

## TYPE 2 SAFETY CONTROL UNITS



- *Control of 1 or 2 emitter-receiver photoelectric sensors*
- *Complete autodiagnostic during Start and Test*
- *Manual activation and Restart*
- *Double safety relay output*

## SB-BWS-T2 SERIES


The control units of the **SB-BWS-T2** series are suitable to type 2 safety systems and can be connected to one or two emitter-receiver photocell couples, available in the tubular M18 format, either in the plastic S5-F/G-ST2 or metal S10-F/G-ST2 versions for distances reaching 8 m, or in the parallelepiped S30-F/G-ST2 model reaching 50 m.

At any interruption of a photocell couple's beam, the contacts of the two relay outputs open causing the safety block of the controlled machinery.

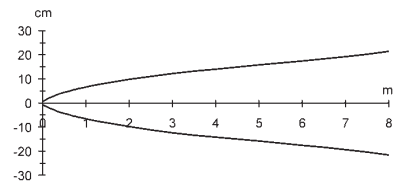
The activation and the Restart of the control unit's output are both obtained closing the 'Start' contact, while the 'Test1' and 'Test2' contacts check the systems without physically interrupting the light beam.

The units operating status is signalled by three LEDs: green 'Free' with free beams, yellow 'Test' during autodiagnostic, red 'Alarm' with one or two interrupted beams.

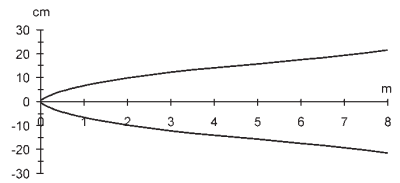
## TECHNICAL DATA

<b>Power supply:</b> .....	24 Vdc $\pm$ 10%, reverse polarity protection
<b>Consumption:</b> .....	180 mA max.
<b>Inputs for photocells:</b> .....	1 or 2 emitter-receiver safety photocell couples (S5-F/G-ST2, S10-F/G-ST2, S30-F/G-ST2 series)
<b>Operating distance:</b> .....	0 ... 8 m with S5-F/G-ST2 or S10-F/G-ST2, 0 ... 50 m with S30-F/G-ST2
<b>Inputs:</b> .....	Start - NO with >30ms closed time, Test1 - NC with >30ms opened time, Test2 - NC with >30ms opened time
<b>Indicators:</b> .....	green FREE LED (free beams) yellow TEST LED (autodiagnostic) red ALARM LED (interrupted beams)
<b>Output type:</b> .....	2 safety relays with NO contact
<b>Output current:</b> .....	4 A max. (250 Vac)
<b>Response time:</b> .....	20 ms max.
<b>Autodiagnostic time (START):</b> .....	165 ms + closing contact time
<b>Auxiliary functions:</b> .....	Test, Start
<b>Connection:</b> .....	terminal block with 30 screw contacts
<b>Mounting:</b> .....	DIN rail, or 2 holes for M4 screws
<b>Safety category:</b> .....	type 2
<b>Electrical protection:</b> .....	class 2
<b>Mechanical protection:</b> .....	IP20
<b>Housing material:</b> .....	plastic
<b>Weight:</b> .....	510 g max.
<b>Operating temperature:</b> .....	0 ... +50 °C
<b>Storage temperature:</b> .....	-10 ... +60 °C
<b>Reference standard:</b> .....	EN 954-1, IEC 61496-1, IEC 61496-2
<b>Certifications:</b> .....	CE 

