

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_{ON} / t_{OFF} | Relay | 35 ms / 35 ms |
| | Transistor | 25 ms / 25 ms |
| Delay t_{ON} / t_{OFF} | 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

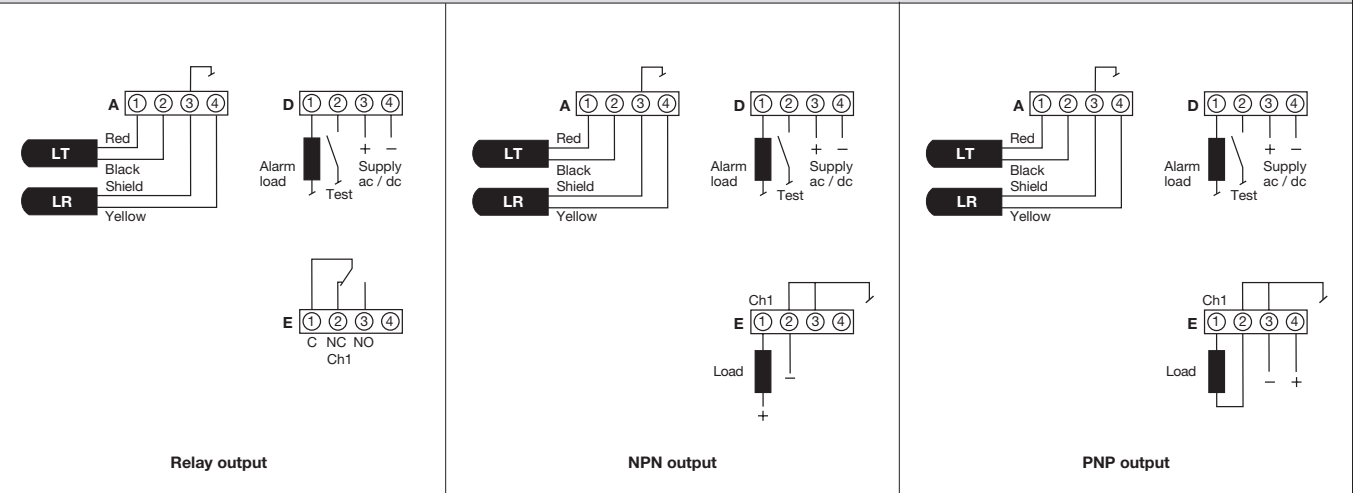
| Model | Connection | Time Delay | Supply Voltage | 24 V ac / dc | |
|---------|---------------------------|--------------|----------------|-----------------|-------------|
| | | | Output | Order Reference | |
| PA 15 A | Removable screw terminals | On/Off delay | Relay | PA 15 A 009 | |
| | | | NPN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

