all-season comfort

GE Zoneline® packaged terminal air conditioners

New product introductions Spring 2010











Zoneline[®]. Efficient, quiet and reliable.

Zoneline® Packaged Terminal Air Conditioners provide year-round comfort with individual heating and cooling temperature controls. Zoneline units are extremely quiet – and designed to fit a wide range of applications, making them the ideal choice for hotels and motels, office buildings and apartments. Standard on all models is our exclusive GE® "Superseal" system, which reduces air infiltration and increases both comfort and efficiency. For superior humidity control, Dry Air 25 Series models remove 25% more moisture from the air than standard GE packaged terminal air conditioners. Plus, all Zoneline units now use R-410A refrigerant which is compliant with 2010 U.S. Environmental Protection Agency requirements for the phase-out of ozone-depleting compounds.

Zoneline® features and benefits



R-410A refrigerant

These models use R-410A refrigerant, which is not harmful to the earth's ozone layer. R-410A meets 2010 U.S. Environmental Protection Agency requirements for the phase-out of ozone depleting hydrochlorofluorocarbons (HCFCs) found in the older R-22 refrigerant.



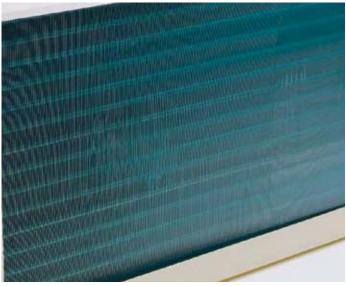
Cross-flow blower

Cross-flow blowers have a unique cylindrical shape which causes the air to move and respond with equal power, but with less noise than traditional fans.



Electronic touch controls

Zoneline® units are equipped with microcomputer touch controls. This feature gives the user better control over the temperature with a touch pad and an LED readout.



Optional corrosion treatment

Deluxe Zoneline units can be ordered with special treatment to reduce the effects of corrosive environments. Special treatments are placed on the outdoor coil and other components to extend the life of the unit.



The Dry Air 25

The Dry Air 25 Series uses GE's exclusive patented Dinh® Dehumidifier Heat Pipe from Heat Pipe Technology, Inc. This innovative technology enables the Dry Air 25 to remove 25% more moisture from the air than standard GE packaged terminal air conditioners. The Dry Air 25 is perfect for high-humidity climates. Available on 7000, 9000 and 12000 BTU models.



Heat Sentinel

Provides automatic protection against over-heating by switching on the unit to cool should the temperature of an unoccupied room reach 85°F.



Freeze Sentinel™

All Zoneline units are equipped with Freeze Sentinel to provide protection against damage caused by freezing temperatures in unoccupied rooms, regardless of unit setting. In installations where freezing temperature is not a concern, the owner has the option of disabling the Freeze Sentinel.



Upfront filters

For ease of cleaning, all Zoneline units have interchangeable, removable upfront filters made of long-lasting nylon mesh, thus assuring high performance and long life.

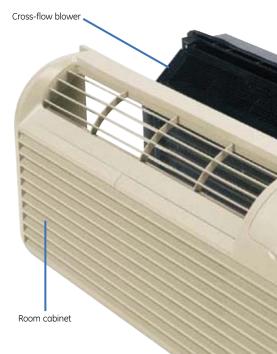
Electronic temperature limiting

Heating and cooling temperatures may be electronically limited on all series to prevent expensive over-cooling or over-heating. Heating and cooling limits are independently set so seasonal adjustment is unnecessary.

Easy installation and flexibility of design

Zoneline® units are designed with innovative, universal components, and offer even greater installation flexibility than ever, whether in new construction, renovation or for replacement of old units. Unless specified by code, they require no sub-base and may be installed flush with finished floor. All models are adaptable to remote and central desk control. Zoneline units may even be placed in unusual locations, such as transom or common-area installations. The Deluxe line offers flexibility to meet each zone application.

