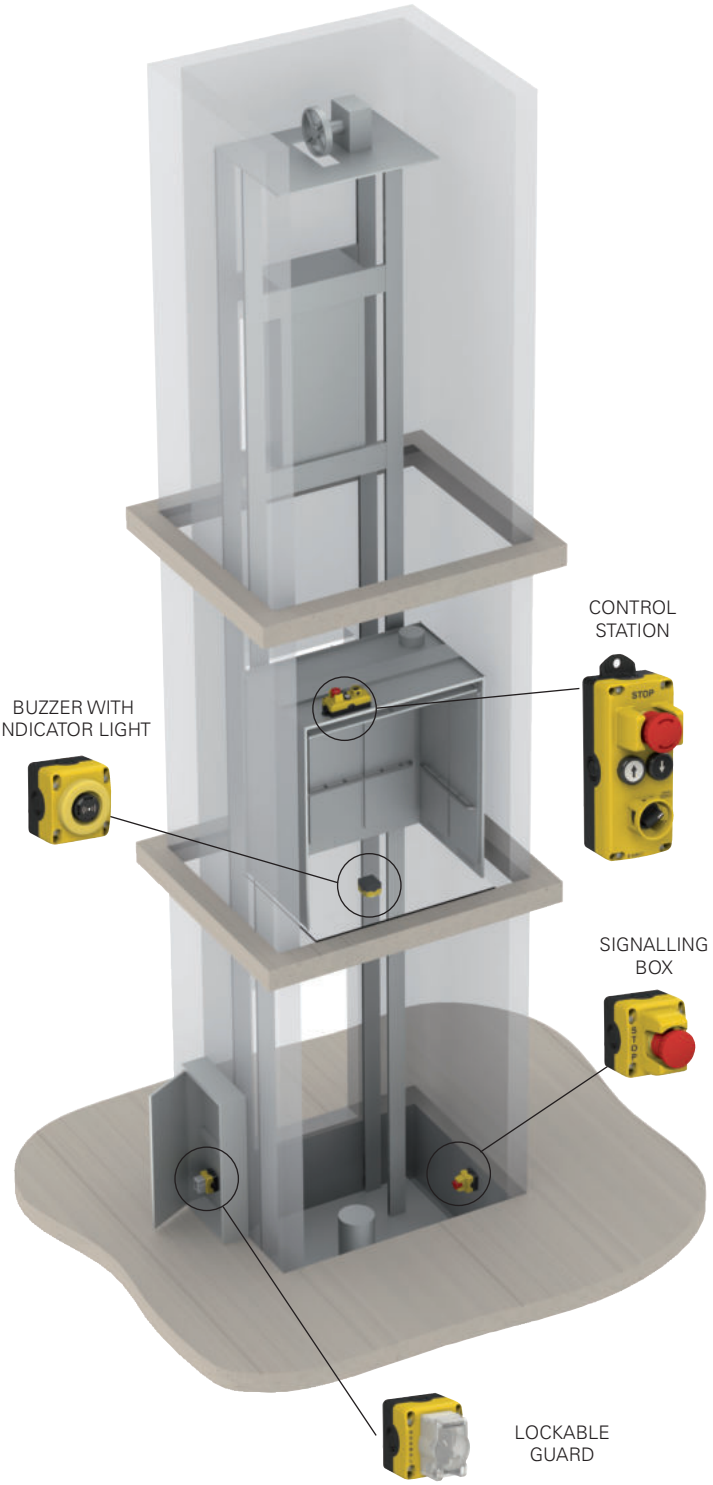
EL AN series control stations



Introduction

The experience and knowledge acquired in decades of activity in the field of safety and automation enables Pizzato Elettrica to offer innovative solutions in other areas as well, combining maximum functionality and flexibility of use with clear lines and attention to detail.

The EL AN series control stations are equipped with Pizzato Elettrica EROUND signalling and control devices.

The EL AN series lift control stations are designed for motion control of elevators during inspection and maintenance.

In compliance with standards EN 81-20 and EN 81-50

International standards EN 81-20 and EN 81-50 set new, updated, technical and safety requirements in comparison to current standards. They are a significant development in terms of lift construction and installation.

The EL range of signalling and control stations is designed to meet all of the requirements included in these standards, to ensure that products are fully compliant.

Modularity

The number, type and location of holes made in the control stations to accommodate devices can be freely selected by the customer: The number of possible variants is very high.

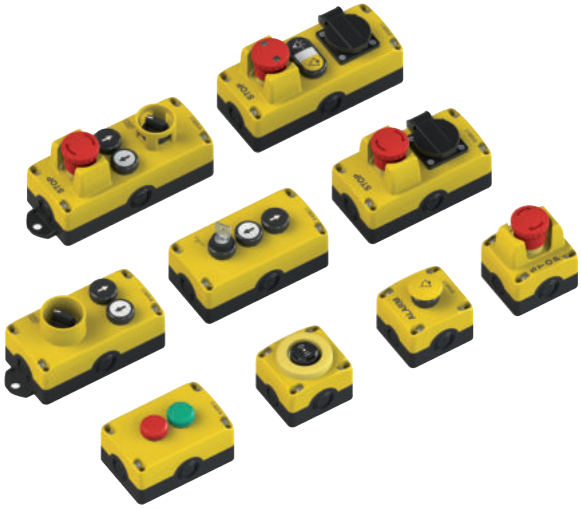
This wide range of options is made possible by an innovative mould, made up of modular and interchangeable elements (patent pending). It allows free positioning of the various hole patterns and shapes required to accommodate devices. This modular mould allows the entire cover to be produced as a single solid piece in a single casting process.



Wide range

The range of available EL AN series control stations includes 4 different dimensions, and multiple configurations.

The shape of the new EL AN control stations has been designed with particular attention to detail; creating a pleasing aesthetic result.



