

Honeywell Media Air Cleaners

PROFESSIONAL INSTALLATION GUIDE GUIDE D'INSTALLATION PROFESSIONNELLE

GETTING
STARTED

MOUNTING

SPECIFICATIONS



INCLUDED IN THIS BOX



Tools needed to install Enhanced Air Cleaner

- ◆ Standard screwdriver
- ◆ Phillips screwdriver
- ◆ Metal cutter
- ◆ Drill
- ◆ Duct Sealant

Replacement Air Filters

Filter Size (in.)	Part Number	
	F100 - MERV 11	F200 - MERV 13
12.5 x 20	FC100A1052	N/A
16 x 25	FC100A1029	FC200E1029
16 x 20	FC100A1003	FC200E1003
20 x 25	FC100A1037	FC200E1037
20 x 20	FC100A1011	FC200E1011

Media Air Cleaner Size (in.)	F100 Media Air Cleaner w/ MERV 11 Filter	F200 Media Air Cleaner w/ MERV 13 Filter
16 X 25	F100F2002	F200F2002
16 X 20	F100F2028	F200F2028
20 X 25	F100F2010	F200F2010
20 X 20	F100F2036	F200F2036
25 X 22	F100F2051	-
25 X 20	F100F2044	-

Honeywell Media Air Cleaner

GETTING
STARTED

What to Expect From Your Honeywell Media Air Cleaner	1
When Installing this Product.....	1
How it Works	1
Application Considerations.....	2
Models	2
Air Conditioning	2
Humidifiers	2
UV Lights	2
Transitions	3
Turning Vanes.....	3
Sheetmetal	3
Offsets	3
Important Installation Requirements	4
Personal Safety	4
Before Mounting	4
If Replacing an Old Air Cleaner.....	4

MOUNTING

Choosing a Mounting Position.....	5
Mounting the Honeywell Media Air Cleaner .	7
Checkout	8
Maintenance.....	8
Specifications	8
Capacity And Pressure Drop.....	9
Temperature Rating	9
Dimensions.....	9
Approvals.....	9
Replacement Filter Table	9

SPECIFICATIONS



NEED HELP? For assistance with this product please visit <http://yourhome.honeywell.com> or call Honeywell Customer Care toll-free at 1-800-468-1502.

Read and save these instructions.

© U.S. Registered Trademark. Patents pending. Copyright © 2013 Honeywell International Inc. All rights reserved.

What to Expect From Your Honeywell Media Air Cleaner

Congratulations for selecting the Honeywell Media Air Cleaner for your home comfort system! The Honeywell Media Air Cleaner captures and removes a significant amount of the air-borne particles from the air circulated through the high-efficiency pleated media filter. The Media Air Cleaner easily mounts in any position within the return air duct of any gas, oil, and electric forced warm air furnaces and to compressor cooling up to 5 tons. Additionally, it requires no electrical connections or maintenance beyond periodic media filter replacement.

When Installing this Product...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the rating given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

How it Works

The filter in your Honeywell Media Air Cleaner is made up of a web of fibers. As air passes through the Media Air Cleaner, particulates such as dust, pollen, dander, mold, and bacteria collide with the fibers in the filter and become trapped. Meanwhile, the clean air is allowed to continue through your heating and cooling system and into your home. The particle removal efficiency of the Honeywell Media Air Cleaner can be found in the Specification section of this manual.

Application Considerations

The Honeywell Media Air Cleaner is designed to work with gas, oil, and electric forced warm air furnaces and with compressor cooling. It can also be used with heat pumps if the filter is changed regularly to prevent excessive pressure drop. The Honeywell Media Air Cleaner is not recommended for applications where pressure drop may be critical.

Models

F100F Media Air Cleaner includes cabinet, access door and MERV 11 pleated media filter.

F200F Media Air Cleaner includes cabinet, access door and MERV 13 pleated media filter.

F100B Media Air Cleaner Boot includes cabinet and access door. (No Filter)

Air Conditioning

Mount the media air cleaner upstream of the evaporator coil in a cooling system. The filter will help to keep the coil clean and reduce maintenance.

Humidifiers

The media air cleaner is compatible with humidifiers. Avoid applications where water mist will reach the media. If an atomizing (steam) humidifier is used, the filter media will require replacement more often because of minerals in the water.

