



FRIEDRICH

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Kühl® Room Air Conditioners

**SPECIFICATIONS, INSTALLATION
AND SIZING GUIDE**

The smartest
window air conditioners
ever designed.



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Kühl SQ/EQ Models



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

Kühl® Series

SPECIFICATIONS

Model	UPC	Cooling Btu	Heating Btu	Volts	Co
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	



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.

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

★ Indicates ENERGY STAR® models

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	Q
6.1	656	—	—	12.2	12.0	\$59	—	1.9	200	72	85	
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	S
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	
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	M
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	
9.3/10.2	2092/2041	—	—	10.3/10.3	10.3/10.3	\$188	—	6.0	425	132	153	L
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	
17.5/19.2	4000/3944	—	—	9.0/9.0	9.0/9.0	\$360	—	12.0	725	212	248	S
7.9	917	9.0	978	10.9	10.8	\$83	2.6	2.0	300	109	131	
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	
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	
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	S
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	L

- 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



R-410A
OZONE FRIENDLY
REFRIGERANT

All Kühl models use R-410A refrigerant.

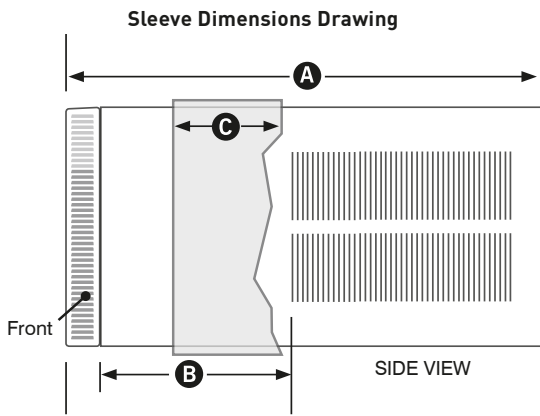
INSTALLATION

Sleeve	Height Inches	Width Inches	Depth with Front Inches	Shell Depth to Louvers Inches	Minimum Extension Into Room* Inches	Minimum Extension Outside* Inches	Window Width INCHES		In-wall Installation Finished Hole Inches			Carton Dimensions Inches		
			A	B			Minimum**	Maximum	Height	Width	Max. Depth C	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.



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. EQ08N11D. 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.



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