



Flat modules

Customized timers for integration,
installation and assembly



High performance Compact design

Grässlin time switches are the energy-efficient universal geniuses for time-dependent switching of loads in the areas of lighting, ventilation, air conditioning, heating and irrigation.

In addition, the timers have proven themselves worldwide, for example for controlling

- ▶ Bells
- ▶ Break times at schools
- ▶ Doors and gates
- ▶ as well as for the illumination of signage and
- ▶ Billboards
- ▶ Animal farms
- ▶ Greenhouse control

Thanks to their particularly compact design, the special Grässlin **flat modules** are ideal for integration into heating, air conditioning and ventilation systems or control systems, e.g. for swimming pools, greenhouses or ski boot heaters. With mounting frames, flat modules can be optimally installed in switch cabinets. As a surface-mounted variant, they are mainly used for decentralized control systems.



How you benefit from Grässlin flat modules



- ▶ **High product diversity:** Flat modules are available in synchronous, quartz and digital versions - for every technology and budget requirement.
- ▶ **Maximum flexibility:** Integration into existing devices or use as stand-alone devices possible.
- ▶ **Perfect for retrofitting** the form factor of current products corresponds to earlier versions and enables easy replacement, even from analog to digital devices.
- ▶ **Convenient programming:** Depending on the device, setting and operation are possible on the PC or via app. Programs can be created in advance and transferred to the devices via Bluetooth. Programs can be transferred from one mobile device to another for quick adaptation.

ANALOG FLAT MODULES

FOR INTEGRATION INTO END DEVICES



Analog FM time switch modules are only suitable for installation in existing devices and systems and offer a wide range of applications in buildings and outdoors. They are suitable for universal switching tasks for appliances, motors, pumps, household appliances and boilers, for switchgear and machine controls or specific solutions such as swimming pool controls or sprinkler systems. Robust housings with optimized dust protection ensure maximum reliability in daily use.



FM/1 STuZH

- ▶ Analog time switch module with synchronous motor
- ▶ Daily program
- ▶ Without power reserve
- ▶ 1 channel
- ▶ SKU: 01.76.1001.1



FM/1 Q TuZH

- ▶ Analog time switch module quartz controlled
- ▶ Housing like FM/1 STuZH
- ▶ Daily program
- ▶ Without power reserve
- ▶ 1 channel
- ▶ Accuracy: Mains synchronized
- ▶ SKU: 02.76.1002.1



FM/1 QRTuZH

- ▶ Analog time switch module quartz controlled
- ▶ Housing like FM/1 STuZH
- ▶ Daily program
- ▶ Power reserve: max. 3 days
- ▶ 1 channel
- ▶ Accuracy: $\leq \pm 1.5$ s/day
- ▶ SKU: 02.76.1001.1

DIGITAL FLAT MODULES

FOR INTEGRATION INTO END DEVICES

Like the analog FM time switch modules, the digital product variants are also suitable exclusively for installation in existing devices and systems. Depending on the device, weekly, annual or astro functions can be used to precisely and safely control appliances, motors, pumps, household appliances and boilers, switchgear and machine controls or specific solutions such as greenhouse controls or sprinkler systems. Programming via app is also possible, depending on the device. Robust housings with optimized dust protection ensure maximum reliability in daily use.



FMD smart

- ▶ Digital time switch module
- ▶ Programming & operation via Bluetooth with talento smart app
- ▶ Weekly function
- ▶ Yearly function
- ▶ Astro function
- ▶ Pulse/cycle function
- ▶ 1 channel
- ▶ LED load: 400 W
- ▶ Accuracy: $\leq \pm 0.3$ s/day
- ▶ Power reserve: 8 years
- ▶ SKU: 43.60.0001.1

FMD easy B1

- ▶ Digital time switch module
- ▶ Weekly function
- ▶ Pulse/cycle function
- ▶ 1 channel
- ▶ LED load: 300 W
- ▶ Accuracy: $\leq \pm 0.5$ s/day
- ▶ Power reserve: 6 years
- ▶ SKU: 43.61.0001.1

