

Light arc detector, LAD/HS, has up to three independent channels suitable for fault arc detection. Each channel has a very fast response triac contact for remote control.

Response time is so fast (30us) compared to timing of switchgear opening to be neglected: this feature make it suitable for high voltage installation protection.

On the front of the device you have green leds for local indication of channel ready to react.

Arc detection is made by optical receiver sensible to infra-red radiation and the arc light is captured by optical plastic fiber inserted into the cubicle in order to obtain simple link between the part under control and LAD device.

The contact of relay subsequently an arc fault changes its state and remains in that situation for 200ms to allow the switch-gear opening.

To get selective arc detection must be used in combination with RHV/A/T.

LAD/IT/X/ \_ \_ \_

## LAD ARC DETECTOR Triac output

### Highlights:

- Output contact by triac technology
- Very fast response (<1ms) typical 30us
- Suitable to work both with AC or DC loads
- High power output NA triac contact: 25A 600V

### Technical features

Nominal voltage :.....24, 48, 110,220 VCC  
Input :.....optical flash infra-red peak  
Temperature range :..... -30°C ÷ 70°C

IP degree protection :.....IP64(\*)

#### Triac output features

IT rms :.....25A  
VDRM :.....600V  
I<sub>tsm</sub>: .....250A  
Response time << 1ms:.....30us  
Maximum load voltage variation:.....500V/us  
Dielectric strength (open contacts) :.....600VAC 1min  
(coil-contacts) :.....5000VAC 1min

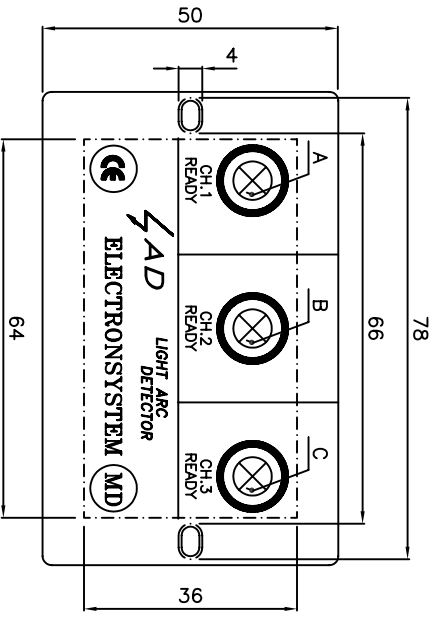
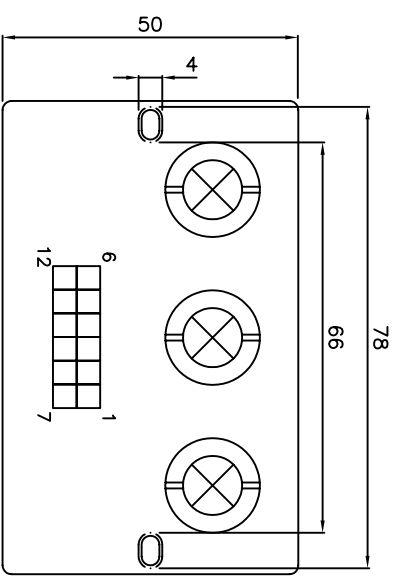
(\*) output connector IP30

### Material

Box :..... Insulating Material  
Filling Material :.. Polyurethan resin (2-component)

Connection input :.....optical fiber  
Output :.....MOLEX MINI FIT 12 poles connector

Rev./Mod Descrizione:	Data	Rev./Mod Descrizione:	Data	Rev./Mod Descrizione:	Data	Rev./Mod Descrizione:	Data	Rev./Mod Descrizione:	Data
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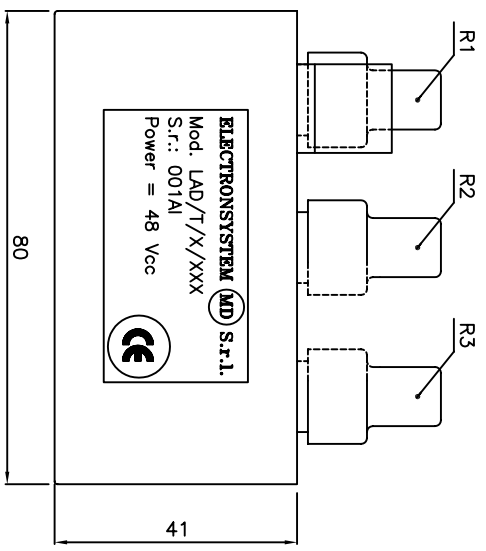
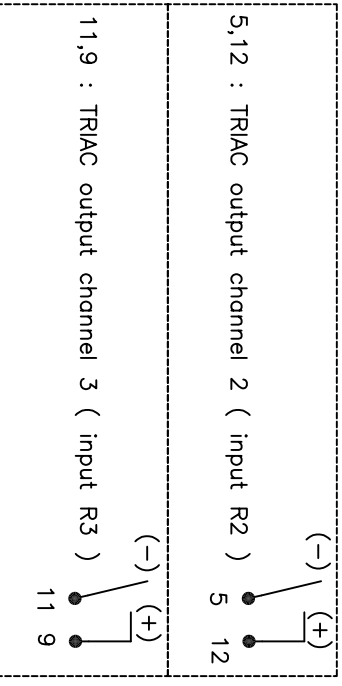
DESCRIPTION:

- A : Green Led - Channel 1 ready
- B : Green Led - Channel 2 ready
- C : Green Led - Channel 3 ready
- R1 : Optical input channel 1
- R2 : Optical input channel 2
- R3 : Optical input channel 3
- 1 : Power (+)
- 7 : Power (-)
- 2,4 : TRIAC output channel 1 ( input R1 )

GROUP	Auxiliary Power Voltage
801	110 Vcc
802	24 Vcc
803	48 Vcc

Note :

- The triac output contact (NA) can work both with DC or AC load, max 20A
- The duration of arc contact signalation is 200msec
- Operating time is less than 1msec
- If load is DC connect it respecting polarity indicated
- The contacts are indicated in conditions of power on and with no input arc.
- Dash-dot line indicates the drilling template of front panel



**ELECTRONSYSTEM MD S.r.l.**  
 Mod. LAD/T/X/XXX  
 S.r.l.: 001A1  
 Power = 48 Vcc

PURCHASE CODE:

Description : Light arc detector

Code : LAD/T/X/1 2 3

X = 2 type with 2 changeover contacts  
 3 type with 3 changeover contacts  
 1-2-3 = Auxiliary power voltage (tab.1)

Piano di Campionamento (UNI 4842-75)	
LIVELLO	LQA
L2	1

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Fig.	Material/Materiale		N° Series / Serie		Finishing / Finitura	
Filing Room Archivio	Thread quality tolerance Tolleranza filetti qualità 69-65° UNI 5541-65		General tolerance for machining / Tolleranze generali per lavorazioni meccaniche:		JS12 JS13 JS15	
Prep. P. GUIZZETTI	Coord.Punching N.C. mach. Coord. punzon. a C.N. JS11		Quality for linear dimension Qualità per quote lineari		Ester-fine / Fine Medion / Media Coarse / Grossolano	
App. P. CIBOLDI	Resp. Dep. Uff. Tecnico		Title Titolo		Apparatus Apparacchio	
Rev./Mod.	015/12/04 : Emissione nuovo disegno		LIGHT ARC DETECTOR (TRIAC OUTPUT)		Scale Scala	
ELECTRONSYSTEM MD S.r.l.			LAD/T/X/---		1:1	
Doc. No. 43911810			Doc. No.		Sh. No. 1/1	