

### Introduction

With its experience and knowledge gained in decades of activity in the field of automation and safety, Pizzato Elettrica confirms its ability to propose innovative solutions in new sectors too. Its range is both absolutely functional and flexible to use, as well as aesthetically linear and detailed.

Pizzato Elettrica's EL AD series lift control stations convey these features and use the EROUND line control and signaling devices.

EL AD lift control stations are designed to drive the lift movement during control and maintenance operations.

### According to EN 81-20 and EN 81-50 standards

International standards EN 81-20 and EN 81-50 establish new, updated technical and safety directives and represent an important step forward in the construction and installation of lifts.

The range of EL control and signalling stations was conceived to be in full compliance with the requirements set by these standards.



### Reduced height

More and more optimised spaces in the lift shaft have led to the need for boxes conceived for reduced height lifts.

However, this requirement must not compromise the solidness, reliability and practicality of manually operated devices.

Pizzato has managed to combine these features by offering the innovative vertical version of the new EL AD series box: it has a maximum height of 60mm, yet it is equipped with standard contact units, built-in devices (including an electrical socket), an emergency button and a big selector, the latter two with solid protections.



### **Sturdiness**



The solid structure of the station, made of stout and thick materials, and the built-in buttons, not projecting from the surface, protect the devices from being hit or stepped on. In addition, solid protections for the

bigger control devices , such as emergency buttons and selectors, make the product suitable for the harshest environments.

Also in the 60mm-reduced height version, two solid protections surround the two top-mounted devices.

### **Modularity**



Lift control stations have been conceived as a customizable product, providing the widest and most versatile choice in the combination of applicable devices.

Several configuration options are possible thanks to the innovative mold with modular, exchangeable elements (registered patent) which allows free arrangement of the perforated holes and shapes for housing various devices; this modular mold is employed to create the whole cover, which is just one solid piece produced by means of a single moulding process.

### Easy cabling

The modern and agreeable product design ensures both technical and practical advantages, the first of which is an easy-wiring process. As a matter of fact, the control station not only features 4 cable-entries on the lower face,

but also a maximum of 6 cable-entries on the enclosure's cover.

Thanks to the cover cable-entries, actuating devices, wiring and cable-inlets are on the same side of the enclosure. thus simplifying and accelerating the process of wiring and closing the control station.



### **Custom wiring**

Lift control stations can be supplied with wiring, following customers' specifications both cables and connectors to be used. This further customization, in accordance with customers' needs, makes the control stations ready for the final installation.



### Rear fastening of the cover

The cover's fixing screws are positioned behind the station, so they are not visible. Moreover, the station can only be opened after removing it from the wall where it is fixed, making tampering more difficult.



### **Magnetic bases**

All control stations FL AD 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.



### **Electrical socket**

The inside of the electrical socket is protected against the risk of accidental contact by means of a removable cover.

Available in different types, it can be perfectly adapted to the standards in force in the country where the lift is installed.



### **Fixing hook**

The special design of the 60mm-reduced height station has also been conceived in order to get a practical fixing hook between the two top-mounted devices. Through this solid hook,

the control station can be hung on a wall easily.



### Shaped base

On the station's base, a knurling allows an easier grip for grabbing and handling the station.



