# PENTAIR

## Side-Mount Filter Fans and Grilles
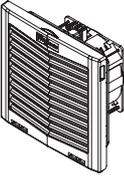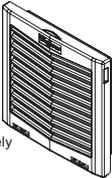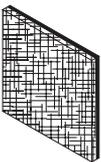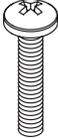
HF/HG Models

# INSTRUCTION MANUAL

DESIGN WITH CONFIDENCE

# TABLE OF CONTENTS

| 1 (1x) | 2 Purchase Separately (1x) | 3 (1x) |
|---|---|---|
| 4       HF/HG04: M3x16    HF/HG05-13: M4x20 <br><br> Optional <br><br> (4x) | 6 (1x) | |
| 5       HF/HG04: M3    HF/HG05-13: M4 <br><br> Optional <br><br> (4x) | | |
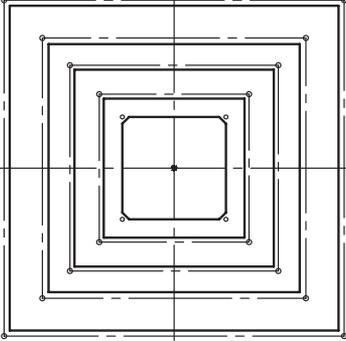
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## ⚠ CAUTION

Before cutting holes in the sides of the enclosure, verify all internal components are clear of the cutting tool to avoid damaging installed components.

## INSTALLATION INSTRUCTIONS

1.  Apply cutout template to the side of the enclosure located as desired. See Figure 1
2.  Cutout hole in enclosure using the appropriate cutout size for the model you purchased.
3.  Deburr the cutting edge.
4.  Insert fan or grille and push into opening until snapped and locked. See Figure 2.
5.  Mounting fasteners are not required for panel or enclosure material thickness less than .10 (2.5 mm). For panel or enclosure material thickness between .10 (2.5 mm) and .14 (3.5 mm), mounting fasteners are recommended. For panel or enclosure material thickness greater than .14 (3.5 mm), mounting fasteners are required in order to maintain the IP / Type 12 rating.
6.  In order to install the mounting fasteners, removal of the grille is required. Remove the grille by pulling from the top of the grille to 45° maximum as shown in Figure 3 on page 4. Then pull from the bottom as shown in Figure 4 on page 4. NOTE: The orientation "Top" directs the louvers downward. This is for reference only; the assembly can be installed to orient louvers in any direction.
7.  It may be necessary to drill out the mounting holes in the filter housing. For model HF04, use a 1/8 (3 mm) drill bit. For models HF05, HF09, HF10 and HF13, use a 5/32 (4 mm) drill bit.
8.  Torque fasteners to 20-25 in-lbs (2.3-2.8 Nm). See Figure 5 on page 4.
9.  Install the grille as shown in Figure 2
10. Verify the location of the enclosure with installed filter fan has a minimum clearance of 7.00 (178 mm). See Figure 7 on page 4
11. Wire the filter fan following the Wire Diagrams on page 5 for the appropriate model being installed.
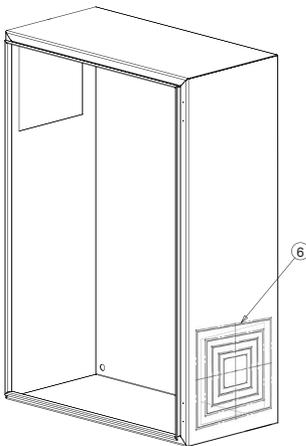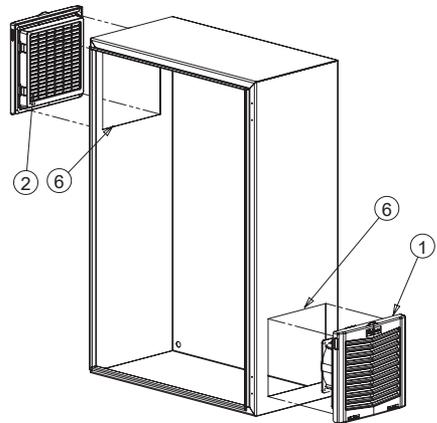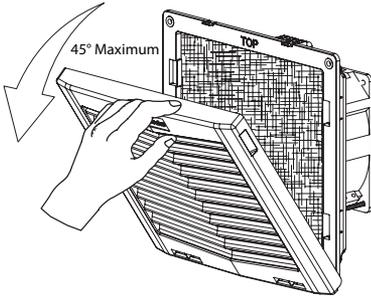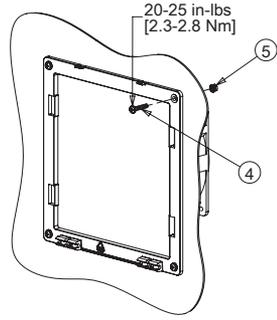