Wall sleeve (optional) RAB71A (Shown) RAB77A4 (SMC) (Not Shown)



Deluxe 4100 series cooling with resistance heat

- R-410A refrigerant
- R-410A meets 2010 U.S. Environmental Protection Agency requirements for the phase-out of ozone-depleting hydrochlorofluorocarbons (HCFCs) found in the older R-22 refrigerant.
- Digital controls
 - LED temperature display
 - Easy temperature selection
 - Tactile touch pads
- Two fan motors
 - Improved quiet sound levels
- Higher efficiency
- Electronic temperature limiting
- Helps reduce operating costs
- Optional corrosion treatment
 - Reduces the effects of coastal environments
- Freeze Sentinel™
- Protects unoccupied rooms from damage by freezing temperatures
- Heat Sentinel
 - Reduces excessive temperatures in unoccupied room
- GE-exclusive Superseal
- Increased room comfort
- Energy savings
- Upfront filters
- Ease of cleaning
- Long-lasting nylon mesh
- Central desk control compatibility
- Remote thermostat capability
- Smartfan
 - Fan cycle operation based on heat/cool selection
- Cross-flow blower

Deluxe Dry Air 25 series cooling with resistance heat

Includes all features of 4100 series, plus:

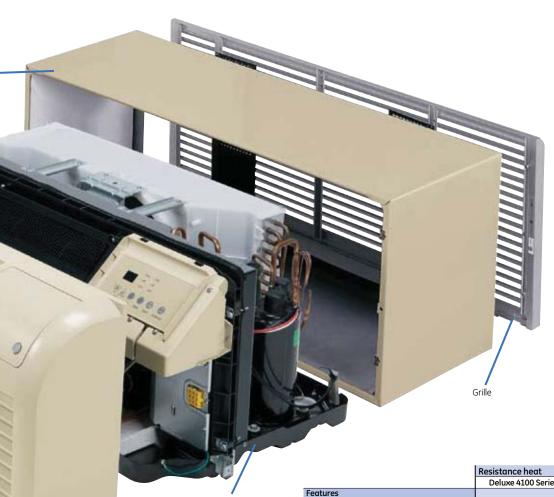
- Removes 25% more moisture from the air than standard GE packaged terminal air conditioners
- Dehumidifies air in less time than standard Zoneline models
- Maintains comfort at slightly higher room temperatures
- Helps reduce operating costs
- Provides comfort without over-cooling
- Corrosion treatment is standard
- Heat pipe is a separate sealed refrigerant system
- No mechanical parts
- No special maintenance required
- Helps maintain lower relative humidity in rooms
- Best suited for humid climates

Deluxe 6100 series cooling with heat pump and resistance heat

Includes all features of 4100 series, plus:

- More efficient air conditioning*
- Higher Energy Efficiency ratios (EERs)*Reverse cycle heating
- Energy savings over electric resistance heat
- Significantly lower operating costs
- Heat pump operation down to 25°F outdoor temperature
- Three-stage thermostat for quicker heat recovery
- Optional factory-installed internal condensate removal (ICR)
 - Minimizes need for drain systems
- Heat pump and resistance heat can operate together
 - Better room comfort
 - Helps reduce operating costs over all standard heat pump systems
- Reverse cycle defrost
 - Extends heat pump operation
 - May help lower operating costs
- Electric resistance heat lockout
 - Lowers operating costs by restricting electric heat operation when outdoor temperature is above 46°F.

^{*}Compared to 2900 and 3900 series models.



