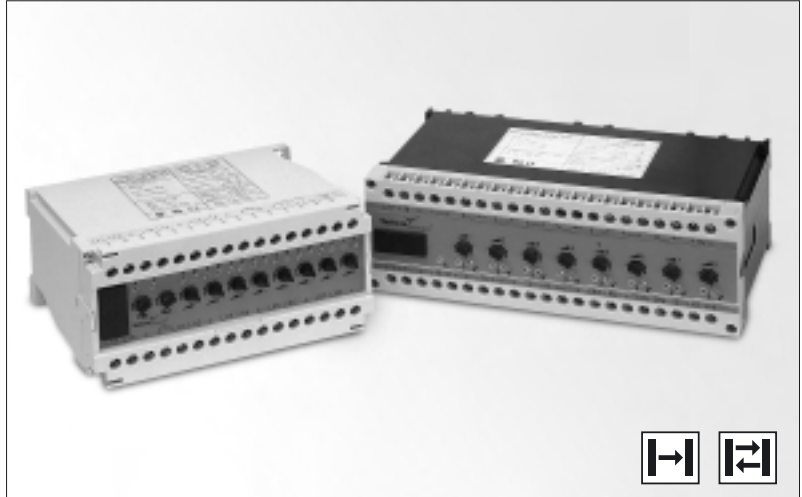


Description

- Operation mode and max sensing range:
Thru-beam: 0-35 m
Diffuse proximity: 0-2 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 an 8-channel, multiplexed photoelectric amplifier, which 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 are switch selectable for each individual channel.

Technical Data				MPA 81 A	MPA 81 B	MPA 81 C	MPA 81 D		
Supply voltage				24 V dc, 24 V ac, 115 V ac or 230 V ac					
Voltage tolerance				+/- 15 %					
Current 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	Relay	Short range		9 Hz		18 Hz			
		Long range		5 Hz		11 Hz			
	Transistor	Short range		11 Hz		28 Hz			
		Long range		6 Hz		14 Hz			
Response time t_{ON} / t_{OFF}	Relay	Short range		55 ms / 55 ms		28 ms / 28 ms			
		Long range		100 ms / 100 ms		46 ms / 46 ms			
	Transistor	Short range		45 ms / 45 ms		18 ms / 18 ms			
		Long range		90 ms / 90 ms		36 ms / 36 ms			
Delay t_{ON} / t_{OFF}				-	0-10 sec, adjustable		-	0-10 sec, adjustable	
Housing material				Polycarbonate					

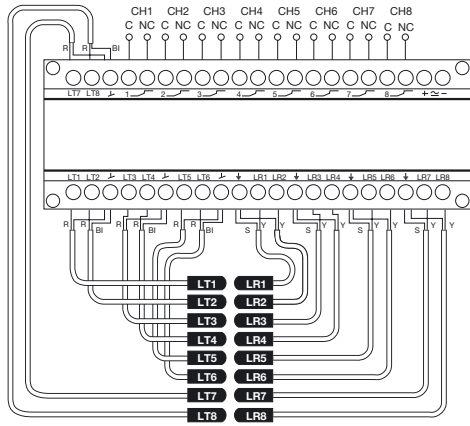
Environmental Data	
Temperature, operation	- 10 to +50 °C
Temperature, storage	- 40 to +80 °C
Sealing class	IP 30
Approvals	CE, UL, CB

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	MPA 81 C 500
		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.

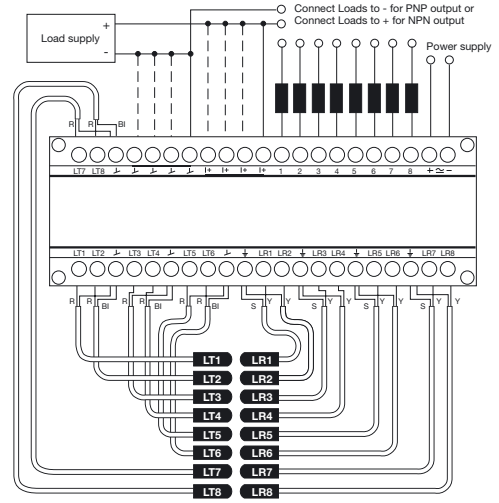
Applicable Remote Sensors and Ranges				
Series	Thru-beam		Diffuse Proximity	
	Short range	Long range	Short range	Long range
MPA 81 A/B				
100	4 m	8 m	0,4 m	0,6 m
110	9 m	18 m	0,7 m	1,3 m
120	18 m	35 m	1,3 m	2 m
MPA 81 C/D				
100	2 m	4 m	0,2 m	0,4 m
110	5 m	9 m	0,4 m	0,7 m
120	9 m	18 m	0,7 m	1,3 m

