Level

Assembling Instructions





AEPE... **ASSEMBLING INSTRUCTIONS - List of documents Edition**

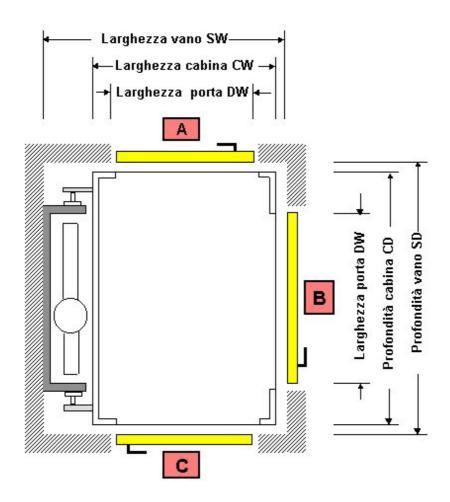
10		DRAWINGS AND MODEL LAYOUTS					
	01	MODEL'S SPECIFICATIONS					
	06	PLAN (WITH ACCESS INDICATIONS)	1				
		PIT LAYOUT AND MACHINE ROOM	1				
	15	VERTICAL SECTION (WITHOUT CABIN DOOR)	1				
	20	HORIZONTAL SECTION (depending on the model)	2				
20		INSTALLATION SEQUENCES					
	10	GENERAL CHECKINGS	3				
	0	SELF SUPPORTING STRUCTURE:					
		I-IA-AS-1 SELF SUPPORTING STRUCTURE					
		I-IA-AS-1-1-1 STARTING UPRIGHTS					
		I-IA-AS-1-1-2 STANDARD BRACKETS					
		I-IA-AS-1-1-3 SHIRT PLATE BRACKET					
		I-IA-AS-1-1-4 UPRIGHTS JUNCTION					
		I-IA-AS-1-3-1 LANDING HINGED DOORS 'V'					
		I-IA-AS-1-4-1 STRUCTURE ENCLOSURE					
	15	STRUCTURE AND GUIDES INSTALLATION (Phase a-b)	2				
	16	STRUCTURE AND GUIDES INSTALLATION (Phase c-d)	3				
	17	STRUCTURE AND GUIDES INSTALLATION (Phase e)	2				
	18	STRUCTURE AND GUIDES INSTALLATION (Phase f1)	3				
	19	STRUCTURE AND GUIDES INSTALLATION (Phase f2)	2				
	20	PISTON SUPPORT – PISTON – DIVERTER PULLEY FRAME (Phase a-b)	3				
	21	PISTON SUPPORT – PISTON – DIVERTER PULLEY FRAME (Phase c-d)	1				
	22	REMOVING OF THE PISTON PROTECTING LOCKS	2				
	25	PUMP UNIT AND PIPES	1				
	30	CONTROLLER	1				
	35	PISTON AIR LEAKING	1				
	40	CAR FRAME (Phase a-b)	2				
	41	CAR FRAME (Phase c)	3				
	42	CAR FRAME (Phase d)	2				

AEPE		ASSEMBLING INSTRUCTIONS- List of documents						
	45	LIFT ATTACHMENT TO THE ROPES	1					
-	<u> 45</u> 50	ELECTRICAL SHAFT COMPONENTS FOR 2 STOPS						
-	<u>50</u> 51							
-		OVER TRAVEL SET						
-		CABIN (Phase a-b-c-d)	2 2					
-		CABIN (Phase e-f)	<u>2</u>					
-		CABIN (Phase g)	2					
-	60		<u>2</u>					
-		LANDING DOORS	<u>2</u>					
-	70		<u>2</u> 1					
-		WARNING AND INSTRUCTION PLATES	<u>'</u> 1					
-		WARRING THE INCINCENT LAND						
30		HYDRAULIC AND ELECTRICAL DRAWINGS						
-	10	HYDRAULIC PUMP UNIT	1					
-	20	SAFETY VALVE						
-	30	LEGEND OF ELECTRICAL DRAWINGS						
-	40	INSULATION TEST	11					
-	50	PLUG IN LOOM BOX WITH LEGEND	11					
	0	ELECTRICAL DRAWINGS (depending on the number of stops	;) :					
		PE.1.IZ4.03 LANDING PUSH BUTTON STATION						
		PE.1.IZ8.02 POWER CIRCUIT 2 STOPS						
		PE.1.IZ8.03 POWER CIRCUIT 3-4-5 STOPS						
		PE.1.IZ4.04 SERVICE PANEL 2 STOPS						
		PE.1.IZ4.05 SERVICE PANEL 3 STOPS						
		PE.1.IZ4.06 SERVICE PANEL 4 STOPS						
		PE.1.IZ4.07 SERVICE PANEL 5 STOPS						
40		PRE-COMMISSIONG – AT THE END OF INSTALLATION	N					
-	10	PRE-COMMISSIONING FORM	1					