Changeover switches and selector switches



In the EL AN series control stations, a cam switch can be installed instead of a selector switch on request.

The cam switches have a wide, ergonomic actuation knob, are available in versions with 2 or 3 stable positions, and can be internally wired to customer specifications, up to a maximum of 4 contacts.

The cover shapes designed to accommodate the switches provide a suitable enclosure with protection guard.

Equipped with a gasket below the knob, the switch achieves a protection degree of IP67.

Treadproof

The EL AN series of control stations – thanks to their specific design, and the choice of materials used – are particularly resistant, and able to withstand impacts and loads.

They are therefore suitable for use in heavy-duty applications.



Custom wiring

The control stations can be supplied wired, with the wiring implemented according to customer specifications; both in terms of cables used, and connectors.

This additional adaptation to customer requirements means that the control stations are supplied ready for final installation.

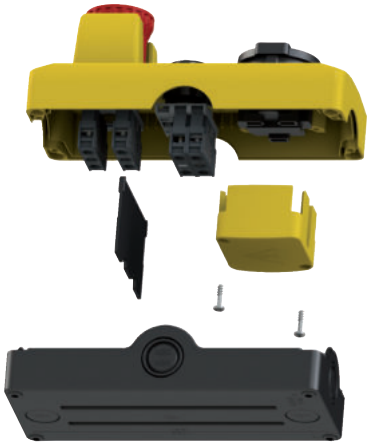


Electrical socket

The interior parts of the socket are protected against accidental contact by a removable cover.

A separator plate is available (which can be installed in various positions), which is used to separate control station parts with different voltages.

The electrical socket is also always installed on the top of the control station, and never on its side; this makes it easier to use, and its position easier to see. It is available in various versions to comply with different country-specific regulations.



Padlockable protection for bypass device

Paragraph 5.12.1.8 of UN i.e. EN 81-20:2014 stipulates use of a bypass device, to allow maintenance of the contacts of landing and cabin doors, and of door locking devices. This device must be placed in the control or emergency panel, and must be a switch protected against unintended use through the use of mechanically mobile means.

The Pizzato bypass device provides a solid guard with a movable cover, which, if needed, can be locked in a closed position by inserting one or two padlocks, or sealed.



To facilitate operations, the cover also has two shutter-release positions: fully open and fully closed.

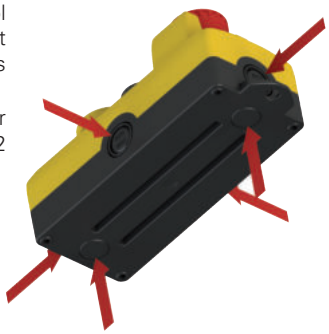
The cover therefore will not open inadvertently, but it must in any case be manually disconnected.

The lockable Pizzato guard can be installed on EL series control stations or on any electrical panel that has the appropriate holes for the fixing screws, as shown.

Conduit entries

The base of the EL AN control station has several knock-out entries for cable routing. This ensures easy wiring.

The control stations have four entries at the sides, and 2 entries on the bottom.



LASER engraving

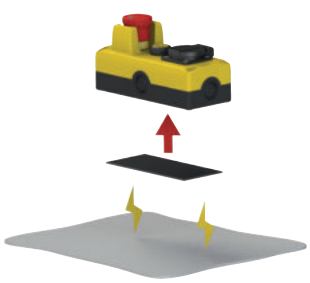


Pizzato Elettrica has introduced a new LASER engraving system for EL AN series control stations.

Thanks to this new system, which does not use pad printing or labels, engravings on the products are indelible and durable over time.

The laser engravings of the EL AN series control stations now include pictograms and icons compliant with the EN 81-20 standard; the control stations can also be customised using indicators, symbols, and logos, on customer request.

Magnetic bases



All EL AN series control stations can be supplied with a magnetic base, installed at the bottom of the housing; this allows the control stations to be anchored to walls and metallic surfaces, in such a way that they are removable, and no drilling is required.

The adhesive magnetic bases can also be retrofitted.

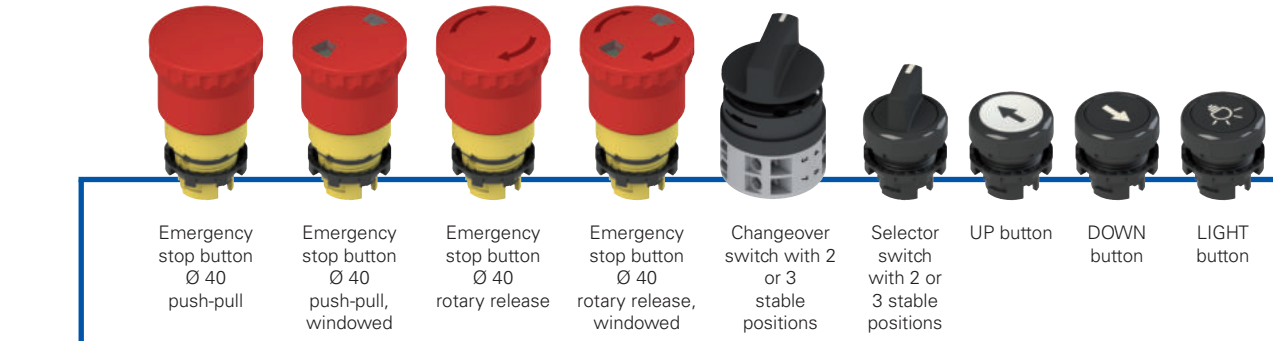
Visual and audible signals



All devices required for compliance with the provisions of standard EN 81-20, in terms of visual and audible signals inside the lift shaft, are available.

All EL series control and signalling stations can therefore be equipped with white lights, with an intensity of 5 LUX at a distance of 1 metre; flashing yellow lights, and buzzers with continuous or pulsed tone, with a minimum sound intensity of 55 dB at a distance of 1 metre.

