

UNIT ASSESSMENT CERTIFICATE

ARTIDOR 24ATEX9999 X

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

4. **Apparatus:** Explosion-safe monoblock air conditioning system
Type: AR-056/012
Power supply: 230 V AC, 50 Hz
Capacity: 2,7 kW nominal cooling
Quantity: 1 piece
Lot No.: AS249999

5. 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 European directive 2014/34/EU.

6. 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 14986:2017
- 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

7. The design and the results of the examination and tests carried out are documented in confidential technical construction file No. AS249999, held at the offices of Artidor Explosion Safety B.V.

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

9. The marking of the equipment includes the following:



II 3 G Ex ec h ic mc IIB+H2 T3 Gc AC unit
II 3 G Ex ic IIC T6 Gc Remote control

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

11. Production is controlled by the Artidor Quality Assurance system in accordance with ISO 9001:2015 and annex VIII of European 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 +50 °C.

14. Description

The air conditioning system consists of an AC unit and a remote control. In function the system refrigerates or heats air. The AC unit contains an internal and external heat exchanger, each provided with an electrically driven fan assembly. While in cooling mode, the outdoor heat exchanger provides a continuous flow of cold fluid which decreases the temperature of the indoor heat exchanger, which in its turn, absorbs the energy of the air, resulting in a room air temperature decrease. In heating mode, the flow of compressed refrigerant is reversed by the 4-way valve, resulting in an increase of the room air temperature. The remote control enables the user to operate the indoor unit.

An ignition hazard assessment in accordance with EN ISO 80079-36 has been carried out to the air conditioning system. Each part has been assessed with regard to its explosion-safe properties and is modified and marked accordingly.

The unit consists of a thermally protected single rotary compressor, two heat exchangers with electrically driven fan assemblies, a 4-way valve, an electronics PCB with microprocessor and several NTC temperature sensors. The constructional parts and covers of the AC unit are mostly made out of non-metallic parts. The electric condensate pump has been removed from the system.

The infrared remote control contains electronics (PCB) with a display and membrane pushbuttons all housed in a non-metallic housing containing two (2) 1,5 V DC AAA dry cell batteries.

The surface resistance of the plastic cover of the air conditioning unit and of the housing of the remote control are higher than 10^9 Ohm. A warning is attached to the outside to draw attention to the risk of electrostatic charge.

The apparatus under (4) in its basic version is originally manufactured by Olimpia Splendid S.p.A., Italy with type designation Unico Edge 30 HP EVA.

All instructions as mentioned on the labels attached to the apparatus and as mentioned in the original installation manual must be followed strictly.

15. Electrical data

Supply voltage:	230 VAC, 1 phase, 50 Hz
Electrical power:	1,0 kW nominal
Rating:	6,6 A
To be fused at:	10 A max.

16. **Specific conditions for use**

1. An explosion-safe electrical isolating switch must be installed in the vicinity of the AC unit.
2. Pre-fusing of the AC unit in accordance with the power consumption is required.
3. To avoid electrostatic charge clean only with a damp cloth. Do not use solvents.
4. Propagating brush discharges must be avoided, please refer to the Installation Manual.

Geldrop, 2 December 2024

M. Moolenaar
Managing Director and EX Authorized Person