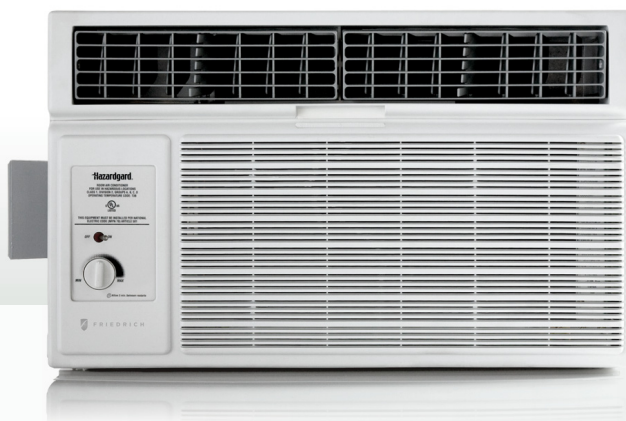


THE EXPERTS
IN ROOM AIR CONDITIONING



FRIEDRICH
1883

50/60 HERTZ MODELS



Hazardgard[®]

UL LISTED

for CLASS 1, DIV 2,
GROUPS A, B, C and D.

CERTIFIED

in accordance with
ISA 12.12.01 and NFPA 70
(NATIONAL ELECTRIC CODE),
ANSI/UL 484 Room Air Conditioners

KSA REGISTERED

and TESTED in accordance with
SASO 2681

HAZARDOUS LOCATION ROOM AIR CONDITIONERS

UL LISTED FOR CLASS 1, DIVISION 2,
GROUPS A, B, C AND D HAZARDOUS LOCATIONS.



Hazardgard®

60 Hertz
North America
14500 to 24000 Btu
Up to 9.7 EER

Hazardgard®

50 Hertz
International
19500 to 20500 Btu
9.0 EER

Hazardgard® is specifically designed to cool living quarters, storage areas and other enclosures situated in hazardous locations, where specific volatile flammable liquids or gases are handled or used within enclosed containers or systems.

Hazardgard meets T4 temperature classification means unit surface temperatures will not rise above 135° C/275° F. (note: 50/60Hz model listed as T4A for surface temperatures to 120° C/248° F. Operates at low ambient conditions without freezing at outdoor ambient temperatures as low as 7° C/45° F. Tolerates higher outdoor temperatures up to 55° C /130° F.

Equipment is certified in accordance with ISA 12.12.01 and NFPA 70 (National Electric Code)

ARTICLE 501

Class I, Div. 2, Group A and Group B

Class I, Div. 2, Group B

Class I, Div. 2, Group C

Class I, Div. 2, Group D

ARTICLE 505

Class I, Zone 2, Group IIC

Class I, Zone 2, Group IIB plus hydrogen, or "+H2"

Class I, Zone 2, Group IIB

Class I, Zone 2, Group IIA

Equipment is certified in accordance with ANSI/UL 484 and SASO 2681

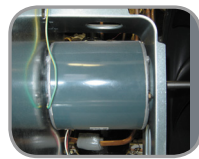
For more than 30 years, Hazardgard has endured some of the toughest and most unforgiving operating conditions imaginable. Time-tested in the field where it counts, Hazardgard is trusted by professionals who have to get the job done.

22-gauge, G60 steel air conditioner cabinet is powder coated for corrosion protection and to withstand years of hard use .

Totally enclosed, heavy-duty motors have a hermetically sealed overload for arc-free operation.

FEATURES

- Permanent split capacitor motor
- Hermetically sealed refrigeration system
- Environmentally sealed on/off switch and gold plated contacts in thermostat for corrosion resistance
- Solid-state control relays for compressor and fan operation
- Hot gas bypass allows the air conditioner to operate at low ambient conditions without freezing at outdoor temperatures as low as 45° F (7°C)
- Hermetically sealed reciprocating compressor is cooled during the refrigeration cycle, which allows the unit to tolerate higher outdoor temperatures up to 130° F (55°C)
- Larger, commercial grade, enclosed fan motor with hermetically sealed overload for arc-free operation. Totally enclosed to assure efficient operation under adverse electrical conditions
- Unit utilizes field supplied, direct-wired, 15-amp circuit with time-delay fuse that will tolerate current surge without tripping the breaker
- 22-gauge, G60 steel air conditioner cabinet is powder coated for corrosion protection and to withstand years of hard use
- High density EPS foam insulation for thermal resistance and sound control
- Heavy duty hexacomb packaging resists damage during shipment and is environmentally friendly



COILS COATED FOR CORROSION RESISTANCE

MODEL SH24M20

- ElectroFin® 5-stage, immersion ecoat process on 100% of metallic surfaces on the outdoor coil provides outstanding corrosion resistance protection in coastal or corrosive environments

ELECTROFIN BENEFITS:

- Excellent adhesion characteristics
- Less than 1% thermal degradation
- Outstanding chemical resistance
- Passed 6048 hrs. ASTM B-117 Salt Spray

ELECTROFIN MEETS THE FOLLOWING:

