

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 AC series lift control stations are designed for motion control of elevators during inspection and maintenance. The control stations are equipped with Pizzato Elettrica EROUND signalling and control devices.

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 piece in a single casting process.

Robustness

The protection of devices against impacts or kicks is guaranteed by both the laterally-hinged guard (in versions equipped with this feature), and by the use of recessed buttons, which do not protrude from the surface of the control station.

In addition, the use of robust guards for particularly bulky control switches, such as emergency stop buttons or selector switches, makes the product applicable in the toughest environments.

Station holder



The EL AC control stations can also be wall-mounted, using the dedicated VE SF series control station holder. This accessory is suitable for use in all situations where it is useful to be able to insert the station in a fixed and secure holder, when not in use by the operator. The reinforced structure and fitted design of the holder ensure easy insertion of the control station, secure hold, and sturdy protection. The snap-in attachment, felt when the station is fully inserted, provides feedback to the operator that the control station is held firmly in place, preventing poor positioning of the device that could allow it to slip from its retainer.



Changeover switches and selector switches



In the EL AC series control stations, a changeover switch can be installed instead of a selector 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 8 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 hinged lateral protective cover has a dual function: it protects devices from dust and dirt, and also from impacts or loads (up to a maximum of 100 kg).

Its special shape means that it is still easy to actuate the emergency stop button, while at the same time the protective function remains in place, even in the event of a distracted maintenance engineer accidentally treading on the control station.



The installed devices will remain unaffected, thanks to the shape of the protection, which allows the pressure exerted to be dispersed onto the robust structure of the control station.

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.



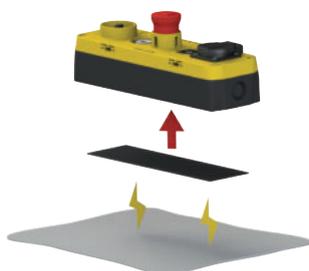
Aesthetics

The shape of the lower part of the control station merges seamlessly with that of the protection; thus forming a single body, characterised by the absence of any protruding elements.

This allows the station to be used even when an attractive design is required, which is increasingly the case when the lift shaft is framed in glass and the cabin is thus visible.



Magnetic bases

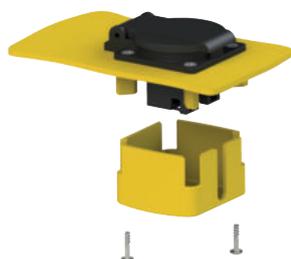


All EL AC series control stations can be supplied with a magnetic base, installed at the bottom of the housing; this allows the control stations to be anchored to walls and metallic surfaces, in such a way that they are removable, and no drilling is required. The adhesive magnetic bases can also be retrofitted.

Electrical socket

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

It is available in various versions to comply with different country-specific regulations.



Protective cover available separately

In the control station versions with centrally positioned emergency stop button, with no protruding guards, the laterally hinged protective cover can be retrofitted, as it is available separately to the control station.



Two heights

The Pizzato Elettrica EL AC series control stations are available in both a high base version (2 levels of contacts) and a low base version (1 level of contacts). This significantly increases the number of application possibilities for the product itself.



2 levels of contacts

1 level of contacts

LASER engraving

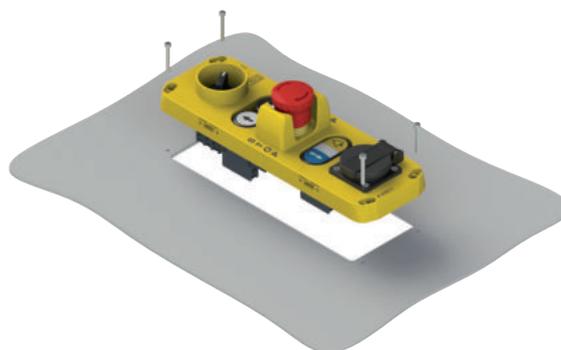


Pizzato Elettrica has introduced a new LASER engraving system for EL AC series control stations. Thanks to this new system, which does not use pad printing or labels, engravings on the products are indelible and durable over time.

