



FRIEDRICH

1883



I N T R O D U C I N G

Kühl Series

COLOR OPTIONS

Optional designer colored fronts sold separately. Satin Silver included.



Our continuous testing ensures your Friedrich air conditioner will perform up to our expectations— and beyond yours.

At the heart of each Kühl unit, you'll find the durable components and heavy duty construction that define the Friedrich brand: Heavy gauge steel, rifled copper tubing, high tech aluminum fins with sine wave technology, aluminum end plates that reduce corrosion, totally-enclosed commercial grade motors, high efficiency compressors, vibration absorbing technology and insulated air plenums.

Friedrich conducts rigorous performance tests to ensure customer satisfaction and safety. Run tests are performed- for up to 120 continuous days- under typical, and extreme, temperature and humidity conditions. Air flow systems are tested for powerful and precise air distribution, while sound levels are measured to ensure ultraquiet performance. Premium air filters are tested for adsorption capacities and efficiencies. The unit's control software is tested for constant and reliable operation. Packaging exceeds ISTA (International Safe Transit Association) standards in order to withstand transportation hazards.

Quality components. Advanced design technology. Extensive product testing. It's what you can expect from Friedrich.

Friedrich conducts rigorous performance tests and incorporates advanced design techniques to build the very best air conditioners.

PERFORMANCE TESTING	
Unit Performance	Product tested for capacity and energy efficiency (EER) pursuant to AHAM RAC-1 test standard and DOE requirements.
Air Handling system	Airflow systems designed utilizing state-of-the-art Computational Fluid Dynamics (CFD) and validated with empirical testing, infrared thermography, and smoke trace analysis.
Air Discharge system	Air discharge louver and directional system aerodynamic design maximizes airflow throw distance and directivity, improving room air distribution effectiveness.
Premium Air Filter	Filter capture efficiency (MERV 6 rating) as per ASHRAE Standard 52.2
Premium Carbon Air Filter	VOC removal from air using premium carbon filter tested per IBR TM P300 Gas Phase Capacity Test
Acoustics	Tested in accordance with ARI 350 – Sound Performance Rating of Non-Ducted Indoor Air Conditioning Equipment to ensure quiet operation
Electronic Controls Software	Electronic Control software rigorously tested using regression testing methodology to assure logic and control states are achieved as designed.
Electronic Controls Hardware	Electronic control hardware systems receive extreme short circuit, over / under voltage, high temp, radiated emissions, electromagnetic pulse / spike susceptibility and other tests to assure durability.
RELIABILITY	
Refrigeration and Mechanical systems	Accelerated life tests at extreme environmental conditions and at abnormal cycle rates to ensure product reliability
Compressor	Stress tested to ensure compressor reliability throughout product's life cycle
Air discharge louvers	Louvers cycle tested robotically to ensure product life cycle durability
Packaging	Shake, Drop, Crush and transit testing to ensure the packaging design is durable and robust enough to prevent damage to the unit
Field testing	Consumer feedback from actual installations
User Interface Handle	Finite Element Analysis (FEA) and load testing to ensure the handle design is capable of withstanding high stress
SAFETY	
Unit	Units are tested to the requirements of UL 485 -Standard for Safety of Room Air Conditioners to ensure safe operation. Tests include electric heater overload, rain penetration, high pressure and numerous other tests to assure a safe a reliable product

Innovative technology. Intuitive controls.

LCD PANEL AUTO DIMS WHEN NOT IN USE

NIGHTLIGHT MODE

TEMPERATURE AND FAN ADJUSTMENT MAINTAINS YOUR CHOSEN COMFORT LEVEL

BACK UP SYSTEM SAVES SETTINGS IF POWER IS INTERRUPTED

BUILT-IN, 7 DAY PROGRAMMABLE THERMOSTAT

24 HOUR TIMER

AUDIO FEEDBACK OPTION

ELECTRONIC MAINTENANCE INDICATOR

SURFACE KEYPAD LOCKOUT PROTECTS SETTINGS

CHECK FILTER REMINDER



ALTERNATELY DISPLAYS:

SET TEMPERATURE — ROOM TEMPERATURE — OUTDOOR TEMPERATURE — OR DIGITAL CLOCK AT THE TOUCH OF A BUTTON

Choose from 4 operating options:

1. SIMPLE OPERATION

Turn the unit on, select 'MODE' and make simple up/down temperature adjustments either at the control panel or with included remote. Unit operates until turned off.