Chassis

Grille options

Extruded aluminum: RAG67 (Shown)

Stamped aluminum grille

Exterior architectural louvers Durable polycarbonate: RAG61 (Warm Grey Beige)

RAG62 (Maple)
RAG63 (Bittersweet Chocolate)

Retrofit kits (not shown)

RAK901L - Wall Case Insulation for use with Heat Pumps

RAK40 - Deflector Kit to adapt chassis for use with existing exterior architectural louvered grilles

Requires power connection kit

Heat pump Deluxe 4100 Series Deluxe Dry Air 25 Deluxe 6100 Series Features Refrigerant type R-410A R-410A R-410A Highly featured microcomputer controls Standard Standard Standard Tactile touch pad controls with LED Standard Standard Standard Universal heaters Standard Standard Standard Solid-state thermostat Standard Standard Standard 3-position vent control Standard Standard Standard Upfront filter (interchangeable) Standard Standard Standard Automatic indoor frost control Standard Standard Standard Sleep function Standard Standard Standard Corrosion-treated chassis Optional Standard Optional 2-position discharge grille Standard Standard Standard Cross-flow blower Standard Standard Standard Fan motors "SmartFan" Fan cycle control Standard Standard Standard Fan Only setting—2-speed Hi/Low Hi/Low Hi/Low Hi/Low Hi/Low Hi/Low Indoor fan speed Cool & heat only settings Hi/Low/Auto Hi/Low/Auto Hi/Low/Auto Freeze Sentinel™ Standard Standard Standard Heat Sentinel Standard Standard Standard Temperature limiting Electronic 7-step Electronic 7-step Electronic 7-step Remote thermostat compatibility Standard Standard Standard Central desk control compatibility Standard Standard Standard Standard Standard Standard Automatic emergency heat Standard Standard Standard Auto power recovery Staged heating 3-stage Heat pump with resistance heat back-up Standard Heat pump with supplemental resistance heat Standard Electric resistance heat lock-out Standard Heat pump defrost system Reverse cycle Internal condensate removal (ICR)* Optional Quick heat recovery Standard

Not for use in corrosive environments

Deluxe models

4100 series and Dry Air 25 series - heat/cool units 6100 series - heat pump unit Highly featured microcomputer controls

The Dry Air 25

The Dry Air 25 features innovative technology from Heat Pipe Technology, Inc., an addition which enables this unit to remove 25% more moisture from the air than standard GE Zoneline® models. The Dry Air 25 system, Heat Pipe, is a hermetically sealed heat transfer surface that is saddlebagged around the indoor coil (evaporator) of the Zoneline. This coil arrangement will transfer heat from one coil to another without power consumption. This assembly uses R-410A as the refrigerant and is isolated from the regular Zoneline refrigerant circuit.

As warm humid air is pulled through the pre-cool section of the Heat Pipe, the heat removed from the air is absorbed by the refrigerant, causing the refrigerant to boil. As the pre-cooled air passes through the Zoneline evaporator, the air is further cooled (colder than it would be normally), removing 25% more moisture from the air than standard GE packaged terminal air conditioners.

As the cold air passes through the reheat section of the Heat Pipe, the refrigerant condenses and the liquid flows back to the pre-cool section to be reheated again. The air discharged into the room by this process is much drier, creating a more comfortable room condition.

Special corrosion-protected units

To help extend the life of the Zoneline unit in seacoast areas. units may be ordered with a special corrosion protection treatment on outdoor components. Zoneline units with optional corrosion protection have a 'C' in the 10th character of the model number

Internal condensate removal

Available on the 6100 heat pumps, this feature drips the heat pump condensate over the warm indoor coil to help dissipate water from heat pump operation and associated defrost cycles. The installation of an internal or external drain system is recommended if no dripping of condensate to the outdoors is desired. ICR must not be installed in seacoast or corrosive applications.



Cross-flow blower

Has a cylindrical shape which causes the air to move and respond with equal power, but with less noise than traditional fans.

Central desk control compatible

Ability to turn the unit "on" or "off" from a remote location.

Two fan motors (not visible)

Separate motors for indoor and outdoor fans to assure quiet operation.

Reversible louver

(not shown) May be reversed to provide an air discharae angle of 40 or 50 degrees off vertical with the simple removal of six screws.

Solid-state thermostat control

Provides better room temperature control vs. electromechanical temperature control device.

