

**Description**

- Operation mode and max sensing range:  
**Thru-beam: 0-70 m**  
**Diffuse proximity: 0-5 m**
- 24 V ac/dc supply voltage
- Manual sensitivity adjustment
- Sensor LED-drive
- Automatic sensor test
- Adjustable on/off time delay
- 1 relay or 1 transistor output
- Switch selectable light or dark function
- Switch selectable long or short range
- Test input
- Power, output, sensor test and signal level indicators
- Alarm output
- DIN rail mounting



The PA 15 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 100, 110 and 120.

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

The microprocessor controlled sensor test ensures that the system will automatically detect and indicate a faulty transmitter or receiver – cable break or electrical failure – during operation, through the relevant LED located on the front panel.

The amplifier offers a test input, which is used for either disabling or enabling the transmitting power temporarily for test purposes. The amplifier includes an alarm output which is used to indicate if the signal level is insufficient or if a sensor is faulty. The sensor LED drive powers the optional monitor LEDs available on the remote sensors – output (LT) and power (LR).

Technical Data		
Supply voltage		15-30 V dc or 24 V ac
Voltage tolerance		+/- 10 %
Current consumption		Max. 2,5 W
Output	Relay	250 V ac / 3 A, 120 V ac / 5A
	Transistor	30 V dc / 60 mA
Alarm output	Transistor	12-30 V dc / 10 mA
Power on indicator		Green LED
Output indicator		Yellow LED
Signal level indicator		Green LED
LR sensor failure indicator		Red LED
LT sensor failure indicator		Red LED
Sensor monitor LED drive		Green monitor LED on receiver indicates 'Power ON' Yellow monitor LED on the transmitter indicates 'PA output activated'
Hysteresis		Approx. 45 %
Operation frequency	Relay	14 Hz
	Transistor	20 Hz
Response time t <sub>ON</sub> / t <sub>OFF</sub>	Relay	35 ms / 35 ms
	Transistor	25 ms / 25 ms
Delay t <sub>ON</sub> / t <sub>OFF</sub>	PA 15 A	0-10 sec, adjustable
Housing material		Polyamide

**Environmental Data**

Temperature, operation	-10 to +50 °C
Temperature, storage	-40 to +80 °C
Sealing class	IP 40
Approvals	CE

**Available Types**

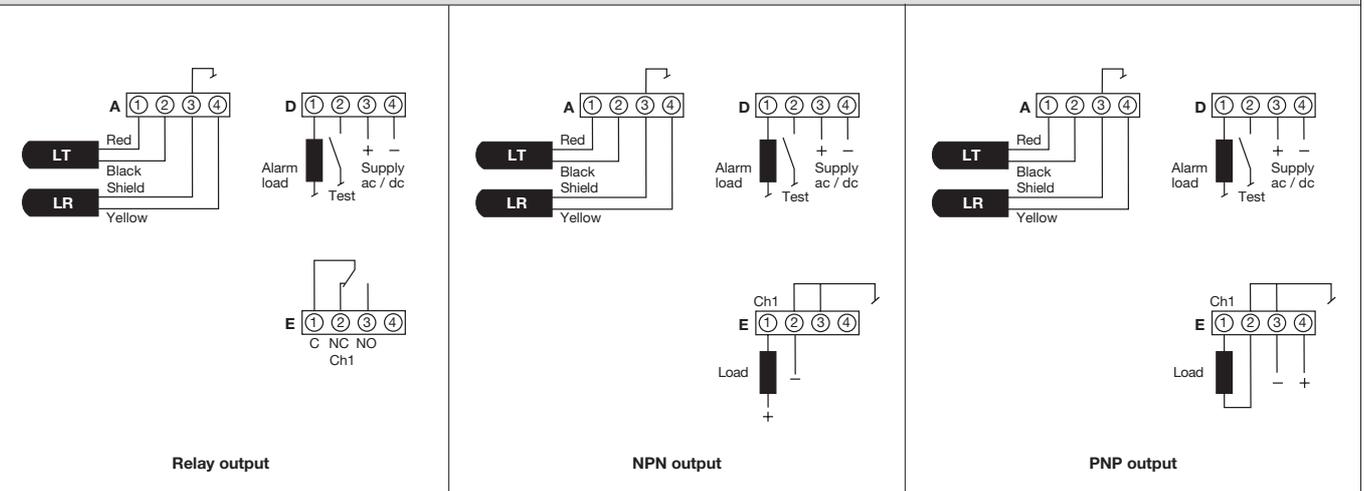
Model	Connection	Time Delay	Supply Voltage	24 V ac / dc	
			Output	Order Reference	
PA 15 A	Removable screw terminals	On/Off delay	Relay	PA 15 A 009	
			NPN	PA 15 A 109	
			PNP	PA 15 A 209	
PA 15 B		-	-	Relay	PA 15 B 009
				NPN	PA 15 B 109
				PNP	PA 15 B 209

Note: Remote sensors to be ordered separately.