2. 7 DAY DEFAULT PROGRAM

Turn the unit on and press 'SCHEDULE' to utilize default settings. (ENERGY STAR® recommended settings for optimum energy efficiency for a typical work week where the home is unoccupied during the day Monday through Friday).

3. 7 DAY CUSTOM PROGRAM

Turn the unit on and program for your preferred comfort levels and to maximize energy savings according to your schedule. Up to 4 settings per day, 7 days a week.

4. REMOTE THERMOSTAT OPERATION

Wire the unit to a wall thermostat to operate the unit remotely and override the control panel. Wall thermostats are available from Friedrich and are sold separately.

Rugged, LCD remote control



FULL LCD DISPLAY SHOWS MODE, FAN SPEED, SET TEMPERATURE, SCHEDULE

ADJUST TEMPERATURE AND FAN SPEEDS

SET AUTO MODE

TURN THE SCHEDULE ON OR OFF

Comfort has a bold new look.

A bold, satin silver front with black accenting and illuminated soft-touch controls places Friedrich Kühl Series at the forefront of room air design. Advanced digital controls intuitively provide comfort, convenience and ease of use, and allow for a range of programmability previously only associated with high-end central air systems.

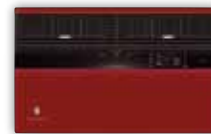
And an exciting palette of colors that complement your home and the way you live.

Technology this advanced couldn't be limited to a single color. Kühl and Kühl+ room air conditioners are available in optional designer colors that boldly stand out or blend in.



Satin Silver
(S T A N D A R D)