Freeze Sentinel™

Provides automatic protection against freezing by switching the unit to heat should the temperature of an unoccupied room drop to 41°F.

Heat Sentinel

Provides automatic protection against over-heating by switching on the unit to cool should the temperature of an unoccupied room reach 85°F

Auto frost control

A special sensor monitors the roomside coil to prevent efficiency-robbing accumulation of frost during cooling operation.

GE Dry Air 25

(not shown) Innovative technology from Heat Pipe Technology, Inc enables the DryAir 25 to remove 25% more moisture from the air than standard GE packaged terminal air conditioners.

Easy-access filter

(not shown) Two upfront interchangeable filters are part of roomside cabinet for easy access and maintenance.



Electronic temperature limiting Preset cooling and heating

limits with 7 independent cooling and 7 heating limits—saves energy by preventing over-cooling or over-heating of rooms.

Reverse cycle defrost

(not shown) Solid-state sensor monitors frost build-up on outdoor coil. When frost is detected, the refrigerant flow is reversed to melt frost build-up. When completed, the refrigerant is reversed to the normal energy-saving heat pump operation for additional heat pump operating hours.

Universal power cord Flexibility of heat applications. All Zonelines contain a bank of 3 heaters.

"Smartfan" fan cycle selection Select fan cycle or fan continuous

independently for heating and cooling. Remote control compatible

Ability to be controlled

by a wall-mounted

or low fan speed

thermostat with high

Rotary compressor Fewer moving parts than reciprocating models for quiet, reliable operation

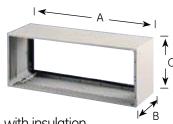
and longer life. Touch pad controls With electronic control temperature display. Gives the user finer control over

the temperature

3-Position vent control (not shown) Opens vent. Provides up to 75 cfm of outdoor air. The closed position saves energy by recirculating conditioned room air.

Wall sleeve dimensions

Heavy-gauge galvanized steel with a baked enamel finish for outstandina protection and appearance.



RAB71A wall sleeve

Heavy-gauge galvanized steel, with insulation. A-42", B-13 3/4", C-16"

RAB77A4 wall sleeve (shown above)

Molded SMC fiberglass-reinforced polyester compound. A-42 1/8", B-13 7/8", C-16 1/4"

Wall opening dimensions

Add 1/4" to A and C dimensions for all cutout sizes. RAB71 16 1/4" min. H. x 42 1/4" min. W. RAB71 available in 16", 24", 28" and 31" depths. RAB77A4 16 1/2" min. H. x 42 3/8" min. W.

Electrical connection

230/208 volt units may be plugged into a receptacle. 265 volt units are provided with a junction box and require direct connection. (NEC Requires 265V Direct Connection.) See Architects and Engineers Design Data Manual for electrical connection information including use of sub-base for direct-connected units. Installation must comply with local electrical codes and regulations.

Ducted applications

6100 and 4100 series can be used with ductwork to heat or cool more than one room. RAK6052 Duct Adapter is applied to top of case over air discharge. RAK601 Duct Extension is applied to right or left of adapter.

For additional information on ducted applications, including special adapters for replacement units, refer to Architects and Engineers Design Data Manual.

Receptacles/Sub-bases



Tandem 230/208V 15 Amp NEMA6-15R



Perpendicular 230/208V 20 Amp NEMA6-20R



Large tandem 230/208V 30 Amp NEMA6-30R



265V 15 Amp NEMA7-15R



265V 20 Amp NEMA7-20R; receptacle used On 265V sub-base GE0720-3



265V 30 Amp NEMA7-30R; receptacle used On 265V sub-base GE073

Sub-bases							
	RAK204U	RAK204D15P	RAK204D20P	RAK204D30P	RAK204E15	RAK204E20	RAK204E30
Voltage	N/A	230/208	230/208	230/208	265	265	265
Amps	N/A	15	20	30	15	20	30
Receptacle	N/A	NEMA6-15R	NEMA6-20R	NEMA6-30R	NEMA7-15R	NEMA7-20R	NEMA7-30R

^{230/208} Volt sub-bases include appropriate power cord kit.