MODEL'S SPECIFICATIONS

Model	Suitable for wheelchair	Door entrance position	Rated Load	Cabin dimensions Height 2100 mm		Door dimension	Shaft dimension			
						Height 2000 mm	Wall mounted			pporting cture
			Kg-Pers.	cw	CD	DW	SW	SD	sw	SD
M		В	250 - 2	630	800	650	1000	1000	1100	1100
S	E	A C	250 - 3	800	1200	800	1225	1290	1325	1390
	E	AC	250 - 3	800	1200	800	1225	1240	1325	1340
W	E	A C	250 - 3	900	1200	800	1275	1390	1375	1490
	E	AC	250 - 3	900	1200	800	1275	1440	1375	1540
		В	250 - 3	900	1200	800	1275	1340	1375	1440
		AB BC	250 - 3	900	1200	800	1275	1390	1375	1490
Z	E	A C	250 - 3	1000	1200	900	1375	1390	1475	1490
	E	AC	250 - 3	1000	1200	900	1375	1440	1475	1540
		В	250 - 3	1000	1200	900	1375	1340	1475	1440
		AB BC	250 - 3	1000	1200	900	1375	1390	1475	1490
ZL	E	A C	250 - 3	1000	1400	900	1375	1590	1475	1690
	E	AC	250 - 3	1000	1400	900	1375	1640	1475	1740
		В	250 - 3	1000	1400	900	1375	1540	1475	1640
		AB BC	250 - 3	1000	1400	900	1375	1590	1475	1690
XL	E	AB BC	250 - 3	1400	1400	900	1770	1590	1870	1690

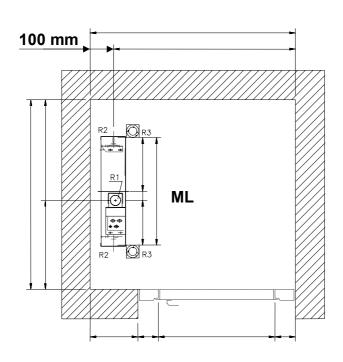
PLAN (WITH ACCESS INDICATIONS)



LANDING DOOR'S:

