

Friedrich Kühl® Series  
Room Air Conditioners



*CONTROL  
ANYTIME,  
ANYWHERE.*

*KÜHL® SETS THE STANDARD*



DELIVERING BOLDLY CRAFTED COMFORT

# KÜHL® ROOM AIR CONDITIONERS



## SUPERIOR CONTROL, CONVENIENCE AND ENERGY SAVINGS

**Friedrich Kühl®** is the first to market, and the industry leader in providing energy-efficient heat pump technology since 1992, offering a smarter alternative to heating. Kühl is also now available in A2L-compliant R-32 refrigerant. As more cities and states mandate lower building emissions or full electrification, our Kühl heat pump technology can help you contribute to decarbonization goals.



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## KÜHL® ROOM AIR CONDITIONERS

### KÜHL® IS UP TO 45% QUIETER\* THAN COMPETITOR'S ROOM AIR CONDITIONERS

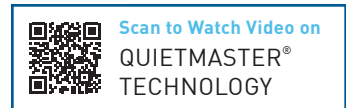
#### QuietMaster® technology

Building the quietest air conditioners begins with the design process and continues through the selection of superior components and materials.

It is shaped by skilled manufacturing and refined through on-going product testing in our engineering lab.

The result is a noticeably quieter cooling and heating experience, as much as 45% quieter than competitor's products.

\*Based on testing conducted at Friedrich's Design and Development Center in comparison to leading rotary compressor models.

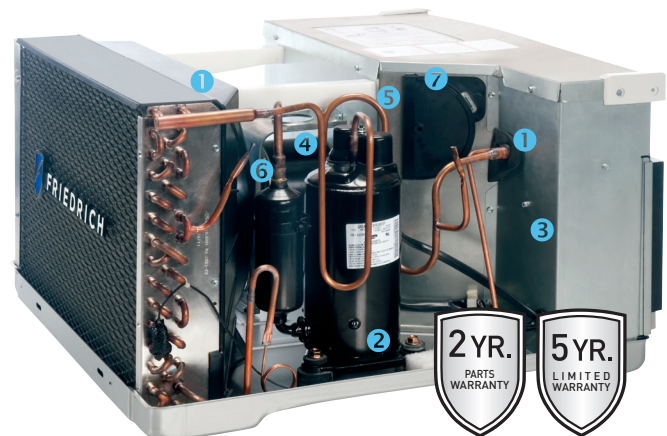


### COMMERCIAL GRADE QUALITY FOR LONG LIFE IN DEMANDING APPLICATIONS

#### Unrivaled quality

Kühl® is built to perform in the extreme conditions of industrial and commercial applications, but it's also perfect for today's home with the convenience and simple control today's consumers demand.

1. Dense, sound-blocking insulation
2. Quiet rotary compressor mounted on large rubber grommets
3. Steel inner walls
4. Totally-enclosed commercial grade fan motor
5. Insulated air plenum prevents outside air and noise intrusion
6. Two resilient rings on motor mount prevent metal-to-metal contact, which eliminates extra vibration and noise
7. Solid steel blower wheel housing for maximum sound reduction



## FEATURES

### Simple Control

- Control with **FriedrichConnect**® app or by voice command
- Create customizable 7-day schedules
- Group and control multiple units

### Comfort and Convenience

- 24-hour timer
- 3 fan speeds
- Auto fan
- Auto-changeover between cooling and heating (Kühl®+ models except KEQ08)
- Auto restart saves settings
- 8-way air flow control
- Control panel lockout (ON/OFF)

### QuietMaster® technology

- Up to 45% quieter than competitive models<sup>1</sup>
- Steel inner wall and extra dense insulation blocks outdoor noise
- Vibration isolating design and components reduce operating noise
- Powerful air flow and air dispersion at low sound levels

### Superior Air Filtration

- Fresh air intake/stale air exhaust vent
- Equipped with washable air filter and check filter reminder
- Optional MERV 13 filter kit available (see accessories)
- Optional Premium Carbon filter pack available (see accessories)

### Built To Last

- Robust steel cabinet
- Solid-steel blower housing
- Commercial grade fan motor
- Corrosion-resistant aluminum fins and end plates
- **EntryGard**® anti-intrusion protection secures the chassis to the sleeve
- Insect barrier keeps out pests
- Durable aluminum rear grille

### Earth Friendly

- Save energy heating with Kühl®+ heat pumps
- Set high and low maximum temperature limits
- Recyclable product packaging
- R-32 refrigerant with low Global Warming Potential on select models

### Installation

- Install in a window or thru-the-wall
- Slideout chassis
- Patented firm grip handles for easier chassis installation and removal
- Heavy duty window installation hardware (optional accessory on Kühl®+ models sold separately)

### Warranty and Support

- Industry-leading warranty features 2-year warranty on parts and 5-year limited sealed system warranty.
- Nationwide service network and U.S.-based Friedrich expert technical team ensures you get fast, knowledgeable service.