### LASER marking

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



### Cam switch and selector

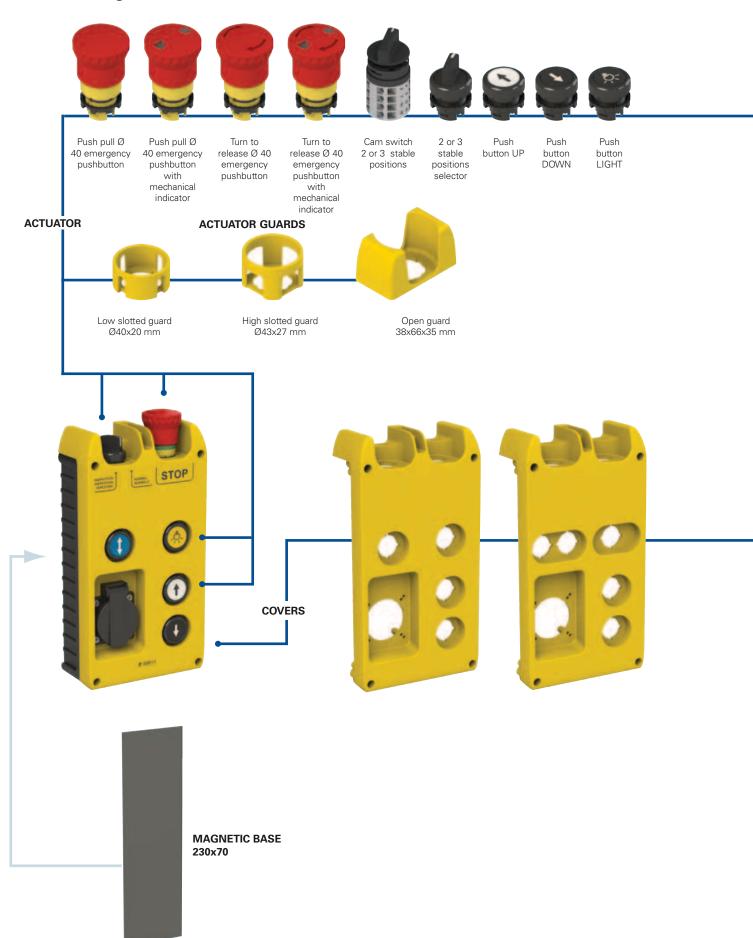


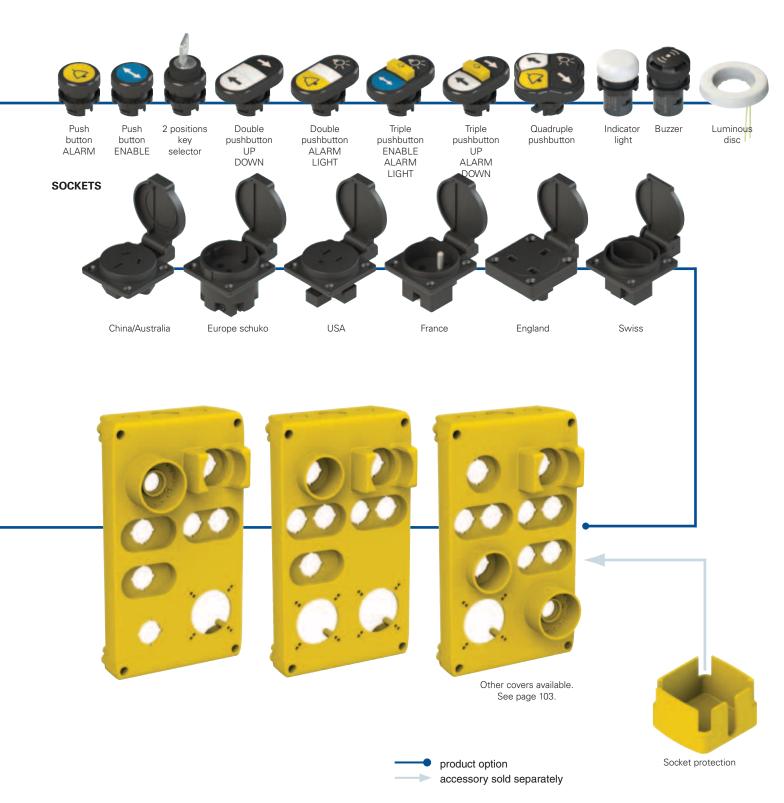
In control station EL AC series can be installed rotary cam switches as an alternative to the selectors. The cam switch is matched with a wide ergonomic actuation knob, available in versions with two and three stay-put positions; it can also be configured with contact diagrams according to customer requirements 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 IP67 protection degree.