Wiring Diagrams



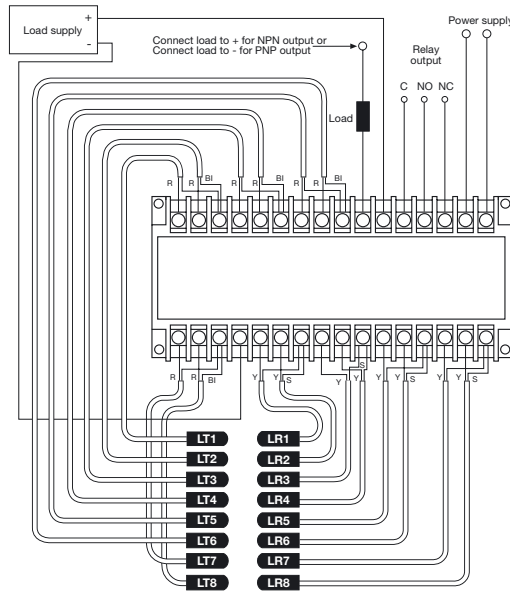
MPA 81 A/C 50x (Relay Output)

Wire Code	
R	Red
BI	Black
Y	Yellow
S	Shield



MPA 81 A/C 60x (Transistor Output)

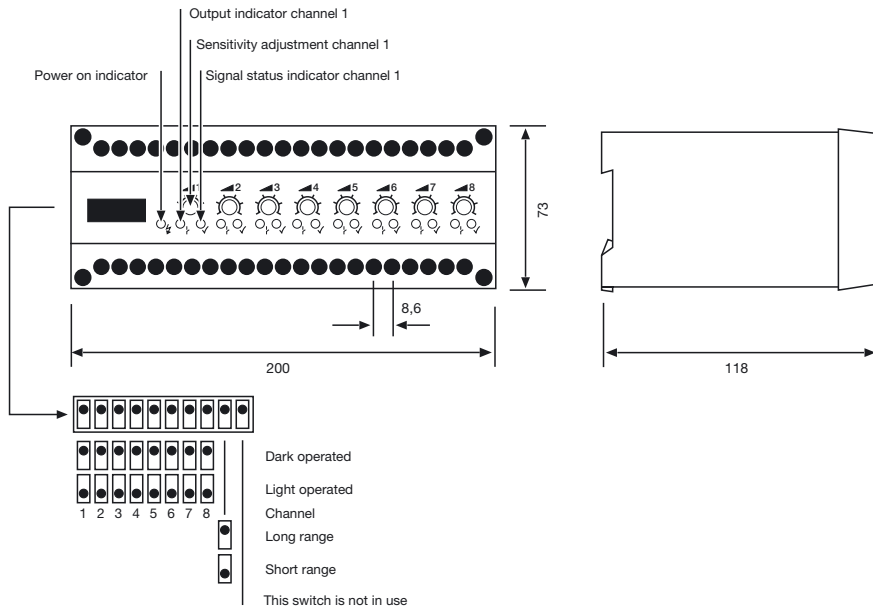
Wire Code	
R	Red
BI	Black
Y	Yellow
S	Shield



MPA 81 B/D (Relay/Transistor Output)

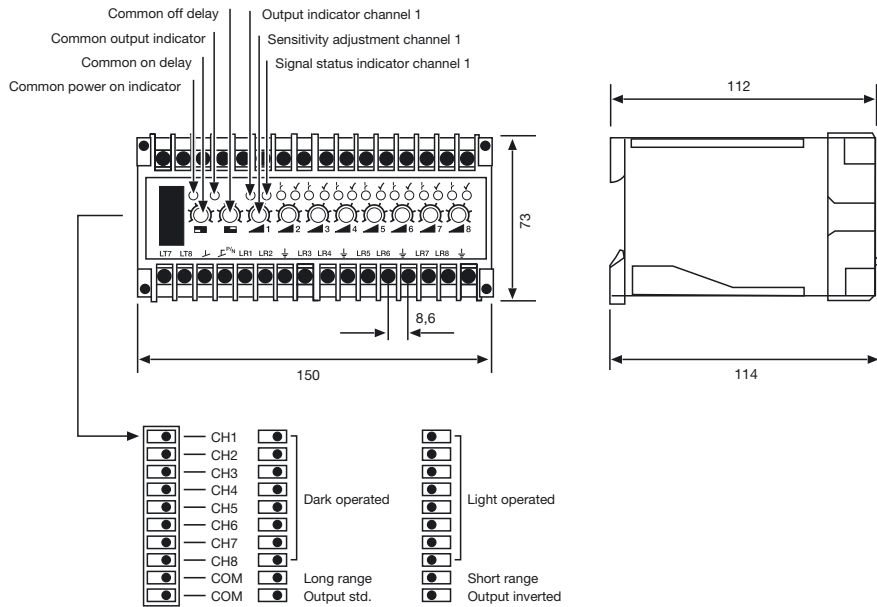
Wire Code	
R	Red
BI	Black
Y	Yellow
S	Shield

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.