



FAN POWERED TERMINAL UNIT WITH ECM MOTOR
PARALLEL FLOW • VARIABLE VOLUME
MODELS: 35N, 35NW AND 35NE • UNIT SIZES 2 – 6

DESCRIPTION:

- 20 ga. (1.00) galvanized steel construction.
- Round laminated 2 x 20 ga. (1.00) butterfly damper with peripheral gasket. 90° rotation. CCW to open.
- Backdraft damper mounted on fan discharge.
- Multi-point averaging Diamond Flow sensor. Supplied with balancing tees.
- Bottom access panels.
- Ultra-high efficiency ECM fan motor with overload protection. EPIC fan volume controller.
- Solid state fan speed controller with minimum voltage stop.
- 3/4" (19) dual density insulation, exposed edges 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 primary air valve low voltage NEMA 1 type enclosure for factory mounted DDC and analog electronic controls.
- Controls mounted as standard on RH side as shown (Right Hand unit). Terminals ordered with LH controls (optional) are built as mirror image (Left Hand unit). Inlets and discharge are opposite of dwg.

OPTIONS:

Digital Controls:

- Factory mounted (supplied by others)
- Field mounted (supplied by others)
- Nailor EZvav. See separate submittal.

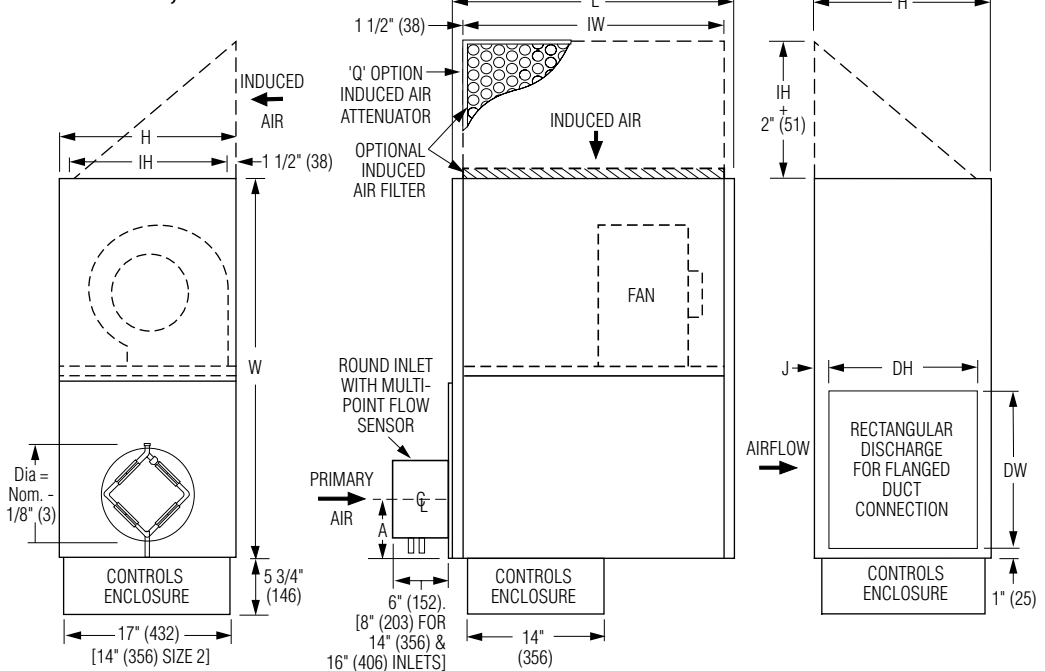
Liner:

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

Other:

- Left-hand controls location
- Toggle disconnect switch
- Fan unit fusing
- 24/24V Isolation transformer
- Cross Flow Sensor
- 'Q' Option - Induced Air Inlet Attenuator (Top entry. Important: 6" (152) clearance required above unit).
- Top entry induced air inlet
- 1" (25) Throwaway filter
- 2" (51) Filter rack only
- Hanger brackets.

