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INSTALLATION AND OPERATING INSTRUCTIONS

SUPPLY AIR FAN

READ AND SAVE THESE INSTRUCTIONS

GENERAL SAFETY INFORMATION

- 1. Make sure that the electric service supply voltage is AC 120V, 60Hz.
- Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSH Act).
- Always disconnect the power source before working on or near the ventilating fan, motor or junction box.
- Protect the power cord from sharp edges, oil, grease, hot surfaces, chemicals or other objects.
- Do not kink the power cord.
- 6. Do not install the unit where ducts are configured as shown in Fig. A.
- 7. Provide intake parts with proper ventilation.
- 8. Not for use in coastal area.

WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before servicing or cleaning unit, switch
 power off at service panel and lock the
 service disconnecting means to prevent
 power from being switched on accidentally.
 When the service disconnecting means
 cannot be locked, securely fasten a
 prominent warning device, such as a tag,
 to the service panel.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- 4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating Refrigeration and Air Conditioning Engineers (ASHRAE) and local code authorities.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- 6. Ducted fans must always be vented to the
- 7. Do not use this unit with any solid-state

- control device. Solid-state controls may cause harmonic distortion, which can cause a motor humming noise. (Avertissement: ne convient pas à des régulateurs de vitesse à semi-conducteurs)
- NEVER place a switch where it can be reached from a tub or shower.
- Not to be installed in a ceiling thermally insulated to a value greater than R50. (This is required for installation in Canada only).

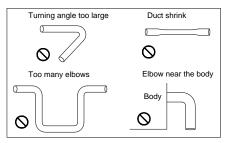
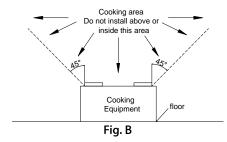


Fig. A

CAUTION

- For General Ventilating Use Only. Do Not Use To Exhaust Hazardous Or Explosive Materials And Vapors.
- 2. Not for use in cooking areas. (Fig. B)
- This product must properly connect to the grounding conductor of the supply circuit.
- To reduce the risk of injury to persons, install the fan at least 8.2 feet (2.5m) above the floor.





SUPPLIED ACCESSORIES

Par	t name	Appearance	Quantity
Br	acket	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2
	rol Panel Cover		1
S (Ø (dri	pping crew 4x25) ive size lo. 2)	Ommun.	4
S (Ø (dri	pping crew 4x10) ive size lo. 2)	E Jaman	4
	rminal olock		1
	ERV 13 filter		1

PREPARATION

- Remove the unit from the box and inspect for damage.
- 2. Put the unit down on a protected surface
- 3. Open the filter cover. (Fig. C)

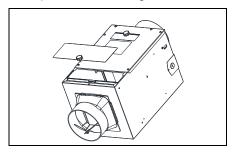


Fig. C

 Discard the MERV 13 filter PE bag, and install the MERV 13 filter in the fan unit. Then reinstall the filter cover. (Fig. D)

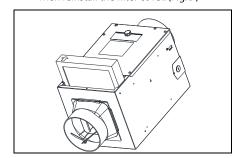


Fig. D



MODEL FRS200HT/VDBFRS200HT

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INSTALLATION

Ducting has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.

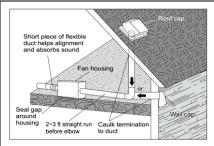


Fig. E Install the housing (I) - Suspended ceiling

Assemble bracket to body. (Fig. F) Suspend body with anchor bolts. (Fig. G)

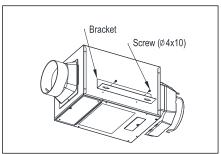


Fig. F

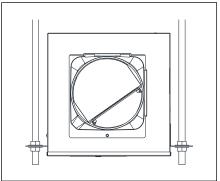


Fig. G

Install the housing (II) - Attic Mount

Using 4 screws (Ø 4x10), install the brackets on the unit, and using 4 screws (Ø 4x25) secure the unit to the joists or cross framing. (Fig. H)

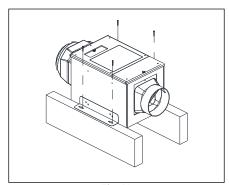


Fig. H Install the housing (III) - Flush to ceiling

Using 4 screws (Ø 4x10), install the brackets on the unit and adapt to the thickness of the ceiling. (Fig. I)

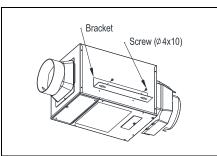
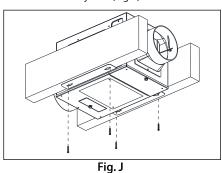


Fig. I

Using 4 screws (Ø 4x25), install the unit between the joists. (Fig. J)



