

ROOM AIR CONDITIONERS

WINDOW | THRU-THE-WALL | PORTABLE | HAZARDOUS LOCATION

COMMERCIAL GRADE



FRIEDRICH

1883

earth friendly



INSTALLATION INFORMATION/SLEEVE DIMENSIONS

Sleeve	Height INCHES	Width INCHES	Depth with Front	Shell Depth to Louvers	Minimum Extension Into Room*	Minimum Extension Outside * INCHES	Window Width INCHES		In-wall Installation Finished Hole INCHES		
			A	B	INCHES	INCHES	Minimum**	Maximum	Height	Width	Max. Depth C
Q	14"	19 3/8"	21 3/8"	8 1/2"	5 1/2"	10 3/4"	22"	42"	14 1/4"	20"	8 1/2"
P1†	12"	18 1/2"	15"	5"	3 1/2"	10 3/4"	20 1/8"	36"	NOT FOR THRU-WALL		
P6	14"	18 3/8"	20 7/8"	8 1/8"	4 1/2"	11"	20 1/8"	36"	14 1/8"	18 3/8"	7 1/2"
P7	15"	23 3/8"	21 3/4"	8 3/4"	4 1/2"	12"	25 1/4"	39"	15 1/4"	23 3/8"	8"
P8	16 7/8"	26"	26 7/8"	10 1/4"	5 1/2"	16 3/8"	26 1/2"	42"	17 1/8"	26 1/4"	9"
P9	16 7/8"	26"	30 3/8"	10 1/4"	5 1/2"	19 1/2"	26 1/2"	42"	17 1/8"	26 1/4"	9"
S	15 11/16"	25 11/16"	29"	8 3/4"	5 3/4"	16 11/16"	27 3/8"	42"	16 3/16"	26 3/16"	7 3/8"
M	17 11/16"	25 11/16"	29"	8 3/4"	5 3/4"	16 11/16"	27 3/8"	42"	18 3/16"	26 3/16"	7 3/8"
L	20 7/16"	28"	35 1/4"	16 1/2"	5 3/8"	18 11/16"	29 7/8"	42"	20 3/8"	28 1/4"	15 1/8"





* Minimum extensions when mounted in a window.

** Minimum widths achieved using one side curtain assembly as opposed to both in a standard installation.

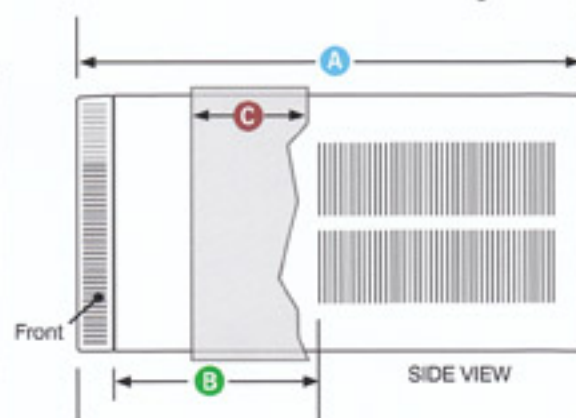
† Sleeve P1 does not have In-wall hole dimensions, as these units are fixed chassis and should not be installed In-wall.

NOTE: S,M and L sleeves may be installed in window with no side kits if properly installed.

