**Window Air Conditioner Selector Guide**

<table>
<thead>
<tr>
<th>Description</th>
<th>Kuhl®</th>
<th>Kuhl®*</th>
<th>Chill®</th>
<th>Chill®*</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMFORT &amp; CONVENIENCE</td>
<td></td>
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</tr>
<tr>
<td>Room size (sq. ft.)</td>
<td>100-2700</td>
<td>100-2700</td>
<td>100-1500</td>
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<tr>
<td>COMFORT &amp; CONVENIENCE</td>
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<tr>
<td>Function</td>
<td>COOL</td>
<td>HEAT/COOL</td>
<td>COOL</td>
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<tr>
<td>Applications</td>
<td>COMMERCIAL AND RESIDENTIAL</td>
<td>COMMERCIAL AND RESIDENTIAL</td>
<td>RESIDENTIAL AND LIGHT COMMERCIAL</td>
<td>RESIDENTIAL AND LIGHT COMMERCIAL</td>
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<tr>
<td>Electronic controls</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Timer</td>
<td>7-day with up to 4 settings per day*</td>
<td>7-day with up to 4 settings per day*</td>
<td>26-hr.</td>
<td>26-hr.</td>
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<tr>
<td>Remote control</td>
<td>LCD</td>
<td>LCD</td>
<td>LCD</td>
<td>LCD</td>
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<tr>
<td>Optional color fronts</td>
<td>—</td>
<td>—</td>
<td>All except EGD8</td>
<td>—</td>
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<tr>
<td>Optional color fronts</td>
<td>—</td>
<td>—</td>
<td>All except CP05</td>
<td>Y</td>
</tr>
<tr>
<td>Steel inner wall and extra dense insulation</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Vibration isolating design and components</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Superior airflow design</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
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<tr>
<td>ENERGY STAR® models</td>
<td>Y</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Smart Grid capable</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Environmentally friendly R-410A</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Energy saver switch</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td>RoHS compliant</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Washable, antimicrobial air filter</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Optional carbon filter</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
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</tr>
<tr>
<td>Anti-fog filter</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Superior fresh air intake/stale air exhaust</td>
<td>All except SQ</td>
<td>All except EGD8</td>
<td>Stale air exhaust only, all except CP05</td>
<td>Stale air exhaust only</td>
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<tr>
<td>Insect barrier</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Safety</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Installation</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Power cord direction</td>
<td>Left or right</td>
<td>Left or right</td>
<td>Left or right</td>
<td>Left or right</td>
</tr>
<tr>
<td>Thru-the-wall installation option</td>
<td>Y</td>
<td>Y</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Window installation hardware</td>
<td>Heavy-duty</td>
<td>Heavy-duty</td>
<td>Available as accessory</td>
<td>Standard</td>
</tr>
</tbody>
</table>

**Product Selection Tools**

These tools are only a guide. Due to variations in room design, local climate and occupancy, larger areas may require the use of multiple units to provide the optimal cooling solution. Please consult your local authorized Friedrich distributor or the Friedrich Technical Assistance team for sizing or application assistance.

**COOLING SIZING GUIDE**

The cooling guide to the right is based on normal room insulation, average number of sun-exposed windows and two-person occupancy.

**HEATING SIZING INFORMATION**

In heating mode, an energy efficient heat pump will generate slightly less heating Btus than it would in cooling mode. However, in heating mode, heat pumps use approximately 1/3 the energy of resistance heat, making them an excellent high-efficiency alternative. Back-up resistance heat ensures heat operation below 40° F outdoor temperatures for year-round comfort.

**Common Window Types**

Traditional wooden windows are typical in many residences built before 1965, but more modern windows are often constructed of aluminum or vinyl. Many newer energy efficient windows like double-glazed windows actually sandwich low conductance gas between two panes of glass. While Friedrich air conditioners may be used with this type of window, care should be taken not to break the seal between the two panes of glass during installation.

Depending on the style of window in the application, you may want to consider the cooling solutions in the adjacent chart. Professional installers may be able to make field adaptations, including removing all or part of a window to support alternative types of air conditioning units. Professional installers should also be able to tell you about any local codes that may apply to your installation.

