

In control station EL AN series can be installed rotary cam switches EH series as an alternative to the E2 series switches.
The cam switch is matched with a wide ergonomic actuation knob, available in versions with two and three stay-put positions; it can also be configured with contact diagrams according to customer requirements up to a maximum number of 8 contacts.
The covers dedicated to house the cam switches provide a suitable slot with protection guard.
Equipped with gasket below the knob provides an IP65 protection degree.

## Introduction

Backed by the experience and knowledge acquired in over 25 years of activity in the automation world, Pizzato Elettrica confirms its capacity of proposing, even in new sectors, innovative solutions which succeed in combining an extremely practical and flexible operation with an accurately detailed linear design. The new EL AN series lift control stations by Pizzato Elettrica incorporate these latest features, and they use articles from the EROUND line as control and signalling devices.
The EL AN series lift control stations have been designed to pilot the movement of lifts during control and maintenance operations.

## Modularity

The control stations have been designed with the precise objective to make them as user-friendly as possible for maintenance operators, as well as to provide the widest and most versatile choice in the combination of applicable devices.
These diverse options are made possible tanks to the innovative construction of the enclosures cover (registered patent) which allows free arrangement of the perforated holes and shapes for housing various devices; such insert elements make up the whole cover, just one solid piece produced by means of a single moulding process.


## Wide range

The range of EL AN series control stations includes 4 dimensions and several configurations.
The outlines and details of the new EL AN series control stations have been accurately designed, which contributes to an attractive aesthetic


## Tread-safe

EL AN series control stations can bear any impact and stress thanks to their specific design and resistant materials, fitted for heavy-duty application.


## Electrical socket

The inside of the electrical socket is protected against the risk of accidental contact by means of a special removable cover.
A separator (applicable in different positions) is available, to be used to separate those parts of the control stations having different voltage.
The electrical socket is always fitted to the top of the control station and not to the side, so as to make its use more convenient and its position more readily identifiable.
Available in different types, it perfectly adapts to the standards in force in the country where the lift is installed.


## Magnetic bases



All control stations EL AN series can be supplied with a magnetic base applied to the bottom of the box; in this way it will be possible to anchor the control stations to metal walls and surfaces in a removable manner without needing to drill.
Adhesive magnetic bases can be applied at a later time.

## Sturdiness

The devices are guaranteed protection against knocks and treading both by the use of sturdy guards for particularly bulky auxiliary control devices, such as the emergency pushbutton or the selector, makes the product suitable for especially heavy-duty installation areas.


## Cable entries

The control station EL AN base features numerous possible knockout entries for the passage of cables, in order to ensure easy wiring.
The control stations feature four inlets on the side faces and two inlets on the lower face.


## LASER marking



Pizzato Elettrica has introduced a new LASER marking system for control stations EL AC series.
Thanks to this system, which excludes the use of pad printing or labels, product marking is indelible and durable.
LASER markings for control stations EL AC series are now enriched with pictograms and symbols according to new standard 81-20; control stations can also be customized with indications, symbols and customer logos.

## Electrical panel hanging hook



On request, the EL AN series control stations can be equipped with a special hook to hang the control stations directly on a wall or onto the electrical panel.



## Code structure

 Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.EL AN23000

| Box shape |  | Configuration progressive number |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | $72 \times 80 \mathrm{~h} 56 \mathrm{~mm}$ | $\mathbf{0 0 0}$ | configuration 000 |
| $\mathbf{2}$ | $120 \times 80 \mathrm{~h} 56 \mathrm{~mm}$ | $\mathbf{0 0 1}$ | configuration 001 |
| $\mathbf{3}$ | $153 \times 80 \mathrm{~h} 56 \mathrm{~mm}$ | $\mathbf{\ldots .}$ | $\ldots$ |
| $\mathbf{4}$ | $186 \times 80 \mathrm{~h} 56 \mathrm{~mm}$ |  |  |



## Main data

- Different configurations available
- Protection degree IP54 or IP65 or IP67
- Actuator guards
- Internal and external fixing
- Customized sockets
- Retained screws