## COOLING SIZING GUIDE

AREA TO BE CONDITIONED IN SQ. FT.	APPROXIMATE COOLING BTU REQUIRED
100 - 150	5000
150 - 250	6000
250 - 300	7000
300 - 350	8000
350 - 400	9000
400 - 450	10000
450 - 550	12000
550 - 700	14000
700 - 1000	18000
1000 - 1200	21000
1200 - 1400	23000
1400 - 1500	24000
1500 - 2000	30000
2000 - 2500	34000

Guide based on normal room insulation, average number of sun exposed windows and two person occupancy.

1. If heavily shaded, reduce cooling Btus required by 10%
2. If very sunny, increase cooling Btus required by 10%
3. Add 500 Btus per person over 2 people
4. Add 4,000 Btus if the area is a kitchen

<sup>1</sup>Based on testing conducted at Friedrich's Design and Development Center in comparison to leading rotary compressor models.

# KÜHL® SPECIFICATIONS

Model	Cooling Btu	Heating Btu	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER		Estimated Yearly Energy Cost	COP	Moisture Removal-Pints/HR	Refrigerant	CFM	Net/ship Wt. lbs.	Sleeve
								EER	CEER							
<b>KÜHL® (COOL ONLY)</b>																
KCQ06A10A	6000	—	115	4.8	492	—	—	12.2	12.1	\$48	—	1.5	R410A	190	78/85	Q
KCQ08A10A	8000	—	115	6.5	661	—	—	12.1	12.0	\$65	—	2.1	R410A	200	78/85	
KCQ10A10B	9500	—	115	8.6	864	—	—	11.0	10.9	\$85	—	3.2	R410A	250	78/85	
KCS08A10A	8000	—	115	6.5	661	—	—	12.1	12.0	\$65	—	1.9	R410A	255	115/121	S
KCS10A10A	10000	—	115	8.5	826	—	—	12.1	12.0	\$81	—	2.9	R410A	300	122/128	
KCS12A10A	12000	—	115	9.5	1000	—	—	12.0	12.0	\$98	—	3.5	R410A	300	134/136	
KCS12A30A	12000	—	230	4.8	992	—	—	12.1	12.0	\$97	—	3.5	R410A	300	134/136	
KCS14A10A	13600	—	115	11.8	1236	—	—	11.0	10.9	\$121	—	4.3	R410A	275	138/138	
KCS16A30A	15700	—	230	6.6	1454	—	—	10.8	10.7	\$142	—	5.0	R410A	330	137/138	
KCM14A10A	13600	—	115	10.9	1140	—	—	12.1	12.0	\$112	—	3.0	R410A	360	149/138	M
KCM18A30A	20000	—	230	9.6	1923	—	—	10.4	10.3	\$188	—	6.0	R410A	425	154/166	
KCM21A30A	21500	—	230	9.6	2067	—	—	10.4	10.3	\$202	—	6.0	R410A	425	154/166	
KCL24A30B	23000	—	230	11.1	2308	—	—	10.4	10.3	\$225	—	7.5	R410A	640	207/212	L
KCL28A30A	28000	—	230	13.4	2800	—	—	10.0	9.9	\$273	—	9.3	R410A	640	214/218	
KCL36A30A	35000	—	230	18.2	3846	—	—	9.1	9.0	\$376	—	11.0	R410A	725	217/248	
<b>KÜHL® + (HEAT PUMP)</b>																
KHS10A10A <sup>1</sup>	10000	8800	115	8.8	917	9.1	978	10.9	10.8	\$90	2.6	2.0	R410A	300	126/131	S
KHS12A33A <sup>*</sup>	12000	9800	230	5.0	1101	4.7	1257	10.9	10.8	\$108	2.9	3.0	R410A	375	133/136	
KHM18A34A <sup>*</sup>	17500	14900	230	7.4	1606	7.4	1568	10.9	10.8	\$157	2.8	5.6	R410A	450	154/155	M
KHL24A35A <sup>*</sup>	24000	21000	230	11.1	2330	10.3	2211	10.3	10.2	\$228	2.8	7.0	R410A	600	211/213	L
<b>KÜHL® + (ELECTRIC HEAT)</b>																
KEQ08A11A	7700	4000	115	6.4	694	11.2	1290	11.1	11.0	\$68	—	2.1	R410A	200	82/85	Q
KES12A33A	12000	10700	230	4.9	1091	16.0	3500	11.0	10.9	\$107	—	3.6	R410A	325	128/137	S
KES16A33A	15700	10700	230	6.6	1454	16.0	3500	10.8	10.7	\$142	—	3.4	R410A	300	138/145	
KEM18A34A	20000	13000	230	9.6	1923	19.5	4200	10.4	10.3	\$188	—	6.0	R410A	425	150/154	M
KEL24A35B	23000	17300	230	11.1	2308	24.0	5500	10.4	10.3	\$225	—	7.0	R410A	750	199/211	L
KEL36A35A	35000	17300	230	18.2	3846	24.0	5500	9.1	9.0	\$376	—	11.0	R410A	725	241/246	