Model 35N, Basic unit



Dimensional Data

| Unit Size | Inlet Size | W | H | L | J | Induced Air Inlet IW x IH | Outlet Discharge DW x DH | Filter Size |
|-----------|---------------------------------------|------------------|-------------|------------------|---------------|---------------------------------|----------------------------|------------------------|
| 2 | 6, 8, 10, 12 (152, 203, 254, 305) | 34 3/4 (883) | 14 (356) | 27 9/16 (700) | 1 (25) | 24 9/16 x 10 3/4 (624 x 273) | 16 x 12 (406 x 305) | 26 x 13 (660 x 330) |
| 3 | 8, 10, 12, 14 (203, 254, 305, 356) | 38 1/4 (972) | 18 (457) | 28 9/16 (725) | 1 1/2 (38) | 25 9/16 x 14 3/4 (649 x 375) | 16 x 15 (406 x 381) | 27 x 17 (686 x 432) |
| 5 | 10, 12, 14 (254, 305, 356) | 45 5/8 (1159) | 18 (457) | 34 1/2 (876) | 1 1/2 (38) | 31 1/2 x 14 3/4 (800 x 375) | 24 x 15 (610 x 381) | 33 x 17 (838 x 432) |
| 6 | 12, 14, 16 (305, 356, 406) | 50 3/4 (1289) | 20 (508) | 36 (914) | 1 1/4 (32) | 33 x 16 3/4 (838 x 426) | 28 x 17 1/2 (711 x 445) | 35 x 19 (889 x 483) |

Electrical Data

| Unit Size | Motor H. P. | EPIC ECM Motor FLA† | | | |
|-----------|-------------|---------------------|------|------|------|
| | | 120V | 208V | 240V | 277V |
| 2 | * | 3.9 | 2.2 | 2.2 | 1.8 |
| 3 | * | 6.9 | 3.9 | 3.9 | 3.5 |
| 5 | * | 11.9 | 6.8 | 6.8 | 6.1 |
| 6 | * | 13.7 | 7.9 | 7.9 | 6.7 |

* The ECM is a variable horsepower motor. Refer to Selectworks Schedule.

FLA = Full load amperage

† EON motor series

| Inlet Size | Dim. A |
|------------|----------|
| 6 | 5 (127) |
| 8 | 6 (152) |
| 10 | 7 (178) |
| 12 | 8 (203) |
| 14 | 9 (229) |
| 16 | 10 (254) |

Seismic Certification:

- 1/4-turn fasteners (access panel)
- Duct tight enclosure seal
- Manual reset secondary outlet
- Seismic Source International (Standard)
- HCAI (formerly OSHPD, California)
- Special Features: _____



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. |
|-------------|----------|------------|-------------|
| 4 - 25 - 23 | 3500 | 2 - 6 - 23 | 35N-3A |



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PARALLEL FLOW • VARIABLE VOLUME
HEAT ACCESSORIES
MODELS: 35NW AND 35NE • UNIT SIZES 2 – 6

Hot Water Coil Section Model 35NW

Standard Features:

- Coil are mounted on unit discharge.
- 1/2" (13) copper tubes.
- Aluminum ripple fins.
- Sweat Connections: Size 2 and 3 one row, 1/2" (13) O.D. male solder. All others 7/8" (22) O.D. male solder.
- Bottom access panel for inspection and coil cleaning.
- Discharge opening for slip and drive connection.

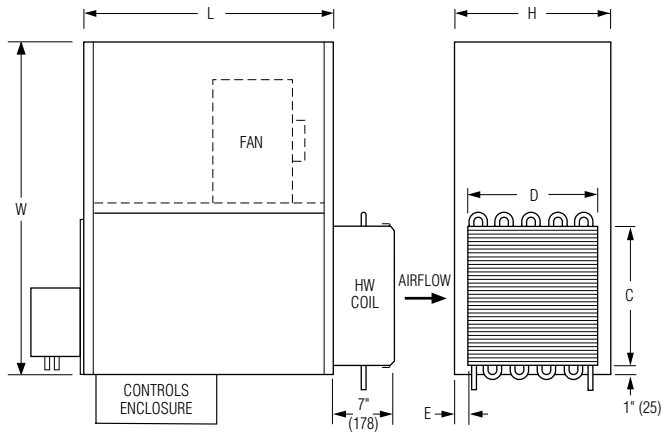
Coil Rows:

- 1-Row 2-Row 3-Row

Coil Hand Connections:

(Looking in direction of airflow).

