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Technical datasheet of hydraulic bollard 220/600 - FE 6mm

Drive	Hydraulic
Driven cylinder	Steel FE 37 *1 - thickness 6 mm
Treatment undergone by driven cylinder	Polyester powder painting-color grey anthracite *2
Driven Cylinder Diameter	220 mm
Driven Cylinder Run	600 mm
Treatment undergone by cylinder top	Polyester powder painting-color light grey (RAL7006)
Drive Speed	Rise speed 10 cm/sec Fall speed 20 cm/sec
Hydraulic pump	230 V Alimentation ± 10% 50 Hz
Protection class	IP 67
Capacitor for pump	18 µF
Electrical input	220 W 230 V
Work frequency - Resistance class	Intensive use > 2.000.000 life cycle 2.000 daily operations
Refractive adhesive band	Standar height 55 mm
Work temperature	-15 a 70 ºC (5 to 158 °F)
Overall weight with pit	120 kg
Manual lowering	YES *4
Resistance to impact (without permanent damage)	20,000 Joules
Resistance to Impact (with permanent damage)	250,000 Joules
Dimensions of pit to be walled	500 x 440 x 1010 H
Standard cable length	10 m *5

*1 Optional: 304 stainless steel

*2 Optional: personalized spray painting with RAL color

*3 Optional: heating devices for temperature up to -25 ºC

*4 Optional: automatic lowering in case of black-out

*5 Optional: on request cable length 50 - 30 m if *3

XB220H06K

Medidas: 600 mm de alto, 220 de diametro

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TECHNICAL INSTRUCTIONS

XB220H06K

WARNINGS FOR THE INSTALLER – GENERAL SAFETY OBLIGATIONS

1	**ATTENTION!** It is very important for the safety of people to follow all instructions strictly. A wrong installation or use of the product could cause serious damage to people.
2	Read carefully this manual before starting installation and save it for future reference.
3	Packaging materials (i.e. plastic, polystyrene, etc.) must be out of children's reach, because potentially dangerous.
4	This product has been designed and manufactured exclusively on the purpose indicated in this manual. Any different use not here indicated could damage the integrity of the product and/or be potentially dangerous.
5	AccessPRO INDUSTRIAL is not responsible for any damage caused by improper or different use from the indicated one.
6	Do not install the device in an explosive area: Using Inflammable gases could be not safe.
7	Installation must be according to the local Laws.
8	In order to have an adequate safety level in the extra-CEE countries, in addiction to the national laws, the above mentioned laws must be followed.
9	AccessPRO INDUSTRIAL is not responsible if someone does not observes the correct method of installation of the AccessPRO INDUSTRIAL products and related devices, included deformations coming during the use.
10	Before any actions on the automatic installations take power off.
11	An Omni polar switch should be foreseen on the alimentation' s net of automatic installations. Its connections should have an opening range of 3 mm. A magnetotermical differential with 6A Omni polar switch is adviceable
12	Assure that a differential switch with 0,03° is present at the beginning of the automatic installation.
13	The main electrical alimentation of the control unit of automatic installations must be connected directly to at the beginning of the apposite principal switch set inside the control unit; use anti-flame cables approved by at least one of the European Institutes. The dimension of the first alimentation line must be minimum 3x2,5mm,but evaluated by the installer according to the number of AccessPRO INDUSTRIAL bollards (400W each AccessPRO INDUSTRIAL bollard) and the distance from the output point in order to guarantee a correct alimentation (230V +/- 10% for moving AccessPRO INDUSTRIAL bollard).
14	Test that the earthing is workmanlike and connect the metallic parts.
15	The automatic installations include a standard safety device: an inversion pressure switch in case of at least 40 kg of load. It is anyway necessary to test the activation level every six months, according to what laws establish.
16	Safety devices (Law EN 12978) allow protection of potentially dangerous areas where activities such as squashing, conveyance, shearing are possible to occur.
17	Each automatic installation should have at least one lighting device (i.e: flashing lights integrated in the crosshead of the bollard) and a signal placard, along with the device quoted at point "16" 2 Read carefully this manual before starting installation and save it for future reference. 18 In each automatic installation the installer must consider.
18	In each automatic installation the installer must consider and install appropriate safety devices.
19	For maintenance works use only original parts supplied by AccessPRO INDUSTRIAL.
20	AccessPRO INDUSTRIAL is not responsible for safety and good functioning of the product , in case of use of components not manufactured or distributed by AccessPRO INDUSTRIAL.
21	Do not apply any modification to the parts composing the automated product AccessPRO INDUSTRIAL.
22	The installer must provide the Customer with all information related to the manual release of the automatic bollard in case of emergency and give the User a warning manual attached to the product.
23	Do not allow children or others to stop close to the bollard during operation.
24	Keep remote controls or other impulse-giving devices out of children's reach, in order to avoid involuntary activation.
25	Thoroughfare over the AccessPRO INDUSTRIAL bollard allowed only at complete lowering of the bollard.
26	Semiautomatic bollards are not adviceable for multiple installation (two or more) on main streets where the frequent passage of vehicles over the lowered bollards can break the lock block and make the bollard lifting without control.
27	The User must avoid any repairing actions or direct operations on the bollard, and must address to qualified and authorized personnel only.
28	Do not waste exhausted batteries in the garbage, but dispose them in the apposite containers to allow recycling. Disposal costs have already been paid by the manufacturer.
29	The product is packaged on Euro pallet; use pallets' movers or shunters for movement; handle with care.
30	The product has been manufactured with IP 56 protection's level, and could therefore be stored everywhere; storage in internal or covered places is anyway preferable.
31	The product does not require availability of spare parts; AccessPRO INDUSTRIAL's warehouse can send by express any needed spare parts.
32	In case of maintenance and/or reparation, Pay attention not to give improper raising signals; to avoid any problems, disconnect the bollard's moving by the switch set inside the control management station.
33	Everything not mentioned in this manual is not allowed.

