

Multifunctional Timer Relay AR-023

Explosion Proof, suitable for zone 2 and 22



Features

- ATEX certified
- Suitable for use in gas and dust environments, zones 2 and 22
- Starter button or external switch
- Switched normally open and normally closed output, max. 16 Ampere
- 7 different programs
- Time can be set from 1 second to 160 minutes
- Aluminium casing
- IP66



II 3 G Ex ec ic mc IIC T6 Gc
II 3 D Ex tc IIIC T80°C Dc



Description

Artidor's explosion proof timer relay AR-023 is a time-controlled relay that can be used to switch on a device, for instance a light or a pump, with the push of a button. After the set time, it is switched off again. Next to this program, there are six more programs available for time-controlled management of your equipment.

The choice of program and desired duration can be easily set using ten switches on the front of the time relay. The digital processing makes the time setting very accurate.

The time relay has a solid IP66 aluminium casing. The starter button circuit is intrinsically safe. The button can be replaced by an external switch according to your needs. In that case, the maximum cable length is 100 meters.

Gas explosion safety is ensured by using the following methods of protection against ignition "heightened safety", "intrinsic safety" and "moulding". Dust explosion safety is ensured by the method of protection against ignition "protection by enclosure".

The Artidor timer relay is explosion safe and certified according to European directive 2014/34/EU (ATEX 114) and is CE marked.



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Technical specifications

European directives:	2014/34/EU (ATEX) and 2014/30/EU (EMC)
Explosion safety:	II 3 G Ex ec ic mc IIC T6 Gc, II 3 D Ex tc IIIC T80°C Dc
Applied standards:	EN 60079-0:2018, EN 60079-7:2015 / A1:2018, EN 60079-11:2012, EN 60079-18:2015 / A1:2017 and EN 60079-31:2014
Switching program:	7 (delay on, delay off, cyclic, pulse delayed, pulse, watchdog, on delay 2)
Timer value:	Adjustable from 1 second to 160 minutes
Start signal:	Built-in push button or external switch (up to 100 m cable length)
Power supply:	115 / 230 V AC, 50 / 60 Hz or 12 - 24 VDC
Power consumption:	Max. 36,6 mA at 24 VDC
Input and output:	Power supply in, power supply out, relay NO / NC (16 A max.), start contact
Electrical connectors:	Connection terminals 9 x 2,5 mm ²
Casing:	Cast aluminium casing (RAL 7015, slate grey)
Connections:	M20 cable glands (2x) suitable for cable diameters from Ø6 to Ø14 mm
Level of protection:	IP66 according to EN 60529
Ambient temperature:	-20 °C to +60 °C
Dimension of casing:	160 x 160 x 100 mm (excluding case glands)
Weight:	1.740 gram

Settings

Switch	Function
1, 2 and 3	Selection of switching program (see page3)
4 and 5	Time interval (1 second, 10 seconds, 1 minute or 5 minutes)
6 through 10	Time setting, adjustable from 1 to 32 times the selected interval