FMD easy C1

- ▶ Digital time switch module
- ▶ Astro programs (sunrise/sunset)
- ▶ Pulse/cycle function
- ▶ 1 channel
- ▶ LED load: 300 W
- ▶ Adjustable offset of 0...99 min
- ▶ Accuracy: $\leq \pm 0.5$ s/day
- ▶ Power reserve: 6 years
- ▶ SKU: 43.61.0002.1

ANALOG FLAT MODULES

FOR RECESSED AND SURFACE MOUNTING



Analog Grässlin universal time switches from the tactic product series offer a wide range of applications both indoors and outdoors. The high-quality 1-channel built-in or surface-mounted timers are used, for example, in swimming pool control systems or sprinkler systems. All devices offer robust housings, simple operation and are equipped with quartz or synchronous drives to suit every requirement.



tactic 111 E/211 E

tactic 111 E

- ▶ Analog universal time switch with synchronous motor for installation
- ▶ Daily program
- ▶ 1 channel
- ▶ Accuracy: Mains synchronized
- ▶ Without power reserve
- ▶ SKU:

tactic 211 E

- ▶ Analog universal time switch with quartz drive for installation
- ▶ Housing like tactic 111 E
- ▶ Daily program
- ▶ 1 channel
- ▶ Accuracy: $\leq \pm 1$ s/day
- ▶ Power reserve: 3 days
- ▶ SKU: 02.79.1002.1
- ▶ Also available without power reserve (SKU: 02.79.1001.1)



tactic 111 A/211 A

tactic 111 A

- ▶ Analog universal time switch with synchronous motor for wall mounting
- ▶ Housing like tactic 111 E
- ▶ Daily program
- ▶ 1 channel
- ▶ Accuracy: Mains synchronized
- ▶ Without power reserve
- ▶ SKU:

tactic 211 A

- ▶ Analog universal time switch with quartz drive for installation
- ▶ Housing like tactic 111 A
- ▶ Daily program
- ▶ 1 channel
- ▶ Accuracy: $\leq \pm 1$ s/day
- ▶ Power reserve: 3 days
- ▶ SKU: 02.78.1001.1
- ▶ Also available without power reserve (SKU: 02.78.1002.1)

DIGITAL FLAT MODULES

FOR RECESSED AND WALL MOUNTING

Like the analog tactic universal time switches, the digital tactic smart product variants also offer a wide range of possible applications both indoors and outdoors. Depending on the device, weekly, annual or astro functions can be used to precisely control swimming pools or animal farms, for example. Programming via app is also possible, depending on the device. Wall mounting, installation in switching applications or DIN rail mounting offer maximum flexibility for every requirement.



tactic smart A

tactic smart A

- ▶ Timer module for wall mounting
- ▶ Programming & operation via Bluetooth with talento smart app
- ▶ Weekly function
- ▶ Yearly function
- ▶ Astro function
- ▶ Pulse/cycle function
- ▶ 1 channel
- ▶ LED load: 400 W
- ▶ Accuracy: $\leq \pm 0.3$ s/day
- ▶ Power reserve: 8 years
- ▶ SKU: 43.87.0002.1



tactic smart E

- ▶ Timer module for installation
- ▶ Range of functions like tactic smart A
- ▶ SKU: 43.87.0003.1



tactic easy B1 A/C1 A

tactic easy B1 A

- ▶ Timer module for wall mounting
- ▶ Weekly function
- ▶ Pulse/cycle function
- ▶ 1 channel
- ▶ LED load: 300 W
- ▶ Accuracy: $\leq \pm 0.3$ s/day
- ▶ Power reserve: 6 years
- ▶ ISKU: 03.80.1001