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Dimensions of pit to be walled	500 x 440 x 1010 H	
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AUTOMATIC AccessPRO INDUSTRIAL BOLLARD XB220H06K INSTALLATION SEQUENCE
1) Ensure that the laying point of the AccessPRO INDUSTRIAL Bollard does not fall within an impluvium area; in cases when, no matter why, this circumstance occurs, you need to partially shelter the AccessPRO INDUSTRIAL Bollard by means of a draining channel, equipped with covering grid.
2) Dig a hole (using a miniature excavator or your hands) down to 1.40m in depth approx. A sector side shall be 1.30m approx.
3) Ensure that the ground features a good water absorption (try by introducing about 40 litres of water and rate that the drain takes place in less than 30 minutes); otherwise, drain rain water through a pipe that is 60 mm in diameter connected to the sewer or, as an alternative, connected to a pit (equipped with a pumpdown system, such as, for instance, an electric pump) being deeper than the cement pipe that collects and drains rain water)
4) Introduce gravel (grain 8 to 20 mm. in diameter approx.) until a thickness of 30 cm approx. is reached, taking care to compress it well to avoid eventual “settling shrinkages”.
5) Install the metallic pit with counterframe and steel rods, as showed in the detailed drawing (16 steel rods 14 mm in diameter type FeB44K with butt-welded threaded pieces to high resistence type 8.8 M14) assuring to plumb it reminding that the superior side of the counterframe must be 10mm higher than the walking level (in order to limit water rain enter in to the pit). Install the pit checking the counterframe reference is in the correct direction.
6) In addiction to the a.m. steel rods, add 6 brackets 14 mm in diameter (see enclosed drawing).
7) Once the pit is installed and before concrete casting, set a flexible tube 40 mm in internal diameter linking the electrical input of the pit to the control moving unit.
8) Cast concrete Rck = 25N,00/mm² all around the pit using a truck up to 15cm from walking level and vibrate the casting with specific instrument.
9) Set all the other tubes linking the moving control unit to the different part of the system (ex. traffic lights, inductive turns etc...), arrange for electrical connection, earthing and other commands if needed.

P. S.1: all tubes and steel reinforcements FeB44K must be set in full compliance with the regulations in force.

P.S. 2: all materials used for foundation, steel FeB44K and cls RCK= 25,00 n/mm$_2$,must be certified and controlled in works as per certificate of quality released from producing firms in full compliance with the regulations in force.