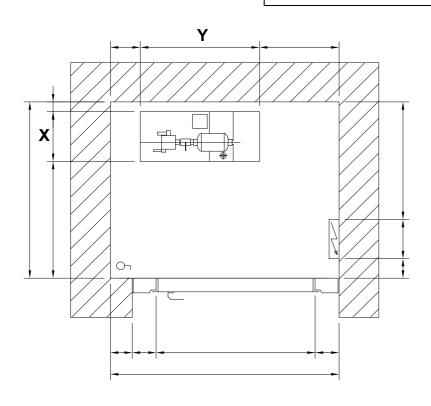
manual with right or left opening

PIT LAYOUT



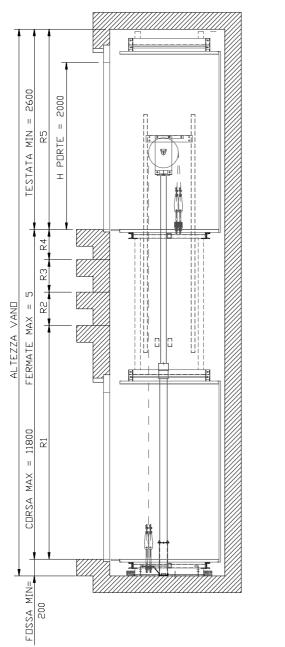
MODEL	ML (mm)		
M	730		
all others	830		

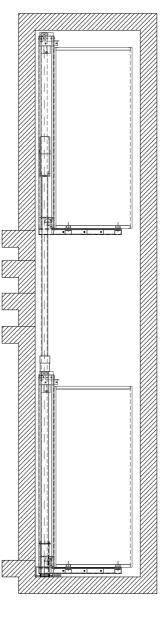
MACHINE ROOM



TRAVEL	X (mm)	Y (mm)		
< 4 mt	360	470		
>= 4 mt	360	700		

VERTICAL SECTION (WITHOUT CABIN DOORS)





Min. Pit	(mm)	200	
Min. Overhead	(mm)	2.600	
Max. Travel	(mm)	11.800	
Max. number of stops	N.	5	
Internal cabin height	(mm)	2.100	
Door height	(mm)	2.000	

HORIZONTAL SECTION (depending on the model)

Models	Suitable for wheelchair	Door entrance position	Wall mounted	Self supporting structure
M		В	A/PE1025	A/PE1026
S	(£.)	A	A/PE1027	A/PE1030
	<u>(3)</u>	С	A/PE1028	A/PE1031
	Ŀ	AC	A/PE1029	A/PE1032
W	4	Α	A/PE1035	A/PE1041
	<u>E</u>	С	A/PE1036	A/PE1042
	<u>[E]</u>	AC	A/PE1037	A/PE1043
		В	A/PE1038	A/PE1044
		AB	A/PE1039	A/PE1045
		ВС	A/PE1040	A/PE1046
Z	Æ	Α	A/PE1050	A/PE1056
	<u>E</u>	С	A/PE1051	A/PE1057
	<u>E</u>	AC	A/PE1052	A/PE1058
		В	A/PE1053	A/PE1059
		AB	A/PE1054	A/PE1060
		ВС	A/PE1055	A/PE1061
ZL	B	Α	A/PE1065	A/PE1071
	(6)	С	A/PE1066	A/PE1072
	(£)	AC	A/PE1067	A/PE1073
		В	A/PE1068	A/PE1074
		AB	A/PE1069	A/PE1075
		ВС	A/PE1070	A/PE1076
XL	4	AB	A/PE1080	A/PE1082
	(£)	ВС	A/PE1081	A/PE1083

GENERAL CHECKINGS

- a) Check the shaft dimensions and the shaft walls being perfectly plumb.
- **b)** Check that the customer has installed the Main Circuit Breaker as per instructions.
- c) Check the alignment of the landing openings. Appropriate obstructions must be placed in front of entrances in order to prevent accidentally falling into the shaft.
- **d)** For a correct installation of the framework, consider as reference the landing opening mostly inside the shaft.