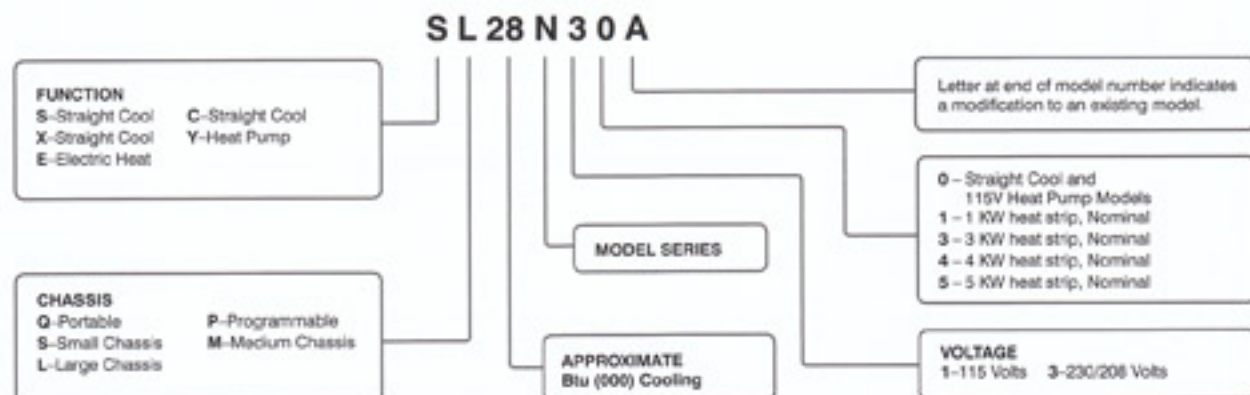
Circuit Rating/ Breaker

Model	Circuit Rating Breaker or T-O Fuse	Plug Face (NEMA#)	Power Cord Length (ft.)	Wall Outlet Appearance
CP05			7	
CP06G10, CP08G10, CP10G10, CP12G10 and CP15G10, EP08G11, All SQ MODELS, EQ08N11, SS08N10, SS10N10, SS12N10 and SS14N10, SM15N10, YS10N10.	125V - 15A	5 - 15P	6	
CP18G30, SS12N30, SS15N30, SM18N30 and SM21N30, EP12G33, EP18G33.	250V - 15A	6 - 15P	4	
CP24G30, SM24N30 and SL28N30, EP24G33, ES12N33 and ES15N33, YS12N33.	250V - 20A	6 - 20P	4	
SL36N30, EP24G33, EM18N34, EM24N34 and EL36N35, YM18N34 and YL24N35.	250V - 30A	6 - 30P	4	

Sleeve Dimensions Drawing



Room Air Conditioner Model Identification Guide





KÜHL® TECHNOLOGY KÜHL® CONTROL

KÜHL
DURABILITY

KÜHL
TECHNOLOGY

KÜHL
CONTROL

Kühl® offers more ways to customize your cooling experience than you ever thought possible in a window air conditioning solution.



CONTROL WITH YOUR SMARTPHONE OR COMPUTER

Adjust your Kühl air conditioner from your smart phone or computer to control the comfort in your home and reduce energy costs.*



*Optional accessory required.

QUALITY CONSTRUCTION

The **HIGHEST GRADE MATERIALS** are used to build a product that will perform reliably season after season.

20 GAUGE STEEL is used in order to create a more robust air conditioner cabinet that will withstand years of hard use.

SOLID SLEEVE TOP* keeps out falling debris, which can obstruct the fan and prevent it from turning, thus damaging the unit.

VIBRATION AND NOISE ISOLATING TECHNOLOGY. Two resilient rings on motor mount prevent metal-to-metal contact, which eliminates extra vibration and noise.

SOLID STEEL BLOWER WHEEL HOUSING
Blower wheel housing made of solid steel for maximum sound reduction.

SCIENTIFIC REFRIGERATION DESIGN.
Better design for quieter performance.

* Feature not on Kühl SQ and EQ models

RIFLED COPPER TUBING with greater surface area for heat exchange, which increases the efficiency of the coils, and improves the overall energy efficiency of the unit.

INSULATED PLENUM prevents outside air intrusion.

ENTRYGARD™ KICK-IN INTRUSION PROTECTION. Steel retaining wire secures chassis to the sleeve to deter 'kick-in' intrusion.

FIRM GRIP HANDLES make grasping the chassis for installation and removal much easier.

ALUMINUM REAR GRILLE protects the unit from damage and vandalism. No one else offers this feature.

SUPERIOR COMPONENTS

What makes Friedrich Kühl ultra premium?

Superior components like **ROBUST, COMMERCIAL GRADE FAN MOTORS** that run at a lower temperature than smaller fan motors prevent the unit from overheating and contribute to a longer life. **FAN MOTORS ARE ALSO TOTALLY ENCLOSED** for maximum protection and longer life.

HIGH EFFICIENCY COMPRESSORS mounted on **LARGE, VIBRATION-ABSORBING GROMMETS** create smooth, quiet power.



Totally enclosed motor



Rifled copper tubing



Aluminum fins



Vibration-isolating grommets



High efficiency compressors

KÜHL® ULTRA PREMIUM LINE

The centralized control and convenience of a central air conditioning system.

You'll find more options, features and ways to customize your cooling experience than you ever thought possible in a window air conditioning solution.