Markings and quality marks (enclosures):
C
Markings and quality marks (contact blocks):


## Technical data

## Housing

Made of shock-proof, self-extinguishing polymer with double insulation $\square$, UV resistant. 1 element box:
2 lateral knock out conduit entries M20-M25-PG 13.5-1/2 NPT
2 lateral knock out conduit entries M20-PG 13.5-1/2 NPT
2 bottom knock out conduit entries M16-PG 11
2 or more elements boxes:
4 lateral knock out conduit entries M20-M25-PG 13.5-1/2 NPT
2 bottom knock out conduit entries M20-PG 13.5-1/2 NPT
Base colour: Black RAL 9005
Cover colour: Yellow RAL 1023
Screws materials: Galvanized steel, stainless steel on request
Protection degree: IP54 according to IEC 60529
IP65 (on request on some articles) according to IEC 60529
IP67 (on request on some articles) according to IEC 60529
with cable gland having equal or higher protection degree

## General data

Ambient temperature: $\quad-25^{\circ} \mathrm{C} \ldots+80^{\circ} \mathrm{C}$
Cover screws driving torque: $1 \ldots 1.4 \mathrm{Nm}$

## In conformity with standards:

IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, UL 508, CSA 22-2 N ${ }^{\circ} 14$, EN 81-20, EN 81-50

## § Installation for safety applications:

Use only switches marked with the symbol $\Theta$. The safety circuit must always be connected with the NC contacts (normally closed contacts: 1-2) as stated in the standard ISO 14119, par. 5.4.

## In conformity with requirements requested by:

Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and
EMC Directive 2004/108/EC.
Positive contact opening in conformity with standards:
IEC 60947-5-1, EN 60947-5-1, VDE 0660-206.

Approval IMQ: CA02.04805
Approval UL: E131787
Approval CCC: 2013010305631156
Approval EAC: RU C-IT ДM94.B. 01024

## Electrical data

Thermal current (lth):
Rated insulation voltage (Ui):
Protection against short circuits:
Rated impulse Uimp:
Pollution degree:

## 10 A

$600 \mathrm{Vac} / \mathrm{dc}$
fuse 10 A 500 V type $\mathrm{gG} / \mathrm{gL}$
6 kV
3

## Utilization categories

Alternate current: AC15

| $(50 \div 60 ~ H z) ~$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Ue (V) | 24 | 48 | 120 | 250 | 400 |
| le (A) | 6 | 6 | 6 | 6 | 3 |
| Direct current: DC13 |  |  |  |  |  |
| Ue (V) | 24 | 125 | 250 |  |  |
| le (A) | 2.5 | 0.6 | 0.3 |  |  |

## High reliability self-cleaning contacts

"V shape" self-cleaning contacts with quadruple contact points. This shape, thanks to its quadruple support, allows to reduce the probability of contact wrong switching. Furthermore it highly improves


## Positive opening

NC contact blocks are suitable for safety application, with positive opening contacts according to IEC 60947-5-1.

## Data type approved by UL

| Utilization category: | A600 pilot duty |
| :--- | :--- |
|  | $(720 \mathrm{VA}, 120-600 \mathrm{Vac})$ |
|  | Q300 pilot duty |
|  | $(69 \mathrm{VA}, 125-250 \mathrm{Vdc})$ |

( $69 \mathrm{VA}, 125-250 \mathrm{Vdc}$ )








Lift control stations EL AN 21••• series dimensions


Lift control stations EL AN 22••• series dimensions


Lift control stations EL AN 23••• series dimensions


Lift control stations EL AN 24••• dimensions


Lift control stations EL AN 21••• series dimensions


Lift control stations EL AN 22••• series dimensions


Lift control stations EL AN $23 \bullet \bullet$ series dimensions


Lift control stations EL AN 24••• dimensions


## Notes



## Slotted protection guard

| Article | Description |  |
| :--- | :--- | :--- |
|  | VE GP22A5A | Cylindrical yellow <br> protection guard with 4 <br> slots $\varnothing 40 \times 20 \mathrm{~mm}$ |

It does not alter the device IP protection degree.