**Thru-the-Wall Installation**

Many models may be installed through a wall so long as the unit’s side vents are not blocked or covered in any way. See page 15, In-wall Installation max. depth.

**COOLING SIZING GUIDE**

<table>
<thead>
<tr>
<th>Area to be conditioned in sq. ft.</th>
<th>Cooling Btu</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 - 190</td>
<td>2800</td>
</tr>
<tr>
<td>190 - 2700</td>
<td>3600</td>
</tr>
</tbody>
</table>

**Which Air Conditioner Is Right For You?**

- **Window Type**
  - Single/double hung: Window®, Portable, Ductless
  - Sliding: Window®, Portable, Ductless
  - Casement: Portable, Ductless
  - Vertical Casement: Portable, Ductless
  - Awning: Portable, Ductless
  - Hopper: Portable, Ductless
  - Picture (non-opening): Thru-the-wall, Ductless

*May require additional modifications

*Requires internet connection and FriedrichLink® accessory.
Kühl Construction.

For over 125 years, Friedrich products have been renowned for their commercial-grade, built-to-last design. Advanced engineering, high-end materials and components, and rigorous product testing are just a few examples of Friedrich’s commitment to quality. When designing Kühl, our engineers challenged convention to develop the very best window air conditioner on the market. Kühl incorporates high-end materials like heavy-gauge galvanized steel, rifled copper tubing, and high-tech aluminum fins.

Kühl also uses the most durable components to extend the life of your air conditioner, including fully-enclosed fan motors that seal out dirt, and powerful, energy-efficient compressors, which make Kühl as tough an air conditioner as we’ve ever built.

Kühl Quiet.

Kühl has been engineered for quiet operation. Materials have been chosen because of their sound-absorption properties and every moving part has been braced and insulated. For example, extra thick rubber grommets absorb vibration and reduce noise inside, while steel inner walls and extra dense insulation block outdoor noise. Rugged hardboard side panels help reduce noise and keep out light. The unique air path is more streamlined, drawing air through the sides, away from moving parts. And our larger discharge vents allow for smoother airflow, delivering maximum conditioned air quietly.

Kühl Comfort.

The most comfortable temperature is the one you never notice. Kühl uses multiple built-in environmental sensors to more accurately monitor indoor and outdoor temperatures so that it can maintain your ideal settings. Kühl+ models have the ability to cool or heat as needed so units can operate year-round. And, like the most advanced central systems, Kühl+ automatically switches between air conditioning and heating functions to maintain the desired comfort level. You won’t have to lift a finger.

Plus, Kühl’s air flow systems are tested for powerful and precise air distribution which means faster cooling when you need it most.
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)

CASE STUDY: The Pratt Institute

"NYSERDA estimates that we can save 25% on our energy consumption which is tremendous... Friedrich really is the industry standard in room air conditioning".

Pratt Institute is located on over 24 acres in Brooklyn and Manhattan and has almost 300 room air conditioners in operation across the campus. Until Friedrich introduced Kühl, facilities management had to depend on personnel to remember to turn units off and maintain appropriate operating conditions. However, Kühl’s controls and scheduler now allow facilities operations to control all of their Friedrich units centrally using a hard card system and a daisy chain. NYSERDA estimates that Pratt can save 25% on energy consumption. And, Kühl comes in a variety of sizes which means Pratt has the flexibility to place a variety of units in different sized rooms.

Stephen Brennan
Director of Maintenance & Operations
Pratt Institute
Brooklyn, NY
Ultra Premium Line

Experience the control and convenience of a central air conditioning system in ways you never thought possible. Control Kühl units via FriedrichLink®.

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

The KWW is the first Wireless Wall Thermostat for a Room Air Conditioner

Four Program periods
(Morning, Day, Evening, and Night) The time and temperature can be set for each period. Upon initial power up the KWW loads time and temperature program default parameters for weekday and weekend days. The default program parameters conform to Energy Star guidelines and are a good point from which to start.

Battery power, no control wiring needed
Runs on 2 AA batteries (4-included), the thermostat can operate continuously for approximately 18 months, and can be mounted in any suitable location that will provide good temperature control.