Figure 1

Figure 2

45° Maximum

Figure 3



20-25 in-lbs
[2.3-2.8 Nm]

⑤

④

Figure 5



Figure 4



2

1

Figure 6



7.0in MIN
[178mm MIN]

Figure 7

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# WIRE DIAGRAMS

LINE VOLTAGE
GROUND

L1    N    ⏚

BLK    WHT    GRN/YEL

FAN MOTOR
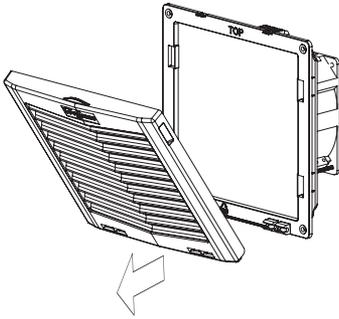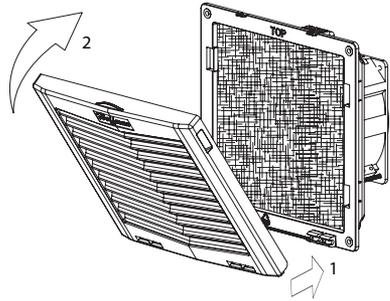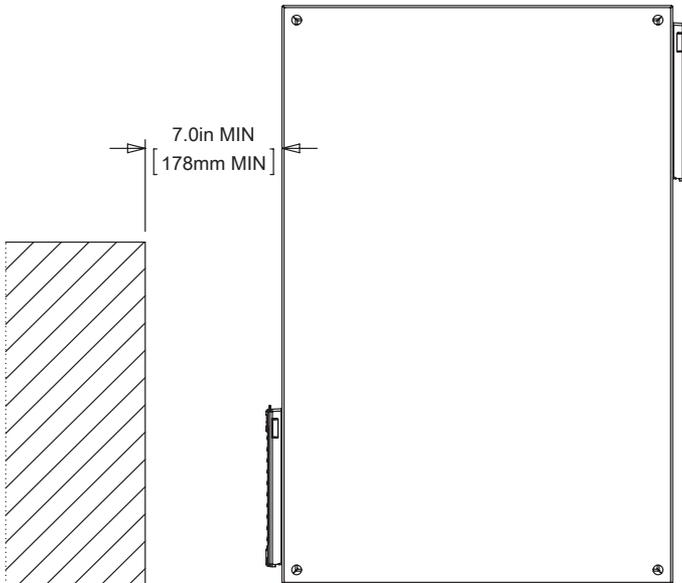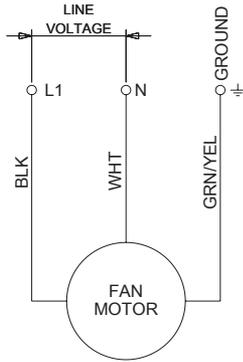
WIRING DIAGRAM
HF04, HF05, HF09, HF10
AC POWERED

LINE VOLTAGE
GROUND

L1    N    PE

BLU    BLK    BRN    GRN/YEL

FAN MOTOR
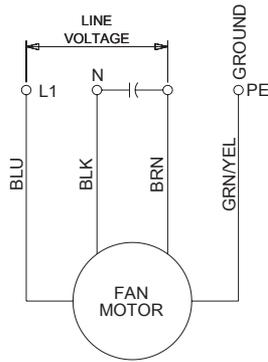
WIRING DIAGRAM
HF13
AC POWERED

SEE NAMEPLATE
VDC

+ (L1)    − (N)

