

ComfortStar®

Air Conditioning and Heating



Diamond Series

23 SEER

with *"I Feel"*
remote controller



www.comfortstarusa.com

Manufactured by EAir LLC

THE
REAL TRUE
VALUE™
The Best For Less

Changeable front panels
with different colors: black, red or silver

Change your decor or your mood

**HIGH EFFICIENCY
FROM 20 UP
TO 23 SEER**

ComfortStar
air conditioners are
environmentally friendly.
We care about the
future of our planet.

**MODERN
COLORS TO
ENHANCE
any decor
in your home
or office**



General Terms of Limited Warranty

ComfortStar USA warrants that our products conform to the manufacturer specifications and will be free of defects in material and workmanship under normal use and maintenance.

For complete details of the limited warranty, including applicable terms and conditions, see your local distributor or visit our website.



Features:

- ◆ High Efficiency from 20 up to 23 SEER
- ◆ Inverter technology
- ◆ Environmentally Friendly R410a to prevent the depletion of the ozone layer
- ◆ 50% to 75% electricity savings compared to regular 13 SEER units
- ◆ Gold Fin to protect the coil from corrosion and improve heat exchange rate
- ◆ Active carbon electrostatic filter to maintain your indoor air quality
- ◆ Micro Plasma Ion Generator: Micro Plasma Ion improves indoor air quality (IAQ) by eliminating biological contaminants that threaten your health such as viruses, bacteria and mold
- ◆ Digital display of indoor, outdoor and setting temperature
- ◆ Changeable front panels with different colors: black, red or silver
- ◆ Auto restart and memory function
- ◆ "I feel" function gives you the most optimized comfort
- ◆ Swing function
- ◆ Turbo fan to cool or heat your room quickly
- ◆ Sleep function
- ◆ 24 hour timer
- ◆ Auto changeover
- ◆ Dehumidification function
- ◆ Self diagnostics with flashing error code
- ◆ Low ambient application down to 5°F

Home Star Program

Carat 9 and Carat 12 qualify for the Home Star Program from October 1, 2010 to September 30, 2012. The owner can claim up to \$1,500 for each installation (maximum two installations for each household).

Federal Tax Credit

Homeowners can claim 30% of the costs (up to a \$1,500 limit) for the installation of systems Carat 9 and Carat 12 in 2009 and 2010. The tax credit applies to the installed costs of the qualified equipment, which includes labor.



Micro Plasma Ion Generator

MPI generator

WHAT IS MPI (MICRO PLASMA ION)?

MPI are harmless active hydrogen (H) and ionized (O₂⁻) generated by our built in MPI generator based on Micro Plasma Discharge Technology. Ionized (O₂⁻) is different to Ozone (O₃). Ozone consists of three oxygen atoms and may be detrimental, in certain concentrations, to a human being.

The Micro Plasma Ion removes harmful substances, such as viruses, germs and allergens floating in the air, by providing active hydrogen and ionized oxygen which are harmless to human body. It also neutralizes active oxygen in the air that causes various diseases and acceleration of skin aging.

