



FRIEDRICH

1883

Kühl® Room Air Conditioners

SPECIFICATIONS, INSTALLATION
AND SIZING GUIDE



Kühl® Series The smartest window air conditioners ever designed.

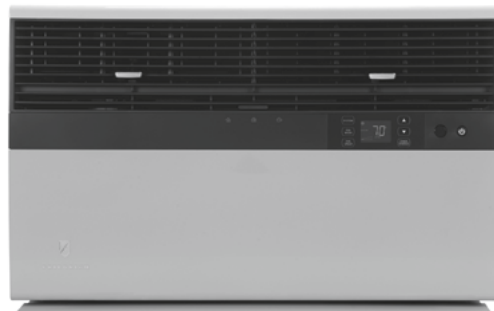
SPECIFICATIONS

★ Indicates 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
Kühl® (Cool Only)														
★ SQ06N10C	724587432664	5800	—	115	4.1	472	—	—	12.3	12.1	\$43	—	1.5	190
★ SQ08N10D	724587432671	8000	—	115	6.1	656	—	—	12.2	12.0	\$59	—	1.9	200
★ SS08N10C	724587432589	8000	—	115	5.8	656	—	—	12.2	12.0	\$59	—	1.9	255
★ SS10N10C	724587432640	10000	—	115	7.2	820	—	—	12.2	12.0	\$74	—	2.5	300
★ SS12N10C	724587432688	11900	—	115	8.7	975	—	—	12.2	12.0	\$88	—	3.9	300
★ SS12N30C	724587432695	12000/11800	—	230/208	4.5/4.9	984/967	—	—	12.2/12.2	12.0/12.0	\$89	—	3.6	300
SS14N10C	724587432701	13600	—	115	10.4	1214	—	—	11.2	10.9	\$109	—	4.3	275
★ SM14N10	724587432442	13700	—	115	9.9	1123	—	—	12.2	12.0	\$101	—	3.0	360
★ SM14N30	724587432435	13800/13300	—	230/208	5.0/5.3	1131/1099	—	—	12.2/12.1	12.0/12.0	\$102	—	3.6	360
SM18N30B	724587432718	20000/20000	—	230/208	9.3/10.2	2092/2041	—	—	9.8/9.8	9.8/9.8	\$184	—	6.0	425
SM21N30D	724587432725	20500/20000	—	230/208	9.3/10.2	2092/2041	—	—	9.8/9.8	9.8/9.8	\$188	—	6.0	425
★ SL24N30C	724587432626	24000/24000	—	230/208	10.2/11.1	2308/2308	—	—	10.4/10.4	10.3/10.3	\$208	—	7.0	640
★ SL28N30C	724587432657	28000/28000	—	230/208	13.1/14.1	2800/2800	—	—	10.0/10.0	9.9/9.9	\$252	—	8.5	640
SL36N30B	724587429961	36000/35500	—	230/208	17.5/19.2	4000/3944	—	—	9.0/9.0	9.0/9.0	\$360	—	12.0	725
Kühl® + (Heat Pump)														
★ YS10N10C*	724587432541	10000	8800	115	7.9	917	9.0	978	10.9	10.8	\$83	2.6	2.0	300
★ YS12N33C	724587432558	12000/12000	11300/11000	230/208	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
★ YM18N34C	724587432732	17500/17200	15200/15200	230/208	7.1/7.6	1606/1578	19.5/17.0	1665/1665	10.9/10.9	10.8/10.8	\$144	2.7/2.7	5.4	370
★ YL24N35C	724587432633	24000/24000	22000/22000	230/208	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
Kühl® + (Electric Heat)														
EQ08N11D	724587432749	8000	4000	115	6.1	656	11.2	1290	12.2	12.0	\$61	—	1.9	200
ES12N33B	724587430004	12000/12000	10700/8900	230/208	4.9/5.2	1062/1062	16.0/14.7	3500/2900	11.3/11.3	11.2/11.2	\$96	—	3.4	325
ES14N33	724587432466	13100/13000	10700/8900	230/208	5.2/5.6	1180/1171	16.0/14.7	3500/2900	11.1/10.9	10.9/10.9	\$106	—	4.0	325
EM18N34A	724587432091	20000/20000	13000/10600	230/208	9.3/10.2	2041/2041	19.5/17.0	4200/3500	9.8/9.8	9.8/9.8	\$184	—	6.0	425
EM21N34	724587432459	20500/20000	13000/10600	230/208	9.3/10.2	2092/2041	19.5/17.0	4200/3500	9.8/9.8	9.8/9.8	\$188	—	6.0	425
EL24N35	724587431612	23500/23200	17300/14300	230/208	11.2/12.0	2500/2468	24.0/22.4	5500/4650	9.4/9.4	9.4/9.4	\$225	—	7.0	750
EL36N35B	724587429954	36000/35500	17300/14300	230/208	17.5/19.2	4000/3944	24.0/22.4	5500/4650	9.0/9.0	9.0/9.0	\$360	—	12.0	725



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

- Robust 20 gauge steel cabinet
- Solid-steel blower housing
- 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)

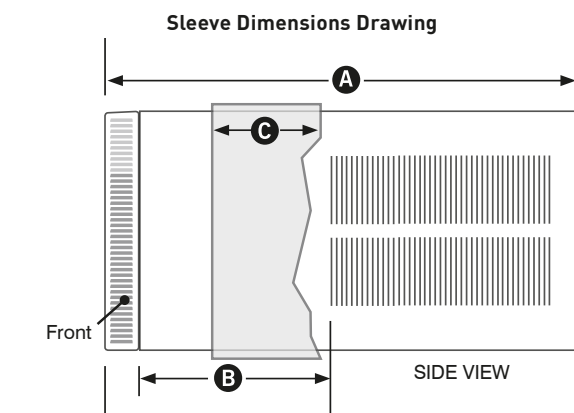
- Rugged hardboard side panels (heavy duty side curtains on SQ and EQ models)
- Power cord can run either left or right
- Patented firm grip handles for easier chassis install/removal
- Smart Grid capable
- ENERGY STAR® qualified models
- EntryCard™ anti-intrusion protection secures the chassis to the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



All Kühl models use R-410A refrigerant.

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, SM14N30 and SM18N30B, SM21N30D.	250V - 15A	6 - 15P	6	
SL24N30C and SL28N30C, ES12N33B and ES14N33, YS12N33C.	250V - 20A	6 - 20P	6	
SL36N30B, EM18N34A and EM21N34, EL24N35 and EL36N35B, YM18N34C and YL24N35C.	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. The consumer, through the AHAM Room Air Conditioner Certification Program, can be certain that the AHAM Certification Seal accurately states the unit's cooling and heating capacity rating, the amperes and the energy efficiency ratio. 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.