ENGINEERED
FOR THE WORLD'S
TOUGHEST ENVIRONMENTS

HAZARDGARD® AIR CONDITIONERS

50 HZ | 60 HZ

ATEX Certified,
II 3 G Ex nA nC IIC T4 Gc

IECEx Certified,
Ex ec nA nC II C T4 Gc

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

FRIEDRICH
DELIVERING BOLDLY CRAFTED COMFORT

Hazardgard® meets T4
temperature classification

- Unit surface temperatures will not rise above 135° C/275° 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.

The Friedrich Advantage

RELIABLE DESIGN BACKED BY ROBUST ENGINEERING

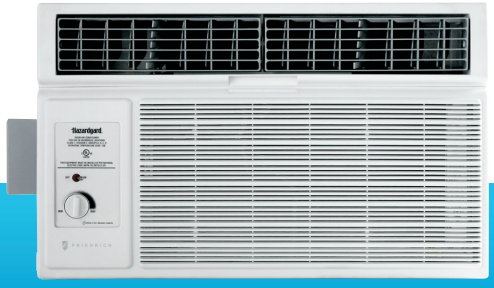
For almost 40 years, industrial professionals have trusted Hazardgard® to deliver safe and reliable cooling in the most extreme conditions. Hazardgard® is specifically designed to cool laboratories, control rooms, living quarters, storage areas and other enclosures situated in hazardous locations; where specific volatile flammable liquids or gases are handled or used within enclosed containers or systems.

Quality
Friedrich is an established player in the air conditioning industry and known for manufacturing quality products.

Product Reliability
Used across the globe, Hazardgard® is a tested and reliable product and not quick-fix, job shop alteration.

Durability
Robust engineering, commercial grade components and extensive field testing provide the durability and safety required in hazardous locations.

Availability
Off the shelf models allow for efficient manufacturing, shorter lead times and standardized component parts.



HAZARDGARD® IS RATED FOR THESE CONDITIONS:

Model	Hazardous Location Classification: Gases	
SH20N50AT SH24N30AT	ATEX, CE Ex II 3 G Ex nA nC IIC T4 Gc IECEx, Ex ec nA nC IIC T4 Gc UKCA	National Electrical Code, NFPA 70 ARTICLE 501: Class 1, Division 2, Group A/B/C/D, Temperature Class T4/T4A* ARTICLE 505: Class 1, Zone 2, Group II C/ II B/ II A, Temperature Class T4/T4A*

Durability & Reliability

- 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
- Commercial grade, enclosed fan motor with hermetically sealed overload for arc-free operation
- Direct-wired (field supplied) , 15-amp circuit with time-delay fuse that will tolerate current surge without tripping the breaker
- Powder coated 22-gauge, G60 steel air conditioner cabinet for corrosion protection and to withstand years of hard use
- Stainless steel fan shaft
- Steel enclosure for solid state relays
- Sealed control enclosure for thermostat and on-off control
- Durable outdoor industrial electrical cable harnesses and cable glands

Coated Coils for Corrosion Resistance

ElectroFin® 5-stage, immersion ecoat process, or Diamonblue™ Advanced Corrosion Protection on 100% of metallic surfaces on the outdoor coil provides outstanding corrosion resistance protection and extends the life of the unit, especially in coastal or corrosive environments.

Diamonblue™ Advanced Corrosion Protection

MODEL SH20N50AT

- Anti-corrosive, hydrophilic coating

ElectroFin® 5-stage, Immersion Ecoat Benefits:

MODEL SH24N30AT

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

DIAMONBLUE™
Advanced Corrosion Protection

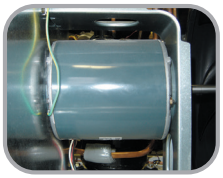
5-Stage ecoat Corrosion Protection

MEETS THE FOLLOWING:

- MIL-C-46168 Chemical Agent Resistance
- DS2, HCI 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)

Performance in Extreme Conditions

- Hot gas bypass for cooling operation at low ambient temperatures, down to 45°F / 7°C without freezing
- Designed to tolerate high ambient temperatures, allowing units to operate in T3 conditions



Commercial grade enclosed fan motor

Steel enclosure for solid state relays

Industrial cable harnesses & cable glands

Molded compressor plug harnesses

Trusted to perform in these applications

- Offshore oil rigs, on-shore oil company offices and refineries
- Petrochemical sites
- 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 workshops
- Office complexes where methane is a by-product
- Hazardous materials storage

Hazardgard®

Model Information

SPECIFICATIONS

Model	Cooling Capacity (Btu/Hr.)	Volts Rated	Cooling Amps	Cooling Capacity (KW)	Energy Efficiency Ratio EER	Moisture Removal Pints/ HR	Air Direction Controls	Air Circulation (CFM)	Refrigerant
60 HERTZ -PERFORMANCE									
SH24N30AT	23,500/23,700	230/208/60	11.8/13.5	7.03/6.95	9.7/9.7	8.0/7.5	8-way	385	R-410A
50 HERTZ -PERFORMANCE									
SH20N50AT	19,500/19,100	240/220/50	9.8/10.3	5.72/5.60	9.0/9.0	5.6/5.5	8-way	425	R-410A

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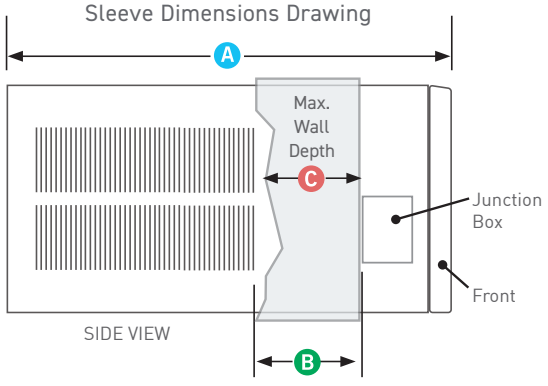
INSTALLATION INFORMATION

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
SH24N30AT	17 15/16"	25 15/16"	27 3/8"	4 7/8"	3 1/16"	16 15/16"	27 7/8"	42"	18 3/16"	26 3/16"	6"	250V-30	180	185
SH20N50AT												250V-15	171	175

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, 662, 058. MAXIMUM outdoor ambient operating temperature is 130°F. (55°C) MAXIMUM TEMPERATURE RATING FOR CLASS 1, DIVISION 2, GROUPS A, B, C, D.

Capacity and efficiency values at each climate conditions are available upon request.
NOTE: Hazardgard unit must be hard-wired.

Sleeve Dimensions Drawing



Due to continuing engineering research and technology, specifications are subject to change without notice.

U.S. MAXIMUM outdoor ambient operating temperature is 115°F. (46°C) MAXIMUM TEMPERATURE RATING FOR CLASS 1, DIVISION 2, GROUPS A, B, C, D.

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

NOTE: Hazardgard unit must be hard-wired.

Manufactured under Design Patent DES 368, 306 decorative front; Utility Patent 5, 662, 058.

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