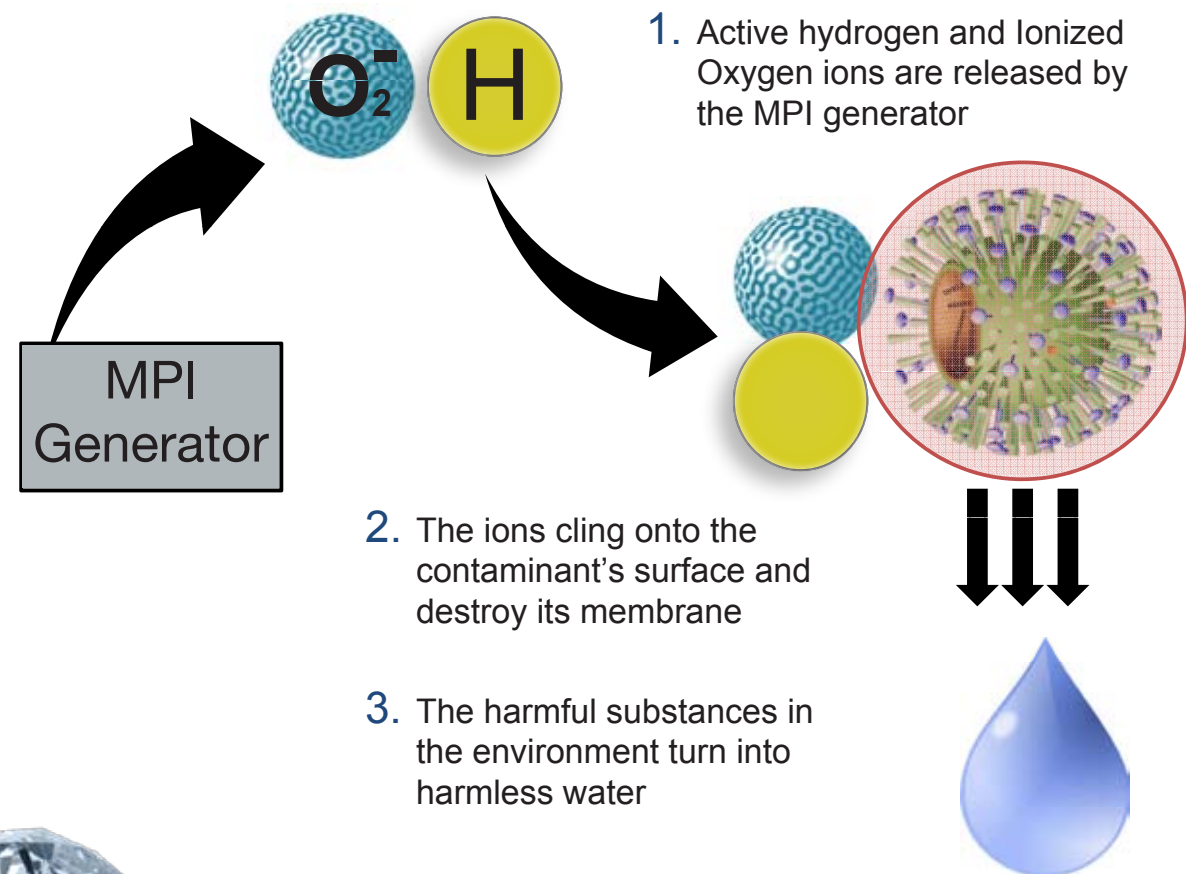
HOW DOES THE MPI generator work?

MPI Generator generates active hydrogen and ionized oxygen ions which are released into the air.

These active ions then cling to the surface of contaminants destroying the contaminants membrane and changes their state to harmless water (H+O₂+Virus=2H₂O). Unlike air filters which only provides partial purification through the filter,

MPI purifies the air in every corner of the room.