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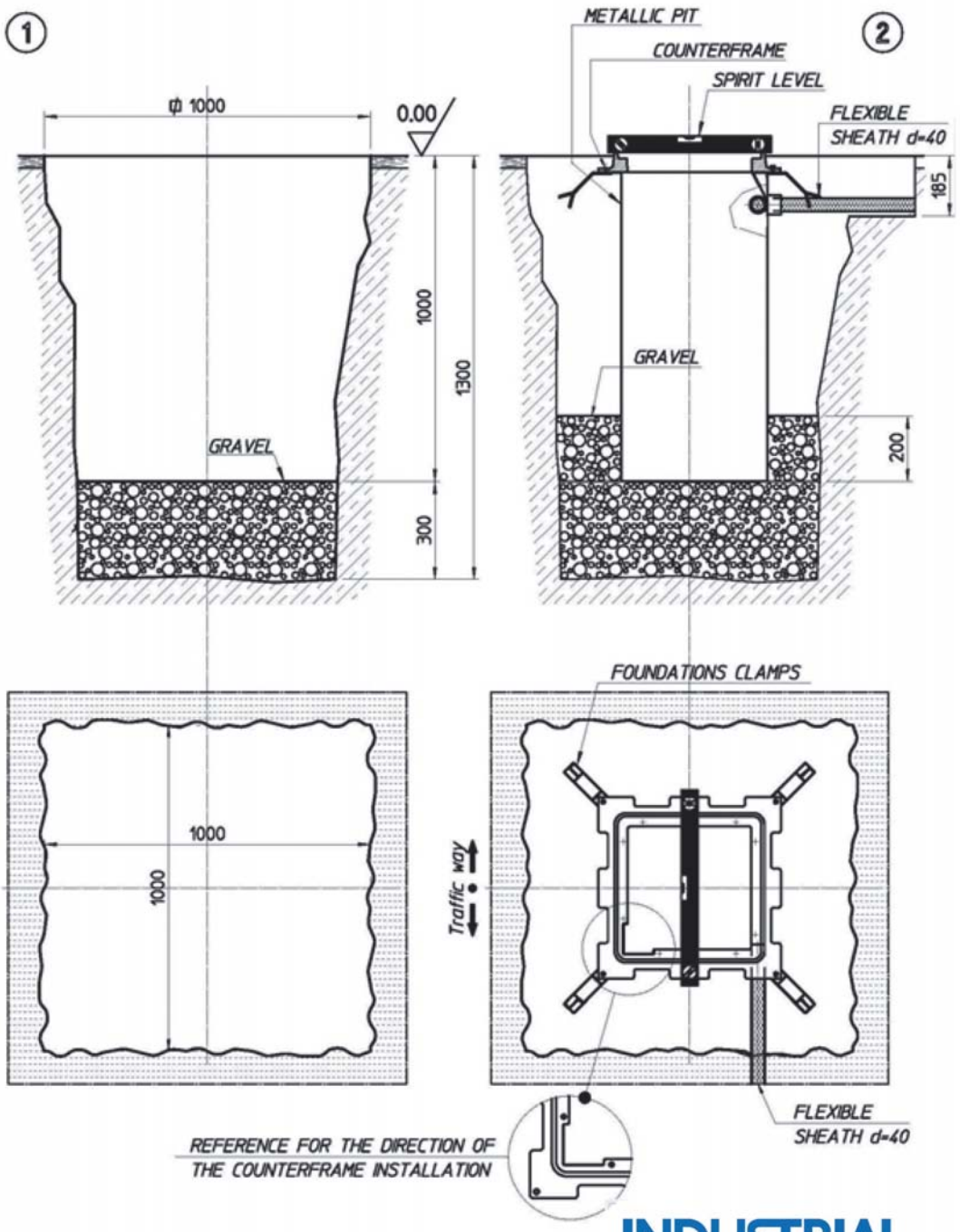
XB220H06K AUTOMATIC BOLLARD - STOKE = 600
INSTALLATION PLAN WITH THE METALLIC PIT



