

# DIGITAL TIME SWITCHES




backlit display

**110 3090 - Daily-yearly - 1 channel**  
**110 3091 - Weekly-yearly - 1 channel**  
**110 3291 - Weekly-yearly - 2 channels**  
**Menu driven time switch - 2 DIN**

**110 5091S - Weekly-yearly - 1 channel**  
**110 5291S - Weekly-yearly - 2 channels**

**Menu driven time switch with programming key - synchronizable with DCF and/or GPS time signal - 2 DIN**

- Power supply 230V c.a.  $\pm 10\%$  50 - 60Hz
- Contact output: limited current NO contact ZERO CROSSING 16 (10) A / 250V a.c.
- Max programs: 64 (matchable in blocks of days)
- ON-OFF minimum connection time: 1 second
- Visualisation: 1" 1/3 backlit LCD display
- Maximum lighting load: Incandescent LPs 3000W  
Fluorescent tube LPs, not compensated 1100W  
Parallely comp. fluorescent tube LPs 900W (tot capacity 125  $\mu$ F)  
Compact, fluorescent LPs 7 W  $\div$  23 W (max. 23 lamp.)  
LED 25 x 4 W / 12 x 8 W / 8 x 15 W
- Max cross-section of wires to terminals: 1 ... 6 mm<sup>2</sup>
- Protection degree: IP20 - IP40 (on rear of switchboard)
- Type of output: terminals with captive screw
- Insulation class: II 
- ON / OFF relay signal: ON/OFF in LCD display
- Charge reserve: 6 years
- Type of reserve: LITHIUM battery
- Time tolerance:  $\pm 0,5$  sec/day
- Operating temperature limits: 0°C +50°C
- Storing temperature: -10°C +65°C
- Type of installation: DIN rail / on rear of switchboard
- Housing: thermoplastic - grey RAL 7035
- Type of use: civil / tertiary / industrial
- Controls: multifunction keys (menu programming) confirmation key
- Clock setting accuracy: digital for hours/minutes
- Daylight saving time change: automatic
- Programming: menu driven - programs protected in EEPROM
- Dimensions (L x W x H) 35 x 60 x 90 mm

## ACCESSORIES



### 1PR EMD01 "EMD" programming key

External memory to upload / download programs



### 1PR AUSB01 USB adapter for "EMD" key

USB adapter to connect the "EMD" programming key to the PC and upload programs

### 110 SW001 Programming software for PC

It allows the programming on your computer. The created programs can be saved, sent via e-mail, printed or transferred to the time switch via the "EMD" programming key.



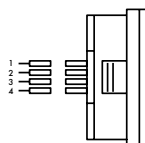
### 1PA RXDCF77 Time signal receiver from Frankfurt for synchronized time switches

- Power supply 230V a.c. 50/60Hz
- Wall-mounted or pole installation
- BUS output signal
- Protection degree IP 65
- Wiring with shielded cable diameter 7-11mm
- Anti-UV opaline housing
- Wiring with cables up to 2.5 mm<sup>2</sup>
- Can be connected to max no. 10 time switches
- LED intervention signalling
- Dimensions (L x W x H) 72 x 37.5 x 147 mm



### 1PA RXGPS01 Satellite GPS time signal receiver for synchronized time switches

- Power supply 230V a.c. 50/60Hz
- Wall-mounted or pole installation
- BUS output signal
- Protection degree IP 65
- Wiring with shielded cable diameter 7-11mm
- Anti-UV opaline housing
- Wiring with cables up to 2.5 mm<sup>2</sup>
- Can be connected to max no. 10 time switches
- LED intervention signalling
- Dimensions (L x W x H) 72 x 37.5 x 147 mm



Pin 1 VDD (power supply)  
 Pin 2 relay output 1  
 Pin 3 relay output 2  
 Pin 4 GND earth

**110 1080/M - Daily - 1 channel**  
**110 1280/M - Daily - 2 channels**  
**110 1081/M - Weekly - 1 channel**  
**110 1281/M - Weekly - 2 channels**

**Digital time switch module with automatic daylight saving time change**



backlit display

**110 7080 - Daily with automatic daylight saving time change - 1 channel**  
**110 7081 - Weekly with automatic daylight saving time change - 1 channel**  
**110 7281 - Weekly with automatic daylight saving time change - 2 channels**  
**Digital time switch - 2 DIN**

1 potential-free changeover contact

**110 6080 - Daily without daylight automatic saving time change - 1 channel**  
**110 6081 - Weekly without daylight automatic saving time change - 1 channel**  
**Digital time switch - 2 DIN**

1 potential-free changeover contact

- Power supply 230V c.a. ±20% 50 - 60Hz
- Contact output: 16 (2) A / 250V a.c.
- Max programs: 20 (matchable in blocks of days)
- ON-OFF minimum connection time: 1 second
- Visualisation: 1" 1/3 backlit LCD display
- Maximum lighting load: Incandescent LPs 3500W  
Fluorescent tube LPs, not compensated 2300W  
Parallely comp. fluorescent tube LPs 700W (tot capacity 35 µF)  
Compact, fluorescent LPs 290W (7 x 15W)  
LED max n° 15 x 4 W / 10 x 8 W / 7 x 15 W
- Max cross-section of wires to terminals: 1 ... 6 mm<sup>2</sup>
- Protection degree: IP20 - IP40 (on rear of switchboard)
- Type of output: terminals with captive screw
- Insulation class: II

