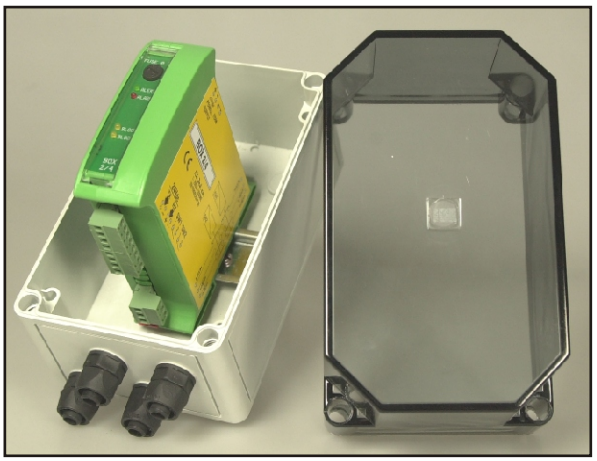
BOX 2/4 | BOX 2/4 IP66

Control Unit for SAFETY UPGRADING
TYPE 4 - SIL 3 SILCL 3 PL e



BOX 2/4 and **BOX 2/4 IP66** control unit together with the Safety Light Curtains TYPE 3 (model LC3) upgrades the category to TYPE 4.
The control unit receive at its inputs the light curtain final switches, which controls their disparity and supplies in its output the two closed contacts in state of alert, coming from the two safety relays at guided contacts in redundancy selfcontrolled
Moreover the control unit provides these functions :
- **External Device Monitoring (EDM) :** control of the external devices : for example contactor, relay, etc...
- **Led Diagnostic** for failures signalling and detection
- **Contact AUX (Ausiliary)** closed with light curtain in alarm state

TECHNICAL FEATURES

Power Supply	24Vdc ± 10%
Absorption	60 mA
Type 3 Inputs	2 NO (switches SW1 - SW2) contacts with light curtain in alarm state
Type 4 Outputs	2 NO (switches SW3 - SW4) contacts with light curtain in alarm state
Outputs Current	5A @ 250Vac
Outputs Protection	fuses 5A
Contact AUX	1 NC - 3 A max (no safety)
Response Time	15 milliseconds
Housing	**BOX 2/4** = Blend PC/ABS self-autoextinguishing DIN RAIL (EN60715) **BOX 2/4 IP66** = Polycarbonate reinforced with glass fiber - transparent lid (EN60529)
Mechanical Dimensions	**BOX 2/4** = 101 x 119 x 35 mm / **BOX 2/4 IP66** = 110 x 180 x 165 mm
Protection Degree	**BOX 2/4** = IP20 / **BOX 2/4 IP66** = IP66
Working Temperature	0 / +55 °C
PFHd	10^{-8} until to $< 10^{-7}$
Directives	2006/42/EC - 2014/30/EC - 2014/35/EC
Standards	CEI-EN 61496-1: 2014 - CEI-EN 61496-2 : 2014

