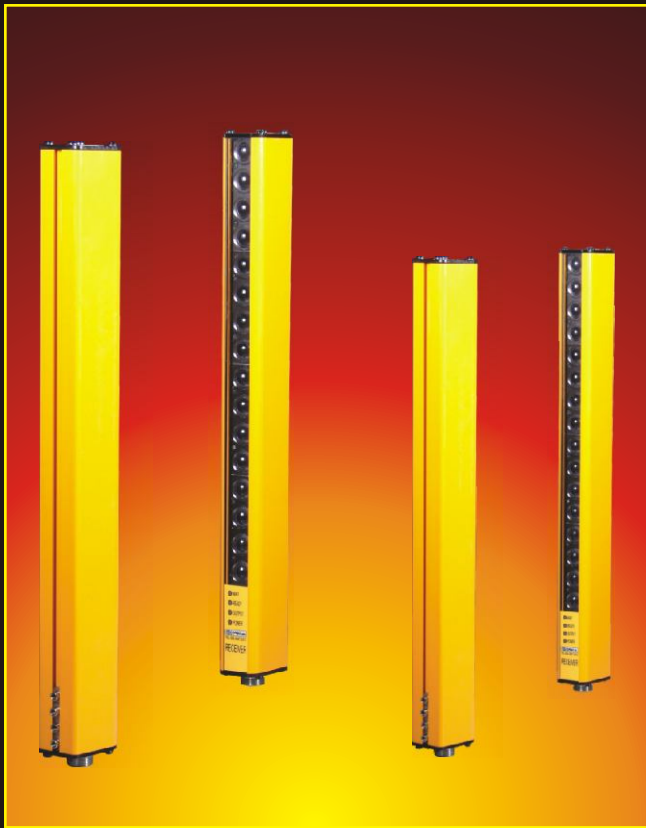




ORBITAL

SAFETY LIGHT CURTAINS & SCREENS

- SELF TEST
- DUAL ELECTRONICS
- RUGGED
- EASY TO ALIGN
- BUILT-IN SURGE SUPPRESSION



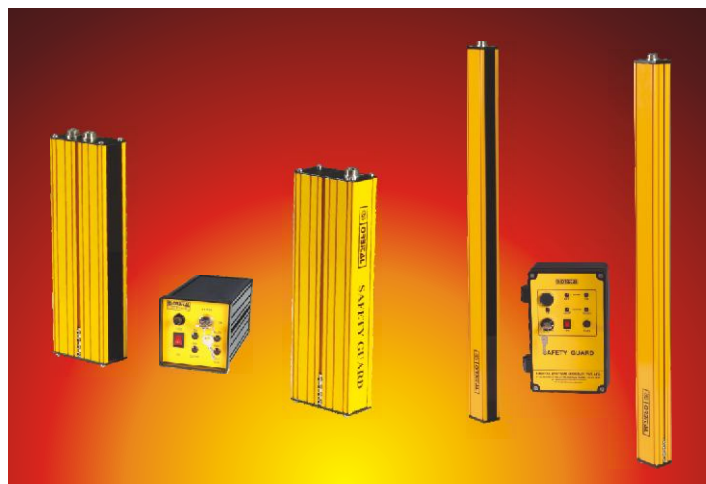
FEATURES

- **Micro controller based Embedded technology**
- **SELF TEST** : Built in self test to ensure that the electronic Components and logic circuit are functioning properly. System will go to wait state if the self test detect a malfunction.
- **DUAL ELECTRONIC CIRCUITS** : with separate outputs and Feedback for each output to add the reliability and to ensure failsafe operation.
- **BUILT IN SURGE SUPPRESSOR** : to safeguard against power Supply surges and electrical noise.
- **HOUSING** : extruded Aluminium Sections ensure that the Product can withstand severe mechanical impacts.
- **MOUNTING** : "T"slots allow for easy mounting arrangements.
- **OPTICS** : well designed optics ensure easy alignment.
- **OPTICAL COMMUNICATION**: No interconnecting cables. Immune to noise.
- **CHANNEL BY PASS OPERATION** : Programming of channels into bypass condition.

