FRIEDRICH

Kühl® Series
Room Air Conditioners

PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

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 KHVQ08)
- Auto restart saves settings
- 8-way air flow control
- Control panel lockout (ON/OFF)

QuietMaster® technology

- Up to 45% quieter than competitive models[1]
- 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 all 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 limited warranty
- Nationwide service network and U.S.-based Friedrich expert technical team ensures you get fast, knowledgeable service



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

Model Numbers **& Details**





Inverter Models (Preliminary)

	Model	Cooling Btu (Nominal)	Low Cooling Btu	HP Heating Btu	Electric Heating Btu (Back-up)	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	Electric Heating kW	EER	CEER	ENERGY STAR®	Estimated Yearly Energy Cost	COP	Moisture Removal Pints/HR	CFM	Net/ship Wt. lbs.	Sleeve
	KÜHL® SLIDE-OUT CHASSIS - COOL ONLY																			
	KCVQ08B10A	9,700	4,000	–	–	115V	9.9	460	–	–	–	10.8	13.9	N	$51	–	2.9	200	70/77	Q
★ ★	KCVS08B10A	8,700	4,000	–	–	115V	8.4	370	–	–	–	12.8	16	Y	$38	–	3	255	100/110	S
★	KCVS12B10A	12,500	6,000	–	–	115V	11.8	624	–	–	–	11.1	15	Y	$62	–	4.2	300	110/120	S
★	KCVS12B30A	12,700	6,000	–	–	230V	6.3	624	–	–	–	11.9	15	Y	$62	–	4.5	300	110/120	S
★	KCVS16B30A	16,200	7,750	–	–	230V	8.6	833	–	–	–	10.6	14.4	Y	$83	–	6	350	110/120	S
★	KCVM14B10A	13,900	6,750	–	–	115V	11.6	680	–	–	–	10	14.7	Y	$89	–	5.6	360	120/135	M
★	KCVM18B30A	19,100	9,000	–	–	230V	10	990	–	–	–	11	14.4	Y	$98	–	7.2	425	130/145	M
★	KCVM24B30A	23,200	11,500	–	–	230V	12	1,349	–	–	–	9.5	13	Y	$133	–	8.9	450	130/145	M
★ ★	KCVL28B30A	28,900	14,000	–	–	230V	14.3	1,577	–	–	–	10.3	13.2	Y	$155	–	11.1	600	155/185	L
★	KCVL36B30A	34,100	17,000	–	–	230V	16	2,153	–	–	–	9.6	12.2	Y	$281	–	12.5	700	155/185	L
	KÜHL®+ SLIDE-OUT CHASSIS - HEAT PUMP																			
	KHVQ10B11A	9,400	4,250	6,600	4,000	115V	9.5	580	9.9	682	1.1	9.4	12.6	–	$78	2.6	3.2	255	73/80	Q
★	KHVS10B11A	10,200	5,000	8,700	4,000	115V	10.2	501	11.2	895	1.1	11.2	14	Y	$50	3	3.3	300	105/115	S
★ ★	KHVS12B33A	12,600	6,000	11,400	10,700	230V	6.2	612	4.3	1,139	3.2	11.4	14.4	Y	$61	2.9	4.2	375	115/125	S
★	KHVM24B34A	22,900	11,250	18,000	13,000	230V	12.6	1,358	10.9	2,000	4.0	9	12.6	Y	$134	2.6	9	450	135/150	M
★	KHVL28B35A	28,200	14,000	21,700	17,300	230V	15.5	1,566	11.5	2,137	5.0	10.1	12.6	Y	$156	3	11.2	600	160/190	L
	KÜHL®+ SLIDE-OUT CHASSIS - ELECTRIC HEAT																			
	*KEVS16B33A	16,200	7,750	TBD	TBD	230V	8.6	833	–	–	3.2kW	10.6	14.4	N	$83	TBD	6	350	110/120	S
	*KEVL36B35A	34,100	1,700	TBD	TBD	230V	16	2,015	–	–	5.0kW	9.6	12.2	N	$281	TBD	12.5	700	155/185	L

NOTE: *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.*

★ *ENERGY STAR® models*

★ ★ *ENERGY STAR® 2025 Most Efficient models*

Single-speed Models

Model	Cooling Btu (Nominal)	HP Heating Btu	Electric Heating Btu (Back-up)	Volts	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER	CEER	ENERGY STAR®	Estimated Yearly Energy Cost	COP	Moisture Removal Pints/HR	CFM	Net/ship Wt. lbs.	Sleeve
KÜHL® SLIDE-OUT CHASSIS - COOL ONLY																	
KCQ08B10A	8,000	–	–	115	7.2	661	–	–	12.1	12	N	$65	–	2.1	200	72/85	Q
KCS12B10A	12,000	–	–	115	11.1	992	–	–	12.1	12	N	$97	–	3.5	300	112/134	S
KCM24B30A	23,800	–	–	230	13.8	2,308	–	–	10.4	10.3	N	$224	–	7.5	640	191/212	M
KCL28B30A	27,100	–	–	230	16	2,606	–	–	10.7	10.7	N	$255	–	9.3	640	193/214	L
KCL36B30A	36,200	–	–	230	23.7	3,987	–	–	9.3	9.3	N	$386	–	11	725	212/248	L
KÜHL®+ SLIDE-OUT CHASSIS - HEAT PUMP																	
KHS10B10A[2]	10,000	8,500	TBD	115	9.3	826	9.8	804	12.1	12	N	$81	2.6	2	300	109/131	S