Install the housing (IV) – **Under ceiling**

Using 4 screws (Ø 4x10), install the brackets on the unit, and using 4 screws (Ø 4x25) secure the unit to the ceiling, into the studs, joists or other solid materials. (Fig. K)

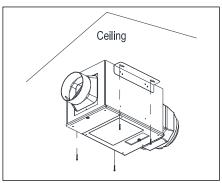


Fig. K

Install the housing (V) – Wall mounted

Using 4 screws (Ø 4x10), install the brackets on the unit, and using 4 screws (Ø 4x25) secure the unit to the wall, into the studs, joists or other solid materials. (Fig. L)

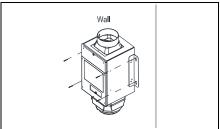


Fig. L







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DUCT CONNECTION

 Connect the 6" duct (not provided) onto duct connector by duct tape. To minimized possible condensation buildup within the duct, place insulation around duct. (Fig. M)

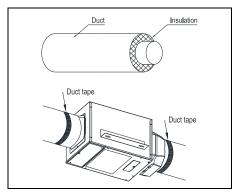


Fig. M

 Install the duct with a gradient 1°~2° to the outside. (Fig. N)

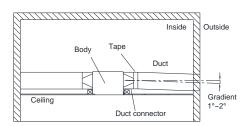
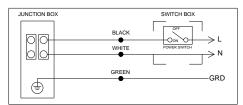


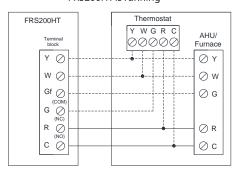
Fig. N

CONNECT WIRING

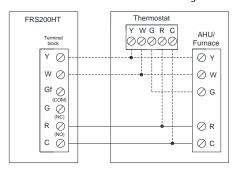
- 1. Follow all local electrical code and ANSI/NFPA70.
- 2. NEVER place a switch where it can be reached from a tub or shower.
- 3. Connect wires as shown in wiring diagrams.



Synchronized: Start AHU/Furnace blower when FRS200HT is running



Not synchronized: AHU/Furnace blower not activated when FRS200HT is running



No AHU/Furnace connection, stand alone supply

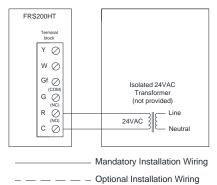


Fig. O

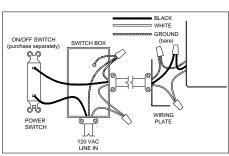


Fig. P

- 4. Using wire nuts (not provided), connect the house power cable to the ventilating fan wires
- 14 AWG (2.1 mm²) is the smallest conductor that shall be used for branch-circuit wiring.
- Connect interlock wire to terminal block, and plug terminal block to fan unit.

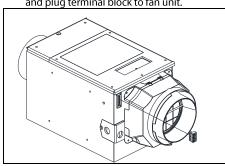
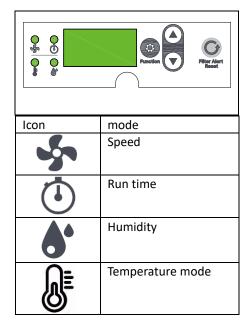


Fig. Q

OPERATION

- 1. Press function button to switch function mode
- Use increment and decrement button to adjust the value.
- 3. Turn the POWER switch on to operate, and motorized damper will open.



Speed settings:

Total 13 settings: 30/40/50/60/70/80/90/110/130/150/170/180/20

(Default:110)

Run time settings:

5~60 min. (increment of 5 min) (Default:60)

Humidity upper limit settings:

30~85 RH% (Increments of 5%) and OFF. Lower limit setting is 20%, except in OFF setting. (Default:85)

Temperature mode settings:

1/2/3/4/5/6/7/8/9/OFF Please refer temperature mode settings table (Default:1)

After finishing settings, secure control panel cover by hand screw. (Fig. R)

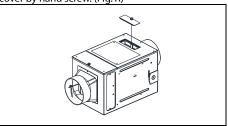


Fig. R





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FILTER MAINTENANCE REMINDER

The display will be show "F01" when the product accumulated running time reaches to 3 months and show "F02" when the product accumulated running time reaches to 6 months.

Press filter "Reset" button to close the Error code. If running time reaches 6 months, reset the

If wanting to reset the timer forcedly, press filter "Reset" button for 3 seconds to reset the timer, display shows "F00".

MAINTENANCE WARNING

Disconnect the power source before working on the unit. Routine maintenance must be done every year.

CAUTION:

timer.

- Never use gasoline, benzene, thinner or any other such chemicals to clean the supply air fan.
- 2. Do not allow water to enter the motor.
- 3. Do not soak resin parts in water over 140°F (60°C).