READY RECKONER - I

Parameter	Code	Specifications
Supply Voltage (V)	1	110 VAC ± 15%, 50Hz
	2	230 VAC ± 15%, 50Hz
	3	24 VDC ± 15%
Number of Channels (C)	A	04 Channels
	B	08 Channels
	C	12 Channels
	D	16 Channels
	E	24 Channels
	F	32 Channels
	G	48 Channels
	H	36 Channels
	I	20 Channels
Range (R)	1	5000 mm
	2	Special
Pitch (P)	A	50 mm
	B	3 mm
	C	18.3 mm
	D	36.6 mm
	E	30 mm
	F	30 & 50 mm
	G	15 mm
	H	57 mm
Type of Output (O)	1	2 x N/O Contact
	2	2 x N/C Contact
	3	1 C/O Relay Contact
	4	PNP NO
Model	S	Standard
	M	Inbuilt control box
	I	Intelligent channel bypass
	E	Slim-Line photo screen
Screen Height available		90, 105, 150, 210, 210, 225, 345, 350, 450, 465, 570, 690, 750, 930, 1150, 1550, 1800, 2000.

SAFETY LIGHT CURTAINS



Technical Specifications:

Operating Range	: upto to 7000mm
Detection Capabilities	: Dia 25mm (For 15mm Pitch) Dia 40mm (For 30mm Pitch) Dia 60mm (For 50mm Pitch)
Effective Angle	: ±5°
Supply Voltage	: 240 VAC -20% +10%, 50 Hz /110 VAC / 24 VDC
Output	: 2 N/O Contacts, 250V. 5A Resistive
Response Time	: Off Response 15 msec
Indicator	: Being Alignment Indicator, 2 Red LED on Transmitter
Temperature	: -10 to 60°C

Ready Reckoner for Safety Light Curtains

Screen Height (mm)	No. of Channel	Pitch	Length	Product Code
90	04	30	180	AA □ A □ E □ S
105	08	15	180	AA □ B □ G □ S
150	04	50	180	AA □ A □ A □ S
210	08	30	275	AA □ B □ E □ S
225	16	15	400	AA □ D □ G □ S
345	24	15	600	AA □ E □ G □ S
350	08	50	400	AA □ B □ A □ S
450	16	30	600	AA □ D □ E □ S
465	32	15	600	AA □ F □ G □ S
570	16	30 & 50	600	AA □ D □ F □ S
690	24	30	800	AA □ E □ E □ S
750	16	50	800	AA □ D □ A □ S
930	32	30	1000	AA □ F □ E □ S
1150	24	50	1500	AA □ E □ A □ S
1410	48	30	1500	AA □ G □ E □ S
1550	32	50	1800	AA □ F □ A □ S

For Safety Light Curtains with intelligent bypass

210	8	30	275	AA □ B □ E □ I
350	8	50	400	AA □ B □ A □ I
450	16	30	600	AA □ D □ E □ I
750	16	50	800	AA □ D □ F □ I
930	32	30	1000	AA □ F □ E □ I
1410	48	30	1500	AA □ D □ E □ I

Humidity	: 30 to 85% RH
Emitting Element	: Infra Red LED
Vibration Resistance	: 10 to 55 Hz, 0.75mm Amplitude in X Y & Z Direction For 2 Hours each 30 msec ² Acceleration (30 G approx.) in X, Y & Z direction for three time each