- Right hand (illustrated). Standard.
- Left hand (terminals are inverted / built as mirror image). Optional. Connections must be selected same hand as controls enclosure location.



| Unit Size | Outlet Duct Size C x D | W | H | L | E |
|-----------|-------------------------|---------------|----------|---------------|------------|
| 2 | 16 x 12 1/2 (406 x 318) | 34 3/4 (883) | 14 (356) | 27 9/16 (700) | 3/4 (19) |
| 3 | 16 x 15 (406 x 381) | 38 1/4 (972) | 18 (457) | 28 9/16 (725) | 1 1/2 (38) |
| 5 | 24 x 15 (610 x 381) | 45 5/8 (1159) | 18 (457) | 34 1/2 (876) | 1 1/2 (38) |
| 6 | 28 x 17 1/2 (711 x 445) | 50 3/4 (1289) | 20 (508) | 36 (914) | 1 1/4 (32) |

Electric Coil Section Model 35NE

Standard Features:

- Coil installed on unit discharge.
- Insulated coil element wrapper.
- Automatic reset high limit cut-outs (one per element).
- Single point electrical connection for entire terminal unit.
- 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 built as mirror image.

Voltage:

Single phase, 60 Hz.

- 120V 208V 240V 277V

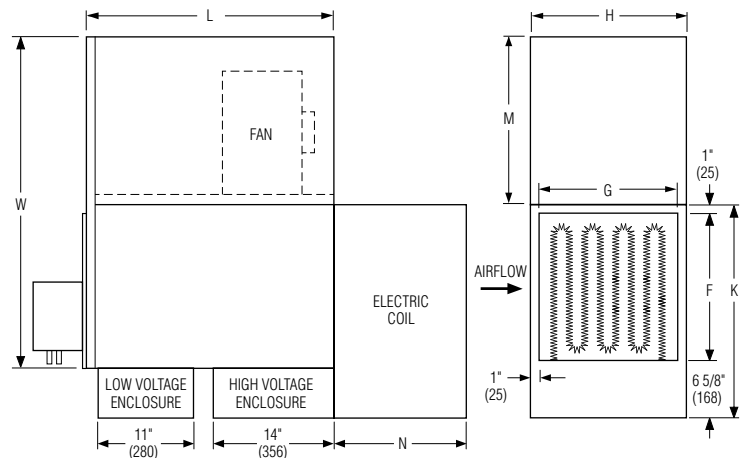
Three phase, 60 Hz.

- 208V 480V (4 wire wye).

- 600V (dual point connection). _____

Options:

- Toggle disconnect switch (includes fan).
- Door interlock disconnect switch.
- SCR control.
- SCR control with discharge temperature 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 | 17 x 12 (432 x 305) | 24 5/8 (626) | 14 (356) | 15 7/8 (403) | 12 1/2 (318) |
| 3 | 17 x 16 (432 x 406) | 24 5/8 (626) | 18 (457) | 19 3/8 (492) | 15 1/4 (387) |
| 5 | 25 x 16 (635 x 406) | 32 5/8 (829) | 18 (457) | 18 3/4 (476) | 15 1/4 (387) |
| 6 | 29 x 18 (737 x 457) | 36 5/8 (930) | 20 (508) | 19 7/8 (505) | 15 1/4 (387) |

| | | | | |
|-----------------------|-------------|-----------------|-------------------|--------------------|
| SCHEDULE TYPE: | | | | |
| PROJECT: | | | | |
| ENGINEER: | DATE | B SERIES | SUPERSEDES | DRAWING NO. |
| CONTRACTOR: | 4 - 25 - 23 | 3500 | 2 - 6 - 2 | 35N-3A |