Kühl® Series
Smart Room Air Conditioners

QuietMaster®
technology

Control
with App

Save big
on energy

6
MERV
Breathe
easier

Voice command
compatible

FRIEDRICH
1883

Kühl®
Smart Room Air Conditioners

HOME OR AWAY, YOU'RE IN CONTROL WITH THE FRIEDRICHCONNECT™ APP.

Integrated Wi-Fi control from your smartphone. Also compatible with Amazon Alexa and Google Home.

Connect in minutes

It's easy with our simplified set up process

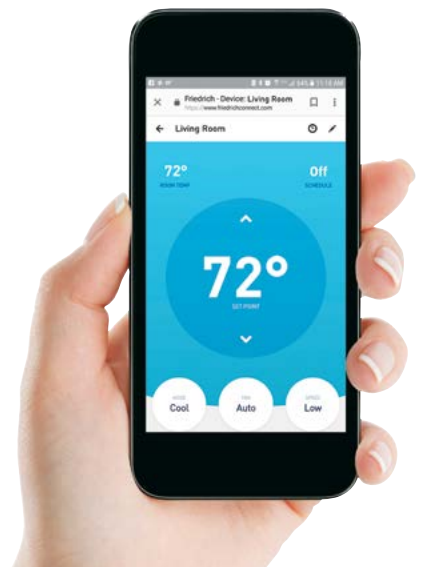### Easily set your home, away, and night time preferences

Set a seven-day custom schedule that fits your lifestyle

You're in control anytime, anywhere

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
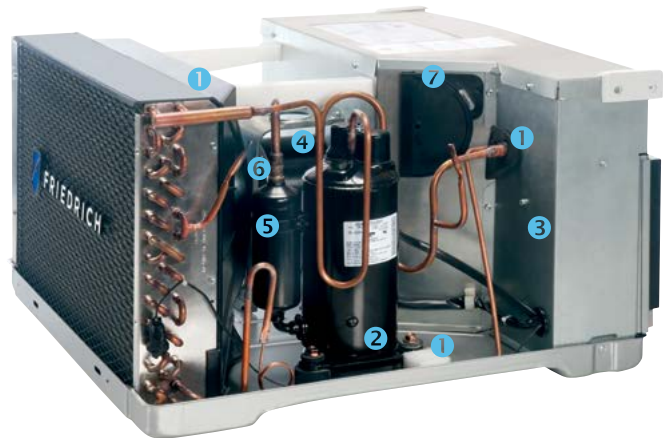
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Unrivaled quality

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.

5 YR. LIMITED WARRANTY

45% QUIETER IN LAB TESTS

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.

UNRIVALED ENERGY SAVINGS OPTIONS,
FOR CONTROL OF ONE OR MULTIPLE KÜHL® UNITS

In commercial applications, only Kühl has true energy management capabilities

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

KÜHL 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

- Superior fresh air intake and stale air exhaust vent*
- Washable, antimicrobial air filter
- Carbon filter absorbs odors and reduces ozone and volatile organic compounds (VOCs)
- Dual filtration provides superior air filtration with ratings as high as MERV 6.
- Check filter reminder
- Hinged door allows easy filter access for easier maintenance

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
- Smart grid capable via participating energy provider
- 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. Nut driver included**.

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.

Heat and Cool Options

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.

*Feature not available on KCQ and KEQ models. ** Nut driver not required for KCQ and KEQ models.