MPI GENERATOR



Benefits of MPI GENERATOR

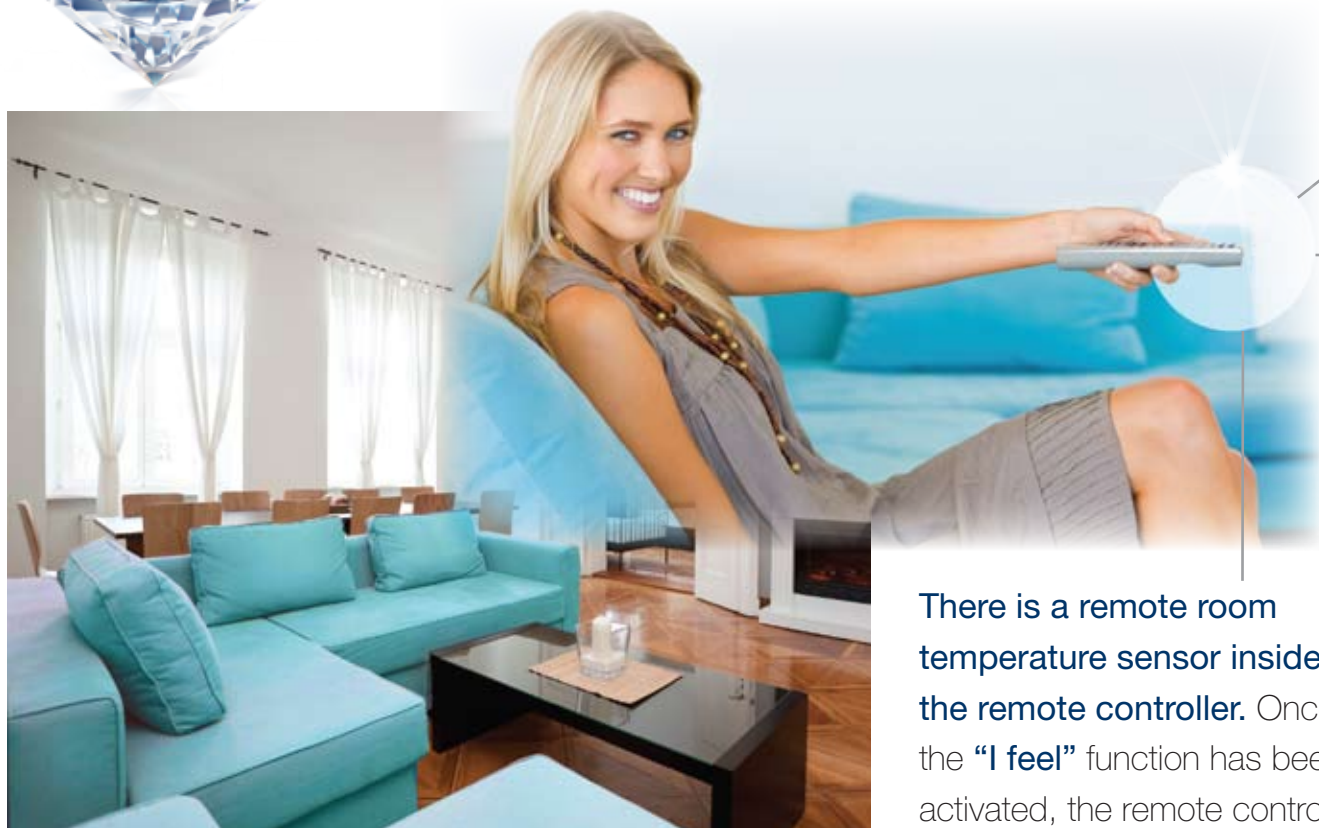
Indoor air quality has become an important health and safety issue in the past few decades. MPI removes Influenza virus (type A), Corona Virus, MRSA, Bacteria, and Mold from the air to improve your indoor air quality and protect your health and safety.



"I Feel"

REMOTE controller

What is the "I FEEL" remote controller?



There is a remote room temperature sensor inside the remote controller. Once the "I feel" function has been activated, the remote controller will send the signal to the evaporator with the temperature reading surrounding the remote controller. Meanwhile, the system will deactivate the room temperature sensor which is located on the evaporator. The system will operate based on the temperature sent by the remote controller.

Control the temperature in your home or office from anywhere—with the "I FEEL" remote controller







Features:

1. Turns Unit On/Off
2. Adjusts temperature setting
3. Change operation mode: Auto, Cool, Dry, Fan or Heat
4. "I Feel" to set your comfort level temperature
5. Swing Function
6. 24 Hour Timer
7. Turn Display Light On or Off
8. Displays set temperature, room temperature or outdoor temperature
9. "One Touch" Sleep Function
10. Turbo Fan to Cool or Heat Faster
11. Indoor Fan delay
12. Clock Setting
13. Plasma Ion Generator
14. Adjustable 3-Speed Fan

Traditional remote controllers do not have a remote room temperature sensor built in. The system operates based on the temperature sensor which is located on the evaporator. In most applications, the evaporator is installed on the wall and far away from your working or living area. The temperature reading on the evaporator doesn't reflect the real temperature on your working or living area which is exactly how you feel. Adding a remote temperature sensor to the remote controller will allow the system to sense the real temperature in your surrounding area. **Therefore, the system will operate as to what you feel.**

