



**DOHA**

**Ducaone®**

THE DIFFERENCE IS QUALITY®

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# Oil Furnace Horizontal/Counterflow

## FEATURES

### HEAT EXCHANGER

- ◆ Heavy duty 14 gauge steel with a long lasting ceramic fiber combustion chamber
- ◆ Easy access large diameter clean out ports

### CABINET

- ◆ Foil-faced high density fiberglass insulation reduces heat loss and noise
- ◆ Pre-painted for maximum durability

### BLOWER

- ◆ Slide-out design with quick plug-in wiring
- ◆ Dynamically balanced blower with resilient motor mounts for smooth and quiet operation

### BURNER

- ◆ High quality Beckett Flame Retention burner for efficient combustion
- ◆ High efficiency air flow system to provide consistent operation through all operating conditions

### CONTROLS

- ◆ Readily available trade components
- ◆ Honeywell fan timer control
- ◆ 40 VA transformer
- ◆ Color coded wiring for easy service
- ◆ Prewired for air conditioning
- ◆ Heating blower on delay
- ◆ Four heating blower off settings
- ◆ Electronic air cleaner connection (115V)
- ◆ Humidifier connection (115V)
- ◆ 5 Amp fuse for protection
- ◆ Single wire twinning

### VENTING

- ◆ Includes standard barometric damper
- ◆ Optional sidewall vent kit

### INSTALLATION

- ◆ Factory wired

### ACCESSORIES

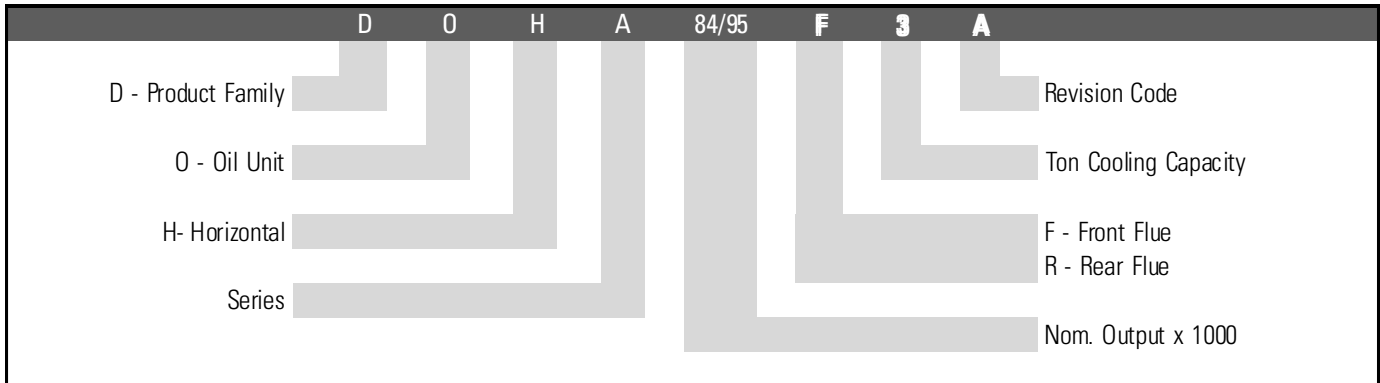
- ◆ Cleanout brush kit
- ◆ Filter kit
- ◆ Combustible base