E-IA-AS-1

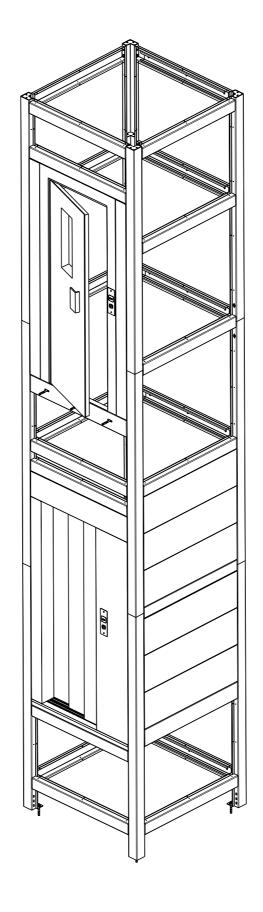
STEP

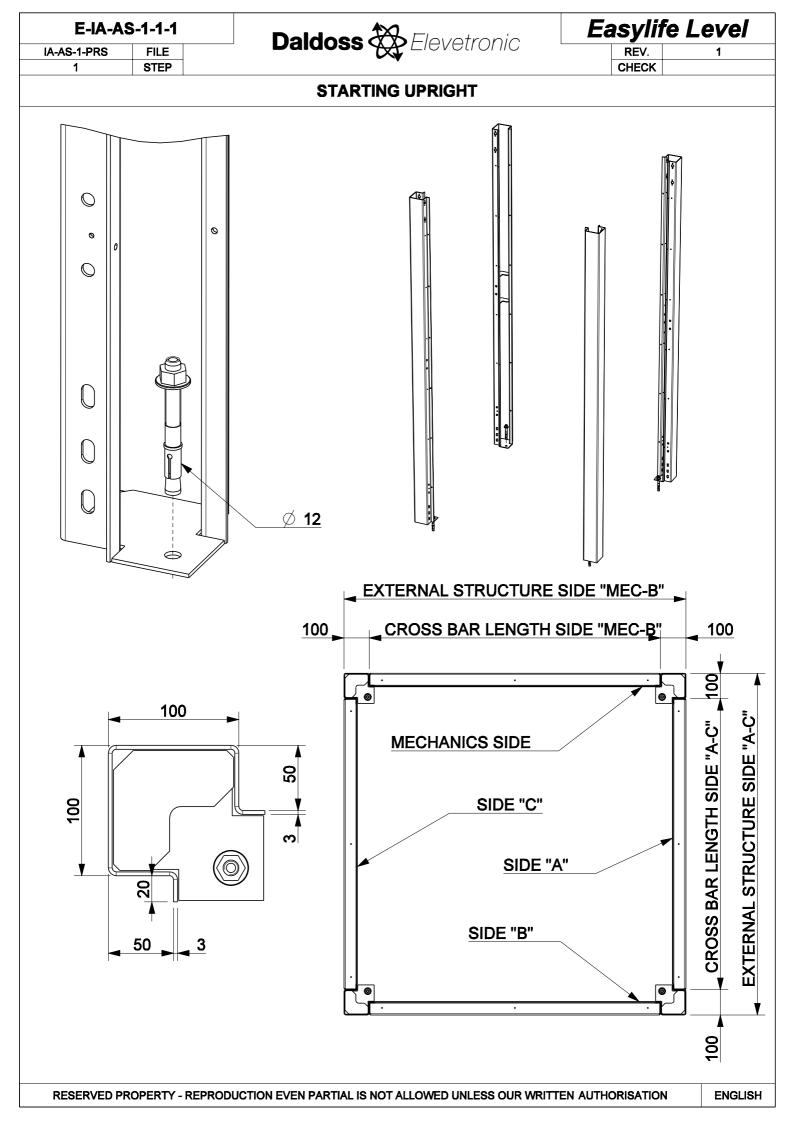
Daldoss *Elevetronic*

Easylife Level

CHECK

STRUCTURE SUPPORTED FRAMEWORK





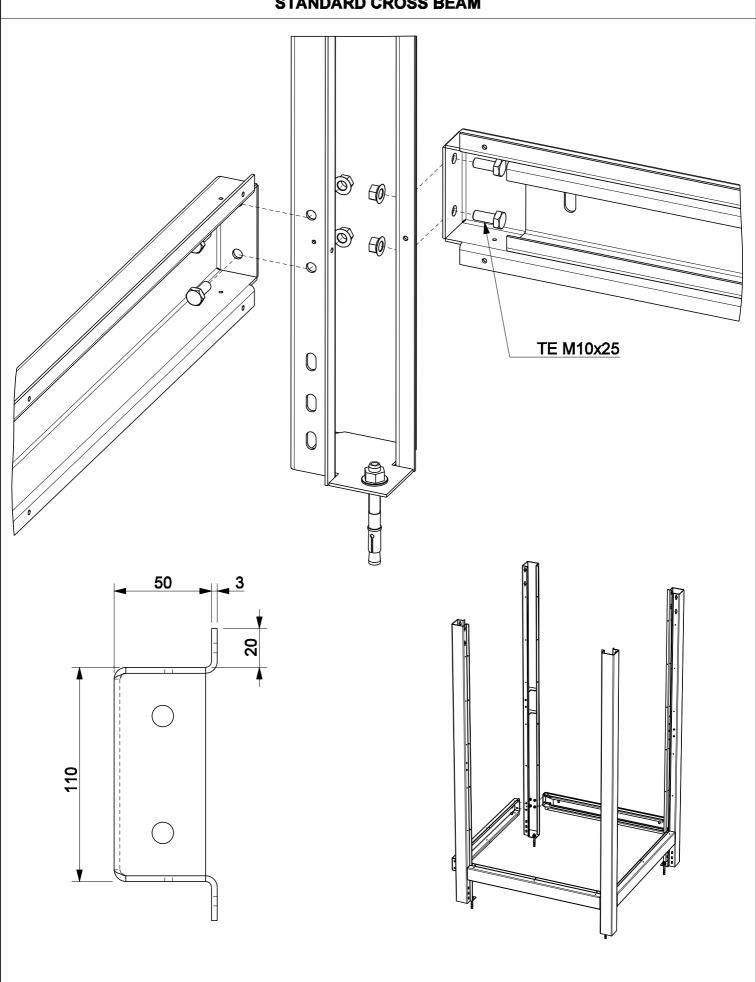
