

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 AD series control stations are equipped with Pizzato Elettrica EROUND signalling and control devices.

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



Reduced height

Continuous optimisation of the space available in the lift shaft has led to the need for control stations with reduced height.

Pizzato meets these requirements by offering the innovative vertical variant of the new EL AD series housing: with a maximum overall height of 60 mm, contact blocks of standard height can be used, as well as recessed devices, including sockets, emergency stop buttons and generously dimensioned selector switches with robust protective guards.

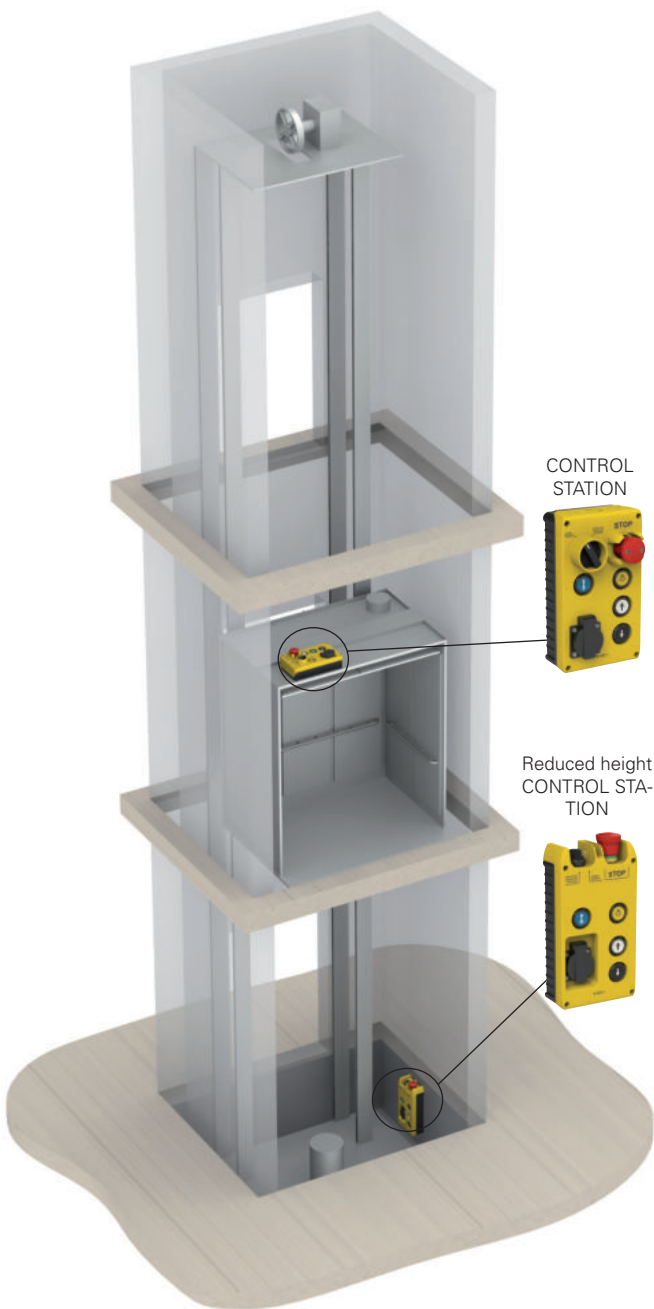


Modularity



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.



Robustness



The protection of devices against impacts or kicks is guaranteed by both the solid structure of the station – which is made from robust, extra thick materials – and by the use of buttons which are inte-

grated and therefore do not protrude from the surface. 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.

In the 60mm reduced height version, two solid guards have also been incorporated, designed to protect the two devices mounted on the top.

Ease of wiring

The design of the product offers many technical and practical advantages, the first of which is the ease of cabling: in addition to the four entries for cables on the base, there are up to six entries on the cover.



Having the entries directly on the cover means having everything positioned on the same side of the station, thus simplifying and speeding up the cabling and closing of the control station.

