



Accessory

## SC 28.X4 pro astr-☼

**Accessory: Data-key Save 'n carry pro**  
(Not included in delivery of the time switch)

- Data-key for managing the programming data:
  - Data back-up of the time switch
  - Programming the time switch with the key program
  - Time switch executes only the key program
  - Query of the key program
- Data-key Save 'n carry pro  
Order-No.: DK pro
- PC Programming Package  
Save 'n carry PP 50 pro  
Order No.: PP 50 pro

### Highlights

- Text based Menu and self-explanatory symbols
- Display with a large dot matrix area to provide two high resolution text lines
- Easy handling. Quick and intuitive programmable time switch
- Can be programmed with supply disconnected (6 years battery-reserve)
- Unlimited program security by E<sup>2</sup>-PROM
- Data-key Save 'n carry pro – programmable with PC Programming package Save 'n carry PP 50 pro (optional – not included in delivery content)
- Astronomic-function:
  - daily updated time for sunrise and sunset
  - applicable worldwide
  - choice of over 100 pre-defined geo-positions

- 1 or 2 channels
- Daily and weekly program
- 100 memory locations
- Minimum interval 1 min
- Switching capacity 16 A per channel
- Permanent by date-mode (holiday function)
- Permanently ON or OFF with manual switch (Perm ON/OFF)
- Manual override
- Automatic sorting of switching times on readout
- Unrestricted block programming of days
- Fully automatic daylight saving time (European, North American or Australian standard adjustable)
- Elapsed time and pulse counter for each channel
- Advance warning function for lighting applications according DIN 18015-2. Twofold flashing warns of darkness. (Glow lamp connectable – glow lamp up to 75 mA).

- Count-Down-Timer function: Similar to "Pulse-function" with extended pulse-length (Pulse-length timer 00:01 up to 9:59:59 h:mm:ss). For use with "Front-key function / Channel-key function" and External input.
- Front-key function / channel-key function: Adjustment of front-key function (ON/OFF, permanent, timer)
- External input (within the one channel version) as trigger for different functions (ON/OFF, permanent, timer)
- Security by PIN-Coding
- Illuminated display

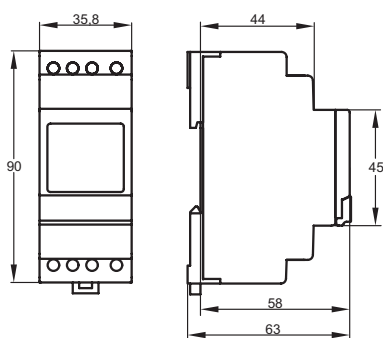
### Overview time switch functions

	Switching time	Front-key/ Channel-key External input
ON/OFF	✓	✓
Permanent	✓	✓
Pulse		
Timer		✓
Cycle		
Astro	✓	
Permanent by date	✓	
Yearly program		

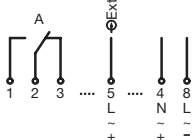
### Astro program astr-☼

- Astro program: Automated switching in relation to sunset and sunrise
- Each switching time independently programmable with or without Astro function
- Astro ON and OFF is adjusted daily due to updated time for sunset and sunrise
- Cut-off function = Earliest and latest possible astro switching time adjustable

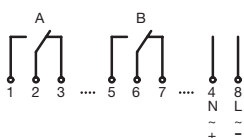
## Programmable time switch SC 28.X4 *pro* for DIN-rail mounting



SC 28.14 *pro* (1 channel)



SC 28.24 *pro* (2 channels)



### Technical data

Supply Voltage	230 V, 50–60 Hz
Power consumption	approx. 1.5 VA
Channel (potential-free)	Change-over, contact gap < 3 mm (μ)
Contact material	AgSnO <sub>2</sub>
Switching capacity	16 A / 250 V~ at cosφ=1
Filament Lamp	2,000 W
Halogen Lamp	2,000 W
Fluorescent Lamp uncompensated	1,000 VA
Fluorescent Lamp series compensated	1,000 VA
Fluorescent Lamp parallel compensated	550 VA
Fluorescent Lamp double switch.	1,000 VA
Mercury Discharge Lamp uncompensated	4 x 125 W, 2 x 250 W, 1 x 400 W, 1 x 700 W
Mercury Discharge Lamp parallel compensated	6 x 50 W (7 μF), 4 x 125 W (10 μF), 2 x 250 W (18 μF), 1 x 400 W (25 μF), 1 x 700 W (40 μF)
Sodium Discharge Lamp uncompensated	2 x 250 W, 1 x 400 W
Sodium Discharge Lamp parallel compensated	2 x 150 W (20 μF), 1 x 250 W (32 μF), 1 x 400 W (45 μF)
Compact Fluorescent Lamp convent. lamp ballast	1,000 VA
Compact Fluorescent Lamp electron. lamp ballast	4 x electronic lamp ballast, power independent
Switching functions	ON, OFF; Astro ON, Astro OFF
Pulse length Timer (man. switching)	00:01 up to 59:59 mm:ss
Memory locations	100
Minimum interval	1 min
Time base	Quartz crystal
Power back-up (at 20°C)	approx. 6 years (depends on the Lithium-battery life)
Program security	unlimited (E <sup>2</sup> -PROM)
Quartz cryst. accuracy (at 20°C)	≤ ±1 sec/day
Display	high resolution LCD (visible area 7.5 cm <sup>2</sup> )
Permitted ambient temperature	-10°...+55°C
Enclosure	self-extinguishing thermoplastic
Dimensions	45 x 35 x 58 mm
Distribution board mounting	35 mm DIN-rail (DIN EN 50022)
Type of connection	Screw terminals (pull-up type)
Type of protection	IP 20 to DIN EN 60529
Class of protection	II when installed according to regulations

Rights to technical amendments reserved.

Type/Order No.	Channels	Time Base	Special function
SC 28.14 <i>pro</i>	1	Quartz	Astro, external input, advance warning function
SC 28.24 <i>pro</i>	2	Quartz	Astro, advance warning function