KÜHL® SERIES
SMART ROOM AIR CONDITIONERS

FRIEDRICH
1883

THE EXPERTS IN ROOM AIR CONDITIONING

Kühl® Series

ULTRA PREMIUM LINE

Smart Room Air Conditioners

Commercial grade durability and more ways to save energy than any other room air conditioner.

BUILT TO LAST

Kühl incorporates high-end materials like heavy-gauge galvanized steel, rifled copper tubing, and high-tech aluminum fins.

Kühl also uses the most durable components to extend the life of your air conditioner, including fully-enclosed fan motors that seal out dirt, and powerful, energy-efficient compressors which make it as tough an air conditioner as we've ever built.
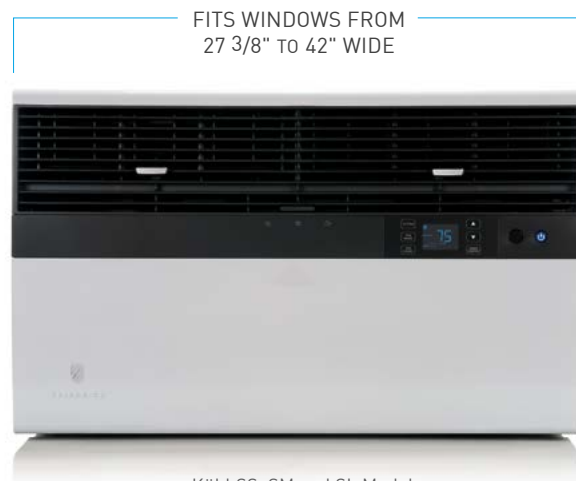
QUIET BY DESIGN

Kühl has been engineered for quiet operation. Component materials have been chosen because of their sound-absorption properties and every moving part has been braced and insulated.

Extra thick rubber grommets absorb vibration and reduce noise inside, while steel inner walls and extra dense insulation block outdoor noise.

Rugged hardboard side panels help reduce noise and keep out light. The unique air path is more streamlined, drawing air through the sides, away from moving parts. Our larger discharge vents allow for smoother airflow, delivering maximum conditioned air quietly.

FITS WINDOWS FROM 22" TO 42" WIDE

Wi-Fi ENABLED

Kühl SQ/EQ Models

FITS WINDOWS FROM 27 3/8" TO 42" WIDE

Wi-Fi ENABLED

Kühl SS, SM and SL Models
Kühl+ ES, YS, EM, YM, EL and YL Models

Friedrich room air conditioners are designed to operate in outdoor temperatures from 60°F to 115°F.

More options for energy control than any other room air conditioner

Control Kühl with a smartphone, tablet or computer.* Remotely adjust temperatures, set schedules and turn units off and on. Group units to operate like a central system. You can even connect Kühl to your utility's power grid. Check with your local utility for available programs and rebates.

*Requires the FriedrichLink® Wi-Fi optional accessory.

COMFORT & CONVENIENCE

- Two built-in 7-day energy management programs
- Create customizable, 7-day schedules (requires accessory, sold separately)
- 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 EQ08)
- Auto restart
- 8-way air flow control for better air distribution
- Control panel lockout (ON/OFF)
- Premium remote control allows user to view schedule, adjust temperature, adjust fan speed, select auto-fan and switch between cool and heat (Kühl+ models)

QUIET BY DESIGN

- 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
- Check filter reminder
- Optional carbon filter absorbs odors and reduces ozone and volatile organic compounds (VOCs)
- 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

- Smart Grid capable
- ENERGY STAR® qualified models, including heat pumps
- Multiple scheduling options save energy
- Environmentally-friendly R-410A refrigerant used in all models
- Recyclable packaging
- RoHS compliant

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
- 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 SQ and EQ models)
- Power cord can run either left or right
- Patented firm grip handles for easier chassis installation and removal
- Front cover attaches easily and securely. Nut driver included**.

ALL SLEEVES ARE INCLUDED. SIZES HAVE REMAINED UNCHANGED FOR OVER 30 YEARS

* Feature not available on Kühl SQ and EQ models. **Nut driver not required for Kühl SQ and EQ models.
†Kühl SQ and SL models have 3 fan speeds. Kühl+ models have 3 fan speeds cooling and heating.