## Open protection guard



## Cylindrical protection guard

| Article | Description |  |
| :--- | :--- | :--- |
|  | VE GP22B5A | Cylindrical yellow $\varnothing 43 \times 27$ <br> mm protection guard |

Not suitable for emergency pushbuttons E2 1PE•••••• series It does not alter the device IP protection degree.

## Blanking plug

## 10 pcs packs

## Technical data:



## polymer

 IP67 and IP69K from 2 to 2.5 Nm Protection degree:Driving torque: Installation prescriptions: page 3/98

Sockets with protection IP54

| Sockets complete with 4 | VE PE1E1DA1 |
| :--- | :--- |
| fixing screws |  |
| VE PE PE1E1EA1 |  |

## Internal socket protection



| Article | Description |
| :---: | :--- |
| VE GG2BA5A | Yellow socket protection |

Protection complete with 2 screws for fixing under the socket.

## Cover protection



| Article | Description |
| :---: | :--- |
| VE GG2CA5A | Yellow cover protection |
| VE GG2CB5A | Yellow cover protection <br> (IP65) |
| VE GG2CA1A | Black cover protection <br> (on request) |

Hinges and fixing screws kit, only for control stations EL AC••••••

## Magnetic bases



Adhesive magnetic bases in plastoferrite to be applied on the bottom of the control stations EL AC••••• and EL AN••••• allowing to anchor them to metal surfaces.

| Article | Description |
| :---: | :--- |
| VE BM2B46X70 | $46 \times 70 \mathrm{~mm}$ for <br> EL AN boxes |
| VE BM2B87X70 | $87 \times 70 \mathrm{~mm}$ for <br> EL AN boxes |
| VE BM2B120X70 | $120 \times 70 \mathrm{~mm}$ for <br> EL AN boxes |
| VE BM2B153X70 | $153 \times 70 \mathrm{~mm}$ for <br> EL AN boxes |
| VE BM2B240X70 | 240x70 mm for <br> EL AC boxes |

## Contact blocks



| Article |  |
| :--- | :--- |
| E2 CP01G2V1 | S |
| E2 CP10G2V1 | S |
| E2 CP01K2V1 | L |
| E2 CP10L2V1 | L |

Contacts
Slow action 1NC $\Theta$
Slow action 1NO
Lagging slow action 1 NC $\Theta$
Leading slow action 1NO

## Contact blocks



| Article |
| :---: | :---: |
| E2 CP01S2V1 |

Contacts
slow self-monitored action 1NC $\Theta$

## General data

Protection degree:
Ambient temperature:
Mechanical endurance:
Max operating frequency:
Contacts material:
Contacts form:
Screw terminal driving torque:

## General data

Protection degree:
Ambient temperature:
Mechanical endurance: Max operating frequency:
Contacts material:
Contacts form:
Screw terminal driving torque:

IP20 according to IEC 60529 $-40^{\circ} \mathrm{C} \ldots+80^{\circ} \mathrm{C}$
20 million operations cycles 3600 operations cycles/hour silver contacts
"V shape" self-cleaning contacts with quadruple contact points $0.6 \ldots 0.8 \mathrm{Nm}$

## Contact blocks



| Article |
| :---: |
| E2 CP11G2V1 |
| E2 CP20G2V1 |
| E2 CP02G2V1 |

Contacts General data
Slow action
$1 \mathrm{NO}+1 \mathrm{NC} \Theta$
Slow action 2 NO
Slow action $2 N C \Theta$
Protection degree:
Ambient temperature:
Mechanical endurance:
Contacts material:
Contacts form:

Max operating frequency:

Screw terminal driving torque:

IP20 according to IEC 60529 $-40^{\circ} \mathrm{C} \ldots+80^{\circ} \mathrm{C}$
20 million operations cycles 3600 operations cycles/hour silver contacts
"V shape" self-cleaning contacts with quadruple contact points
$0.6 \ldots 0.8 \mathrm{Nm}$