### WARRANTY

- ◆ Limited life-time on heat exchanger
- ◆ Five year limited on parts



## Model Number Guide



## Physical & Electrical Data

| Model                        | Nozzle Size  | Input (Btuh) | Output (Btuh) | AFUE (ICS) | Nom. Cooling Cap. | Flue Dia. (in.) | Volts/Hz/Phase | Max. Time Delay Breaker or Fuse (amp) | Trans. (V.A.) | Appr. Weight (lb.) |
|------------------------------|--------------|--------------|---------------|------------|-------------------|-----------------|----------------|---------------------------------------|---------------|--------------------|
| DOHA84/95F3A <sup>1</sup>    | .65GPH-80°B  | 105,000      | 85,000        | 81.0       | 2.0-3.0           | 6               | 120/60/1       | 15                                    | 40            | 225                |
|                              | .75GPH-80°B  | 119,000      | 97,000        | 81.0       |                   |                 |                |                                       |               |                    |
| DOHA112/125F5A <sup>1</sup>  | .85GPH-80°B  | 140,000      | 113,000       | 81.0       | 3.0-5.0           | 6               | 120/60/1       | 15                                    | 40            | 265                |
|                              | 1.00GPH-80°B | 154,000      | 125,000       | 81.0       |                   |                 |                |                                       |               |                    |
| DOHA57/72R3A*                | .50GPH-80°A  | 70,000       | 57,000        | 83.0       | 2.0-3.0           | 6               | 120/60/1       | 15                                    | 40            | 225                |
|                              | .65GPH-80°A  | 90,000       | 72,000        | 82.0       |                   |                 |                |                                       |               |                    |
| DOHA84/95R3A* <sup>1</sup>   | .65GPH-80°B  | 105,000      | 85,000        | 82.8       | 2.0-3.0           | 6               | 120/60/1       | 15                                    | 40            | 225                |
|                              | .75GPH-80°B  | 119,000      | 97,000        | 81.0       |                   |                 |                |                                       |               |                    |
| DOHA112/125R5A* <sup>1</sup> | .85GPH-80°B  | 140,000      | 113,000       | 81.8       | 3.0-5.0           | 6               | 120/60/1       | 15                                    | 40            | 265                |
|                              | 1.00GPH-80°B | 154,000      | 125,000       | 81.0       |                   |                 |                |                                       |               |                    |
| DOHA168/196R6A* <sup>1</sup> | 1.25GPH-80°B | 210,000      | 168,000       | 80.0       | 4.0-6.0           | 8               | 120/60/1       | 20                                    | 40            | 375                |
|                              | 1.50GPH-80°B | 245,000      | 196,000       | 80.0       |                   |                 |                |                                       |               |                    |

\*R (Rear Flue) models are approved for horizontal applications only.

Note: All models are rated at 140 PSI pump pressure except the DOHA57 which is rated at 100 PSI

<sup>1</sup>Shipped in low fire configuration.

## Blower Performance Data

| Model          | Motor Size (hp) | Blower Size | Temp. Rise °F | Blower Speed | CFM @ ext. static pressure - in w.c. |        |        |        |        |
|----------------|-----------------|-------------|---------------|--------------|--------------------------------------|--------|--------|--------|--------|
|                |                 |             |               |              | .20                                  | .30    | .40    | .50    | .60    |
| DOHA84/95F3A   | 1/2             | 10 x 10     | 70            | High         | 1,410                                | 1,320  | 1,280  | 1,195  | 1,090  |
|                |                 |             |               | Med. High    | 1,340                                | 1,282  | 1,190  | 1,100  | 1,016  |
|                |                 |             |               | Med          | 1,236                                | 1,175  | 1,092  | 1,015  | 918    |
|                |                 |             |               | Low          | 1,090                                | 1,037  | 975    | 900    | 855    |
| DOHA112/125F5A | 3/4             | 12 x 9      | 60            | High         | 2,072                                | 1,995  | 1,950  | 1,900  | 1,850  |
|                |                 |             |               | Med. High    | 1,794                                | 1,750  | 1,690  | 1,630  | 1,585  |
|                |                 |             |               | Med          | 1,515                                | 1,482  | 1,430  | 1,388  | 1,320  |
|                |                 |             |               | Low          | 1,355                                | 1,326  | 1,290  | 1,233  | 1,176  |
| DOHA57/72R3A   | 1/3             | 10 x 8      | 60            | High         | 1,406                                | 1,341  | 1,274  | 1,203  | 1,126  |
|                |                 |             |               | Med. High    | 1,256                                | 1,206  | 1,156  | 1,090  | 1,012  |
|                |                 |             |               | Med          | 1,010                                | 981    | 948    | 906    | 842    |
|                |                 |             |               | Low          | 837                                  | 818    | 798    | 761    | 716    |
| DOHA84/95R3A   | 1/2             | 10 x 10     | 70            | High         | 1,487                                | 1,398  | 1,303  | 1,210  | 1,104  |
|                |                 |             |               | Med. High    | 1,380                                | 1,303  | 1,220  | 1,150  | 1,033  |
|                |                 |             |               | Med          | 1,230                                | 1,170  | 1,108  | 1,000  | 935    |
|                |                 |             |               | Low          | 1,057                                | 1,022  | 970    | 909    | 835    |
| DOHA112/125R5A | 3/4             | 12 x 9      | 60            | High         | 2,218                                | 2,141  | 2,082  | 2,000  | 1,907  |
|                |                 |             |               | Med. High    | 1,782                                | 1,750  | 1,706  | 1,649  | 1,579  |
|                |                 |             |               | Med          | 1,552                                | 1,504  | 1,480  | 1,440  | 1,380  |
|                |                 |             |               | Low          | 1,353                                | 1,335  | 1,300  | 1,277  | 1,223  |
| DOHA168/196R6A | 3/4             | 12 x 12     | 65 -95        | High         | 2,675                                | 2,625  | 2,585  | 2,480  | 2,291  |
|                |                 |             |               | Med          | 2,170                                | 2,150  | 2,110  | 2,060  | 2,000  |
|                |                 |             |               | Low          | 1,650*                               | 1,625* | 1,585* | 1,550* | 1,495* |

