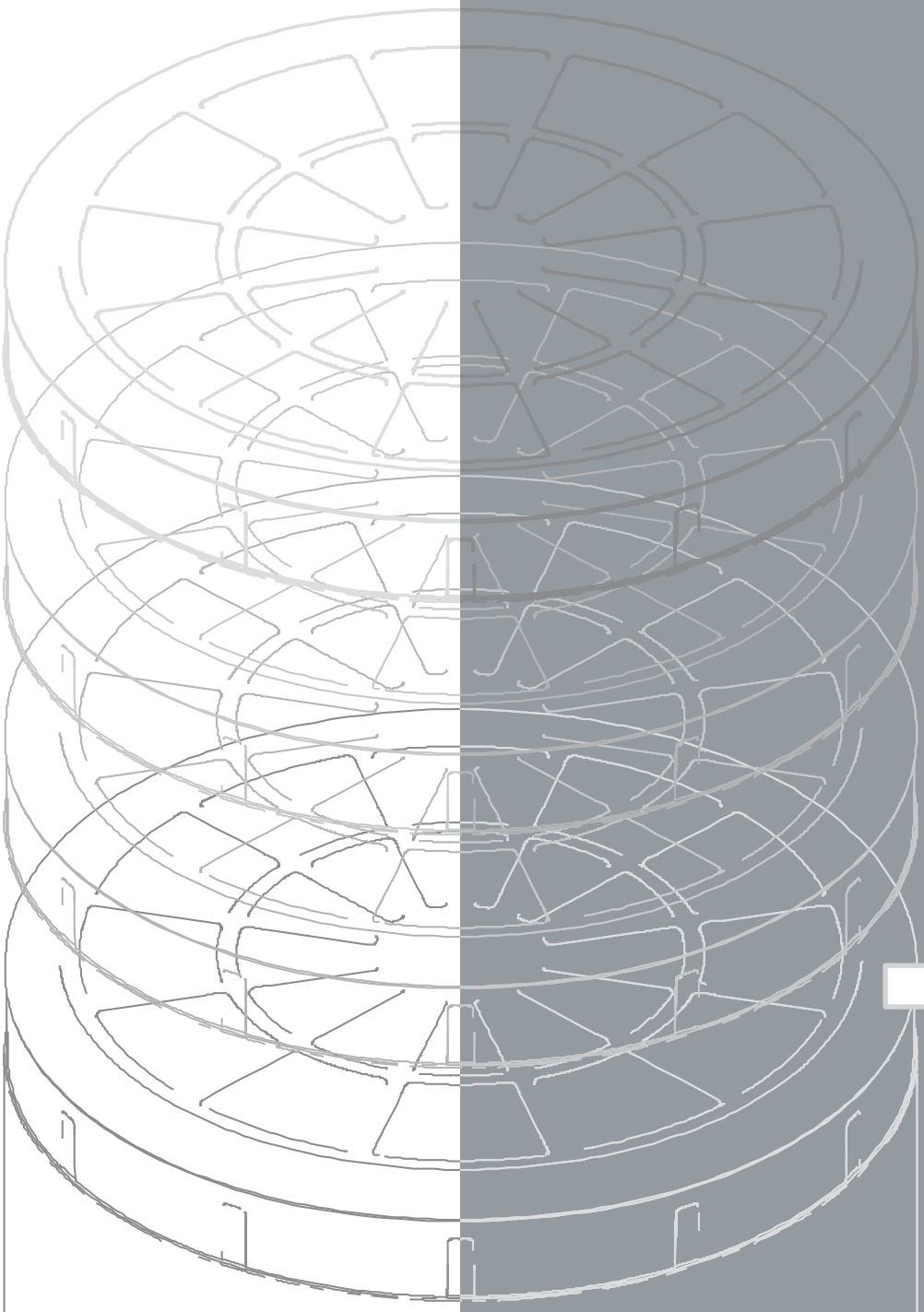
Luxor
Technical Centre

Installation, Use & Maintenance



English **EN**

URBACO
AUTOMATIC BOLLARDS

Contents

"IMPORTANT INSTALLATION, SAFETY INSTRUCTIONS"

"CAUTION: IMPROPER INSTALLATION MAY CAUSE SERIOUS DAMAGE, FOLLOW ALL INSTALLATION INSTRUCTIONS CAREFULLY"

"THIS MANUAL IS ONLY FOR PROFESSIONAL OR QUALIFIED INSTALLERS"

1 Legend of symbols

This symbol tells you to read the section with particular care.

This symbol tells you that the sections concern safety issues.

This symbol tells you what to say to the end-users.

2 Intended use and limits to use

2.1 Intended use

This product can be used only for purposes indicated in this manual

The use of this product for purposes other than those described above and installation executed in a manner other than as instructed in this technical manual are prohibited.

Urbaco has no responsibility for any improper use of the system

2.2 Limits to use

Do not allow children to play or loiter within the movement area of the bollard.

Keep transmitters and any other command device out the reach of children, to prevent operator from being activated by accident.

3 Reference Standards

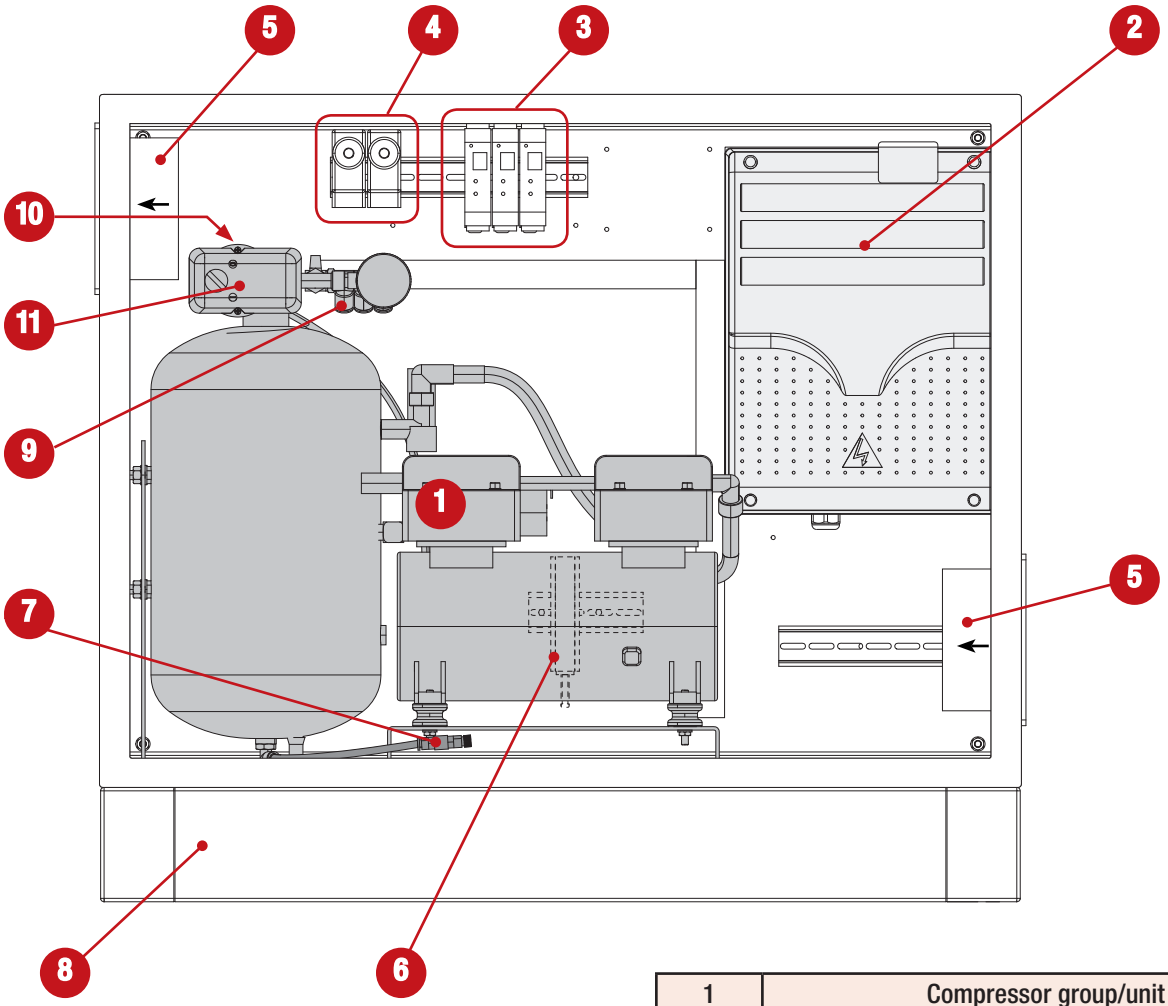
This product complies with the following standards: *see chapter 11 - Conformity declaration - pag. 17.*

