



**FAN POWERED TERMINAL UNIT WITH  
OUTSIDE AIR INLET • EPIC ECM MOTOR  
SERIES FLOW • CONSTANT OR VARIABLE VOLUME  
MODELS: 35S-OAI, 35SW-OAI AND 35SE-OAI  
UNIT SIZES 2 – 6**

**DESCRIPTION:**

- 18 ga. (1.31) galvanized steel channel frame with 20 ga. (1.00) casing components.
- 16 ga. (1.61) galvanized steel inclined opposed blade dampers. 45° rotation. RH CW to close. LH CCW to close.
- Separate outside ventilation air inlet.
- Ultra-high efficiency ECM fan motor. EPIC fan volume controller.
- Multi-point averaging Diamond Flow sensor. Supplied with balancing tees.
- Universal access panels on all 4 sides.
- 3/4" (19) dual density insulation, coated to prevent air erosion, meets requirements of NFPA 90A and UL 181.
- Single point electrical and/or pneumatic main air connection.
- Discharge opening for flanged duct connection.
- Full enclosure for factory mounted DDC and analog electronic controls.
- Choice of right or left-hand primary inlet location. Hand of unit is determined by location of primary inlet looking in direction of airflow. Right-hand illustrated.

**OPTIONS:**

**Digital Controls:**

- Factory mounted (supplied by others)
- Field mounted (supplied by others)

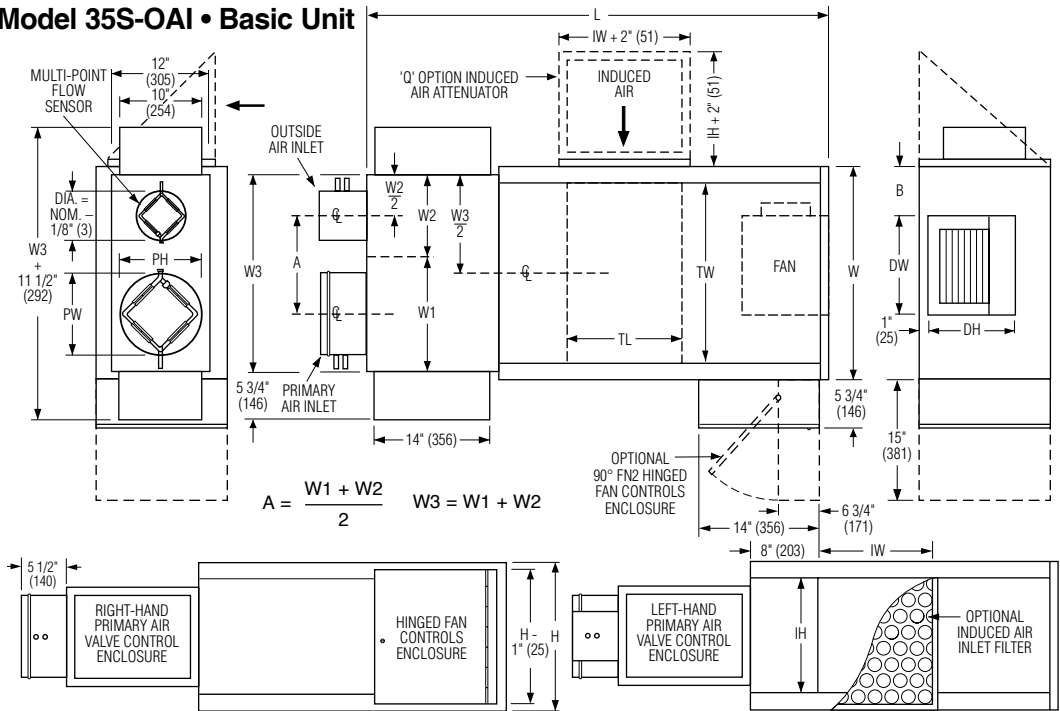
**Liner:**

- Fiber-free
- Steri-liner
- Steri-liner + Perforated metal
- Perforated metal
- Solid metal
- 1" (25) fiberglass

**Other:**

- Left-hand controls location
- Left-hand primary inlet location
- Toggle disconnect switch
- Fan unit fusing
- 24/24V Isolation transformer
- Cross Flow Sensor (not on primary inlet)
- 'Q' Option – Induced Air Inlet Attenuator. (not available w/FN2 option).
- Top entry induced air inlet
- 1" (25) Throwaway filter
- 2" (51) MERV 8 filter
- Hanger brackets.
- 1/4-turn fasteners (access panel)
- FN2 90° Line Voltage Enclosure