RED    BLK

FAN MOTOR
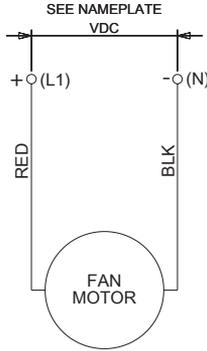
WIRING DIAGRAM
HF04, HF05, HF09, HF10
DC POWERED

SEE NAMEPLATE
VDC

+    −    TACH OUTPUT    CONTROL INPUT

RED    BLK(BLU)    WHT    YEL

FAN MOTOR
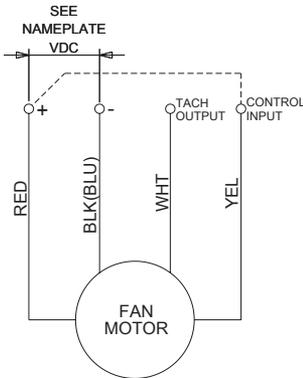
WIRING DIAGRAM
HF13 - FULL SPEED
DC POWERED

SEE NAMEPLATE
VDC

SPEED CONTROL
0-10 VDC

+    −    TACH OUTPUT    CONTROL INPUT

RED    BLK(BLU)    WHT    YEL

FAN MOTOR
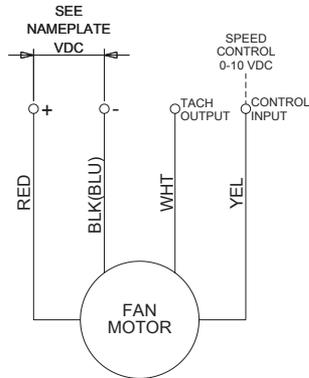
WIRING DIAGRAM
HF13 - VARIABLE SPEED
DC POWERED

## HOW TO READ MODEL NUMBERS

| HF | 04 | 16 | 4 | 0 | 4 |
|----|----|----|---|---|---|
| 1  | 2  | 3  | 4 | 5 | 6 |

1. Filter fan / Grille
2. Size
3. Voltage: 16 = AC 115/50/60/1
   26 = AC 230/50/60/1
   24 = DC 24V
   48 = DC 48V
4. IP Rating: 4 = IP54
   5 = IP55
5. Version
6. Color: 3 = RAL9011 Black
   4 = RAL = RAL7035 Light Gray

## FILTER CLEANING / REPLACEMENT

| Replacement Filter Part Numbers | | |
|---|---|---|
| Fan/Grille Models | IP54 / Type 12 (≈ .50 [14 mm] thick) | IP55 / Type 12 (≈ .75 [20 mm] thick) |
| HF/HG04 | 89134423R | --- |
| HF/HG05 | 89134424R | 89136408R |
| HF/HG09 | 89134425R | 89136409R |
| HF/HG10 | 89134426R | 89136410R |
| HF/HG13 | 89134427R* | 89136411R |

**\*Note: HF/HG13 replacement filters are not approved for IP54; only Type 12.**

1. Open louvered grille.
2. Wash filter in warm water. Use mild detergent if necessary.
3. For greasy matter, wash in warm water containing a grease solvent.
4. Do not wring the filter.



45° Maximum

DENSE SIDE IN

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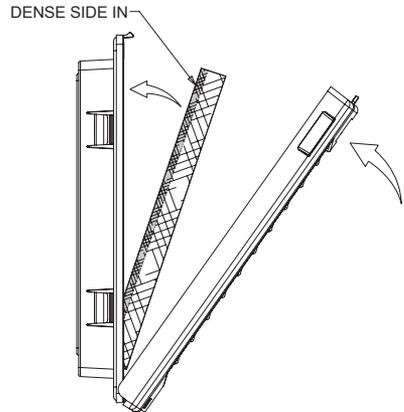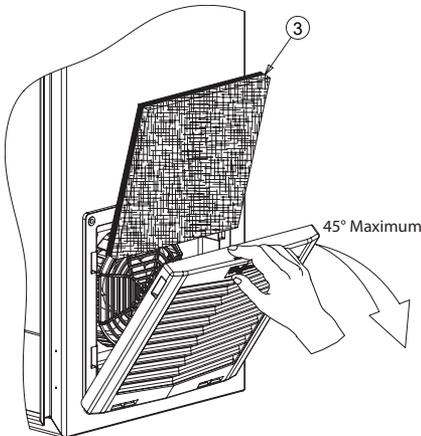
## REPLACEMENT PARTS

| Model | RAL7035 Light Gray | | RAL9011 Black | |
|---|---|---|---|---|
| | Grille | Housing | Grille | Housing |
| HF04 | 89123894SP | 89133137SP | 89131499SP | 89133137SP |
| HF05 | 89122973SP | 89133138SP | 89131495SP | 89133138SP |
| HF09 | 89122907SP | 89133139SP | 89131484SP | 89133139SP |
| HF10 | 89123456SP | 89133140SP | 89131496SP | 89133140SP |
| HF13 | 89124454SP | HG1300404 | 89131502SP | HG1300403 |
| HG04 | 89123894SP | HG0400404 | 89131499SP | HG0400403 |
| HG05 | 89122973SP | HG0500404 | 89131495SP | HG0500403 |
| HG09 | 89122907SP | HG0900404 | 89131484SP | HG0900403 |
| HG10 | 89123456SP | HG1000404 | 89131496SP | HG1000403 |
| HG13 | 89124454SP | HG1300404 | 89131502SP | HG1300403 |

## WARRANTY

Please register your product and reference the Hoffman Cooling Product Warranty located here: http://www.pentairprotect.com/en/hoffman/warranty-information

**PENTAIR**