Kühl® Room Air Conditioners

SPECIFICATIONS, INSTALLATION
AND SIZING GUIDE

FRIEDRICH
1883

Kühl® Series

SPECIFICATIONS

Model	UPC	Cooling Btu	Heating Btu	Volts	Coo
Kühl® (Cool Only)					
★ SQ06N10C	724587432664	5800	—	115	
★ SQ08N10D	724587432671	8000	—	115	
SQ10N10C		10000	—	115	
★ SS08N10C	724587432589	8000	—	115	
★ SS10N10C	724587432640	10000	—	115	
★ SS12N10C	724587432688	11900	—	115	
★ SS12N30C	724587432695	12000/11800	—	230/208	
SS14N10C	724587432701	13600	—	115	
SS16N30C	72458743400	15500/15300	—	230/208	
★ SM14N10	724587432435	13700	—	115	
★ SM18N30C	72458743411	20000/20000	—	230/208	
★ SM21N30E	72458743397	20500/20500	—	230/208	
★ SL24N30C	724587432626	24000/24000	—	230/208	
★ SL28N30C	724587432657	28000/28000	—	230/208	
SL36N30B	724587429961	36000/35500	—	230/208	
Kühl® + (Heat Pump)					
★ YS10N10C*	724587432541	10000	8800	115	
★ YS12N33C	724587432558	12000/12000	11300/11000	230/208	
★ YM18N34C	724587432732	17500/17200	15200/15200	230/208	
★ YL24N35D	724587432633	24000/24000	22000/22000	230/208	
Kühl® + (Electric Heat)					
EQ08N11D	724587432749	8000	4000	115	
ES12N33B	724587430004	12000/12000	10700/8900	230/208	
ES16N33C	72458743399	15500/15300	10700/8900	230/208	
EM18N34B	72458743249	20000/20000	13000/10600	230/208	
EL24N35B	724587431612	24000/24000	17300/14300	230/208	
EL36N35B	724587429954	36000/35500	17300/14300	230/208	

Kühl SQ/EQ Models

Kühl SS, SM and SL Models
Kühl+ ES, YS, EM, YM, EL and YL Models

KÜHL® FEATURES

- Two, 7-day energy management programs
- Customizable, 7-day schedules (requires KWIFI accessory, sold separately)
- 24-hour timer
- 4 cooling/4 fan-only speeds on select models
- Auto fan
- Auto-changeover between cooling and heating modes (Kühl+ models except EQ08)
- Auto restart
- 8-way air flow control

- Control panel lockout (ON/OFF)
- Steel inner wall and extra dense insulation materials block outdoor noise
- Vibration-isolating design and components reduce operating noise
- Fresh air intake/stale air exhaust vent*
- Washable, antimicrobial air filter
- Check filter reminder
- Optional carbon filter absorbs odors
- Easy filter access

* Option not available on SQ and EQ models

Premium LCD Remote

Full LCD display shows MODE, FAN SPEED, SET TEMPERATURE and SCHEDULE. Adjust TEMPERATURE and FAN SPEEDS, set AUTO MODE and turn the SCHEDULE ON/OFF.

Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	EER	CEER	Estimated Yearly Energy Cost	COP	Moisture Removal-Pints/HR	CFM	Net Wt. lbs.	Ship Wt. lbs.	Sleeve
4.1	472	—	—	12.3	12.1	$43	—	1.5	190	72	85	
6.1	656	—	—	12.2	12.0	$59	—	1.9	200	72	85	Q
8.9	882	—	—	11.1	10.9	$79	—	3.2	250	72	85	
5.8	656	—	—	12.2	12.0	$59	—	1.9	255	106	128	
7.2	820	—	—	12.2	12.0	$74	—	2.5	300	112	134	
8.7	975	—	—	12.2	12.0	$88	—	3.9	300	112	134	
4.5/4.9	984/967	—	—	12.2/12.2	12.0/12.0	$89	—	3.6	300	116	138	S
10.4	1214	—	—	11.2	10.9	$109	—	4.3	275	141	154	
6.5/7.1	1435/1417	—	—	10.8/10.8	10.7/10.7	$129	—	5.0	330	141	154	
9.9	1123	—	—	12.2	12.0	$101	—	3.0	360	138	150	
9.3/10.2	2092/2041	—	—	10.3/10.3	10.3/10.3	$184	—	6.0	425	132	153	M
9.3/10.2	2092/2041	—	—	10.3/10.3	10.3/10.3	$188	—	6.0	425	132	153	
10.2/11.1	2308/2308	—	—	10.4/10.4	10.3/10.3	$208	—	7.0	640	191	212	
13.1/14.1	2800/2800	—	—	10.0/10.0	9.9/9.9	$252	—	8.5	640	193	214	L
17.5/19.2	4000/3944	—	—	9.0/9.0	9.0/9.0	$360	—	12.0	725	212	248	
7.9	917	9.0	978	10.9	10.8	$83	2.6	2.0	300	109	131	S
4.9/5.2	1101/1101	5.6/5.9	1257/1213	10.9/10.9	10.8/10.8	$99	2.6/2.7	3.0	375	115	136	
7.1/7.6	1606/1578	7.3/8.0	1665/1665	10.9/10.9	10.8/10.8	$149	2.7/2.7	5.4	370	141	154	M
10.1/11.0	2330/2330	10.7/11.4	2391/2391	10.3/10.3	10.2/10.2	$210	2.6/2.6	7.0	600	197	211	L
6.1	656	11.2	1290	12.2	12.0	$61	—	1.9	200	72	85	Q
4.9/5.2	1062/1062	16.0/14.7	3500/2900	11.3/11.3	11.2/11.2	$96	—	3.4	325	113	128	S
6.5/7.1	1435/1417	16.0/14.7	3500/2900	10.8/10.8	10.7/10.7	$129	—	3.4	300	138	150	
9.3/10.2	2041/2041	19.5/17.0	5500/4650	10.4/10.4	10.3/10.3	$225	—	7.0	750	141	154	M
10.9/11.6	2308/2308	24.0/22.4	5500/4650	9.4/9.4	9.4/9.4	$225	—	6.0	425	197	211	L
17.5/19.2	4000/3944	24.0/22.4	5500/4650	9.0/9.0	9.0/9.0	$360	—	12.0	725	213	246	