**Model 35S-OAI • Basic Unit**



**Dimensional Data**

Unit Size	Inlet Size	Outside Inlet Size	W	H	L	B	Induced Air Inlet		Outlet Discharge DW x DH	Filter Size	
							Side (std.) IW x IH	Top (opt.) TL x TW		Side Inlet (std.)	Top Inlet (opt.)
2	6, 8 (152, 203)	4, 5, 6 (102, 127, 152)	18 (457)	14 (356)	51 1/2 (1308)	6 (152)	8 x 10 (203 x 254)	10 x 14 (254 x 356)	9 1/4 x 10 1/2 (235 x 267)	10 x 12 (254 x 305)	14 x 16 (356 x 406)
3	6, 8, 10 (152, 203, 254)	4, 5, 6 (102, 127, 152)	18 (457)	18 (457)	51 1/2 (1308)	3 1/2 (89)	12 x 14 (305 x 356)	14 x 14 (356 x 356)	9 1/4 x 10 1/2 (235 x 267)	14 x 16 (356 x 406)	16 x 16 (406 x 406)
4	8, 10, 12** (203, 254, 305)	6, 7, 8 (152, 178, 203)	26 (660)	18 (457)	56 1/2 (1435)	6 (152)	14 x 14 (356 x 356)	12 x 22 (305 x 559)	12 x 10 1/2 (305 x 267)	16 x 16 (406 x 406)	16 x 25 (406 x 635)
5	10, 12**, 14** (254, 305, 356)	6, 7, 8 (152, 178, 203)	26 (660)	18 (457)	56 1/2 (1435)	5 (127)	14 x 14 (356 x 356)	12 x 22 (305 x 559)	13 1/4 x 11 1/2 (337 x 292)	16 x 16 (406 x 406)	16 x 25 (406 x 635)
6	10, 12**, 14** (254, 305, 356)	6, 7, 8 (152, 178, 203)	30 (762)	19 (483)	59 1/2 (1511)	6 (152)	16 x 15 (406 x 381)	14 x 26 (356 x 660)	13 1/4 x 11 1/2 (337 x 292)	17 x 18 (432 x 457)	18 x 28 (457 x 711)

**Primary/Inlet Dimensions**

\*\*Flat oval inlets

Size	W1 or W2
4, 5, 6	12 (305)
7, 8	14 (356)
10	16 (406)
12**	19 (483)
14**	20 (508)

**Oval Inlet Dimensions**

Size	PW x PH
12**	12 13/16 x 9 13/16 (325 x 249)
14**	16 1/16 x 9 13/16 (408 x 249)

- FN3 Remote Line Voltage Controls Enclosure. (See submittal FN3)
- Dust tight enclosure seal
- Remote user disconnect

**Seismic Certification:**

- Seismic Source International (Standard)
- HCAI (formerly OSHPD, California)
- Special Features: \_\_\_\_\_



\* The ECM is a variable horsepower motor. Refer to Selectworks schedule for actual power consumption. FLA = Full load amperage. All motors are single phase/60 Hz.

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

Page 1 of 2. For heat options; see page 2. Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 6 - 23	3500	11 - 15 - 22	35S-OAI-1



**FAN POWERED TERMINAL UNIT WITH  
OUTSIDE AIR INLET • EPIC ECM MOTOR  
HEAT ACCESSORIES**  
SERIES FLOW • CONSTANT OR VARIABLE VOLUME  
MODELS: 35SW-OAI AND 35SE-OAI • UNIT SIZES 2 – 6

**Hot Water Coil Section Model 35SW-OAI**

**Standard Features:**

- Coil section installed on unit discharge.
- Coil (and header on multi-circuit units) is installed in insulated casing for increased thermal efficiency.
- 1/2" (13) copper tubes.
- Aluminum ripple fins.
- Sweat Connections:  
Size 2 – 3: 1 Row 1/2" (13), 2 and 3 Row 7/8" (22); O.D. male solder.  
Size 4 – 6: 1, 2, and 3 Row 7/8" (22); O.D. male solder.
- Top and bottom access panels for inspection and coil cleaning.
- Flanged outlet duct connection.

