

# Honeywell **has ....**

## **More than 100 years in business**

Since 1885, Honeywell has been the world's leading supplier in the indoor environmental control business.

## **40 years experience in air cleaning**

We have been designing, building and selling air cleaners for 40 years.

Many early models are still operating at peak efficiency today.

## **4,000,000 installations worldwide**

Honeywell's air cleaners have served millions of people in offices, hotels, homes, shopping malls, government buildings, schools, hospitals and factories all around the world. Over 4 million installations worldwide prove it.

## **Commitment to quality**

We are committed to developing products that improve the quality of the indoor environment. You can be assured of the product and service satisfaction throughout the life of the equipment. Even if your application requires a custom system, we will provide you with the best solution to meet your needs.

When you think of indoor air quality  
think **Honeywell.**

## Page contents

- 4 **Poor Indoor Air Affects You & Your Business.**
- 5 **Particles in the Air**
- 6 **How a Honeywell Electronic Air Cleaner Works?**

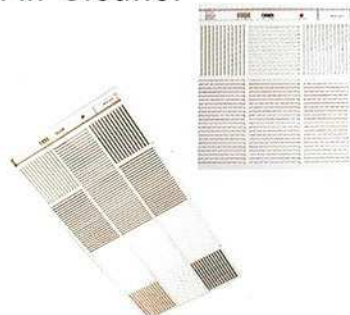
7



**F52G**  
Return Grille Mounted  
Electronic Air Cleaner

8

**F57A/B**  
Flushed-Mount  
Commercial Electronic  
Air Cleaner



9



**F300**  
Electronic Air Cleaner

10

**F58G**  
Duct Mounted Commercial  
Electronic Air Cleaner



11



**F90A/B**  
Self-Contained Commercial  
Electronic Air Cleaner

12

**F92C**  
Electrostatic Air Cleaner



13



**UV100A2008**  
Coil Irradiation Ultraviolet  
Air Treatment System

14

**Honeywell EAC Installations in Asia Pacific**

15

**Product Selection Guide**



# Poor indoor air affects you & your business

**Indoor air quality is becoming a major workplace issue regardless of which business you are in.**

## POOR INDOOR AIR QUALITY LEADS TO...

### Higher medical costs & reduced productivity

Poor indoor air can lead to sick building syndrome – when occupants complain of headaches, eye and throat irritation, shortness of breath, nausea and fatigue. As a result, the company will incur higher medical costs and increased absenteeism. The company also suffers declining productivity from sick employees who remain at work.

### Higher operating costs

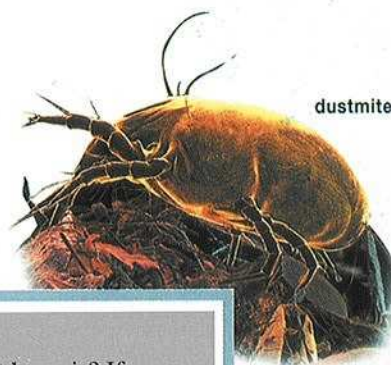
As dirty air particles accumulate on the coils inside the air conditioning equipment, its performance suffers. Independent tests have shown that dirty coils cost building owners 15% more in energy costs. And if the pollutants contaminate your office equipment, it means your décor and furnishings will have a shorter life span, too. Poor indoor air quality can also lead to costly building retrofits involving replacement of soiled air-conditioning ducting, ceiling boards and draperies and the loss of rental income during a major retrofit exercise.

## THE PERFECT INDOOR ENVIRONMENT



animal dander

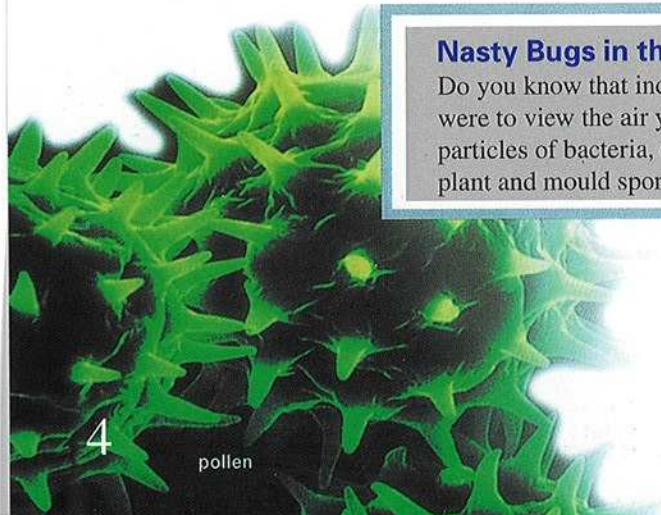
With Honeywell's air filtration systems, you need not worry about the effects of poor indoor air. Instead, you can relax and enjoy many benefits. Your overall maintenance costs will be decreased. The life of your expensive furnishings will be prolonged and you will gain a reputation for providing a quality property to tenants.



