BOX-MUT

Control unit for MUTING
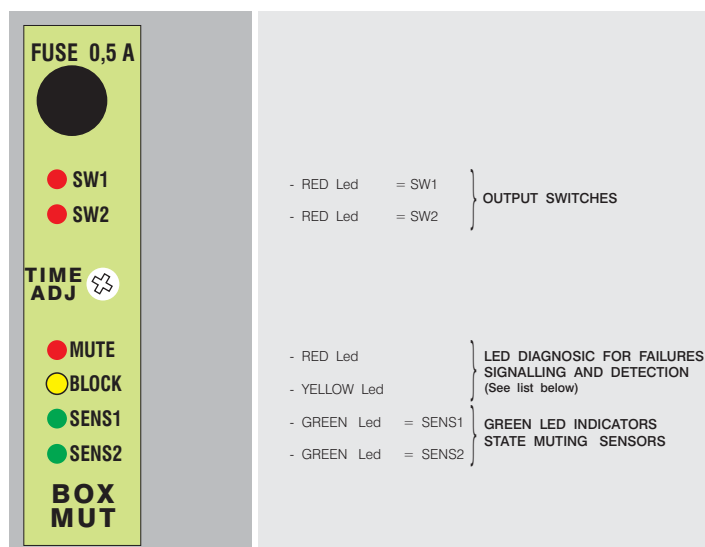## TYPE 2 - SIL 2   SILCL 2 PL d

CE

Temporary MUTING of the Safety Light Curtain in TYPE 2 in relation to the cycle of the machine.
The MUTING function is necessary for the normal automatic cycle of a plant when the object must across the lightguard without provoking the machine stop.

The palletizer is an example since the palletized product must pass free through the area controlled by the light curtain, while the access of a person must provoke an immediante stop of the plant.
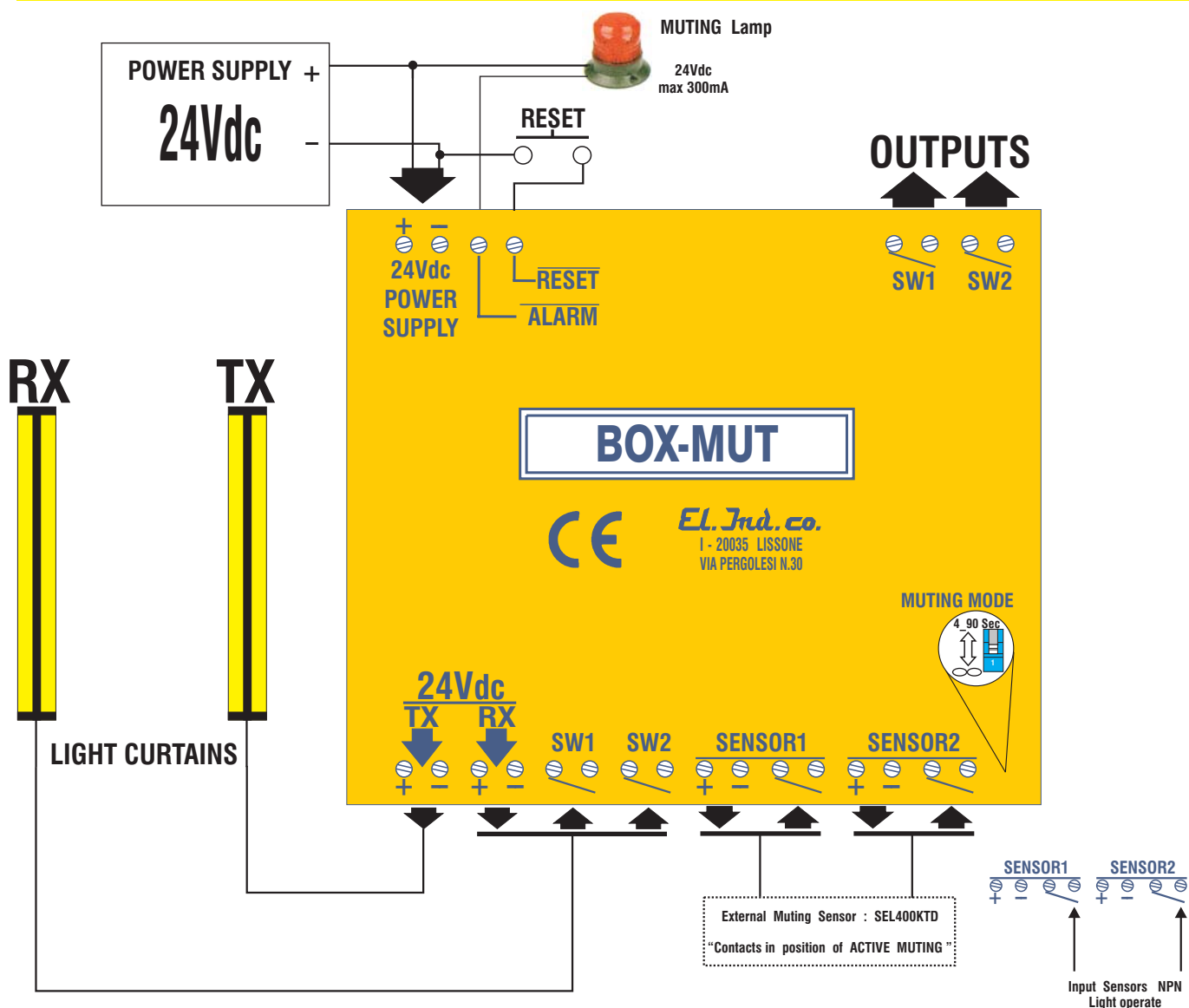
<u>Applications</u> : palletizzers - robot area - mounting areas - industrial automatic warehouses - etc ...
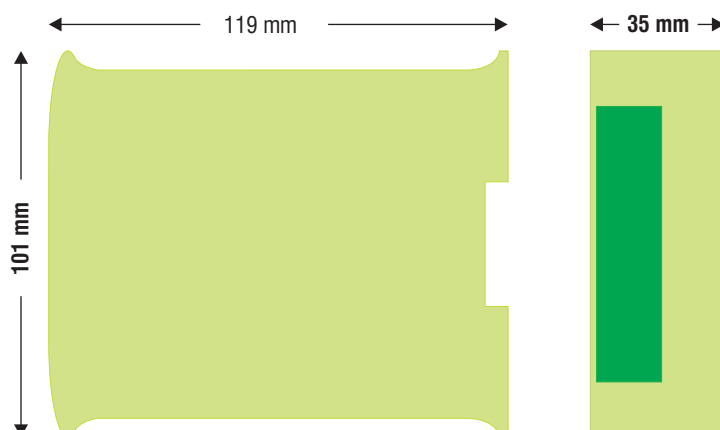
TECHNICAL FEATURES

