

## *Timing Solutions*

- *Mini DIN-rail timers*
- *DIN-rail timers*
- *Plug-in timers*
- *48 x 48 timers*



## ON-Delay timers

Nobody really knows how many times the ON-Delay function is needed. It is really the most common timing function. What Carlo Gavazzi gives is absolute reliability to be sure that everything runs perfectly for years.

Set-up is simple and straightforward thanks to the clear front knobs. They can be turned using a screwdriver (the same can be used for the terminals) so undesired changes are avoided.

### THE FACTS

- Fully multivoltage
- Fully multirange
- Available with SPDT and DPDT relay output
- CE marked, UL and CSA approved, RINA approved (DAA51, DAA01, PAA01)

### DAA51, DAA71, DAA01, PAA01, FAA01



## Multifunction timers

A multifunction timer knows that he is required few things: work hard, even in very bad conditions, be always ready with the needed function and be easy to set-up. Our timers DMB51, DMB71, DMB01, PMB01 and FMB01 have learned this lesson and don't let down the user.

With power supply voltage ranges until reaching 12 to 240 V AC/DC, they can be used in the most various situations, while the extremely wide time ranges allow to keep very few pieces on stock to be able to answer a great lot of requests.

### THE FACTS

- Fully multivoltage
- Fully multirange
- Multifunction: ON-delay, interval, interval on trigger open, double interval, OFF-delay, symmetrical recycler (ON or OFF first)
- Available with SPDT and DPDT relay output
- CE marked, UL and CSA approved, RINA approved (DMB51, DMB01, PMB01)

### DMB51, DMB71, DMB01, PMB01, FMB01



# WHEN YOUR APPLICATION NEEDS

Star-delta operation is a very reliable and performing solution to avoid undesired inrush current starting a motor and subsequent voltage drops. DAC51 is the smallest solution in this case, including the star to delta dead zone to avoid fast wear of the contactor.

## THE APPLICATIONS

- pumps
- cranes
- saws
- mills
- compressors
- conveyor belts

## Star-delta: DAC51



There are a lot of cases in which you just have to delay a contactor start. EAS, EBS and ECS offer ON-delay, interval and recycler functions using just two wires. Solid state output is specifically made for the contactor coil and wiring is extremely simple. Also available with fast-ON terminals, (useful in case of vibrations).

## THE APPLICATIONS

- doors
- compressors
- boilers
- fans

## Directly starting contactor: EAS, EBS, ECS



In a variety of processes an event has to take place for a certain time and wait for another one. DCB51, DCB01, PCB01 offer full flexibility both for ON and OFF time (0.1 s to 100h independent each other). DCB51 can be fully set using the front knobs.

## THE APPLICATIONS

- lubrication
- swimming pools
- industrial refrigerators
- back up batteries surveillance
- water removal from air compressor

## Asymmetrical recycler: DCB51



When an OFF-delay function is needed, and there is just the power supply voltage to trigger, DBB51, DBB01, DBB02, PBB01 or PBB02 are perfect. Thanks to their supercapacitor or rechargeable battery, they go on counting even without the power supply, and switch the output relay at the end of this time. Available in versions up to 10 h.

### THE APPLICATIONS

- wind energy generators
- fans
- hotel rooms
- lights

### True delay on release: DBB51



Being able to trigger using a sensor output, a transistor, or to supply the sensor itself, are just some of the features of this timer, able to simply solve situations otherwise hard. Also offering the opportunity to connect an external potentiometer for time management.

### THE APPLICATIONS

- watchdog in conveyor systems
- signal the presence of persons or objects in industrial applications or shops

### All in one systems: DMC01



When other people end their resources, Carlo Gavazzi offers **T-RUN!** If you need a peculiar function, or you don't want anyone to change it, ask for **T-RUN!**, and we'll tell you all the potential of this product. By the way, programming software is free.