4 Descriptions

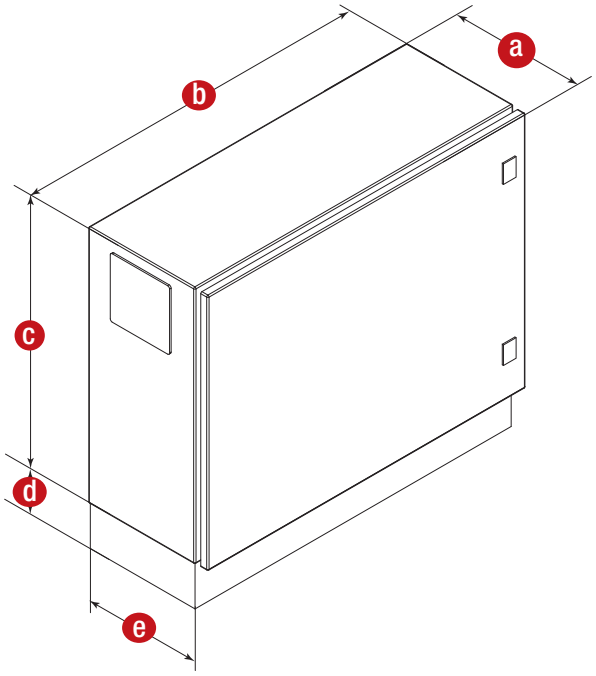
4.1 Technical centre - technical features

(Electric) power supply	230 V - 50/60Hz
Weight	1500 W
Draw when idle	100 mA
Protection rating	IP 44-54
Acoustic pression	69-70 Db
Weight	60 kg
Cabinet material	Laquered 15/10 sheet metal
Operating temperature	-10° +55°
Duty cycle	50%

4.2 (Technical centre) Description: Components and dimensions



1	Compressor group/unit
2	Control panel
3	Magnetic loops (optional)
4	Hot/Cold thermostats (optional)
5	Cooling fans (optional)
6	Heating unit (optional)
7	Automatic purge (optional with timer)
8	Floor mounting basement (optional)
9	Air joints for bollards (Ø 10)
10	Air circuit discharge
11	Pressure regulator (manometer)



a	300
b	806
c	606
d	100
e	270

4.3 (Technical centre) Pneumatic performances

The following performances have been recorded with a 50 m long conduit of 10 mm diameter

Max no. of Luxor bollards operated simultaneously by a single technical centre

Max no. of bollards	Ø 200	Ø 270	Ø 320
h 600	6	5	4
h 800	4	4	3

Max no. of manoeuvres per hour

No. of bollards	Ø 200		Ø 270		Ø 320	
	h 600	h 800	h 600	h 800	h 600	h 800
1	100	70	100	70	100	70
2	45	35	45	35	45	35
3	30	24	30	24	30	24
4	24	18	24	18	24	
5	18		18			
6	16					

Reliable values if T=25°C and compressor duty cycle of up to 40%
The no. of manoeuvres should be evenly distributed over time
The conduit length has influence on the max no. of manoeuvres per hour
For intensive use manoeuvres the use the aeration kit is required

Minimal interval between two subsequent manoeuvres (s)

No. of bollards	Ø 200		Ø 270		Ø 320	
	h 600	h 800	h 600	h 800	h 600	h 800
1	35	50	35	50	35	50
2	80	104	80	104	80	104
3	120	150	120	150	120	150
4	150	190	150	190	150	
5	190		190			
6	225					