- MIL-C-46168 Chemical Agent Resistance -DS2, HCl Gas
- CID A-A-52474A (GSA)
- MIL-STD 810F, Method 509.4 (Sand and Dust)
- MIL-P-53084 (ME)-TACOM Approval
- MIL-DTL-12468 Decontamination Agent (STB)
- DPG (Douglas Proving Grounds) Soil & Water Exposure Tests
- GM9540P-97 Accelerated Corrosion Test (120 cycles)
- ASTM B117-G85 Modified Salt Spray (Fog) Testing-2,000 hours
- ASTM B117 Salt Spray (tested by ARL for Lockheed Martin)

5-stage ecoat



MODELS SH15M30A, SH20M30A, SH20M50A

- Diamonblue™ Advanced Corrosion Protection on the outdoor coil protects the coil against deterioration and extends the life of the unit especially in coastal or corrosive environments


DIAMONBLUE™
Advanced Corrosion Protection



Friedrich air conditioners can be found in some of the world's toughest locations. Oil companies rely on us to cool offshore oil rigs in the most extreme conditions, and military bases and government offices all over the world choose Friedrich.

APPLICATIONS

Built to perform in the harshest environments

- Offshore oil rigs, on-shore oil company offices and refineries
- Petrochemical sites and propane fill-up stations
- Paint and varnish storage or processing plants
- Grain alcohol processors or storage sites
- Plant areas using strong solvents or chemicals
- Munitions plants or armories
- PVC or plastics plants and processing points
- Recycling plants
- Furniture refinishing/stripping workshops
- Fertilizer plants
- Office complexes where methane is a by-product
- Hazardous materials storage
- Container labs
- For analyzer houses/shelters



SPECIFICATIONS

Hazardgard®

Model	Electrical Characteristics				Energy Efficiency Ratio EER	Moisture Removal Pints/HR	Air Direction Controls	Air Circulation CFM	Refrigerant
	Cooling Capacity Btu/Hr.	Volts Rated	Cooling Amps	Cooling Watts					
60 HERTZ - NORTH AMERICA									
SH15M30A	14500/14000	230/208	6.9/7.5	1495/1443	9.7/9.7	6.0	8-way	375	R-410A
SH20M30A	20000/19000	230/208	8.7/9.6	2125/2021	9.4/9.4	4.0	8-way	375	R-410A
SH24M30	24000/23700	230/208	12.6/13.5	2727/2788	8.8/8.5	8.0/7.5	8-way	385	R-401A
50 HERTZ - INTERNATIONAL									
SH20M50A	19500/19100	240/220	9.8/10.3	2167/2156	9.0/9.0	5.6/5.5	8-way	425	R-410A
SH24M30	20500	220	13.2	2412	8.5	7.0	8-way	360	R-410A

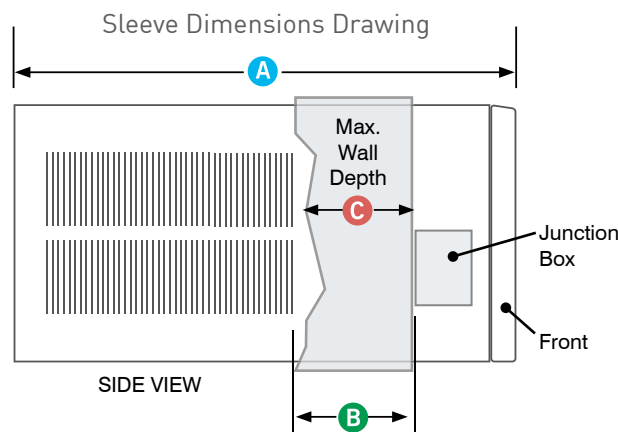
Installation Information

Model	Dimensions INCHES						Window Width INCHES		In-Wall Installation Finished Hole INCHES			Circuit Rating Breaker or T - D Fuse	Weight Lbs.	
	Height	Width	Depth with Front A	Depth J Box to Louvers B	Minimum Extension Into Room	Minimum Extension Outside	Min.	Max.	Height	Width	C Max. Depth	Volts - Amps	Net	Shipping
SH15M30A	15 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	16 3/16"	26 3/16"	6"	250V-15	140	167
SH20M30A	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	250V-15 (230V) 250V-20 (208V)	166	170
SH20M50A	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	250V-15	171	175
SH24M30	17 15/16"	25 15/16"	27 3/8"	6"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	250V-30	180	185

Due to continuing engineering research and technology, specifications are subject to change without notice. Manufactured under U.S. Design Patent DES 368, 306 decorative front; Utility Patent 5, 622, 058. MAXIMUM outdoor ambient operating temperature is 130°F. (55°C) MAXIMUM TEMPERATURE RATING FOR CLASS I, DIVISION 2, GROUPS A,B,C,D.

For global applications, Hazardgard cooling capacities are tested in a certified laboratory at moderate (T1*) and hot (T3*) climate conditions in accordance with SASO (Saudi Arabian Standards Organization) Standard 2681. SASO Standard 2681 is adopted from ISO Standard 5151 for testing and rating for performance of non-ducted air conditioners and heat pumps.

* Capacity and efficiency values at each climate conditions are available upon request.



NOTE: Hazardgard unit must be hard-wired.



Friedrich Air Conditioning Co. | 10001 Reunion Place, Suite 500 | San Antonio, TX 78216 | 877.599.5665 | www.friedrich.com