

*lux*<sup>24h</sup>



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

### 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**

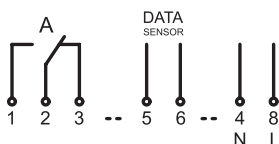
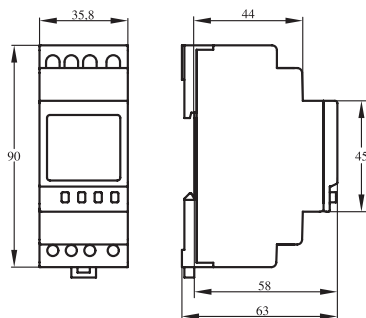
### Highlights

- 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 E<sup>2</sup>-PROM

# Digital twilight switch 972 413 pro

for DIN-rail mounting

## Technical data



<b>Supply voltage</b>	230 V, 50–60 Hz
<b>Power consumption (real power)</b>	0.8–1.8 W (depending on the switching status)
<b>Channel (potential-free)</b>	Change-over, contact gap < 3 mm (μ)
<b>Contact material</b>	AgSnO <sub>2</sub>
<b>Switching capacity per channel</b>	16 A / 250 V~ at cosφ=1 6 A with inductive load cosφ=0,6
<b>Min. switching power</b>	1,000 mW (10 V / 10 mA)
<b>Max. starting current</b>	50 A
<b>Filament Lamp</b>	2,000 W
<b>Halogen Lamp</b>	2,000 W
<b>Fluorescent Lamp uncompensated</b>	1,000 VA
<b>Fluorescent Lamp series compensated</b>	1,000 VA
<b>Fluorescent Lamp parallel compensated</b>	550 VA
<b>Fluorescent Lamp double switch</b>	1,000 VA
<b>Mercury Discharge Lamp uncompensated</b>	4 x 125 W, 2 x 250 W, 1 x 400 W, 1 x 700 W
<b>Mercury Discharge Lamp parallel compensated</b>	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)
<b>Sodium Discharge Lamp uncompensated</b>	2 x 250 W, 1 x 400 W
<b>Sodium Discharge Lamp parallel compensated</b>	2 x 150 W (20 μF), 1 x 250 W (32 μF), 1 x 400 W (45 μF)
<b>Compact Fluorescent Lamp convent. lamp ballast</b>	1,000 VA
<b>Compact Fluorescent Lamp electron. lamp ballast</b>	4 x electronic lamp ballast, power independent
<b>Switching functions</b>	Lux; Night OFF; Day ON
<b>Adjustable lux threshold</b>	1–50,000 Lux
<b>Adjustable delay times</b>	00:01 up to 59:59 mm:ss
<b>Adjustable light-hysteresis</b>	0–50%
<b>Memory locations</b>	30
<b>Minimum interval</b>	1 min.
<b>Time base</b>	Quartz
<b>Power back-up (at 20°C)</b>	approx. 10 years (depends on the Lithium-battery life)
<b>Program security</b>	unlimited (E <sup>2</sup> -PROM)
<b>Quartz accuracy (at 20°C)</b>	≤ ±0.5 sec./day
<b>Display</b>	high resolution LCD (visible area 7.5 cm <sup>2</sup> )
<b>Permitted ambient temperature</b>	Sensor unit –30°...+55°C Control unit –30°...+55°C
<b>Enclosure</b>	self-extinguishing thermoplastic
<b>Dimensions</b>	45 x 35 x 58 mm
<b>Distribution board mounting</b>	35 mm DIN-rail (DIN EN 60715)
<b>Type of connection</b>	Screw terminals (pull-up type)
<b>Type of protection</b>	Sensor unit IP 54 to DIN EN 60529 Control unit IP 20 to DIN EN 60529
<b>Class of protection</b>	II when installed according to regulations

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

Twilight