KÜHL® SERIES

COMMERCIAL GRADE ROOM AIR CONDITIONERS

FRIEDRICH

1883

Kühl® Series

COMMERCIAL GRADE

Room Air Conditioners

Tough enough for the most demanding applications

Kühl is used in industrial and commercial applications where only the most rugged air conditioners can survive.

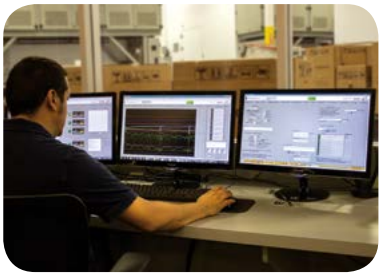
Extensive testing

Friedrich conducts rigorous performance tests in our own UL-certified lab to ensure customer satisfaction and safety. Run tests are performed for up to 120 continuous days under extreme temperature conditions.

Air flow systems are tested for powerful and precise air distribution using state-of-the art Computational Fluid Dynamics (CFD). Sound levels are measured and optimized in our Friedrich sound lab to ensure ultra quiet performance. Premium air filters are tested for absorption 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.

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



COMMERCIAL GRADE CONSTRUCTION

Quality materials, superior components and construction

- **The highest grade materials** are used to build a product that will perform reliably season after season even in the most demanding environments.
- **20 gauge steel** is used in order to create a more robust air conditioner cabinet that will withstand years of hard use.
- **Vibration and noise** isolating technology.
- **Two resilient rings on motor mount** prevent metal-to-metal contact, which eliminates extra vibration and noise.
- **Solid steel blower wheel housing** for maximum sound reduction.
- **Rifled copper tubing** with greater surface area for heat exchange, which increases the efficiency of the coils, and improves the overall energy efficiency of the unit.
- **Insulated plenum** prevents outside air intrusion.
- **Entrygard™ kick-in intrusion protection**- steel retaining wire secures chassis to the sleeve to deter 'kick-in' intrusion.
- **Firm grip handles** make grasping the chassis for installation and removal much easier.

Robust, painted steel cabinet with aluminum rear grille

Kühl® has Energy Management under control

Kühl offers unrivaled energy savings options, no matter how you control one or all of your units

FriedrichLink®

Control Kühl with a smartphone, tablet or computer.

Connect Kühl to a Building Management System.

Built-in Capabilities Control Panel & Remote Control	1. KEYPAD LOCKOUT FEATURE **Protects settings** and prevents any/all manipulation of controls.
	2. 24-HR. TIMER
	3. TWO, BUILT-IN 7 DAY SCHEDULES **One for residential use** that raises the temperature during working hours, and lowers it in the evening; and **another for commercial use** that raises the temperature after working hours and on the weekends.
Optional Programming Capabilities	4. CUSTOM 7-DAY PROGRAMS Create up to **5 custom programs**. Each 7-day program allows **up to 4 setting changes per day**. Create **individual programs** per unit or **group units** into a single custom program.
	5. BANDWIDTH CONTROL/TEMPERATURE LIMITING Set the **maximum low and high temperature limits** allowed on the unit (temperature can't be manipulated from the control panel)
Wireless Control Options	6. WIRELESS CONTROL **Controlled programming** and grouping of Kühl units **with a smartphone, tablet or computer**. Allows for **remote diagnostics** and user can **group units** to a common program. (FriedrichLink® Wi-Fi accessory sold separately)
	7. WIRELESS WALL-MOUNTED THERMOSTAT **Optimize temperature control** for ideal comfort. **Control up to 8 units** per stat through RF technology (additional units require a KCM). Offers 5 + 2 day programmability with up to 4 programs per day (KWW Wireless Thermostat sold separately)
	8. BUILDING MANAGEMENT SYSTEM (BMS) INTERFACE* Universal potential w/KCM and Enernet Partnership. **Full integration into existing BMS** with a KCM module (1 for each Kuhl unit) and a KJD. KEG may also be required depending on Building Management System. Uses RF communication and mesh network topology. BACnet compatible. Contact your Friedrich sales representative for more information.

*Building Management Systems are not compatible with Kühl SQ and EQ models.

KWW is the first wireless wall thermostat for a room air conditioner

CONTROL UP TO 8 KÜHL UNITS FROM A SINGLE WALL-MOUNTED THERMOSTAT

Wireless thermostat

FOUR PROGRAM PERIODS

- (Morning, Day, Evening, and Night)

  The time and temperature can be set for each period. Upon initial power up the KWW loads time and temperature program default parameters for weekday and weekend days. The default program parameters conform to Energy Star guidelines and are a good point from which to start.
- Battery power, no control wiring needed. Runs on 2-AA batteries (4-included), the thermostat can operate continuously for approximately 18 months, and can be mounted in any suitable location that will provide good temperature control.
- Kick stand allows the thermostat to stand on a flat surface such as a table or shelf, in the event that permanent mounting to a wall is not desired.
- RF technology means flexibility. Radio frequency technology used to allow the KWW to communicate with the KCM; this is on a 900MHz RF band.
- Large Blue Backlight Screen
- Easy push button adjustments
- Degree °F and °C selection button
- Utility Demand Response capable / interface to any building automation system

Kühl® Series

Built for demanding applications

Kühl is rugged and durable with the control and convenience of a central air conditioning system. Control Kühl units via FriedrichLink®.

