Friedrich Kühl[®] Series Room Air Conditioners

FreshAire IAQ READY

SMART. QUIET. COOL.





THE EXPERTS IN ROOM AIR CONDITIONING

Kühl[®] | Smart Room Air Conditioners

THE ONLY ROOM AIR CONDITIONER AVAILABLE WITH ASHRAE AND CDC-RECOMMENDED MERV 13 FILTRATION

FreshAire[®] *IAQ* is a suite of indoor air quality (IAQ) accessories for use with Friedrich Air Conditioners, all with one dedicated purpose - healthy indoor air.



FreshAire[®] IAQ

FreshAire® MERV 13 filtration option

Leading authorities, including the CDC, EPA, and ASHRAE recommend upgrading your filter to a MERV 13 or higher to help guard against the spread of infectious airborne particles, including COVID-19. MERV 13 filters are 85% or more effective at capturing particles down to 1 micron in size*. The COVID-19 virus travels on particles and nuclei between 1 and 6 microns in size.

While higher MERV and HEPA filters are efficient at trapping smaller particles at a higher rate, not all air conditioning units have the needed air pressure capacity or power to pull air through a higher efficiency filter.

Kühl[®] Room Air Conditioners have all been tested for use with MERV 13 filtration and are able to provide the best in indoor air quality protection, while never sacrificing your desired temperature and comfort.





*ASHRAE Standard 52.2-2017

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.



CONTROL WITH THE FRIEDRICHCONNECT® APP OR BY VOICE COMMAND

You're in control anytime, anywhere

Connect in minutes with our simplified set up process, then set your home, away, and night time preferences. Set a seven-day custom schedule that fits your lifestyle. Power units off and on, increase or decrease a unit's set point temperature, change system cool, fan, heat, and auto settings and fan speeds

Control multiple Kühl® units

With our advanced grouping program, you can control multiple units to work independently or as a single system. You can even invite other users to manage one or more of your units



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

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
- 4 fan speeds on select models
- 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
- 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

- Optional MERV 13 filter captures particles down to 1 micron in size
- Standard dual filtration provides air filtration as high as MERV 6
 - Antimicrobial air filter
- Carbon filter absorbs odors and reduces ozone and volatile organic compounds (VOCs)
- Check filter reminder
- Fresh air intake/stale air exhaust vent*



FRIEDRICH

Friedrich Air Conditioning Co. I www.friedrich.com

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

- ENERGY STAR[®] qualified models,
- 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)

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

Need a Friedrich model that heats and cools? Here are some things to consider.

Kühl®+ Electric Heat models utilize an electric heat strip that provides warm air quickly. They can be used for **primary heating in moderate climates** and as supplemental heating in colder climates. They are ideal for rooms that are always 'too cold in winter'.

Kühl*+ Heat Pumps provide energy-efficient heating by extracting heat from the outside air. They can be used for primary heating in moderate climates and as supplemental heating in colder climates. 230 volt models have back-up electric heat that will activate when outside temperatures are too cold for efficient heat pump operation.

Your **Friedrich Dealer** can assist you in selecting the right **Kühl®**+ for your local climate and application.



Friedrich Kühl[®] Series Room Air Conditioners





KCS, KCM, KCL, KHS, KHM, KHL, KES, KEM, KEL

KCQ, KEQ

FEATURES

- Control with FriedrichConnect[®] app or by voice command
- Customizable, 7-day schedules
- Advanced grouping of multiple units
- 🝠 24-hour timer
- Up to 4 cooling/4 fan-only speeds
- Auto fan
- Auto-changeover between cooling and heating (*Kühl*®+ models except KEQ08)
- Auto restart
- 8-way air flow control
- Control panel lockout (ON/OFF)
- QuietMaster[®] technology for up to 45% quieter operation**
- Steel inner wall and extra dense insulation blocks outdoor noise
- Vibration isolating design and components reduce operating noise
- FreshAire® IAQ ready- optional MERV 13 filter captures particles down to 1 micron in size
- Fresh air intake/stale air exhaust vent*

- · Washable, antimicrobial air filter
- Carbon filter absorbs odors and reduces ozone and volatile organic compounds (VOCs)
- Standard dual filtration provides air filtration as high as MERV 6
- Check filter reminder
- Robust 20 gauge steel cabinet
- Solid-steel blower housing offers enhanced protection
- Totally enclosed commercial grade fan motor
- Durable base pan and steel inner walls
- · Aluminum end plates
- High-tech aluminum fins with rifled copper tubing
- ENERGY STAR[®] qualified models,
- Kühl®+ heat pumps provide energy efficient cooling and heating
- Temperature limiting for maximum low and high temperature settings
- Recyclable packaging