E-IA-AS-1-1-2 IA-AS-1-PRS FILE STEP



Easylife Level

CHECK

STANDARD CROSS BEAM



E-IA-AS-1-1-3

IA-AS-1-PRS FILE

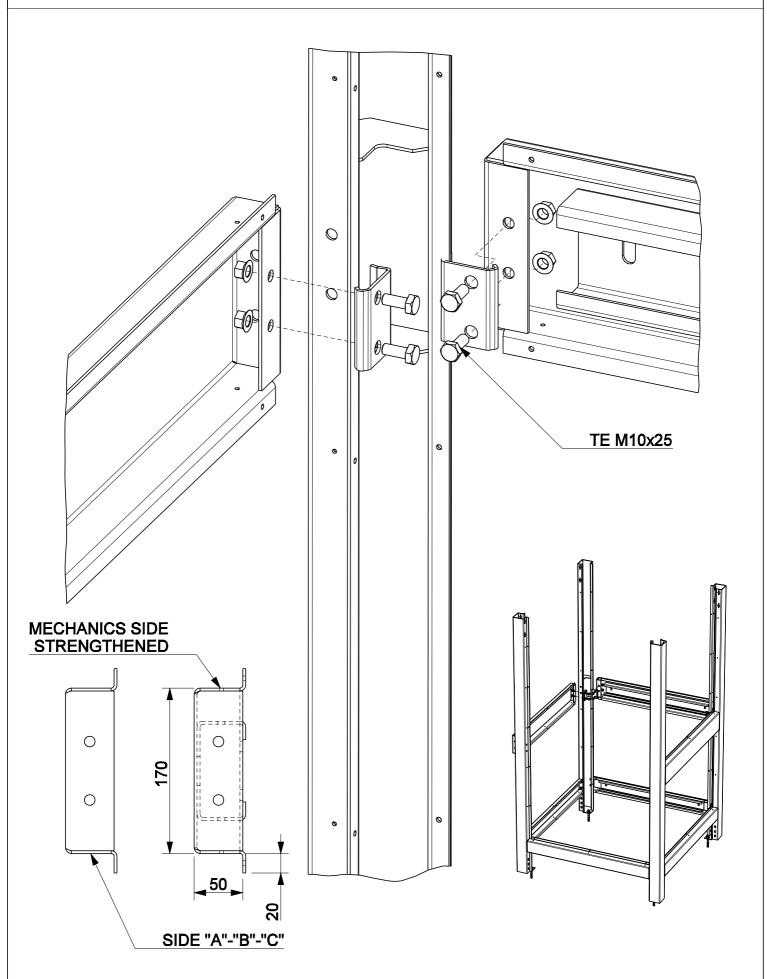
3 STEP



Easylife Level

CHECK

BOTTOM CROSS BEAM



E-IA-AS-1-1-4

