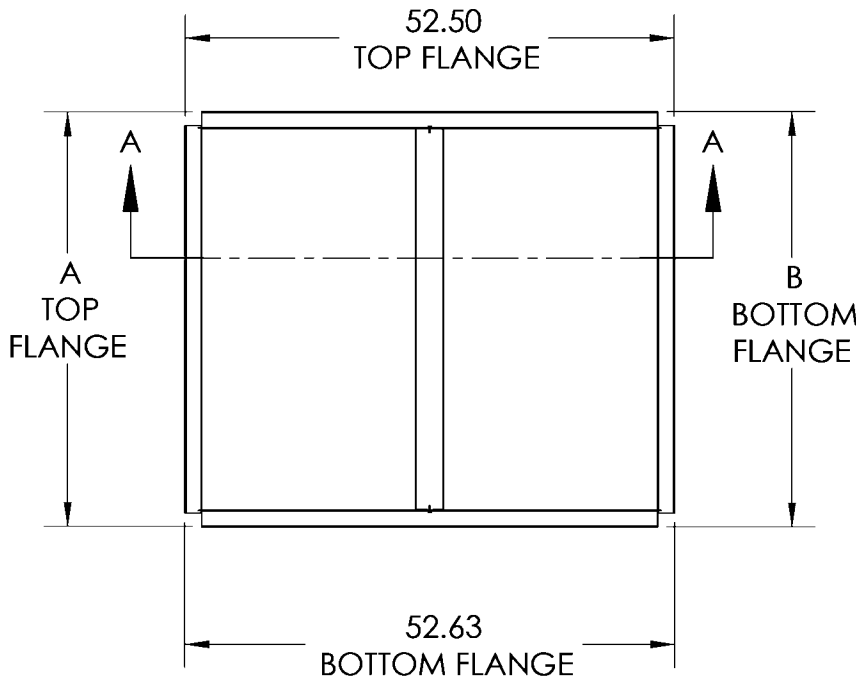
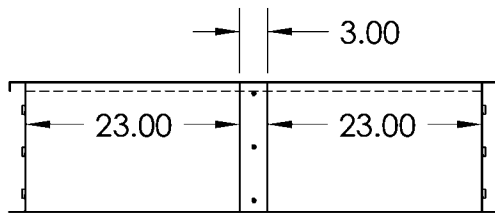
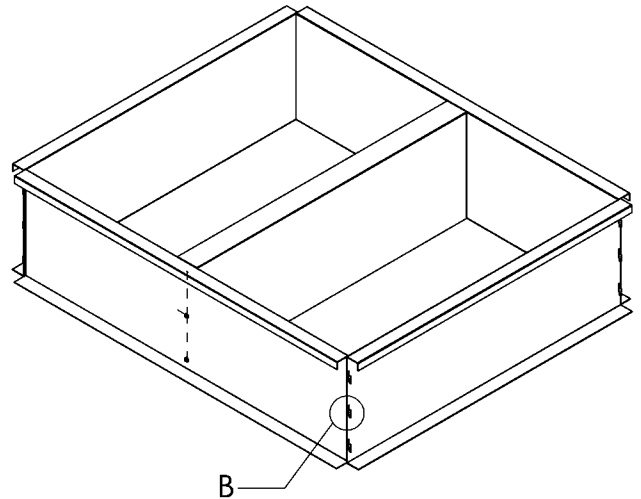
F Series Curb – F02 to F06

Roof Curbs

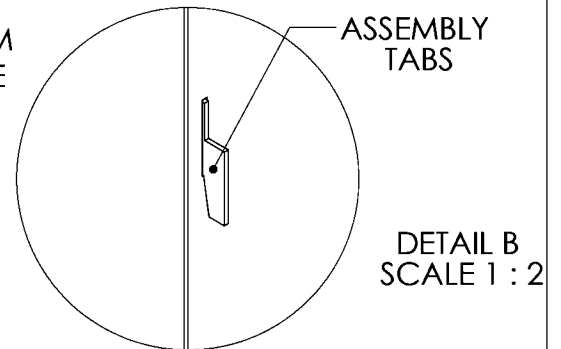
The ERV roof curbs are constructed of heavy gauge galvanized steel, and include a wood nailer and gasket package for a tight unit-to-curb seal. Standard curbs are 14" tall and are manufactured to NRCA specifications. Duct work can slide into the supply and return openings and hang from the top of the curb. Insulated deck pans and duct supports are provided.

NOTES:

- STANDARD 14" TALL FLAT-ROOF CURB
- 18 GA. GALVANIZED STEEL CONSTRUCTION
- KNOCKDOWN CURB, SHIPPED DISASSEMBLED
- FULL PERIMETER WOOD NAILER IS PROVIDED
- 0.25" x 1.50" FOAM GASKET TAPE IS PROVIDED



UNIT	A	B
F02R	28.75	28.88
F03R	44.5	44.63
F04R	60.25	60.38
F05R	76.00	76.13
F06R	91.75	91.88



Contact Information

For sales and application information, please contact us at:

Info@ConsERV.com

or

727-375-8484 x211

For installation and warranty information, please contact us at:

Tech@ConsERV.com

or

727-375-8484 x230

Please visit us at

www.ConsERV.com

to find out more about ConsERV™ technology
and to locate your local
ConsERV™ Manufacturer's Representative

Or Write us at:

Dais Analytic Corporation
11552 Prosperous Dr.
Odessa, FL 33556

ConsERV™ products provide...

- High latent heat transfer = high performance
- Improved indoor humidity and moisture control
- Peak demand and overall energy savings
- Excellent part load performance
- No rotating parts in the component - low maintenance
- No drain pans to worry about
- Safe downsizing of HVAC plants