Power connection kits are required on all Zoneline® chassis (see chart below).

The correct kit for the installation is determined by the voltage and amperage of the electrical circuit and the means of connecting the unit to the building wiring. If the unit is to be plugged into a receptacle, a line cord kit would be used; if the unit is to be permanently connected, a permanent connection kit would be used. 265 volt cord set units must be installed in compliance with National Electrical Code®.

Power connection kits Required on all models. See specification sheet for heater KW and branch circuit ampacity.



RAK3153A/3203A 230/208 volt line cord connection kit



RAK4157/4207/4307 230/208 volt universal power supply kit



RAK5157/5207/5307 265 volt universal power supply kit

230/208 volt Line cord connected units					
LCDI Power Connection Kit	RAK3153A	RAK3203A	RAK3303A		
Heater KW	2.55/2.09	3.45/2.82	5.00/4.09		
Watts	2,550/2,090	3,450/2,820	5,000/4,090		
BTUH	8,600/7,100	11,700/9,600	17,000/13,900		
Amps	11.6/10.6	15.6/14.2	22.4/20.4		
Min. circuit amps	15	20	30		
Recommended protective device	15 amp time delay fuse or breaker	20 amp time delay fuse or breaker	30 amp time delay fuse or breaker		

265 volt Permanent connected units* (Cord set)						
RAK5172	RAK5202	RAK5302				
2.55	3.45	5.0				
2,550	3,450	5,000				
8,600	11,700	17,000				
10.3	13.8	19.6				
15	20	30				
15 amp time delay fuse	20 amp time delay fuse	30 amp time delay fuse				

^{*}To be used with sub-base

230/208 volt	Direct connection kit**					
	RAK4157	RAK4207	RAK4307			
Heater KW	2.55/2.09	3.45/2.82	5.00/4.09			
Watts	2,550/2,090	3,450/2,820	5,000/4,090			
BTUH	8,600/7,100	11,700/9,600	17,000/13,900			
Amps	11.6/10.6	15.6/14.2	22.4/20.4			
Min. circuit amps	15	20	30			
Recommended protective device	15 amp time delay fuse or breaker	20 amp time delay fuse or breaker	30 amp time delay fuse or breaker			

**To be used with	sub-base or	connection t	to	building	wiring

265 volt Direct connection kit**						
RAK5157	RAK5207	RAK5307				
2.55	3.45	5.0				
2,550	3,450	5,000				
8,600	11,700	17,000				
10.3	13.8	19.6				
15	20	30				
15 amp time delay fuse	20 amp time delay fuse	30 amp time delay fuse				

^{**}To be used with sub-base or connection to building wiring

Preliminary specifications subject to change.

²⁶⁵ Volt units are to be direct connected. Cordset through enclosed chaseway into interior sub-base receptacle meets the NEC requirements