[2]*KHS10B10A heat pumps operate on 115 volts 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.*

NOTE: *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.*

LOW GWP Refrigerant

All models use R-32 refrigerant with low Global Warming Potential

Kühl® Installation Information

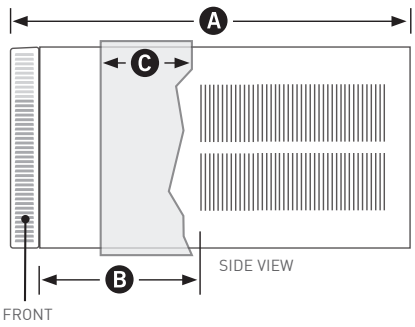
Window or Through-the-wall Installation

							WINDOW INSTALLATION		THROUGH-THE-WALL INSTALLATION					
							Window Width		Through-the-wall Installation Finished Hole			Carton Dimensions		
Sleeve	Height	Width	A Depth With Front	B Shell Depth to Louvers	Minimum Extension Into Room[1]	Minimum Extension Outside[1]	Minimum[2]	Maximum	Height	Width	C Max. Depth	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"

[1]Minimum extensions when mounted in a window. [2]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 a window with no side kits if properly installed.



Sleeve Dimensions Drawing



Electrical Requirements

Model	Circuit Rating Breaker or T-D Fuse	Plug Face (NEMA#)	Power Cord Length (ft.)	Wall Outlet Appearance
KCVQ08B10A, KCVS08B10A, KCVS12B10A, KCVM14B10A and KHVS10B11A	125V–15A	5-15P	6′	
KCVS12B30A, KCVS16B30A and KCVM18B30A	250V–15A	6-15P	6′	
KCVM24B30A, KCVL28B30A, KHVS12B33A, KEVS16B33A	250V–20A	6-20P	6′	
KHVM24B34A, KHVL28B35A, KEVL36B35A, KCVL36B30A	250V–30A	6-30P	6′	

NOTE: Power cords can be routed to the front left or right side of Kühl® units.

Cooling Sizing Guide

AREA TO BE CONDITIONED IN SQ. FT.	APPROXIMATE COOLING BTU REQUIRED
100 - 150	5,000
150 - 250	6,000
250 - 300	7,000
300 - 350	8,000
350 - 400	9,000
400 - 450	10,000
450 - 550	12,000
550 - 700	14,000
700 - 1,000	18,000
1,000 - 1,200	21,000
1,200 - 1,400	23,000
1,400 - 1,500	24,000
1,500 - 2,000	30,000
2,000 - 2,500	34,000

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

Kühl® Accessories

FreshAire® IAQ

MERV 13 Filters/Filter Brackets

Kühl® air conditioners can utilize an optional FreshAire® MERV 13 air filter that's effective at capturing and removing microorganisms from the air, which according to ASHRAE[1], the leading authority on the science behind advanced indoor air quality, include harmful airborne viruses.

[1]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

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





Window Mounting Kits[2]: Kühl®+

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

Heat / Cool Models	Kit No.
KHVQ10B11A[3]	KWIKQA
KHS10B10A, KHVS10B11A, KHVS12B33A, KEVS16B33A	KWIKSB
KHVM24B34A	KWIKMB
KHVL28B35A, KEVL36B35A	KWIKLB

[2]Window kits are required for installation of Kühl®+ models in a window.
[3]Does not include window brackets.



KWIKQA



KWIKSB, KWIKMB, KWIKLB

Drain Kit

Drain kits allow the 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

Premium carbon filters remove odors and volatile organic compounds (VOC) and can achieve up to a MERV 6 rating when used with a standard filter.

Model	Kit No.
KCVQ and KHVQ	KWCFQ
KCVS, KHVS, and KEVS	KWCFS
KCVM and KHVM	KWCFM
KCVL, KHVL, and KEL	KWCFL



NOTE: Sold as a 3 pack.

Standing Out as a Cut Above

Many Friedrich products have sustainability features, but the KCVQ08B10A, KCVS08B10A, KCBS12B10A, KHVS10B11A, KHVS12B33A, KCVM14B10A, KHVM24B34A and KHVL28B35A models have earned our Sustainability Standout® seal, indicating that they are among the best of the best. We created the seal to help you more easily find the products that save energy, save money, and save the planet.

ENERGY STAR ENERGY STAR Most Efficient 2025 www.energystar.gov

2 YR. PARTS & LABOR WARRANTY

LOW GWP Refrigerant

Friedrich.com/Kuhl

Due to continuing research in new energy-saving technology, specifications are subject to change without notice. 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 a electricity cost of $.13 per kWh.

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