

**Description**

- Operation mode and max sensing range:  
**Thru-beam:** 0-45 m  
**Diffuse proximity:** 0-3,5 m
- 230 V ac, 115 V ac or 24 V ac/dc supply voltage
- Automatic and/or manual sensitivity adjustment
- Sensor LED-drive
- Adjustable on/off time delay
- 1 relay or 1 transistor output
- STF – Signal Tracking Feature
- Switch selectable light or dark function
- Switch selectable long or short range
- Power, output and signal status indicators
- Test input
- 11-pole DIN socket connection



The PA 01 is a 1-channel photoelectric amplifier, which is to be used in conjunction with a set of remote transmitter LT and receiver LR from the series 101, 100, 110 or 120.

This amplifier series offers a choice between automatic and/or manual sensitivity adjustment with or without a 0-10 sec on/off time delay via integral potentiometers located on the front panel of the amplifier. Output can be selected from either a relay or an NPN/PNP transistor output. Light or dark function and long or short range are switch selectable.


In automatic mode, set up is required. This is achieved by pressing the teach-in button located on the front panel. This unique feature ensures

that the transmitting power level is adjusted according to the application, thus achieving optimal hysteresis and excess gain. Once set up, the system will automatically compensate for moderate misalignment and contamination during operation. In manual mode, the teach-in button allows for an overall manual system test by temporarily disabling the transmitter. The sensor LED drive powers the optional monitor LEDs available on the remote sensors – output (LT) and power (LR). The feature STF allows up to 3 identical systems to operate within a close distance of each other without optical cross talk as each system automatically maintains different transmitter frequencies.

**Technical Data**

Supply voltage		115 V ac or 230 V ac
		12-30 V ac / 12-36 V dc
Voltage tolerance		+/- 15 %
Current consumption		Max. 2,5 VA
Output	Relay	1 open / 1 close, 230 V ac / 3 A, 120 V ac / 5 A
	Transistor	100 mA / 36 V dc
Alarm output		–
Power on indicator		Green LED
Output indicator		Yellow LED
Signal status indicator		Green LED
LR sensor failure indicator		–
LT sensor failure indicator		–
Sensor monitor LED drive		The green monitor LED on the receiver indicates 'Power ON' The yellow monitor LED on the transmitter indicates 'PA 01 output activated'
Hysteresis		Approx. 20 %
Operation frequency	Relay	11 Hz
	Transistor	14 Hz
Response time $t_{ON} / t_{OFF}$	Relay	45 ms / 45 ms
	Transistor	35 ms / 35 ms
Delay $t_{ON} / t_{OFF}$	PA 01 C	0-10 sec, adjustable
Housing material		Noryl

**Environmental Data**

Temperature, operation	–10 to +55 °C
Temperature, storage	–40 to +80 °C
Sealing class	IP 40
Approvals	CE 

## Available Types

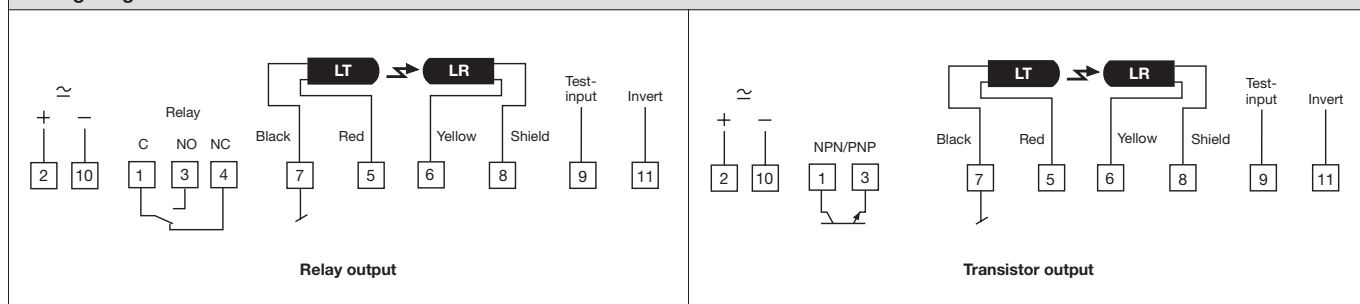
Model	Connection	Time Delay	Supply Voltage	12-30 V ac 12-36 V dc	115 V ac	230 V ac
			Output	Order Reference		
PA 01 A Automatic	11-pole DIN socket	—	Relay	PA 01 A 519	PA 01 A 511	PA 01 A 510
			NPN and PNP	PA 01 A 619	PA 01 A 611	PA 01 A 610
—		Relay	PA 01 B 519	PA 01 B 511	PA 01 B 510	
		NPN and PNP	PA 01 B 619	PA 01 B 611	PA 01 B 610	
PA 01 C Automatic/Manual		On/Off delay	Relay	PA 01 C 519	PA 01 C 511	PA 01 C 510
			NPN and PNP	PA 01 C 619	PA 01 C 611	PA 01 C 610

Note: Remote sensors and 11-pole DIN socket to be ordered separately.