5 Card

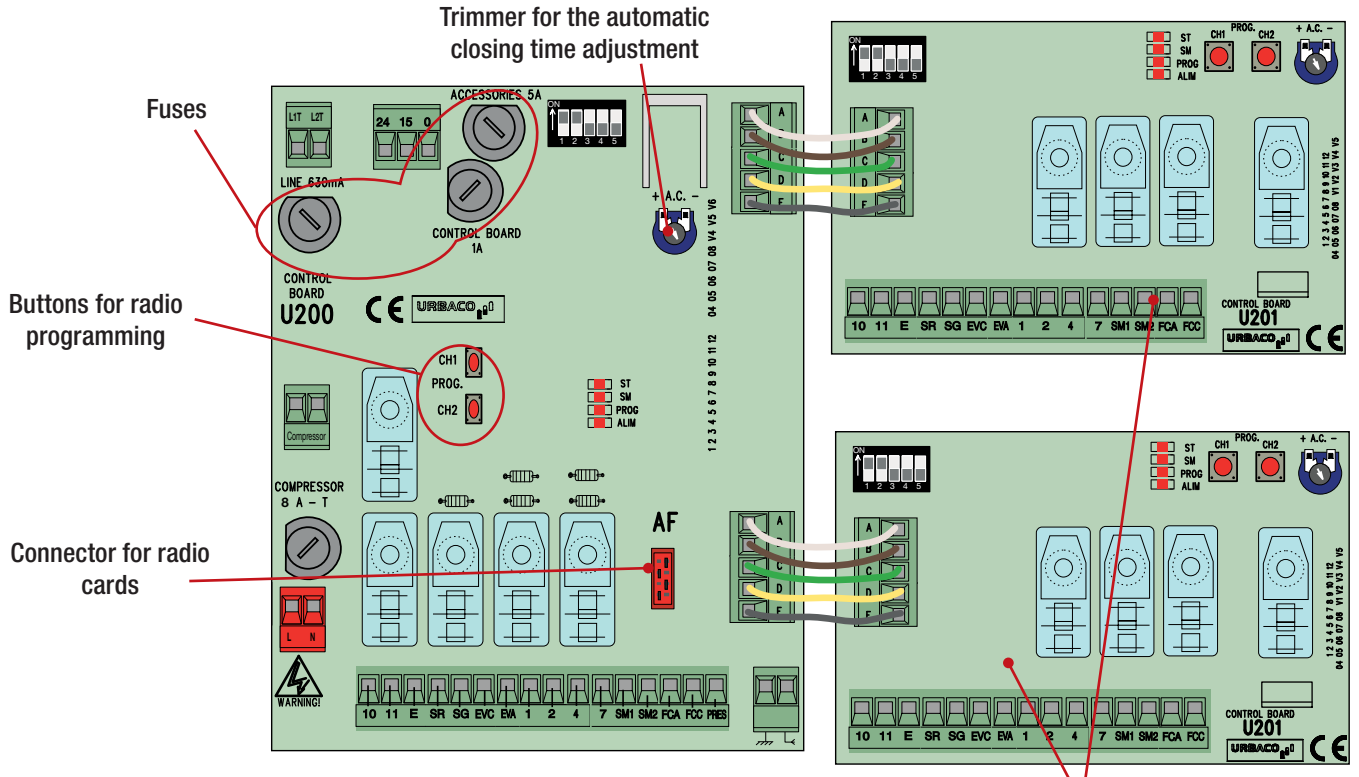


Table of fuses	
Fuse for accessories	5A
Fuse for main line	630 mA
Fuse for control board	1A
Fuse for compressor	8A -T

	ON	OFF
DIP n° 1	Automatic closing – enabled	Automatic closing - disabled
DIP n° 2	Only-opening enabled	Only-opening disabled
DIP n° 3	3” Pre-flashing enabled	Pre-flashing disabled
DIP n° 4	Programming (see table below)	
DIP n° 5		

Switch		Button		Led	Option
N°4	N°5	CH1	CH2	After 5”	
ON		ON		ON	It enables the bistable solenoid valve
ON		ON		OFF	It enables the monostable solenoid valve
ON			ON	ON	It enables the acoustic signaller and the flashing of the red traffic light
ON			ON	OFF	It disables the acoustic signaller
	ON	ON		ON	Green traffic light enabled
	ON	ON		OFF	Yellow traffic light enabled
	ON		ON	ON	“Presence” function is enabled (it is possible to retract the bollard only when the loop detects the mass)
	ON		ON	OFF	“Presence” function is disabled

Put the n°4 and n° 5 dip switch into ON position, then press the CH1 or CH2 buttons. The led starts flashing. After 5”, if the led is still flashing, it means that the option is enabled; if it is not, then the option is disabled.

5.1 Summary table of 24 V accessories' power demand, expressed in W

U200 control panel to control 1 access way					
Type of accessory	Single accessory power (W)	Max no. of connectable accessories and bollards		Total power (W), if with monostable solenoid valve	Total power (W), if with bistable solenoid valve
Monostable solenoid valve	8	6		48	
Bistable solenoid valve *	3		8		24
Duty cycle	3	6		18	
			8		24
Flashing light	25	1		25	25
Traffic light	11	2		22	22
Magnetic loop	2.5	3		7.5	7.5
Total (W)				120.5	102.5

U200 control panel + U201 board to control 2 separated access ways							
Type of accessory	Single accessory power (W)	Max no. of connectable accessories and bollards		Total power (W), if with monostable solenoid valve		Total power (W), if with bistable solenoid valve	
Monostable solenoid valve	8	6		48			
Bistable solenoid valve *	3		8			24	
Duty cycle	3	6		18			
			8			24	
Flashing light**	25	2		50		50	
Traffic light **	11	4			44		44
Magnetic loop	2.5	6		15		15	
Total (W)				131	125	113	117

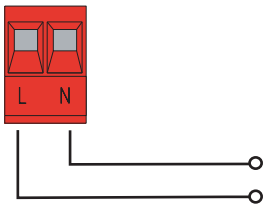
U200 control panel + two U201 boards to control 3 separated access ways							
Type of accessory	Single accessory power (W)	Max no. of connectable accessories and bollards		Total power (W), if with monostable solenoid valve		Total power (W), if with bistable solenoid valve	
Monostable solenoid valve	8	6		48			
Bistable solenoid valve *	3		8			24	
Duty cycle	3	6		18			
			8			24	
Flashing light ***	25	3		75		75	
Traffic light ***	11	6			66		66
Magnetic loop	2.5	9		22.5	22.5	22.5	22.5
Total (W)				163.5	154.5	145.5	136.5

* The bistable solenoid valves are used in such systems, where the bollard should remain in the higher position even when voltage is cut off

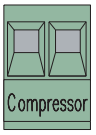
** If you use the flashing light you cannot use the traffic light

*** According to this configuration, the flashing lights or the traffic lights should be externally supplied.

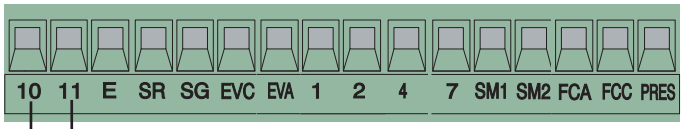
5.2 Electrical connections



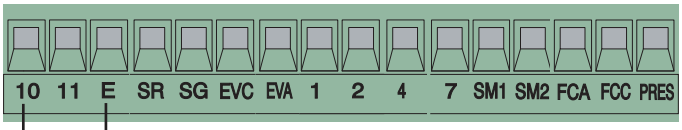
Line voltage 230V - 50/60Hz



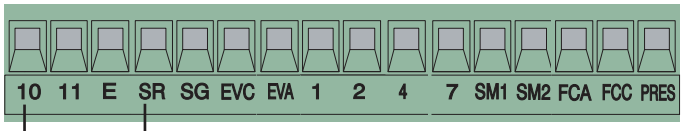
Compressor



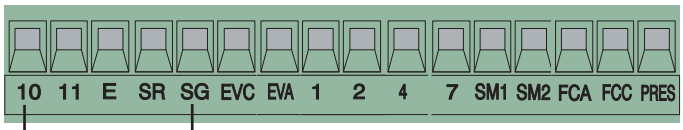
Magnetic sensor/photocells max power supply (see tab. in chap. 5.1)



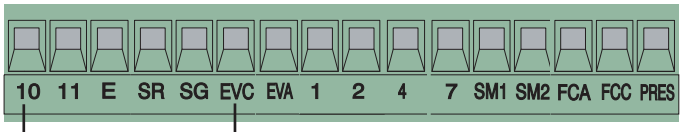
Flashing light output voltage 24V 25W



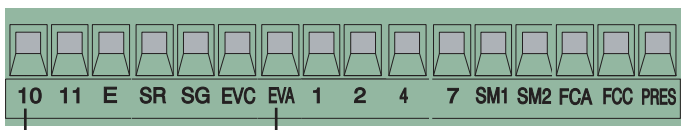
Red traffic light and illuminated ring (see tab. in chap. 5.1)