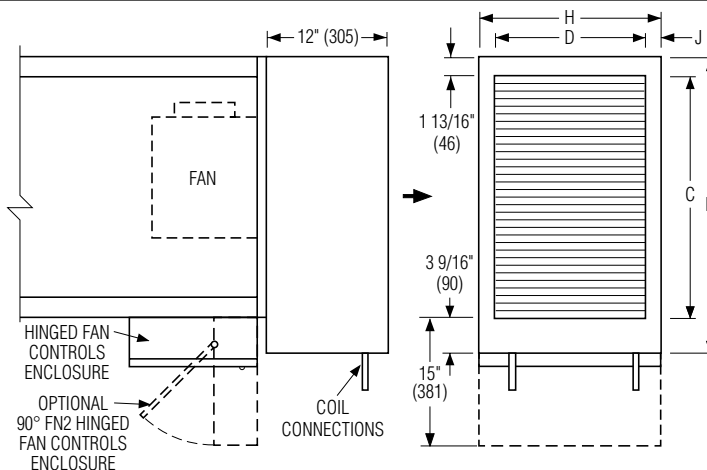
**Coil Rows:**

- 1-Row    2-Row    3-Row

**Coil Hand Connections:**

(Looking in direction of airflow).

- Right hand (illustrated). Standard.  
 Left hand. Optional.

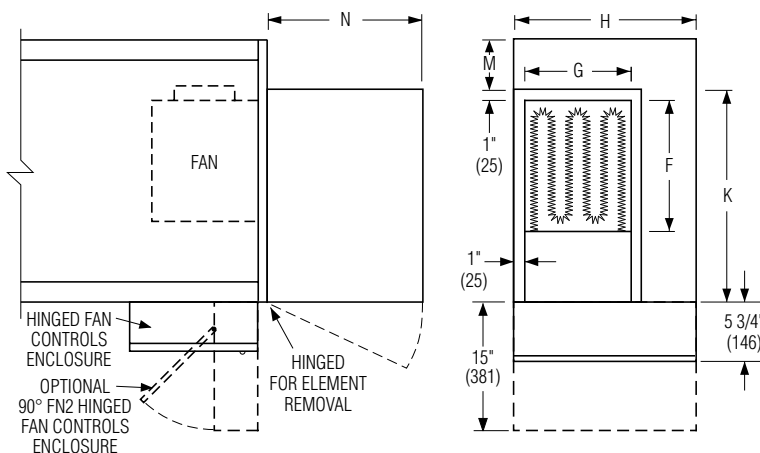


Unit Size	Outlet Duct Size C x D	E	H	J
2	16 x 12 1/8 (406 x 308)	21 3/8 (543)	14 (356)	15/16 (24)
3	16 x 14 7/8 (406 x 378)	21 3/8 (543)	18 (457)	1 9/16 (40)
4, 5	24 x 14 7/8 (610 x 378)	29 3/8 (746)	18 (457)	1 9/16 (40)
6	28 x 17 1/8 (711 x 435)	33 3/8 (848)	19 (483)	15/16 (24)

**Electric Coil Section Model 35SE-OAI**

**Standard Features:**

- Unique hinged heater design permits easy access, removal and replacement of heater element without disturbing ductwork.
- Coil installed on unit discharge.
- Insulated coil element wrapper.
- Automatic reset high limit cut-outs (one per element).
- Single point electrical connection (except 600V).
- Positive pressure airflow switch.
- Flanged outlet duct connection.
- Class A 80/20 Ni/Cr wire.
- Terminal unit with coil is ETL Listed as an assembly.
- Controls mounted as standard on RH side as shown. Terminals ordered with LH controls (optional) are inverted and discharge duct hanging elevation will therefore change.



**Voltage:**

Single phase, 60 Hz.

- 120V    208V    240V    277V

Three phase, 60 Hz.

- 208V    480V (4 wire wye).

- 600V (Dual point connection)    \_\_\_\_\_

**Options:**

- Toggle disconnect switch (includes fan).
- Door interlock disconnect switch.
- SCR Control.
- Mercury contactors.
- Power circuit fusing.
- Dust tight construction.
- Manual reset secondary thermal cut out.

Unit Size	Outlet Duct Size F x G	K	H	M	N
2	10 1/4 x 10 1/2 (260 x 267)	15 1/2 (394)	14 (356)	2 1/2 (64)	12 1/2 (318)
3	10 1/4 x 10 1/2 (260 x 267)	15 1/2 (394)	18 (457)	2 1/2 (64)	15 1/4 (387)
4	13 x 10 1/2 (330 x 267)	21 (533)	18 (457)	5 (127)	15 1/4 (387)
5	14 1/4 x 11 3/4 (362 x 298)	22 (559)	18 (457)	4 (102)	15 1/4 (387)
6	14 1/4 x 11 3/4 (362 x 298)	25 (635)	19 (635)	5 (127)	15 1/4 (387)

**SCHEDULE TYPE:**

**PROJECT:**

**ENGINEER:**

**CONTRACTOR:**

**DATE**

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**SUPERSEDES**

**DRAWING NO.**

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3500

11 - 15 - 22

35S-OAI-1