Selection diagram



Emergency stop button Ø 40 push-pull

Emergency stop button Ø 40 push-pull, windowed

Emergency stop button Ø 40 rotary release

Emergency stop button Ø 40 rotary release, windowed

Changeover switch with 2 or 3 stable positions

Selector switch with 2 or 3 stable positions

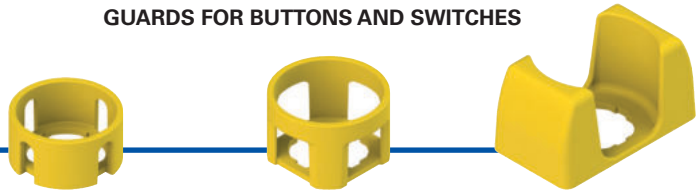
UP button

DOWN button

LIGHT button

BUTTONS AND SWITCHES

GUARDS FOR BUTTONS AND SWITCHES



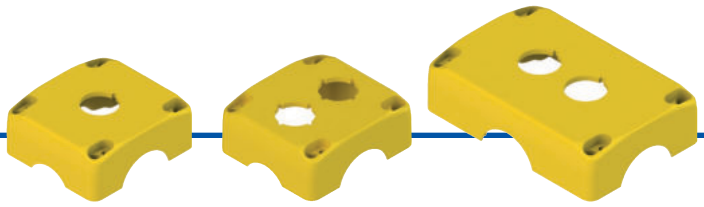
Low windowed guard Ø40x20 mm

High windowed guard Ø43x27 mm

Open guard 38x66x35 mm

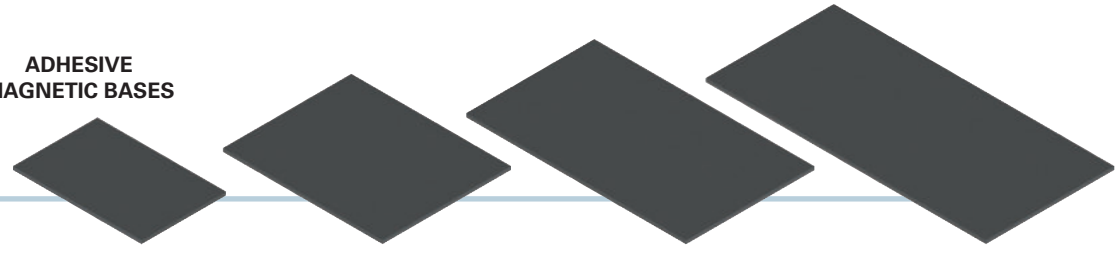


COVERS



BASES

ADHESIVE MAGNETIC BASES

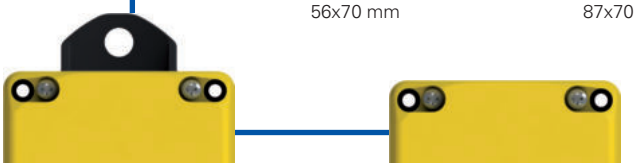


56x70 mm

87x70 mm

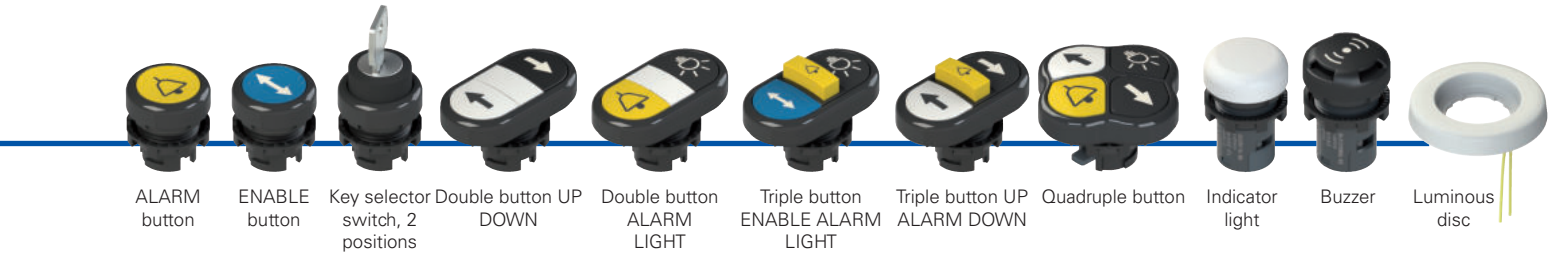
120x70 mm

153x70 mm



Base with hook

Base without hook

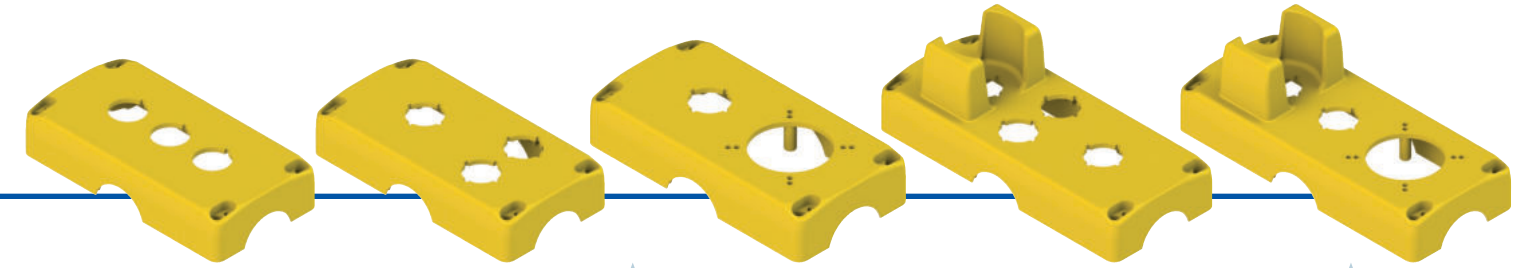


ALARM button | ENABLE button | Key selector switch, 2 positions | Double button UP DOWN | Double button ALARM LIGHT | Triple button ENABLE ALARM LIGHT | Triple button UP ALARM DOWN | Quadruple button | Indicator light | Buzzer | Luminous disc

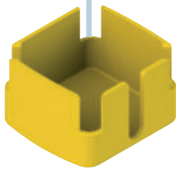
SOCKETS



China/Australia | Europe Schuko | USA | France | United Kingdom | Switzerland



Other covers available.
See page 113.



