

UNDERFLOOR FAN BOOSTER UNIT WITH ECM MOTOR • COOLING AND HEATING DAMPERS • VARIABLE OR CONSTANT VOLUME MODELS: 38F, 38FW & 38FE • UNIT SIZES: 1.3 & 5

STANDARD FEATURES:

- Unit incorporates two low leakage dampers for 2 position open/closed operation. One is used for supply air cooling mode airflow (from underfloor plenum) and the other for return air heating mode airflow (ducted).
- 20 ga. (1.0) galvanized steel casing components.
- · Full size top access panel.
- Access door for side access to damper actuators.
- Return heating inlet and discharge opening designed for flanged duct connection.
- 1/2" (13) dual density insulation, exposed edges coated to prevent air erosion. Meets requirements to NFPA 90A and UL181.
- Ultra-high efficiency ECM fan motor. EPIC fan volume controller.
- Motor blower assembly mounted on special 16 ga. (1.6) angles and isolated from casing with rubber isolators.
- Single point electrical connection.
- Top access hinged door on the line voltage/fan controls enclosure.
- Terminals ordered with LH controls as shown are optional. (Controls mounted as standard on RH side. See submittal drawing 38F-1RH).

OPTIONS:

- ☐ Toggle disconnect switch.
- ☐ Fiber-free liner.
- □ Perforated metal liner.
- ☐ Isolator pads.
- ☐ Rubber support feet.
- ☐ Fan Unit fusing.
- Heating damper collar. Flat oval transition on return inlet for flexible duct connection (back or side location). Unit size Collar

1 8" (9 x 5 7/8") 3, 5 10" (11 1/8" x 7 3/4") or 12" (14 1/4" x 7 3/4")

Discharge collar. Flat oval for flexible duct connection.

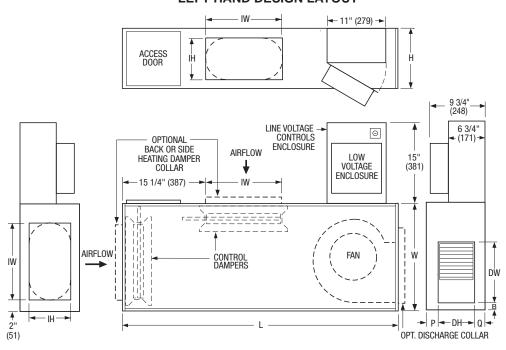
Unit size Collar

1 8" (9 x 5 7/8") 3 12" (14 1/4" x 7 3/4") 5 14" (17 3/8" x 7 3/4")

☐ Special features:

☐ Model 38F Basic Unit

LEFT HAND DESIGN LAYOUT



Dimensional Data. Imperial Units (inches)

Unit Size	w	н	L	В	Р	Q	Inlets IW x IH	Outlet Discharge DW x DH
1	20	8 1/2	50 7/8	1 3/8	3/4	4	14 1/4 x 4 3/4	7 1/8 x 3 3/4
3	20	11	50 7/8	1 3/8	2	2	14 1/4 x 7 3/4	11 1/4 x 7
5	20	15	50 7/8	1 1/4	4 3/4	2	14 1/4 x 11 3/4	11 3/8 x 8 1/4

Dimensional Data. Metric Units (mm)

Unit Size	w	н	L	В	Р	Q	Inlets IW x IH	Outlet Discharge DW x DH
1	508	216	1292	35	19	102	362 x 121	181 x 95
3	508	279	1292	35	51	51	362 x 197	286 x 178
5	508	381	1292	32	121	51	362 x 298	289 x 210

Electrical Data

	Unit	Motor	ECM Motor								
Unit Size 1 3	H.P.	Voltage	120/1/60	208/240/1/60	277/1/60						
	1	1/3	Watts	277	276	270					
	1	1/3	FLA	3.7	1.9	1.9					
	2	1/3	Watts	420	450	410					
	3		FLA	5.8	3.4	2.9					
	_	2/4	Watts	930	1080	940					
	5	3/4	FLA	12.6	6.2	5.5					