## R-32 Refrigerant Models

Model	Cooling Btu	Heating Btu	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER		Estimated Yearly Energy Cost	COP	Moisture Removal-Pints/HR	Refrigerant	CFM	Net/ship Wt. lbs.	Sleeve
								EER	CEER							
<b>KÜHL® (COOL ONLY)</b>																
KCQ08B10A	8000	—	115	6.5	659	—	—	12.1	12.0	\$65	—	2.1	R-32	200	72/85	Q
KCS12B10A	12000	—	115	11.1	992	—	—	12.1	12.0	\$97	—	3.5	R-32	300	112/134	S
KCM24B30A	22300	—	230	13.8	2308	—	—	10.4	10.3	\$202	—	7.5	R-32	640	191/212	M
KCL28B30A	28000	—	230	16	2542	—	—	10.7	10.7	\$273	—	9.3	R-32	640	193/214	L
KCL36B30A	34800	—	230	18.6	3894	—	—	9.3	9.3	\$376	—	11.0	R-32	725	212/248	
<b>KÜHL® + (HEAT PUMP)</b>																
KHS10B10A <sup>1</sup>	10000	8800	115	9.3	829	9.1	978	10.9	12.2	\$90	2.6	2.0	R-32	300	109/131	S

<sup>1</sup> KHS10A10A and KHS10B10A heat pumps operate on 115 volt and are not equipped with supplemental heat. They 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 indicates heat pump performance. KÜHL®+ Electric Heat heating information indicates electric heat strip performance. For KÜHL®+ Heat Pump electric heating performance refer to corresponding KÜHL®+ Electric Heat model.

Uses R-32 refrigerant with low Global Warming Potential

Your energy costs will depend on your utility rates and use. The estimated energy cost is based on an electricity cost of \$.13 per kWh. For more information, visit [www.ftc.gov/energy](http://www.ftc.gov/energy).

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

# KÜHL® INSTALLATION INFORMATION

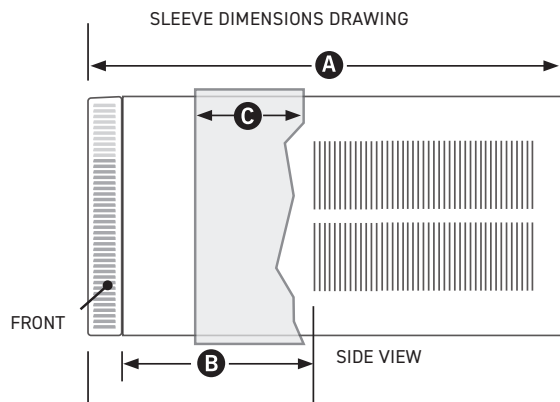
## WINDOW OR THRU-WALL INSTALLATION

Sleeve	Height Inches	Width Inches	Depth with Front Inches <b>A</b>	Shell Depth to Louvers Inches <b>B</b>	Minimum Extension Into Room <sup>1</sup> Inches	Minimum Extension Outside <sup>1</sup> Inches	WINDOW INSTALLATION		THRU-WALL INSTALLATION			Carton Dimensions Inches		
							Window Width Inches		Thru-the-wall Installation Finished Hole Inches			Height	Width	Depth
							Minimum <sup>2</sup>	Maximum	Height	Width	Max. Depth <b>C</b>			
<b>Q</b>	14 1/4"	19 3/4"	21 3/8"	8 1/2"	5 1/2"	10 3/4"	22"	42"	14 1/2"	20"	8 1/2"	18 3/4"	22"	25 1/2"
<b>S</b>	15 15/16"	25 15/16"	29"	8 3/4"	5 3/4"	16 15/16"	27 3/8"	42"	16 3/16"	26 3/16"	7 3/8"	19"	29"	34 1/2"
<b>M</b>	17 15/16"	25 15/16"	29"	8 3/4"	5 3/4"	16 15/16"	27 3/8"	42"	18 3/16"	26 3/16"	7 3/8"	21"	29"	34 1/2"
<b>L</b>	20 3/16"	28"	35 1/2"	16 1/2"	5 3/8"	18 15/16"	29 7/8"	42"	20 3/8"	28 1/4"	15 1/8"	24 1/2"	31 5/8"	38 7/8"

<sup>1</sup> Minimum extensions when mounted in a window.

