#### Comparable products ...

972 414 pro with additional features: Weekly program, yearly program, 60 memory locations, Data-key function, External input function

972 424 pro with additional features: Weekly program, yearly program, 60 memory locations, Data-key function, 2 Channels

#### Illuminate

## 972 413 pro

- 1 channel
- Twilight switch with daily program
- Switch off by time and duration / Switch on by time and duration (e.g. for energy saving)
- Adjustable lux threshold (1-50,000 Lux)
- Adjustable delay times
- Adjustable light-hysteresis
- 30 memory locations
- 10 years battery-reserve
- Minimum interval 1 min.
- Switching capacity 16 A
- Up to 30 permanent switchings by date
- Manual permanent mode
- Manual override
- Automatic sorting of switching times on readout
- Fully automatic daylight saving time
- Elapsed time and pulse counter
- Advance warning function
- Security by PIN-Code
- Illuminated display

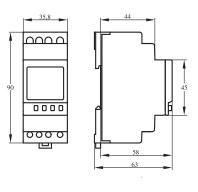
#### Highlights

- Up to 30 permanent switchings by date or with Easter function
- 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
- Unlimited program security by E²-PROM

# Digital twilight switches 972 413 pro

for DIN-rail mounting

### Technical data





Supply voltage	230 V, 50-60 Hz
Power consumption (real power)	0.8-1.8 W (depending on the switching status)
Channel (potential-free)	Change-over, contact gap $<$ 3 mm ( $\mu$ )
Contact material	AgSnO <sub>2</sub>
Switching capacity per channel	16 A / 250 V~ at cosφ=1 6 A with inductive load cosφ=0,6
Min. switching power	1,000 mW (10 V / 10 mA)
Max. starting current	50 A
Filament Lamp, Halogen Lamp	2,000 W
Fluorescent Lamp with electron. lamp ballast	1,000 W
Fluorescent Lamp with convent. lamp ballast	750 W
LED (230 V~) / CFL	400 W
Switching functions	Lux; Night OFF; Day ON
Adjustable lux threshold	1-50,000 Lux
Adjustable delay times	00:01 up to 59:59 mm:ss
Adjustable light-hysteresis	0-50%
Memory locations	30
Minimum interval	1 min.
Time base	Quartz
Quartz accuracy (at 20°C)	$\leq \pm 0.5~\text{sec./day}$ (Quartz accuracy optimized for typical ambient conditions
Power back-up (at 20°C)	approx. 10 years (depends on the Lithium-battery life)
Program security	unlimited (E <sup>2</sup> -PROM))
Display	high resolution LCD (visible area 7.5 cm²)
Permitted ambient temperature	Sensor unit –30°+55°C Control unit –30°+55°C
Housing	self-extinguishing thermoplastic
Dimensions	45 x 35 x 58 mm
Mounting	35 mm DIN-rail
Type of connection	Screw terminals (pull-up type)
Type of protection	Sensor unit IP 54 to DIN EN 60529 Control unit IP 20 to DIN EN 60529
Class of protection	II when installed according to regulations

Order number	Channels	Special function
paladin 972413 pro	1	Daily program functionality