FLA = Full load amperage

SCHEDULE TYPE:	Page 1 of 2.					
PROJECT:	Dimensions are in inches (mm).					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.		
CONTRACTOR:	3 - 9 - 09	38F	8 - 20 - 08	38F-1DLH		



UNDERFLOOR FAN BOOSTER UNIT WITH ECM MOTOR • COOLING AND HEATING DAMPERS • HEAT ACCESSORIES

MODELS: 38FW & 38FE • UNIT SIZES: 1, 3 & 5

☐ Hot Water Coil Section Model 38FW

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: One Row 1/2" (13) O.D. male solder. Two and three row 7/8" (22) O.D. male solder.
- Top access panel for inspection and coil cleaning.
- · Flanged outlet duct connection.

Coil Rows:

☐ 1-Row ☐ 2-Row ☐ 3-Row

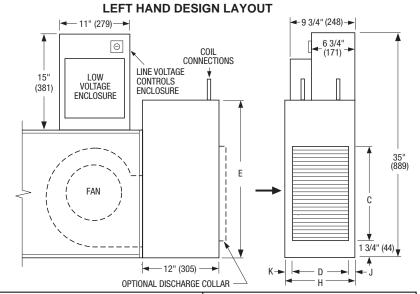
Coil Connections:

(Looking in direction of airflow).

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

Option:

☐ Discharge collar for flexible duct connection (see page 1 for dimensional data).



	Imperial l	Jnits (inches)	Metric Units (mm)					
Unit Size	Outlet Discharge C x D	Н	E	J	K	Outlet Discharge C x D	н	E	J	K
1	14 3/4 x 5 3/4	8 1/2	20	1	1 3/4	375 x 146	216	508	25	44
3	14 3/4 x 8 3/4	11	20	1 1/8	1 1/8	375 x 222	278	508	29	29
5	20 x 12 1/2	15	24 3/4	1 1/4	1 1/4	508 x 318	381	629	32	32

☐ Electric Coil Section Model 38FE

Standard Features:

- · Coil installed on unit discharge.
- Insulated heater element wrapper.
- Automatic reset high limit cut-outs (one per element).
- · Flanged outlet duct connection.
- · Airflow safety switch to prove airflow.
- Single Point electrical connection for entire terminal unit.
- Terminal unit with heater is ETL listed as an assembly.
- · Controls mounted as standard on LH side as shown.

Voltage:

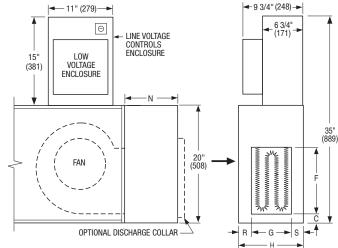
Single phase, 60 Hz. □ 208V □ 240V □ 277V Three phase, 60 Hz. (Unit Size 3 and 5 only)

□ 208V □ 480V (4 wire wye). □

Options:

- ☐ Toggle disconnect switch.
- ☐ Door interlock disconnect switch.
- Mercury contactors.
- Power circuit fusing.
- ☐ Class 'A' 80/20 Ni./Cr. Wire.
- Dust tight construction.
- ☐ Manual reset secondary thermal cut out.
- ☐ Discharge collar for flexible duct connection (see page 1 for dimensional data).

LEFT HAND DESIGN LAYOUT



	lm	perial	Units	Metric Units (mm)								
Unit Size	Outlet Discharge F x G	Н	N	С	R	S	Outlet Discharge F x G	Н	N	С	R	s
1	8 1/4 x 6	8 1/2	9	1 3/8	1 1/2	1	210 x 152	216	229	35	38	25
3	11 x 7 3/4	11	9	1	1 5/8	1 5/8	279 x 197	278	229	25	41	41
5	12 x 8 3/4	15	13 3/4	1	5 1/4	1	305 x 222	381	352	25	133	25

 SCHEDULE TYPE:
 Page 2 of 2.

 PROJECT:
 Dimensions are in inches (mm).

 ENGINEER:
 DATE
 B SERIES
 SUPERSEDES
 DRAWING NO.

 CONTRACTOR:
 3 - 9 - 09
 38F
 8 - 20 - 08
 38F-1DLH