OPTIONAL DESIGNER COLORS



Deep Red



Cobalt Blue



Pink Diamond



Designer White



Classic Beige



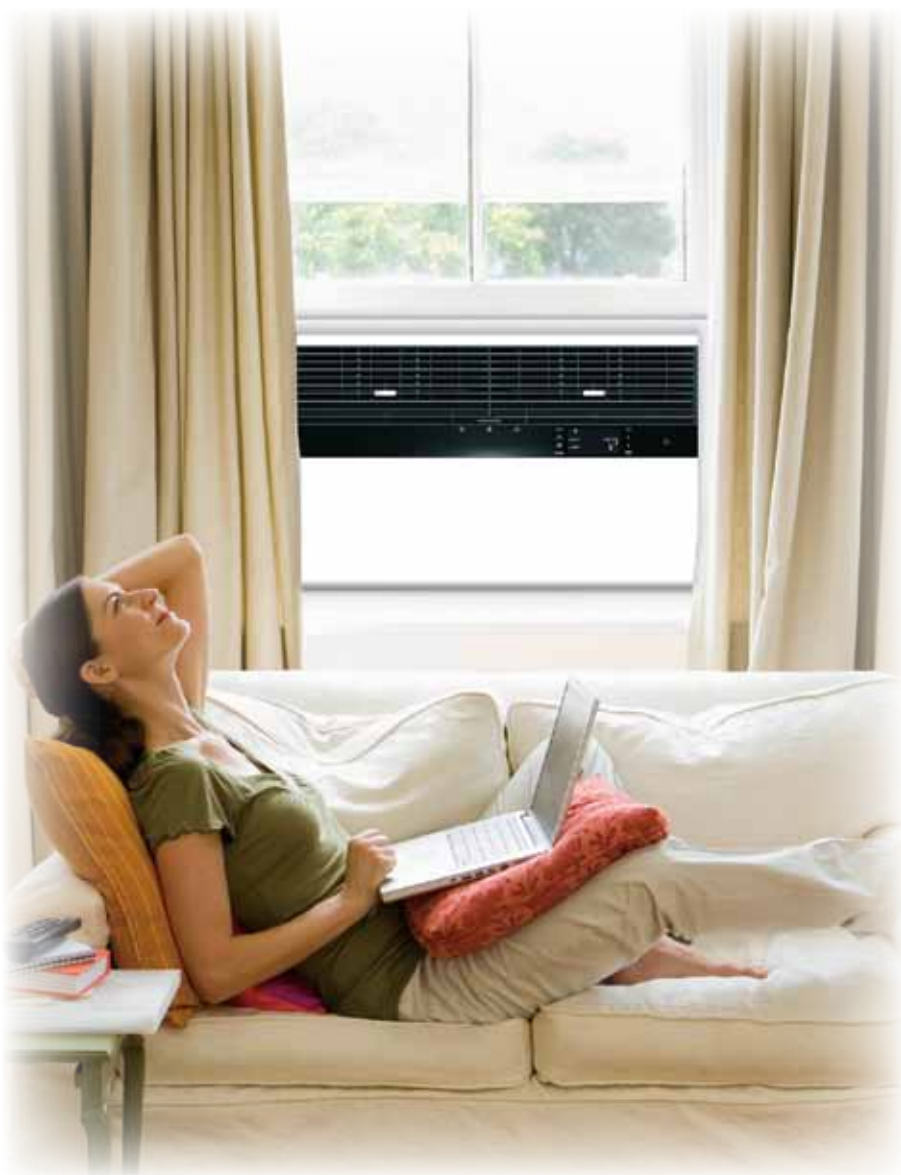
Black Onyx



Ask your sales person
or visit www.friedrich.com
for ordering information.

Choose the perfect color,
the right cooling capacity
and simply relax.

Distinctive LCD remote with mountable holster.



Comfort & Convenience

- Commercial grade durability
- Optional wired wall thermostat
- Built-in programmable 7 day thermostat
- 24 hour timer
- 4 cooling and 4 fan-only speeds on select models*
- Automatic fan speed adjustment
- Comfortwatch technology samples the air to more accurately maintain the set temperature
- 8-way air flow control
- Auto-changeover from cool to heat, or heat to cool, to maintain desired temperature (Kühl+ models)
- Temperature readout can alternately display set temperature, room temperature and outdoor temperature, or digital clock as selected
- Control panel lockout (ON/OFF)
- Scratch resistant cabinet
- LCD panel auto dims if not in use
- Nightlight mode
- 7 yr. battery provides back up system that saves settings if power is interrupted

Superior Sound Reduction Technology

- Steel inner wall and extra dense insulation materials block outdoor noise
- Vibration isolating design and components diminish traditional operating noise
- Precision engineering maximizes air flow while delivering ultraquiet operation

*Kühl 8,000 BTUh-23,500 BTU/h models only. All SL models have 3 cooling and 3 fan-only speeds. Kühl + models have 3 cooling, heating and fan-only speeds

Superior filtration

- Superior fresh air intake and stale air exhaust vent
- Washable, antimicrobial air filter
- Check filter reminder
- Optional premium filter when used in conjunction with standard filter provides superior air filtration with ratings as high as MERV 6, while also adsorbing odors and reducing ozone and VOCs
- Hinged door for easy filter access for easier maintenance
- Electronic maintenance indicators with error code storage

Installation Features

- Install in a window or thru-the-wall
- Slide-out chassis for more permanent installation and easier access for maintenance
- Includes heavy duty window installation hardware (optional accessory on Kühl+ models)
- Rugged hardboard side panels for a more permanent installation
- Power cord can run either left or right
- Firm grip handles for easier chassis installation and removal
- Front cover attaches easily and securely. Nut driver included.

Earth Friendly

- Auto Fan mode saves money by conserving energy
- 12 ENERGY STAR® qualified models, including all four heat pumps
- Environmentally-friendly R-410A refrigerant used in all models
- Recyclable packaging
- RoHS compliant

Safety & Security Features

- EntryGard anti-intrusion protection- steel retaining wire secures the chassis to the sleeve to deter 'kick-in' intrusion
- Powercord leakage current protected
- Insect barrier
- Protective rear grille

Accessories (sold separately)

- Optional designer colored front covers
- 3 pack of premium carbon filters
- (Kühl +) window installation kits
- Wall thermostat