# Selection diagram





### **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**

	<u> </u>	:	
Вох	shapes	Con	figuration progressive number
1	240 x 160 mm (standard height)	010	configuration 010
		011	configuration 011
3	260 x 160 mm (60mm height)	012	configuration 012



### Main data

- Reduced hight version (60mm)
- Inputs on cover for easy wiring
- Multiple configurations available
- Degree of protection up to IP69K
- Devices embedded or guarded
- Customizable electric socket

### Markings and quality marks (enclosures):

Approval EAC: RU C-IT.AД35.B.00454

Markings and quality marks (contact blocks):









Approval UL: E131787 Approval CCC: 2013010305631156 Approval EAC: RU C-IT.AД35.B.00454

### **Technical data**

### Housing

Made of shock-proof, self-extinguishing polymer with double insulation , UV resistant, Cover:

Standard version:

M20 - M25 - PG 13,5 - 1/2 NPT 2 lateral knock out conduit entries:

4 lateral knock out conduit entries: M16 - PG 11 Reduced height version:

M20 - M25 - PG 13,5 - 1/2 NPT 1 lateral knock out conduit entries:

2 lateral knock out conduit entries: M16 - PG 11

Base:

4 ingressi inferiori passanti a sfondamento: M20 - PG 13,5 - 1/2 NPT

Base colour: Black RAL 9005

Cover colour: Yellow RAL 1023 (standard)

Screws materials: Galvanized steel, stainless steel on request IP40 according to EN 60529 (standard) Protection degree:

IP54 according to EN 60529 (on request) according

to EN 60529

IP65 according to EN 60529 (on request) IP67 according to EN 60529 (on request)

IP69K according to ISO 20653 (on request) with cable gland having equal or higher protection degree

**General data** 

-25°C ... +80°C Ambient temperature: Cover screws driving torque: 1 ... 1.4 Nm

### In conformity 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 81-20, EN 81-50, UL 508, CSA 22.2 No.14

### ⚠ Installation for safety applications:

Use only switches marked with the symbol  $\odot$ . The safety circuit must always be connected with the NC contacts (normally closed contacts: 1-2) as stated in the standard EN 81-20 par. 5.11.2.2.1.

### In conformity with requirements requested by:

Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and EMC Directive 2014/30/EC.

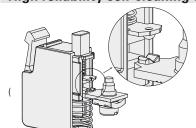
Positive contact opening in conformity with standards:

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 111.

Electrical data	Utilization categories									
Thermal current (Ith): Rated insulation voltage (Ui): Protection against short circuits: Rated impulse withstand voltage (Ui):	10 A 500 Vac/dc fuse 10 A 500 V type gG/gL 8 kV	Alternate current: AC15 (50÷60 Hz) Ue (V) 24 48 120 250 40 le (A) 6 6 6 6 3 Direct current: DC13	00							
Pollution degree:	2	Ue (V) 24 48 125 250								
Pollution degree.	3	le (A) 2.5 1.3 0.6 0.3								

### High reliability self-cleaning contacts



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 the contacts reliability in case of dust registered patent).

### Positive opening

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

### Characteristics approved by UL

Utilization categories:

A600 pilot duty (720 VA, 120 ... 600 Vac) Q300 pilot duty (69 A, 125 ... 250 Vdc)

### Characteristics approved by IMQ

Rated insulation voltage (Ui): 500 V Conventional free air thermal current (Ith): 10 A Thermal current in enclosure (Ithe): 10 A Rated impulse withstand voltage (Uimp):8 kV Protection degree of the housing: IP20

Terminals: screw terminals Utilization category: AC15

Operating current (le): 3 A Forms of the contact element: X, Y Positive opening of contacts on contact blocks 01G, 01K

In conformity with standards: EN 60947-1, EN 60947-5-1 + A1:2009, fundamental requirements of the Low Voltage Directive 2006/95/EC.

Use 60° or 75 °C copper (Cu) conductor, rigid or flexible, wire size AWG 12-20

Operating voltage (Ue): 400 Vac (50/60 Hz)

# EL AD23004

	DEVICES	CONTACTS	WIRING LAYOUT
STOP	Emergency pushbutton Ø40 turn to release, with green indication, with guard	1NC	0F-^-
NORMAL PROPERTY PARTY NORMAL PA	Short handle selector 2 stay-put positions, black colour, with guard	2NO+2NC	NORMAL \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
			INSPECTION / / /
<b>(1)</b>	Pushbutton ENABLE flush, spring-return, blue colour	1NO	E
<b>①</b>	Pushbutton UP flush, spring-return, white colour	2NO	E
•	Pushbutton DOWN flush, spring-return, black colour	2NO	E
	Pushbutton LIGHT flush spring-return, yellow colour	1NO	E\
	Schuko socket 16A 250 Vac with internal protection		