## LED holders

|  | LED colour | Actuator colour | Operation voltage |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $12 . . .30 \mathrm{Vac} / \mathrm{dc}$ | 120 Vac | 230 Vac |
|  |  | white / yellow | E2 LP1A2V1 | E2 LP3A2V1 | E2 LP4A2V1 |
|  |  | red | E2 LP1A3V1 | E2 LP3A3V1 | E2 LP4A3V1 |
|  |  | green | E2 LP1A4V1 | E2 LP3A4V1 | E2 LP4A4V1 |
|  | blue | blue | E2 LP1A6V1 | E2 LP3A6V1 | E2 LP4A6V1 |
|  |  | orange | E2 LP1A8V1 | E2 LP3A8V1 | E2 LP4A8V1 |

## General data

Protection degree: IP20 according to IEC 60529 Ambient temperature: $-25^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C}$
Endurance: 100.000 hours (at rated voltage and ambient temperature $+25^{\circ} \mathrm{C}$ )
Operation voltage:
12 ... $30 \mathrm{Vac} / \mathrm{dc} ; 5$... 15 mA
102 ... $138 \mathrm{Vac} ; 10$... 12 mA
195 ... $264 \mathrm{Vac} ; 9$... 10 mA
Screw terminal driving torque: $0.6 \ldots 0.8 \mathrm{Nm}$

Fixing ring
20 pes packs


Fixing tool

Fixing adapter
10 pes packs


| Article |
| :---: |
| E2 1BAC11 |

## Description

Fixing adapter with 3 positions for E2 CP contact block and E2 LP LED holder


| Article | Description |
| :---: | :---: |
| E2 1BAC21 | Fixing adapter with 4 positions for E2 CP contact block |
| be exclusively uble pushbutton h 4 positions. | ned with selectors E2 1SE••••••••, key selectors E2 1 SC $\bullet \bullet \bullet \bullet \bullet \bullet$, pushbuttons E2 $1 P U \bullet \bullet \bullet \bullet \bullet$, -••••••, emergency pushbuttons E2 1PE $\bullet \bullet \bullet \bullet \bullet$, configured in the appropriate versions for adapters |

Emergency pushbuttons


## Key selectors

## Selectors

Illuminated disc



## Blinking illuminated disc

| colour and marking | Article | Description |
| :---: | :---: | :---: |
|  | VE DL1A5L00 | Yellow illuminated disc，blinking （ 0.5 s on 0.5 s off），$\varnothing 60 \mathrm{~mm}, 24$ Vac／dc，no marking |
| $5$ | VE DL1A5L09 | Yellow illuminated disc，blinking （ 0.5 s on 0.5 s off），$\varnothing 60 \mathrm{~mm}, 24$ $\mathrm{Vac} / \mathrm{dc}$ ，with marking： $\text { STOP }_{\text {STOP }} \geqslant \text { STOP }^{1 \nabla} \text { STOP }$ |
|  | VE DL1A5L13 | Yellow illuminated disc，blinking （ 0.5 s on 0.5 s off），$\varnothing 60 \mathrm{~mm}, 24$ Vac／dc，with marking： |

## Cam switches

| Contacts |  |  |  |  |  |  |  | Position | Article |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1－2 | 3－4 | 5－6 | 7－8 | 9－10 | 11－12 | 13－14 | 15－16 |  |  |
| NC | NO | NC | NO | － | － | － | － | 入 | EH B2A22A－P01 |
| NO | NO | NC | NC | NC | NC | － | － | 入 | EH B2A24A－P01 |
| NC | NO | NC | NO | NC | NO |  |  | $\checkmark$ | EH B2A33A－P01 |
| NO | NC | NO | NC | NO | NC | NC | NC | 入 | EH B2A35A－P01 |
| NC | NO | NC | NO | NC | No | NC | NO | $\checkmark$ | EH B2A44A－P01 |
| NC | NO | NC | NO | NC | No | NC | NO | $\checkmark$ | EH B3A44A－P01 |