Preliminary specifications

	Deluxe series – cooling & electric heat				Dry Air 25			
		4100 series units				Dry Air 25		
230/208V Models	AZ41E07D	AZ41E09D	AZ41E12D	AZ41E15D	AZ41E07DAP	AZ41E09DAP	AZ41E12DAP	
Capacity								
Cooling BTUH	7,300/7,100	9,450/9,250	11,800/11,600	14,700/14,500	6,800/6,600	9,000/8,800	11,200/11,000	
EER (BTU/Watt)	12.8/12.8	12.3/12.3	11.8/11.8	10.6/10.6	12.2/12.2	11.8/11.8	11.3/11.3	
Dehumidification Pts/Hr	1.7	2.7	3.5	4.6	2.3	3.4	4.4	
Features								
Refrigerant type	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	
CFM, indoor fan high	290	340	420	409	220	280	330	
CFM, indoor fan low	218	229	323	324	190	208	270	
Vent CFM (full open/partial open)	50/25	70/35	75/38	75/38	50/25	70/35	75/38	
Power/Ratings								
Power factor	89%	93%	93%	90%/92%	86%/87%	92%	92%	
Sensible heat ratio @ 230 volts	80%	75%	70%	70%	60%	60%	60%	
Watts	570/555	770/755	1000/985	1390/1370	555/540	765/745	995/975	
Cooling Amperes, F.L.	2.8/3.0	3.6/3.9	4.7/5.1	6.7/7.2	2.8/3.0	3.6/3.9	4.7/5.1	
Amperes, L.R.	19.0	21.0	29.5	31.0	19.0	21.0	29.5	
Weight (Net/Ship)	89.5/102.5	99.9/112.9	99.4/112.4	100.3/113.3	97.0/110.0	105.2/118.2	105.4/118.4	
Sound Transmission Class (STC)	29	29	29	29	29	29	29	

265V Models	AZ41E07E	AZ41E09E	AZ41E12E	AZ41E15E	AZ41E07EAP	AZ41E09EAP	AZ41E12EAP
Capacity							
Cooling BTUH	7,300	9,450	11,800	14,700	6,800	9,000	11,200
EER (BTU/Watt)	12.8	12.3	11.8	10.6	12.2	11.8	11.3
Dehumidification Pts/Hr	1.7	2.7	3.5	4.6	2.3	3.4	4.4
Features							
CFM, indoor fan high	290	340	420	406	220	280	330
CFM, indoor fan low	215	229	323	324	190	208	270
Vent CFM (full open/partial open)	50/25	70/35	75/38	75/38	50/25	70/35	75/38
Power/Ratings							
Power factor	90%	91%	92%	92%	87%	90%	92%
Sensible heat ratio @ 265 volts	80%	75%	70%	70%	60%	60%	60%
Watts	570	770	1000	1390	555	765	995
Cooling Amperes, F.L.	2.4	3.2	4.1	5.7	2.4	3.2	4.1
Amperes, L.R.	12.0	16.5	23.5	26.0	12.0	16.5	23.5
Weight (Net/Ship)	91.3/104.3	101.2/114.2	99.9/112.9	101.0/114.0	97.4/110.5	104.9/117.9	108.0/121.0
Sound Transmission Class (STC)	29	29	29	29	29	29	29

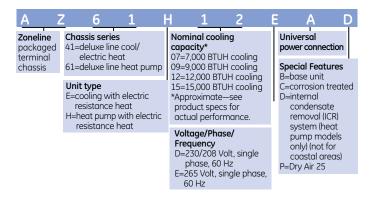
	Deluxe series - h	eat pump units**					
		6100 series units					
230/208V Models	AZ61H07D	AZ61H09D	AZ61H12D	AZ61H15D			
Capacity							
Cooling BTUH	7,200/7,000	9,400/9,200	11,800/11,600	14,800/14,600			
EER (BTU/Watt)	13.2/13.2	12.7/12.7	12.1/12.1	11.2/11.2			
Dehumidification Pts/Hr	1.7	2.7	3.5	4.5			
Features							
Refrigerant type	R-410A	R-410A	R-410A	R-410A			
CFM, indoor fan high	340	360	370	370			
CFM, indoor fan low	194	212	284	290			
Vent CFM (full open/partial open)	50/40	70/45	75/45	75/45			
Power/Ratings							
Power factor	91%	92%	92%	91%/92%			
Sensible heat ratio @ 230 volts	85%	75%	70%	65%			
Cooling Watts	545/530	740/725	975/960	1,325/1,305			
Cooling Amperes, F.L.	2.6/2.8	3.5/3.8	4.6/5.0	6.3/6.8			
Amperes, L.R.	19.0	21.0	29.5	31.0			
Reverse cycle heat BTUH	6,400/6,200	8,300/8,100	10,600/10,400	14,000/13,900			
COP	4.0/4.0	3.8/3.8	3.7/3.7	3.3/3.3			
Heating Watts	470/455	645/630	850/835	1,245/1,235			
Heating Amperes	2.2/2.4	3.1/3.3	4.1/4.5	5.8/6.3			
Weight (Net/Ship)	94.1/107.1	101.4/114.4	102.1/115.1	100.8/113.8			
Sound Transmission Class (STC)	29	29	29	29			