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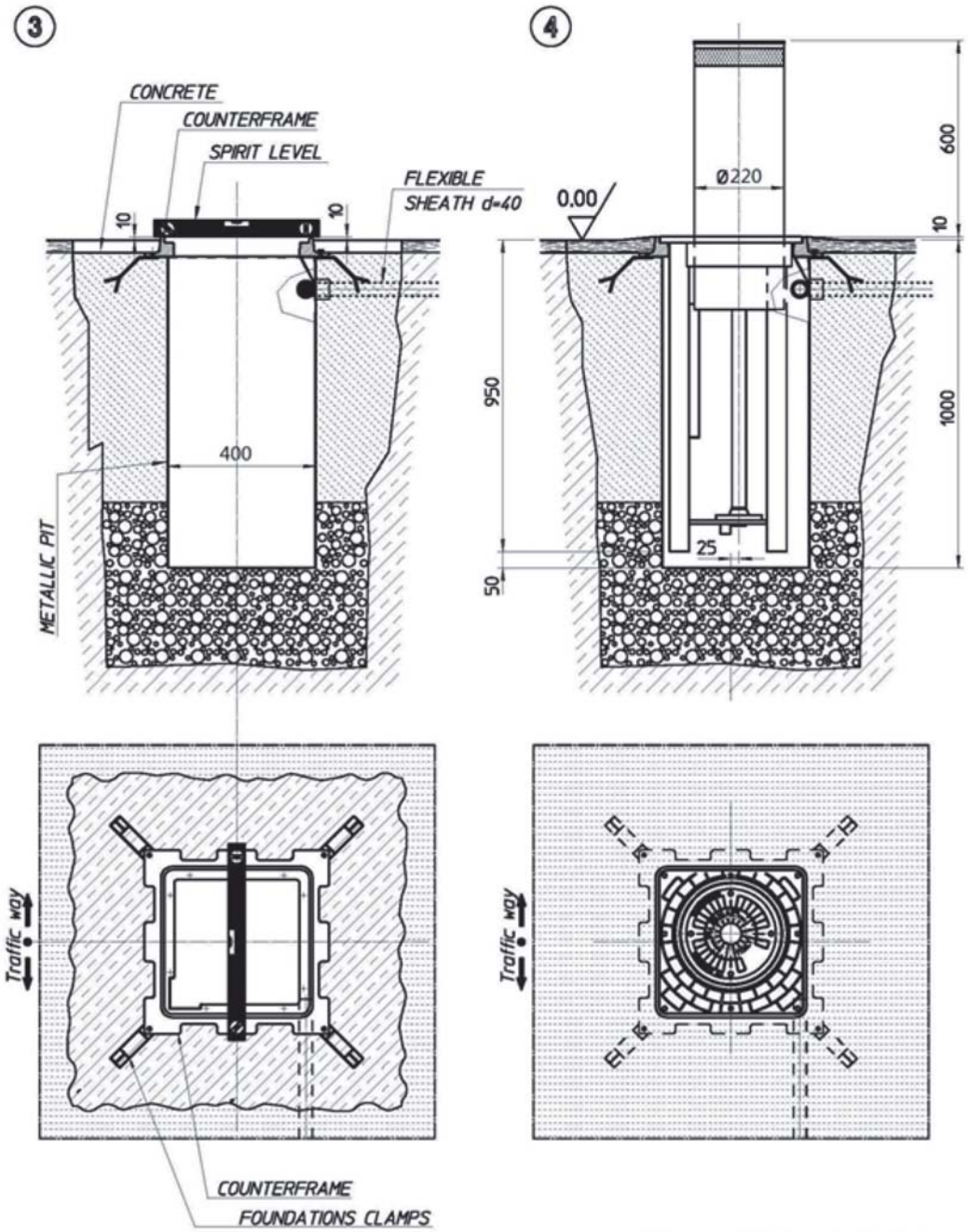
XB220H06K AUTOMATIC BOLLARD - STOKE = 600
INSTALLATION PLAN WITH THE METALLIC PIT