Kick-Stand design
This feature permits the thermostat to stand on a flat surface such as a table or shelf, in the event that permanent mounting to a wall is not desired.

RF technology means flexibility.
Radio frequency technology used to allow the KWW to communicate with the KOM, this is on a 900 MHz RF band.
• Large Blue Backlight Screen
• Easy push button adjustments
• Degree °F and °C selection button
• Utility Demand Response capable / Interface to any building automation system

Battery power, no control wiring needed

Kühl®
5200-9400 Btu
Up to 11.2 EER

Kühl®+
Electric Heat
COOLING 7900 Btu
Up to 11.2 EER
ELECTRIC HEAT 4000 Btu

Kühl®
8000-36000 Btu
Up to 11.5 EER

Kühl®+
Electric Heat
COOLING 12000-36000 Btu
Up to 11.3 EER
ELECTRIC HEAT 8900-17300 Btu

Kühl®
Heat Pump
COOLING 9500-24000 Btu
Up to 10.4 EER
HEATING 8000-22000 Btu
Up to 2.7 COP

*KWW wireless thermostat is not compatible Kühl SQ and EQ models.
**Kühl® Features**

**Comfort**
- Convenient control from your smartphone or computer via FriedrichLink® (required accessory sold separately)
- 24-hour timer
- Up to 4 cooling and 4 fan-only speeds on select models
- Automatic fan speed adjustment
- Auto-changeover from cool to heat; heat to cool to maintain set temperature (Kühl+ models except EQ08)
- 8-way air flow control
- Temperature readout can display set temperature
- LCD settings lockout option (ON/OFF)
- 8-way air flow control
- Auto-changeover from cool to heat and heat to cool (Kühl+ models except EQ08)
- Up to 4 cooling and 4 fan-only speeds (Kühl+ models except EQ08)
- Power cord can run either left or right
- Rugged hardboard side panels or heavy-duty installation hardware
- Slideout chassis for more permanent installation (heavy duty side curtains on SQ and EQ models) for a more permanent barrier from the outside elements
- Lasts longer and provides a superior finish for many years for easy replacement
- Same sleeve dimensions for 30+ years for easy replacement
- Slideout chassis for more permanent installation and easier access for maintenance
- Installs in a window or in-wall
- High-duty installation hardware lasts longer and provides a superior barrier from the outside elements (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**

**Durability**
- Sealed control panel for protection from dust, moisture and contaminants
- Control module is separate from touch controls for better protection from the elements, abusive handling or accidental damage and to minimize repair costs
- Robust 20 gauge steel cabinet
- Solid-sleeve top keeps out falling debris
- Solid-steel blower housing offers enhanced protection
- Totally enclosed commercial grade fan motor runs at a lower temperature to prevent overheating and is double-mounted for added stability and reduced wear
- Durable base pans and steel inner walls
- Unit’s structural integrity allows it to be removed, cleaned and maintained outside of its sleeve
- Aluminum end plates will not contribute to rust-stained building exteriors
- Scratch-resistant cabinet
- High-tech aluminum fins with rifled copper tubing are more efficient and less prone to corrosion
- Defrost control protects coil against freeze up

**Sound Reduction Technology**
- Steel inner wall and extra dense insulation materials block outdoor noise
- Vibration isolating design and components diminish traditional operating sound levels
- Precision engineering maximizes air flow while delivering ultra quiet operation

**Energy Management**
- 2 ready-to-go 7-day energy management programs
- Control up to 8 units with wireless thermostat option
- FriedrichLink® WiFi allows monitoring and control of one or all of your Kühl air conditioners remotely
- Compatible with building management system
- Autofan mode saves money by conserving energy
- ENERGY STAR® qualified models, including heat pumps
- Environmentally-friendly R-410A refrigerant used in all models
- Recyclable packaging
- RoHS compliant

**Maintenance & Installation**
- Check filter reminder and error code storage
- Same sleeve dimensions for 30+ years for easy replacement
- EntryGard® anti-intrusion protection - secures chassis to the sleeve with a steel retaining wire to deter ‘kick-in’ intrusion
- Power cord current leakage protected
- Aluminum rear grille protects the outdoor coil from damaging debris and vandalism
- Insect barrier