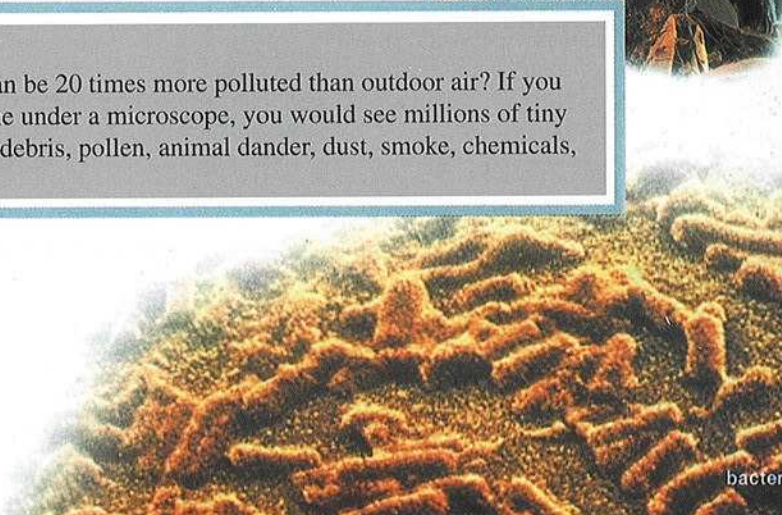
dustmite

### Nasty Bugs in the Air

Do you know that indoor air can be 20 times more polluted than outdoor air? If you were to view the air you breathe under a microscope, you would see millions of tiny particles of bacteria, dust mite debris, pollen, animal dander, dust, smoke, chemicals, plant and mould spores.



pollen



bacter



# Particles in the Air

## Antigen.

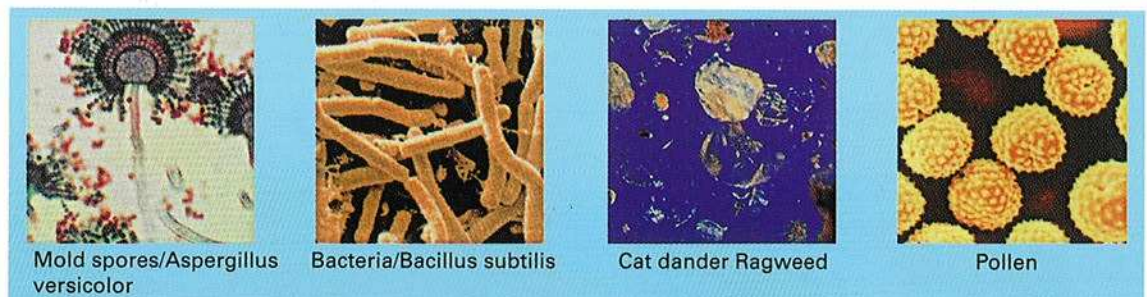
An antigen is a substance that, when introduced into the body, stimulates the production of an antibody.

## Allergen.

When an antigen induces an allergic reaction, it's called an allergen. The threshold at which an allergic reaction occurs is different for every person.

## Dander.

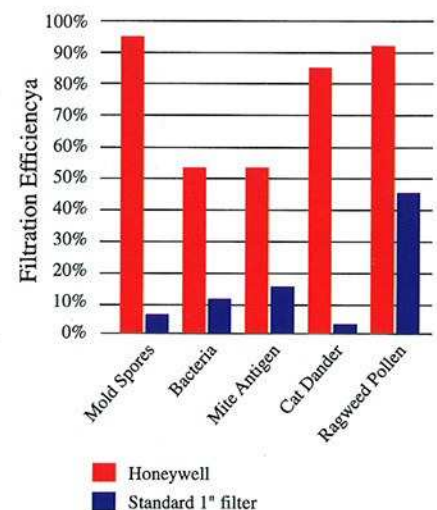
Dander is minute scales from hair, feathers or skin. These scales may be allergenic.



Independent testing show that Honeywell Electronic Air Cleaners capture a very high percentage of mold spores, bacteria, dust mite antigen, cat dander and ragweed pollen from the air that passes through the filter. The Honeywell Electronic Air Cleaner captured more than 90% of mold spores and ragweed pollen from the air passing through the air cleaner, more than 70% of bacteria and cat dander, and nearly 60% of dust mite antigen.

