

Explosion-safe air conditioners AR-051

Split systems based on Toshiba



Features

- Based on Toshiba systems
- ATEX certified
- Suitable for use in Zone 2
- From 2,5 to 22,5 kW, cooling and heating
- Ambient temperatures from -27 °C up to +52 °C
- Industrial, compact and light industrial models available
- Additional protective coating possible
- Combination of explosion-safe and standard, non-explosion-safe parts is possible



II 3 G Ex ec h ic mc IIB+H₂ T3 Gc
II 3 G Ex ec h ic IIB+H₂ 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 and the application, a wall, ceiling, cassette or duct model can be chosen. Multi-split versions in which multiple indoor units are combined with one outdoor unit 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 paid to the maintainability and ease with which the units can be installed. The functionality remains completely intact.

For installation in a corrosive environment, the outdoor units can be provided with an additional protective coating.

In addition to Toshiba-based systems, we can also build explosion-safe air conditioning systems based on other brands. Ask for the possibilities.

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



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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 systems up to 10 kW and up to 75 meters for systems of 10 kW and higher;
- Cooling at an outside temperature of -15 °C up to +52 °C and heating starting at -27 °C;
- The wall-mounted model comes with an infrared remote control; the ceiling, duct and cassette models are provided with a 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-051/0511	5,0	5,6	230	50	16	1,43	680 / 960	Wall
AR-051/0512	5,0	5,6	230	50	16	1,39	540 / 900	Ceiling
AR-051/0513	5,0	5,6	230	50	16	1,61	480 / 800	Duct
AR-051/0514	5,0	5,0	230	50	16	1,30	780 / 1.050	Cassette
AR-051/0711	7,1	8,0	230	50	20	2,25	680 / 1.040	Wall
AR-051/0712	7,1	8,0	230	50	20	1,80	750 / 1.410	Ceiling
AR-051/0713	7,1	8,0	230	50	16	1,85	750 / 1.200	Duct
AR-051/0714	7,1	8,0	230	50	20	1,77	810 / 1.230	Cassette
AR-051/1011	10,0	11,2	230	50	20	3,13	1.180 / 1.610	Wall
AR-051/1012	10,0	11,2	230	50	25	2,38	1.020 / 1.860	Ceiling
AR-051/1013	10,0	11,2	230	50	20	2,73	1.260 / 2.100	Duct
AR-051/1014	10,0	11,2	230	50	20	2,18	1.170 / 2.010	Cassette
AR-051/1212	12,5	14,0	230	50	25	3,59	1.200 / 2.040	Ceiling
AR-051/1213	12,5	14,0	230	50	25	3,63	1.260 / 2.100	Duct
AR-051/1214	12,5	14,0	230	50	25	3,21	1.230 / 2.100	Cassette
AR-051/1422	14,0	16,0	400	50	3 x 16	4,60	1.200 / 2.040	Ceiling
AR-051/1423	14,0	16,0	400	50	3 x 16	4,57	1.260 / 2.100	Duct
AR-051/1424	14,0	16,0	400	50	3 x 16	4,34	1.260 / 2.130	Cassette

Options

- Wired remote control on the wall-mounted models as a replacement for the infrared remote control;
- Additional coating of the aluminum fins, copper piping and sheet metal with Blygold PolualXT coating;
- Explosion-safe work switch.