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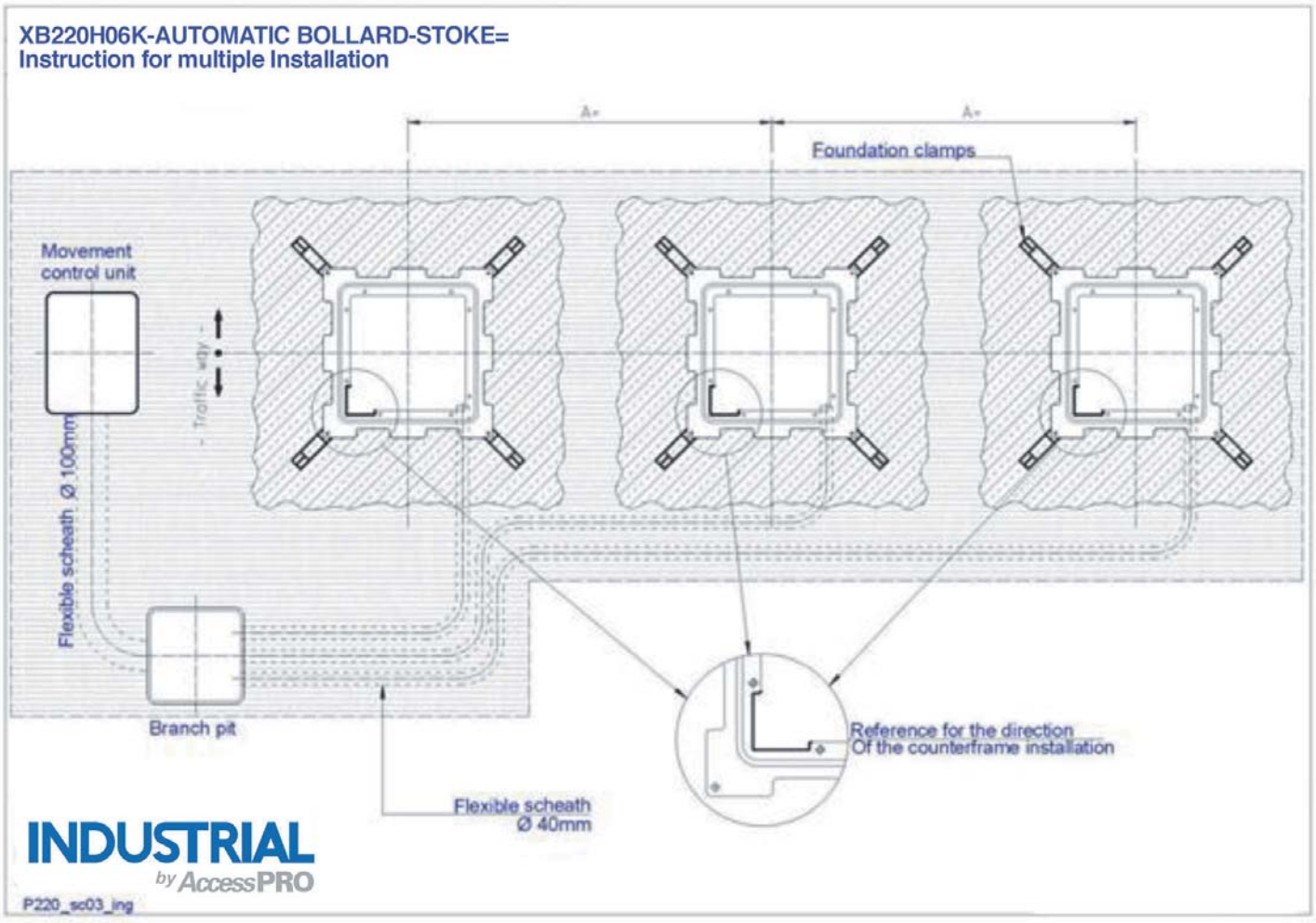