NEW COMPACT CHASSIS SIZE



Kühl®

5500-9500 Btu
Up to 10.7 EER

Kühl® + EQ08 Electric Heat

COOLING
7500 Btu
Up to 9.8 EER
ELECTRIC HEAT
4000 Btu



Full LCD display shows MODE, FAN SPEED, SET TEMPERATURE and SCHEDULE. Adjust TEMPERATURE and FAN SPEEDS, set AUTO MODE and turn the SCHEDULE ON/OFF.



Kühl®

7900-36000 Btu
Up to 11.7 EER

Kühl® + Electric Heat

COOLING
11500-36000 Btu
Up to 11.4 EER
ELECTRIC HEAT
10700-17300 Btu

Kühl® + Heat Pump

COOLING
9500-24000 Btu
Up to 11.7 EER
HEATING
7500-23500 Btu



Comfort & Convenience

- Optional Remote Link Wi-Fi Control including multi-unit control options
- 2 ready-to-go 7-day energy management programs
- Download a customizable, 7-day program from our website and transfer to your Kühl unit using a micro USB cable and computer or create a custom program with optional Wi-Fi accessory
- 24-hour timer
- Optional wired wall thermostat*
- 4 cooling and 4 fan-only speeds on select models
- Automatic fan speed adjustment
- Comfortwatch technology samples the air to more accurately maintain the set temperature
- 8-way air flow control
- Temperature readout can display set temperature and room temperature
- Control panel lockout (ON/OFF)
- Scratch resistant cabinet
- LCD panel auto dims if not in use
- Nightlight mode

*Wired thermostat option not available on Kühl SQ and EQ models.

**Nut driver not required for Kühl SQ and EQ models.

Superior Sound Reduction Technology

- Steel inner wall and extra dense insulation materials block outdoor noise
- Vibration isolating design and components diminish traditional operating noise
- Precision engineering maximizes air flow while delivering ultraquiet operation

Superior Filtration

- Superior fresh air intake and stale air exhaust vent
- Washable, antimicrobial air filter
- Check filter reminder
- Optional premium filter when used in conjunction with standard filter provides superior air filtration with ratings as high as MERV 6, while also adsorbing odors and reducing ozone and VOCs
- Hinged door for easy filter access for easier maintenance

Installation Features

- Install in a window or thru-the-wall
- Slideout chassis for more permanent installation and easier access for maintenance
- Includes heavy duty window installation hardware (optional accessory on Kühl+ models)
- Rugged hardboard side panels or (heavy duty side curtains on SQ and EQ models) for a more permanent installation
- Power cord can run either left or right
- Firm grip handles for easier chassis installation and removal
- Front cover attaches easily and securely. Nut driver included**.

Earth Friendly

- Smart Grid capable
- Auto Fan mode saves money by conserving energy
- 16 ENERGY STAR® qualified models, including four heat pumps
- Environmentally-friendly R-410A refrigerant used in all models
- Recyclable packaging
- RoHS compliant

Safety & Security Features

- EntryGard™ anti-intrusion protection-steel retaining wire secures the chassis to the sleeve to deter 'kick-in' intrusion
- Powercord leakage current protected
- Insect barrier
- Protective rear grille



RECYCLABLE
PACKAGING



R-410A
OZONE FRIENDLY
REFRIGERANT

SIMPLE 'ONE-TOUCH' OPERATION OR COMPLETE CONTROL

Kühl units are Smart Grid capable and you can use Wi-Fi to control your unit from a smartphone or computer.

SIMPLE OPERATION

Turn the unit on, select 'MODE' and make simple up/down temperature adjustments either at the control panel or with included remote. Unit operates until turned off.

BUILT-IN 7 DAY PROGRAMS

All Kühl units include two 7-day energy management programs which can be accessed and selected from the unit's controls. Selecting the '40 Hr. Work Week' residential schedule causes Kühl to raise the room temperature temporarily during the hours when most people are away at work and lower them again prior to the time when most people will return home. Selecting the '5-Day Business Week' commercial schedule tells the unit to raise temperatures after typical working hours and on weekends when commercial spaces are typically unoccupied.

CUSTOM 7-DAY PROGRAM (requires optional accessory)

If you would rather customize your own 7-day energy management program, an optional Wi-Fi adapter (KWIFI accessory) can be used in conjunction with your computer to schedule up to four temperature adjustments per day of the week. Maximize comfort and energy savings by creating the schedule that's right for you. Custom schedules can either be uploaded to the unit via the air conditioner's built-in micro USB interface or transmitted wirelessly, as explained below, greatly simplifying the programming of one or multiple units.