You'll find more options, features and ways to customize each cooling experience than you ever thought possible in a window air conditioning solution.

Convenient remote
LCD display shows Mode, Fan Speed, Set Temperature and Schedule.

FITS WINDOWS FROM
22" TO 42" WIDE

Kühl SQ/EQ Models

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

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

COOL ONLY MODELS

5800 to 36000 Btu

HEAT PUMPS

COOLING
10000 to 24000 Btu

HEATING
8800 to 22000 Btu

ELECTRIC HEAT MODELS

COOLING
7500 TO 36000 Btu

HEATING
4000 to 17300 Btu

COMFORT

- Control from your smartphone or computer via FriedrichLink® (required accessory sold separately)
- 24-hour timer
- Up to 4 cooling and 4 fan-only speeds on select models†
- Automatic fan speed adjustment
- Auto-changeover between cool and heat to maintain set temperature (Kühl+ models except EQ08)
- 8-way air flow control
- Temperature readout can display set temperature or room temperature
- LCD panel auto dims if not in use
- LCD settings lockout option
- Premium remote control allows user to activate schedule, adjust temperature, adjust fan speed or select auto-fan; can also switch between cool and heat (Kühl+ models)

MAINTENANCE & INSTALLATION

- Check filter reminder and error code storage
- Same sleeve dimensions for 30+ years
- Slideout chassis for more permanent installation and easier access for maintenance
- Installs in a window or in-wall
- Heavy-duty installation hardware lasts longer and provides a superior barrier from the outside elements (optional accessory on Kühl+ models)
- Rugged hardboard side panels or (heavy duty side curtains on SQ and EQ models) for a more permanent installation
- Power cord can run left or right
- Firm grip handles for easier chassis installation and removal
- Front cover attaches easily and securely. Nut driver included**

DURABILITY

- Sealed control panel for protection from dust, moisture and contaminants
- Control module is separate from touch controls for better protection from the elements, abusive handling or accidental damage and to minimize repair costs
- 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 pans and steel inner walls
- Unit's structural integrity allows it to be removed, cleaned and maintained outside of its sleeve
- 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
- Defrost control protects coil against freeze up

SOUND REDUCTION TECHNOLOGY

- Steel inner wall and extra dense insulation blocks outdoor noise
- Vibration isolating design and components diminish traditional operating sound levels
- Precision engineering maximizes air flow while delivering ultra quiet operation

ENERGY MANAGEMENT

- 2 built-in 7-day energy management programs
- Control up to 8 units with wireless thermostat option
- FriedrichLink® Wi-Fi allows monitoring and control of one or all of your Kühl air conditioners remotely
- Compatible with building management system*
- Autofan mode saves money by conserving energy
- ENERGY STAR® qualified models, including heat pumps
- Environmentally-friendly R-410A refrigerant used in all models
- Recyclable packaging
- RoHS compliant

SAFETY & SECURITY

- EntryGard™ anti-intrusion protection - secures chassis to the sleeve with a steel retaining wire to deter 'kick-in' intrusion
- Power cord current leakage protected
- Aluminum rear grille protects the outdoor coil from damaging debris and vandalism
- Insect barrier*

HEALTH & IAQ

- Superior fresh air intake and stale air exhaust vent*
- Washable, antimicrobial air filter
- Optional premium carbon filter provides superior air filtration with ratings as high as MERV 6, while also adsorbing odors, and reducing ozone and VOCs when used in conjunction with standard filter
- Hinged door for easy filter access

* 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.

ACCESSORIES

FRIEDRICHLINK® WI-FI ADAPTER

Wi-Fi Adapter Accessory connects to unit to allow for remote wireless access and programming from a computer, tablet or mobile device.

Model	Kit No.
N Series	KWIFI

WIRELESS THERMOSTAT- KWW

Wireless thermostat for control of Kühl units. One thermostat can control up to 8 Kühl units. Additional units require 1 KCM communication module per unit. KWW Thermostat ships with 1 KCM Communication Module.

COMMUNICATION MODULE- KCM

Communicates with KWW thermostat or building management system.

PREMIUM CARBON FILTERS

Remove odors and VOCs (volatile organic compounds). Achieve up to a MERV 6 rating when used with standard filter. Sold in packs of 3.

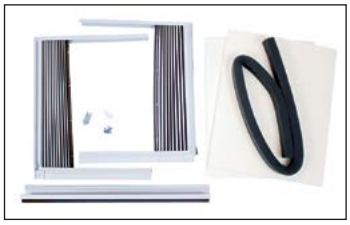
Model	Kit No.
SQ and EQ	KWCFQ
SS, ES and YS	KWCFS
SM, EM and YM	KWCFM
SL, EL and YL	KWCFL

WINDOW MOUNTING KITS: KÜHL+

Heavy duty kits required for installation of these Kühl+ models in a window.

Heat/Cool Models	Kit No.
EQ08N11D*	KWIKQA
ES12N33B, ES16N33C, YS10N10C and YS12N33C.	KWIKSB
EM18N34B and YM18N34C.	KWIKMB
EL24N35B, EL36N35B and YL24N35D.	KWIKLB

*EQ08N11D window kit KWIKQA does not include window brackets.



KWIKQA

KWIKSB, KWIKMB, KWIKLB

FRIEDRICH

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