UV Lights

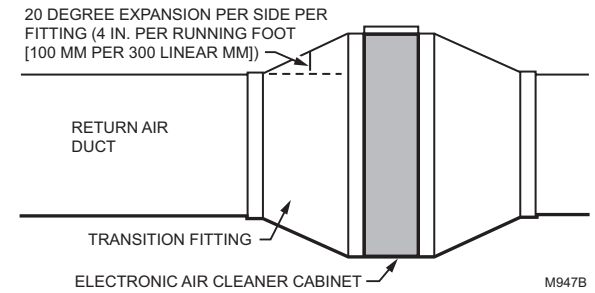
Germicidal UV lights can cause degradation of the media filter. The UV light should be located out of line of sight or a minimum of 3 feet from the filter. Otherwise the filter may need to be replaced more frequently.

Transitions

For most efficient air cleaning, spread airflow evenly across the face of the media. If the duct is a different size than the media air filter cabinet, gradual transitions are required. Follow these guidelines when fabricating:

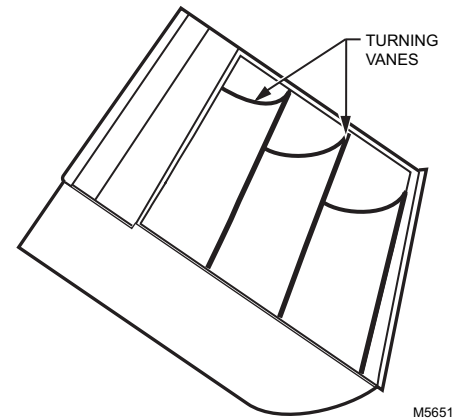
- Use gradual transitions to reduce air turbulence and increase efficiency.
- Use no more than 20 degrees (about 4 in. per running ft. (100 mm per 300 linear mm)) of expansion on each side of a transition fitting.

DUCT SIZE CHANGED GRADUALLY TO PREVENT TURBULENCE.



Turning Vanes

If the media air cleaner is installed next to an elbow or angle fitting, add turning vanes inside the angle to distribute airflow more evenly across the face of the media. See middle figure.

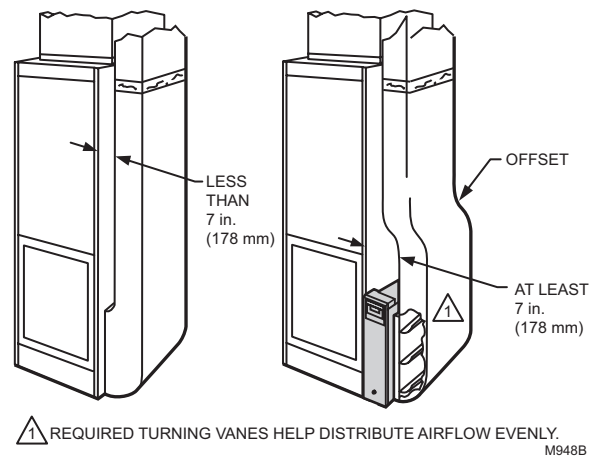


Sheetmetal

The media air cleaner is adaptable to all new or existing forced air heating and cooling systems used in residential applications. Transitions or turning vanes may be required in some applications for effective media air cleaner operation.

Offsets

If the duct connection to the furnace in a side installation allows less than 7 in. (178 mm) for mounting media air cleaner cabinet, attach an offset to the elbow. See bottom figure at right.



Important Installation Requirements

Failure to comply with these requirements will result in voided warranty, improper installation, and service callbacks.

Personal Safety

- Wear safety glasses while installing the unit.
- Do not cut into any air conditioning or electrical line.
- Follow professional safety standards and all local codes for plumbing, electrical, and mechanical considerations.

Before Mounting

- Using the figure on the cover and the lists on the inside cover, make sure that you have all the components for your Honeywell Media Air Cleaner and the tools to install it.
- Ensure airflow direction through the Honeywell Media Air Cleaner matches the arrows on the filter cartridge. The arrows should point in the direction of the airflow.
- Choose a location that is readily accessible for checking and replacing the filter. Allow at least 26 in. (660 mm) clearance in front of the unit for removal of the cartridge.
- Install the media air filter where the temperature will not exceed the ratings in the Specifications.
- Do not mount in the supply air duct.

NOTE: Generally, the best location is in the return air duct next to the blower compartment so the media air cleaner can help to keep the blower motor and evaporator coils clean.