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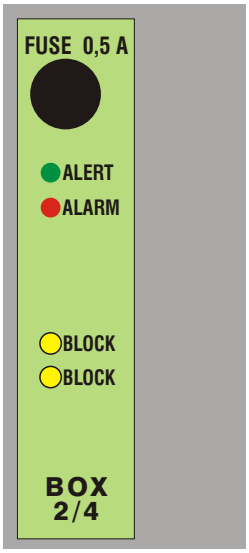
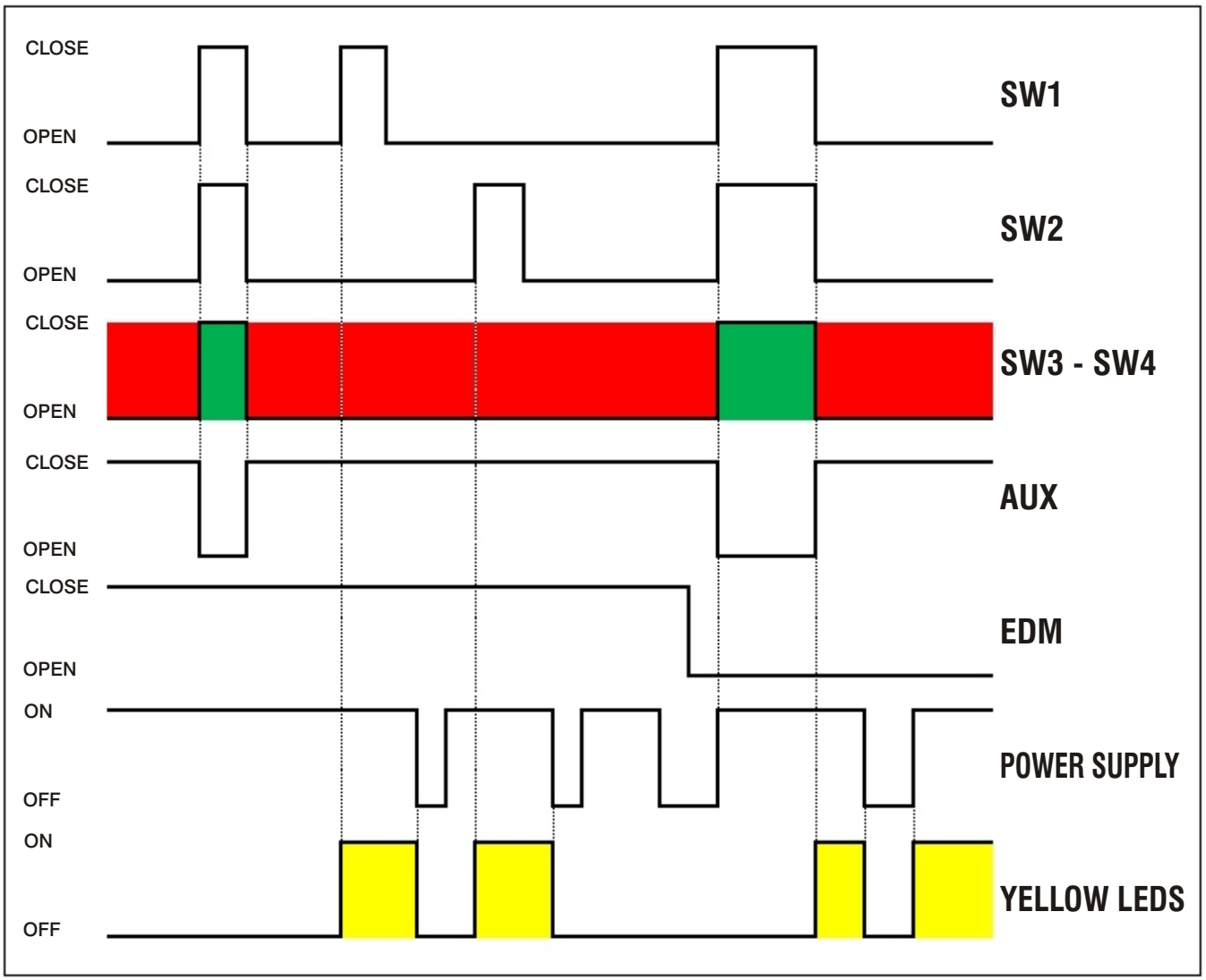
DIAGNOSTICS



LEDs STATUS	SITUATION	SOLUTION
ALERT = OFF ALARM = ON BLOCK = OFF BLOCK = OFF	Light curtain in alarm state or disconnected	No abnormality
ALERT = ON ALARM = OFF BLOCK = OFF BLOCK = OFF	Light curtain in alert state	
ALERT = OFF ALARM = ON BLOCK = ON BLOCK = ON	Disparity of the input signals, check the outputs of the light curtain. They must open / close at the same time	Resolve the anomaly and then remove the power supply for at least 2 seconds

Any other state is considered an internal error. Call Service EL.IND.CO.

