

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 air conditioning split system
Consisting of: Outdoor unit and indoor unit with remote control
Type: AR-051/0711
Power supply: 220 – 240 V AC, 50 Hz
Capacity: 7 kW 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+H ₂ T3 Gc	Outdoor unit
II 3 G Ex ec h ic IIB+H ₂ T4 Gc	Indoor 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 outdoor unit is -30 °C to +60 °C and -20 °C to +60 °C for the indoor unit and remote control.

14. Description

The air conditioning split system consists of an outdoor unit and an indoor unit with remote control. In function the system refrigerates air. The indoor unit contains a heat exchanger which is connected to the outdoor unit using special tubing. The outdoor unit provides a continuous flow of cold fluid which decreases the temperature of the heat exchanger, which in its turn absorbs the energy of the air, resulting in a room air temperature decrease. 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 apparatus. Each part has been assessed with regard to its explosion-safe properties and is modified and marked accordingly.

The outdoor unit consists of a sheet steel enclosure containing the compressor, 4-way valve, expansion valve(s), NTC temperature sensors, fan assembly and the control electronics. The aluminium connection box for connection of the power cable and the interconnecting cable to the indoor unit is mounted at the front of the unit. The sheet steel enclosure is partly part of the protection degree against ignition applied.

The indoor unit consists of an electrically driven fan assembly, louvre motors, an electronics PCB and NTC temperature sensors all covered by a non-metallic hood. The low voltage circuits to the temperature sensors and louvre motors are intrinsically safe, fed by the electronics PCB. The output circuits of the PCB have a limited voltage and current output meeting the requirements of the EN 60079-11 technical standard on intrinsically safe circuits. The surface resistance of the non-metallic hood is higher than 10⁹ Ohm. A warning is attached to the outside of the hood to draw attention to the risk of electrostatic charge.

The 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 apparatus under (4) in its basic version is originally manufactured by Toshiba Carrier (Thailand) Co. Ltd., Thailand with the following type identification and serial number(s):

outdoor unit: RAV-GP801ATP-E and serial No. 42xxxxx
indoor unit: RAV-HM801KRT-E and serial No. 52xxxxx

15. Electrical data:
Supply voltage: 220 - 240 V AC, 50 Hz
Electrical power: 3,61 kW
Current rating: 12,2 A
To be fused at: 16 A max.

16. **Specific conditions for 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.
3. To avoid electrostatic charge clean with a damp cloth only. Do not use solvents.
4. Propagating brush discharges shall be avoided, please refer to the Installation Manual.

Geldrop, 1 September 2024

M. Moolenaar
Managing Director and EX Authorized Person

Example