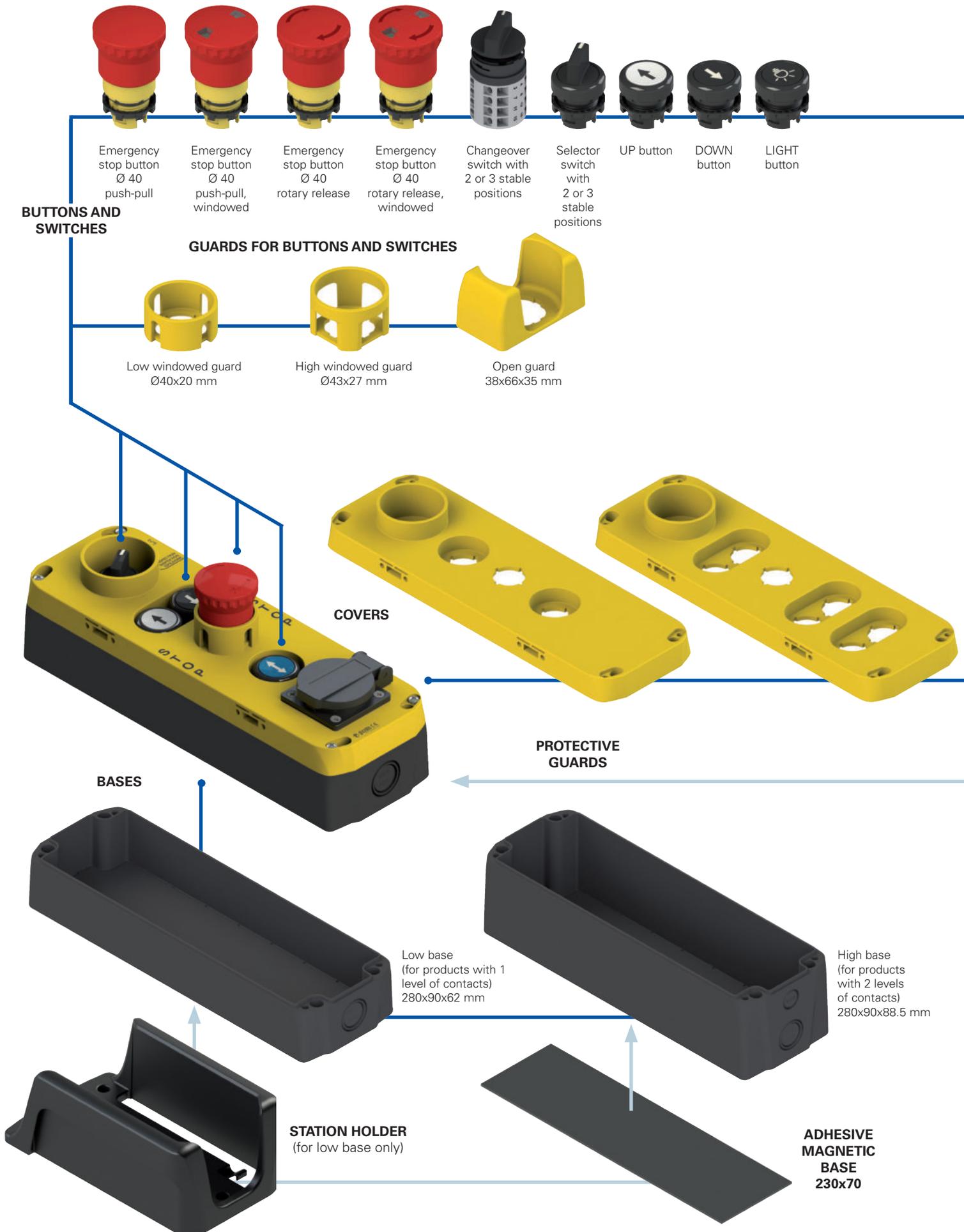
The laser engravings of the EL AC series control stations now include pictograms and icons compliant with the new EN 81-20 standard; the control stations can also be customised using indicators, symbols, and logos, on customer request.