Kühl

7900-36000 BTU/h
Up to 12.0 EER

Kühl+

Electric Heat

COOLING 11700-36000 BTU/h	ELECTRIC HEAT 10700-17300 BTU/h
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Up to 11.4 EER

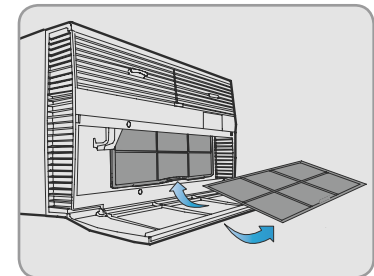
Kühl+

Heat Pump

COOLING 9500-24000 BTU/h	HEATING 7500-23500 BTU/h
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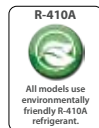
Up to 11.7 EER

Heat Pumps reverse the air conditioning cycle to provide heated air in winter. In temperatures above 39° F, heat pumps are approximately 33% more energy efficient than electric heat.



HINGED FILTER ACCESS DOOR
FLIPS OPEN AND FILTER
SLIDES OUT

OPTIONAL CARBON FILTER
REMOVES ODORS AND VOCs



Comfort & Convenience

- 12 hour timer lets you program on/off times
- 3 cooling speeds, plus 3 fan-only settings
- Money Saver® setting saves money by conserving energy
- Ultraquiet operation
- 4-way air flow control
- Auto restart saves settings if power is interrupted

Health

- One-touch, lift-out, washable antimicrobial filter for protection against fungal & bacterial growth
- Stale air exhaust

Installation

- Fixed chassis
- Standard installation hardware
- Expandable side curtains
- Power cord can run either left or right out of the side of the unit front

Safety Features

- EntryGard anti-intrusion protection



CP05
COOLING
5500 BTU/h
10.7 EER

Comfort & Convenience

- 12 hour timer lets you program on/off times
- Auto Air Sweep swing louvers provide more even air distribution
- 3 cooling speeds, plus 3 fan-only settings
- Money Saver® setting saves money by conserving energy
- Ultraquiet operation
- 4-way air flow control
- Auto restart saves settings if power is interrupted

Health

- One-touch, lift-out, washable antimicrobial filter for protection against fungal & bacterial growth
- Stale air exhaust

Installation

- Slide-out chassis
- Standard installation hardware
- Expandable side curtains
- Power cord can run either left or right out of the side of the unit front

Safety Features

- EntryGard anti-intrusion protection



CP06
COOLING
6000 BTU/h
10.7 EER

CP08
COOLING
7800 BTU/h
10.7 EER

Sizing your air conditioner correctly is vital.

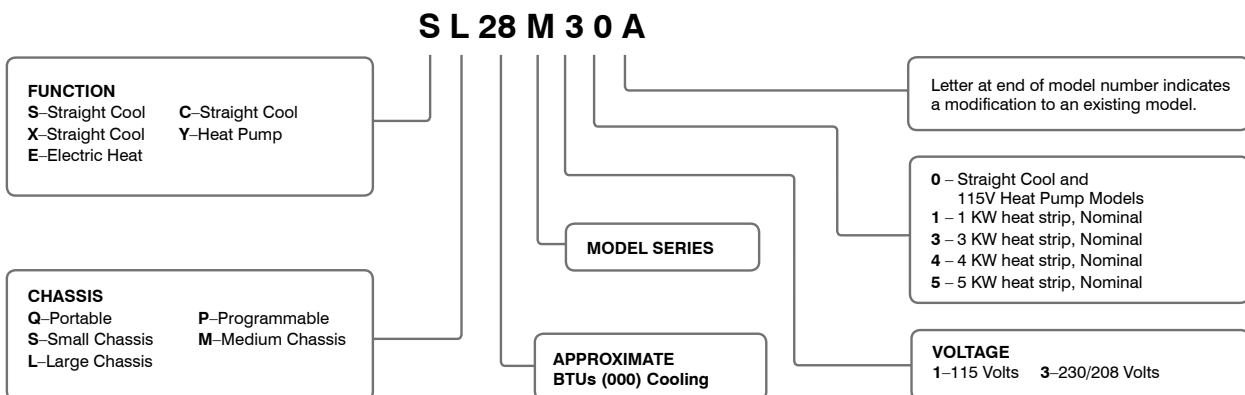
Sizing Guide

The following guide is based on normal room insulation, average number of sun-exposed windows and two-person occupancy.