- ON / OFF relay signal: ON/OFF in LCD display
- Charge reserve: 15 days
- Type of reserve: NiMH rechargeable battery
- Time tolerance: ± 0,5 sec/day
- Operating temperature limits: 0°C +50°C
- Storing temperature: -10°C +65°C
- Type of installation: DIN rail / on rear of switchboard
- Housing: thermoplastic - grey RAL 7035
- Type of use: civil / tertiary / industrial
- Controls: multifunction keys (menu programming) confirmation key
- Clock setting accuracy: digital for hours/minutes
- Daylight saving time change: for 4 geographic areas
- Programming: for hours, minutes and seconds
- Dimensions (L x W x H) 35 x 60 x 90 mm



backlit display

**110 4091 - 1 channel**  
**110 4291 - 2 channels**  
**Astronomical twilight time switch - 2 DIN**

- Power supply 230Vc.a.±10%, 50Hz
- Contact output: limited current NO contact  
**ZERO CROSSING** 16 (2) A / 250V a.c.
- Max programs: 45 ON-OFF
- ON-OFF minimum connection time: 1 minute
- Visualisation: 1" 1/3 backlit LCD display
- Maximum lighting load: Incandescent LPs 3000W  
Fluorescent tube LPs, not compensated 1100W  
Parallely comp. fluorescent tube LPs 900W (tot capacity 125 µF)  
Compact, fluorescent LPs 7 W ÷ 23 W (max. 23 lamp.)  
LED max n° 25 x 4 W / 12 x 8 W / 8 x 15 W
- Max cross-section of wires to terminals: 1 ... 6 mm<sup>2</sup>
- Protection degree: IP20 - IP40 (on rear of switchboard)
- Type of output: terminals with captive screw
- Insulation class: II

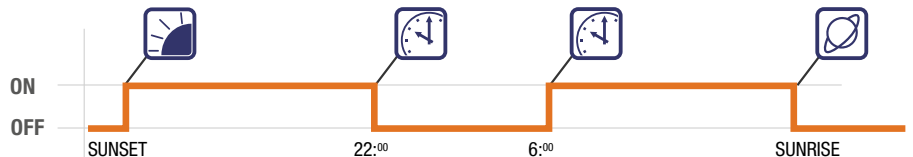
**UNIQUE ON THE MARKET**  
**Astro-Lux-Time in one product!**

- ON / OFF relay signal: ON/OFF in LCD display
- Charge reserve: 6 years
- Type of reserve: CR2032 replaceable battery
- Time tolerance: ± 1 sec/day
- Operating temperature limits: -20°C +55°C
- Storing temperature: -30°C +60°C
- Type of installation: DIN rail / on rear of switchboard
- Housing: thermoplastic - grey RAL 7035
- Type of use: civil / tertiary / industrial
- Controls: manual function key ON/OFF
- Clock setting accuracy: digital for hours/minutes
- Daylight saving time change: euro / free / none
- Programming: for hours and minutes
- Dimensions (L x W x H) 35 x 60 x 90 mm



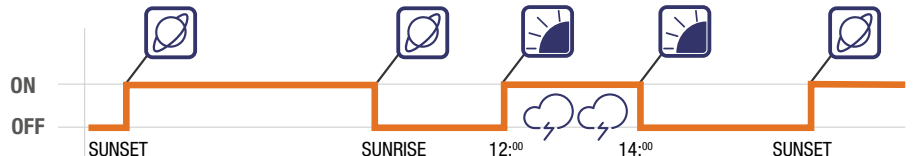
**1 SHOP SIGNBOARD - Operation with twilight / time / Astro logic**

- ON** TWILIGHT
- OFF** TIME h 22:00
- ON** TIME h 6:00
- OFF** ASTRONOMIC



**2 PUBLIC/SQUARE/PARKING LIGHTING - Operation with astronomical logic and daytime intervention in twilight mode in case of storm**

- ON** ASTRONOMIC
- OFF** ASTRONOMIC



**ACCESSORIES**

**1PR EMD01 "EMD" programming key**  
 External memory to upload / download programs



**1PR 6092 Outdoor cadmium-free probe**  
 The probe is not included in the packing, it must be purchased separately.

- Installation outdoors on wall and/or pole
- Connection with cables measuring between 0.75 and 2.5 mm<sup>2</sup>
- Cabling with 4-8 mm shielded cable
- UV-resistant opal housing
- Protection degree IP 65
- Dimensions of sensor (L x W x H) 28 x 48 x 56 mm