SAFETY LIGHT CURTAIN WITH IN BUILT CONTROLLER

READY RECKONER

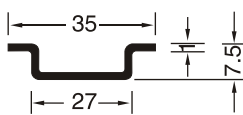
Screen Height (mm)	No. Of Channel	Pitch (mm)	Total Height (mm)	Product Code
145	8	18.3	205	AC □ B □ C □ M
220	12	18.3	280	AC □ C □ C □ M
290	16	18.3	350	AC □ D □ C □ M
365	20	18.3	425	AC □ I □ C □ M
440	24	18.3	500	AC □ E □ C □ M
585	32	18.3	645	AC □ F □ C □ M
660	36	18.3	720	AC □ H □ C □ M
880	48	18.3	940	AC □ G □ C □ M
290	8	36.6	350	AC □ B □ D □ M
440	12	36.6	500	AC □ C □ D □ M
585	16	36.6	645	AC □ D □ D □ M
730	20	36.6	790	AC □ I □ D □ M
880	24	36.6	940	AC □ E □ D □ M
1170	32	36.6	1230	AC □ F □ D □ M
1315	36	36.6	1375	AC □ H □ D □ M
1755	48	36.6	1815	AC □ G □ D □ M



TECHNICAL SPECIFICATIONS:

Operating Range	: 5000 mm upto 15000 mm
Effective Angle	: ± 5°
Supply Voltage	: 24 VDC ± 20%
Output	: 2 x PNP N/O
Response Time	: 15 m sec
Temperature	: 0 to 60°C
Humidity	: 30 to 85% RH
Emitting Element	: Infra Red LED
Peak Emission Wavelength	: 940 nm
Output Load current	: Max. 100 mA
Vibration Resistance	: 10 to 55 Hz, 0.75mm Amplitude in X Y & Z Direction For 2 Hours each 30 msec ² Acceleration (30 G approx.) in X, Y & Z direction for three time each
Connection	: Transmitter 2 Pin connector & Receiver 4 pin connector
Dimension	: 31 mm (Width) x 41 mm (Breadth) x Total Height

SAFETY RELAY UNITS

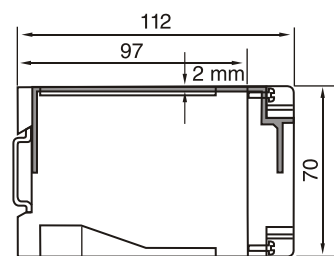
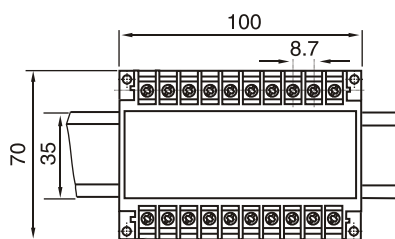
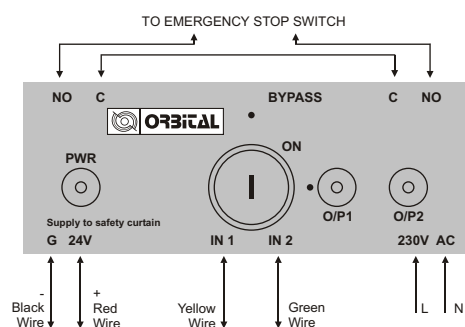


DIN RAIL-DIN EN.50022

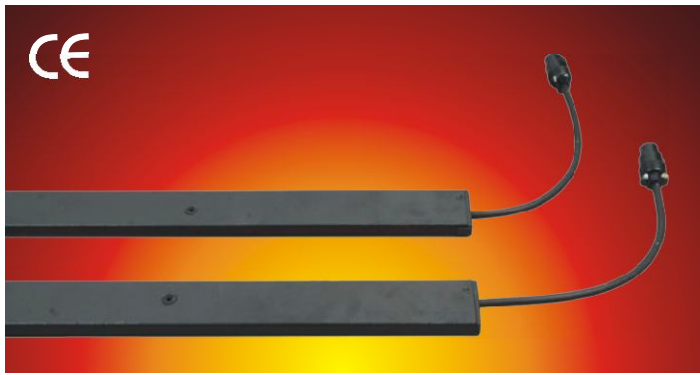
Specifications

Supply voltage	90 - 260 VAC	
Current consumption	500 mA	
In Put	Applicable input	PNP or contact input
	2 channel	2 channel
	Rated applied voltage	24 V DC
Output	Safety circuit output	2 NO contact
	Rated voltage	24 V DC
Ambient temperature	0 to 55°C, Storage 0 to 70°C	
Ambient humidity	35 to 85% RH, Storage: 35 to 85% RH	
Vibration resistance	10 to 55Hz frequency, 0.5mm amplitude (checked in three directions)	
Material	Enclosure: Glass fiber-reinforced thermoplastic	
Connecting method	Terminal block connection (self-up screw)	