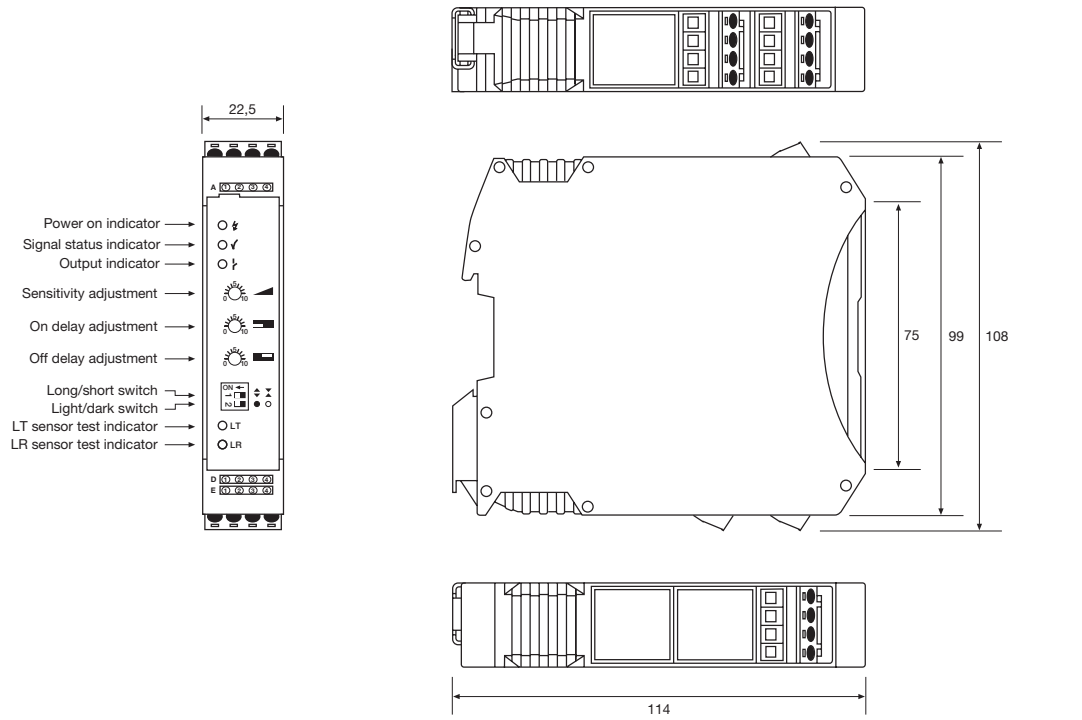
Applicable Remote Sensors and Ranges

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

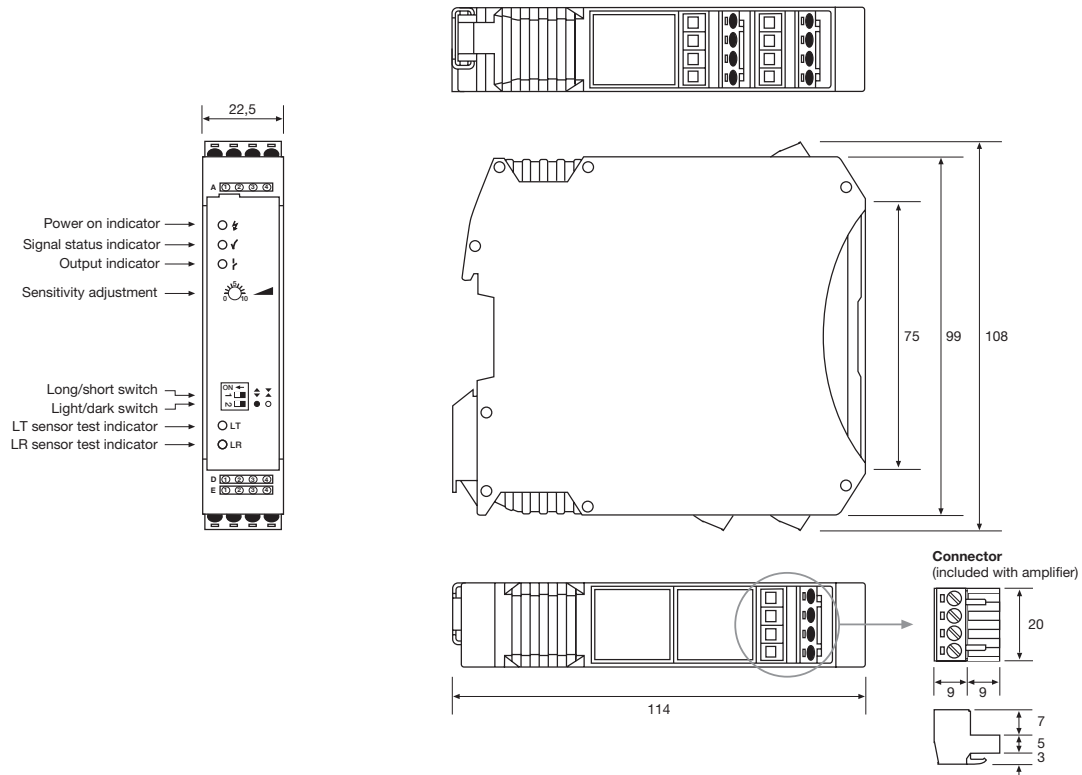
Wiring Diagrams



Dimensions and Descriptions



PA 15 A



PA 15 B

(Units in mm)

Telco reserves the right to change specifications without notice.