<sup>2</sup> Minimum widths achieved using one side curtain assembly as opposed to both in a standard installation.

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



## CIRCUIT RATING/BREAKER/POWER CORD

Model	Circuit Rating Breaker or T-D Fuse	Plug Face (NEMA#)	Power Cord Length (ft.)	Wall Outlet Appearance
All KCQ MODELS. KEQ08A11A. KCS08A10A, KCS10A10A, KCS12A10A, KCS12B10A and KCS14A10A. KHS10A10A, KHS10B10A and KCM14A10A.	125V - 15A	5 - 15P	6	
KCS12A30A and KCS16A30A. KCM18A30A and KCM24B30A	250V - 15A	6 - 15P	6	
KCM21A30A, KCL24A30B, KCL24B30A, KCL28A30A and KCL28B30A. KES12A33A and KES16A33A. KHS12A33A.	250V - 20A	6 - 20P	6	
KCL36A30A, KCL36B30A, KEM18A34A and KEL24A35B and KEL36A35A. KHM18A34A and KHL24A35A.	250V - 30A	6 - 30P	6	

## KÜHL® ACCESSORIES

### FreshAir® IAQ

#### MERV 13 Filters /Filter Brackets

FreshAir® MERV 13 filtration is effective at capturing and removing microorganisms from the air, which according to ASHRAE\*, the leading authority on the science behind advanced indoor air quality, include harmful airborne viruses. Maintaining the best indoor air quality possible requires that you prevent harmful pollutants from circulating throughout the space. One way to prevent this is to trap the pollutants with mechanical filtration. Kühl® air conditioners can utilize an optional MERV 13 air filter, which is at least 85% efficient at capturing particles between 1 and 3 microns in size and up to 50% efficient in filtering particles between 0.30 and 1 micron in size such as bacteria and sneeze nuclei.

\*Based on ASHRAE Guidance for Building Operations during the COVID-19 Pandemic

Model No.	UPC	Description
KMFB1PK	724587440553	Kühl MERV filter bracket 1 pack
KMFBQ1PK	724587440546	Kühl Q MERV filter bracket 1 pack
KMFQ3PK	724587440560	Kühl MERV filter - Q chassis 3 pack
KMFS3PK	724587440577	Kühl MERV filter - S chassis 3 pack
KMFM3PK	724587440584	Kühl MERV filter - M chassis 3 pack
KMFL3PK	724587440591	Kühl MERV filter - L chassis 3 pack



Filter bracket required for MERV 13 filter installation.  
Minimum bracket order of 24.  
Minimum filter order quantity of eight.

#### Window Mounting Kits\*: Kühl®+

Window kits are included with cooling only models, but are an accessory item for Kühl®+ heat/cool models.

\*Window kits are required for installation of Kühl®+ models in a window.

Heat/Cool Models	Kit No.
KEQ08A11A*	KWIKQA
KES12A33A, KES16A33A, KHS10A10A, KHS10B10A and KHS12A33A.	KWIKSB
KEM18A34A and KHM18A34A.	KWIKMB
KEL24A35B, KEL36A35A and KHL24A35A.	KWIKLB



KWIKQA



KWIKSB, KWIKMB, KWIKLB

\* KEQ08A11A window kit KWIKQA does not include window brackets.

#### Drain Kit

Allows field installed drain tube to be installed to the bottom of the sleeve to route the condensate from the unit.

Model	Kit No.
All Kühl® Series Models	DC2



#### Premium Carbon Filters

Removes odors and VOCs (volatile organic compounds).  
Achieve up to a MERV 6 rating when used with standard filter.  
Sold as 3 pack.

Model	Kit No.
KCQ and KEQ	KWCFQ
KCS, KES and KHS	KWCFS
KCM, KEM and KHM	KWCFM
KCL, KEL and KHL	KWCFL





*These products meet a stringent set of our company's internally defined sustainability standards*

KCQ08B10A, KCS12B10A, KHS10B10A, KHS12A33B, KCM24B30A, KHM18A34B, KCL36B30A, KHL24A35B



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