If Replacing an Old Air Cleaner

If the Honeywell Media Air Cleaner is not identical in size and shape to the existing air cleaner, before performing a retrofit installation, you might need to add duct transitions to ensure a smooth air flow.

For optimum system performance, replace the filter every six months (before heating season and before cooling season). Adjust the schedule to your needs, but replace the filter at least once per year.

Choosing a Mounting Position

The Media Air Cleaner mounts in any position within the return air duct, usually next to the furnace blower compartment, but the arrow on the cartridge must point in the same direction as the airflow. See Figs. 1-8 for proper location of the media air cleaner for a variety of furnace installations.

NOTE: The media air cleaner cabinet is sturdy enough to easily support the weight of the furnace and evaporator coil.

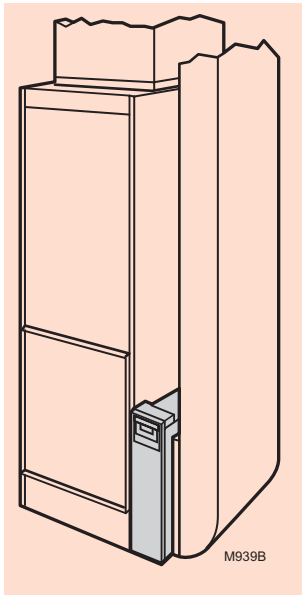


Fig. 1. Highboy furnace with side installation. Media air filter is mounted vertically where return enters side inlet of furnace.

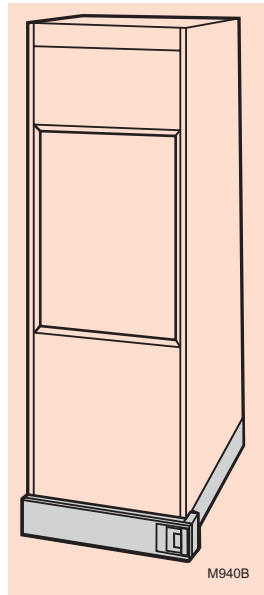


Fig 2. Highboy furnace, with installation beneath furnace. Media air cleaner is mounted horizontally where return enters from below.

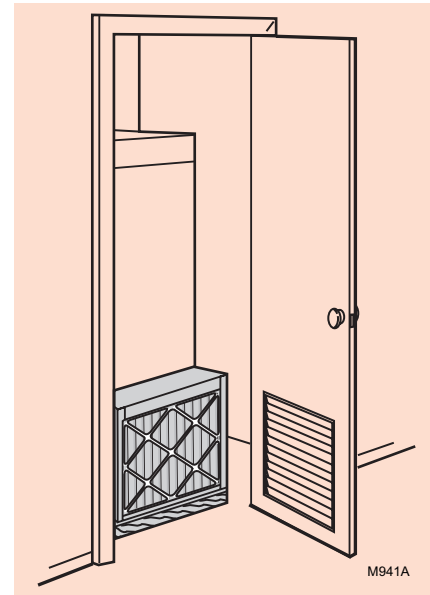


Fig. 3. Highboy furnace, with closet installation. Media air cleaner is mounted vertically on furnace between furnace and louvered return air opening in closet door.

MOUNTING

Before beginning Mounting:

I have chosen an installation location that meets the requirements on pages 5 through 6.

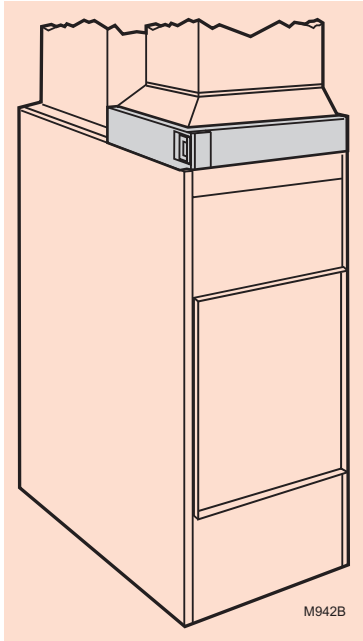


Fig. 4. Lowboy furnace, with media air cleaner mounted horizontally in return plenum just above furnace and opposite heating plenum.