Custom wiring

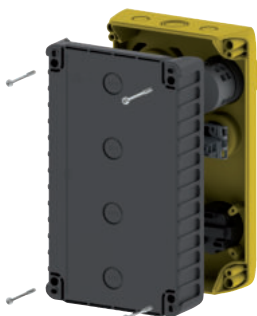
The control stations can be supplied wired, with the wiring implemented according to customer specifications; both in terms of cables used, and connectors.

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



Rear fixing of the cover

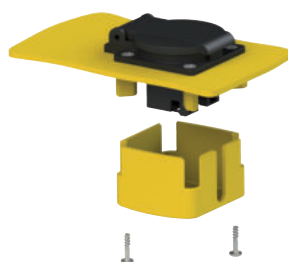
The cover fixing screws on the base are positioned obscured from view, behind the station; this in turn means that the station can only be opened once removed from the wall where it is fixed – making tampering more difficult.



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.



Changeover switches and selector switches



In the EL AD 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 6 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.

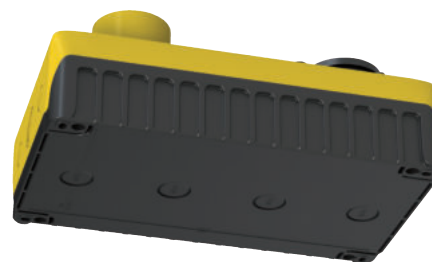
Fixing hook

The specific shape of the reduced height 60mm station also allows a practical fixing hook, positioned between the two devices mounted on the top, to be incorporated. With this robust hook, the control station can easily be hung on the wall.



Profiled base

The station base is also knurled, allowing easier grip when picking up and handling the station.



LASER engraving

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

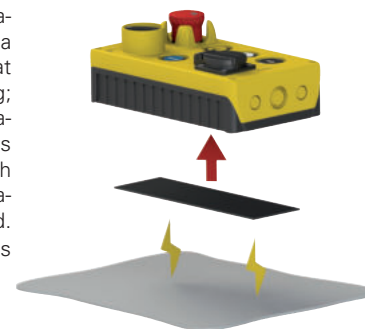
Thanks to this new system, which does not use pad printing or labels, engravings on the products are indelible and durable over time.

The laser engravings of the EL AD 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.

