

# Explosion-safe air conditioners AR-051

## Split systems based on Toshiba

### Features

- Based on Toshiba
- ATEX certified
- Suitable for use in Zone 2
- From 2,5 to 14 kW, cooling and heating
- Ambient temperatures from -27 °C up to +52 °C
- Industrial, compact and corrosion resistant models available
- Additional protective coating possible
- Combination of explosion-safe and standard non-explosion-safe parts possible



II 3 G Ex ec h ic mc IIC T3 Gc  
II 3 G Ex ec h ic IIC T4 Gc



### Description

Artidor's explosion-safe air conditioners are made to safely ensure a good climate in an area where a release of gas, vapor or mist could possibly cause an explosive atmosphere (Zone 2). The units are widely used in office spaces, offshore temporary living quarters, crane cabins and at the storage of chemicals and flammable substances.

Depending on the required power, a wall-mounted or ceiling-mounted indoor unit can be selected. Duct or cassette model indoor units can also be supplied on request. Multisplit versions are also among the extensive options.

The Artidor air conditioners are explosion-safe and certified in accordance with European directive 2014/34/EU (ATEX 114) and are CE marked. The systems can consist of a combination of explosion-safe and non-explosion-safe units, depending on the zoning of the area where the units are placed. During the conversion of the units to explosion-safe, the greatest possible attention is given to the maintainability and ease with which the units can be installed. The functionality remains completely intact.

For placement in a corrosive environment, a number of corrosion-resistant versions are available with factory coated condenser fins and copper tubing and additional coating of the sheet steel plating. Standard units can also be provided with an additional protective coating.

In addition to Toshiba's systems, we can also convert systems from other manufacturers to explosion-safe. Ask for the possibilities.

Please contact our sales team ([sales@artidor.com](mailto:sales@artidor.com)) for a quote including all technical details, actual prices and delivery times.

# Explosion-safe air conditioners AR-051

## Split systems based on Toshiba



### Industrial use, high and low temperatures, long pipes

The industrial units have been designed for 24/7 operation, which, for instance, may be the case in process areas, laboratories and measuring rooms. The systems are provided with a stronger compressor, are energy efficient and extremely reliable.

- Based upon the Toshiba RAV-GP range of outdoor units;
- Pipe lengths of up to 50 meters for wall-mounted models and up to 75 meters for ceiling-mounted models are possible;
- Cooling at an outside temperature of -15 °C up to +52 °C and heating starting at -27 °C;
- Wall-mounted units provided with infra-red remote control, ceiling-mounted units with fixed, wired remote control;
- Refrigerant R32.

Type number	Capacity Cooling [kW]	Capacity Heating [kW]	Supply Voltage [V AC]	Frequency [Hz]	Fuse rating [A]	Electrical Power [kW]	Air flow [m <sup>3</sup> / hour]	Model
AR-051/0511	5,0	5,6	230	50	16	1,43	266 / 960	Wall
AR-051/0512	5,0	5,6	230	50	16	1,38	540 / 900	Ceiling
AR-051/0711	7,1	8,0	230	50	16	2,25	289 / 1.040	Wall
AR-051/0712	7,1	8,0	230	50	16	1,80	750 / 1.410	Ceiling
AR-051/1011	10,0	11,2	230	50	20	3,61	447 / 1.610	Wall
AR-051/1012	10,0	11,2	230	50	20	2,38	1.020 / 1.860	Ceiling
AR-051/1212	12,5	14,0	230	50	25	3,59	1.200 / 2.040	Ceiling
AR-051/1422	14,0	16,0	400	50	3 x 16	4,60	1.260 / 2.040	Ceiling

### Options

- Fixed remote control on wall-mounted units;
- Additional coating of the aluminum fins, copper tubing and sheet steel plating;
- Explosion-safe work switch.

# Explosion-safe air conditioners AR-051

## Split systems based on Toshiba



### Industrial use, compact design

The compact industrial units have been designed for 24/7 operation and are eminently suitable for application in mobile installations, container applications and crane cabins.

- Based upon the Toshiba RAV-GM range of outdoor units;
- 50 and 60 Hz mains frequency supported and guaranteed by the manufacturer;
- Cooling at an outside temperature of -15 °C up to +46 °C and heating starting at -15 °C;
- Wall-mounted units provided with infra-red remote control, ceiling-mounted units with fixed, wired remote control;
- Refrigerant R32.