[^0]

Article

EH B2A22A－P01 EH B2A24A－P01 EH B2A35A－P01 EH B2A44A－P01
EH B3A44A－P01

## General data

Protection degree according to IEC 60529：IP65 only if installed on appropriate cover IP20 on the terminals
Ambient temperature： $-25^{\circ} \mathrm{C}+55^{\circ} \mathrm{C}$
Mechanical endurance：
1.5 million operation cycles at 120 operation cycles／hour
Contacts material：
Screw terminal driving torque： Thermal current（lth）：
$0.6 \ldots 0.8 \mathrm{Nm}$
Rated insulation voltage（Ui）：
16 A
660 Vac
Rated impulse withstand voltage（ $\mathrm{U}_{\mathrm{imp}}$ ）： 4 kV

| Rated operation current le：alternate current |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Vac | $\begin{gathered} \mathrm{AC}-21 \mathrm{~A} \\ \mathrm{AC}-22 \mathrm{~A}(\mathrm{~A}) \end{gathered}$ | AC23A（A－kW） |  | AC－3（A－kW） |  |
|  |  | 1 PH | 3PH | 1 PH | 3PH |
| 110 | 1 | 14－1．5 | ／ | 12－1．1 | ／ |
| 230 | 1 | 14－3．1 | 13－4．2 | 12－2．5 | 10－3．1 |
| 400 | 16 | ／ | 13－7．5 | ／ | 10－5．1 |

## Double pushbuttons



Flush and mushroom pushbutton


## Triple pushbuttons



| Actuator colour and marking |  | Flush upper pushbutton Projecting central pushbutton Flush lower pushbutton |  |
| :---: | :---: | :---: | :---: |
|  |  | Function | Black ring |
| $0^{\prime}$ | 言 <br> black pushbutton | LIGHT | E2 1PTRS1AADK |
| - | yellow pushbutton 1 blue pushbutton | ALARM |  |
| $\leftrightarrow$ |  | ENABLE |  |
|  | black pushbutton | DOWN | E2 1PTRS1AABK |
| 4 | yellow pushbutton white pushbutton | ALARM |  |
| - |  | UP |  |

## Quadruple pushbuttons



| $\begin{gathered} \text { Actuator colour } \\ \text { and marking } \\ \text { (starting from the top and clockwise) } \end{gathered}$ |  | flush upper pushbutton flush right pushbutton flush lower pushbutton flush left pushbutton |  |
| :---: | :---: | :---: | :---: |
|  |  | Function | black ring |
|  | white pushbutton | UP | E2 1PQFA1QAAQ |
|  | black pushbutton | LIGHT |  |
|  | black pushbutton | DOWN |  |
|  | yellow pushbutton | ALARM |  |
|  | white pushbutton | UP | E2 1POFA10AAS |
|  | black pushbutton | LIGHT |  |
|  | black pushbutton | DOWN |  |
|  | blue pushbutton | ENABLE |  |
|  | white pushbutton | UP | E2 1PQFA1QAAR |
|  | yellow pushbutton | ALARM |  |
|  | black pushbutton | DOWN |  |
|  | blue pushbutton | ENABLE |  |


| Monolithic illuminated indicator |  |  | 10 pcs packs |
| :---: | :---: | :---: | :---: |
| LED colour | Operation voltage |  |  |
|  | $12 . .30 \mathrm{Vac} / \mathrm{dc}$ | 120 Vac | 230 Vac |
| ○ <br> white <br> red <br> green | E6 1IL1A2110 | E6 1IL7A2110 | E6 1IL8A2110 |
|  | E6 1IL1A3110 | E6 1IL7A3110 | E6 1IL8A3110 |
|  | E6 1IL1A4110 | E6 1IL7A4110 | E6 1IL8A4110 |
| yellow | E6 1IL1A5110 | E6 1IL7A5110 | E6 1IL8A5110 |
|  | E6 1IL1A6110 | E6 1IL7A6110 | E6 1IL8A6110 |
| orange | E6 1IL1A8110 | E6 1IL7A8110 | E6 1IL8A8110 |