REMOTELINK™ WI-FI OPERATION (requires optional accessory)

Kühl units can be controlled wirelessly over a Wi-Fi network. Adding a Friedrich KWIFI accessory (Wi-Fi adapter) to your Kühl unit will allow you to control it online using either a computer or a smartphone. A web-based control portal on Friedrich.com will allow you to access individual or multiple units for monitoring, control or even diagnostics.



BUILDING MANAGEMENT SYSTEM-BMS (requires optional accessory)

The optional KWIFI accessory also allows Kühl units to be controlled remotely via a BMS: manage one or groups of units, create custom schedules and even run unit diagnostics. The web-based control portal on Friedrich.com will allow you to access individual or multiple units for monitoring, control or even diagnostics.

REMOTE THERMOSTAT OPERATION

With the optional thermostat adapter, the unit can be wired to a wall thermostat* and operated remotely. Wall thermostats are available from Friedrich and many retailers, and are sold separately.

Intuitive controls.



LCD panel auto dims when not in use

Nightlight mode

Temperature and fan adjustment maintain your desired comfort level

Back up system saves settings if power is interrupted

Two built-in 7-day programs

24-hr. timer

Audio feedback option

Auto restart returns unit to previous settings if power is interrupted

Displays set temperature and room temperature

Check filter reminder

Keypad lockout option (ON/OFF) protects settings

*Wired thermostat option not available on Kühl SQ and EQ models.



SMART GRID CAPABLE

Kühl is the first room air conditioner that can tie into a power company's smart grid. A grid is a network that brings electricity from power stations to consumers. New technologies allow power companies to adjust electrical loads of residential users based on their specific needs - this is called a 'smart grid'. Smart grid helps consumers to be better informed about their electricity usage and allows electric utility companies to serve customer demand in the most efficient way.

For example, during a hot summer afternoon when AC units are running at full capacity, the smart grid can send information to recalibrate other loads, which helps to alleviate stress on the system as a whole.

Source: SGIC (Smart Grid Information Clearinghouse)

KÜHL ACCESSORIES

PREMIUM CARBON FILTERS

Remove odors and VOCs (volatile organic compounds). Achieve up to a MERV 6 rating when used with standard filter. Sold in packs of 3.



Model	Kit No.
All SQ and EQ Models	KWCFQ
All SS, ES and YS Models	KWCF5
All SM, EM and YM Models	KWCFM
All SL, EL and YL Models	KWCFL

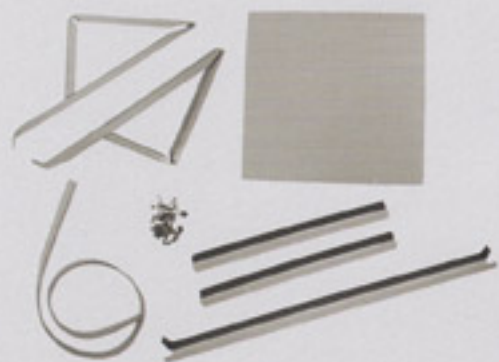
KWIFI

USB thumbdrive and Wi-Fi dongle connect to unit control to allow for remote access and programming. Control from a computer, mobile device or building management interface.



WINDOW MOUNTING KIT FOR KÜHL+ MODELS.

Heavy duty kits required for installation of these models in a window.



Heat/Cool Models	Kit No.
EQ08N11	KWIKQ
ES12N33, ES15N33, YS10N10 and YS12N33.	KWIKS
EM18N34, EM24N34 and YM18N34.	KWIKM
EL36N35 and YL24N35.	KWIKL

DECORATIVE COLORED FRONT COVERS

Colored front cover kits available in six colors



Pink Diamond



Cobalt Blue



Designer White



Deep Red



Black Onyx



Classic Beige

Model	Color Front	Deep Red	Cobalt Blue	Classic Beige	Designer White	Black Onyx	Pink Diamond
	Kit No.						
All SQ and EQ Models	KWREDQ	KWBLUQ	KWBEQ	KWHTQ	KWBLKQ	KWPNQ	
All SS, ES and YS Models	KWREDS	KWBLUS	KWBE5	KWHT5	KWBLKS	KWPN5	
All SM, EM and YM Models	KWREDM	KWBLUM	KWBE5M	KWHT5M	KWBLKM	KWPN5M	
All SL, EL and YL Models	KWREDL	KWBLUL	KWBE5L	KWHT5L	KWBLKL	KWPN5L	

DRAIN KITS FOR USE WITH KÜHL SERIES

Drain tube field installed to the bottom on the base pan.