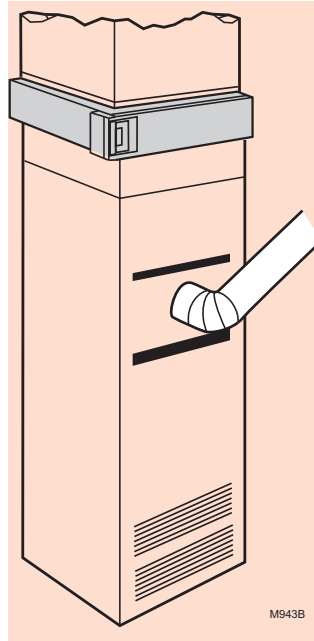


Fig. 5. Counterflow furnace, with media air cleaner mounted horizontally in return duct or plenum just above furnace.

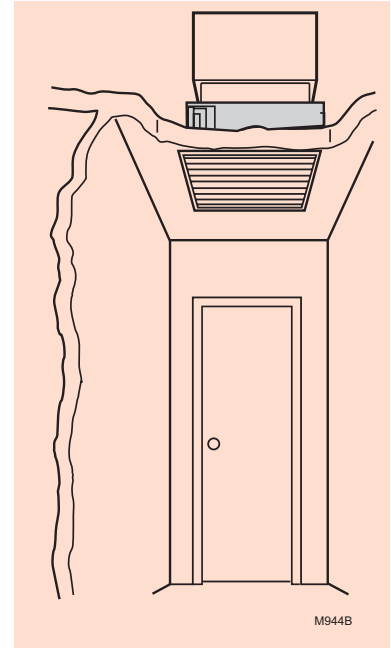


Fig. 6. Central fan installation, with media air cleaner mounted horizontally in central return duct.

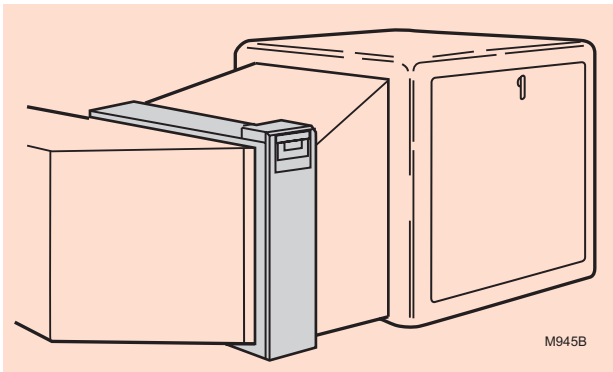


Fig. 7. Horizontal furnace, with media air filter mounted vertically in return duct near furnace.

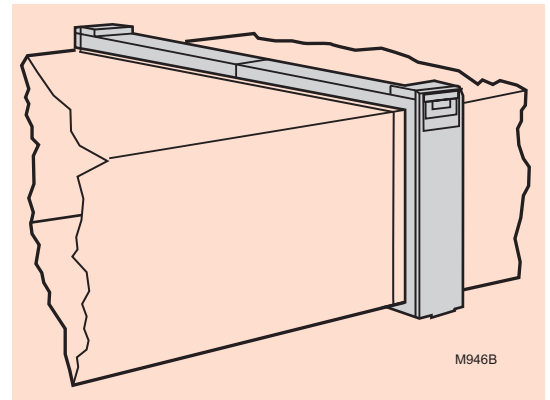


Fig. 8. Two or more media air cleaners used in a high capacity system.

Mounting the Honeywell Media Air Cleaner

The following procedure describes a typical side installation on an existing highboy furnace (Fig. 1). Alternate procedures are noted as appropriate. Other changes in installation procedures may be necessary to complete your installation.

NOTE: Before starting the installation, remove and discard the existing furnace filter (if used). Thoroughly clean the blower compartment. If possible, power vacuum the ductwork to remove accumulated dust in an occupied home or remove construction dirt in a new home. The media air cleaner cannot remove dirt that has settled in the blower compartment and distribution ducts.

STEP ONE: Review the Installation Plan

Temporarily place the cabinet on the floor, oriented as it will be when installed. Insert and remove the cartridge to make sure the plan allows adequate clearance for easy removal and replacement of the cartridge.

STEP TWO: Fasten the Cabinet to the Furnace

- a. Align the cabinet with the return air opening.
- b. Place blocks under the cabinet, as necessary, to make sure the unit sits securely.
- c. Create an opening in the furnace to match the cabinet opening.
- d. Attach the cabinet securely to the furnace. Attach the unit directly or fit a starting collar in the furnace opening. Either drill holes and fasten with sheetmetal screws or rivets, or use slip joints. If you are drilling holes, use a locking pliers to help hold the unit in place during drilling.

