

TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

Type Examination Certificate Number: **DEMKO 15 ATEX 1364X Rev. 0**

Equipment: **Air Conditioners, SH Series Models SH20N50AT-A and SH24N20AT-A,**

Manufacturer: **Friedrich Air Conditioning Co.**

Address: **10001 Reunion Place, San Antonio, TX 78216 USA**

This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

UL International Demko A/S certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 3** equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report no. **4786411965**

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to Standards:

EN 60079-0:2012+A11:2013

EN 60079-15:2010

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

This Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

The marking of the equipment or protective system shall include the following:

Ex II 3 G Ex nA nC IIC T4 Gc

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2015-07-23

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



Schedule

TYPE EXAMINATION CERTIFICATE No.

DEMKO 15 ATEX 1364X Rev. 0

Report: 4786411965

Description of Equipment:

Air Conditioners, Model Series SH20N50, SH24N20, may be followed by AT, followed by –A. These products are room air conditioners intended for through the wall or window type of mounting. The air conditioner is provided with field installed outlet box for conduit connection in the field.

The air conditioner employs a slide-out type chassis. All units are shipped with outlet box, installation operating instructions and mounting hardware. Subject Models employ IP40 rated electrical enclosures to house make/break components.

Temperature range

The ambient temperature range is +8 °C to +55 °C.

Nomenclature:

Part	Designation	Description
I	SH	Hazardgard Series
II	20	Nominal Capacity 20,000 BTU's
	24	Nominal Capacity 24,000 BTU's
III	N	Hazardgard Engineering Series
IV	20	230/208V - 60Hz / 240/220V – 50Hz
	50	240/220V – 50Hz
V	AT	ATEX
VI	A	Marketing Code

Electrical data

Model	SH20N50AT-A	SH24N20AT-A
Voltage (V)	220/240	208/230 (60Hz), 220/240 (50Hz)
Frequency (Hz)	50	50/60
Cooling: BTU/HR	19500/19100	2400/2370, 21000/20500
EER (Energy Efficient Ratio)	9.0/9.0	8.8/8.5, 8.1/8.5
AMPS	9.8/10.3	
MCA	12.4/11.6	12.6/13.5, 13.2
MOP	20/20	20/20, 20/20
FLA, Fan Motor		
Motor HP	1/3	1/4
RLA, Compressor	8.6	11.8
LRA, Compressor	48.0	74
Fan FLA	2.0	1.5
Refrigerant, R-10A Amount, oz (max)	40	43
Design Pressure:		
High Side, psig	600	600
Low side, psig	300	300

Routine tests

Routine tests are required per EN 60079-15, clause 23.2.1.

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.



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Special conditions for safe use:

- Provision shall be made to prevent the rated voltage being exceeded by the transient disturbances of more than 140% of the peak rated voltage.
- Only for use in locations providing adequate protection against the entry of solid foreign objects or water capable of impairing safety.
- The equipment must be installed only for use in locations providing adequate protection against the entry of solid foreign objects or water capable of impairing safety.
- Only permanently wired cables may enter the cable glands. The user shall provide for the required strain relief.
- Degree of protection will be safeguarded only when sealing and cable entry fittings are properly fitted. The Manufacturer's instructions must be followed.
- Cable Glands shall be mounted into the enclosure in such a way that they are mechanically protected against impact force.
- To avoid the buildup of electrostatic charge, regularly clean the unit with a damp cloth.

Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2012+A11:2013 and EN 60079-15:2010.

Additional information

The Air Conditioners, Model Series SH20N50, SH24N20 have in addition passed the tests for Ingress Protection to IP 40 in accordance with EN60529: 1991/A1 2000