Cover without base

The EL AC control stations are also available as covers without base. These are designed for cases where the control station is to be mounted directly on a wall or in switching cabinet.

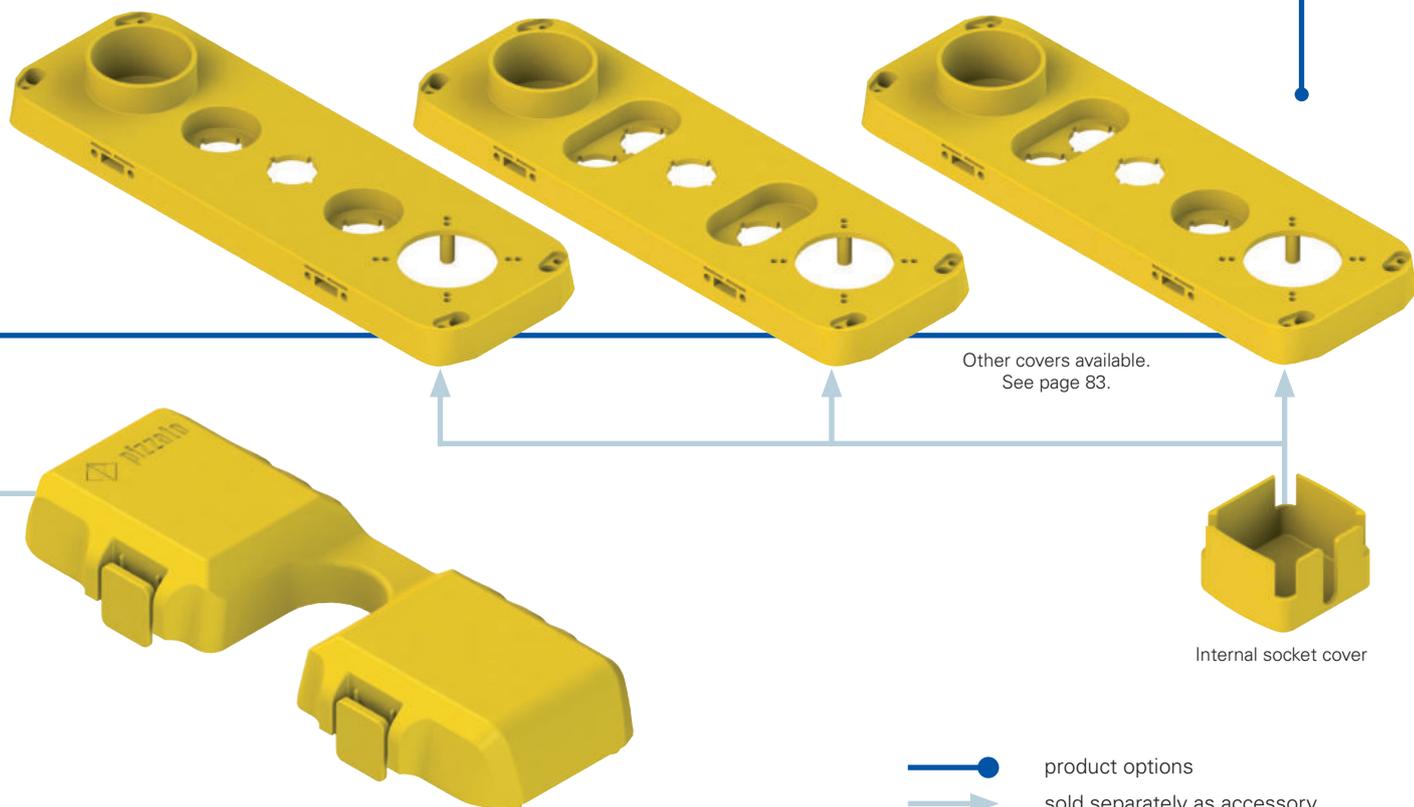


Selection diagram





SOCKETS



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

EL AC27010

Housing shape		Incremental configuration number	
7	base 280 x 90 mm	010	configuration 010
		011	configuration 011
		012	configuration 012
	