tactic easy B1 E

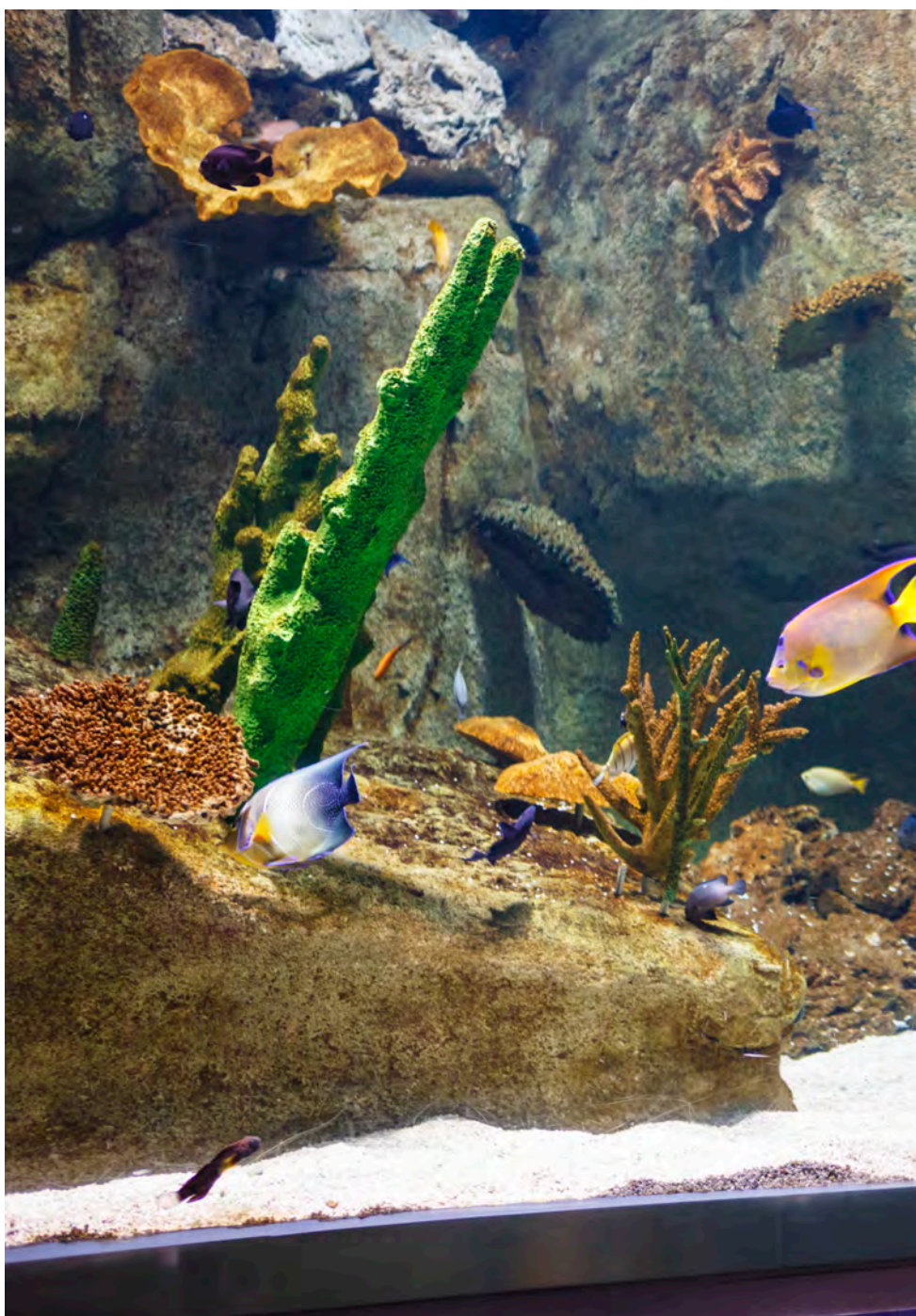
- ▶ Timer module for installation
- ▶ Like tactic easy B1 A
- ▶ SKU: ???

▶ tactic easy C1 A Like tactic

- ▶ easy B1 A However:
- ▶ Astro function with adjustable offset 0-99 min
- ▶ SKU: 03.80.1003.1

tactic easy C1 E

- ▶ Timer module for installation
- ▶ Like tactic easy C1 A
- ▶ SKU: ???



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