## DIGITAL TIME SWITCHES



### 110 1070 - Daily

### 110 1071 - Weekly

#### Digital time switch with automatic standard time / daylight saving time change - 1 DIN


- Power supply 230V c.a. 50 - 60Hz
- Contact output: 16 (2) A / 250V a.c.
- Max programs: 96 (110 1070) - 672 (110 1071)
- ON-OFF minimum connection time: 15 minutes
- Visualisation: 14" LCD display
- Maximum lighting load: 3500VA (each contact)  
Incandescent LPs 2300W  
Fluorescent tube LPs, not compensated 1000W  
Parallely comp. fluorescent tube LPs 290W (tot capacity 35 µF)  
Compact, fluorescent LPs 105W (7 x 15W)  
LED max n° 15 x 4 W / 10 x 8 W / 7 x 15 W
- Max cross-section of wires to terminals: 1 ... 2.5 mm<sup>2</sup>
- Protection degree: IP20 - IP40 (on rear of switchboard)
- Type of output: terminals with captive screw
- Insulation class: II 
- ON / OFF relay signal: ON/OFF in LCD display
- Charge reserve: 15 days
- Type of reserve: NiMH rechargeable battery
- Time tolerance: ± 0,5 sec/day
- Operating temperature limits: 0°C +50°C
- Storing temperature: -10°C +50°C
- Type of installation: DIN rail / on rear of switchboard
- Housing: thermoplastic - grey RAL 7035
- Type of use: civil / tertiary / industrial
- Controls: programming keys, ON/OFF key
- Clock setting accuracy: digital for hours/minutes
- Daylight saving time change: automatic
- Dimensions (L x W x H) 17.5 x 60 x 90 mm



### 110 0022/D15 - Daily

### 110 0024/D15 - Weekly

#### Digital time switch with tappets and display - 2 DIN

- Power supply 230V c.a. 50 - 60Hz
- Contact output: 16 (2) A / 250V a.c.
- Max programs: 96 (110 1070) - 672 (110 1071)
- ON-OFF minimum connection time: 15 minutes
- Visualisation: 1" LCD circular display
- Maximum lighting load: 3500VA (each contact)  
Incandescent LPs 2300W  
Fluorescent tube LPs, not compensated 1000W  
Parallely comp. fluorescent tube LPs 290W (tot capacity 35 µF)  
Compact, fluorescent LPs 105W (7 x 15W)  
LED max n° 15 x 4 W / 10 x 8 W / 7 x 15 W
- Max cross-section of wires to terminals: 2.5 mm<sup>2</sup>
- Protection degree: IP20 - IP30 (with terminal covers)  
IP40 (on rear of switchboard)
- Type of output: terminals with captive screw
- Insulation class: II 
- ON / OFF relay signal: ON/OFF in LCD display
- Charge reserve: 15 days
- Type of reserve: NiMH rechargeable battery
- Time tolerance: ± 1 sec/day
- Operating temperature limits: 0°C +55°C
- Storing temperature: -10°C +65°C
- Type of installation: DIN rail / wall-mounted / on rear of switchboard
- Housing: thermoplastic - grey RAL 7035
- Type of use: civil / tertiary / industrial
- Controls: programming keys, ON/OFF key
- Clock setting accuracy: digital for hours/minutes
- Daylight saving time change: automatic
- Dimensions (L x W x H) 35 x 60 x 128 mm

**Note: Art. 0022/D15 - 0024/D15 can be installed in rear of switchboard with accessory 1PA KTMP/2 (option)**




### 110 0012D15 - Daily - 72x72

### 110 0016D15 - Weekly - 72x72

### 110 0012D15/M230 - Daily - 60x60 Module

### 110 0012D15/M230 - Weekly - 60x60 Module

#### Digital time switch with tappets and display

- Power supply 230V c.a. 50 - 60Hz
- Contact output: 16 (2) A / 250V a.c.
- Max programs: 96 (daily) - 672 (weekly)
- ON-OFF minimum connection time: 15 minutes
- Visualisation: LCD circular display
- Maximum lighting load: 3500VA (each contact)  
Incandescent LPs 2300W  
Fluorescent tube LPs, not compensated 1000W  
Parallely comp. fluorescent tube LPs 290W (tot capacity 35 µF)  
Compact, fluorescent LPs 105W (7 x 15W)  
LED max n° 15 x 4 W / 10 x 8 W / 7 x 15 W
- Max cross-section of wires to terminals: 2.5 mm<sup>2</sup>
- Protection degree: IP40 (wall-mounted, on rear of switchboard)
- Type of output: terminals with captive screw
- Insulation class: II 
- ON / OFF relay signal: ON/OFF in LCD display
- Charge reserve: 15 days
- Type of reserve: NiMH rechargeable battery
- Time tolerance: ± 1 sec/day
- Operating temperature limits: 0°C +50°C
- Storing temperature: -10°C +50°C
- Type of installation: wall-mounted / on rear of switchboard / recess mounting
- Housing: thermoplastic - grey RAL 7035
- Type of use: civil / tertiary / industrial
- Controls: programming keys, ON/OFF key, reset key
- Clock setting accuracy: digital for hours/minutes
- Dimensions (L x W x H) 72 x 67.5 x 101 mm (72x72)  
60 x 26 x 60 mm (60x60)

**Note: Art. 0012D15 - 0016D15 can be installed on rear of switchboard with accessory 1PA SG001 (option)**