FT ²	Btu/h
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
1,400-1,600	25,000
1,600-1,900	28,000
1,900-2,700	36,000

Due to variations in room design, climate zone and occupancy, larger areas may require the use of multiple units to provide the optimal cooling solution. Please consult your retail sales person.

Room Air Conditioner Model Identification Guide



Specifications

★ ENERGY STAR® qualified

Model	Cooling Capacity Btu	Heating Capacity Btu	Volts Rated	Cooling Amps	Cooling Watts	Heating Amps	Heating Watts	COP	Energy Efficiency Ratio EER	Estimated Yearly Operating Cost	Moisture Removal Pints/HR	Room Side Air Circulation CFM	Sleeve	Net Weight Lbs
Kühl														
★ SS08M10	7900	—	115	6.1	677	—	—	—	11.7	\$54	1.0	265	S	99
★ SS10M10	9500	—	115	7.7	848	—	—	—	11.2	\$68	2.0	260	S	106
★ SS12M10	12000	—	115	10.0	1071	—	—	—	11.2	\$86	3.0	300	S	112
SS14M10	14000	—	115	12.0	1444	—	—	—	9.7	\$115	3.5	325	S	116
★ SS12M30	11700/11200	—	230/208	4.8/4.9	1026/982	—	—	—	11.4/11.4	\$82	2.8	275	S	112
SS15M30	14500/14300	—	230/208	6.4/6.8	1405/1385	—	—	—	10.3/10.3	\$112	3.5	360	S	116
★ SM18M30	17500/17300	—	230/208	7.4/8.0	1635/1617	—	—	—	10.7/10.7	\$131	4.6	350	M	140
★ SM21M30	20800/20700	—	230/208	9.4/10.3	2080/2070	—	—	—	10.0/10.0	\$166	6.0	425	M	132
★ SM24M30	23500/23300	—	230/208	11.2/11.9	2500/2479	—	—	—	9.4/9.4	\$200	10.0	390	M	152
★ SL28M30	27800/27000	—	230/208	13.5/14.4	2865/2812	—	—	—	9.7/9.6	\$229	8.5	600	L	193
SL36M30	36000/35700	—	230/208	19.0/20.5	4235/4200	—	—	—	8.5/8.5	\$338	12.0	725	L	212
Kühl + Heat Pump														
★ YS10M10*	9500	7500	115	7.8	812	7.6	743	3.0	11.7	\$65	1.9	285	S	109
★ YS12M33	12100/12100	9400/9000	230/208	5.2/5.4	1120/1120	5.6/5.8	1132/1139	2.4	10.8/10.8	\$89	3.0	265	S	115
★ YM18M34	18200/17800	15400/15500	230/208	8.5/8.9	1838/1798	8.5/8.7	1833/1761	2.6	9.9/9.9	\$147	5.4	370	M	141
★ YL24M35	24000/23600	23500/23200	230/208	11.1/12.0	2474/2433	13.4/12.6	2610/2575	2.6	9.7/9.7	†	7.0	600	L	197
Kühl + Electric Heat														
ES12M33	11700/11200	10700/8900	230/208	4.8/4.9	1026/982	16.0/14.7	3500/2900	3.3	11.4/11.4	\$82	2.8	275	S	113
ES15M33	14500/14300	10700/8900	230/208	6.4/6.8	1405/1385	16.0/14.7	3500/2900	3.0	10.3/10.3	\$112	3.5	360	S	117
EM18M34	17500/17200	13000/10600	230/208	7.4/8.0	1635/1617	19.5/17.0	4200/3500	3.1	10.7/10.7	\$131	4.6	350	M	141
EM24M34	23500/23300	13000/10600	230/208	11.2/11.9	2500/2479	19.5/17.0	4200/3500	3.1	9.4/9.4	\$200	10.0	390	M	153
EL36M35	36000/35700	17300/14300	230/208	19.0/20.5	4235/4200	24.0/22.4	5500/4650	2.5	8.5/8.5	\$338	12.0	725	L	213
XStar®														
★ XQ05M10	5500	—	115	4.5	491	—	—	—	11.2	\$39	1.0	170	Q	72
★ XQ06M10	6000	—	115	4.9	500	—	—	—	12.0	†	1.0	175	Q	72
★ XQ08M10	7500	—	115	6.9	701	—	—	—	10.7	\$56	1.7	175	Q	71
XQ10M10	9500	—	115	9.0	970	—	—	—	9.8	\$56	2.5	180	Q	71
XStar® Electric Heat														
EQ08M11	7500	4000	115	6.3	701	11.2	1290	2.8	10.7	\$56	1.9	175	Q	72
CP														
★ CP05N10A	5500	—	115	4.8	510	—	—	—	10.7	\$41	1.3	135	P1	46
★ CP06F10	6000	—	115	5.1	560	—	—	—	10.7	\$45	1.8	210	P6	51
★ CP08F10	7800	—	115	6.8	720	—	—	—	10.7	\$58	2.3	250	P6	54
★ CP10F10	10000	—	115	8.5	920	—	—	—	10.8	\$74	3.0	270	P7	73
★ CP12F10	12000	—	115	10.2	1110	—	—	—	10.8	\$89	3.3	310	P7	73
★ CP15F10	14700	—	115	12.0	1370	—	—	—	10.7	\$110	2.5	470	P4	121
★ CP18F30	18000/17600	—	230/208	8.1/8.8	1682/1644	—	—	—	10.7	\$135	2.8	570	P5	141
★ CP24F30	24000/23500	—	230/208	10.9/11.8	2553/2500	—	—	—	9.4	\$206	4.7	590	P5	165