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	724587436570	6000	—	115	4.8	492	—	—	12.2	12.1	$48	—	1.5	190	72/85	
★	KCQ08A10A	724587436587	8000	—	115	6.5	661	—	—	12.1	12.0	$65	—	2.1	200	72/85	Q
	KCQ10A10B	724587436594	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	724587432640	10000	—	115	8.5	826	—	—	12.1	12.0	$81	—	2.9	300	112/134	
★	KCS12A10A	724587432688	12000	—	115	9.5	1000	—	—	12.0	12.0	$98	—	3.5	300	112/134	
★	KCS12A30A	724587432695	12000	—	230	4.8	992	—	—	12.1	12.0	$97	—	3.5	300	116/138	S
	KCS14A10A	724587432701	13600	—	115	11.8	1236	—	—	11.0	10.9	$121	—	4.3	275	141/154	
	KCS16A30A	724587436678	15700	—	230	6.6	1454	—	—	10.8	10.7	$142	—	5.0	330	141/154	
★	KCM14A10A	724587432435	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	M
★	KCM21A30A	724587436624	21500	—	230	9.6	2067	—	—	10.4	10.3	$202	—	6.0	425	132/153	
★	KCL24A30A	724587436549	24000	—	230	11.1	2308	—	—	10.4	10.3	$225	—	7.5	640	191/212	
★	KCL28A30A	724587432657	28000	—	230	13.4	2800	—	—	10.0	9.9	$273	—	9.3	640	193/214	L
	KCL36A30A	724587436556	35000	—	230	18.2	3846	—	—	9.1	9.0	$376	—	11.0	725	212/248	
	Kühl® + (Heat Pump)																
★	KHS10A10A*	724587432541	10000	8800	115	8.8	917	9.1	978	10.9	10.8	$90	2.6	2.0	300	109/131	
★	KHS12A33A	724587436525	12000	9800	230	5.0	1101	4.7	1257	10.9	10.8	$108	2.9	3.0	375	115/136	S
★	KHM18A34A	724587436532	17500	14900	230	7.4	1606	7.4	1568	10.9	10.8	$157	2.8	5.6	450	141/154	M
★	KHL24A35A	724587432633	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	724587432749	7700	4000	115	6.4	694	11.2	1290	11.1	11.0	$68	—	2.1	200	72/85	Q
	KES12A33A	724587430004	12000	10700	230	4.9	1091	16.0	3500	11.0	10.9	$107	—	3.6	325	113/128	
	KES16A33A	724587436678	15700	10700	230	6.6	1454	16.0	3500	10.8	10.7	$142	—	3.4	300	138/150	S
	KEM18A34A	724587432491	20000	13000	230	9.6	1923	19.5	4200	10.4	10.3	$188	—	6.0	425	141/154	M
	KEL24A35A	724587431612	24000	17300	230	11.1	2308	24.0	5500	10.4	10.3	$225	—	7.0	750	197/211	
	KEL36A35A	724587436563	35000	17300	230	18.2	3846	24.0	5500	9.1	9.0	$376	—	11.0	725	213/246	L

* 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.
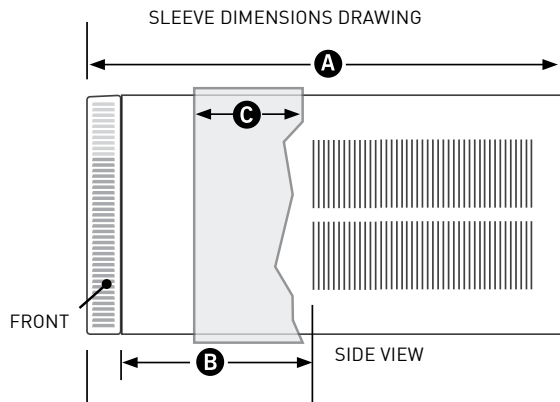
INSTALLATION

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 Width INCHES Minimum**	Maximum	In-wall Installation Finished Hole Inches Height	Width	Max. Depth (C)	Carton Dimensions Inches 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"
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.

SLEEVE DIMENSIONS DRAWING

FRONT

SIDE VIEW

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	
KCL24A30A and KCL28A30A. KES12A33A and KES16A33A. KHS12A33A.	250V - 20A	6 - 20P	6	
KCL36A30A. KEM18A34A and KEL24A35A and KEL36A35A. KHM18A34A and KHL24A35A.	250V - 30A	6 - 30P	6	

ACCESSORIES

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

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
KEL24A35A, 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

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

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