\*Not recommended for heating. Temperature rise may be outside acceptable range.

## Accessories

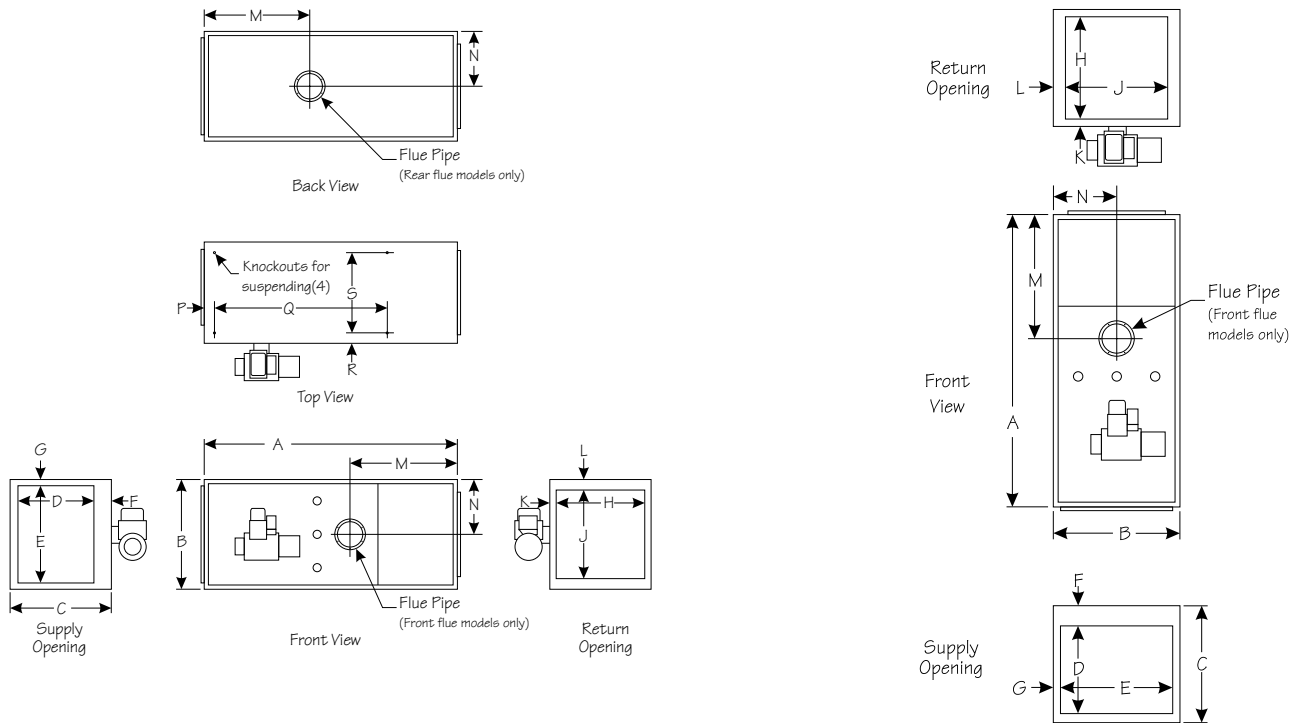
| Description                                    | Used with      | Part Number |
|--|----------------|-------------|
| Combustible Floor Base                         | DOHA84/95F     | 20326905    |
| Combustible Floor Base                         | DOHA112/125F   | 20326906    |
| Clean Brush Out Kit                            | All models     | 20327201    |
| Vestibule Kit                                  | DOHA84/95F     | 20327501    |
| Vestibule Kit                                  | DOHA112/125F   | 20327502    |
| Filter Kit                                     | DOHA57 & 84/95 | 20327601    |
| Filter Kit                                     | DOHA112/125    | 20327602    |
| Filter Kit                                     | DOHA168/196    | 20327603    |
| Twinning Kit                                   | All models     | 20276602    |
| Tjerlund Side Wall Vent Kit <sup>1</sup>       | All models     | 20327701    |
| Field Controls Side Wall Vent Kit <sup>2</sup> | All models     | 20327702    |