# **EL AD23007**



DEVICES	CONTACTS	WIRING LAYOUT		
Emergency pushbutton Ø40 turn to release, with green indication, with guard	2NC	0.F,-7		
Short handle selector 2 stay-put positions, black colour, with guard	2NO+2NC	NORMAL \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Pushbutton ENABLE flush, spring-return, blue colour	1NO	E		
Monolithic indicator light $\emptyset$ 30 red colour	Red led 1230 Vac/dc	———— LED		
Pushbutton ALARM flush, spring-return, yellow colour	1NO	E\		
Pushbutton LIGHT flush, spring-return, black colour	1NO	E\		
Pushbutton UP flush, spring-return, white colour	2NO+1NC	E\ \ \ \ \		
Pushbutton DOWN flush, spring-return, black colour	2NO+1NC	E\ \ \ \ \		
Schuko socket 16A 250 Vac with internal protection				
	Emergency pushbutton Ø40 turn to release, with green indication, with guard  Short handle selector 2 stay-put positions, black colour, with guard  Pushbutton ENABLE flush, spring-return, blue colour  Monolithic indicator light Ø 30 red colour  Pushbutton ALARM flush, spring-return, yellow colour  Pushbutton LIGHT flush, spring-return, black colour  Pushbutton UP flush, spring-return, white colour  Pushbutton DOWN flush, spring-return, black colour  Schuko socket 16A 250 Vac	Emergency pushbutton Ø40 turn to release, with green indication, with guard  2NC  Short handle selector 2 stay-put positions, black colour, with guard  Pushbutton ENABLE flush, spring-return, blue colour  Monolithic indicator light Ø 30 red colour  Pushbutton ALARM flush, spring-return, yellow colour  Pushbutton LIGHT flush, spring-return, black colour  Pushbutton UP flush, spring-return, white colour  Pushbutton DOWN flush, spring-return, black colour  Pushbutton DOWN flush, spring-return, black colour  Pushbutton DOWN flush, spring-return, black colour  Schuko socket 16A 250 Vac		

# **EL AD23006**



	DEVICES	CONTACTS	WIRING LAYOUT
STOP	Emergency pushbutton Ø40 turn to release, with green indication, with guard	2NC	ŒF-√
NORMAL STREET	Short handle selector 2 stay-put positions, black colour, with guard	2NO+2NC	NORMAL \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
((+1)	Buzzer, continuous alarm open lens, black colour	24Vac/dc	FL
	Monolithic indicator light Ø 30 white colour	White led 1230 Vac/dc	——— LED
<b>①</b>	Pushbutton UP flush, spring-return, white colour	2NO+1NC	E
<b>PK</b>	Pushbutton CLOSE flush, spring-return, black colour	1NO	E-
<b>①</b>	Pushbutton OPEN flush, spring-return, white colour	1NO	E-7
•	Pushbutton DOWN flush, spring-return, black colour	2NO+1NC	E-\ \ \ \
	Pushbutton ALARM flush, spring-return, yellow colour	1NO	E\
	Pushbutton LIGHT flush, spring-return, black colour	1NO	E\
<b>(1)</b>	Pushbutton ENABLE flush, spring-return, blue colour	1NO	E\