Internal socket cover

Product options

Sold separately as accessory

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

Housing shape	
1	72x80h56 mm
2	120x80h56 mm
3	153x80h56 mm
4	186x80h56 mm

Incremental configuration number	
000	configuration 000
001	configuration 001
...	...

EL AN series control stations



Main features
- Various configurations available
- Protection degree up to IP69K
- Guards for buttons and switches
- Internal and external fixing
- Customisable electrical socket
- Captive screws

Housing quality marks:

EAC approval: RU C-IT.УТ03.B.00035/19

Contact block quality marks:

IMQ approval: CA02.04805
UL approval: E131787
CCC approval: 2021000305000106
EAC approval: RU C-IT.УТ03.B.00035/19

Technical data

Housing
Shockproof, self-extinguishing technopolymer cover. UV resistant and double insulated: ⧈

Single element housing:	
2 lateral knock-out entries:	M20 - M25 - PG13.5 - 1/2 NPT
2 lateral knock-out entries:	M20 - PG13.5 - 1/2 NPT
2 knock-out entries at bottom:	M16 - PG11
Housing with 2 or more elements:	
4 lateral knock-out entries:	M20 - M25 - PG 13.5 - 1/2 NPT
2 knock-out entries at bottom:	M20 - PG 13.5 - 1/2 NPT
Base colour:	Black RAL 9005
Cover colour:	Yellow RAL 1023
Material of the screws:	Zinc-plated steel; stainless steel available on request
Protection degree acc. to EN 60529:	IP54 (standard) IP65 (on request) IP67 (on request)
Protection degree acc. to ISO 20653:	IP69K (on request) with cable gland of equal or higher protection degree

General data

Ambient temperature:	-25°C … +80°C
Cover screw tightening torque:	1 … 1.4 Nm

In compliance with standards:
IEC 60947-5-1, EN 60947-5-1, IEC 60947-5-5, EN 60947-5-5, EN 60947-1, IEC 60204-1, EN 60204-1, EN ISO 14119, IEC 60529, EN 60529, EN IEC 63000, EN 81-20, EN 81-50, UL 508, CSA 22.2 No.14

⚠ **Installation for safety applications:**
Use only contact blocks marked with the symbol ⊖. Always connect the safety circuit to the NC contacts (normally closed contacts: 1-2) as stated in standard EN 81-20 par. 5.11.2.2.1.

Compliance with the requirements of:
Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, Lift Directive 2014/33/EU, RoHS Directive 2011/65/EU.
Positive contact opening in conformity with standards:
IEC 60947-5-1, EN 60947-5-1.

⚠ **If not expressly indicated in this chapter, for correct installation and utilization of all articles see the instructions given on page 133.**

Electrical data

Thermal current (I_{th}):	10 A
Rated insulation voltage (U_i):	500 Vac/dc
Protection against short circuits:	type gG/gL fuse 10 A 500 V
Rated impulse withstand voltage (U_{imp}):	8 kV
Pollution degree:	3

Utilization category

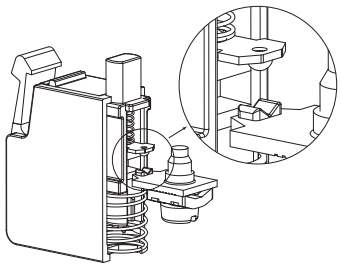
Alternating current: AC15 (50 … 60 Hz)

U_e (V)	24	48	120	250	400
I_e (A)	6	6	6	6	3

Direct current: DC13

U_e (V)	24	48	125	250
I_e (A)	2.5	1.3	0.6	0.3

High-reliability self-cleaning contacts



"V-shape" self-cleaning contacts with quadruple contact point. This type of shape, thanks to the presence of the double contact point, makes it possible to drastically reduce the probability of contact commutation failure. In addition to this, it improves considerably the reliability in the presence of dust (patent pending).

Positive opening

NC contact block suitable for safety applications, with positive opening contacts in accordance with IEC 60947-5-1.

Features approved by UL

Electrical Ratings: A600 pilot duty (720 VA, 120-600 V ac)
Q300 pilot duty (69 VA, 125-250 V dc)

For contact block series E2 C provided with clamping screw terminals: use 60 or 75 °C copper (Cu) conductor and wire size range 14-20 AWG, stranded or solid. The terminal tightening torque of 7.1 Lb In (0.8 Nm).

For contact block series E2 C provided with screw less type terminals: use 60 or 75 °C copper (Cu) conductor and wire size range 16-24 AWG, stranded. These terminals are suitable also for stranded conductors prepared with ZMLF ferrules. Recommended stripping length: 8 mm.

Features approved by IMQ

Rated insulation voltage (U_i): 500 V
Conventional free air thermal current (I_{th}): 10 A
Thermal current inside housing (I_{the}): 10 A
Rated impulse withstand voltage (U_{imp}):
– Screw terminals or solder terminals 8 kV;
– Terminals without screw 6 kV.
Protection degree of the housing:
– Screw terminals or terminals without screw IP20;
– Solder terminals IP00;
– Screw terminals with dust protection cap, panel mounting only IP20.