The testing found that the Honeywell Electronic Air Cleaner is more efficient at capturing all five types of particles than a standard 1-inch furnace filter, see chart above.

## Particles are nabbed as they pass through the filter



## Air cleaners and allergy relief

An air cleaner may provide some relief to individuals suffering from allergies or other respiratory problems, and should be part of an overall allergy treatment program. However, there is no guarantee that a reduction in symptoms will occur through the use of any type of air cleaner.

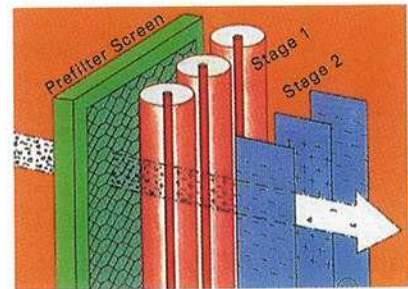


# How a Honeywell Electronic Air Cleaner works?

Two-stage electrostatic precipitation electrically charges air particles to create an effective method for capturing airborne contaminants.

## Stage 1: Charging Section

- Most large particles are caught on the prefilter screen.
- Smaller particles flow through the screen to the first section of the air cleaner cell, where they pass through a series of high-voltage ionizing wires—more than 8,000 volts—and become electrically charged.



## Stage 2: Collector Section

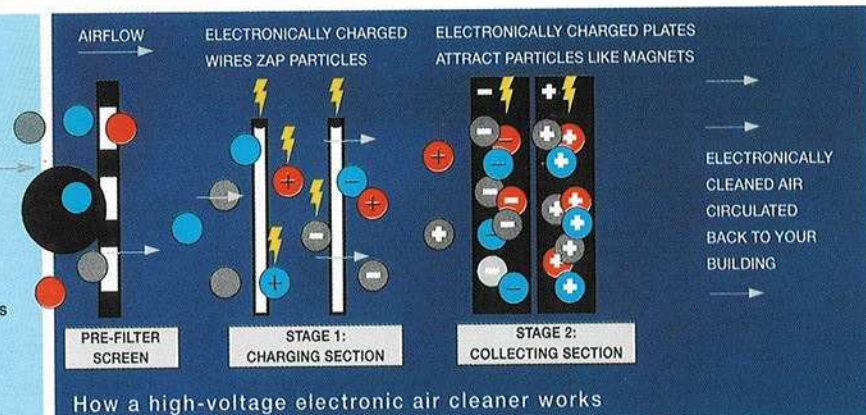
- Charged particles advance through the cell to the collecting section.
- The charged particles are attracted like magnets to a series of oppositely charged collector plates.
- Electronically filtered air is circulated back into your building environment.

### HERE'S HOW IT WORKS

The scientific name for the air cleaning process is:

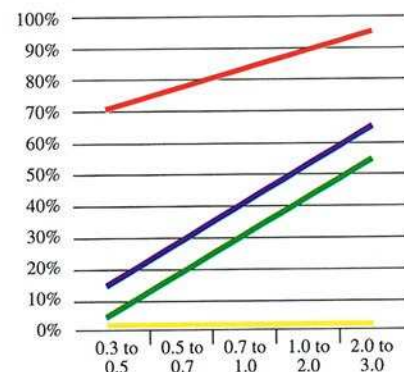
#### Two-Stage Electrostatic Precipitation

Most large particles are caught on the pre-filter screen. Small particles flow through the screen to the first section of the cell where they are zapped by an electrical charge. Charged particles are then trapped in the collecting section. The electronically cleaned air is circulated back to your building.



## Outperforms other filtration technologies

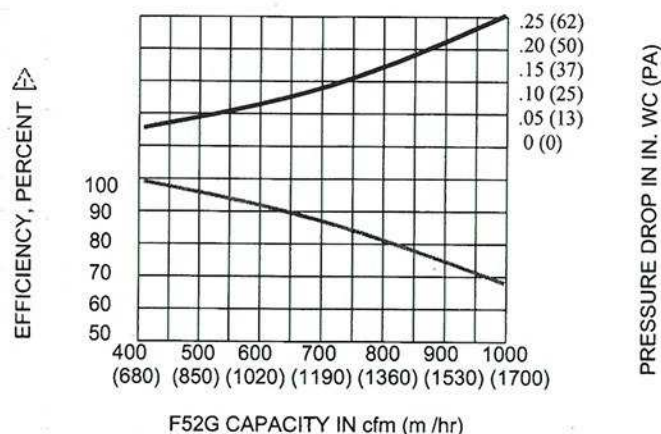
The fractional efficiency test measures the ability of an air cleaner to capture particles of a specific, uniform size. The Honeywell Electronic Air Cleaner consistently outperformed air cleaners that use different technologies, capturing significantly more particles in all size ranges tested.