STEP THREE: Install Turning Vanes

Install turning vanes to help distribute air equally over the full surface of the upstream side of the media. Install them whenever an abrupt 90 degree elbow is installed directly against the media air cleaner cabinet.

STEP FOUR: Fasten Cabinet to Ductwork

Fasten side of cabinet to the ductwork using sheet-metal screws, rivets, or slip joints, as appropriate.

STEP FIVE: Connect Ductwork

- a. Connect the vertical duct section to the elbow. If the vertical drop of the duct is less than 7 in. (178 mm) from the side of the furnace, shorten the horizontal trunk or attach an offset fitting to the elbow.
- b. When ductwork is properly aligned, connect the vertical duct to the horizontal trunk.

STEP SIX: Seal Joints

Seal all joints in the return air system between the media air filter and the furnace to prevent dust from entering the clean airstream.

STEP SEVEN: Install Filter Cartridge

Slide the filter cartridge into the cabinet, making sure the arrow on the cartridge points in the direction of air flow. Replace access door. Insert the tab on the bottom of the door into the slot in the cabinet. Swing the door closed and press it into place.

Checkout

Visually check the installation and make sure that:

- Airflow is in the direction of the arrow on the media air filter cartridge.
- Turning vanes and transitions, if used, are properly installed.
- Joints in sheetmetal between media air filter and furnace are sealed.
- All sheetmetal connections are complete.
- Original furnace filter has been removed and blower compartment is cleaned.

When you have verified that checkout has been completed:

- Replace any access doors removed during the Installation or Checkout.
- Run the furnace or cooling system through one complete cycle to make sure the system operates as desired.

Maintenance

The media filter must be replaced when pressure drop across the media filter reaches 0.5 in. w.c. (0.1 kPa), or at least annually. If the media air cleaner is installed downstream from an atomizing humidifier or if the installation includes both heating and cooling, more frequent replacement may be necessary. Clogged media must be replaced promptly to avoid restricting airflow and reducing efficiency of the heating/cooling system. Record the replacement date in the space provided on the replacement media filter.

Specifications

The specifications in this publication do not include normal manufacturing tolerances; therefore, an individual unit may not exactly match the listed specifications. This product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

F100 Specifications

MERV Rating*: MERV 11

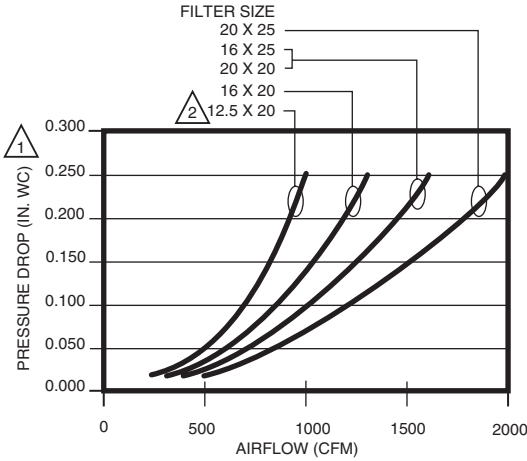
Static Pressure Drop: 0.23 (in. w.c.) at 500 FPM

Efficiency Definition*:

Small Particles: E1 = 0.3 to 1.0 microns = **32%**

Medium Particles: E2 = 1.0 to 3.0 microns = **72%**

Large Particles: E3 = 3.0 to 10.0 microns = **96%**



1 WHEN FIRST INSTALLED. PRESSURE DROP INCREASES AS FILTER BECOMES LOADED. REPLACE FILTER WHEN PRESSURE DROP REACHES 0.5 IN. WC. (0.1 kPa).