Terminals: screw terminals, solder terminals, without screw
Utilization category: AC15
Operating voltage (U_e): 400 Vac (50/60 Hz)
Operating current (I_e): 3 A
Forms of the contact element: X, Y
Positive opening of contacts on contact blocks 01G, 01K
In compliance with standards: EN 60947-1, EN 60947-5-1, fundamental requirements of the Low Voltage Directive 2014/35/EU.

EL AN21223



	DEVICES	CONTACTS	DIAGRAM
STOP STOP	**Emergency stop button Ø 40** windowed push-pull release, with guard	1NC	

EL AN21224



	DEVICES	CONTACTS	DIAGRAM
STOP STOP	**Emergency stop button Ø 40** rotary release, with guard	1NC	

EL AN21256



	DEVICES	CONTACTS	DIAGRAM
STOP STOP	**Emergency stop button Ø 40** push-pull release, with guard	1NC	

EL AN21257



	DEVICES	CONTACTS	DIAGRAM
STOP STOP	**Emergency stop button Ø 40** windowed rotary release, with guard	1NC	

EL AN21365



	DEVICES	CONTACTS	DIAGRAM
ALARM	**ALARM mushroom button Ø 36** spring-return, yellow	1NO	

EL AN series control stations

EL AN21324



DEVICES	CONTACTS	DIAGRAM
LIGHT button flush, spring-return, black	1NO	

EL AN21369



DEVICES	CONTACTS	DIAGRAM
WHITE luminous disc 5 LUX steady white light	24 Vac/dc	LED
Black closing cap	/	

EL AN21366



DEVICES	CONTACTS	DIAGRAM
Selector switch with short handle 2 stable positions, black, with lockable guard for bypass	1NO	NORMAL BYPASS

EL AN21348



DEVICES	CONTACTS	DIAGRAM
YELLOW luminous disc blinking yellow light	24 Vac/dc	LED
Buzzer, continuous alarm perforated lens, black	24 Vac/dc	

EL AN21440



DEVICES	CONTACTS	DIAGRAM
UP button flush, spring-return, white	1NO	
DOWN button flush, spring-return, black	1NO	

EL AN21441



	DEVICES	CONTACTS	DIAGRAM
	**Monolithic indicator light Ø 30** colour: red	Red LED 12 ... 30 Vac/dc	
	**Monolithic indicator light Ø 30** colour: green	Green LED 12 ... 30 Vac/dc	

EL AN21439



	DEVICES	CONTACTS	DIAGRAM
	**Schuko socket 16 A 250 Vac**	/	

EL AN21442



	DEVICES	CONTACTS	DIAGRAM
	**Buzzer, continuous alarm** perforated lens, black	24 Vac/dc	
	**Indicator light Ø 30** red, blinking	Red LED 12 ... 30 Vac/dc	

EL AN31435



	DEVICES	CONTACTS	DIAGRAM
	YELLOW luminous cover continuous/blinking yellow light	24 Vdc	
	Buzzer continuous/intermittent tone		
	**ALARM button** flush, spring-return, yellow	1NO	

For all details on this housing, see page 109.
For 12 Vdc versions contact our technical department.

EL AN22070



	DEVICES	CONTACTS	DIAGRAM
	**Selector switch with short handle** 2 stable positions, black	1NO+1NC	
	**UP button** flush, spring-return, white	1NO	
	DOWN button flush, spring-return, black	1NO	

EL AN23040



	DEVICES	CONTACTS	DIAGRAM
STOP	**Emergency stop button Ø 40** rotary release	1NC	
	UP button flush, spring-return, white	1NO	
	DOWN button flush, spring-return, black	1NO	

EL AN23072



	DEVICES	CONTACTS	DIAGRAM
STOP	**Emergency stop button Ø 40** windowed push-pull release	1NC	
	LIGHT button flush, spring-return, yellow	1NO	

EL AN23023



	DEVICES	CONTACTS	DIAGRAM
STOP	**Emergency stop button Ø 40** rotary release, with guard	1NC	
	Schuko socket 16 A 250 Vac with internal fuse	/	

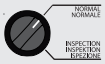
EL AN23118



	DEVICES	CONTACTS	DIAGRAM
STOP STOP	**Emergency stop button Ø 40** windowed push-pull release, with guard	1NC	
	Selector switch with short handle 2 stable positions, black, with guard	1NO+1NC	NORMAL INSPECTION
	UP button flush, spring-return, white	2NO	
	DOWN button flush, spring-return, black	2NO	

EL AN23052



	DEVICES	CONTACTS	DIAGRAM
	**Selector switch with short handle** 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	**UP button** flush, spring-return, white	1NO	
	**DOWN button** flush, spring-return, black	1NO	

EL AN23116



	DEVICES	CONTACTS	DIAGRAM
	**Buzzer, continuous alarm** perforated lens, black	24 Vac/dc	
	YELLOW luminous disc blinking yellow light	24 Vac/dc	
	**ALARM button** flush, spring-return, yellow	1NO	

EL AN23117



	DEVICES	CONTACTS	DIAGRAM
	**Buzzer, continuous alarm** perforated lens, black	24 Vac/dc	
	**Monolithic indicator light Ø 30** colour: red	Red LED 12 ... 30 Vac/dc	
	**ALARM button** flush, spring-return, yellow	1NO	

EL AN23119



	DEVICES	CONTACTS	DIAGRAM
	**WHITE luminous disc** 5 LUX steady white light	24 Vac/dc	
	ALARM button flush, spring-return, yellow	1NO	
	**Schuko socket 16 A 250 Vac** with internal fuse	/	

EL AN24025



DEVICES	CONTACTS	DIAGRAM
Emergency stop button Ø40 windowed push-pull release, with guard	1NC	
Illuminated LIGHT button flush, spring-return, yellow	1NO White LED 12 ... 30 Vac/dc	
Schuko socket 16 A 250 Vac with internal fuse	/	

