

# UNIT ASSESSMENT CERTIFICATE

Issued by a competent body in explosion safety

## ARTIDOR 20ATEX9999 X

We, ARTIDOR Explosion Safety B.V., Emopad 38, 5663 PB Geldrop, The Netherlands, herewith declare that:

**Apparatus:** Explosion-safe rooftop air conditioning system  
**Type:** AR-053/140  
**Power supply:** 230 V AC, 50 Hz  
**Capacity:** 3,1 kW cooling  
**Quantity:** 1 piece  
**Lot No.:** AS209999

has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to directive 2014/34/EU.

Compliance with the Essential Health and Safety Requirements for group II, category 3G equipment has been assured by compliance with the following harmonized standards:

- EN 60079-0:2018
- EN 60079-7:2015 / A1:2018
- EN 60079-11:2012
- EN 60079-18:2015 / A1:2017
- EN 80079-36:2016
- EN 80079-37:2016

The design and the results of the examination and tests carried out are documented in confidential technical construction file No. AS209999, held at the offices of Artidor Explosion Safety B.V.

If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to the special conditions for safe use as described in this declaration.

The marking of the equipment includes the following:



II 3 G Ex ec h ic mc IIC T3 Gc

This certificate only relates to the examination and tests according to directive 2014/34/EU and to the equipment of the above mentioned type, lot number and Ex code.

Production is controlled by the ARTIDOR Quality Assurance system in accordance with ISO 9001:2015 and annex VIII of directive 2014/34/EU.

12. This certificate does not imply that the apparatus meets all statutory requirements in any particular industry or circumstance.

13. The ambient temperature allowed for the apparatus is -20 °C to +52 °C.

14. Description

The rooftop air conditioner is an unitary and self-contained unit and has been designed to provide cooling for rugged duty applications. It is equipped with a closed, pre-charged refrigeration circuit, driven by a fully encapsulated compressor protected against overload. The condenser fan and evaporator blower are sharing a common used brushless electric motor, thermally protected, with a filter on the outside coil insuring reliable performance. Substantial power delivered to the inside air blower assures delivery of full system capacity under all conditions.

The ceiling plate contains two control knobs to set the mode of operation and the desired temperature. The control knobs are connected to the central control box by means of an intrinsically safe circuit.

The central control box contains the connection terminals for power, terminals to connect the intrinsically safe circuit to the ceiling plate and terminals for the compressor and ventilation unit. All relays and the barrier are protected by encapsulation meeting the requirements of "Ex mc".

An ignition hazard assessment in accordance with EN 80079-36 has been carried out to the rooftop air conditioning including compressor, fan motor, central control box and capacitor box. Each part has been assessed with regard to its explosion-safe properties and is modified and marked accordingly. The sheet steel enclosure is partly part of the protection degree against ignition applied.

The apparatus under (4) in its basic version is originally manufactured by Airxcel, Wichita, Kansas, U.S.A. designated as model No. xxxyyy and with serial No. xxxxx.

15. Electrical data:

Supply voltage: 240 VAC, 1 phase, 50 Hz  
Electrical power: 1,6 kW  
Rating: 7,6 A  
To be fused at: 15 A max.

16. **Special conditions for safe use**

1. Install an isolating switch close to the apparatus and be sure that it's explosion-safe in accordance with the classification of its environment.
2. Pre-fuse the electric power supply in accordance with the power consumption of the apparatus connected.

Geldrop, 1 April 2020

M. Moolenaar  
Managing Director and EX Authorized Person