- Robust 20 gauge steel cabinet
- Solid-steel blower housing
- Slinger ring technology
- Totally-enclosed commercial grade fan motor
- Durable base pan and steel inner walls
- Aluminum end plates resist rust
- Install in a window or thru-the-wall
- Slideout chassis
- Includes heavy duty window installation hardware (optional accessory on Kühl+ models, sold separately)

- Rugged hardboard side panels (heavy duty side curtains on SQ and EQ models)
- Power cord can run either left or right
- Patented firm grip handles for easier chassis installation and removal
- Smart Grid capable
- ENERGY STAR® qualified models
- EntryGard™ anti-intrusion protection secures the chassis to the sleeve to deter 'kick-in' intrusion
- Insect barrier*
- Aluminum rear grille protects the outdoor coil from debris and vandalism

5 YR. LIMITED WARRANTY

ENERGY STAR

R-410A OZONE FRIENDLY REFRIGERANT

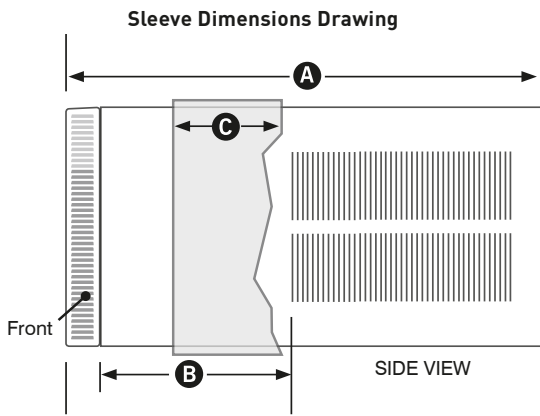All Kühl models use R-410A refrigerant.

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 ¼"	19 ¾"	21 ³/₈"	8 ½"	5 ½"	10 ¾"	22"	42"	14 ½"	20"	8 ½"	18 ³/₄"	22"	25 ¹/₂"
S	15 ¹⁵/₁₆"	25 ¹⁵/₁₆"	29"	8 ¾"	5 ¾"	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 ¾"	5 ¾"	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 ½"	16 ½"	5 ³/₈"	18 ¹⁵/₁₆"	29 ⁷/₈"	42"	20 ³/₈"	28 ¼"	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

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

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 SQ MODELS. EQO8N11D. SS08N10C, SS10N10C, SS12N10C and SS14N10C. YS10N10C. SM14N10.	125V - 15A	5- 15P	6	
SS12N30C and SS16N30C. SM18N30C and SM21N30E.	250V - 15A	6 - 15P	6	
SL24N30C and SL28N30C. ES12N33B and ES16N33C. YS12N33C.	250V - 20A	6 - 20P	6	
SL36N30B. EM18N34B and EL24N35B and EL36N35B. YM18N34C and YL24N35D.	250V - 30A	6 - 30P	6	

* YS10N10C 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.