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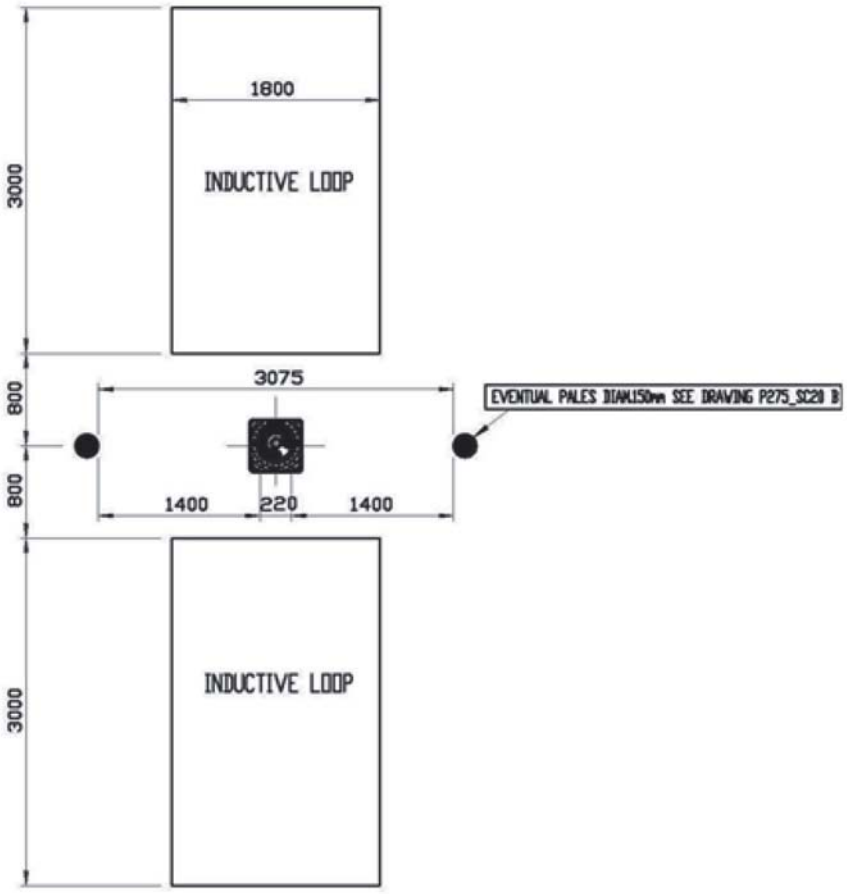

QUOTE ESPRESSE IN mm.

PER QUOTE SENZA TOLLERANZA CARPENTERIA: DA 1-30 ±0,1 / DA 30-120 ±0,15 / DA 120-315 ±0,2 / ±0,5	INDUSTRIAL by AccessPRO		Macchina: INDUSTRIAL by AccessPRO		Modello: XB220H06K			rev. note/data
			Descrizione: PIPELINES INSTALLATION PLAN FOR N°1 Bollard					- -
			Codice: -				NPZ	- -
	eseg. -	data 14/10/05	materiale -	finiture -	peso unit.kg. -	peso tot.kg.		- -
	visto -	scala 1:50	rep. di destinazione -	note -	superf.unit.kg. -	superf.tot.kg.	dis.	XB220H06K

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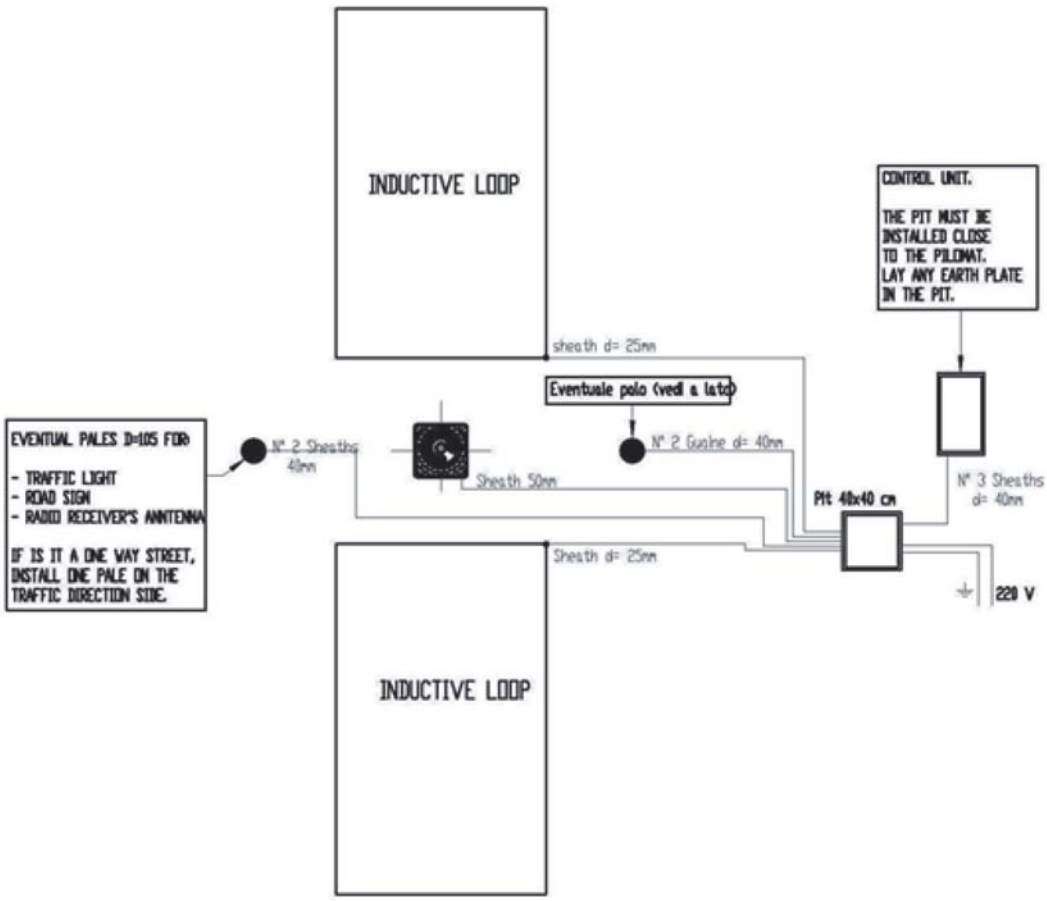