Type number	Capacity Cooling [kW]	Capacity Heating [kW]	Supply Voltage [V AC]	Frequency [Hz]	Fuse rating [A]	Electrical Power [kW]	Air flow [m³ / hour]	Model
AR-051/0211 C	2,5	3,4	230	50 / 60	16	0,85	186 / 670	Wall
AR-051/0311 C	3,6	4,0	230	50 / 60	16	1,13	229 / 700	Wall
AR-051/0312 C	3,6	4,0	230	50 / 60	16	0,83	540 / 900	Ceiling
AR-051/0511 C	5,0	5,3	230	50 / 60	16	1,66	266 / 960	Wall
AR-051/0512 C	5,0	5,3	230	50 / 60	16	1,61	540 / 900	Ceiling
AR-051/0711 C	6,7	7,7	230	50 / 60	16	2,61	289 / 1.040	Wall
AR-051/0712 C	6,9	7,7	230	50 / 60	16	2,38	750 / 1.410	Ceiling
AR-051/0811 C	8,0	9,0	230	50 / 60	16	2,90	328 / 1.180	Wall
AR-051/0812 C	8,0	9,0	230	50 / 60	16	2,65	900 / 1.600	Ceiling
AR-051/1011 C	9,5	11,2	230	50 / 60	20	3,47	447 / 1.610	Wall
AR-051/1012 C	9,5	11,2	230	50 / 60	20	2,95	1.020 / 1.860	Ceiling
AR-051/1021 C	9,5	11,2	400	50	3 x 10	3,47	447 / 1.610	Wall
AR-051/1022 C	9,5	11,2	400	50	3 x 10	2,95	1.020 / 1.860	Ceiling
AR-051/1212 C	12,1	13,0	230	50 / 60	25	4,42	1.200 / 2.040	Ceiling
AR-051/1222 C	12,1	13,0	400	50	3 x 10	4,42	1.260 / 2.040	Ceiling
AR-051/1422 C	14,0	16,0	400	50	3 x 16	4,69	1.260 / 2.040	Ceiling

### Options

- Fixed remote control on wall-mounted units;
- Additional coating of the aluminum fins, copper tubing and sheet steel plating;
- Explosion-safe work switch.

# Explosion-safe air conditioners AR-051

## Split systems based on Toshiba



### Industrial use, compact design, corrosion resistant

The special anti-corrosive units are identical to the compact units but are better suited for use in corrosive conditions, such as in offshore or coastal industrial areas, thanks to the following effective measures:

- Additional coating on aluminum fins and copper pipework;
- Panels and base plate provided with two extra layers of acrylic coating;
- Stainless steel screws with Geomet anti-corrosion treatment and plastic washers;
- The fan motor axle is provided with an epoxy coating.

Type number	Capacity Cooling [kW]	Capacity Heating [kW]	Supply Voltage [V AC]	Frequency [Hz]	Fuse rating [A]	Electrical Power [kW]	Air flow [m³ / hour]	Model
AR-051/0211 CR	2,5	3,4	230	50 / 60	16	0,85	186 / 670	Wall
AR-051/0311 CR	3,6	4,0	230	50 / 60	16	1,13	229 / 700	Wall
AR-051/0312 CR	3,6	4,0	230	50 / 60	16	0,83	540 / 900	Ceiling
AR-051/0511 CR	5,0	5,3	230	50 / 60	16	1,66	266 / 960	Wall
AR-051/0512 CR	5,0	5,3	230	50 / 60	16	1,61	540 / 900	Ceiling
AR-051/0711 CR	6,7	7,7	230	50 / 60	16	2,61	289 / 1.040	Wall
AR-051/0712 CR	6,9	7,7	230	50 / 60	16	2,38	750 / 1.410	Ceiling
AR-051/0811 CR	8,0	9,0	230	50 / 60	16	2,90	328 / 1.180	Wall
AR-051/0812 CR	8,0	9,0	230	50 / 60	16	2,65	900 / 1.600	Ceiling
AR-051/1011 CR	9,5	11,2	230	50 / 60	20	3,47	447 / 1.610	Wall
AR-051/1012 CR	9,5	11,2	230	50 / 60	20	2,95	1.020 / 1.860	Ceiling
AR-051/1212 CR	12,1	13,0	230	50 / 60	25	4,42	1.200 / 2.040	Ceiling

### Options

- Fixed remote control on wall-mounted units;
- Explosion-safe work switch.