

THE EXPERTS IN ROOM AIR CONDITIONING



FRIEDRICH

1883

KÜHL® SERIES

Smart Room Air Conditioners

For Window and Through-the-wall Installation



FreshAir® IAQ READY

Smart

SUPERIOR FILTRATION • CONTROL W/APP

Quiet

UP TO 45% QUIETER

Cool

POWERFUL AIRFLOW

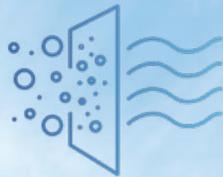
Kühl®

Smart Room Air Conditioners

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

FreshAire® IAQ

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.



Optional FreshAire® MERV 13 filtration

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



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.



COMMERCIAL GRADE QUALITY AND COMPONENTS

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



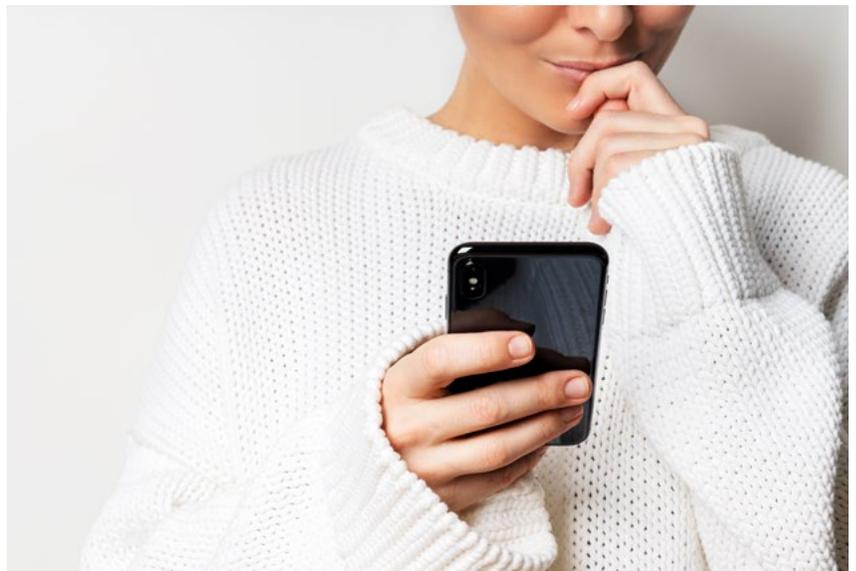
MORE OPTIONS FOR CONTROLS

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

Controlling multiple units is simple

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



25 Kühl models to choose from, including Kühl+ Electric Heat and Kühl+ Heat Pumps

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FEATURES

Control via FriedrichConnect®

- Built-in Wi-Fi
- Voice command compatible
- Create customizable, 7-day schedules
- Advanced grouping of multiple units

Comfort and Convenience

- 24-hour timer
- Up to 4 cooling and 4 fan-only speeds on select models
- Auto fan adjusts the fan speed to maintain the set temperature
- Auto-changeover between cooling and heating modes (Kühl+ models except KEQ08)
- Auto restart
- 8-way air flow control for better air distribution
- 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
- Precision engineering delivers maximum air flow and air dispersion at low sound levels

Superior Air Filtration

- FreshAire® IAQ ready- optional MERV 13 filter captures particles down to 1 micron in size
- Superior fresh air intake and stale air exhaust vent*
- Washable, air filter
- Carbon filter absorbs odors and reduces ozone and volatile organic compounds (VOCs)
- Dual filtration provides superior air filtration as high as MERV 6.
- Check filter reminder

Built To Last

- Robust 20 gauge steel cabinet
- 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 pan and steel inner walls
- 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

Earth Friendly

- ENERGY STAR® qualified models, including heat pumps
- Multiple scheduling options save energy
- Kühl+ heat pumps provide energy efficient cooling and heating
- Temperature limiting for maximum low and high temperature settings
- Environmentally-friendly R-410A refrigerant used in all models
- Recyclable packaging