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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;
- For some models, the mains frequency 50 / 60 Hz is supported by the manufacturer;
- The AR-051/1923 C and AR-051/2223 C air conditioners are equipped with a high static pressure ducted indoor unit and are particularly suitable for applications where pipe lengths of up to 100 meters are required;
- Cooling at an outside temperature of -15 °C up to +46 °C and heating starting at -15 °C;
- The wall-mounted model comes with an infrared remote control; the ceiling, duct and cassette models are provided with a 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	450 / 670	Wall
AR-051/0311 C	3,6	4,0	230	50 / 60	16	1,13	450 / 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	680 / 960	Wall
AR-051/0512 C	5,0	5,3	230	50 / 60	16	1,61	540 / 900	Ceiling
AR-051/0513 C	5,0	5,3	230	50 / 60	16	1,83	480 / 800	Duct
AR-051/0514 C	5,0	5,3	230	50 / 60	16	1,56	780 / 1.050	Cassette
AR-051/0711 C	6,7	7,7	230	50	16	2,30	680 / 1.040	Wall
AR-051/0712 C	6,7	7,7	230	50	16	2,06	750 / 1.410	Ceiling
AR-051/0713 C	6,7	7,7	230	50	16	2,04	750 / 1.200	Duct
AR-051/0714 C	6,7	7,7	230	50	16	1,99	810 / 1.230	Cassette
AR-051/0811 C	8,0	8,6	230	50	16	2,67	680 / 1.180	Wall
AR-051/0812 C	8,0	8,6	230	50	16	2,38	900 / 1.600	Ceiling
AR-051/0813 C	8,0	8,6	230	50	16	2,39	1.000 / 1.700	Duct
AR-051/0814 C	8,0	8,6	230	50	16	2,29	900 / 1.600	Cassette
AR-051/1011 C	9,5	11,2	230	50	20	2,95	1.180 / 1.610	Wall
AR-051/1012 C	9,5	11,2	230	50	20	2,86	1.020 / 1.860	Ceiling
AR-051/1013 C	9,5	11,2	230	50	20	2,60	1.260 / 2.100	Duct
AR-051/1014 C	9,5	11,2	230	50	20	2,86	1.170 / 2.010	Cassette
AR-051/1021 C	9,5	11,2	400	50	3 x 16	3,38	1.180 / 1.610	Wall
AR-051/1022 C	9,5	11,2	400	50	3 x 16	2,83	1.020 / 1.860	Ceiling
AR-051/1023 C	9,5	11,2	400	50	3 x 16	2,87	1.260 / 2.100	Duct
AR-051/1024 C	9,5	11,2	400	50	3 x 16	2,82	1.170 / 2.010	Cassette

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Industrial use, compact design - continued

Type number	Capacity Cooling [kW]	Capacity Heating [kW]	Supply Voltage [V AC]	Frequency [Hz]	Fuse rating [A]	Electrical Power [kW]	Air flow [m ³ / hour]	Model
AR-051/1212 C	12,1	13,0	230	50	25	4,01	1.200 / 2.040	Ceiling
AR-051/1213 C	12,1	13,0	230	50	25	4,01	1.260 / 2.100	Duct
AR-051/1214 C	12,1	13,0	230	50	25	3,88	1.230 / 2.100	Cassette
AR-051/1222 C	12,1	13,0	400	50	3 x 16	3,94	1.200 / 2.040	Ceiling
AR-051/1223 C	12,1	13,0	400	50	3 x 16	3,94	1.260 / 2.100	Duct
AR-051/1224 C	12,1	13,0	400	50	3 x 16	3,81	1.230 / 2.100	Cassette
AR-051/1422 C	14,0	16,0	400	50	3 x 16	4,94	1.260 / 2.040	Ceiling
AR-051/1423 C	14,0	16,0	400	50	3 x 16	5,14	1.260 / 2.100	Duct
AR-051/1424 C	14,0	16,0	400	50	3 x 16	4,92	1.260 / 2.130	Cassette
AR-051/1923 C	19,0	22,0	400	50 / 60	3 x 20	6,91	3.200 / 3.800	Duct
AR-051/2223 C	22,5	24,00	400	50 / 60	3 x 25	7,62	4.200	Duct

Options

- Wired remote control on the wall-mounted models as a replacement for the infrared remote control;
- Additional coating of the aluminum fins, copper piping and sheet metal with Blygold PolualXT coating;
- Explosion-safe work switch.