**Safety & Security**
- Superior fresh air intake and stale air exhaust vent
- Washable, antimicrobial air filter
- Optional premium carbon filter provides superior air filtration with ratings as high as MERV 6, while also absorbing odors, and reducing ozone and VOCs when used in conjunction with standard filter
- Hinged door for easy filter access
- Insect barrier

**Health & IAQ**
- Heavy duty kits required for installation of these Kühl+ models in a window.

**Kühl® Accessories**

**FRIEDRICHLINK® WI-FI ADAPTER**
Wi-Fi Adapter Accessory connects to unit to allow for remote wireless access and programming from a computer, tablet or mobile device.

**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.

**WINDOW MOUNTING KITS: KÜHL+**
Heavy duty kits required for installation of these Kühl+ models in a window.

**COLORED FRONT COVERS**
Color front cover kits available

**DRAIN KIT**
Drain tube field installed to the bottom on the base pan.

**WIRELESS THERMOSTAT- KWW**
Wireless thermostat for control of Kühl units*. One thermostat can control up to 8 Kühl units. Additional units require 1 KCM communication module per unit. KWW Thermostat ships with 1 KCM Communication Module.

**COMMUNICATION MODULE- KCM**
Communicates with KWW thermostat or building management system.

*Not compatible with Kühl SQ and EQ models.

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* Feature not available on Kühl SQ and EQ models. **Nut driver not required for Kühl SQ and EQ models.
† Kühl SQ and SI models have 3 fan speeds. Kühl+ models have 3 fan speeds cooling and heating.

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**Model | N Series | KWFR1**
--- | --- | ---
**SQ and EQ** | **KL** | **KWFR2**
**SL, ES and YS** | **KWWFS**
**SM, EM and YM** | **KWWCM**
**SL, EL and YL** | **KWWCL**

**MODEL | K C M**
--- | ---
**SQ and EQ** | **KCM1**
**SL, ES and YS** | **KCM2**
**SM, EM and YM** | **KCM3**
**SL, EL and YL** | **KCM4**

---

**Model | Color**
--- | ---
**Deep Red** | **KCMRD**
**Cobalt Blue** | **KCMBU**
**Classic Beige** | **KCMCG**
**Designer White** | **KCMDSW**
**Black Onyx** | **KCMBO**

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**Model | Kit No.**
--- | ---
KWMA | KWMA1
EG08N11B® | KWMA2
ES12N33B, ES16N33B, YS10N10B and YS12N33B: | KWMA3
ES12N33B and YS12N33B: | KWMA4
ES16N33B and YS16N33B: | KWMA5
ES12N33B and YS12N33B*: | KWMA6
ES16N33B and YS16N33B*: | KWMA7
ES12N33B and YS12N33B**: | KWMA8
ES16N33B and YS16N33B**: | KWMA9

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**Model | Kit No.**
--- | ---
All Kühl Series Models | DC2

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*2008N11B® window kit KWFR1 does not include window brackets.
Our efficient line of room air conditioners with programmable controls for convenient operation.

CHILL® SLEEK DESIGN

and outstanding efficiency. Available in a range of capacities with convenience features for carefree cooling and heating.

Premium Line

Sleek white design and energy efficient operation, including heat/cool models.

**CHILL® Features**

Comfort & Convenience

- 24-hour timer
- Auto air sweep swing louvers* provide more even air distribution
- 3 cooling speeds, plus 3 fan-only settings; 2 cooling speeds, 2 heating speeds, plus fan-only setting on Chill+
- Ultra-quiet operation
- 4-way air flow control
- Auto-restart saves settings if power is interrupted

Energy Management

- ENERGY STAR® qualified models
- Money Saver® setting saves money by operating the fan only when cooling

Health & IAQ

- Washable, antimicrobial air filter
- Check filter alert
- Stale air exhaust

Installation Features

- Slideout chassis*
- Install in window or thru-wall**
- Standard installation hardware
- Expandable side curtains
- Power cord can run either left or right out of the side of the unit front*

Safety & Security Features

- EntryGard™ anti-intrusion protection

Auto air sweep swing louvers for even cooling throughout the room.