- F50 Electronic Air Cleaner
- Deep pleated media Air Cleaner
- 24-volt powered 1" filter
- Standard 1" filter

## Features

- Models available with one electronic cell and a rated capacity of 1000 cfm (1700m<sup>3</sup>/hr)
- Solid state power supply energized by ON/OFF switch; or interconnection to fan coil system if required
- Solid state power supply self-regulating and maintains peak efficiency during a wide range of cell dirt-loading conditions
- Pressure drop approximately equal to that of regular fiberglass filter
- Built-in light in the switch shows that air cleaner is operating
- Automatic interlock switch disconnects the power when unit is opened
- Intelligent fan speed detection allows easy interconnection with FCU thermostat



△ EFFICIENCY RATINGS BASED ON NATIONAL BUREAU OF STANDARDS DUST SPOT METHOD USING ATMOSPHERIC DUST AND AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS STANDARD 52.1-92.

F52G Air cleaner efficiency and pressure drop at various airflow rates

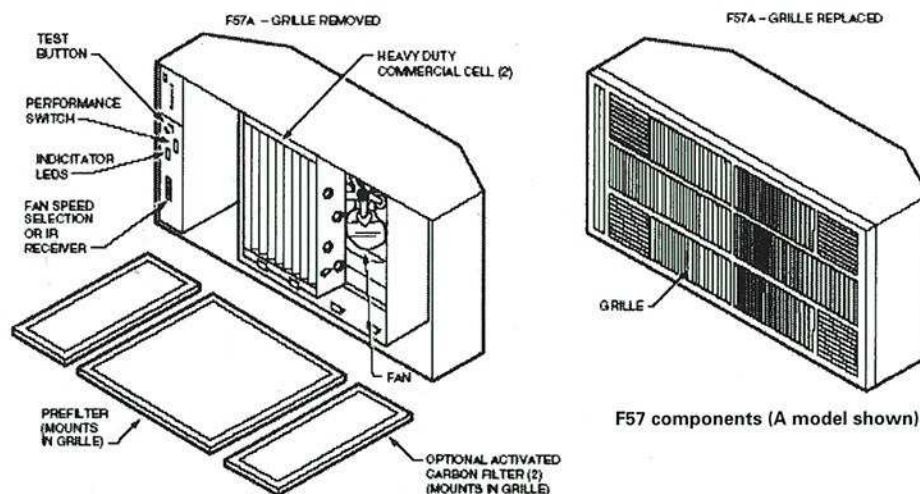
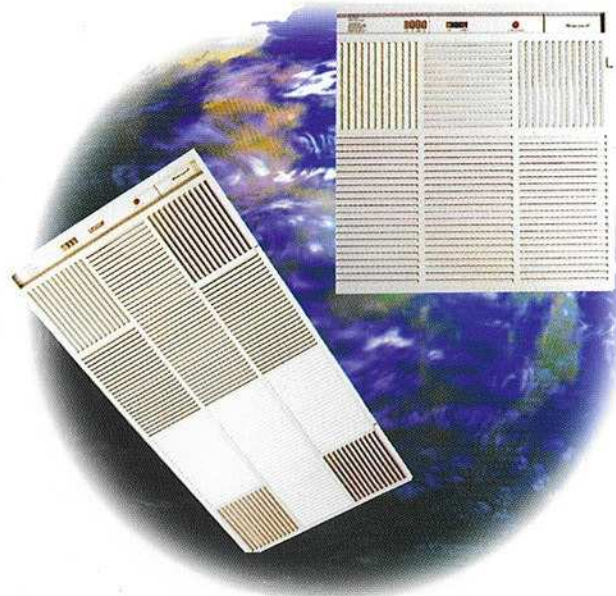
## Technical Information

Model	F52G1012	F52G2002
No of cells	One electronic cell	
Capacity	1000 cfm (1700 m <sup>3</sup> /hr)	
Mounting	Return grille mounted	
Door/grille type	Louvered	
Included accessories	Solid state power supply with air cleaner monitor capability, one-electronic cell, pre-filter, door/grille	One-electronic cell, pre-filter, door/grille
Electrical Ratings	220V / 50Hz	No Power supply
Operating Ambient	40 °F to 125 °F (4 °C to 52 °C)	
Dimensions	600 mm X 600mm X 442 mm	
Weight	16.4 kg (shipped) 14 kg (installed)	
Certifications	UL certified	