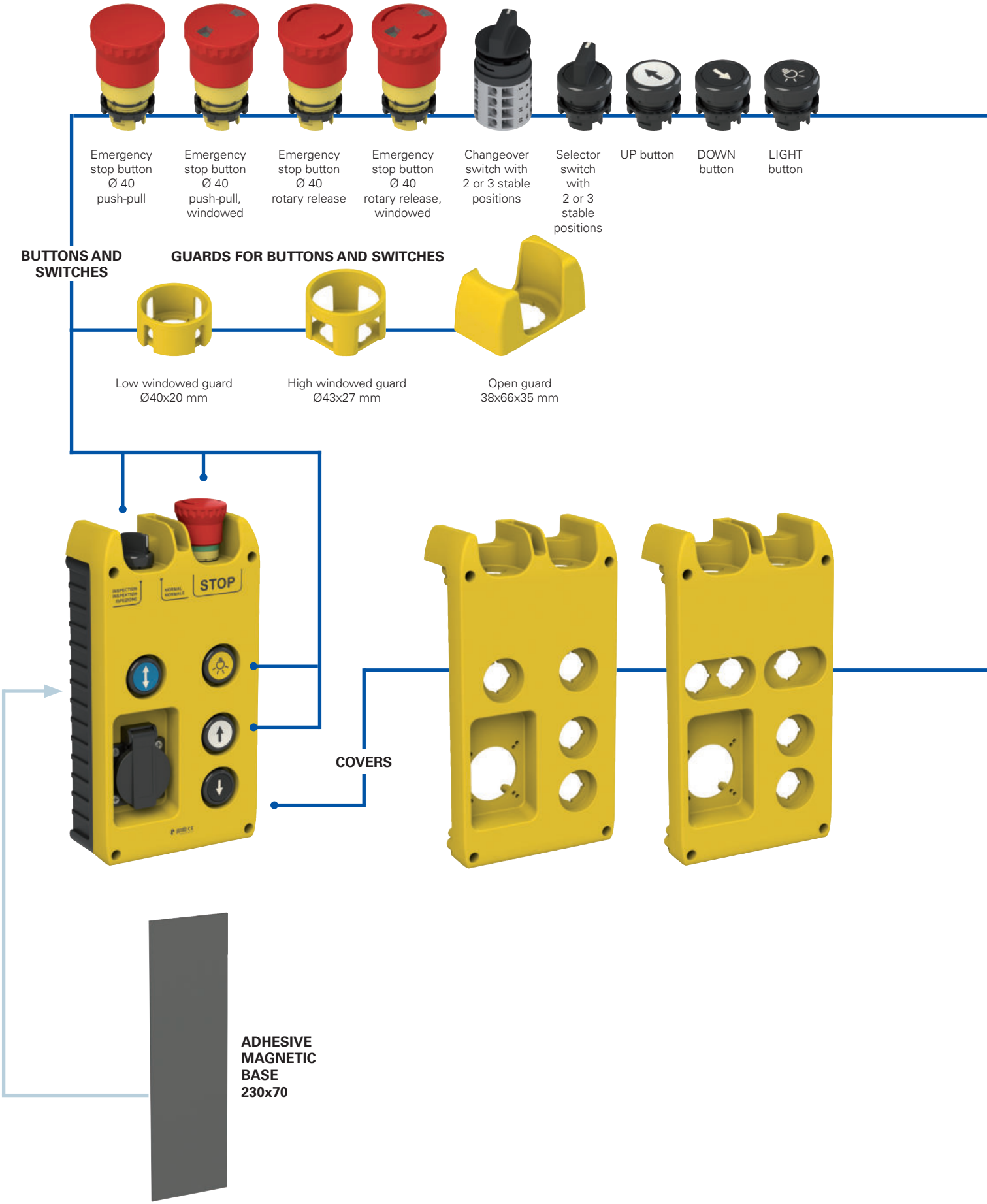


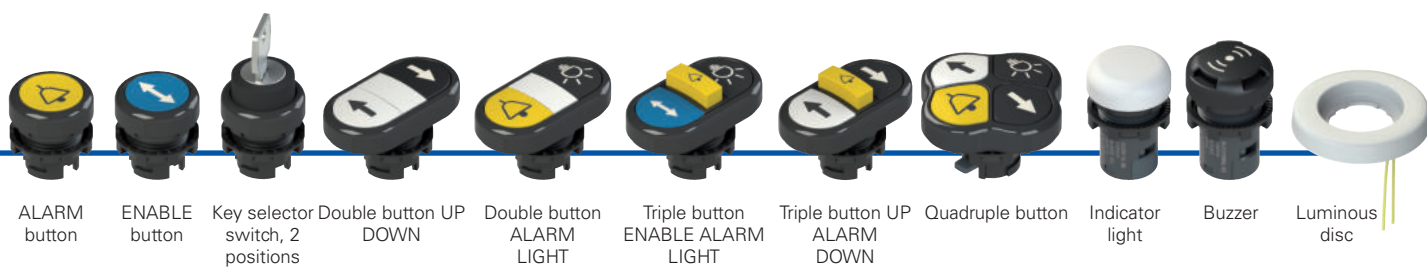
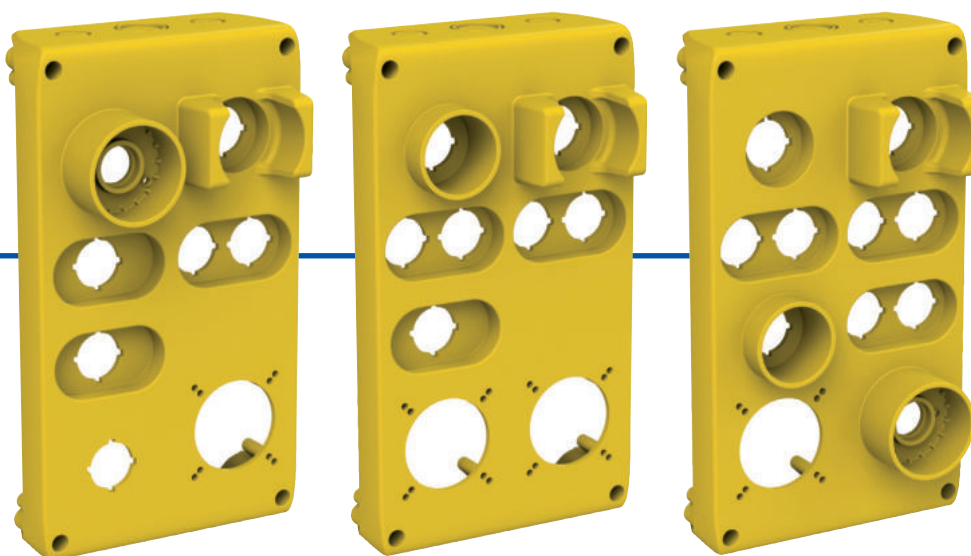
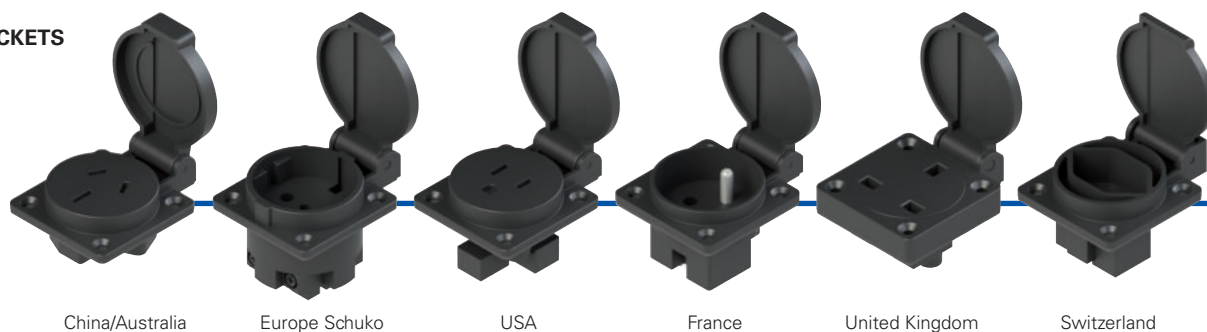
Magnetic fixing bases

All EL AD 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.

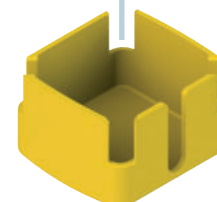


Selection diagram




SOCKETS


Other covers available. See page 110.



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 AD23010

Housing shape		Incremental configuration number	
1	240 x 160 mm (standard height)	010	configuration 010
3	260 x 160 mm (height 60mm)	011	configuration 011
		012	configuration 012
	



Main features

- Reduced height version (60mm)
- Entries on cover for easier wiring
- Various configurations available
- Protection degree up to IP69K
- Devices flush-mounted or protected by guard
- Customisable electrical socket

Housing quality marks:



EAC approval: RU C-IT.A.135.B.00454

Contact block quality marks:



IMQ approval: CA02.04805

UL approval: E131787

CCC approval: 2013010305631156

EAC approval: RU C-IT.A.135.B.00454

Technical data

Housing

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

Cover:

Standard version:

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

4 lateral knock-out entries: M16 - PG 11

Reduced height version:

1 lateral knock-out entry: M20 - M25 - PG 13.5 - 1/2 NPT

2 lateral knock-out entries: M16 - PG 11

Base:

4 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:

IP40 (standard)

IP54 (on request)

IP65 (on request)

IP67 (on request)

IP69K (on request)

with cable gland of equal or higher protection degree

Protection degree acc. to ISO 20653:

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, EN 60204-1, IEC 60947-5-5, EN 60947-5-5, 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 \ominus . 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.