265V Models	AZ61H07E	AZ61H09E	AZ61H12E	AZ61H15E
Capacity				
Cooling BTUH	7,200	9,400	11,800	14,800
EER (BTU/Watt)	13.2	12.7	12.1	11.2
Dehumidification Pts/Hr	1.7	2.7	3.5	4.5
Features				
Refrigerant type	R-410A	R-410A	R-410A	R-410A
CFM, indoor fan high	340	360	370	370
CFM, indoor fan low	194	211	284	290
Vent CFM (full open/partial open)	50/40	70/45	75/45	75/45
Power/Ratings				
Power factor	94%	90%	92%	93%
Sensible heat ratio @ 265 volts	85%	75%	70%	65%
Cooling Watts	545	740	975	1,325
Cooling Amperes, F.L.	2.2	3.1	4.0	5.4
Amperes, L.R.	12.0	16.5	23.5	26.0
Reverse cycle heat BTUH	6,400	8,300	10,600	14,000
COP	4.0	3.8	3.7	3.3
Heating Watts	470	645	850	1,245
Heating Amperes	2.0	2.7	3.6	5.0
Weight (Net/Ship)*	94.6/107.6	103.6/116.6	103.6/116.6	104.3/117.3
Sound Transmission Class (STC)	29	29	29	29

^{*}ICR adds 3 pounds to unit weight
**Corrosion model BTUH and watts may vary.

Zoneline® chassis nomenclature

The Zoneline® chassis is identified by a model number defining the type of unit, cooling capacity, electrical information and optional features included on the unit. When specifying or ordering the Zoneline chassis, use of this nomenclature will assure receiving the correct unit.



Zoneline warranty*

What is covered

Limited one-year warranty

For one year from the date of the original purchase, GE will repair or replace any part of the air conditioner which fails due to a defect in materials or workmanship. During this limited one-year warranty, GE will provide, free of charge, all labor and related service costs to repair or replace the defective part.

Limited five-year warranty

For five years from the date of the original purchase, GE will repair or replace the Sealed Refrigerating System if any part of the Sealed Refrigerating System (the compressor, condenser, evaporator, and all connecting tubing) should fail due to a defect in materials or workmanship. During this limited five-year warranty, GE will provide, free of charge, all labor and related service costs to repair or replace the defective part.

Limited second through fifth year parts warranty

From the second through the fifth year from the date of the original purchase, GE will replace the Fan Motors, Switches, Thermostat, Heater, Heater Protectors, Compressor Overload, Solenoids, Circuit Boards, Auxiliary Controls, Thermistors, Freeze Sentinel, Frost Controls, ICR Pump, Capacitors, Varistors and Indoor Blower Bearing, if any of these parts should fail due to a defect in materials or workmanship. During this additional four-year limited warranty, you will be responsible for any labor and related service costs.

*See written warranty for details











For detailed information on operating specifications, installation data and accessories, see the GE Zoneline Architects and Engineers Design Data Manual.



100 years of innovation and we're just getting started

For more than a century, GE has been committed to producing innovative products that change the way people live. The result of thorough research and rigorous testing, GE appliances are designed for years of dependable performance.

Today, the GE tradition of quality and innovation continues.

GE Consumer & Industrial

Appliances General Electric Company Louisville, KY 40225 geappliances.com zoneline.com GE has a policy of continuous improvement of its products and reserves the right to change materials and specifications without notice.

© 2009 GE Company Pub. No. 20-X049 PC59104