### **EL AD21002** DEVICES CONTACTS WIRING LAYOUT Emergency pushbutton Ø 40 push-pull, with mechanical indicator, with guard Œ. 1NC STOP NORMAL **Cam switch** 2 stay-put positions, black colour, with guard 2NO+2NC INSPECTION Pushbutton ENABLE 1NO flush, spring-return, blue colour Pushbutton UP flush, spring-return, white colour 2NO Pushbutton DOWN flush, spring-return, black colour 2NO Pushbutton LIGHT flush, spring-return, yellow colour 1NO Schuko socket 16A 250 Vac with internal protection **EL AD21006** DEVICES CONTACTS WIRING LAYOUT **STOP** Emergency pushbutton $\emptyset$ 40 push-pull, with guard 2NC NORMAL Short handle selector 2 stay-put positions, black colour, with guard 2NO+2NC INSPECTION Pushbutton ENABLE flush, spring-return, blue colour 1NO Buzzer, continuous alarm open lens, black colour 24Vac/dc Pushbutton UP flush, spring-return, white colour 2NO Pushbutton DOWN flush, spring-return, black colour **2NO** Pushbutton ALARM flush, spring-return, yellow colour 1NO Pushbutton LIGHT flush, spring-return, black colour **1NO** Schuko socket 16A 250 Vac with internal protection USA socket 15A 125 Vac with internal protection **EL AD21008** DEVICES CONTACTS WIRING LAYOUT STOP Emergency pushbutton $\emptyset$ 40 push-pull, with guard 2NC STOP NORMAL Cam switch Ø 42 2 stay-put positions, black colour, with guard 2NO+4NC INSPECTION / /// Pushbutton ALARM flush, spring-return, yellow colour 1NO **Pushbutton LIGHT** 1NO flush, spring-return, black colour Pushbutton UP flush, spring-return, white colour 2NO+1NC Pushbutton DOWN flush, spring-return, black colour 2NO+1NC Pushbutton ENABLE flush, spring-return, blue colour **1NO** Buzzer, continuous alarm open lens, black colour 24Vac/dc WHITE luminous disc white fixed light 5 LUX 24Vac/dc

Schuko socket 16A 250 Vac with internal protection

# **EL AD21007**



	DEVICES	CONTACTS	WIRING LAYOUT
STOP	Emergency pushbutton Ø40 push-pull, with mechanical indicator, with guard	2NC	03- <sub>2</sub> -77
SSENSE CONTROL	Short handle selector 2 stay-put positions, black colour, with guard	2NO+2NC	NORMAL \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
1	Pushbutton ENABLE flush, spring-return, blue colour	1NO	E\
<b>(4)</b>	Pushbutton ALARM flush, spring-return, yellow colour	1NO	E\
	Pushbutton LIGHT flush, spring-return, black colour	1NO	E\
<b>①</b>	Pushbutton UP flush, spring-return, white colour	2NO+1NC	E\ \ \ \ \
•	Pushbutton DOWN flush, spring-return, black colour	2NO+1NC	E\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
000	Schuko socket 16A 250 Vac with internal protection		

# **EL AD21004**



S T O P	Emergency pushbutton Ø 40 turn to release, with mechanical indicator, with guard	1NC	0f-^-
SONE CONTROL OF THE C	Short handle selector 2 stay-put positions, black colour, with guard	2NO+2NC	NORMAL $\frac{1}{1}$
<b>①</b>	Pushbutton UP flush, spring-return, white colour	2NO	E\ \
•	Pushbutton DOWN flush, spring-return, black colour	2NO	E\ \
	Pushbutton ENABLE flush, spring-return, blue colour	1NO	E-7
A	Pushbutton LIGHT flush, spring-return, black colour	1NO	E-7
4	Pushbutton ALARM flush, spring-return, yellow colour	1NO	E-7
3 B	Schuko socket 16A 250 Vac with internal protection		