## Features

- Three-speed motor-driven fan circulates up to:  
1030 cfm (1750 m<sup>3</sup>/hr) on F57A  
485 cfm (714 m<sup>3</sup>/hr) on F57B
- Available in 220-240 Vac 50Hz
- Heavy duty commercial cells and prefilter are removable for cleaning
- Solid state power supply self-regulating and maintains peak efficiency during a wide range of cell dirt-loading conditions
- Provides Coanda air distribution (recirculation of clean air in 6 directions)
- LEDs indicate ON and CHECK
- Selectable infrared remote control models for easy operation



## Technical Information

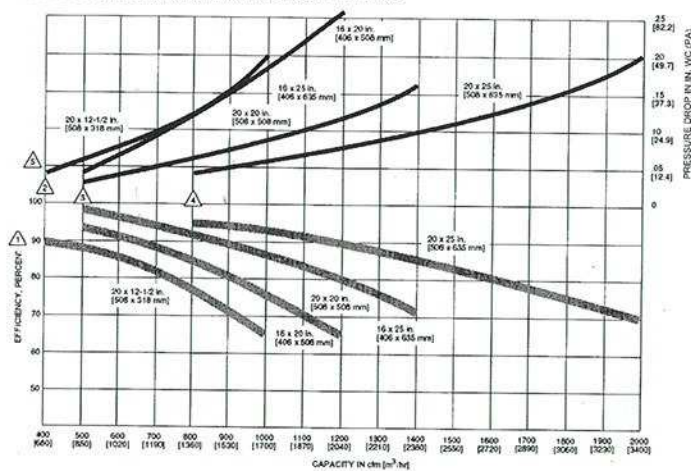
Model	F57A1101	F57B1075
No of cells	2 commercial cells	1 commercial cell
Capacity	1030 cfm (1750 m <sup>3</sup> /hr)	485 cfm (714 m <sup>3</sup> /hr)
Mounting	Ceiling mounted (flush-mount)	
Door/grille type	Louvered	
Include accessories	Solid state power supply assembly, prefilter, inlet-outlet grille, power and speed control switch, performance selection switch, collector test button, 3-speed motor driven fan, interlock switch (access grille), vinyl trim flanges, exhaust air vent	
Electrical Ratings	220-240V 50Hz	
Operating Ambient	Not higher than 77 °F (25 °C) For brief periods 104 °F (40 °C)	
Dimensions	1168mm X 569mm X 343mm	572mm X 572mm X 343mm
Weight	48.1 kg (shipped) 37.6 kg (installed)	29.0 kg (shipped) 24.5 kg (installed)
Certifications	UL, CSA, CE certified	

## Features

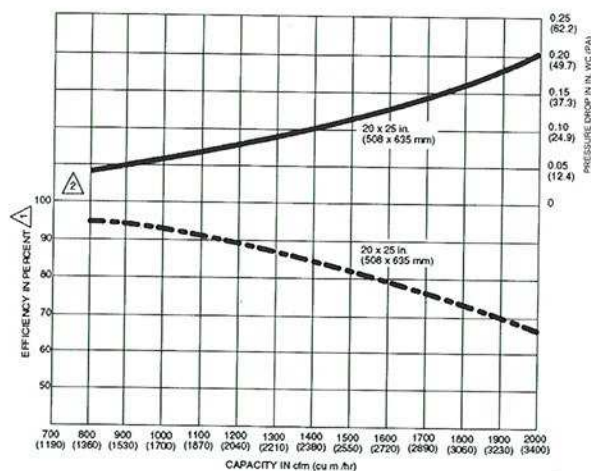
- Capacity varies from: 1000 cfm (1700 m<sup>3</sup>/hr) to 2000 cfm (3400 m<sup>3</sup>/hr) depending on size
- Removes airborne particles as small as 0.3 micron
- Electronic cells can be washed in most home dishwashers
- Solid state power supply self-regulating and maintains peak efficiency during a wide range of cell dirt-loading conditions
- Pressure drop is approximately equal to that of a regular fibreglass filter



AIR CLEANER EFFICIENCY AND PRESSURE DROP AT VARIOUS AIRFLOW RATES.