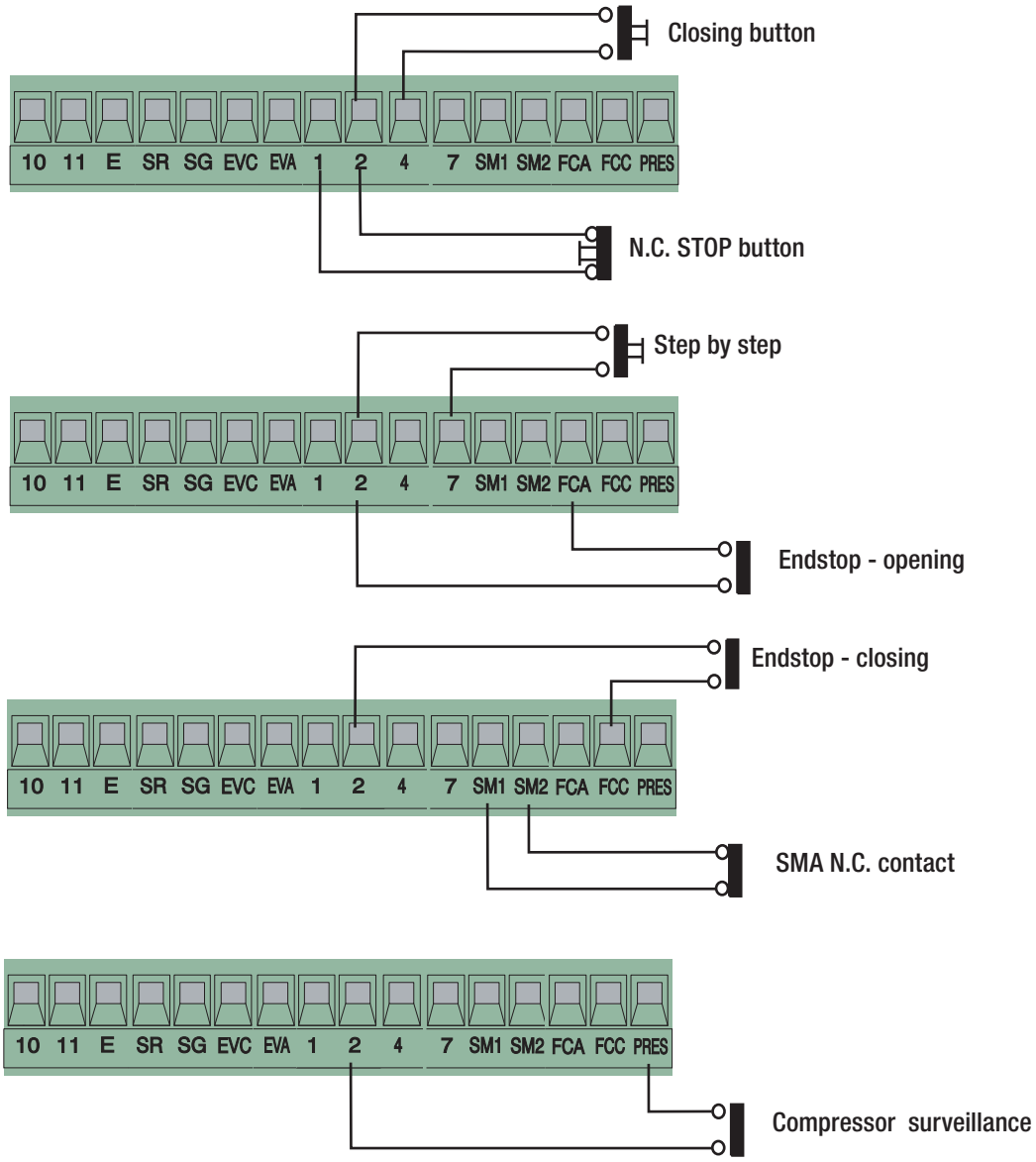
Yellow traffic light (see tab. in chap. 5.1)



Solenoid valve for the upward movement max voltage 24V AC (see tab. in chap. 5.1)

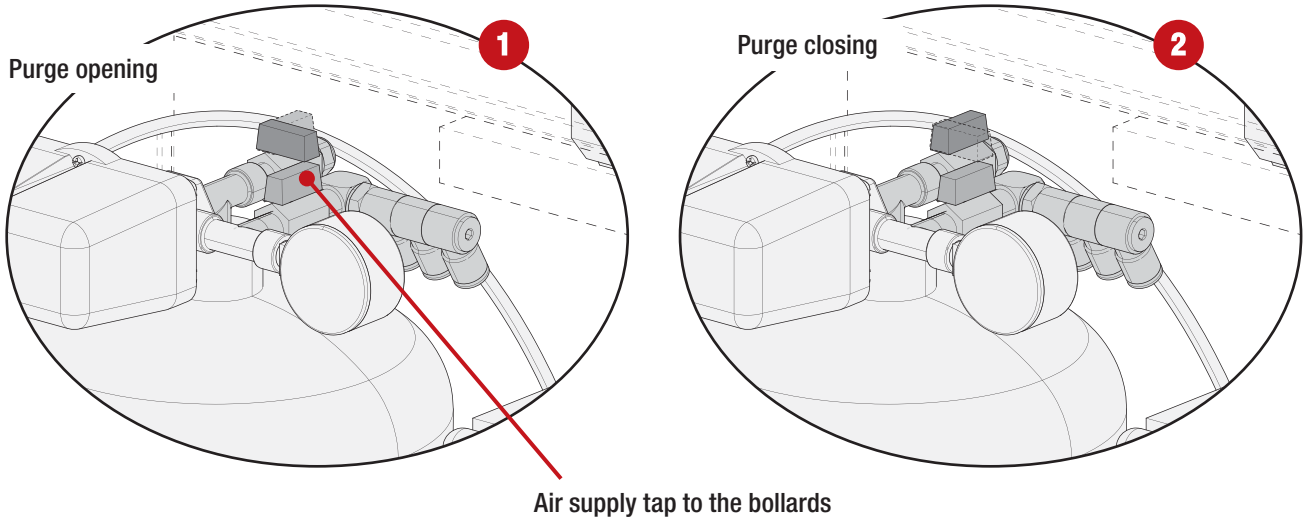


Solenoid valve for the downward movement 24V AC (optional) or downward command for the bistable valve



5.3 Release/discharge the system from/inside the centre

To discharge air from the system and consequently move down the bollards, you can open the tap nearby the pressure switch (we recommend you to do it when the compressor is shut down, in order to avoid that it starts automatically to compensate the pressure fall).To put the system into operation again, close the air discharge as shown in fig. 2 (and turn on the compressor, if you had shut it down).



6 Technical centre installation

6.1 Preliminary checks

-Check that no conduits or other obstacles shall prevent from excavating and installating operations.
-Check the soil consistence and its loading capacity.
-On the power supply line provide an omnipolar disconnecting device with an opening distance between contacts equal to or larger than 3 mm. We recommend you to use a 10 A omnipolar disconnecting device.
-Remove any obstacle that can prevent the bollard form a normal operating mode.
-The magnetic loops positioning has influence on the access correct functioning.
In fact, we recommend you to chose first the loops position, then the bollards one and then that for the technical centre.
-Position the technical centre in a way to protect it from accidental hurting.
-Provide for a conduit to pass connections through it.
-When necessary, you need to install optical and sound signalization to minimize dangerous situations.
-Air flexibles max length must not exceed 100 m
-Max distance of the cable connecting the feeder and the magnetic loop shall not exceed 50 m.

