## **PHOTOELECTRIC AMPLIFIER SERIES**

## 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



PA 01

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					
		115 V ac or 230 V ac			
Supply voltage		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 receiver failure indicator		-			
LT transmitter 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 $\rm t_{ON}$ / $\rm t_{OFF}$	Relay	45 ms / 45 ms			
	Transistor	35 ms / 35 ms			
Delay t <sub>ON</sub> / t <sub>OFF</sub>	PA 01 C	0-10 sec, adjustable			
Housing material		Polycarbonate			

Environmental Data				
Temperature, operation	–10 to +55 °C			
Temperature, storage	-40 to +80 °C			
Sealing class	IP 40			
Approvals	(€ c <b>H</b> as			

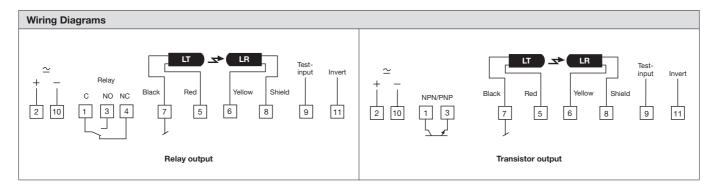
## PA 01

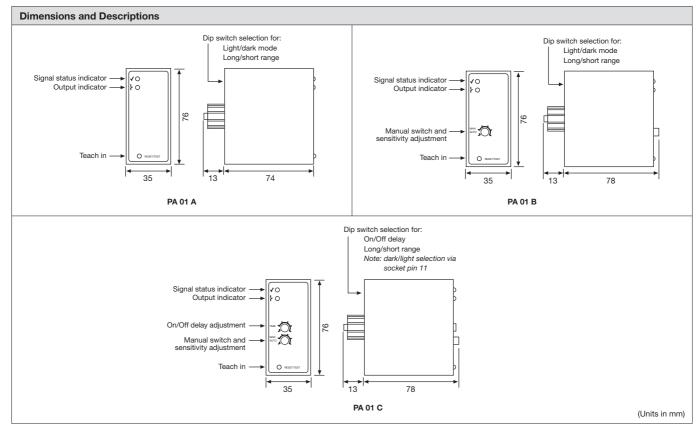
## PHOTOELECTRIC AMPLIFIER SERIES

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	11-pole DIN socket	-	Relay	PA 01 A 519	PA 01 A 511	PA 01 A 510
Automatic			NPN and PNP	PA 01 A 619	PA 01 A 611	PA 01 A 610
PA 01 B		_	Relay	PA 01 B 519	PA 01 B 511	PA 01 B 510
Automatic/Manual			NPN and PNP	PA 01 B 619	PA 01 B 611	PA 01 B 610
PA 01 C		On/Off delay	Relay	PA 01 C 519	PA 01 C 511	PA 01 C 510
Automatic/Manual			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		
101	8 m	0,6 m		
100	10 m	0,7 m		
110	23 m	1,6 m		
120	45 m	3,5 m		





Telco reserves the right to change specifications without notice.