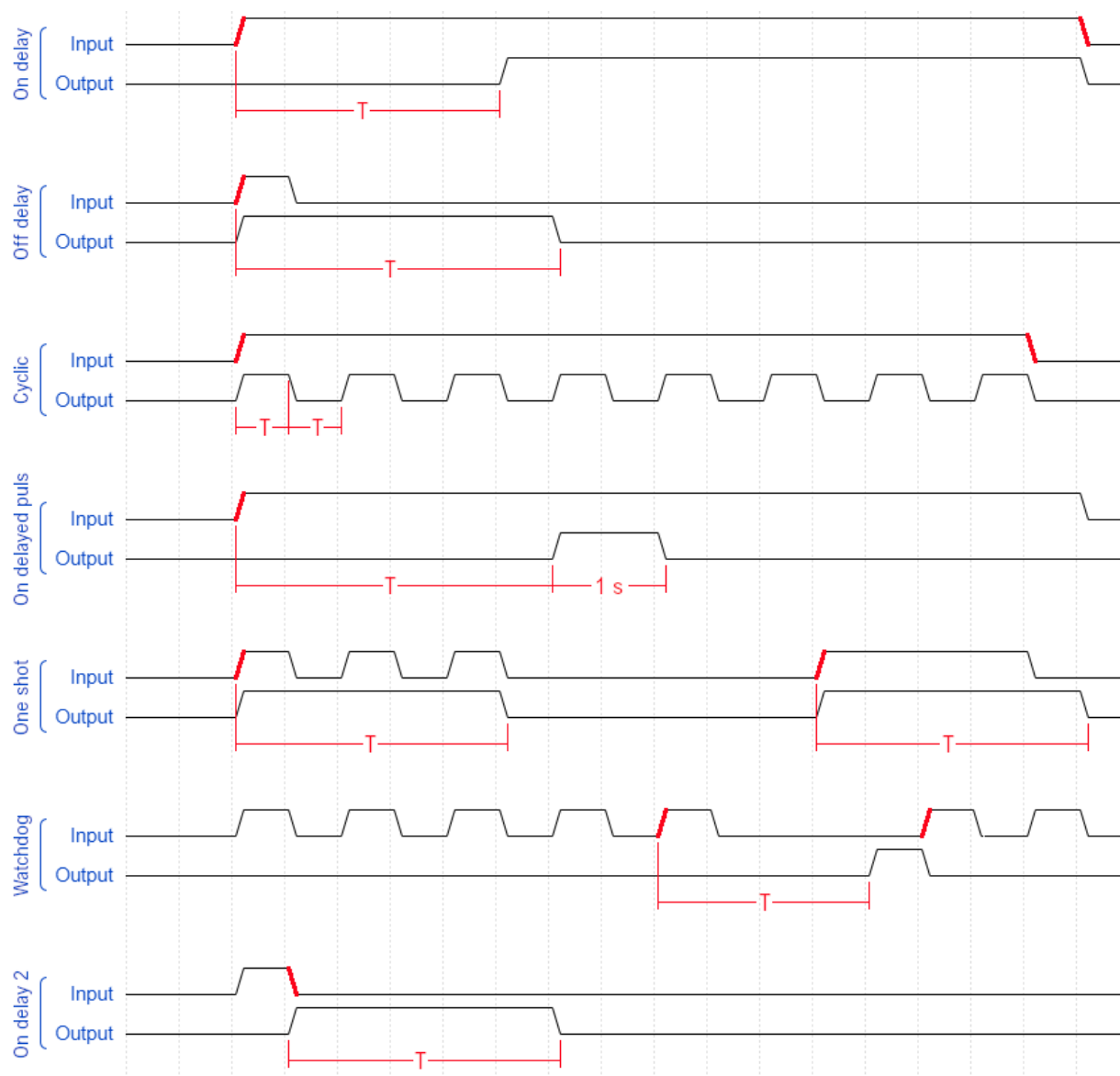
The various settings of switches 4 through 10 make it possible to set the time to the maximum values below.

Time interval / scale	Adjustment range time T
1 second	1 - 32 seconds
10 seconds	10 - 320 seconds
1 minute	1 - 32 minutes
5 minutes	5 - 160 minutes

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Switching programs



The diagram shows the normally open (NO) output. The AR-023 also offers the inverted normally closed (NC) output. On special request the AR-023 timer relay can be provided with a customer-specific program. For this, please contact us.

Order code

Type number	Power	Description
AR-023/001 *	115 / 230 VAC 50 / 60 Hz	Multifunctional time relay, DIN rail execution
AR-023/002		Multifunctional time relay including aluminum casing and start button
AR-023/011 *	12 - 24 VDC	Multifunctional time relay, DIN rail execution
AR-023/012		Multifunctional time relay including aluminum casing and start button

* The DIN rail execution must be installed in a certified Ex ec / tc housing.