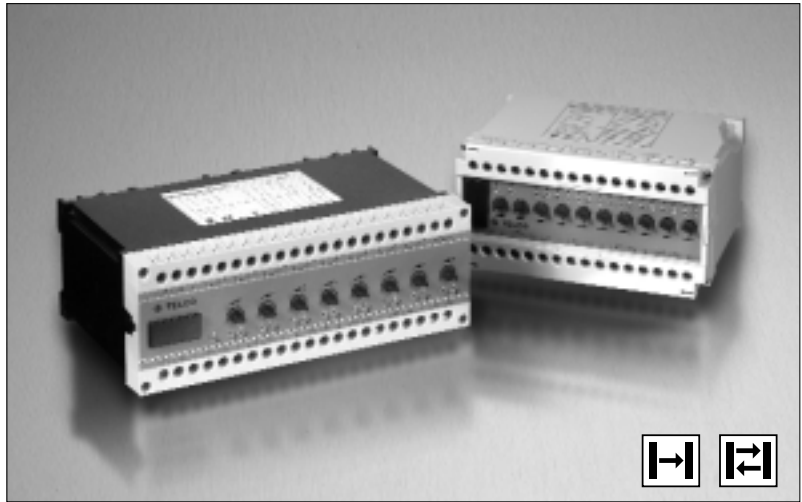


**Description**

- Operation mode and max sensing range:  
**Thru beam:** 0-35 m  
**Diffuse proximity:** 0-3 m
- 230 V ac, 115 V ac, 24 V ac or 24 V dc supply voltage
- Manual sensitivity adjustment
- Adjustable on/off time delay
- 8 relays or 8 transistor individual outputs
- 1 relay and 1 transistor common output
- Switch selectable light or dark function
- Switch selectable long or short range
- Power, output and signal level indicators
- Screw terminals connection



The MPA 81 is to be used in conjunction with 8 sets of remote transmitters LT and receivers LR, from the series 100, 110 and 120.

The 8 channels operate independently of each other with their own set of remote transmitter and receiver. The multiplexing function ensures that optical cross talk between channels is prevented. The series offers a choice between 8 individual relays or 8 individual NPN/PNP transistor



outputs, or 1 common relay and 1 common NPN/PNP transistor output which has an adjustable 0-10 sec on-off time delay.

This amplifier series offers manual sensitivity adjustment for each individual channel, via integral potentiometers located on the front panel of the amplifier. Light or dark function and long or short range is switch selectable for each individual channel.

**Technical Data**

Supply voltage		24 V dc, 24 V ac, 115 V ac or 230 V ac
Voltage tolerance		+/- 15 %
Power consumption		Max. 6,5 VA
Output	Relay	1 open / 1 close, 250 V ac / 3 A, 120 V ac / 5 A
	Transistor	40 mA / 30 V dc
Power on indicator		Green LED
Output indicator		Red LED
Signal level indicator		Green LED
LR sensor failure indicator		-
LT sensor failure indicator		-
Sensor monitor LED drive		-
Hysteresis		Approx. 35 %
Operation frequency	MPA 81 A /B	5 Hz
	MPA 81 C/D	13 Hz
Response time $t_{ON} / t_{OFF}$	MPA 81 A/B	90 ms / 90 ms
	MPA 81 C/D	36 ms / 36 ms
Delay $t_{ON} / t_{OFF}$	MPA 81 B/D	0 - 10 sec
Housing material		Noryl

**Environmental Data**

Temperature, operation	- 10 to +50 °C
Temperature, storage	- 40 to +80 °C
Sealing class	IP 30
Approvals	CE  

### Available Types

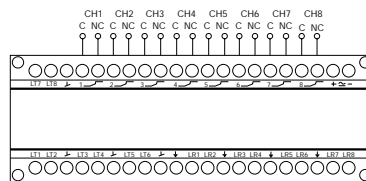
Model	Connection	Supply Voltage	24 V dc	24 V ac	115 V ac	230 V ac
		Output	Order Reference			
MPA 81 A	Screw terminals	8 individual relays	MPA 81 A 503	MPA 81 A 502	MPA 81 A 501	MPA 81 A 500
		8 individual NPN/PNP	MPA 81 A 603	MPA 81 A 602	MPA 81 A 601	MPA 81 A 600
MPA 81 B On/Off delay		1 common relay and 1 common NPN/PNP	MPA 81 B 703	MPA 81 B 702	MPA 81 B 701	MPA 81 B 700
		MPA 81 C	8 individual relays	MPA 81 C 503	MPA 81 C 502	MPA 81 C 501
8 individual NPN/PNP			MPA 81 C 603	MPA 81 C 602	MPA 81 C 601	MPA 81 C 600
MPA 81 D On/Off delay		1 common relay and 1 common NPN/PNP	MPA 81 D 703	MPA 81 D 702	MPA 81 D 701	MPA 81 D 700

Note: Remote sensors to be ordered separately.

