

## 972413 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

Comparable products ...

972414 pro with additional features: Weekly program, yearly program, 60 memory locations, Data-key function, External input function

972424 pro with additional features: Weekly program, yearly program, 60 memory locations, Data-key function, 2 Channels

## 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 972413 pro

for DIN-rail mounting


Technical data

| Supply voltage | $230 \mathrm{~V}, 50-60 \mathrm{~Hz}$ |
| :---: | :---: |
| Power consumption (real power) | 0.8-1.8 W (depending on the switching status) |
| Channel (potential-free) | Change-over, contact gap $<3 \mathrm{~mm}$ ( $\mu$ ) |
| Contact material | $\mathrm{AgSnO}_{2}$ |
| Switching capacity per channel | $\begin{aligned} & 16 \mathrm{~A} / 250 \mathrm{~V} \sim \text { at } \cos \varphi=1 \\ & 6 \mathrm{~A} \text { with inductive load } \cos \varphi=0,6 \end{aligned}$ |
| Min. switching power | 1,000 mW ( $10 \mathrm{~V} / 10 \mathrm{~mA}$ ) |
| Max. starting current | 50 A |
| Filament Lamp, Halogen Lamp | 2,000 W |
| Fluorescent Lamp with electron. Iamp 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 $20^{\circ} \mathrm{C}$ ) | $\leqq \pm 0.5$ sec./day (Quartz accuracy optimized for typical ambient conditions |
| Power back-up (at $20^{\circ} \mathrm{C}$ ) | approx. 10 years (depends on the Lithium-battery life) |
| Program security | unlimited (E²-PROM)) |
| Display | high resolution LCD (visible area $7.5 \mathrm{~cm}^{2}$ ) |
| Permitted ambient temperature | $\begin{aligned} & \text { Sensor unit }-30^{\circ} \ldots+55^{\circ} \mathrm{C} \\ & \text { Control unit }-30^{\circ} \ldots+55^{\circ} \mathrm{C} \end{aligned}$ |
| Housing | self-extinguishing thermoplastic |
| Dimensions | $45 \times 35 \times 58 \mathrm{~mm}$ |
| 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 |
| $V_{\text {Housing colour }}$ |  |  |

