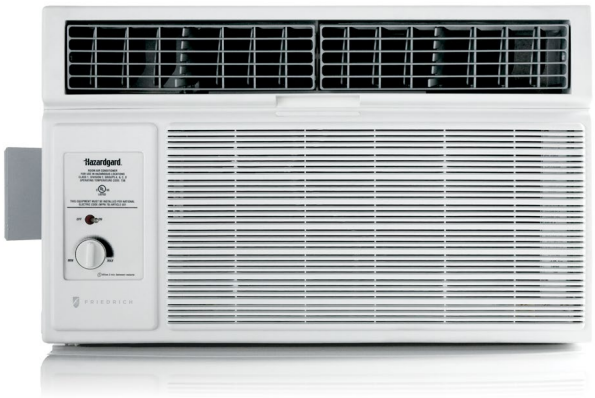
FRIEDRICH

Friedrich Hazardgard® Series

Hazardous Location Room Air Conditioners



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

KSA registered model tested in accordance with SASO 2681

FEATURES

- 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. Permanent split capacitor motor
- 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
- 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

Coated Coils for Corrosion Protection

- 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®

- Standard on all models (except SH24N30A, see below)
- Anti-corrosive, hydrophilic coating

ElectroFin® 5-stage, Immersion Ecoat (Model SH24N30A only)

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

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)

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	23500/23700	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	19500/19100	240-220-50	9.8/10.3	5.72/5.60	9.0/9.0	5.6/5.5	8-way	425	R-410A

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 UK CA	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*

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.

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

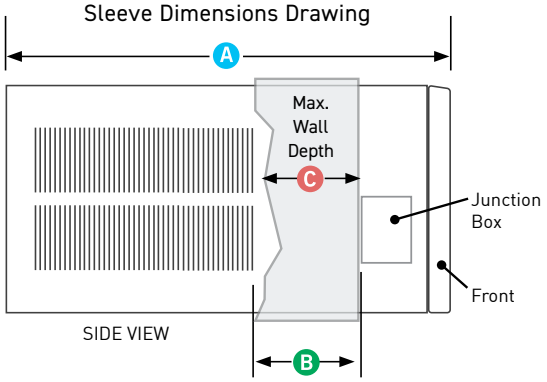
U.S. MAXIMUM outdoor ambient operating temperature is 115°F. (46°C) MAXIMUM TEMPERATURE RATING FOR CLASS 1, DIVISION 2, GROUPS A, B, C, D.

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.

Sleeve Dimensions Drawing



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