SAFESCREEN - FCU-0547

SUMMARY

Featuring 47 diagonal infra-red (IR) beams in a 30mm wide x 20mm long aluminium housing, Formula Systems' SafeScreen product has been designed for the North American market.

The product is backward compatible with any Formula Systems power supply, enabling companies to upgrade old technology, and can be wired directly into suitable door controllers or the Formula Systems universal interface.

Our interfaces combine with SlimScreen, SafeScreen and Vision products in applications where direct connection is not appropriate.

Housed in a coated steel casing, installation is simple and quick. The product enables the user to select multiple output relays and buzzer/nudging options.

Signal connections to the controller are provided by a pair of relays with changeover contacts. In order to ensure a failsafe response to power failure the detection relay, which is normally in the energised mode, will drop out when any of the detection systems are interrupted.

FEATURES & BENEFITS

- 47 diagonal infra-red beams
- Backward compatible to any Formula System power supply
- Can be installed directly, or with a Formula Systems Universal Interface
- Designed specifically for the North American market
- No-fuss installation with flexible power connection options

PRODUCT OVERVIEW

MODEL	VERSION	DIMENSIONS (MM)			RANGE (M)		MOUNTING		BEAMS	
		W	D	H	MIN	MAX	DOOR	TRACK	QTY	TOP
SafeScreen	FCU-0547	30	20	2136	0	1.8	YES	NO	47	1788

STANDARD CHARACTERISTICS

PRODUCT STANDARD CHARACTERISTICS (UNLESS OTHERWISE NOTED)	
Response time: <100ms	Light immunity: > 100,000 lux
Output: NPN	Indicators (LED): Red obstruction
Ingress protection: IP54	Temperature: Ambient -20°C to +70°C, Storage -40°C to +80°C
Operating voltage: 24V DC (18 - 30)	Material: Al, Alloy casing, plastic lens cover
Current Consumption: 100mA (Typical)	Approvals & Certification: UL, cUL, CE