* Feature not available on CP05. ** CP05 has a fixed chassis and is for window installation only.
### ENERGY STAR® models

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<tr>
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<tbody>
<tr>
<td>CP06G10A</td>
<td>6000</td>
<td>120/208</td>
<td>66/115</td>
<td>4.9/7.1</td>
<td>530</td>
<td>11.2/14.9</td>
<td>10,9/12,6</td>
<td>110/137</td>
<td>5,3/6,3</td>
<td>350</td>
<td>M</td>
<td>150</td>
<td>190/230</td>
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<tr>
<td>CP15N10B</td>
<td>12000</td>
<td>115/230</td>
<td>72/100</td>
<td>4.9/8.3</td>
<td>1062</td>
<td>11.3/15.0</td>
<td>10,6/13,3</td>
<td>170/210</td>
<td>5,3/6,3</td>
<td>350</td>
<td>S</td>
<td>150</td>
<td>190/230</td>
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<tr>
<td>SS12N30B</td>
<td>12000</td>
<td>230/460</td>
<td>100/150</td>
<td>4.9/5.2</td>
<td>1062</td>
<td>11.3/15.0</td>
<td>10,6/13,3</td>
<td>210/250</td>
<td>5,3/6,3</td>
<td>350</td>
<td>S</td>
<td>150</td>
<td>190/230</td>
</tr>
</tbody>
</table>

* Specifications are subject to change without notice.

### INSTALLATION INFORMATION/SIZE DIMENSIONS

<table>
<thead>
<tr>
<th>Sleeve</th>
<th>Height</th>
<th>Width</th>
<th>Front to Front</th>
<th>Rear to Rear</th>
<th>Wall Min.</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Width</th>
<th>Height</th>
<th>Min.</th>
<th>Max.</th>
<th>C</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
</table>

* 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-well.

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

### Room Air Conditioner Model Identification Guide

- **FUNCTION**:
  - S: Straight Cool
  - A: AxCool
  - E: Electric Heat

- **CHASSIS**:
  - Q: Portable
  - S: Small Chassis
  - L: Large Chassis

- **P: Programmable
  - M: Medium Chassis

- **MODEL SERIES**:

### Room Air Conditioner Specification Sheet

- **SPECIFICATIONS**
  - **ENERGY STAR® models**

### Circuit Rating / Breaker

<table>
<thead>
<tr>
<th>Model</th>
<th>Circuit Rating Breaker or CDF</th>
<th>Plug Face</th>
<th>Power Cord Length</th>
<th>Wall Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP06G10A</td>
<td>120/240V 15A 2-15 5-20P</td>
<td>120V 2-15P</td>
<td>30 ½“</td>
<td>120V 2-15P</td>
</tr>
<tr>
<td>CP06G20A</td>
<td>120/240V 20A 2-20P</td>
<td>120V 2-20P</td>
<td>30 ½“</td>
<td>120V 2-20P</td>
</tr>
</tbody>
</table>

### CHASSIS SIZE DIMENSIONS

<table>
<thead>
<tr>
<th>Sleeve</th>
<th>Front View</th>
<th>Side View</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Width</td>
<td>Height</td>
</tr>
<tr>
<td>P1</td>
<td>12</td>
<td>18 3/8</td>
</tr>
<tr>
<td>P2</td>
<td>15 3/4</td>
<td>23 1/4</td>
</tr>
<tr>
<td>P3</td>
<td>18</td>
<td>24</td>
</tr>
</tbody>
</table>

### Energy Information

- Your operating costs will depend on your utility rates and use. The estimated operating cost is based on a electricity cost of $.12 per kWh.

### Additional Information

- Kühn Heat Pump heating information (shown in red) indicates heat pump performance. Kühn and CHN® Electric Heat heating information (shown in red) indicates electric heat performance.

- 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.

- Your operating costs will depend on your utility rates and use. The estimated operating cost is based on a electricity cost of $.12 per kWh.

- For more information, visit www.fridgco.gov.