F300 Air cleaner efficiency and pressure drop at various airflow rates



F300 Air cleaner efficiency and pressure drop at various airflow rates

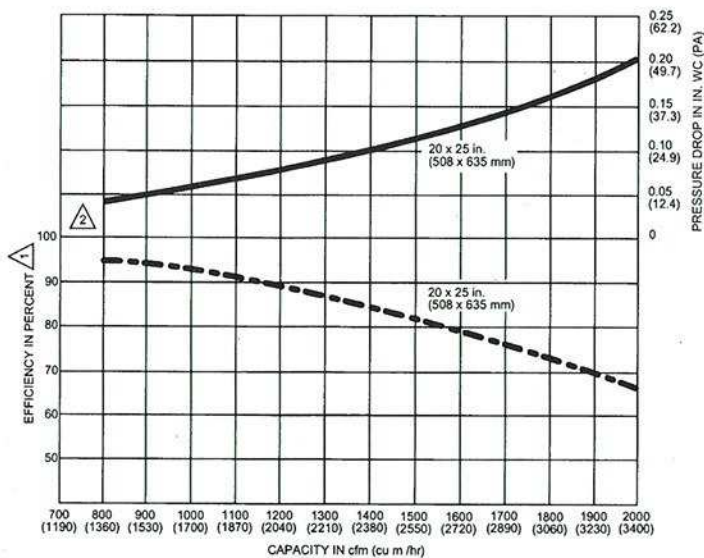
## Technical Information

Model	F300	
No of cells	1 cell	or 2 cells
Capacity	1000 cfm (1700 m <sup>3</sup> /hr)	to Max 2000 cfm (3400 m <sup>3</sup> /hr)
Mounting	Duct mounted (return air duct)	
Housing	Galvanized cabinet	
Included accessories	Cabinet, access door, solid state power supply, electronic cell and prefilter	
Electrical	220V -240V	
Ratings	50-60Hz	
Operating Ambient	40 °F to 125 °F (4 °C to 52 °C)	
Dimensions	From 318mm X 605mm X 172mm	to 583mm X 648mm X 172mm
Weight (shipped/installed) depending on model	11.3 (shipped) 9.5 (installed)	19.1 (shipped) 16.8 (installed)
Certifications	UL certified	



## Features

- Capacity up to 2000 cfm (3400 m<sup>3</sup>/hr) per unit
- Multiple units interconnected to form array of air cleaners
- May be connected to building management system
- Removes airborne particles as small as 0.3 micron
- Solid state power supply self-regulating and maintains peak efficiency during a wide range of cell dirt-loading conditions
- Test button checks system operation



F58G Air cleaner efficiency and pressure drop at various airflow rates

## Technical Information

Model	F58G1016	F58G1024	F58H1006
No of cells	2 heavy duty commercial cells		1 heavy duty commercial cell
Capacity	2000 cfm (3400 m <sup>3</sup> /hr)		1000 cfm (1700m <sup>3</sup> /hr)
Mounting	Duct mounted		
Housing	Galvanized steel cabinet with integral power supply		
Included accessories	Cabinet, electronic air cleaning cells, prefilter, ON and CHECK indication, Solid state power supply, WASH indication, BMS interface	Cabinet, electronic air cleaning cells, prefilter, ON and CHECK indication, Solid state power supply, WASH indication, w/o BMS interface	Cabinet, electronic air cleaning cells, prefilter, ON and CHECK indication, WASH indication, w/o power supply and BMS interface
Electrical Ratings	220-240V 50Hz		Must be connected with F58G
Operating Ambient	Not higher than 40 °F to 125 °F (4 °C to 52 °C)		
Dimensions	670mm X 610mm X 171mm		350mm X 610mm X 171mm
Weight	19.1 kg (shipped) 16.9 kg (installed)		
Certifications	UL certified		

## Features

- Three or five speed motor driven fan circulates up to:  
1250 cfm (2100 m<sup>3</sup>/hr) on F90A  
550 cfm (930 m<sup>3</sup>/hr) on F90B
- Removes up to 92% of staining dirt from air
- Heavy duty commercial cells and prefilter are removable for cleaning
- Solid state power supply self-regulating and maintains peak efficiency during a wide range of cell dirt-loading conditions
- Provides Coanda air distribution (recirculation of clean air in 4 directions)
- LEDs indicate ON and CHECK
- Three-position adjustable discharge louvers
- Available with off white finish or woodgrain with black trim
- Infrared remote control with self diagnostic function available for F90B

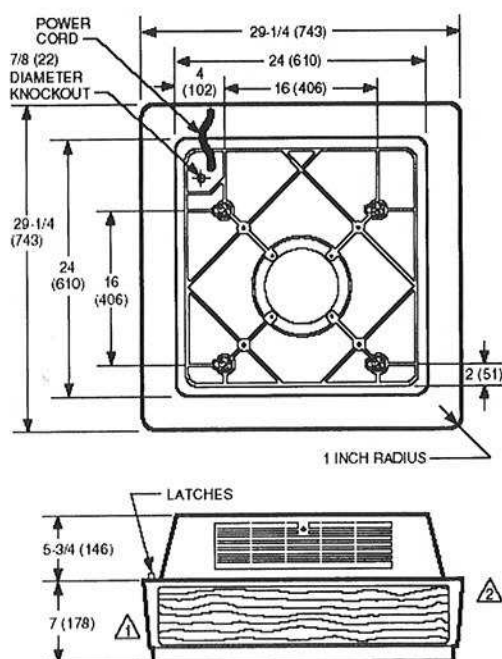


Fig. 1. F90A Installation dimensions in in. (mm).