EL AN24026



DEVICES	CONTACTS	DIAGRAM
Emergency stop button Ø40 windowed push-pull release, with guard	1NC	
ALARM button flush, spring-return, yellow	1NO	
Schuko socket 16 A 250 Vac with internal fuse	/	

EL AN24028



DEVICES	CONTACTS	DIAGRAM
Emergency stop button Ø40 windowed push-pull release, with guard	1NC	
ALARM button flush, spring-return, yellow	1NO	
LIGHT button flush, spring-return, black	1NO	
Schuko socket 16 A 250 Vac with internal fuse	/	

EL AN24111



DEVICES	CONTACTS	DIAGRAM
Emergency stop button Ø 40 rotary release, with guard	1NC	
UP button flush, spring-return, white	2NO	
DOWN button flush, spring-return, black	2NO	
Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION

EL AN24201



DEVICES	CONTACTS	DIAGRAM
Emergency stop button Ø 40 push-pull release, with guard	1NC	
UP button flush, spring-return, white	2NO	
DOWN button flush, spring-return, black	2NO	
Changeover switch Ø 42 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION

EL AN24202



DEVICES	CONTACTS	DIAGRAM
Emergency stop button Ø 40 push-pull release, with guard	1NC	
UP button flush, spring-return, white	2NO	
DOWN button flush, spring-return, black	2NO	
Selector switch with short handle 2 stable positions, black, with guard	2NO+3NC	NORMAL INSPECTION
ENABLE button flush, spring-return, blue	1NO	

EL AN24203



DEVICES	CONTACTS	DIAGRAM
Selector switch with short handle 2 stable positions, black	1NO+1NC	0 1
Selector switch with short handle 2 stable positions, red	1NO+1NC	0 1
Monolithic indicator light Ø 30 colour: green	Green LED 12 ... 30 Vac/ dc	LED
UP button flush, spring-return, white	1NO	
DOWN button flush, spring-return, black	1NO	

EL AN24204



DEVICES	CONTACTS	DIAGRAM
WHITE luminous disc 5 LUX steady white light	24 Vac/dc	LED
Buzzer, continuous alarm perforated lens, black	24 Vac/dc	
Monolithic indicator light Ø 30 colour: red	Red LED 12 ... 30 Vac/ dc	LED
Monolithic indicator light Ø 30 colour: green	Green LED 12 ... 30 Vac/ dc	LED
Schuko socket 16 A 250 Vac with internal fuse	/	

EL AN series control stations with visual and audible signalling functions



Power supply electrical data

Rated operating voltage Ue:	12 Vdc or 24 Vdc
Tolerance of the operating voltage:	±20 % of Ue
Operating current at Ue voltage:	80 mA (12 Vdc version) 50 mA (24 Vdc version)

Description

The series EL AN control station for lifts in the 1-unit version is also available with visual and audible signalling functions, in order to meet the requirements of the EN 81-20 and EN 81-50 standards, which prescribe the presence of an acoustic signal and flashing light beneath the cabin. Using the terminal block located inside the housing, the visual indicator can be configured as continuous light or flashing light, and the audible indicator can be set as a steady tone or intermittent tone.
The control station is available as 12 Vdc or 24 Vdc version.

Base with installation flange

The base of the EL AN series control station equipped with visual and audible signalling functions is designed with mounting flanges with a hole spacing of 100x70 mm. This design allows additional options for a quick and flexible installation.

Indicator lights

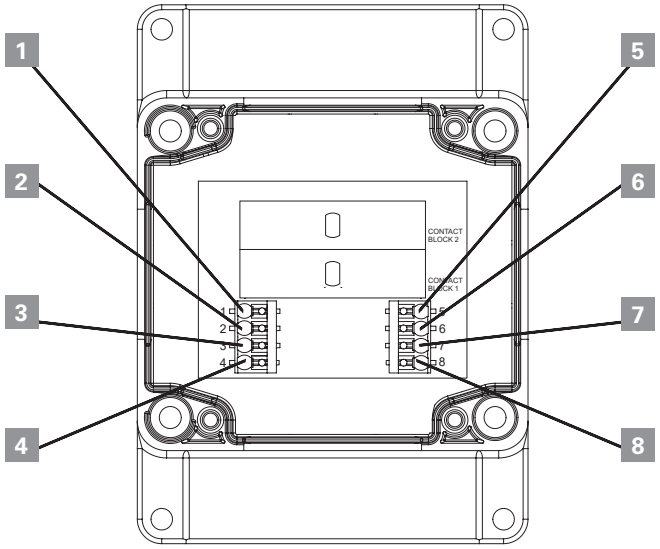
The illuminated cover is equipped with LEDs that ensure highly visible illumination from any viewing direction, including from the side.

Buzzers

The control station guarantees a minimum sound intensity of 55 dB at a distance of 1 metre, in accordance with the EN 81-20 and EN 81-50 standard. The position of the buzzer inside the housing ensures its protection degree and also keeps the system protected from external influences.