IA-AS-1-PRS FILE

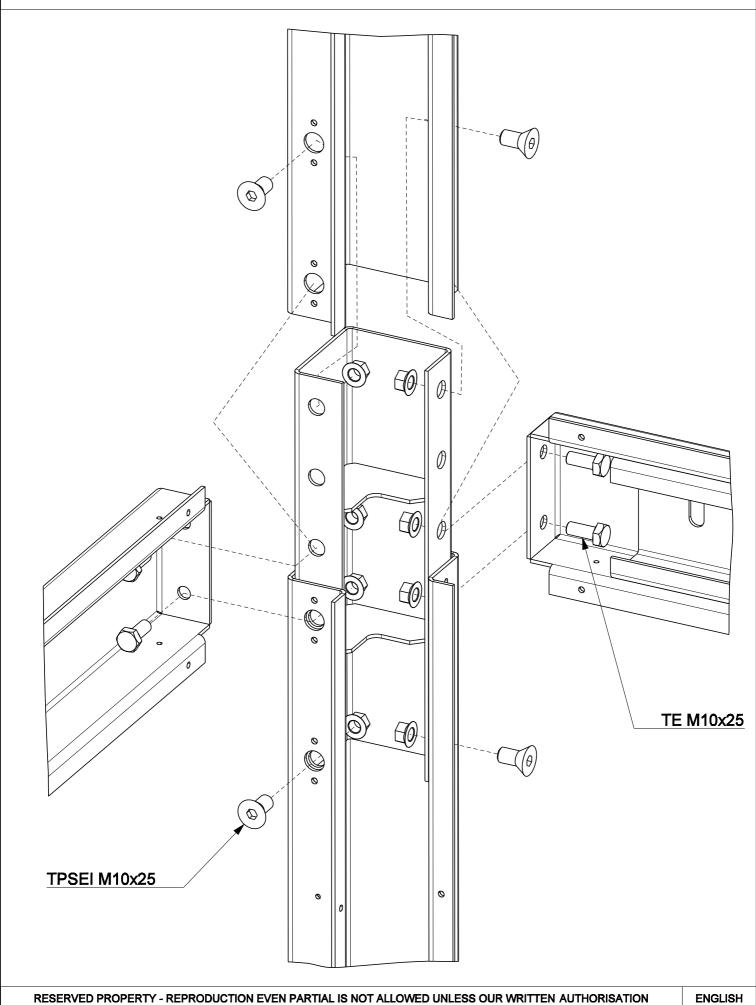
4 STEP

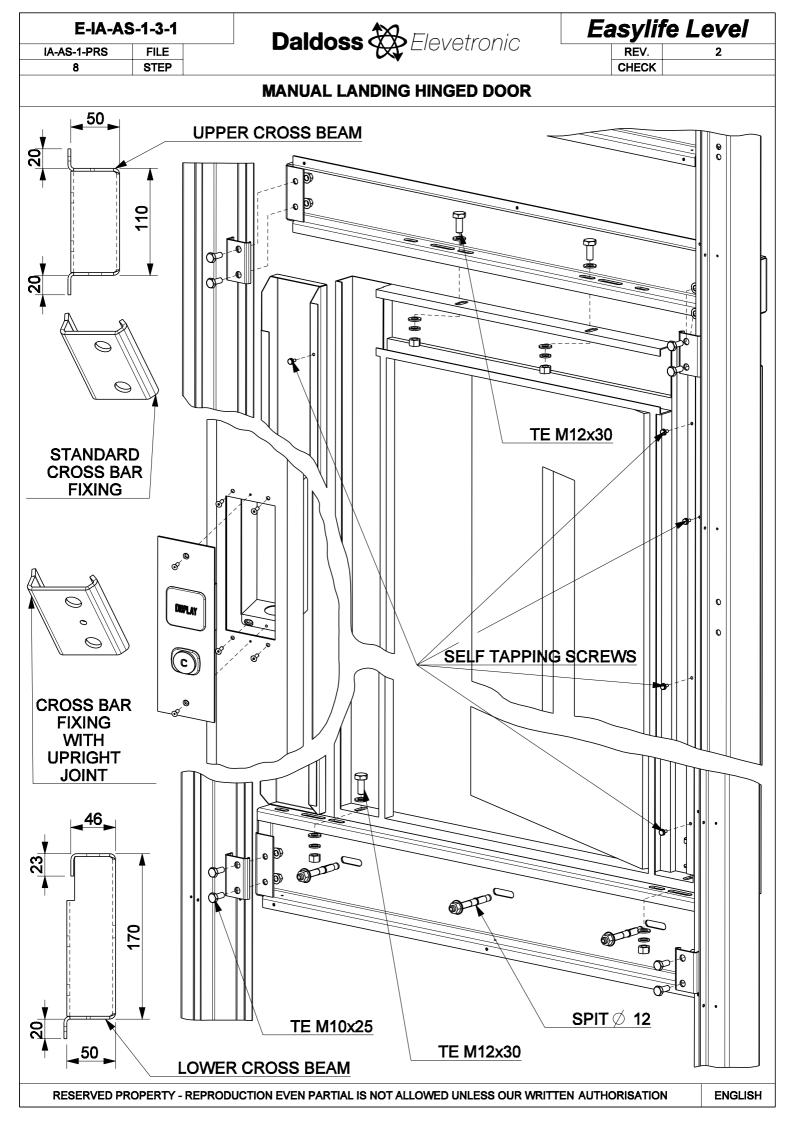


Easylife Leve

CHECK

UPRIGHT JUNCTION





STEP



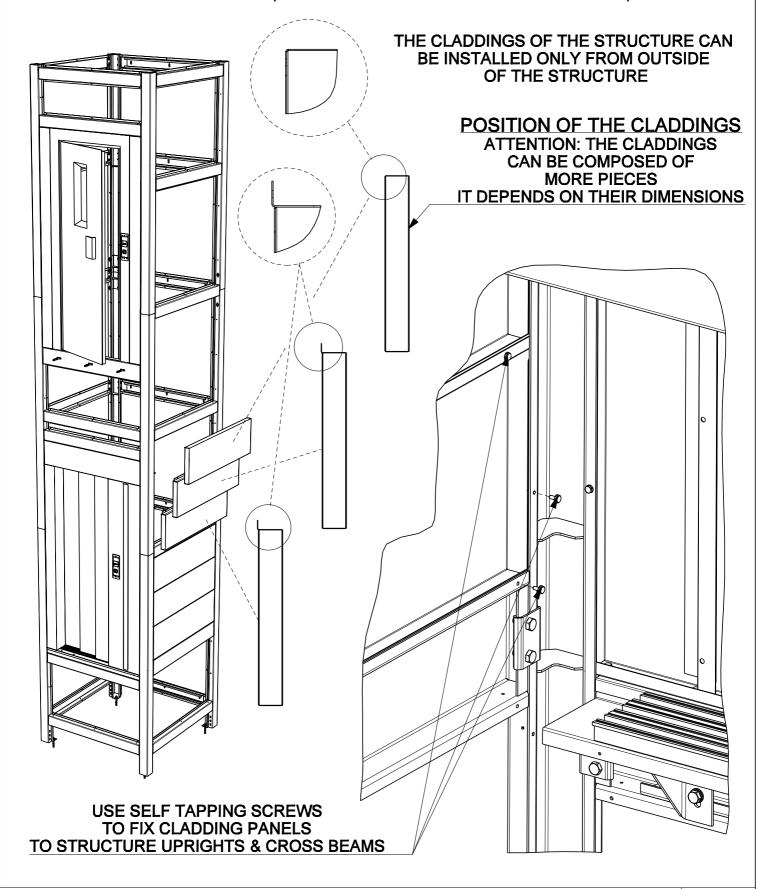
Easylife Level

CHECK

STRUCTURE FRAMEWORK STEEL CLADDING

ATTENTION

IF STRUCTURE FRAME IS EXPOSED PARTIALLY OR COMPLETELY IN ALL WEATHERS, IT IS NECESSARY TO SEAL THE CRACKS WHICH MIGHT BRING SEEPAGE INSIDE THE STRUCTURE (SEALANT IS NOT INCLUDED IN OUR SUPPLY)