FORMULA SYSTEMS
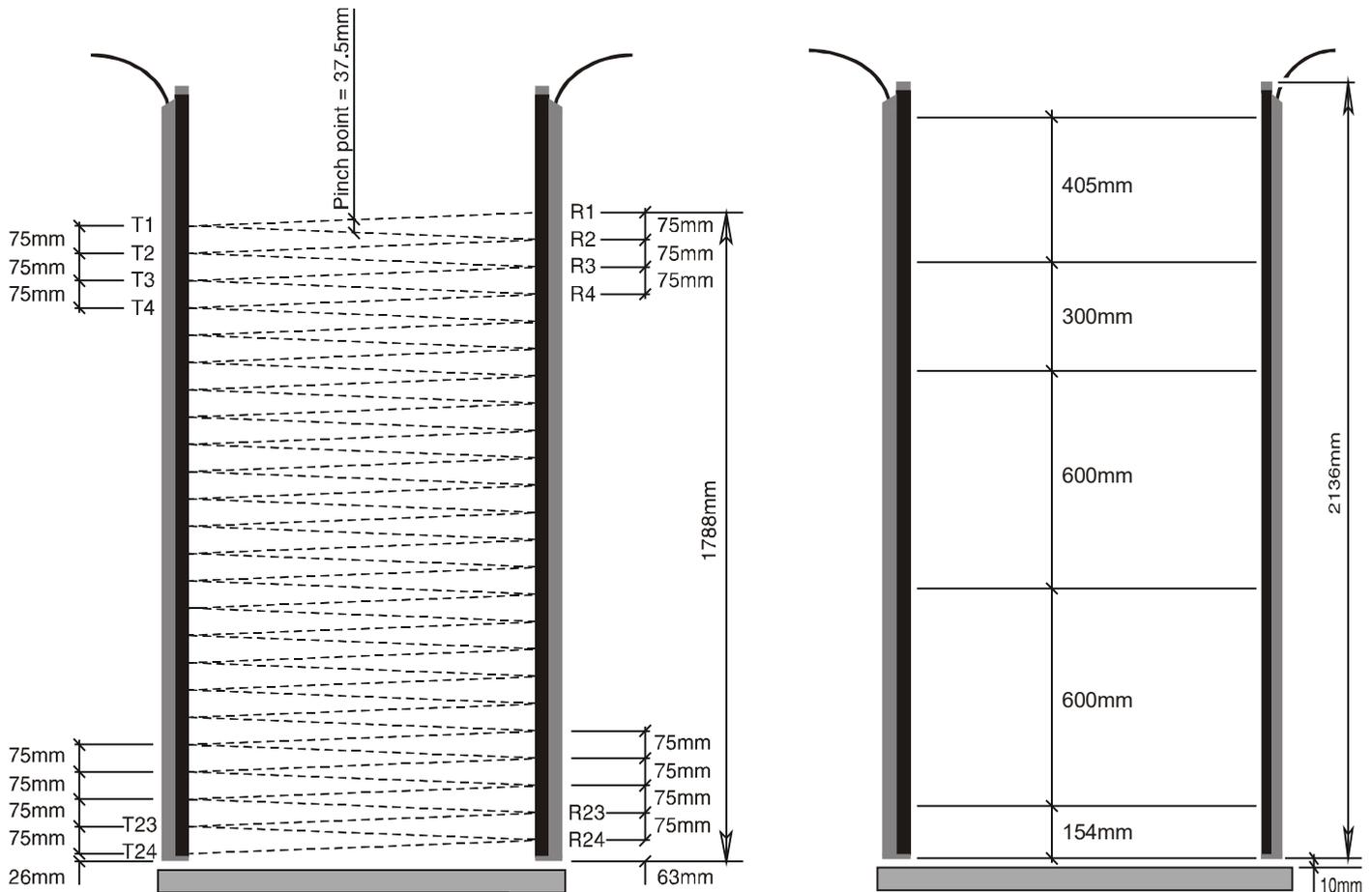# TECHNICAL DATA SHEET
SAFESCREEN - FCU-0547

TECHNICAL SPECIFICATIONS

ITEM	DETAIL	COMMENTS
Number of beams	47 non-focused beams	Infra-red
Number of sensors	24	See drawing outline
Sensor spacing	75mm	See drawing outline
Distance between beams at pinch point (doors closed)	37.5mm	See drawing outline
Scan Type	Interleaved	
Response Time	10 to 100 milliseconds	Relates to point of detection in scan cycle
Range of detection	1800mm	Standard range
Light immunity	100,000 lux	Visible light
Angular displacement	10° (inclusive)	
Positional mounting tolerance	+/- 18mm vertically +/- 5mm side by side	Doors closed, units touching
Operating voltage	24 volts	16 volts min / 30 volts max
Current consumption	<100 mA RMS	Total of both units
Control unit	Not required	Optional Universal Interface FPS 0274
Environmental protection	IP54	Conformal coating to PCB's
Operating temperature range	-20 °C to +70 °C	Ambient environment
Storage temperature range	-40 °C to +80 °C	
Unit size	30x20x2136mm	
Mounting	5 screw positions	See drawing outline
Indicators	Supply present: System fault / beams obstructed	Green LED Red LED
Cable supplied	Two x 4m approx. of 3 core cable	Connects to product via short fixed lead
Case material	Aluminium alloy	Finished black
Cover (filter)	Infra-red transparant plastic	Snap-on fixing
Installation kit	1x Instructions 1x Space block 6x Cable clips 3x Nytie 20x Screws 8-32unc x 1/2" 20x Washers 20x Washer spring 2x Mounting brackets 10x Screws M5.0 x 10mm 10x Washers M5.0 2x Cable retainer 1x Drill bit	Hex. flanged head (self tapping) Use with Mounting Bracket Use with Mounting Bracket
System approvals	CUlus, CE	

PRODUCT OUTLINE

Pinch point = 37.5mm

T1
T2
T3
T4
75mm
75mm
75mm

R1
R2
R3
R4
75mm
75mm
75mm

1788mm

75mm
75mm
75mm
75mm
T23
T24
26mm

75mm
75mm
75mm
R23
R24
75mm
63mm

405mm
300mm
600mm
600mm
154mm
2136mm
10mm

FCU 0547 SERIES
(Nominal dimension shown)

15

19

30

INFRA-RED
TRANSPARENT
PLASTIC FILTER

MOUNTING HOLE
CENTER LINE

HOUSING.
BLACK ANODISED
ALUMINIUM ALLOY