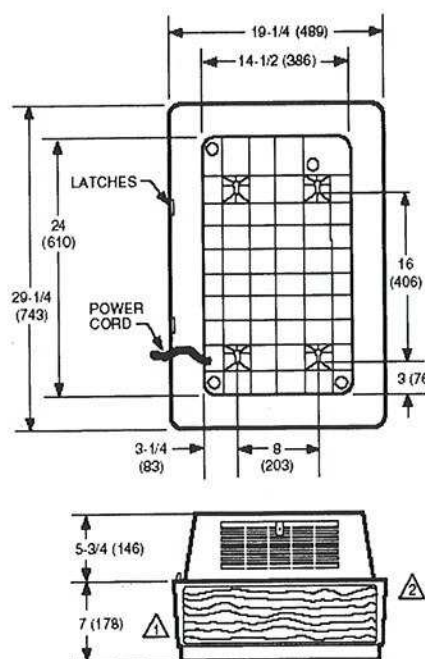


Fig. 2. F90B Installation dimensions in in. (mm).

## Technical Information

Model	F90A1290 (white)	F90A1308 (black wood-grain)	F90B1132 or F90B1132/S (off-white)	F90B1140 or F90B1140/S (black wood-grain)
No of cells	2 heavy duty commercial cells		1 heavy duty commercial cell	
Capacity	1250 cfm (2100 m³/hr)		550 cfm (930m³/hr)	
Mounting	Ceiling mounted		Ceiling mounted or floor standing	
Door/grille type	3 position adjustable louver			
Included accessories	Solid state power supply assembly, prefilter, cover with grille, power and speed control switch, performance selection switch, test button, 3 or 5-speed motor driven fan, interlock switch for cover and grille, power cord, LED indicator			
Electrical Ratings	220-240V 50Hz		220-240V 50Hz	
Operating Ambient	Not higher than 90 °F (32 °C) For brief periods 120 °F (49 °C)			
Dimensions	743mm X 743mm X 324mm		489mm X 743mm X 324mm	
Weight	31.5 kg (shipped) 29.5 kg (installed)		18.9 kg (shipped) 16.2 kg (installed)	
Certifications	UL, CSA, Canadian EMI certified, CE applicable			



▼ Central Plaza, Malaysia



▲ Putra Jaya, Malaysia

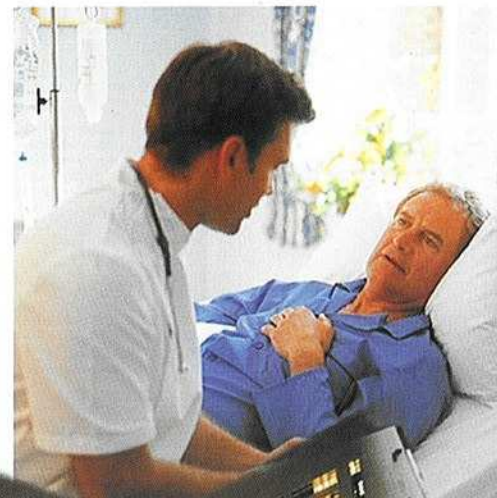


▲ Suntec City

▼ Grand Hyatt Hotel, HK



▲ Tan Tock Seng Hospital, Singapore



◀ The People's Hospital, China

广西壮族自治区人民医院  
THE PEOPLE'S HOSPITAL OF GUANGXI ZHANGJIANG AUTONOMOUS REGION



▼ One Marina Boulevard, NTUC Singapore

## Honeywell SEA & AP Installations

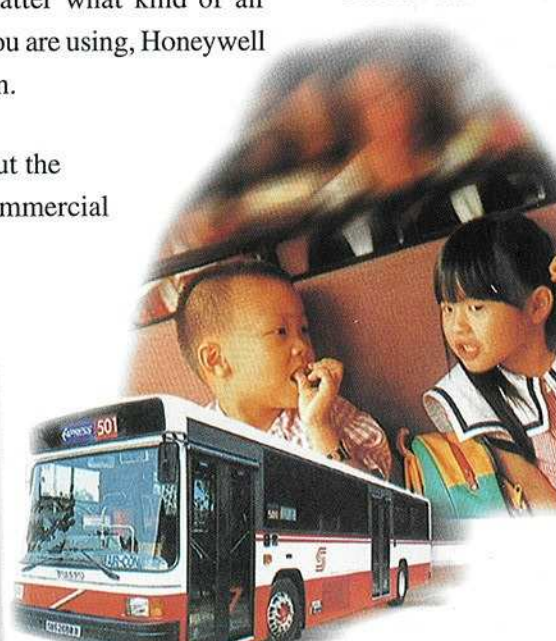
Honeywell commercial Electronic Air Cleaner series can meet various application requirements. Whether for installations in hotels, restaurants, offices or hospitals and no matter what kind of air conditioning, cooling or ventilating system you are using, Honeywell EAC can always provide the perfect solution.