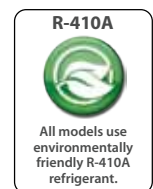
* Operates on 115 volt and is not equipped with supplemental heat. Will not provide heat at temperatures below 40°F. Friedrich room air conditioners are designed to operate in outdoor temperatures from 60° F to 115° F.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.

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.

Estimated yearly operating cost based on a 2007 national average electricity cost of 10.65 cents per kWh. † The estimated yearly operating cost of this model was not available at the time the range was published.



Installation Information / Sleeve Dimensions

Sleeve	Height	Width	Depth with Front	Shell Depth to Louvers	Minimum Extension Into Room*	Minimum Extension Outside*	Window Width		Thru-the-wall Installation Finished Hole		
			A	B			Minimum**	Maximum	Height	Width	Max. Depth C
Q	14"	19 3/4"	21 3/8"	8 1/2"	5 1/2"	10 3/4"	22"	42"	14 1/4"	20"	8 1/2"
P1†	12"	18 1/2"	15"	5"	3 1/2"	10 3/4"	20 1/8"	36"	NOT FOR THRU-WALL		
P4	17 1/2"	26"	27 5/8"	8 7/8"	5 1/2"	16 5/8"	26 1/2"	42"	17 3/4"	26 1/4"	8 3/8"
P5	17 1/2"	26"	29 3/4"	8 7/8"	5 1/2"	19 1/2"	26 1/2"	42"	17 3/4"	26 1/4"	8 3/8"
P6	14"	18 3/8"	20 7/8"	8 1/8"	4 1/2"	11"	20 1/8"	36"	14 1/4"	18 3/4"	7 1/2"
P7	15"	23 5/8"	22 1/4"	8 3/4"	4 1/2"	12"	25 1/4"	39"	15 1/4"	23 7/8"	8"
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"
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"
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"





* Minimum extensions when mounted in a window.

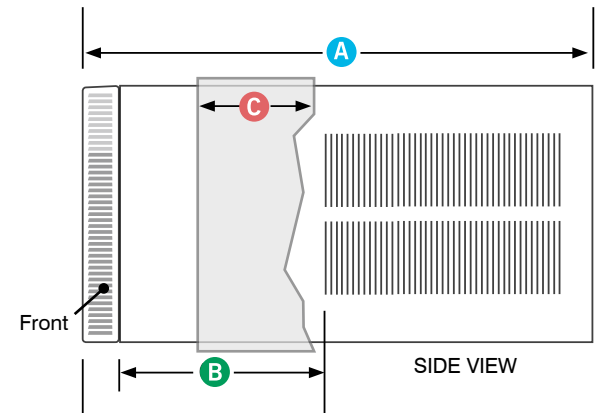
** Minimum widths achieved using one side curtain assembly as opposed to both in a standard installation.