CONTACTS

WIRING LAYOUT

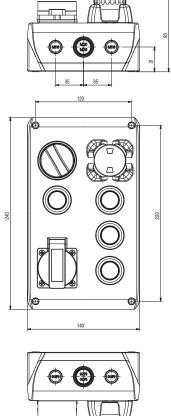
# **EL AD21005**

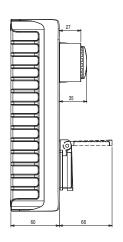


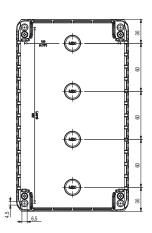
	DEVICES	CONTACTS	WIRING LAYOUT
S T O P	Emergency pushbutton Ø 40 push-pull, with mechanical indicator, with guard	2NC	Φ-3-√
* NORMALI PROFESSION PERSONALI PERSO	Cam switch Ø 42 2 stay-put positions, black colour, with guard	2NO+2NC	NORMAL \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
<b>(4)</b>	Pushbutton ALARM flush, spring-return, yellow colour	1NO	E\
<b>A</b>	Pushbutton LIGHT flush, spring-return, black colour	1NO	E
H 0 ◆	Short handle selector 3 positions, black colour, with guard, spring-return left, stay-put, spring-return right	2NO	<ul><li>▶ 4</li><li>⟩ ; ;</li><li>0</li><li>; ;</li><li>4 ▶</li><li>; ;</li></ul>
((*))	Buzzer, continuous alarm open lens, black colour	24Vac/dc	JPL
	Monolithic indicator light Ø 30 white colour	Led bianco 1230 Vac/dc	———— LED
	Schuko socket 16A 250 Vac with internal protection		
<b>①</b>	Pushbutton UP flush, spring-return, white colour	2NO+1NC	E\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
•	Pushbutton DOWN flush, spring-return, black colour	2NO+1NC	E\ \ \ \ \
	Pushbutton ENABLE flush, spring-return, blue colour	1NO	E\

## Lift control stations EL AD series dimesions

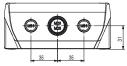
All measures in the drawings are in mm

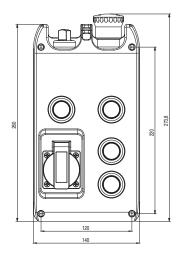




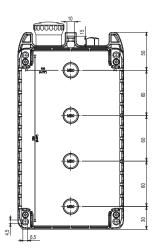






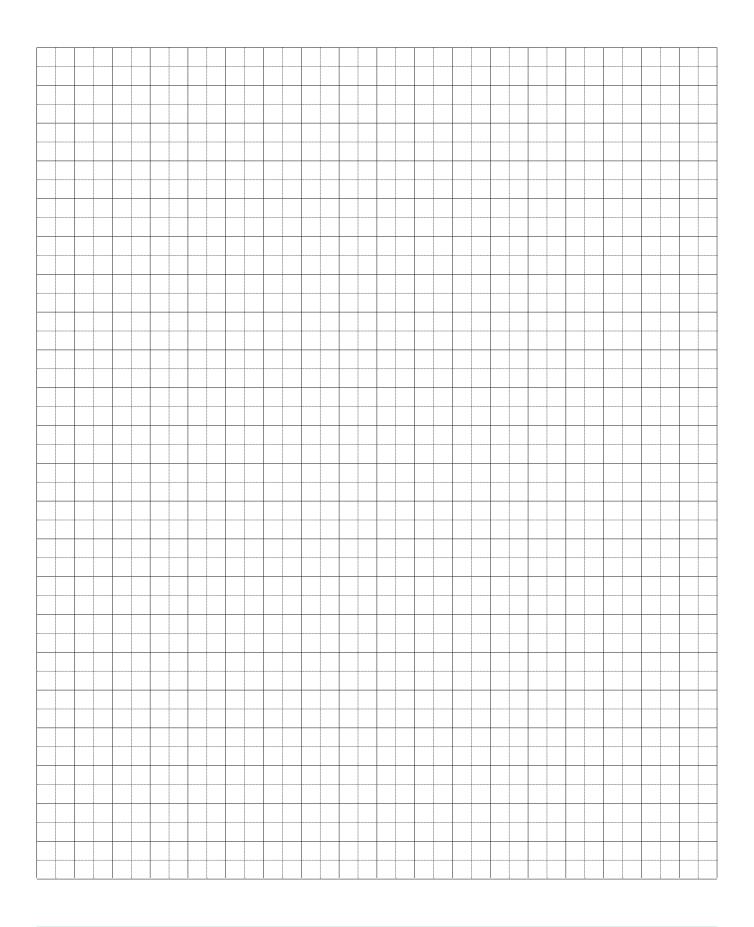








# Notes



### Selection table of covers EL AD series (versions for selector)

WARNING: Internal code is not an article. Loose covers are not available for sale



### Selection table of covers EL AD series (versions for cam switch)

WARNING: Internal code is not an article. Loose covers are not available for sale



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