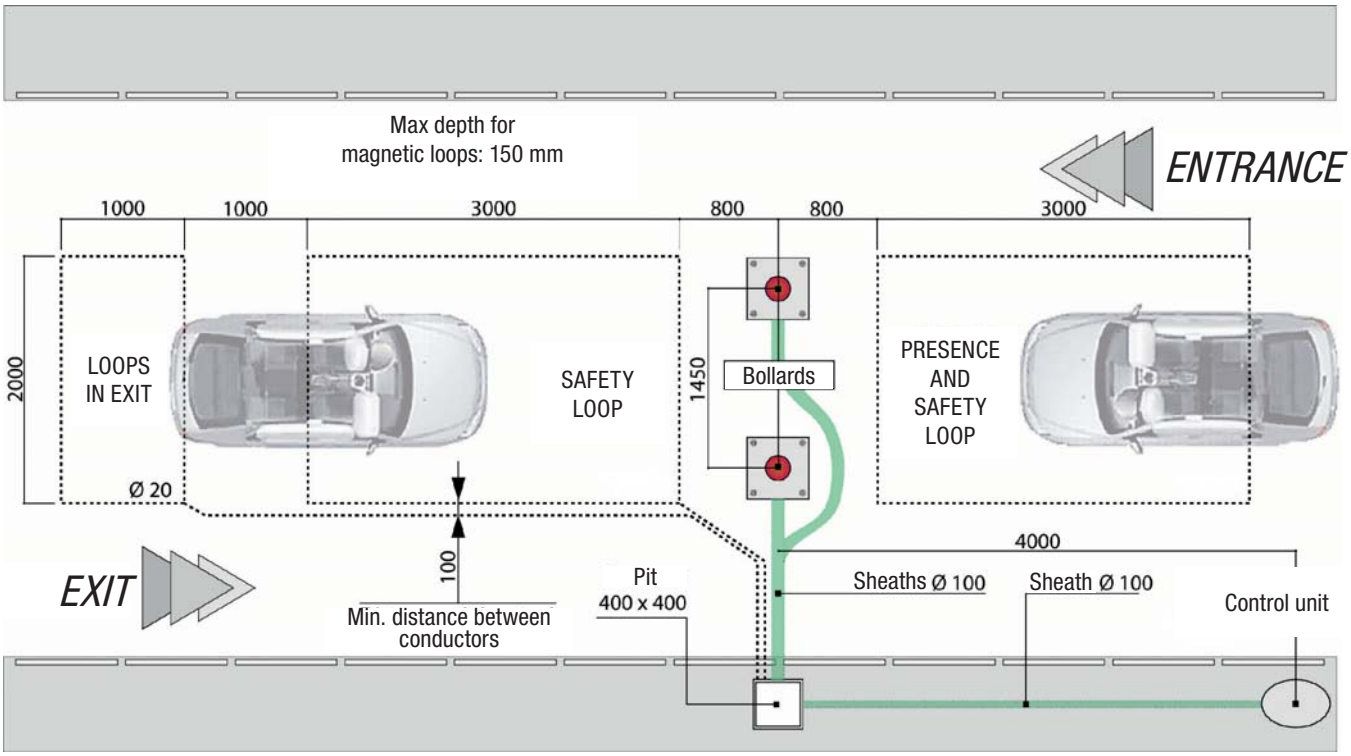
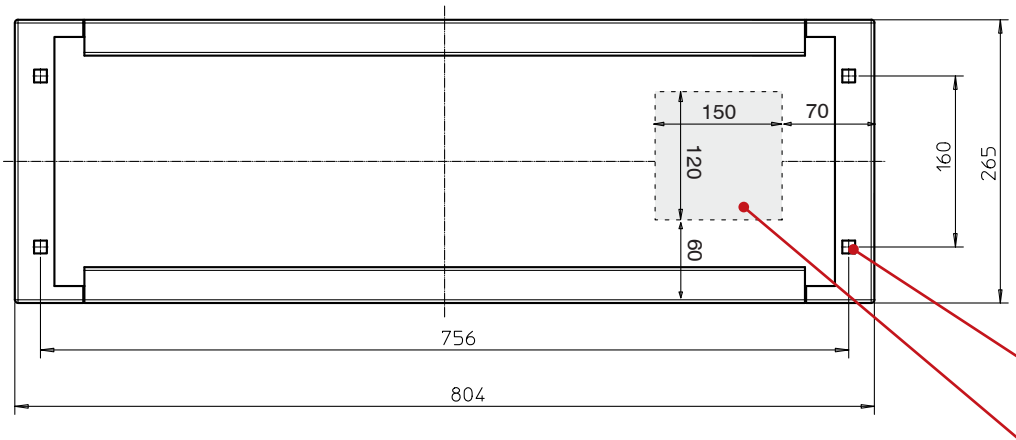


Table of connections	
Air piping	Rilsan PA11 - DIN 74324 Ø 10x8
Electrical connections between technical centre and bollards	FG7(0) R0.6/1kW 10x1.5
Links between SMA and loop	Min. 20 windings per meter Ø 1x1.5
Connection to the traffic light	FG7(0) R0.6/1kW 3x1.5

6.2 Technical centre fastening with reinforcement (optional – COREH02-LUX code)

Dimensions and holes spans



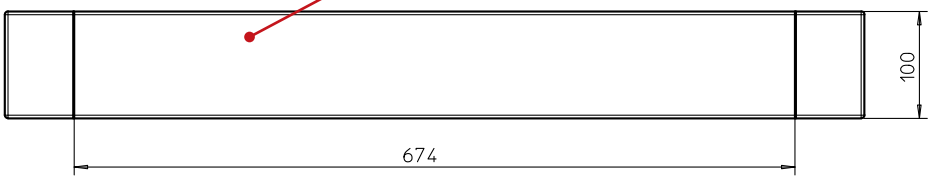
Provided with:

- M8 cage nuts – 4 pieces
- washers – 4 pieces D8x24
- securing screws – 4 pieces M8x16 UNI 5739
- securing screws for inspection flange

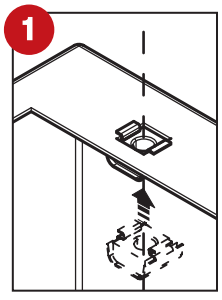
4 square holes for the M8 locked nuts

Conduits connecting area

Flange for inspection on both sides



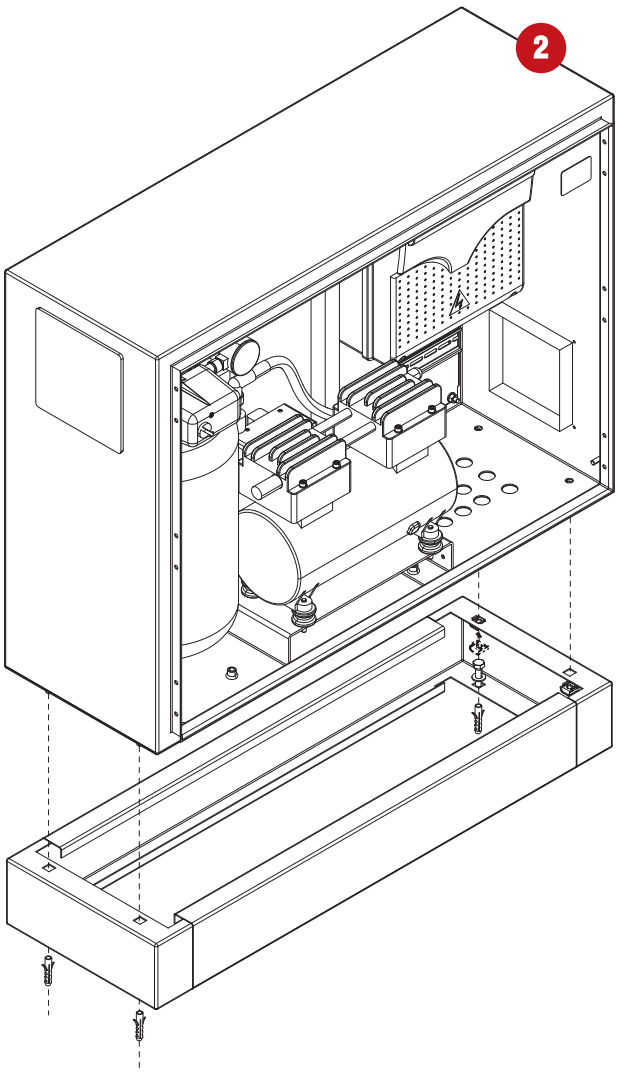
⚠ Check that the fastening point is resistant and protected against hurting. The fastening should be carried out with suitable screws, plugs, etc. (not included), depending on the surface typology.