## USB socket



| Back connection | Front connection <br> USB 2.0 Type A integrated female socket <br> black ring |  |
| :--- | :---: | :---: |
| USB Type A integrated female <br> socket | E2 1USB1CAK |  |
| outlet with cable in PVC $(1.8 \mathrm{~m}$ | $/$ | E2 1USB1CN1.8 |
| long) and USB Type A male socket <br> outlet with cable in PVC $(3 \mathrm{~m}$ long $)$ <br> and USB Type A male connector | / | E2 1USB1CN3 |
| outlet with cable in PVC $(5 \mathrm{~m}$ long $)$ <br> and USB Type A male connector | / | E2 1USB1CN5 |

DIN rail adapter
10 pcs packs

| Article | Description <br> VE AD3Pter with Ø22 hole <br> for front fixing on DIN rail <br> of control and signalling <br> devices EROUND series. |
| :--- | :--- |

Not suitable for cam switches and quadruple pushbuttons


## RJ45 socket



| Back connection | Front connection <br> RJ45 integrated female socket <br> black ring |  |
| :--- | :---: | :---: |
| RJ45 integrated female socket | E2 1RJ451AAK | / |
| Output with cable in PVC $(1 \mathrm{~m}$ <br> long $)$ and RJ45 male connector | / | E2 1RJ451AN1 |
| Output with cable in PVC $(2.5 \mathrm{~m}$ <br> long $)$ and RJ45 male connector | / | E2 1RJ451AN2.5 |

## Notes



## Alignment lug

The alignment lug in the external diameter of the EROUND series devices allows to obtain an exact alignment of the device while installing it on the panel avoiding any rotation.
If the application hole does not have the lug slot, it is sufficient to remove the lug by levering it with a screwdriver and paying attention not to damage the gasket.
It is not advisable to remove the alignment lug for turn to release selector (E2 1SE, E2 1SL, E21SC series) and emergency pushbuttons (E2 1PE series) since these are devices with rotating actuation.


## Device connection to the fixing adapter

After having fixed the control device to the panel through its proper ring, connect it to the fixing adapter by turning the locking lever.
The lever has two indications: open position (open padlock) and locked position (close padlock).
The locking lever rotation is easier if using a slotted screwdriver.


## Contact and LED holders hooking

Each contact and LED holders have two snap tabs which assure a stable fixing to the adapter, for panel mount versions, or to the enclosure for base fixing versions. Panel contact blocks can be hooked between them, up to a maximum of three, provided that the limits for every actuator are respected as written in the relative chapters.
Contact and LED holders are quickly removed by levering with a slotted screwdriver on the snap tabs.


Contact block release from other block

## Lenses for indicator lights E2

The E2 indicator lights are provided with lenses of different colours which are interchangeable. The lenses can be fixed and removed by simply turning them clockwise and anticlockwise without needing any tool.
For a good chromatic output, it is necessary a correct combination of lens and LED holder colours.

## Panel fixing

The signalling and control devices have to be fixed behind the panel through a ring which has to be screwed with the fixing tool provided as accessory.
The driving torque for a correct fixing has to be between 2 and 2, 5 Nm .
After fixing the ring it is possible
 to apply the fixing adapter and the panel contact block or LED holder.


## Gasket

Thanks to its configuration, the gasket assures a prefixing on the panel.
This way the ring nut can be applied with no need of keeping in position the device.


## Lenses for illuminated pushbuttons



## General prescription

The product is designed to be installed into electrical board or enclosures destined to contain electric circuits. All EROUND series components and electrical devices destined to be installed inside boards or enclosures, (e.g. E2 CP, E2 CF, E2 LP, E2 LF), do not have adequate protection against: water, dust in high quantity, condensate, humidity, steam, corrosive agents, explosive and inflammable gas or other polluting agents. The boards and enclosures protection degree have to guarantee the necessary protection for the EROUND series electrical components installed inside, as according to the application.