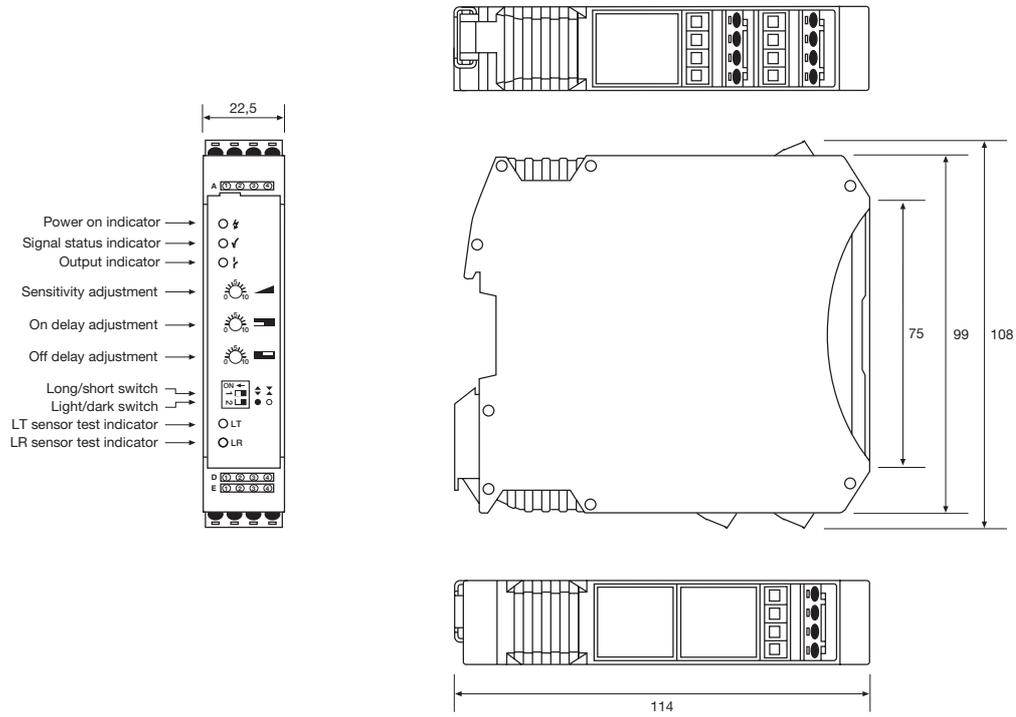
**Applicable Remote Sensors and Ranges**

Series	Thru Beam	Diffuse Proximity
100	18 m	1,3 m
110	40 m	2,7 m
120	70 m	5,0 m

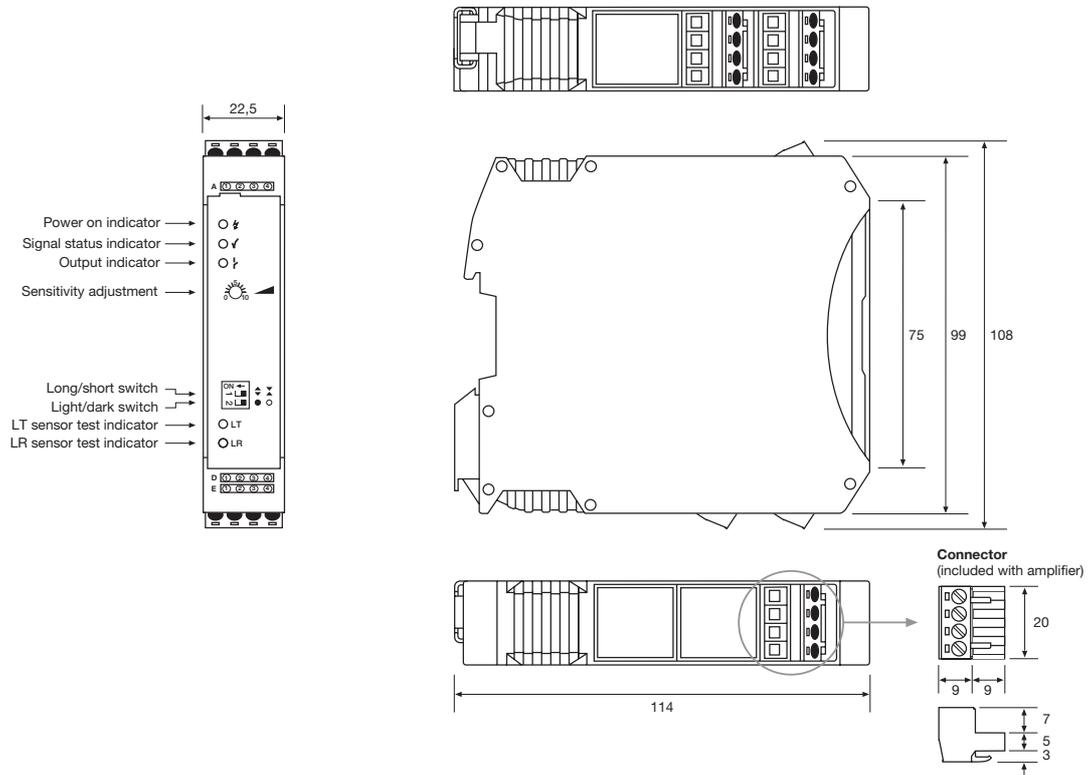
**Wiring Diagrams**



Dimensions and Descriptions



PA 15 A



PA 15 B

(Units in mm)

Telco reserves the right to change specifications without notice.