Main features

- Various configurations available
- With treadproof protective cover
- Protection degree IP54, IP65, or IP67
- Internal and external fixing
- Devices flush-mounted or protected by guard
- Customisable electrical socket

Housing quality marks:



EAC approval: RU C-IT.YT03.B.00035/19

Contact block quality marks:



IMQ approval: CA02.04805

UL approval: E131787

CCC approval: 2013010305631156

EAC approval: RU C-IT.YT03.B.00035/19

Technical data

Housing

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

High base:

2 lateral knock-out entries:	M20 - M25 - PG 13.5 - 1/2 NPT
2 lateral knock-out entries:	M16 - PG 11
6 knock-out entries at bottom:	M20 - PG 13.5 - 1/2 NPT

Low base:

2 lateral knock-out entries:	M20 - M25 - PG 13.5 - 1/2 NPT
2 knock-out entries at bottom:	M20 - M25 - PG 13.5 - 1/2 NPT

Base colour:

Cover colour:

Protective cover colour:

Material of the screws:

Protection degree acc. to EN 60529:

Black RAL 9005
Yellow RAL 1023 (standard)
Black RAL 9005 (on request)
Yellow RAL 1023 (standard)
Black RAL 9005 (on request)
Zinc-plated steel;
stainless steel available on request
IP54 (standard)
IP65 (on request)
IP67 (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, EN 60947-1, IEC 60204-1, IEC 60947-5-5, EN 60947-5-5, 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 119.

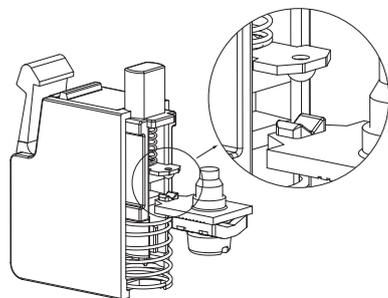
Electrical data

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 support point. This type of shape, thanks to the presence of the double support 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_{th}): 10 A
Rated impulse withstand voltage (U_{imp}): 8 kV
Protection degree of the housing: IP20
Terminals: screw terminals
Utilization category: AC15

Operating voltage (U_o): 400 Vac (50/60 Hz)
Operating current (I_o): 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 AC27029



	DEVICES	CONTACTS	DIAGRAM
	Selector switch with short handle 3 stable positions, black, with guard	4 NO	NORMAL 0 INSPECTION
	UP button flush, spring-return, white	2NO	
	Emergency stop button Ø 40 rotary release, with guard	1NC	
	DOWN button flush, spring-return, black	2NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27433



	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 windowed push-pull release, with guard	1NC	
	Changeover switch Ø 42 2 stable positions, black, with guard	2NO+4NC	NORMAL INSPECTION
	UP button flush, spring-return, white	1NO+1NC	
	ENABLE button flush, spring-return, blue	1NO	
	DOWN button flush, spring-return, black	1NO+1NC	

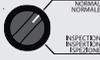
EL AC27616



	DEVICES	CONTACTS	DIAGRAM
	Changeover switch Ø 42 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	UP button flush, spring-return, white	2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	Emergency stop button Ø 40 rotary release, with guard	2NC	
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button flush, spring-return, yellow	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27620



	DEVICES	CONTACTS	DIAGRAM
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL  INSPECTION 
	UP button flush, spring-return, white	2NO	
	DOWN button flush, spring-return, black	2NO	
	Emergency stop button Ø 40 windowed push-pull release, with guard	1NC	
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button projecting, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27615



	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 windowed 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+2NC	NORMAL  INSPECTION 
	ENABLE button flush, spring-return, blue	1NO	
	Buzzer, continuous alarm perforated lens, black	24 Vac/dc	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27617