Model	Kit No.
All Kühl Series Models	DC2

RT6 REMOTE THERMOSTAT

Digital thermostat for remote operation of Friedrich Kühl SS, SM and SL models and Kühl+ ES, EM, EL, YS, YM and YL models.



KWSTAT

Thermostat adapter allows unit to operate with a wired remote wall thermostat.

NEW CHILL™ SERIES PREMIUM LINE

Convenience features with energy efficient operation, including new heat/cool models.

Our efficient line of room air conditioners with programmable controls for convenient operation



CP05



Select MODE, FAN SPEED, adjust TEMPERATURE and set the TIMER.

Chill™
5450 Btu
10.7 EER



Select MODE, FAN SPEED, adjust TEMPERATURE and set the TIMER.

Chill™
6000-23000 Btu
Up to 10.8 EER

Chill™+
Electric Heat
COOLING
8000-23000 Btu
Up to 9.8 EER
ELECTRIC HEAT
3850-9800 Btu

SPECIFICATIONS

★ Energy Star® models

MODEL	Cooling Btu	Heating Btu	Volts Rated	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	Energy Efficiency Ratio EER	Estimated Yearly Operating Cost	COP	Moisture Removal-Pints/HR	CFM	Sleeve	Net Wt	Ship Wt
KRM*															
★ SQ05N10	5500	-	115	4.5	514	-	-	10.7	\$41	-	0.5	190	0	65	78
★ SQ06N10	5900	-	115	4.9	561	-	-	10.7	\$45	-	0.5	190	0	71	84
★ SQ08N10	7500	-	115	6.1	700	-	-	10.7	\$56	-	1.2	240	0	71	84
★ SQ10N10	9500	-	115	8.4	969	-	-	9.8	\$77	-	2.1	240	0	75	88
★ SS08N10	7900	-	115	6.1	677	-	-	11.7	\$54	-	1.0	265	S	99	121
★ SS10N10	9500	-	115	7.7	848	-	-	11.2	\$68	-	2.0	260	S	106	136
★ SS12N10	12000	-	115	10.0	1071	-	-	11.2	\$86	-	3.0	300	S	112	136
★ SS14N10	14000	-	115	12.0	1444	-	-	9.7	\$115	-	3.5	325	S	116	133
★ SS12N30	11500/11200	-	230/208	4.8/4.9	1055/1027	-	-	11.4/11.4	\$84	-	2.8	275	S	112	134
★ SS15N30	14500/14300	-	230/208	6.4/6.8	1480/1459	-	-	9.8/9.8	\$112	-	3.5	360	S	116	136
★ SM15N10	14800	-	115	12.0	1358	-	-	10.9	\$109	-	3.5	360	M	141	154
★ SM18N30	17500/17200	-	230/208	7.4/8.0	1635/1607	-	-	10.7/10.7	\$131	-	4.6	350	M	140	158
★ SM21N30	20800/20700	-	230/208	9.4/10.3	2080/2070	-	-	10.0/10.0	\$177	-	6.0	425	M	132	153
★ SM24N30	23500/23300	-	230/208	11.2/11.9	2500/2479	-	-	9.4/9.4	\$200	-	10.0	390	M	152	167
★ SL28N30	27800/27000	-	230/208	13.5/14.4	2926/2872	-	-	9.7/9.6	\$229	-	8.5	600	L	193	214
★ SL36N30	36000/35700	-	230/208	19.0/20.5	4235/4200	-	-	8.5/8.5	\$338	-	12.0	725	L	212	227
KüHl* + Heat Pump															
★ YS10N10	9500	7500	115	7.8	812	7.6	743	11.7	\$65	3.0	1.9	285	S	109	131
★ YS12N33	12100/12100	9400/9000	230/208	5.2/5.4	1120/1120	5.6/5.8	1132/1139	10.8/10.8	\$89	2.4/2.3	3.0	265	S	115	136
★ YM18N34	18200/17800	15500/15400	230/208	8.5/8.9	1838/1798	8.5/8.7	1833/1761	9.9/9.9	\$147	2.5/2.6	5.4	370	M	141	152
★ YL24N35	24000/23600	23500/23200	230/208	11.1/12.0	2474/2433	12.2/14.3	2610/2575	9.7/9.7	\$198	2.4/2.6	7.0	600	L	197	212
KüHl* + Electric Heat															