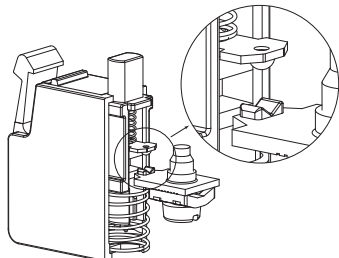
Electrical data

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_{the}): 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_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 AD23004


	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø40 rotary release, with green indicator, with guard	1NC	
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	ENABLE button flush, spring-return, blue	1NO	
	UP button flush, spring-return, white	2NO	
	DOWN button flush, spring-return, black	2NO	
	LIGHT button flush, spring-return, yellow	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AD23006


	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø40 rotary release, with green indicator, with guard	2NC	
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	Buzzer, continuous alarm perforated lens, black	24 Vac/dc	
	Monolithic indicator light Ø 30 white	White LED 12 ... 30 Vac/ dc	
	UP button flush, spring-return, white	2NO+1NC	
	CLOSE button flush, spring-return, black	1NO	
	OPEN button flush, spring-return, white	1NO	
	DOWN button flush, spring-return, black	2NO+1NC	
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	ENABLE button flush, spring-return, blue	1NO	

EL AD23007


	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø40 rotary release, with green indicator, with guard	2NC	
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	ENABLE button flush, spring-return, blue	1NO	
	Monolithic indicator light Ø 30 colour: red	Red LED 12 ... 30 Vac/ dc	
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	UP button flush, spring-return, white	2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AD21002



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

EL AD21006



	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 push-pull release, with guard	2NC	
	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	
	UP button flush, spring-return, white	2NO	
	DOWN button flush, spring-return, black	2NO	
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	
	USA 15 A 125 Vac socket with internal fuse	/	

EL AD21008



	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 push-pull release, with guard	2NC	
	Changeover switch Ø 42 2 stable positions, black, with guard	2NO+4NC	NORMAL INSPECTION
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	UP button flush, spring-return, white	2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	ENABLE button flush, spring-return, blue	1NO	
	Buzzer, continuous alarm perforated lens, black	24 Vac/dc	
	WHITE luminous disc 5 LUX steady white light	24 Vac/dc	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AD21007


	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø40 windowed push-pull release, with guard	2NC	
	Selector switch with short handle 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	ENABLE button flush, spring-return, blue	1NO	
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	UP button flush, spring-return, white	2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	Schuko socket 16 A 250 Vac with internal fuse	/	