Connections and configuration

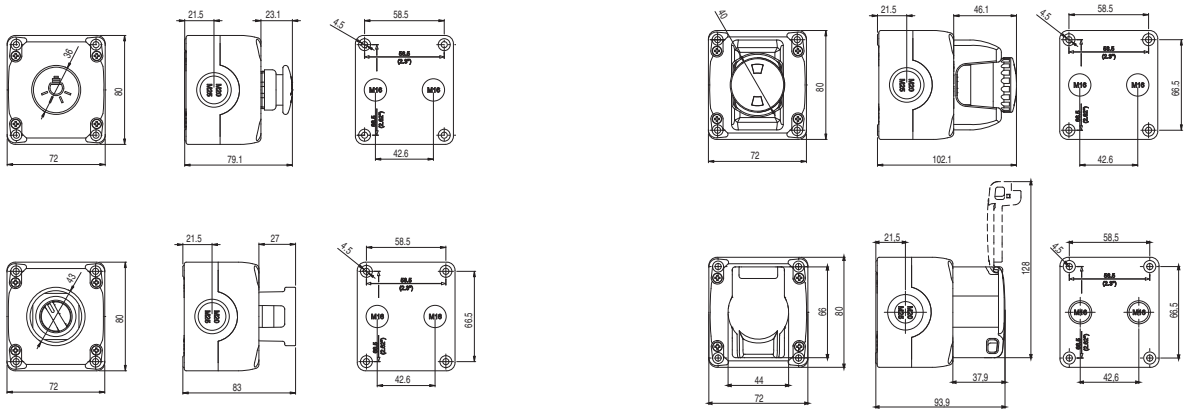
Pin 2 Contact 1	1	5	Power supply for blinking light and buzzer (if available) with intermittent tone (a)
Power supply for continuous light and buzzer (if available) with continuous tone (a)	2	6	Pin 2 Contact 2
Pin 1 Contact 2	3	7	Pin 1 Contact 1
Not used	4	8	Supply input 0 Vdc



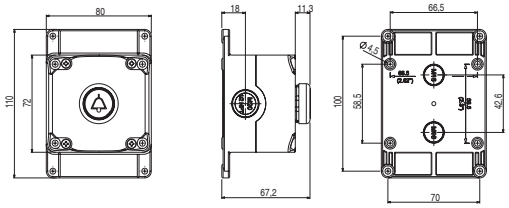
(a) for versions without buzzer please contact our technical department.

Notes

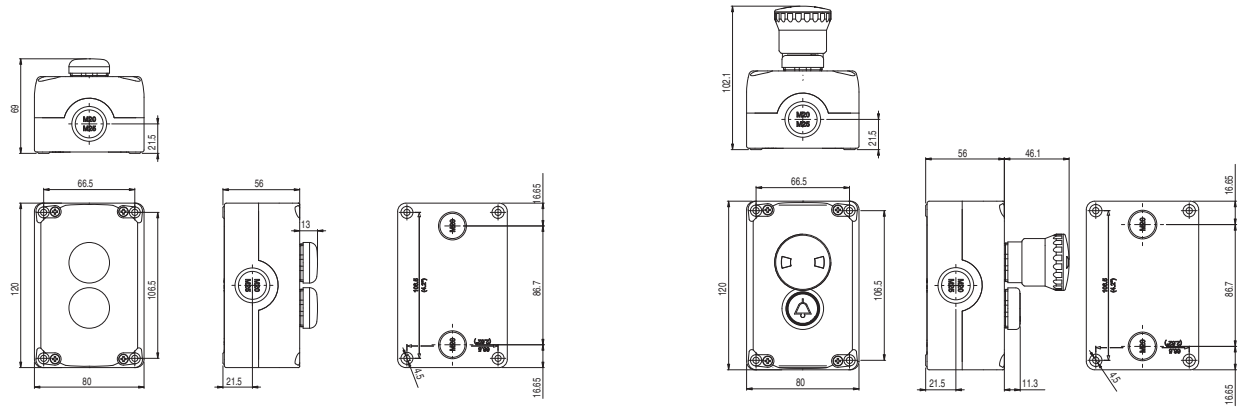
Housing dimensions for EL AN 21••• series lift control stations



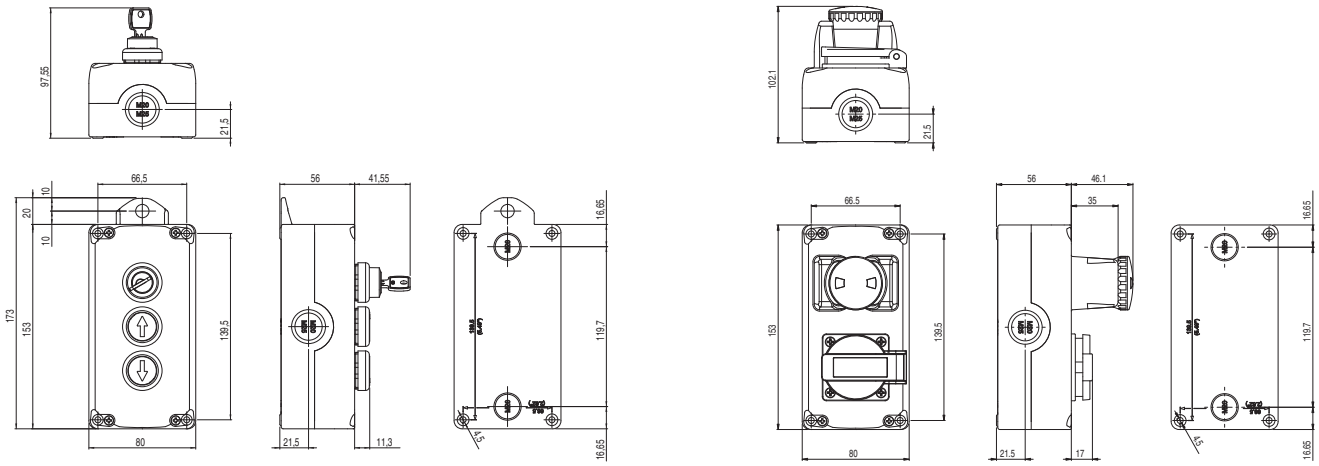
Housing dimensions for EL AN 31••• series lift control stations