<sup>1</sup> This can be ordered from Tjerlund, part number SSIC.

<sup>2</sup> This can be ordered from Field Controls, part number SWG-5-CK61.

## Dimensions (in.)

| Model Number   | A  | B      | C      | D      | E      | F     | G     | H  | J  | K     | L     | M       | N      | P  | Q  | R     | S      |
|----------------|----|--------|--------|--------|--------|-------|-------|----|----|-------|-------|---------|--------|----|----|-------|--------|
| DOHA84/95F3A   | 59 | 20 1/2 | 20 1/2 | 18 1/4 | 18 1/4 | 1 1/4 | 1 1/4 | 18 | 18 | 1 1/4 | 1 1/4 | 32 1/2  | 10 1/4 | 3  | 53 | 3     | 14 1/2 |
| DOHA112/125F5A |    | 23 1/2 | 23 1/2 | 21 1/4 | 21 1/4 |       |       | 21 | 21 |       |       |         | 11 3/7 |    |    | 4 3/4 |        |
| DOHA57/72R3A   | 59 | 20 1/2 | 20 1/2 | 18 1/4 | 18 1/4 | 1 1/4 | 1 1/4 | 18 | 18 | 1 1/4 | 1 1/4 | 32 1/2  | 10 1/4 | 3  | 53 | 3     | 14 1/2 |
| DOHA84/95R3A   |    |        |        |        |        |       |       |    |    |       |       |         |        |    |    |       |        |
| DOHA112/125R5A |    |        |        |        |        |       |       |    |    |       |       |         |        |    |    |       |        |
| DOHA168/196R6A | 67 | 26 1/4 | 26 1/4 | 23 1/2 | 23 1/2 | 1 3/8 | 1 3/8 | 24 | 24 | 1 1/8 | 1 1/8 | 36 5/16 | 13 1/8 | 15 | 50 | 20    | 3 1/8  |



## Clearances (in.)

### Horizontal Position

| Model          | Front | Above | Rear | Flue | Bottom |
|----------------|-------|-------|------|------|--------|
| DOHA84/95F3A   | 24    | 1     | 1    | 7    | 1      |
| DOHA112/125F5A |       |       |      |      |        |
| DOHA57/72R3A   | 24    | 4     | 24   | 9    | 4      |
| DOHA84/95R3A   |       |       |      |      |        |
| DOHA112/125R5A |       |       |      |      |        |
| DOHA168/196R6A |       |       |      |      |        |

## Clearances (in.)

### Counterflow Position

| Model          | Front | Above | Rear | Flue |
|----------------|-------|-------|------|------|
| DOHA84/95F3A   | 16    | 0     | 1    | 1    |
| DOHA112/125F5A |       |       |      |      |

Due to our policy of continuous improvement, all specifications are subject to change without notice. For more information, contact your local Ducon distributor.

**Ducon**<sup>®</sup>

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