1- hook the M8 cage nuts as shown in picture n°1

2- then anchor the reinforcement to the floor

3- and finally, as shown in picture n°2, fasten the technical centre to the reinforcement using the supplied screws



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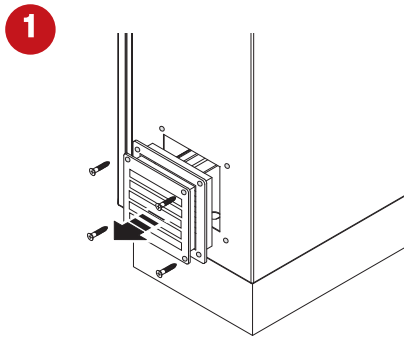
7 Connection of additional devices

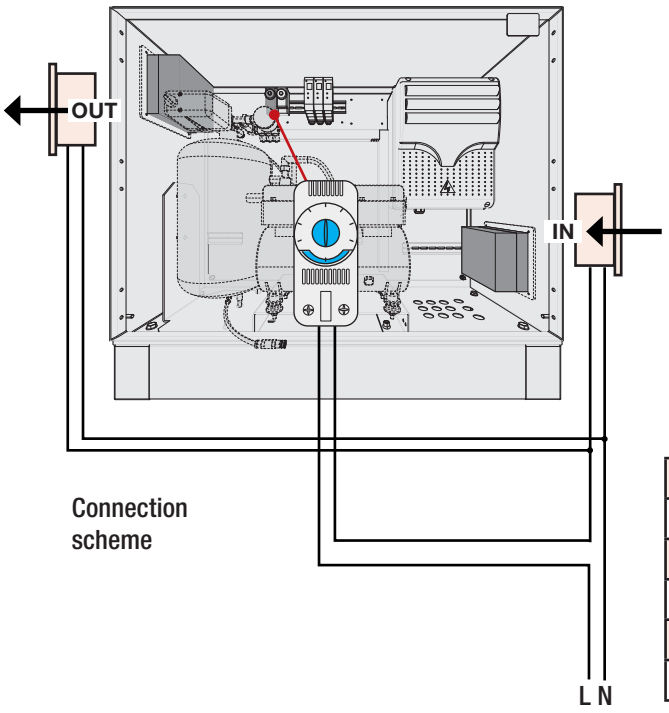
7.1 Cooling fans (optional – COVF-LUX code)

1) Take off the grids that shall support the fans.

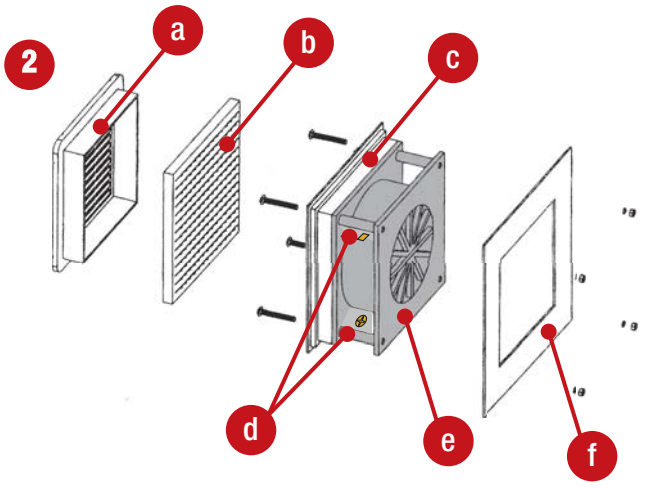
2) On the grids mount the motors (please check to put one for intake and another in discharge), by using the supplied cables.

NOTE: face the electrical connections (d – see pict. n°2) toward the inside of the technical centre. The connecting cables should not come into contact with heated zones (i.e. heating unit, compressor head).





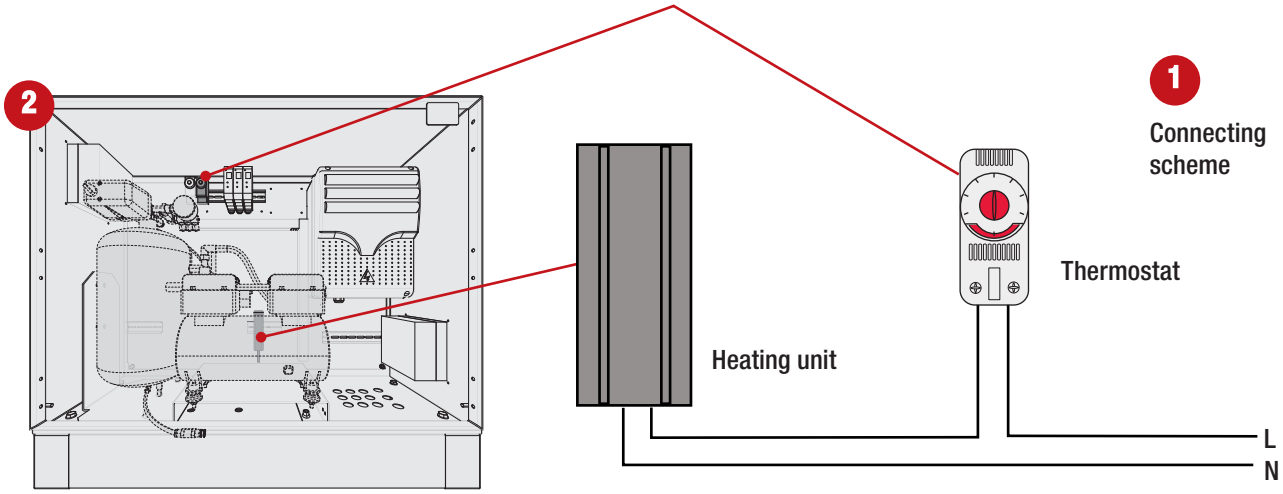
Connection scheme



a	Upper cover
b	Dustproof filter
c	Carter for motor fastening
d	Electrical connections, including earthing
e	Fan
f	Sealing