	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 windowed rotary release, with guard	1NC	
	ENABLE button flush, spring-return, blue	1NO	
	UP button flush, spring-return, white	2NO	
	LIGHT button flush, spring-return, black	1NO	
	DOWN button flush, spring-return, black	2NO	
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL  INSPECTION 
	Selector switch with short handle 3 positions, black, with guard, left spring-return, stable, right spring-return	2NO	 0  



EL AC27622



	DEVICES	CONTACTS	DIAGRAM				
	Emergency stop button Ø 40 windowed 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	<table border="0"> <tr> <td>NORMAL</td> <td></td> </tr> <tr> <td>INSPECTION</td> <td></td> </tr> </table>	NORMAL		INSPECTION	
NORMAL							
INSPECTION							
	ENABLE button flush, spring-return, blue	1NO					
	ALARM button flush, spring-return, yellow	1NO					
	WHITE luminous disc 5 LUX steady white light	24 Vac/dc					
	Buzzer, continuous alarm perforated lens, black	24 Vac/dc					

EL AC27619



	DEVICES	CONTACTS	DIAGRAM				
	Selector switch with short handle 2 stable positions, black, with guard	3NO+3NC	<table border="0"> <tr> <td>NORMAL</td> <td></td> </tr> <tr> <td>INSPECTION</td> <td></td> </tr> </table>	NORMAL		INSPECTION	
NORMAL							
INSPECTION							
	UP button flush, spring-return, white	2NO+1NC					
	DOWN button flush, spring-return, black	2NO+1NC					
	Emergency stop button Ø 40 windowed push-pull release, with guard	2NC					
	ENABLE button flush, spring-return, blue	2NO					
	ALARM button flush, spring-return, yellow	1NO					

EL AC27618



	DEVICES	CONTACTS	DIAGRAM				
	Selector switch with short handle 2 stable positions, black, with guard	3NO+3NC	<table border="0"> <tr> <td>NORMAL</td> <td></td> </tr> <tr> <td>INSPECTION</td> <td></td> </tr> </table>	NORMAL		INSPECTION	
NORMAL							
INSPECTION							
	UP button flush, spring-return, white	2NO					
	DOWN button flush, spring-return, black	2NO					
	Emergency stop button Ø 40 windowed push-pull release, with guard	2NC					
	LIGHT button flush, spring-return, black	1NO					
	ENABLE button flush, spring-return, blue	1NO					
	Schuko socket 16 A 250 Vac with internal fuse	/					

EL AC27025



	DEVICES	CONTACTS	DIAGRAM
	Selector switch with short handle 2 stable positions, black, with guard	3NO+3NC	NORMAL
			INSPECTION
	UP button flush, spring-return, white	2NO	
	DOWN button flush, spring-return, black	2NO	
	Emergency stop button Ø 40 rotary release, with guard	1NC	
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	ENABLE button flush, spring-return, blue	2NO	
	Selector switch with short handle 3 positions, black, left spring-return, stable, right spring-return	2NO	 0

EL AC27613



	DEVICES	CONTACTS	DIAGRAM
	Changeover switch Ø 42 2 stable positions, black, with guard	3NO+3NC	NORMAL
			INSPECTION
	UP button flush, spring-return, white	2NO	
	DOWN button flush, spring-return, black	2NO	
	Emergency stop button Ø 40 windowed push-pull release, with guard	1NC	
	ENABLE button flush, spring-return, blue	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27058



	DEVICES	CONTACTS	DIAGRAM
	Selector switch with short handle 2 stable positions, black, with guard	3NO+3NC	NORMAL
			INSPECTION
	UP button flush, spring-return, white	2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	Emergency stop button Ø 40 rotary release, with guard	1NC	
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button projecting, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27048


	DEVICES	CONTACTS	DIAGRAM
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
		2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	Emergency stop button Ø 40 rotary release, with guard	2NC	
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button flush, spring-return, yellow	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