Housing dimensions for EL AN 22••• series lift control stations



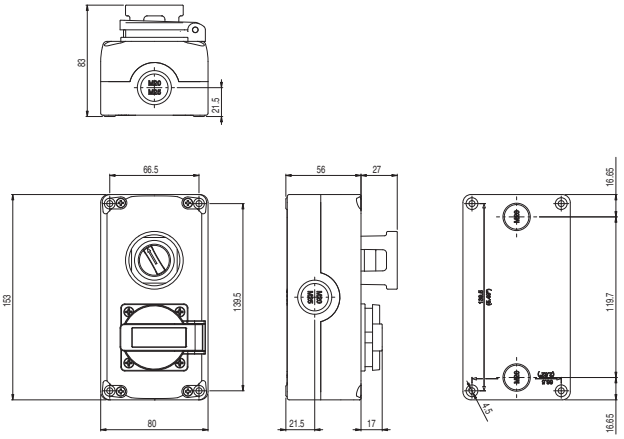
Housing dimensions for EL AN 23••• series lift control stations



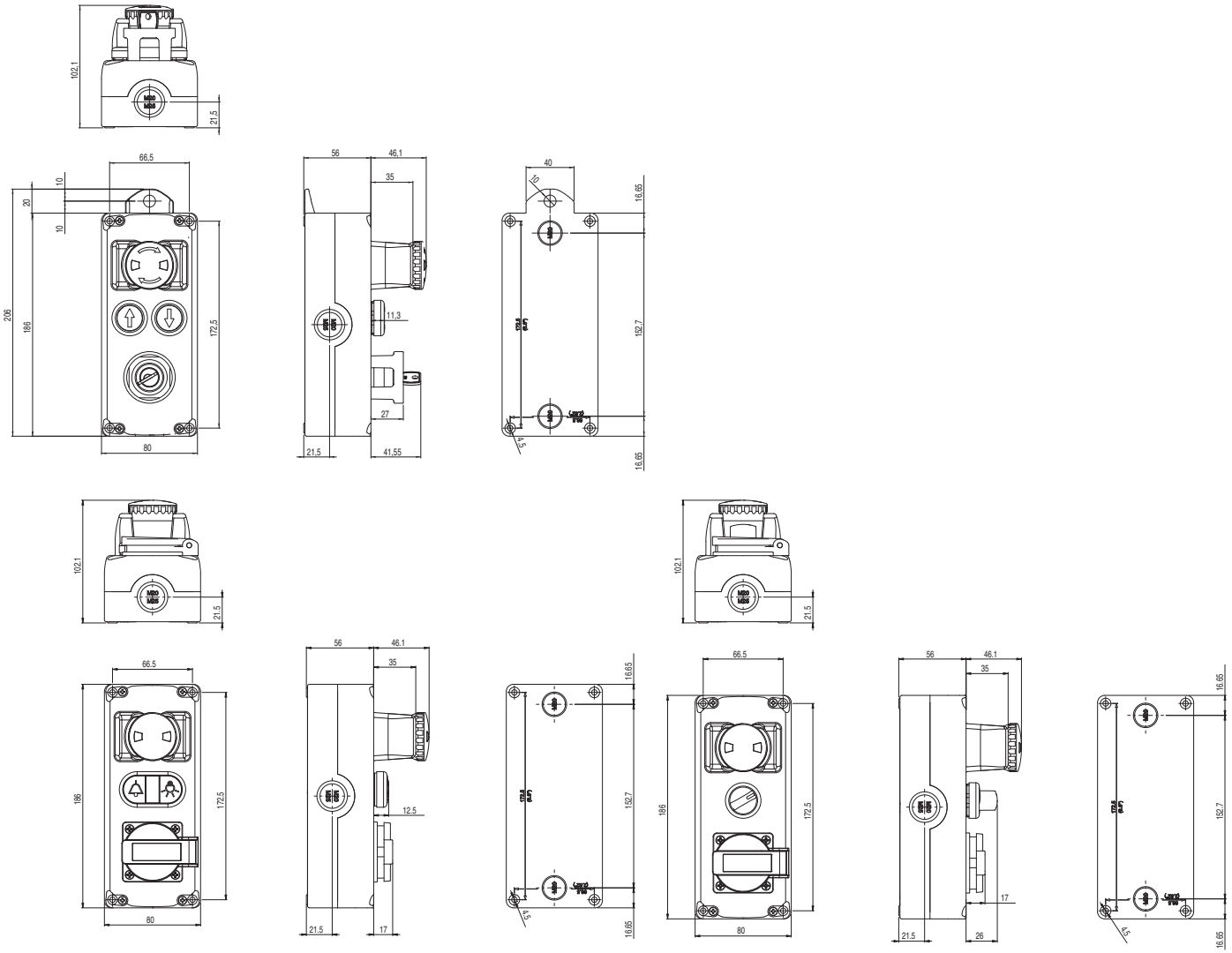
All values in the drawings are in mm

→ The 2D and 3D files are available at **www.pizzato.com**

Housing dimensions for EL AN 23••• series lift control stations



Housing dimensions for EL AN 24••• series lift control stations



All values in the drawings are in mm

➔ The 2D and 3D files are available at **www.pizzato.com**

EL AN 21••• series cover selection table

ATTENTION: The internal code does not designate a product. Covers are not available for sale separately.

				
internal code	24151	24159	24195	24196

EL AN 22••• series cover selection table

ATTENTION: The internal code does not designate a product. Covers are not available for sale separately.

		
internal code	24201	24210

EL AN 23••• series cover selection table (selector versions)

ATTENTION: The internal code does not designate a product. Covers are not available for sale separately.

					
internal code	24251	24258	24260	24262	24263

EL AN 24••• series cover selection table (selector versions)

ATTENTION: The internal code does not designate a product. Covers are not available for sale separately.

					
internal code	24301	24310	24313	24315	24316

	
internal code	24326

EL AN 24••• series cover selection table (changeover switch versions)

ATTENTION: The internal code does not designate a product. Covers are not available for sale separately.

	
internal code	24317