CLEANING

 Open the filter maintenance cover by turning the hand screw counterclockwise. (Fig. S)



Fig. S

Pull out the pre-filter, clean it with water once in 3 months. (Fig. T)



Fig. T

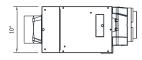
3. Pull out the MERV 13 filter, clean it with vacuum cleaner once in 3 months, and replace it once in 6 months. (Fig. U)



Fig. U

 Reinstall the filters and close the maintenance cover by turning the screw clockwise.

DIMENSIONS



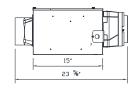




Fig. V

WARRANTY

DELTA ELECTRONICS THREE YEAR LIMITED WARRANTY

Delta Electronics Inc. ("Delta Electronics") warrants to the original consumer purchaser in the USA and Canada that the Breez supply air fan products will be free from defects in material or workmanship. This warranty is limited to five (5) years from the original date of purchase.

Limitations and Exclusions

- 1. During the warranty period, a replacement for any defective product will be supplied free of charge for installation by the consumer. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, and installation service.
- 2. All returns of defective parts or products must include the product model number, and must be made through an authorized Delta Electronics distributor. Authorized returns must be shipped prepaid. Repaired or replacement products will be shipped by Delta Electronics F.O.B. shipping point.
- Delta Electronics shall not be liable for any indirect, incidental, consequential, punitive, or special damages arising out of or in connection with products use or performance, regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise.
- 4. This warranty does not extend to pre-filter and MERV filter.
- 5. The warranty does not cover if user does not comply with manufacturer's installation manual.
- 6. To qualify for warranty service, you must notify Delta Electronics at the address or telephone number below.
- 7. Delta Electronics shall have no liability to the original owner-user with respect to any defect caused by abuse, misuse, neglect, improper transportation or storage, improper testing, improper installation, improper operation, improper use, improper maintenance, improper repair, improper alteration, improper modification, tampering or accident of products or parts thereof, or unusual deterioration or degradation of products or parts thereof due to a physical environment beyond the requirements of products' specifications.

Address: 46101 Fremont Boulevard, Fremont , CA 94538US Toll Free Number: 1-888-979-9889





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TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE CORRECTIVE ACTION	
The fan is not turning on	1. Power off	1. Make sure power supply is on.
	2. Faulty switch	2. Test or replace switch.
	3. Faulty wire connection	3. Check wire in switch box.
The fan seems louder than it	1. CFM too great.	1. Be sure the CFM rating on the
	Damper not working properly or damaged	fan matches the size of your room.
	3. Bend in duct too close to fan discharge.	2. Check damper to ensure it is opening and closing properly. If
	4. Fan discharge reduced to fit smaller duct.	the damper has become damaged, please call Customer
	5. Fan body not securely attached	Service.
	6. Filter is clogged.	3. Be sure you do not have any sharp bends in duct closer than 18 in. to the fan discharge.
		4. Use recommended size ducting to reduce fan noise.
		5. Be sure the fan is securely attached.
		6. Replace or clean clogged parts.

FID ERROR CODE

CODE	DESCRIPTIONS
F00	User reset timer
F01	Need to clean filter
F02	Need to replace filter
E02	Supply airflow fan failure
E03	Humidity sensor failure
E04	Temperature sensor failure
E05	The connection of PCB failure
Ot	Over/Under Temperature Protection
ОН	Over/Under Humidity Protection

TEMPERATURE MODE SETTINGS TABLE

TEMPERATURE MODE SETTINGS TABLE									
	Normal				Heating/Cooling Call				
	(°C)		(°F)		(°C)		(°F)		
Setting	Min	Max	Min	Max	Min	Max	Min	Max	
1 (Full range)	2	32	36	90	-2	36	28	97	
2 (Range #1)	2	26	36	79	-2	30	28	86	
3 (Range #2)	4	32	39	90	0	36	32	97	
4 (Range #3)	4	30	39	86	0	34	32	93	
5 (Zone 1&2)	10	32	50	90	6	36	43	97	
6 (Zone 3)	10	30	50	86	6	34	43	93	
7 (Zone 4)	10	26	50	79	6	30	43	86	
8 (Zone 5)	4	26	39	79	0	30	32	86	
9 (Zone 6&7)	4	23	39	73	0	27	32	81	
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	



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SPECIFICATIONS

Voltage (V)	Frequency (Hz)	Duct (inch)	Static Pressure	Air volume (CFM)	Power consumption	Weight (lb)
			(inch-w.g.)		(W)	
				30	8.6	
				40	9.1	
				50	10.3	
				70	12	
120	60	6	0.2	90	14.1	12.0
120	60	6	0.2	110	17.2	12.0
				130	19.9	
				150	24.5	
				170	31.6	
				200	42.6	

Note: Specifications subject to change without notice.

CLIMATIC ZONES