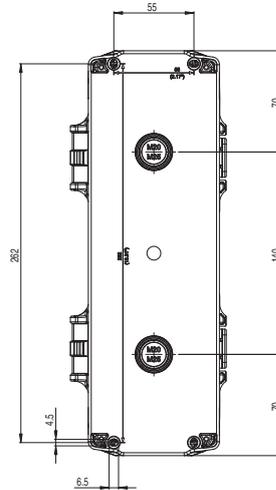
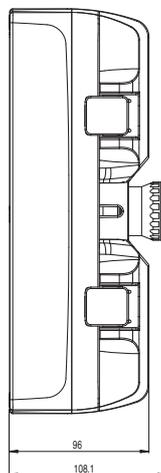
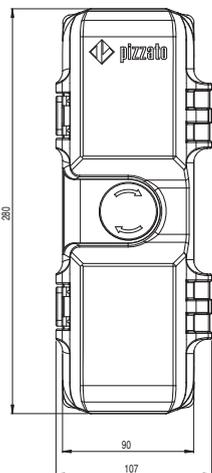
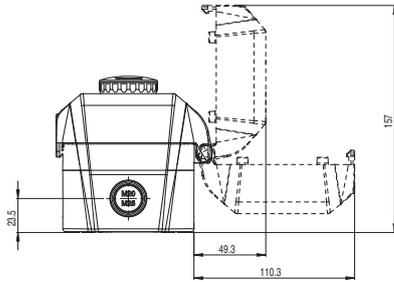
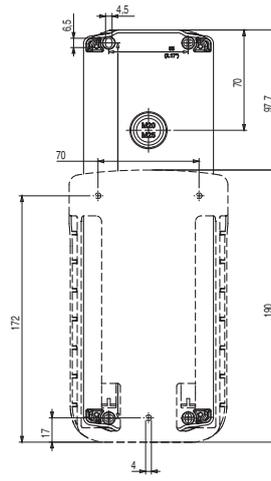
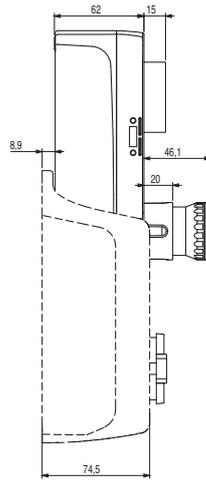
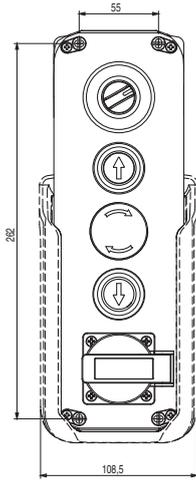
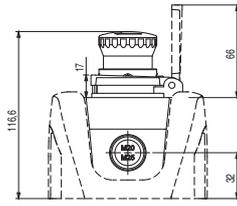
EL AC27623


	DEVICES	CONTACTS	DIAGRAM
	Changeover switch Ø 42 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
		2NO	
	DOWN button flush, spring-return, black	2NO	
	Emergency stop button Ø 40 rotary release, with guard	2NC	
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button flush, spring-return, yellow	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AC27614