† Sleeve P1 does not have thru-the-wall hole dimensions, as these units are fixed chassis and should not be installed thru-the-wall.

NOTE: S, M and L sleeves may be installed in window with no side kits if properly installed.

Circuit Rating/ Breaker

Model	Circuit Rating Breaker or T-D Fuse	Plug Face (NEMA#)	Power Cord Length (ft.)	Wall Outlet Appearance
CP05			7	
CP06, CP08, CP10, CP12 and CP15. All XQ MODELS. SS08M10, SS10M10, SS12M10 and SS14M10. EQ08M11. YS10M10.	125V - 15A	5 - 15P	6	
CP18. SS12M30, SS15M30, SM18M30 and SM21M30.	250V - 15A	6 - 15P	4	
CP24. SM24M30 and SL28M30. ES12M33 and ES15M33. YS12M33.	250V - 20A	6 - 20P	4	
SL36M30. EM18M34, EM24M34 and EL36M35. YM18M34 and YL24M35.	250V - 30A	6 - 30P	4	



Window Mounting Kits

Heat/Cool Models	Kit No.
EQ08M11	WIKQ
ES12M33, ES15M33, YS10M10 and YS12M33.	KWIKS
EM18M34, EM24M34, YM18M34.	KWIKM
EL36M35 and YL24M35.	KWIKL

Premium Carbon Filters

Model	Kit No.
All SS, ES and YS Models	KWCFS
All SM, EM and YM Models	KWCFM
All SL, EL and YL Models.	KWCFL

Each kit contains 3 replacement carbon filters

Friedrich heat/cool models include accessories for thru-the-wall installation only. Window mounting requires use of optional accessory kit as listed above.

Custom color fronts

For other custom color fronts not pictured in this brochure, visit www.friedrich.com

A full line of air conditioning solutions

PORTABLE AIR CONDITIONERS

Great for fast back-up or supplemental cooling. Plug into a standard 115 volt outlet. They can be quickly vented through a window or wall opening. Full display electronic controls and remote control.

IDEAL FOR:

Workshops, garages, home offices, dorm rooms, sunrooms, bedrooms, attics and basements.

THRU-THE-WALL AIR CONDITIONERS

Residential and commercial applications. 26 and 27 inch wall sleeve models. A high efficiency replacement for older units.

IDEAL FOR:

Deep exterior walls and year-'round installations. Can be installed flush with exterior wall and floor level.

PACKAGED TERMINAL AIR CONDITIONERS

Energy efficient and extremely quiet. Friedrich PTACs offer programmable electronics with a large LED display that provides precise temperature control and energy savings. Installs thru-the-wall.

IDEAL FOR:

Lodging, healthcare, dormitories and any application where a thru-the-wall installation is desired.

DUCTLESS SPLIT SYSTEMS

Sleek, absolutely quiet and incredibly energy efficient, with SEERs up to 20.0! Twenty total system configurations including nine dual, tri-zone and quad-zone wall-mounted configurations. Floor and ceiling models also available.

IDEAL FOR:

Zone cooling or locations where no ductwork exists, or is impossible or too costly to install. Any area where security is a concern.

VERTICAL SINGLE PACKAGE UNITS

Self contained unit installs in a small utility closet. A simpler way to condition multiple rooms. VERT-I-PAK installs as easily as a PTAC and the concealed installation creates a more homelike feel in a guest room or suite.

IDEAL FOR:

Suites, extended stay properties, apartments and dorms; or any application where lower sound levels are desired.



See the full line of Friedrich products @ www.friedrich.com



Friedrich is a partner in the Energy Star® program which promotes the conservation of energy and the protection of the environment through the purchase of high efficiency appliances.



Friedrich Air Conditioning Co. | P.O. Box 1540 | San Antonio, TX 78295-1540 | 800.541.6645 | fax 210.357.4480
www.friedrich.com