Safety & Security

- EntryGard® anti-intrusion protection secures the chassis to the sleeve to deter 'kick-in' intrusion
- Power cord leakage current protected
- Insect barrier*
- Aluminum rear grille protects the outdoor coil from debris and vandalism

Installation

- Install in a window or thru-the-wall
- Slideout chassis for more permanent installation and easier access for maintenance
- Patented firm grip handles for easier chassis installation and removal
- Includes heavy duty window installation hardware (optional accessory on Kühl+ models sold separately)
- Rugged 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
- Front cover attaches easily and securely.



Sleeve sizes have remained unchanged for over 45 years. Today's Friedrich units are compatible with your existing similar-sized Friedrich sleeve should you decide to use it.



Two options for heating, including energy-efficient heat pump models

Kühl+ Electric Heat models utilize an electric heat strip to provide 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 or distributor can assist you in selecting the right Kühl+ unit for your particular climate and application.

SPECIFICATIONS

★ ENERGY STAR® models

Model	UPC	Cooling Btu	Heating Btu	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER	CEER	Estimated Yearly Energy Cost	COP	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	Q
★ KCQ08A10A	724587436570	8000	—	115	6.5	661	—	—	12.1	12.0	\$65	—	2.1	200	72/85	
★ 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	S
★ 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	
★ 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	M
★ KCM18A30A	724587436617	20000	—	230	9.6	1923	—	—	10.4	10.3	\$188	—	6.0	425	132/153	
★ 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	L
★ KCL28A30A	724587436549	28000	—	230	13.4	2800	—	—	10.0	9.9	\$273	—	9.3	640	193/214	
★ KCL36A30A	724587437119	35000	—	230	18.2	3846	—	—	9.1	9.0	\$376	—	11.0	725	212/248	
Kühl® + (Heat 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	M
★ 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® + (Electric 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	M
★ 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 \$.12 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.



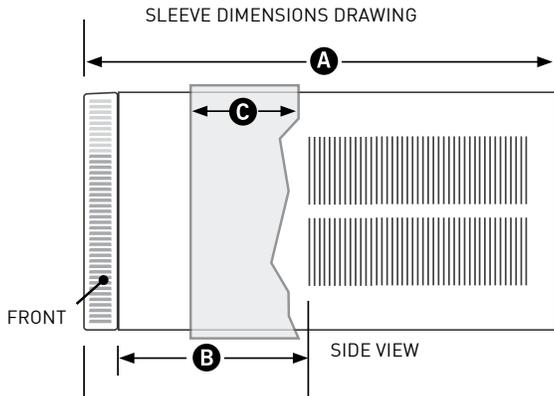
INSTALLATION

Sleeve	Height Inches	Width Inches	Depth with Front Inches A	Shell Depth to Louvers Inches B	Minimum Extension Into Room* Inches	Minimum Extension Outside * Inches	WINDOW INSTALLATION		THRU-WALL INSTALLATION			Carton Dimensions Inches		
							Window Width Inches		Thru-the-wall Installation Finished Hole Inches			Height	Width	Depth
							Minimum**	Maximum	Height	Width	Max. Depth C			
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"
M	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"	29 7/8"	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.



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

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	

ACCESSORIES

FreshAir® IAQ

MERV 13 FILTER / 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® is the only window air conditioner that 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.

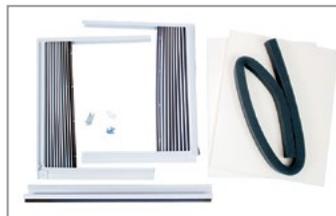
WINDOW MOUNTING KITS*: KÜHL+

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 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.

Model	Kit No.
All Kühl Series Models	DC2



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	KWCFB
KCM, KEM and KHM	KWCFM
KCL, KEL and KHL	KWCFL



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