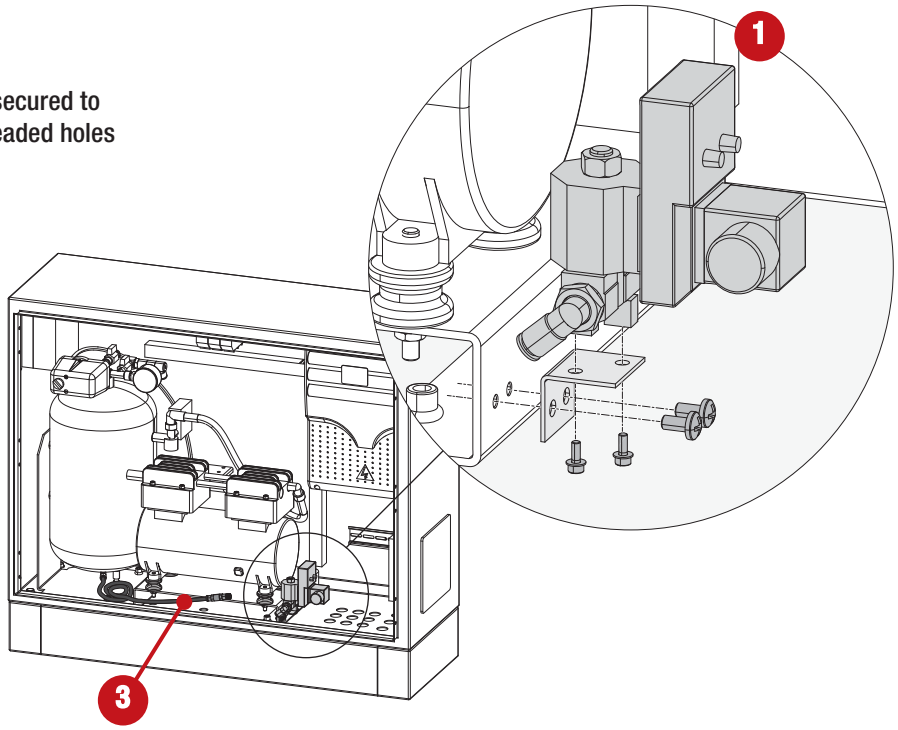
7.2 Heating unit (optional – COKCHGT-LUX code)

Following the scheme in pict. n°1, connect this heating unit to the thermostat by using the supplied cables. Then put both of them into the technical centre (see pict. 2)

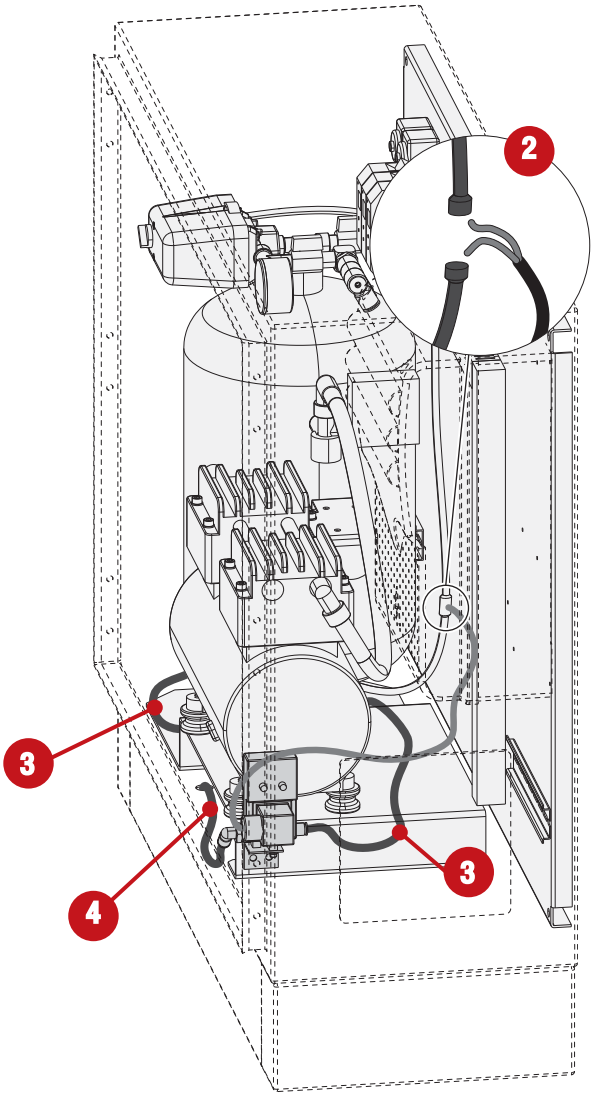


7.3 Assembling the timed condensate drain (optional code COPURA-LUX)

1 The timed condensate drain must be secured to the compressor support base using the threaded holes provided.



2 ⚠ Disconnect mains power.
Disconnect the cable between the pressure switch and the motor and insert the timed drain cable.



3 Pass the standard drain pipe behind the compressor and cut to size to connect it at the condensate drain inlet.

4 Use the remaining part of the pipe (remove the valve) as the final drain through one of the holes present in the base of the cabinet.

8 Safety instructions

⚠ Important safety instructions

This product must only be employed for its originally intended use. Any other use is wrong and potentially dangerous.
The manufacturer cannot be held liable for any damages resulting from wrongful, erroneous or negligent uses.
Avoid working close to the hinges or other moving mechanical parts. Stay out of the opening/closing arc when operator is in movement.
Do not exercise force against the motion of the operator as this could result in potentially dangerous situations.
Do not allow children to play or loiter within the opening/closing arc of the operator.
Keep transmitters and any other command device out the reach of children, to prevent operator from being activated by accident.
In the event of anomalous behaviour, stop using the operator immediately.
Provide for adequate safety systems such as magnetic loops, traffic lights or any device that shall prevent dangerous situations

9 Maintenance

9.1 Periodic maintenance

☞ -Before performing any maintenance procedures, cut off the main power, to prevent possible accidents due to gate movement.

Check point	Check and maintenance	1° month	2° month	3° month	4° month	5° month	6° month	7° month	8° month	9° month	10° month	11° month	12° month
1	Compressor functioning						x						x
2	Cleaning of the centre						x						x
3	Endstops						x						x
4	Solenoid valve						x						x
5	No Air leak						x						x
6	Cooling fans						x						x
7	Heating unit						x						x
8	Automatic drainage functioning						x						x
9	Metal detecting loops						x						x

9.2 Problems resolution

MALFUNCTIONS	POSSIBLE CAUSES	REMEDIES
The solenoid valve is supplied (check it by using a voltmeter) but the bollards doesn't move upwards.	The air doesn't come to the solenoid valve.	Check the compressor and the air circuit.
	The flux regulator is closed	Open the flux regulator.
	Solenoid valve winding has burnt out	Change the winding.
The bollard move upwards irregularly.	Presence of foreign bodies on the guide.	Check the guides status. Pulire.
	Air pressure is not sufficient.	Clean and verify the manometer regular pressure (6-8 bars)
The compressor works too frequently.	Air leak.	Check the flexible air tube and the couplings (if needed use foam spray to detect leaks).
	Air leak at the solenoid valve release.	Purge the circuit and clean (or replace) the electrovalve (foreign objects in the air circuit).
	The pressure is too high.	Check that pressure switch (6 – 8 bar when working).