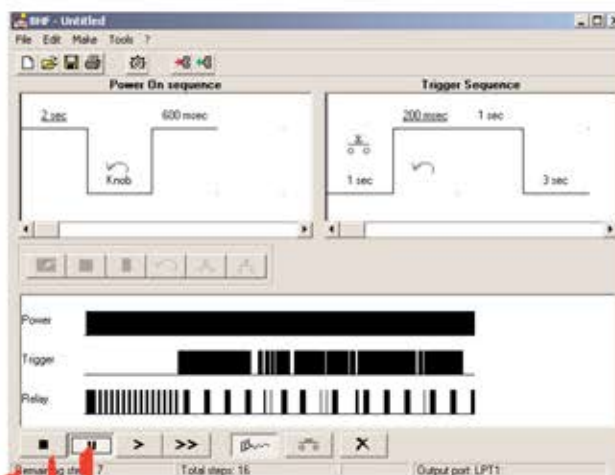
### THE APPLICATIONS

- saunas
- lubrication
- pumps
- ... wherever others can't!



**T-RUN!**

### Fully programmable: DHA51, DHA52



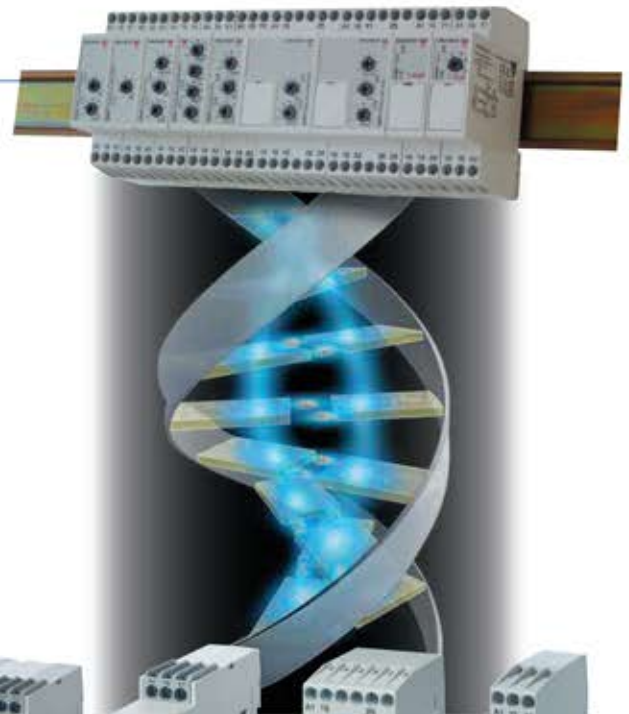
15x47

# A LIFETIME IN TIMERS

## Belonging to the History of timers

Since the Electromatic days we have been having timers in our DNA. Many years of success have passed, and now creating timers means using the threasure of knowl-edge together with the most advanced technology. The result is components able to deliver a lot of functions and provide huge reliability.

The family is available, with the same functions, in four different housings: the **standard DIN-rail** one, perfect for industrial panels, the **Plug-in housing** to allow fast and safe replacement (without moving cables), the **48x48 mm housing**, for direct changes of the parameter by the user, and the new **Mini-D housings** for DIN-rail mounting, that can be mounted in industrial panels as well as in smaller panels as, for instance, for buildings or for special industrial applications.



[www.carlogavazzi.com/ac](http://www.carlogavazzi.com/ac)

### *Designed to Market Requirements*

Dedicated applications engineering teams design special products upon request from the customer.

### *Solution to Applications Challenges*

The Carlo Gavazzi individual product ranges complement one another thereby offering the customer all the advantages of a synergistic range of products in terms of application and availability.

### *Guaranteed reliability*

Each product group is designed and manufactured in a center of excellence to assure that each individual products is the best in its field. Carlo Gavazzi products are subject to stringent quality tests to guarantee they exceed the performance we specify.

*Visit our website for more details, technical information or datasheets download.*

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