Honeywell EACs are used widely throughout the Asia Pacific Region in many of the major commercial buildings and hospitals.






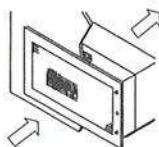
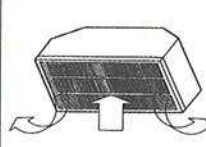
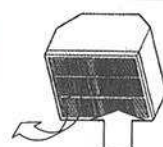
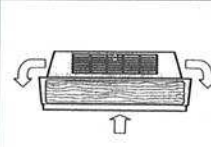
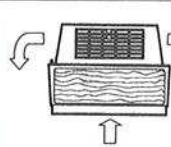
▼ Singapore Management University






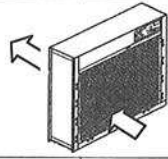
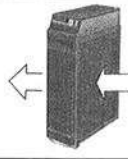
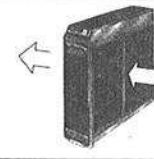
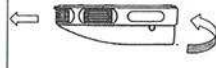


▼ Singapore Bus Services





Product		F52G	F57A	F57B	F90A	F90B				
Mounting		Return Grille Mounted	Ceiling Mounted (Flush Mount)	Ceiling Mounted (Flush Mount)	Ceiling Mounted	Floor Standing				
Appearance										
Air Flow Direction										
Capacity [cfm (m3/hr)]	Lo	1000 (1700)	F57A1101	F57B1075	F90A	F90B1132				
	Med					640 (1080)	260 (420)	800 (1380)	F90B1140	
	Hi					730 (1260)	375 (660)	1020 (1740)	1	
Efficiency	Lo	69% - 95%	Up to 95% Dust Spot Method	Up to 95% Dust Spot Method	Up to 92% Dust Spot Method	Up to 92% Dust Spot Method				
	Med						875 (1500)	460 (780)	1250 (2100)	2
	Hi									3
Electrical Ratings		F52G1012: 220V/50Hz	F57A1101: 220-240V / 50Hz	F57B1075: 220-240V / 50Hz	220-240V / 50Hz	220-240V / 50Hz				
Power Consumption (W)	Lo	72	F57A1101	F57B1075	F90A	115 (Max)				
	Med						205	100	185	
	Hi						250	150	215	
Color		White	White	White	White/Wood-grain	White/Black Wood-grain				
Dimensions (mm)		600Wx600Hx442D	F57A1101: 1168Wx569Hx343D	F57B1075: 572Wx572Hx343D	F90A: 743Wx743Hx324D	F90B: 489Wx743Hx324D				
Installed Weight (kg)		14	F57A1101: 37.6	F57B1075: 24.5	F90A: 29.5	F90B: 16.2				

Product		F58G	F58H	F300	F300	F92C
Mounting		Duct Mounted		Duct Mounted	Duct Mounted (Return Air)	Ceiling Mounted or Floor Standing
Appearance						
Air Flow Direction						
Capacity [cfm (m3/hr)]	Lo	F58G: 2000 (3400)	F58H: 1000 (1700)	1000 (1700)	2000 (3400)	150 (250)
	Med					200 (330)
	Hi					300 (500)
Efficiency	Lo	F58G: 69% - 95%	F58H: 69% - 95%	69% - 98%	69% - 98%	69% - 95%
	Med					
	Hi					
Electrical Ratings		F58G: 220-240V/50Hz	F58H: Must be connected to F58G	220-240V / 50-60Hz	220-240V / 50-60Hz	220-240V / 50-60Hz
Power Consumption (W)	Lo	36	22	36	140	
	Med					
	Hi					
Color		—		—	—	Off-white/ Anthracite finish
Dimensions (mm)		F58G: 670Wx610Hx171D	F58H: 350Wx610Hx171D	318Wx605Hx172D	583Wx648Hx172D	610Wx565Hx185D
Installed Weight (kg)		F58G: 16.8	F58H: 10.9	9.5	16.8	13.0