★ E008N11	7500	4000	115	6.9	765	11.2	1290	9.8	\$61	-	1.9	175	0	72	84
★ ES12N33	11500/11200	10700/8900	230/208	4.8/4.9	1055/1027	16.0/14.7	3500/2900	11.4/11.4	\$84	-	2.8	275	S	113	128
★ ES15N33	14500/14300	10700/8900	230/208	6.4/6.8	1480/1459	16.0/14.7	3500/2900	9.8/9.8	\$112	-	3.5	360	S	117	130
★ EM18N34	17500/17200	13000/10600	230/208	7.4/8.0	1635/1617	19.5/17.0	4200/3500	10.7/10.7	\$131	-	4.6	350	M	141	158
★ EM24N34	23500/23300	13000/10600	230/208	11.2/11.9	2500/2479	19.5/17.0	4200/3500	9.4/9.4	\$200	-	10.0	390	M	153	166
★ EL36N35	36000/35700	17300/14300	230/208	19.0/20.5	4235/4200	24.0/22.4	5500/4650	8.5/8.5	\$338	-	12.0	725	L	213	225
Chill**															
★ CP05G10	5450	-	115	4.8	510	-	-	10.7	\$41	-	1.5	140	P1	46	50
★ CP06G10	6000	-	115	5.1	560	-	-	10.7	\$45	-	1.8	200	P6	60	66
★ CP08G10	8000	-	115	6.8	720	-	-	10.8	\$58	-	2.2	250	P6	64	70
★ CP10G10	10000	-	115	8.5	920	-	-	10.8	\$73	-	3.0	300	P7	81	87
★ CP12G10	12000	-	115	10.2	1110	-	-	10.8	\$89	-	3.3	330	P7	87	93
★ CP15G10	15000	-	115	12.9	1400	-	-	10.7	\$112	-	4.0	400	P8	120	134
★ CP18G30	18000/17500	-	230/208	8.1/7.6	1630/1680	-	-	10.7/10.7	\$130	-	4.5	520	P9	136	150
★ CP24G30	23500/23000	-	230/208	12.4/11.4	2450/2500	-	-	9.4/9.4	\$196	-	6.8	590	P9	146	160
Chill**+															
★ EP08G11	8000	3850	115	7.5	820	11.0	1260	9.8	\$65	-	2.6	205	P6	60	66
★ EP12G33	12000/11500	12000/9800	230/208	5.0/5.5	1220/1170	15.3/14.0	3500/2900	9.8/9.8	\$93	-	3.3	265	P7	87	93
★ EP18G33	18000/17500	12000/9800	230/208	9.0/8.3	1850/1800	15.3/14.0	3500/2900	9.7/9.7	\$144	-	5.5	430	P9	136	150
★ EP24G33	23500/23000	12000/9800	230/208	13.2/12.2	2760/2700	15.3/14.0	3500/2900	8.5/8.5	\$216	-	6.5	560	P9	146	160

* Operates on 115 volt and is not equipped with supplemental heat. Will not provide heat at temperatures below 40°F. Friedrich room air conditioners are designed to operate in outdoor temperatures from 60°F to 115°F.

KüHl+ Heat Pump heating information (shown in red) indicates heat pump performance. KüHl+ and Chill+ Electric Heat heating information (shown in red) indicates electric heat strip performance. For KüHl+ Heat Pump electric heating performance refer to corresponding KüHl+ Electric Heat model.

As an ENERGY STAR® partner, Friedrich Air Conditioning Co. has determined that the selected ENERGY STAR® models meet the ENERGY STAR® guidelines for energy efficiency.

The consumer- through the AHAM Room Air Conditioner Certification Program- can be certain that the AHAM Certification Seal accurately states the unit's cooling and heating capacity rating, the amperes and the energy efficiency ratio.

Estimated yearly operating cost based on a 2007 national average electricity cost of 10.65 cents per kWh.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.