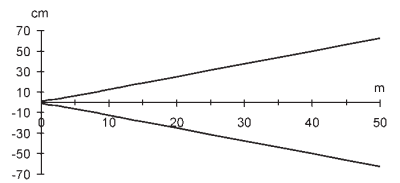
## DETECTION DIAGRAMS WITH Sx-F/G-ST PHOTOCELL SERIES



**S5-F/G-ST2**



**S10-F/G-ST2**

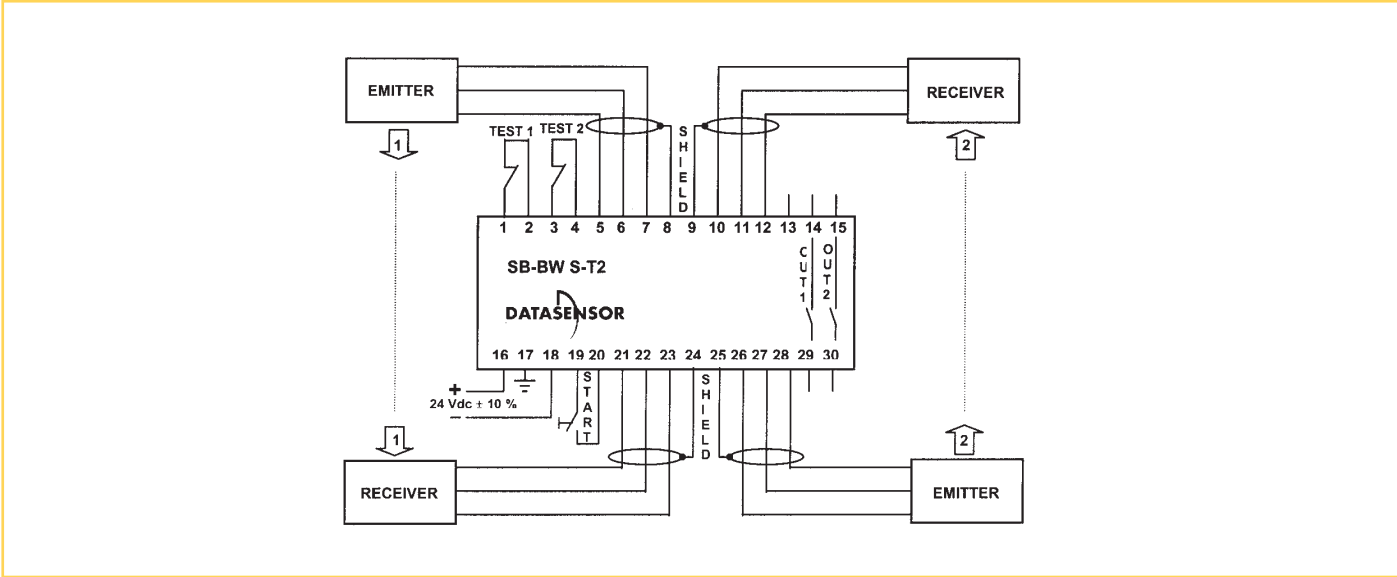


**S30-F/G-ST2**

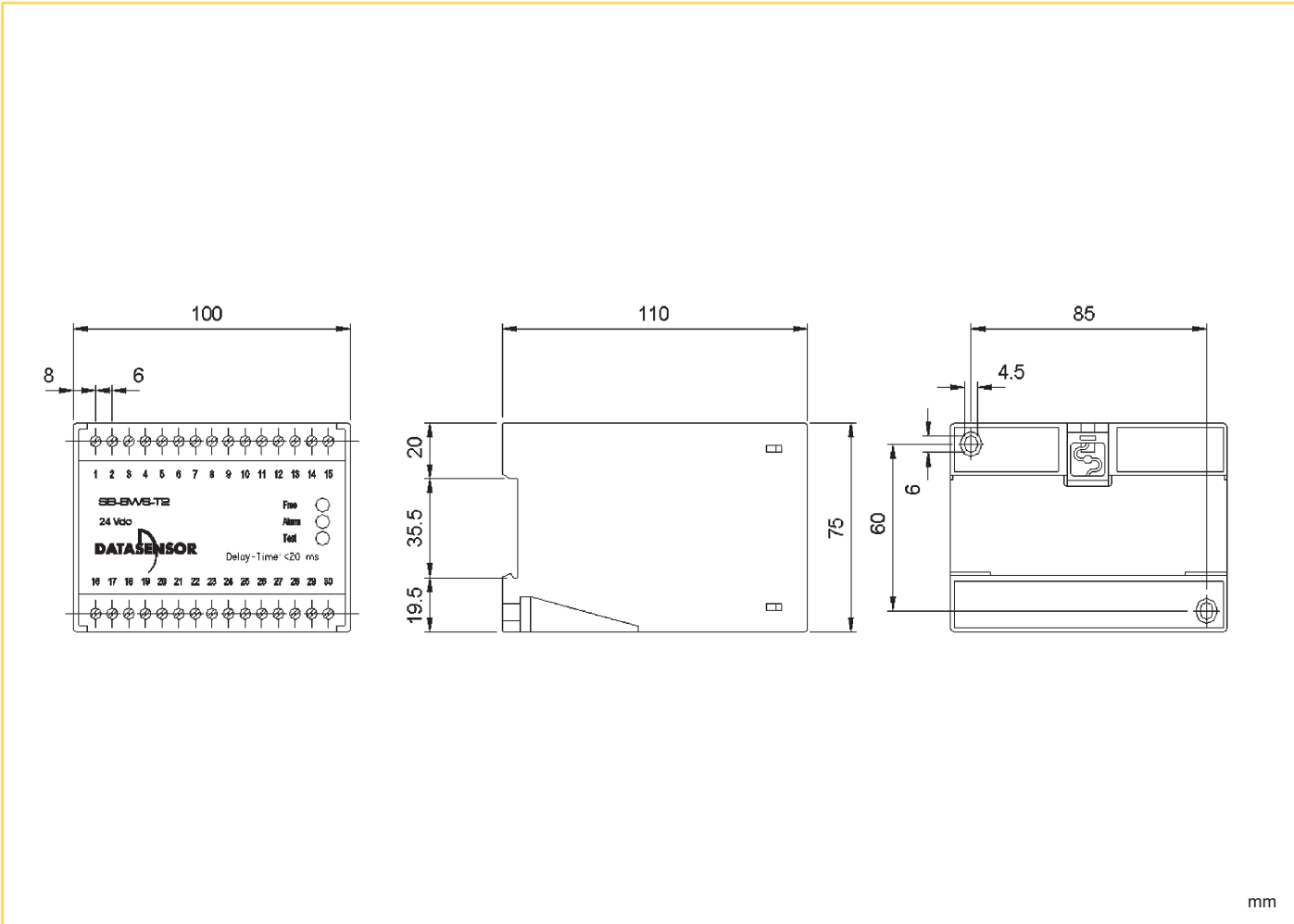
*Effective aperture angle (EAA)*

*For further information please refer to Sx-F/G-ST safety photocell series*

## CONNECTIONS



## DIMENSIONS





## MODELS

MODEL	DESCRIPTION	CODE N°
SB-BWS-T2	type 2 control unit	G6211110

## ACCESSORIES

MODEL	DESCRIPTION	CODE N°
SE-DM 150	deviating mirror	95ACC1900

*Please refer also to Sx-F/G-ST safety photocell series*

# SAFETY DEVICES

### Distributed by:

#### HEADQUARTERS

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