COOL ONLY

115 volt- 6,000 to 13,600 Btu 230 volt- 12,000 to 35,000 Btu EFFICIENCY: EERs up to 12.2

HEAT PUMPS

115 volt- 10,000 Btu COOLING 8,800 Btu HEATING 230 volt- 24,000 Btu COOLING 9,800-21,000 Btu HEATING EFFICIENCY: EERs up to 10.9

ELECTRIC HEAT MODELS 115 volt- 7,700 Btu COOLING 4,000 Btu HEATING 230 volt- 12,000 to 35,000 Btu COOLING 10,700 to 17,300 Btu HEATING EFFICIENCY: EERs up to 11.1

- EntryGard[®] anti-intrusion protection secures the chassis to the sleeve
- Power cord leakage current protected
- Insect barrier*
- Aluminum rear grille protects the outdoor coil from debris and vandalism
- Install in a window or thru-the-wall
- Slideout chassis for more permanent installation, easier maintenance access
- Patented firm grip handles for easier chassis installation and removal
- Includes heavy duty window installation hardware (optional accessory on Kühl[®]+ models sold separately)
- Hardboard side panels for a more permanent installation (heavy duty side curtains on KCQ and KEQ models)
- Power cord can run either left or right



*Feature not available on KCQ and KEQ models

**Based on testing conducted at the Friedrich Design and Development Center in comparison to leading rotary compressor models



FreshAire[®] IAQ

MERV 13 FILTER / FILTER BRACKETS

FreshAire 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 mechancial filtration. Kühl[®] is the only window air conditioner that can utilize on 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
КМҒМЗРК	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 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 and KHS12A33A.	KWIKSB
KEM18A34A and KHM18A34A.	KWIKMB
KEL24A35B, KEL36A35A and KHL24A35A.	KWIKLB

* KEQ08A11A window kit KWIKQA does not include window brackets.



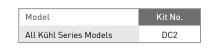
KWIKQA



KWIKSB, KWIKMB, KWIKLB

DRAIN KIT

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





PREMIUM CARBON FILTERS

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

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



SPECIFICATIONS

★ ENERGY STAR[®] models

	Model	UPC	Cooling Btu	Heating Btu	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER	CEER	Esti- mated Yearly Energy Cost	СОР	Moisture Removal- Pints/HR	CFM	Net/ship Wt. lbs.	Sleeve
	Kühl® (Cool	Only]															
*	KCQ06A10A	724587437102	6000	-	115	4.8	492	_	-	12.2	12.1	\$48	-	1.5	190	72/85	
*	KCQ08A10A	724587436570	8000	_	115	6.5	661	-	-	12.1	12.0	\$65	-	2.1	200	72/85	Q
	KCQ10A10B	724587436587	9500	-	115	8.6	864	_	-	11.0	10.9	\$85	_	3.2	250	72/85	
*	KCS08A10A	724587436631	8000	_	115	6.5	661	_	-	12.1	12.0	\$65	-	1.9	255	106/128	
*	KCS10A10A	724587436501	10000	-	115	8.5	826	_	-	12.1	12.0	\$81	-	2.9	300	112/134	
*	KCS12A10A	724587436891	12000	-	115	9.5	1000	-	-	12.0	12.0	\$98	-	3.5	300	112/134	s
*	KCS12A30A	724587436907	12000	-	230	4.8	992	-	-	12.1	12.0	\$97	-	3.5	300	116/138	
	KCS14A10A	724587436686	13600	-	115	11.8	1236	-	-	11.0	10.9	\$121	-	4.3	275	141/154	
	KCS16A30A	724587436648	15700	_	230	6.6	1454	_	-	10.8	10.7	\$142	_	5.0	330	141/154	
*	KCM14A10A	724587436525	13600	_	115	10.9	1140	-	-	12.1	12.0	\$112	-	3.0	360	138/150	
*	KCM18A30A	724587436617	20000	-	230	9.6	1923	-	-	10.4	10.3	\$188	-	6.0	425	132/153	м
*	KCM21A30A	724587436624	21500	_	230	9.6	2067	-	-	10.4	10.3	\$202	-	6.0	425	132/153	
*	KCL24A30B	724587439939	23000	-	230	11.1	2308	-	-	10.4	10.3	\$225	-	7.5	640	191/212	
*	KCL28A30A	724587436549	28000	_	230	13.4	2800	-	-	10.0	9.9	\$273	-	9.3	640	193/214	L
	KCL36A30A	724587437119	35000	-	230	18.2	3846	-	-	9.1	9.0	\$376	_	11.0	725	212/248	
	Kühl® + (Hea	at Pump)															
*	KHS10A10A*	724587436518	10000	8800	115	8.8	917	9.1	978	10.9	10.8	\$90	2.6	2.0	300	109/131	s
*	KHS12A33A	724587437133	12000	9800	230	5.0	1101	4.7	1257	10.9	10.8	\$108	2.9	3.0	375	115/136	
*	KHM18A34A	724587437140	17500	14900	230	7.4	1606	7.4	1568	10.9	10.8	\$157	2.8	5.6	450	141/154	м
*	KHL24A35A	724587436563	24000	21000	230	11.1	2330	10.3	2211	10.3	10.2	\$228	2.8	7.0	600	197/211	L
	Kühl® + (Ele	ctric Heat)															
	KEQ08A11A	724587436594	7700	4000	115	6.4	694	11.2	1290	11.1	11.0	\$68	-	2.1	200	72/85	Q
	KES12A33A	724587436914	12000	10700	230	4.9	1091	16.0	3500	11.0	10.9	\$107	-	3.6	325	113/128	s
	KES16A33A	724587436679	15700	10700	230	6.6	1454	16.0	3500	10.8	10.7	\$142	-	3.4	300	138/150	
	KEM18A34A	724587436921	20000	13000	230	9.6	1923	19.5	4200	10.4	10.3	\$188	-	6.0	425	141/154	м
	KEL24A35B	724587431612	23000	17300	230	11.1	2308	24.0	5500	10.4	10.3	\$225	-	7.0	750	197/211	L
	KEL36A35A	724587437126	35000	17300	230	18.2	3846	24.0	5500	9.1	9.0	\$376	-	11.0	725	213/246	