2 AVAILABLE ONLY IN UNITED STATES.

M34911

F200 Specifications

MERV Rating*: MERV 13

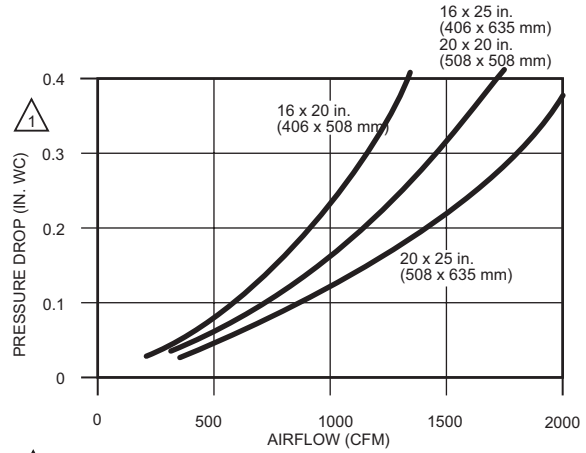
Static Pressure Drop: 0.3 (in. w.c.) at 500 FPM

Efficiency Definition*:

Small Particles: E1 = 0.3 to 1.0 microns = **63%**

Medium Particles: E2 = 1.0 to 3.0 microns = **91%**

Large Particles: E3 = 3.0 to 10.0 microns = **99%**



1 WHEN FIRST INSTALLED. PRESSURE DROP INCREASES AS FILTER BECOMES LOADED. REPLACE FILTER WHEN PRESSURE DROP REACHES 0.5 IN. WC. (0.1 kPa).

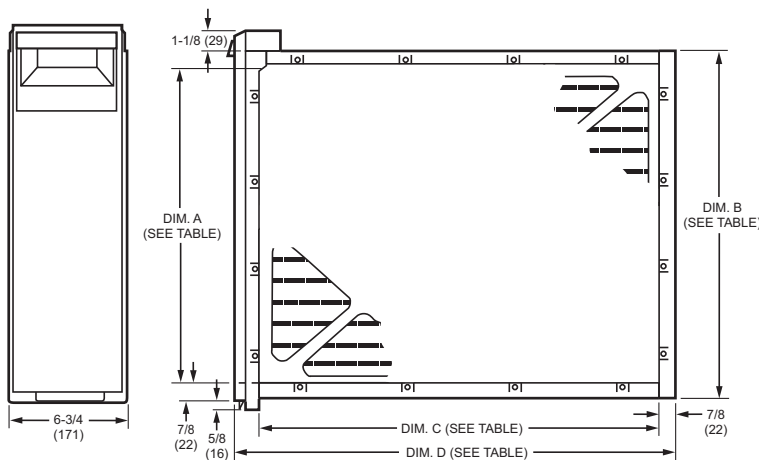
M13662

SPECIFICATIONS

* Minimum Efficiency Reporting Value (Media Filters Only)

* Efficiency ratings are based on American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 52.2-1999.

Dimensions



F100 SIZE		DIM. A		DIM. B		DIM. C		DIM. D	
IN.	MM	IN.	MM	IN.	MM	IN.	MM	IN.	MM
16 X 25	406 X 635	14 7/16	367	16 3/16	411	23 1/4	591	25 1/2	648
16 X 20	406 X 508	14 7/16	367	16 3/16	411	18 1/4	457	20 1/2	521
20 X 25	508 X 635	18 7/16	468	20 3/16	513	23 1/4	591	25 1/2	648
20 X 20	508 X 508	18 7/16	468	20 3/16	513	18 1/4	457	20 1/2	521
25 X 20	635 X 508	23 5/16	592	25 1/8	638	18 3/8	467	20 5/8	524
25 X 22	635 X 559	23 5/16	592	25 1/8	638	20 1/4	514	22 1/2	572

M14710E

Temperature Rating

-40° to +140°F (-40° to +60°C)

Approvals

Underwriters Laboratories, Inc.: Listed to UL 900, Class 2.

Replacement Filter Table

Filter Size (in.)	Part Number	
	F100	F200
20 x 12-1/2 x 4-3/8	FC100A1052	N/A
16 x 24-7/8 x 4-3/8	FC100A1029	FC200E1029
16 x 19-3/4 x 4-3/8	FC100A1003	FC200E1003
20 x 24-7/8 x 4-3/8	FC100A1037	FC200E1037
20 x 19-3/4 x 4-3/8	FC100A1011	FC200E1011

Automation and Control Solutions

Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Honeywell Ltd
705 Montrichard Avenue
Saint-Jean-sur-Richelieu, Québec
J2X 5K8
<http://yourhome.honeywell.com>

© U.S. Registered Trademark.
© 2013 Honeywell International Inc.
68-0239EF—09 M.S. Rev. 11-13
Printed in U.S.A.

Honeywell