

Explosion-safe AR-050 Air handler / evaporator

Suitable for use in Zone 1

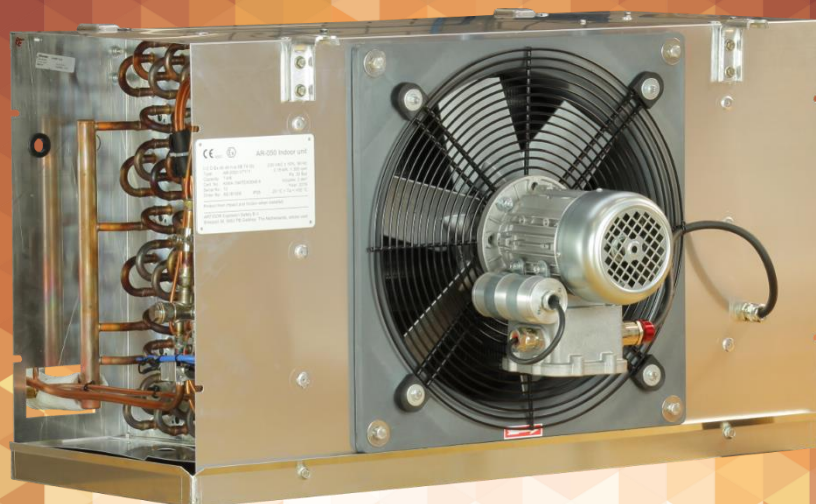


Features

- Capacities up to 14 kW
- Suitable for hazardous environments in which gas, vapor or mist is present, classified as Zone 1
- ATEX EU Type Examination Certificate
- Robust axial fan with aluminum impeller
- Intrinsically safe room air thermostat
- For ambient temperatures up to 55 °C
- Refrigerant R513A
- Increased safe junction box for easy installation
- 230 VAC, 50 / 60 Hz



II 2 G Ex db eb h ia IIC T4 Gb



Description

Artidor's explosion-safe AR-050 air handlers / evaporator units are designed to maintain the correct temperature in areas intended for the storage of chemicals, flammable substances or for charging lead batteries of forklift trucks or UPS systems (uninterruptable power supplies). The compact design ensures maximum availability of the storage space. The units are equipped with highly efficient coils made from inner grooved copper tubing and aluminum fins, reducing the inner volume and refrigerant use.

The units are provided with an explosion-safe fan with aluminum fan blades, a flameproof electric motor and an anti-static mounting plate. The room air thermostat is part of an intrinsically safe circuit which can be connected to the air handler's junction box. This junction box also holds the power connections to the fan motor.

The units are designed for use of the non-flammable, non-toxic A1 refrigerant R513A. Other refrigerants can be applied on request.

An air conditioner outdoor / condenser unit provided with a control box that holds the necessary safety features and barriers for the intrinsically-safe circuits to the air handler / evaporator unit is available as an option. Also an explosion-safe version suitable for use in zone 2 is available.

The AR-050 air handlers / evaporator units are explosion-safe and meet the requirements of European Directive 2014/34/EU (ATEX 114), product category II 2G, gas group IIC and temperature class T4. The units are CE marked.



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Technical data

Nominal capacity:	2 up to 14 kW
Explosion safety:	II 2 G Ex db eb h ia IIC T4 Gb
Conformity:	European directive 2014/34/EU (ATEX 114)
Applied standards:	EN 60079-0:2012 / A11:2013, EN 60079-1:2014, EN 60079-7:2015 / A1:2018, EN 60079-11:2012, EN 80079-36:2016 and EN 80079-37:2016
Certificate:	EU Type Examination Certificate No. KIWA 19ATEX0049X
Ambient temperature:	-20 °C up to +55 °C
Fan(s):	230 VAC, 50 / 60 Hz single phase or 400 VAC, 50 / 60 Hz three phase Diameter(s): 250, 300, 350, 400, 450 or 500 mm
Nr. of fans:	Up to 3
Fan properties:	Short cased 4-pole axial fan with aluminum impellor
Power supply:	220 – 240 VAC, 50 Hz (400 VAC, 3 phase, 50 Hz on request)
Fin spacing	4 or 6 mm
Electric heating:	Not available
Refrigerant:	R513A

Note: R513A is a non-flammable, non-toxic A1 refrigerant with a global warming potential (GWP) of 613. It is an environmental friendly replacement of R134A, suitable for medium temperature applications and highly recommended for industrial cooling.

Options

Description
Air conditioner outdoor / condenser unit provided with a control box that holds the necessary safety features and barriers for the intrinsically-safe circuits to the indoor / evaporator unit.
Explosion-safe air conditioning outdoor / condenser unit, suitable for use in hazardous areas classified as zone 2. The unit is provided with a control box that holds the necessary safety features and barriers for the intrinsically-safe circuits to the indoor / evaporator unit.
Blygold PoluAL XT coating of the aluminum fins and copper tubing of the condenser and / or evaporator unit to increase service life under harsh conditions as found offshore or coastal areas.
Explosion-safe II 2 G Ex de IIC T6 work switch suitable for use in Zone 1.
Packing of the air conditioner in a palletized wooden export crate, meeting the requirements of the International Standards for Phytosanitary Measures (ISPM15).

Quotation

Please contact us for more information or a detailed quotation for your specific application.