create your own comfort zone



Model		 CARAT09-CA (I) CARAT09-CA (O)		 CARAT09-CD (I) CARAT09-CD (O)		 CARAT12-CA (I) CARAT12-CA (O)		 CARAT12-CD (I) CARAT12-CD (O)		CARAT18-CD (I) CARAT18-CD (O)		CARAT24-CD (I) CARAT24-CD (O)		
		Cooling Capacity	Heating Capacity	Cooling Capacity	Heating Capacity	Cooling Capacity	Heating Capacity	Cooling Capacity	Heating Capacity	Cooling Capacity	Heating Capacity	Cooling Capacity	Heating Capacity	
Rated Voltage		115V		208-230V		115V		208-230V		208-230V		208-230V		
Capacity (Btu/h)		8900	9000	8900	9000	12000	13000	12000	13000	17600	20000	21800	24000	
Rated Current (A)		6.2	7.2	3	3.5	9.2	10.5	4.5	5.2	9.2	12.4	10.5	12.5	
Air Flow Volume (CFM)		300		300		340		340		500		600		
EER		EER=14		EER=14		EER=12.5		EER=12.5		EER=11.7		EER=11.5		
SEER/HSPF		SEER=23	HSPF=9.8	SEER=23	HSPF=9.8	SEER=22	HSPF=10.0	SEER=22	HSPF=10.0	SEER=21.0	HSPF=10.0	SEER=20.0	HSPF=10.0	
Indoor Unit	Output of Fan Motor (W)	10		10		10		10		20		35		
	Fan Type	Cross flow fan		Cross flow fan		Cross flow fan		Cross flow fan		Cross flow fan		Cross flow fan		
	Evaporator	Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		
	Sound Pressure Level dB (A)	42		42		47		47		46		51		
	Dimensions in Inches	Dim. (W/H/D)	34.3x11.1x7		34.3x11.1x7		34.3x11.1x7		34.3x11.1x7		37.7x11.8x7.7		42.9x12.9x8.2	
		Dim. Package (W/H/D)	36.8x14.7x10.2		36.8x14.7x10.2		36.8x14.7x10.2		36.8x14.7x10.2		40.7x15.3x11		45.6x16.1x12.2	
		Net Weight/ Gross Weight	26/33		26/33		26/33		26/33		28/39		35/46	
Outdoor Unit	Compressor	SANYO		SANYO		SANYO		SANYO		SANYO		SANYO		
	Compressor Model	C-6RZ110H1A		C-6RZ110H1A		C-6RZ110H1A		C-6RZ110H1A		C-6RZ146H1A		C-6RZ146H1A		
	Compressor Type	Inverter control		Inverter control		Inverter control		Inverter control		Inverter control		Inverter control		
	L.R.A. (A)	33		33		33		33		41		41		
	Compressor RLA (A)	4.59		4.59		4.59		4.59		8.4		8.4		
	Throttling Method	Electric expand valve		Electric expand valve		Electric expand valve		Electric expand valve		Electric expand valve		Electric expand valve		
	Condenser coil	Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		Aluminum fin-copper tube		
	Fan Motor Speed (RPM)	825		825		825		825		825		825		
	Output of Fan Motor (HP)	1/20		1/20		1/20		1/20		1/12		1/8		
	Air Flow Volume of Outdoor Unit CFM	1200		1200		1200		1200		2000		2400		
	Sound Pressure Level dB (A)	52		52		55		55		54		56		
	Dim. (W/H/D)	33.3x21.3x12.6		33.3x21.3x12.6		33.3x23.2x12.6		33.3x23.2x12.6		35x27.5x13.4		36.2x31.1x14.5		
	Dim. of Package (W/H/D)	34.5x22.8x14.2		34.5x22.8x14.2		34.5x24.8x14.2		34.5x24.8x14.2		40.5x28.9x18.1		41.9x33x19		
	Net Weight/ Gross Weight	88/96		88/96		90/99		90/99		110/121		118/132		
Refrigerant and Charge (oz.)	R410A/45.8		R410A/45.8		R410A/45.8		R410A/45.8		R410A/49		R410A/63.4			
Line Set size	Liquid/Suction	1/4"	3/8"	1/4"	3/8"	1/4"	1/2"	1/4"	1/2"	1/4"	1/2"	1/4"	5/8"	
Pre-Charge	Ft.	16		16		16		16		25		25		
Max. line run	Ft.	66		66		66		66		100		100		
Max. elevation	Ft.	33		33		33		33		50		50		
Add. charge per feet	Oz.	0.22		0.22		0.28		0.28		0.28		0.32		
MCA	(A)	12.2		6.2		12.2		6.2		14		14		
MOP	(A)	25		10		25		10		25		25		
No. of wires between indoor/outdoor		4		4		4		4		4		4		
Size of wires between indoor/outdoor		AWG16		AWG16		AWG16		AWG16		AWG16		AWG16		

ComfortStar®
 12201 N.W. 107th Avenue Medley, FL 33178
 toll free: 1-866-524-9898 ♦ fax: 305-500-9896
 e-mail: info@comfortstarusa.com ♦ www.comfortstarusa.com