Power Supply	24Vdc ± 10%
Absorption	40 mA
Type 2 Inputs	2 NO (switches SW1 - SW2)
Type 2 Outputs	2 NO (switches SW1 - SW2)
Outputs Current	0,75 A @ 40Vdc
Outputs Protection	Short circuit or overcharge
Input Muting Sensors	2 contacts NO or NPN (see diagram electrical connection)
MUTING Protection Time	4÷90 seconds o infinite through microswitches (MUTING MODE)
Housing	Blend PC/ABS self-autoextinguishing DIN RAIL (EN60715)
Housing Section	101 x 119 x 35 mm
Protection Degree	IP20
Working Temperature	0 / +55 ℃
Directives	2006/42/EC - 2004/108/EC - 2006/95/EC
Standards	CEI-EN 61496/1 - CEI-CLC/TS 61496-2

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FUSE 0,5 A

● SW1
● SW2

TIME ADJ ✛

● MUTE
○ BLOCK
● SENS1
● SENS2

BOX MUT

- RED Led   = SW1 ⎫
- RED Led   = SW2 ⎬ OUTPUT SWITCHES

- RED Led   ⎫ LED DIAGNOSIC FOR FAILURES
- YELLOW Led ⎬ SIGNALLING AND DETECTION
             (See list below)
- GREEN Led = SENS1 ⎫ GREEN LED INDICATORS
- GREEN Led = SENS2 ⎬ STATE MUTING SENSORS

LEDs STATE	SITUATION	SOLUTION
● SW1 = ⎫ Following the state ● SW2 = ⎭ of the light curtain ● MUTE = OFF ○ BLOCK = OFF ● SENS1 = ON ● SENS2 = ON	**NORMAL OPERATION** No Muting request	
● SW1 = ON ● SW2 = ON ● MUTE = BLINKING ○ BLOCK = OFF ● SENS1 = OFF ● SENS2 = OFF	**MUTING - ON** Corrects working of the machine and the Light Curtain in muting-mode. ALARM output in ON STATE (MUTING Lamp)	
● SW1 = ⎫ Following the state ● SW2 = ⎭ of the light curtain ● MUTE = ON ○ BLOCK = ON ● SENS1 = ⎫ State disparity sensors ● SENS2 = ⎭	**BLOCK** Disparity of Muting sensors "SENSOR1" "SENSOR2" more than 2 seconds	Eliminate the cause and then push the external buttor Reset
● SW1 = OFF ● SW2 = OFF ● MUTE = OFF ○ BLOCK = ON ● SENS1 = OFF ● SENS2 = OFF	**MUTING NOT ALLOWED** Request of Muting when the light curtain is in the alarm state	Free the sensitive curtain of the light curtain and the Muting sensors from possible obstacle
● SW1 = ⎫ Following the state ● SW2 = ⎭ of the light curtain ● MUTE = ⎫ Simultaneous blinking ○ BLOCK = ⎭ ● SENS1 = OFF ● SENS2 = OFF	**TIME - OUT** Muting time over-range set by the regulator TIME- ADJ (only MUTING MODE set on 4 ÷ 90 sec.)	Free the stand still obstacle among the Muting sources (photocells, switches, etc...)

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MUTING Lamp

POWER SUPPLY +
24Vdc −

24Vdc
max 300mA

RESET

OUTPUTS

+ −
24Vdc
POWER
SUPPLY

RESET
ALARM

SW1   SW2

RX   TX

BOX-MUT

CE

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VIA PERGOLESI N.30

MUTING MODE

4_90 Sec
1

LIGHT CURTAINS

24Vdc
TX   RX
+ −   + −

SW1   SW2   SENSOR1   SENSOR2

+ −   + −   + −   + −

SENSOR1   SENSOR2
+ − + −   + − + −

Input Sensors NPN
Light operate

External Muting Sensor : SEL400KTD
"Contacts in position of ACTIVE MUTING"

119 mm   35 mm

101 mm

Product Code
BOX-MUT