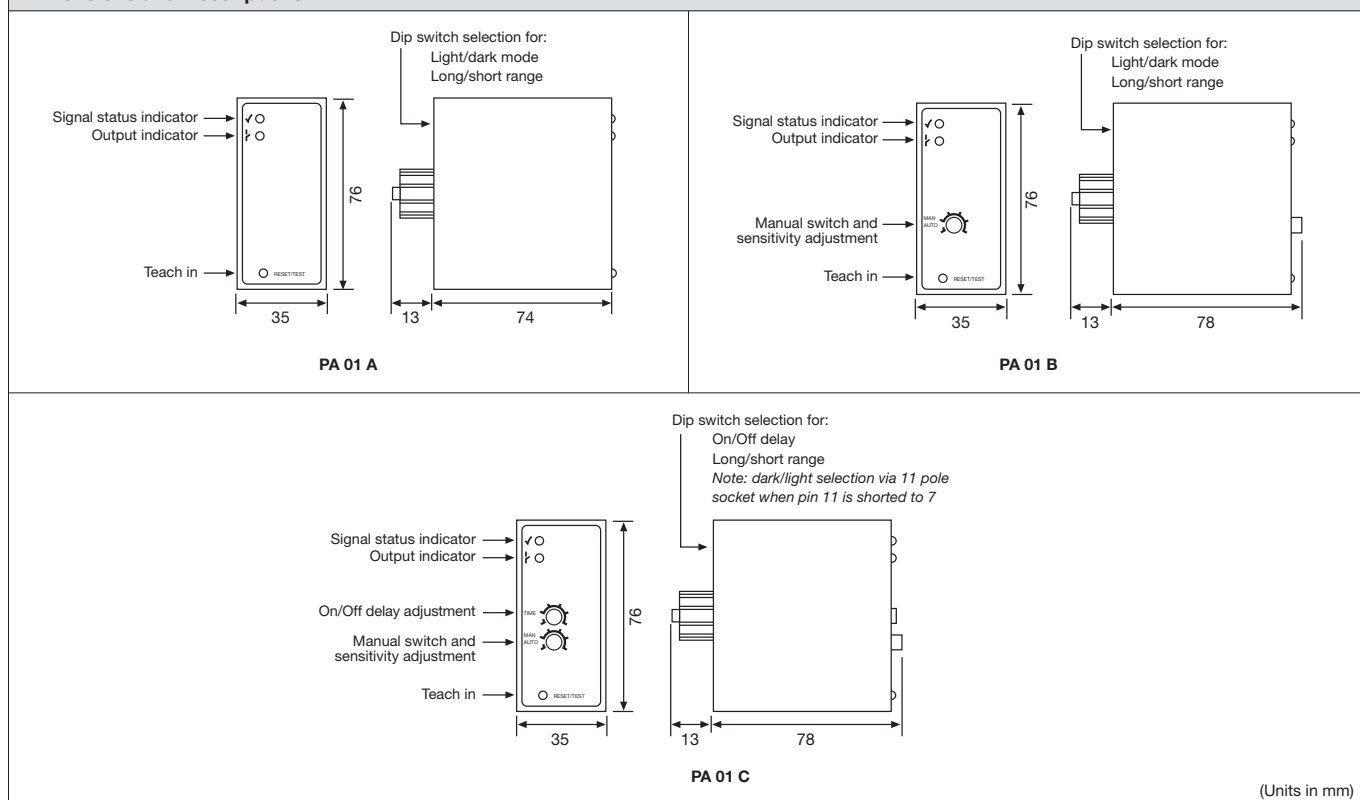
## Applicable Remote Sensors and Ranges

Series	Thru-beam	Diffuse Proximity
<b>101</b>	8 m	0,6 m
<b>100</b>	10 m	0,7 m
<b>110</b>	23 m	1,6 m
<b>120</b>	45 m	3,5 m

## Wiring Diagrams



## Dimensions and Descriptions



Telco reserves the right to change specifications without notice.