Controller Connection Diagram



ELEVATOR LIGHT CURTAINS



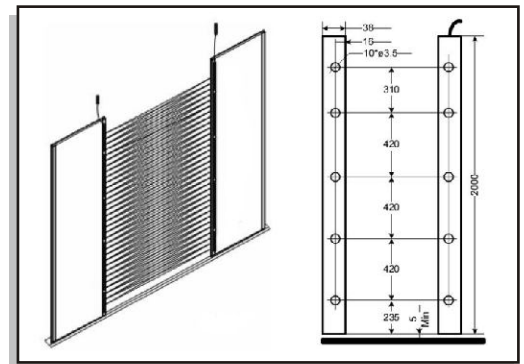
Features

- Micro controller based Embedded technology
- Pulsed, Modulated & Scanned Logic
- Crisscross Beam Pattern
- Extensive fault diagnosis
- Intelligent bypass of individual channels
- Inbuilt Surge & Spike Protection
- Extremely Rugged

Technical Specifications

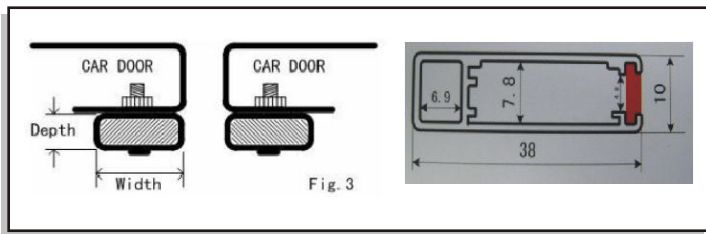
Number of beams(Max.)	94
Response time(mS)	69.2
Range of detection	0-3000mm
Active protection height	20-1841mm
Vertical mounting tolerance	+/- 20mm/10°
Horizontal mounting tolerance	+/- 3mm/7°
Light immunity(LUX.)	100000
Operating temperature	-20°c — +65°c
LED indicators	Green: power supply; Red: signal indicators
Housing material	Aluminum alloy, finished black
Housing dimension(L)	2000mm
Housing dimension(W)	38mm
Housing dimension(D)	10mm
Power Consumption	3W
System marking	CE

Installation Dimension



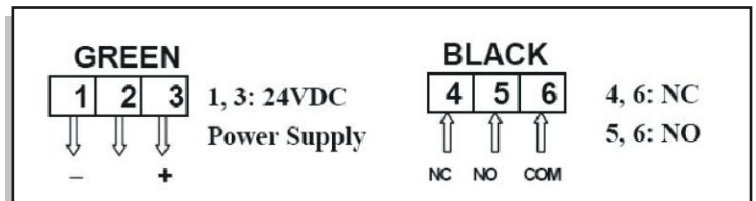
Housing Dimension

Depth	10MM
Width	38MM

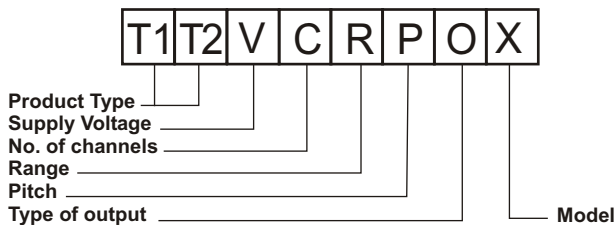


Elevator Door Detector (Elevator Light Curtain) Power Unit

Please make sure that all the wires are connected according the following diagram



ORDERING CODE: (Refer READY RECKONER - I)



→ Model:-
M : Inbuilt control box
I : Intelligent Channel Bypass
E : Slim-line Photo Screen
S : Standard

Product type (T1, T2):-
AA = Safety light curtain
AB = Photo screen for part sensing
AC = Inbuilt control box
AD = Slim-Line photo screen



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