9.3 Records of intervention

Check point	Check and maintenance	YES	NO	Other actions
1	Cover fastening			
2	Slide ring			
3	Endstop sensors			
4	Solenoid valve			
5	No air leak			
6	Air discharge efficiency			
7	Cover positioning			
8	Illuminated ring			
9	Magnetic loops			

Installer stamp	Date of intervention
	Operator's full name
	Technician signature
	Client signature

Check point	Check and maintenance	YES	NO	Other actions
1	Cover fastening			
2	Slide ring			
3	Endstop sensors			
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Installer stamp	Date of intervention
	Operator's full name
	Technician signature
	Client signature

10 Phasing out and disposal

We kindly ask you to also safeguard the envirnoment, because we at URBACO considere it to be one of the fundamental elements of development of its market and operational strategies. You can do this by simply following simple disposing instructions :

DISPOSING OF THE PACKAGING

The components of the packaging (i.e. cardboard, plastic, etc.) are solid urban waste and can be disposed of without problems, just throw them out in the proper, correspoding recycling bins.

The components of the packaging (i.e. cardboard, plastic, etc.) are solid urban waste and can be disposed of without problems, just throw them out in the proper, correspoding recycling bins.

DO NOT DISPOSE OF IN THE ENVIRONMENT !

PRODUCT DISPOSAL

Our products are made of different types of materials. Most of these (i.e. aluminium, plastic, iron, electrical cables) are to be disposed of as solid urban waste. These can be recycled through separate waste collection and disposal at authorised facilities.

Other components (i.e. electronic cards, remote control batteries, etc.) may contain hazardous materials. Thus, they must be treated and hand over to special firms authorised to properly dispose of them.

Before acting, always check the specific, current legislation in your location.

DO NOT DISPOSE OF IN THE ENVIRONMENT !

11 Declaration of conformity

CE

MANUFACTURER'S DECLARATION

Pursuant to annex II A of the Machinery Directive 98/37/EC

URBACO

URBACO S.A.
Z.A. du Couquiou
84320 ENTRAIGUES
FRANCE

Declares under its own responsibility that the equipments listed below:

LUXOR AUTOMATIC RETRACTABLE BOLLARDS

BPLUXE60/G/R, BPLUXE80/G/R, PLUXF60/G/R, BPLUXF80/G/R, BPLUXG60/G/R, BPLUXG80/G/R,

LUXOR TECHNICAL CENTERS

CC6U200PR, CC6U200PRS,

LUXOR COMPLEMENTARY ACCESSORIES

COPURA-LUX, COKCHGT-LUX, BOEVP-LUX, BOEVB-LUX, COVF-LUX, KITBEA-LUX,

comply with the National Law related to the following European Directives and to the applicable parts of the following Standards.

--- Directives ---

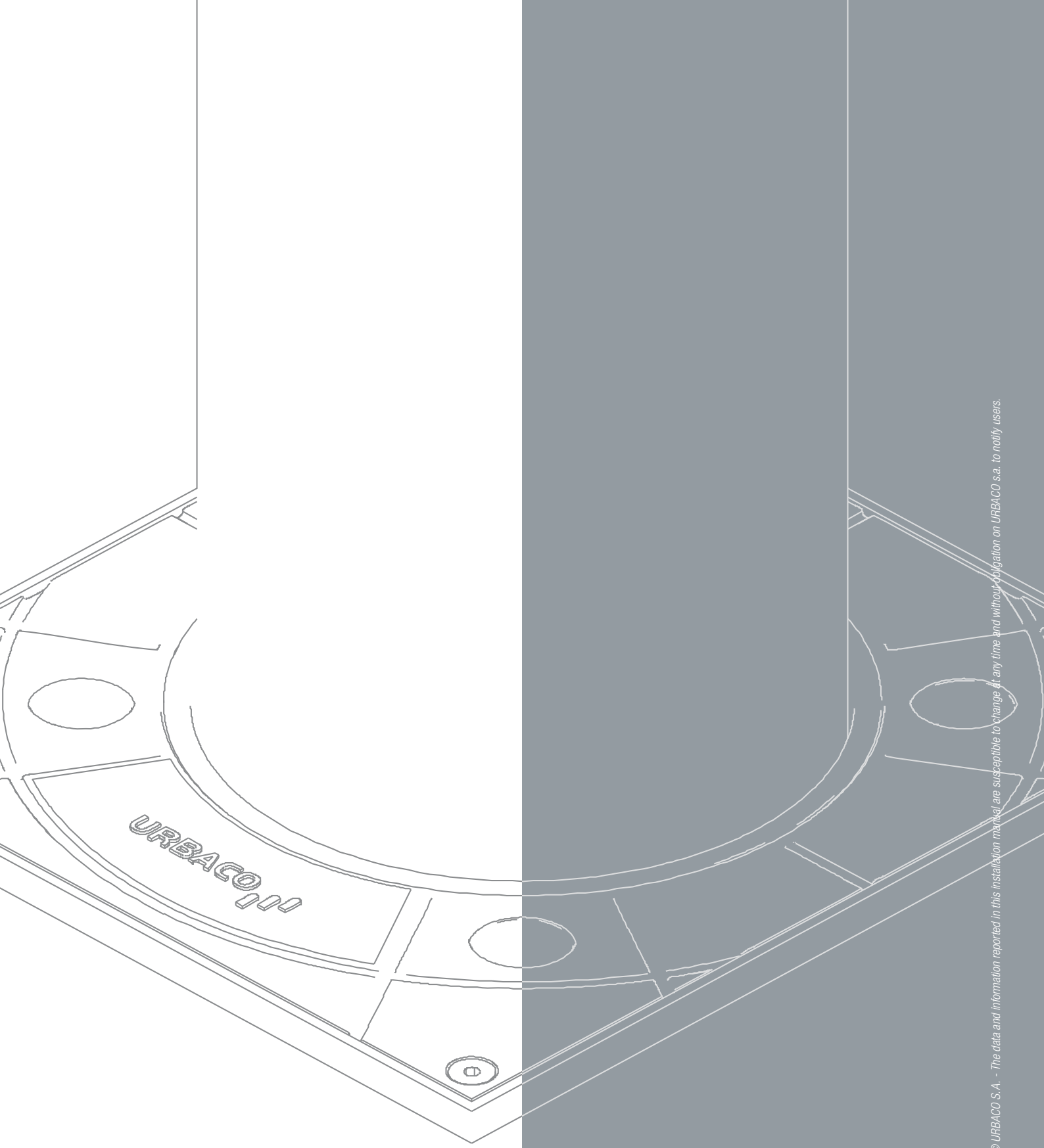
98/37/CE - 98/79/CE	Machinery Directive
2004/108/CE	Electromagnetic Compatibility Directive
2006/95/CE	Low Voltage Directive
87/404/CEE	Simple Pressure Vessels Directive
97/37/CE	Pressure Equipment Directive

--- Standards ---

EN 60204-1	EN 1050	EN 60529	EN 60068-2
EN 61000-6-2	EN 61000-6-3	NF P 98-310	EN 3744
EN 11201	EN 1012-1		

IMPORTANT WARNING!
This statement is legally binding only if the specifications in the supplied instruction manual have been properly followed.
Do not use the equipment specifi ed here above, before completing the full installationIn full compliance with the Machinery Directive 98/37/EC.

the Chairman
Andrea Menuzzo



URBACO

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