QUOTE ESPRESSE IN mm.

PER QUOTE SENZA TOLLERANZA CARPENTERIA: DA 0-30 ±0.1; DA 30-120 ±0.15; DA 120-315 ±0.2; ±0.5	INDUSTRIAL by AccessPRO	Macchina: INDUSTRIAL by AccessPRO	Modello: XB220H06K		
		Descrizione: PIPELINES INSTALLATION PLAN FOR N°1 Bollard			rev: note/data: - - - - - -
		Codice: _		KP2:	peso totkg:
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	visto: -	scala: 1:50	rep. di destinazione: -	note: -	superfunitkg: -
					superf.totkg: dis: XB220H06K

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NOTES ON MAKING THE MAGNETIC LOOP WITH A 9 m CABLE

If using the automatic AccessPRO INDUSTRIAL bollard, two inductive magnetic loops must be created to detect metal
weights (cars), one in front of and another behind the bollard. The standard dimensions of these loops is: width 1.80 m - length 3.00 m.

Other sizes are possible if the case warrants this. The loop is created by using a special electric cable with a diameter of approximately 9mm and suitable protection, laid directly in the ground without the need for conduits.

When laying the loop, it's necessary to check that there are no electrowelded metal meshes nearby. If this is the case, it's essential that the mesh is at least 25 cm below the loop (otherwise, a 30 cm section of the mesh below the loop must be removed).

The loop needs to be placed 5-7 cm below the road surface. If there is any porphyrite or similar, the blocks of porphyrite must be lowered to allow for the loop to be laid at this depth. Alternatively, the loop can be laid between one block and another with a fret pattern.

The loop is connected to a line that transmits the signal to the movement control station.This consists of a special insensitive cable to be laid in a conduit with a 20-25 mm diameter.

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INSTALLATION SEQUENCE BOLLARD

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TECHNICAL DATASHEET OF SP CONTROL STATION	
Electronic control circuit	Micro-processor-operated, with dedicated software that manages the AccessPRO INDUSTRIAL units
SP control station case	Wall-mounted
Case size	See attached table
Protection class	IP 54
Work temperatures	-15°C + 70°C
Control station power supply	AC 230V. + 10% -50Hz
Protection cut-off	Differential thermo magnetic switch
Service transformer	DC 24V Standard power 150 W