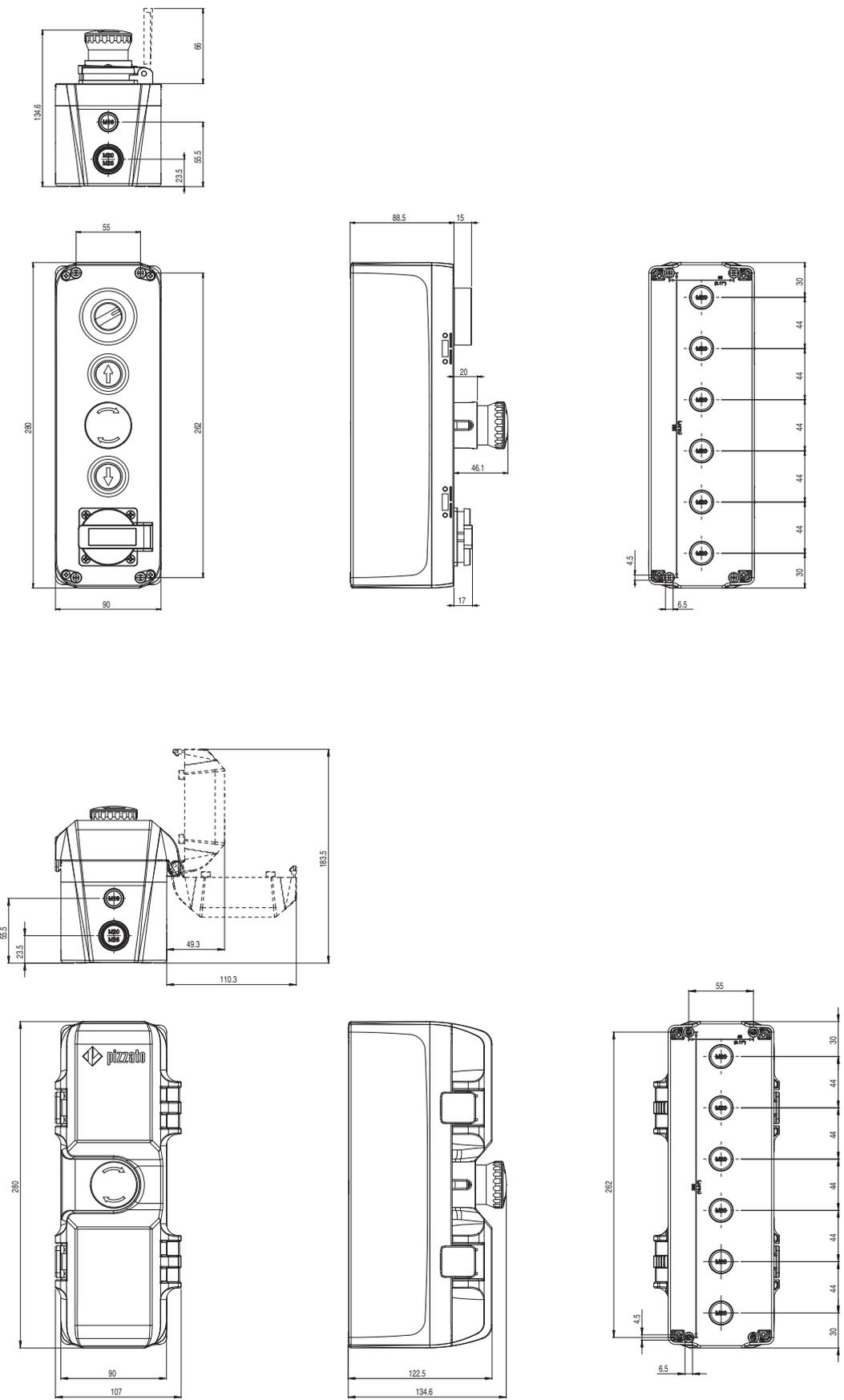

	DEVICES	CONTACTS	DIAGRAM
	Selector switch with short handle 2 stable positions, black, with guard	3NO+3NC	NORMAL INSPECTION
		2NO	
	DOWN button flush, spring-return, black	2NO	
	Emergency stop button Ø 40 windowed push-pull release, with guard	2NC	
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button flush, spring-return, yellow	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

Housing dimensions for EL AC27••• series lift control stations with low base



All values in the drawings are in mm

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

Housing dimensions for EL AC27••• series lift control stations with high base


All values in the drawings are in mm

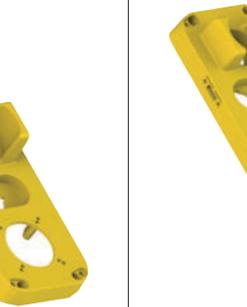
→ The 2D and 3D files are available at www.pizzato.com

EL AC series cover selection table (selector switch versions)

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

					
internal code	25001	25068	25074	25075	25076

					
internal code	25081	25103	25116	25125	25129

			
internal code	25146	25150	25154

EL AC 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	25138	25153	25162	25183	25190

EL AC series cover selection table (selector switch versions)

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

					
internal code	25060	25101	25118	25119	25120

EL AC 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	25163