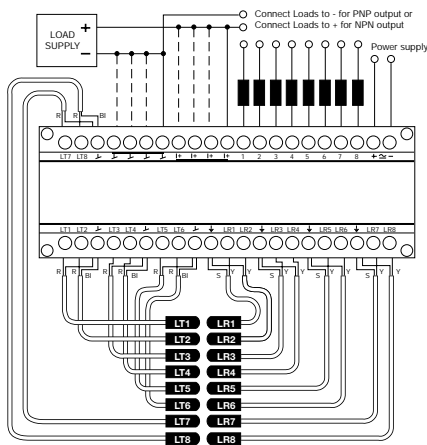
### Applicable Remote Sensors and Ranges

Series	Thru Beam	Diffuse Proximity
<b>MPA 81 A/B</b>		
100	8 m	65 cm
110	18 m	1,3 m
120	35 m	3 m
<b>MPA 81 C/D</b>		
100	4 m	35 cm
110	9 m	70 cm
120	18 m	2 m

### Wiring Diagrams

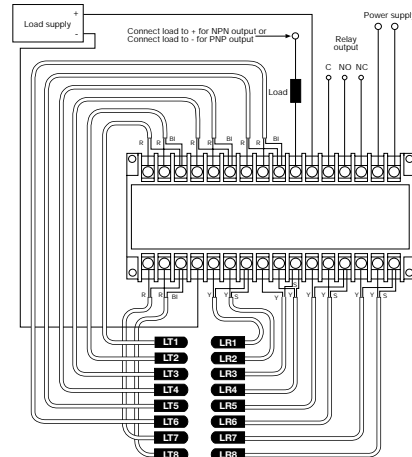


MPA 81A/C50X (Relay Output)



Wire Code	
R	Red
BI	Black
Y	Yellow
S	Shield

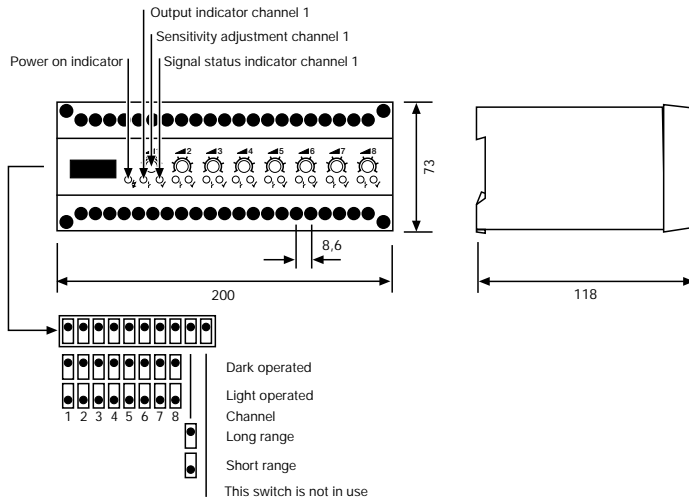
MPA 81A/C60X (Transistor Output)



Wire Code	
R	Red
BI	Black
Y	Yellow
S	Shield

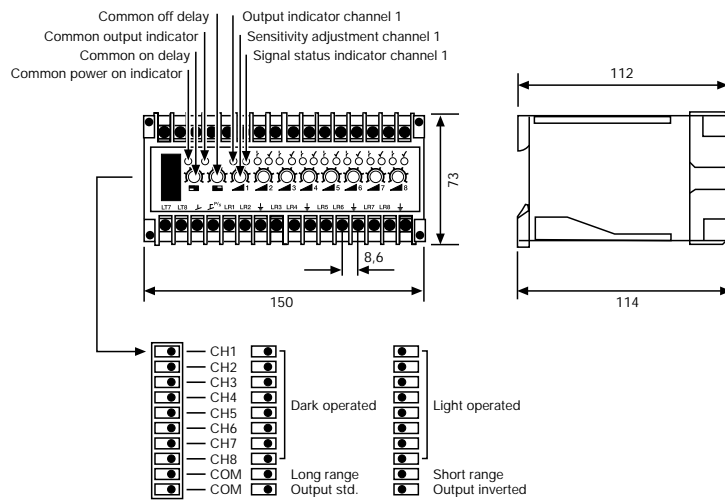
MPA 81 B/D

Dimensions and Descriptions



MPA 81 A/C

(Units in mm)



MPA 81 B/D

(Units in mm)

Telco reserves the right to change specifications without notice.