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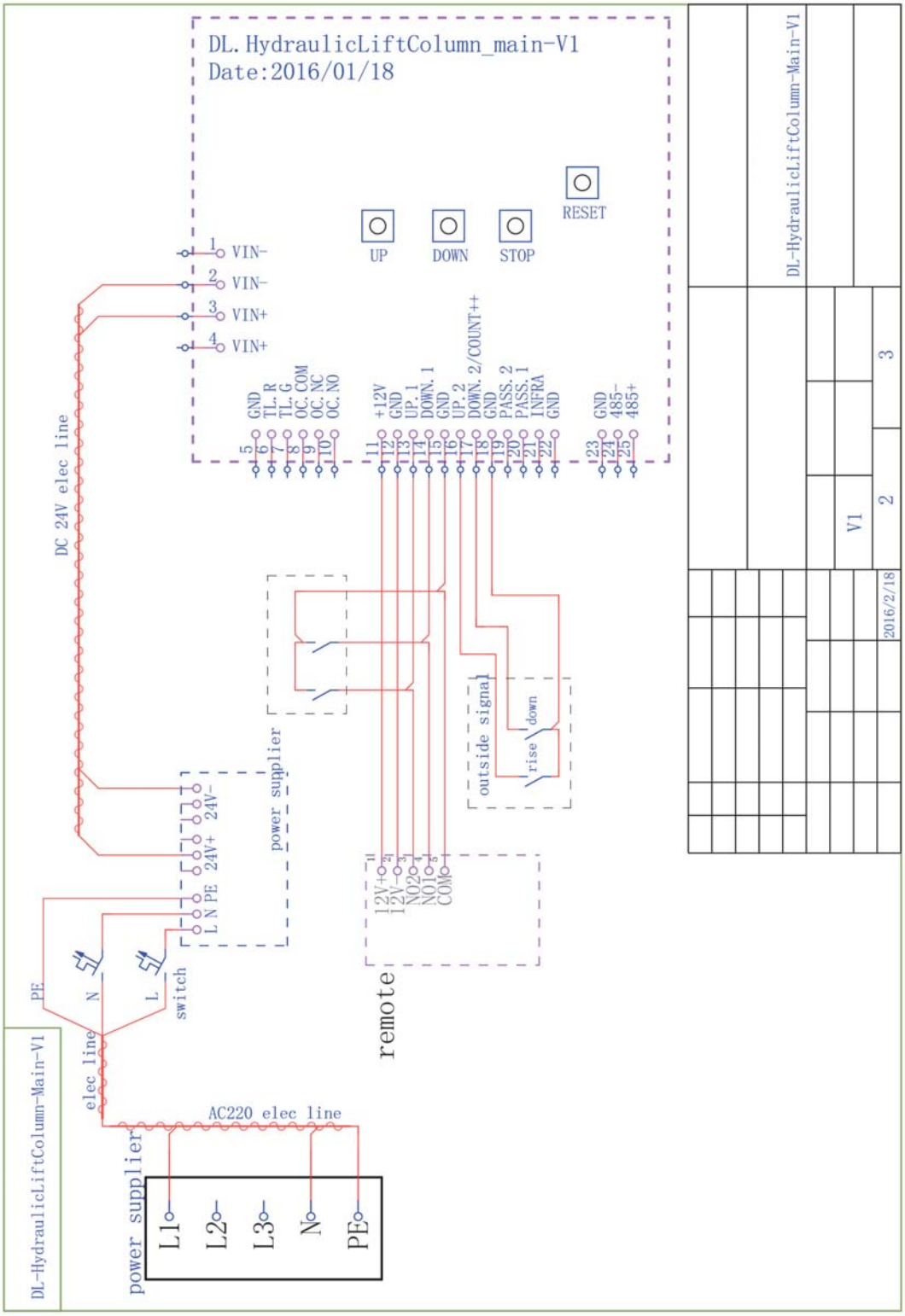

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ORDINARY ROUTINE MAINTENANCE PROCEDURE FOR ACCESSPRO INDUSTRIAL BOLLARD

The standard routine maintenance sequence is as follows: Cleaning of pit with suction of all material settlements.

- Cleaning of water drains located on the pit bottom
- Cleaning and greasing of the central sliding rail
- Testing (and replacement, if needed) of the lower beat gaskets
- Testing and repair (if required) of the handling piston for oil leaks
- General testing of the pop-up element's screws for correct tightening
- General cleaning of the driven cylinder and painting touch-ups, if needed
- Testing of the hydraulic station, top-up of oil level and checks over working pressure settings
- Testing and possibly setting of safety pressure switch for proper operation (40 Kg.

MOREOVER, IF THE FOLLOWING ITEMS ARE IN THE SYSTEM ,PERFORM THE FOLLOWING CHECKS AND TESTS:

- Test the flashlight that is incorporated in the element's head for proper operation
- Operating test of traffic-lights lanterns
- Operating test of inductive safety turns
- Check over the power failure procedure for proper operation
- Operating test over the control radio receiver
- Operating test of the emergency lowering sound analyser
- Operating test of the remote control GSM effector
- Sight check of the electronic handling management unit (e.g. : "flooded"
- relay contacts oxidized clamps – etc.)