

# Explosion-safe rooftop air conditioners AR-053 for containers, vehicles and crane cabins



## Features

- ATEX certified
- CE marked
- Suitable for environments in which gas or vapor is present, classified as zone 2
- Cooling only
- Very compact and easy to install
- Refrigerant R410A
- Extremely robust, very reliable
- Coated sheet steel plating, tubing and fins
- Optional: wired remote control



II 3 G Ex ec h ic mc IIB+H2 T3 Gc



## Description

Artidor's explosion-safe rooftop air conditioners are made to safely provide a pleasant climate in an area that can contain an explosive atmosphere as a result of released gas.

The rooftop air conditioners only take up little space. The control knobs for ventilating, cooling or heating and the air thermostat are built-in in the low ceiling panel. No connections need to be made to the cooling system to install the compact rooftop air conditioner and therefore there is no need to call in a specialized refrigeration technician. The circuits to the operation knobs and thermostat are intrinsically safe and the connection between the rooftop unit and the ceiling plate is made by means of connectors. Installation of the unit is therefore fast and efficient.

The rooftop unit can be provided with a wired remote control if access to the control knobs in the ceiling panel is not practical.

All units are provided with an additional coating of the sheet steel parts, copper tubing and aluminum condenser and evaporator fins to increase service life under harsh conditions.

The Artidor rooftop air conditioners are explosion-safe and certified in accordance with the European Directive 2014/34/EU (ATEX 114) and have a CE mark. The air conditioners meet the requirements for product category 3 G, suitable for use in a hazardous area classified as Zone 2 (gas).



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## for containers, vehicles and crane cabins



### Technical data - general

|                          |                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Explosion safety:        | II 3 G Ex ec h ic mc IIB+H2 T3 Gc                                                                                                                                        |
| European directives:     | 2014/34/EU (ATEX) and 2014/30/EU (EMC)                                                                                                                                   |
| Applied 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 and EN 80079-37:2016                           |
| Certificate:             | EU Declaration of Conformity / Unit Assessment Certificate                                                                                                               |
| Ambient temperature:     | -20 °C to +60 °C                                                                                                                                                         |
| Operational temperature: | +7 °C to +52 °C                                                                                                                                                          |
| Resistance:              | Shock and vibration resistant design                                                                                                                                     |
| Ingress protection:      | IP54 for all parts, including fan motor                                                                                                                                  |
| Coating:                 | All sheet metal parts, copper tubing and aluminum condenser and evaporator fins are provided with an additional coating to increase service life under harsh conditions. |
| Power connection:        | Factory mounted H07RN-F cable, 3 x 2,5 mm <sup>2</sup> , length 10 meter                                                                                                 |
| Controls connection:     | The circuits to the control knobs are intrinsically-safe and are connected to the units control box by means of connectors.                                              |
| Dimensions (L x W x H):  | Rooftop unit: 97 x 67 x 30 cm, ceiling plate: 56 x 54 x 5 cm<br>Roof opening: 36 x 36 cm, roof thickness: 15 cm max.                                                     |

### Technical data – model specific

|                     |                               |                               |
|---------------------|-------------------------------|-------------------------------|
| Model / order code: | AR-053/250                    | AR-053/260                    |
| Cooling capacity:   | 4,3 kW (15.000 BTU/h)         | 3,95 kW (13.500 BTU/h)        |
| Power supply:       | 115 / 120 VAC, 60 Hz, 1 phase | 230 / 240 VAC, 50 Hz, 1 phase |
| Running Watts:      | 1,9 kW                        | 1,5 kW                        |
| Start-up current:   | Up to 59 A / 0,15 s           | Up to 24 A / 0,15 s           |
| Fuse rating         | 25 A (slow)                   | 10 A (slow)                   |
| Refrigerant:        | R410A                         | R410A                         |
| Fan speeds:         | 2                             | 2                             |
| Max. air flow:      | 520 m <sup>3</sup> /h         | 470 m <sup>3</sup> /h         |
| Weight:             | 42 Kg                         | 44 Kg                         |

### Optional wired remote control

|                     |                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------|
| Model / order code: | AR-053/900 (replaces the control knobs in the ceiling plate)                                       |
| Settings:           | Off / fan low / fan high / cooling low / cooling high<br>Temperature control knob                  |
| Dimensions:         | 240 x 120 x 100 mm                                                                                 |
| Connection:         | Factory mounted Ölflex EB CY 4x0,75 mm <sup>2</sup> cable, length 5 meter, provided with connector |