müller

lux^{year}

- 1 or 2 channels
- Twilight switch with daily, weekly and yearly 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
- 60 memory locations
- 10 years battery-reserve
- Minimum interval 1 min.
- Switching capacity channel A = 16 A (Switching capacity channel B = 10 A)
- Up to 60 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
- External input (within the one channel version)
- Security by PIN-Code
- Illuminated display
- Data-key function
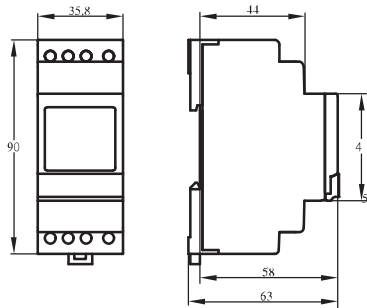
Further information / Accessory

**Accessory: Data-key DK pro
and Programming package PP 50 pro / PP 60 pro**
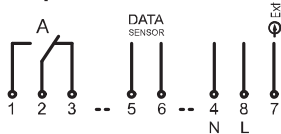(not included in delivery of the time switch)

Highlights

- Yearly program with Easter function
- Up to 60 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^2-PROM
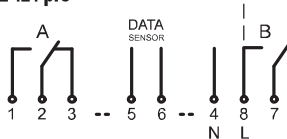- Programmable with PC (Accessory Data-key DK pro and Programming package PP 50 pro / PP 60 pro)

hugomüller

Digital twilight switches 972 4x4 *pro*
for DIN-rail mounting

Technical data

972 414 pro

972 424 pro

Supply voltage	230 V, 50–60 Hz
Power consumption (real power)	0.8–1.8 W (depending on the switching status)
Channel	Channel A: Change-over (potential free) (Channel B: Change-over [potential of supply voltage]) Normally open, contact gap < 3 mm (μ)
Contact material	$AgSnO_2$
Switching capacity per channel	Channel A: 16 (6) A / 250 V~ (Channel B: 10 (4) A / 250 V~)
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; yearly program
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	60
Minimum interval	1 min.
Time base	Quartz
Quartz accuracy (at 20°C)	$\leqq$ ±0.5 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 (E²-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
Accessories (not included in delivery)	Data-key DK pro, Programming package PP 50 pro / PP 60 pro

* Lamp load channel B approx. 60 % of the values of channel A

Order number	Channels	Special function
paladin **972 414 pro**	1	External input, yearly program
paladin **972 424 pro**	2	Yearly program

◿ ◿ Housing colour