STATE DIAGRAM



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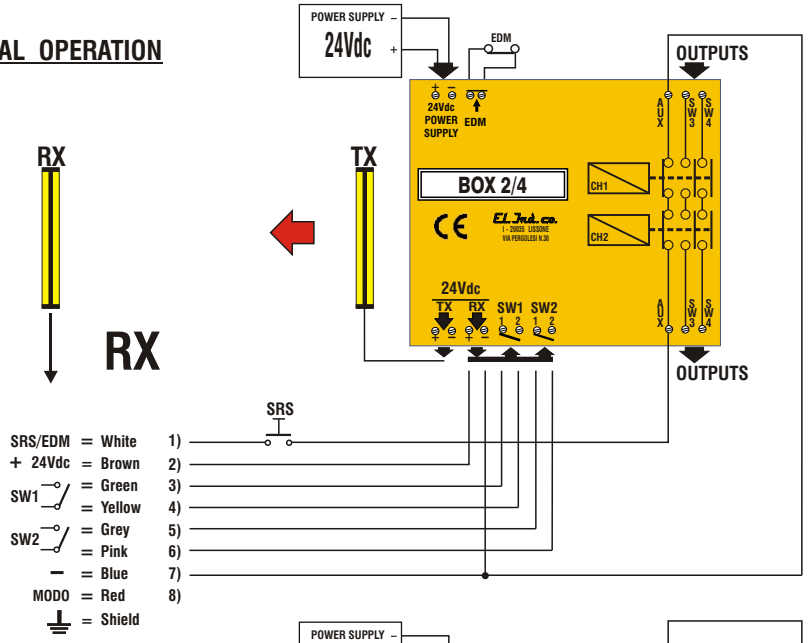
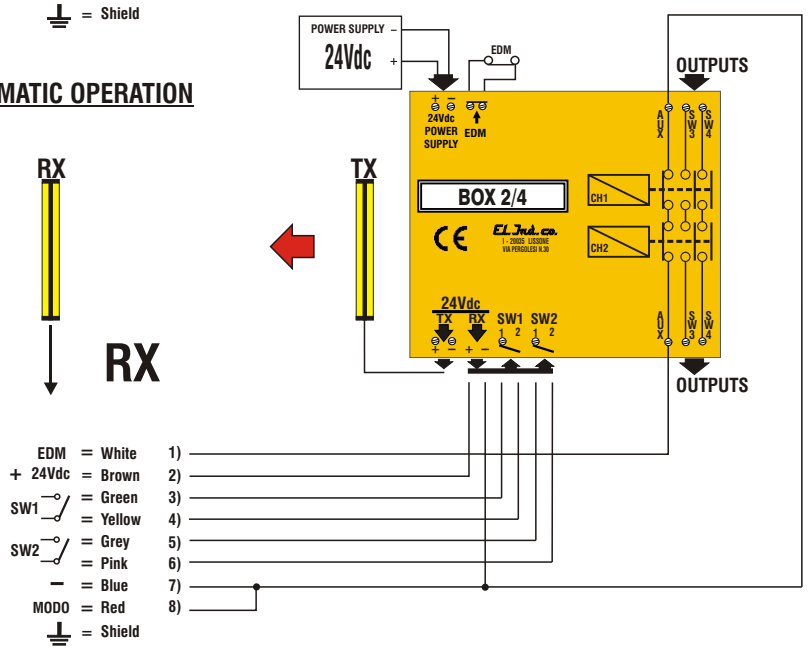
WIRING DIAGRAM

MANUAL OPERATION

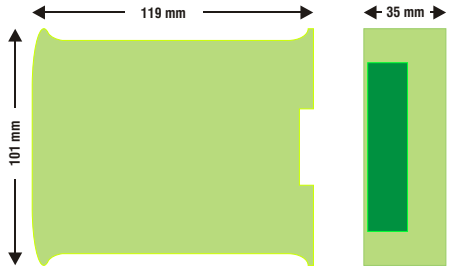


AUTOMATIC OPERATION

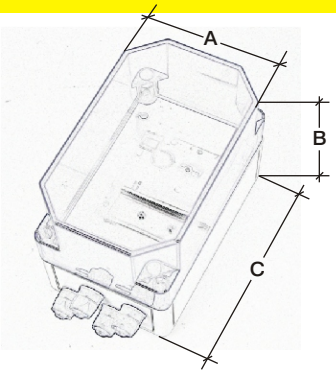


N.B. The unit "BOX 2/4" is provided with the function EDM temporarily excluded (jumper on terminal EDM).
When you had to use other external devices (relays, etc ...) to increase the output contacts, you may want to control the safety of these devices eliminate the bridge in the EDM terminal and connect the contact / contacts NC of such devices in series in the clamp EDM.

MECHANICAL DIMENSIONS (millimeters)



BOX 2/4



A = 110mm

B = 165mm

C = 180mm

BOX 2/4 IP66

HOW TO ORDER

Product Code

BOX 2/4

BOX 2/4 IP66

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