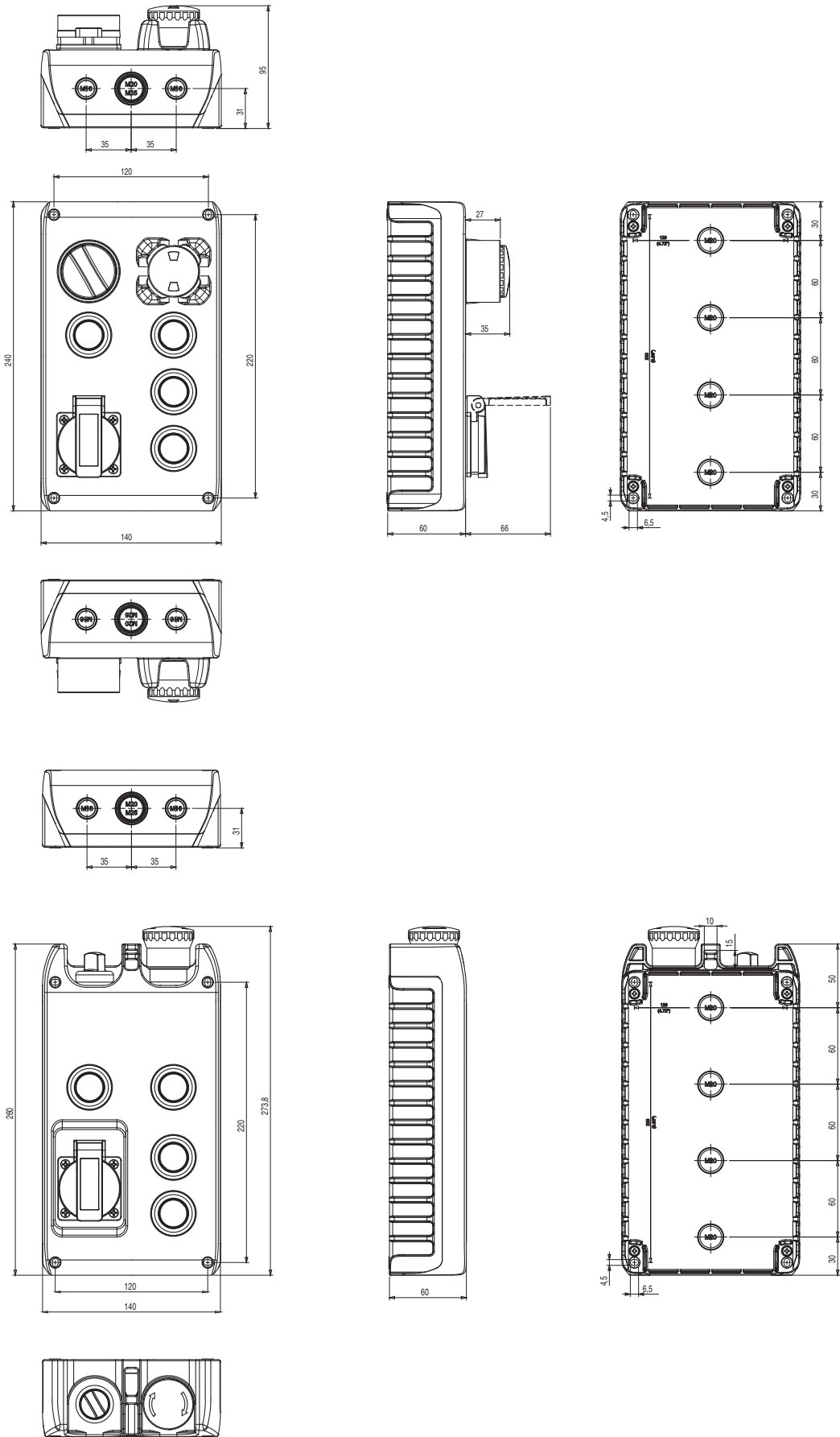
EL AD21004


	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 windowed rotary release, with guard	1NC	
	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	
	ENABLE button flush, spring-return, blue	1NO	
	LIGHT button flush, spring-return, black	1NO	
	ALARM button flush, spring-return, yellow	1NO	
	Schuko socket 16 A 250 Vac with internal fuse	/	

EL AD21005


	DEVICES	CONTACTS	DIAGRAM
	Emergency stop button Ø 40 windowed push-pull release, with guard	2NC	
	Changeover switch Ø 42 2 stable positions, black, with guard	2NO+2NC	NORMAL INSPECTION
	ALARM button flush, spring-return, yellow	1NO	
	LIGHT button flush, spring-return, black	1NO	
	Selector switch with short handle 3 positions, black, with guard, left spring-return, stable, right spring-return	2NO	
	Buzzer, continuous alarm perforated lens, black	24 Vac/dc	
	Monolithic indicator light Ø 30 white	White LED 12 ... 30 Vac/ dc	
	Schuko socket 16 A 250 Vac with internal fuse	/	
	UP button flush, spring-return, white	2NO+1NC	
	DOWN button flush, spring-return, black	2NO+1NC	
	ENABLE button flush, spring-return, blue	1NO	

Housing dimensions for EL AD series lift control stations



All values in the drawings are in mm

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




EL AD 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	25502	25523	25527	25519	25526

EL AD 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	25501	25522	25524