## Impacts and vibrations

- Avoid collisions with devices. Excessive impacts and vibrations could not guarantee the correct working of the device.


## Devices utilization

- All devices of the EROUND series are projected for manual operation.
- Do not apply excessive force to the device once it has reached the end of its actuating travel.
- Do not pass the actuating maximum travel.
- Do not disassemble or try to repair the device, in case of defect or fault replace the whole device.
- In case the device is deformed or damaged replace it completely. There is no guarantee of working for a deformed or damage device.
- Always attached the following instructions for use in the manual of the machine were the switch is installed.
- The preservation of the following instructions for use has to allow their consultation for the whole utilization period of the device.


## Wiring and installation

- The installation has to be made by qualified personnel.
- Comply with minimum distances between devices.
- Comply with the driving torque.
- Keep the electrical load beneath the value indicated on the utilization category.
- Turn off the power before access to the contacts, also during the wiring.
- Do not paint or varnish the devices.
- It is possible to install the product only on surfaces with thickness between 1 and 6 mm .
- The protection degree and its correct working are guaranteed only installing the product on flat and smooth surfaces with holes diameter 22 mm according to IEC 60947-5-1.
- After and during the wiring do not pull the electrical cables connected to the contact block. If an elevate traction force is applied to the cables the contact blocks could be separated from the actuator.
- During hooking and release operation of the contact block and the fixing adapter or the enclosure base do not deform or stress the fixing tabs. Tabs deformation could cause the separations between the contact block and the fixing adapter.
- After the installation and before machine working, verify:
- the correct device working;
- the correct and complete locking of the E2 1BAC•1 fixing adapter to the device;
- the correct hooking of the contact block.
- Periodically verify the devices correct working.


## Do not use in the following environments:

- Environment where dust and dirt can cover the device and by sedimenting stop its correct working.
- Environment where sudden changes of temperature cause condensation.
- Environment where ice formation on the device is possible.
- Environment where the application causes knocks or vibrations which can damage the device.
- Environment with explosive and inflammable gas presence.


## Utilization limits

- Use the devices following the instructions, complying with their working limits and the standards in force.
- The devices have specific application limits (min. and max ambient temperature, mechanical endurance, protection degree, etc.).

These limits are satisfied by the different devices only if singularly taken and not in combination among them. For further information contact our Technical department.

- The utilization implies compliance and acknowledgement of the following standards: IEC 60204-1, IEC 60947-5-1, ISO 12100-1, ISO12100-2.
- Contact our Technical dept. for information and assistance (phone +39.0424.470.930 / fax $+39.0424 .470 .955 /$ e-mail tech @ pizzato.com) in the following cases:
- Cases not mentioned on the following instructions;
- In nuclear power stations, trains, airplanes, cars, incinerators, medical devices or any application where the safety of two or more persons depend on the correct device working.


## Additional prescription for safety application

Provided that all previous requirements for the devices installed for safety application are fulfilled, further additional prescriptions have to be observed:

- The utilization in any case implies compliance and acknowledgement of the following standards: IEC 60204-1, IEC 60947-5-1, EN 60954-1, EN 13849, EN ISO 13850, ISO 12100-1, ISO12100-2
- In the emergency mushroom the safety circuit has to be connected to NC 1-2 contacts when the device is not actuated. Auxiliary NO 3-4 contacts have to be used only in the signalling circuit.
- Always connect in series the protection fuse (or equivalent device) to the NC 1-2 contacts of the safety circuit.
- Periodically verify the correct working of the safety devices, the periodicity of this verification is settled by the machine manufacturer based on the machine danger degree and it doesn't have to be less than one a year.
- After the installation and before machine working, verify:
- the correct device working;
- the correct and complete locking of the E2 1BAC•1 fixing adapter to the device;
- the correct hooking of the contact block.
- Do not leave the key inserted in the emergency mushroom with key-release. A sudden actuation of the emergency mushroom with the key inserted could hurt the operator.


[^0]:    Supplied with fixing screw and knob
    Please note：only compatible with dedicated box covers．
    For further information please contact the sales dept．