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Light industrial use, in particular for 60 Hz applications

The light industrial units are designed for a mains frequency of 50 and 60 Hz.

- Based on the Toshiba RAV-GV model series;
- Mains frequency 50 / 60 Hz supported by the manufacturer;
- Cooling from an outside temperature of -15 °C to +46 °C and heating from -15 °C;
- Wall model with infrared remote control, ceiling model, duct and cassette model 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-051/0511 L	5,0	5,3	230	50 / 60	16	1,50	680 / 960	Wall
AR-051/0512 L	5,0	5,3	230	50 / 60	16	1,50	540 / 900	Ceiling
AR-051/0513 L	5,0	5,3	230	50 / 60	16	1,85	480 / 800	Duct
AR-051/0514 L	5,0	5,3	230	50 / 60	16	1,60	780 / 1050	Cassette
AR-051/0711 L	6,7	7,0	230	50 / 60	16	2,20	680 / 1.040	Wall
AR-051/0712 L	6,7	7,0	230	50 / 60	16	2,20	750 / 1.410	Ceiling
AR-051/0713 L	6,7	7,0	230	50 / 60	16	2,33	750 / 1.200	Duct
AR-051/0714 L	6,7	7,0	230	50 / 60	16	2,20	810 / 1.230	Cassette
AR-051/1011 L	9,5	10,0	230	50 / 60	20	3,80	1.180 / 1.610	Wall
AR-051/1012 L	9,5	10,0	230	50 / 60	20	3,80	1.020 / 1.860	Ceiling
AR-051/1013 L	9,5	10,0	230	50 / 60	20	3,17	1.260 / 2.100	Duct
AR-051/1014 L	9,5	10,0	230	50 / 60	20	3,15	1.170 / 2.010	Cassette
AR-051/1021 L	9,5	10,0	400	50 / 60	3 x 16	3,40	1.180 / 1.610	Wall
AR-051/1022 L	9,5	10,0	400	50 / 60	3 x 16	3,40	1.020 / 1.860	Ceiling
AR-051/1023 L	9,5	10,0	400	50 / 60	3 x 16	3,10	1.260 / 2.100	Duct
AR-051/1024 L	9,5	10,0	400	50 / 60	3 x 16	3,15	1.170 / 2.010	Cassette
AR-051/1212 L	11,5	12,1	230	50 / 60	25	4,70	1.200 / 2.040	Ceiling
AR-051/1213 L	11,5	12,1	230	50 / 60	25	4,70	1.260 / 2.100	Duct
AR-051/1214 L	11,5	11,9	230	50 / 60	25	4,60	1.230 / 2.100	Cassette
AR-051/1222 L	12,1	12,3	400	50 / 60	3 x 16	4,90	1.200 / 2.040	Ceiling
AR-051/1223 L	12,1	12,3	400	50 / 60	3 x 16	4,90	1.260 / 2.100	Duct
AR-051/1224 L	12,1	12,3	400	50 / 60	3 x 16	4,90	1.230 / 2.100	Cassette

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Light industrial use, in particular for 60 Hz applications - continued

Type number	Capacity Cooling [kW]	Capacity Heating [kW]	Supply Voltage [V AC]	Frequency [Hz]	Fuse rating [A]	Electrical Power [kW]	Air flow [m ³ / hour]	Model
AR-051/1422 L	13,0	13,5	400	50 / 60	3 x 16	5,40	1.260 / 2.040	Ceiling
AR-051/1423 L	13,0	13,5	400	50 / 60	3 x 16	5,40	1.260 / 2.100	Duct
AR-051/1424 L	13,0	13,5	400	50 / 60	3 x 16	5,40	1.260 / 2.130	Cassette

Options

- Wired remote control on the wall-mounted models as a replacement for the infrared remote control;
- Additional coating of the aluminum fins, copper piping and sheet metal with Blygold PolualXT coating;
- Explosion-safe work switch.