* KHS10A10A heat pump 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 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.

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. EER is the unit's Energy Efficiency Ratio; CEER is the unit's Combined Energy Efficiency Ratio.

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.

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

SPECIFICATIONS

★ ENERGY STAR[®] models

	California Compliant Low GWP R-32 Models											Esti- mated Yearly		Moisture			
	Model	UPC	Cooling Btu	Heating Btu	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER	CEER	Energy Cost	COP	Removal- Pints/HR	CFM	Net/ship Wt. lbs.	
	Kühl® (Cool Only)																
*	KCQ08B10A	724587442144	8000	-	115	6.5	661	-	-	12.1	12.0	\$65	-	2.1	200	72/85	Q
*	KCS12B10A	724587442168	12000	_	115	9.5	1000	_	-	12.0	12.0	\$98	_	3.5	300	112/134	s
*	KCM24B30A	724587442137	22300	_	230	9.6	2067	_	-	10.4	10.3	\$202	_	6.0	425	132/153	М
*	KCL24A30B	724587439939	23000	-	230	11.1	2308	_	-	10.4	10.3	\$225	-	7.5	640	191/212	
	KCL36B30A	724587442120	34800	_	230	18.2	3846	_	-	9.1	9.0	\$376	-	11.0	725	212/248	
	Kühl® + (Heat Pump)																
*	KHS10B10A*	724587442151	10000	8800	115	8.8	917	9.1	978	10.9	10.8	\$90	2.6	2.0	300	109/131	S

* KHS10A10A heat pump 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 $^\circ{\rm F}$ to 115 $^\circ{\rm F}.$

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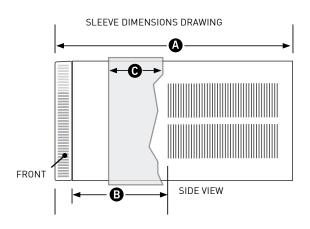
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INSTALLATION

							WINDOW INS	TALLATION	THRU	-WALL INSTA	LLATION			
	Height	Width	Depth with Front Inches	Shell Depth to Louvers Inches	Minimum Extension Into Room*	Minimum Extension Outside	Window Width Inches			he-wall Ins shed Hole		Cart	on Dimens Inches	ions
Sleeve	Inches	Inches	A	В	Inches	* Inches	Minimum**	Maximum	Height	Width	С	Height	Width	Depth
Q	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"
S	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"
м	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"
L	20 ³ /16"	28"	35 ¹ /2"	16 ¹ /2"	5 ³ /8"	18 ¹⁵ /16"	297/8"	42"	20 ³ /8"	28 ¹ /4"	15 ¹ /8"	24 ¹ /2"	31 ⁵ /8"	38 ⁷ /8"

* Minimum extensions when mounted in a window.

** 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 and KCS14A10A. KHS10A10A. KCM14A10A.	125V - 15A	5 - 15P	6	
KCS12A30A and KCS16A30A. KCM18A30A and KCM21A30A.	250V - 15A	6 - 15P	6	
KCL24A30B and KCL28A30A. KES12A33A and KES16A33A. KHS12A33A.	250V - 20A	6 - 20P	6	
KCL36A30A. KEM18A34A and KEL24A35B and KEL36A35A. KHM18A34A and KHL24A35A.	250V - 30A	6 - 30P	6	



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