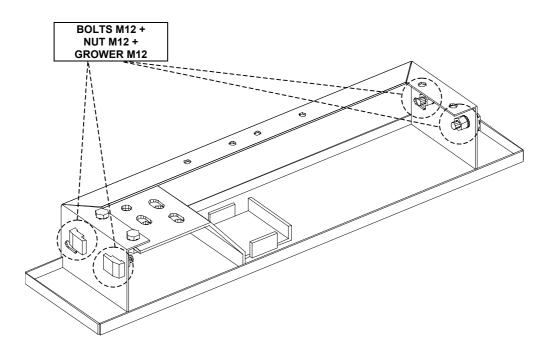


STRUCTURE AND GUIDES INSTALLATION



THE INSTALLATION OF THE GUIDES SUPPORTING STRUCTURE IS VERY IMPORTANT TO OBTAIN A GOOD COMPLETE INSTALLATION. WE RECCOMEND TO FOLLOW CAREFULLY THE PRESENT INSTRUCTIONS IN SUCH A WAY THE GUIDES ARE PERFECTLY PLUM AND ARE CORRECTLY PLACED.

- a) Check that the support (or the self-supporting framework; in this case the guides fixing upright is not present) for the guides fixing is perfectly plum. If there are something out of plumb in the shaft, they must be considered before the guides brackets installation. Some corrections can be performed by means of slots of around 2 cm present on the uprights.
- b) Place the pit frame establishing the correct position of the axis as per shopdrawing and check that the distance between the support (or self supporting framework) upright and the landing door position is correct.

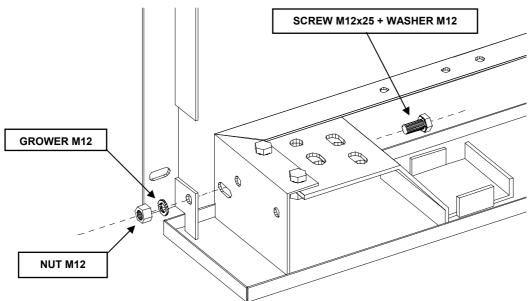




THIS PHASE IS VERY IMPORTANT TO AVOID ANY COMPLICATION DURING THE CABIN INSTALLATION AND GETTING A CORRECT DISTANCE BETWEEN THE CABIN SILL AND THE LANDING SILL.

STRUCTURE AND GUIDES INSTALLATION

c) Start the installation of the brackets fixing uprights, placing the starting couple over the pit frame. This starting couple is different from the other ones for the specific downward recesses necessary for the oil collector bucket and the oil pipes. Use the supplied SPIT M12 for concrete, respecting the step pointed

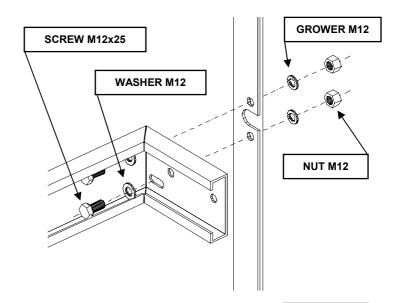


out by the shopdrawing (normally 1500 mm).

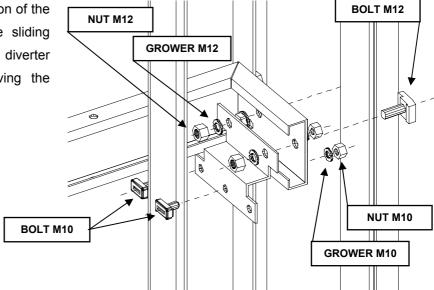
d) Proceed along the shaft with the standard SPIT M12 uprights, placing pieces cut of the right measure as last ones. THE UPRIGHTS ARE SUPPLIED FOR THE ad) WALL MOUNTED VERSION ONLY - THERE ARE NOT PRESENT IN SELF SUPPORTING **STRUCTURE**

STRUCTURE AND GUIDES INSTALLATION

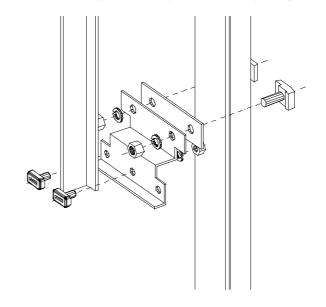
- e) Proceed as follows:
 - 1. Install the guides support brackets respecting the step pointed out by the shopdrawing. Before definitely tightening the brackets, check if they are perfectly plumb.



2. Proceed with the installation of the cabin guides, having the sliding side outward. Install the diverter pulley frame guides having the sliding side inward.

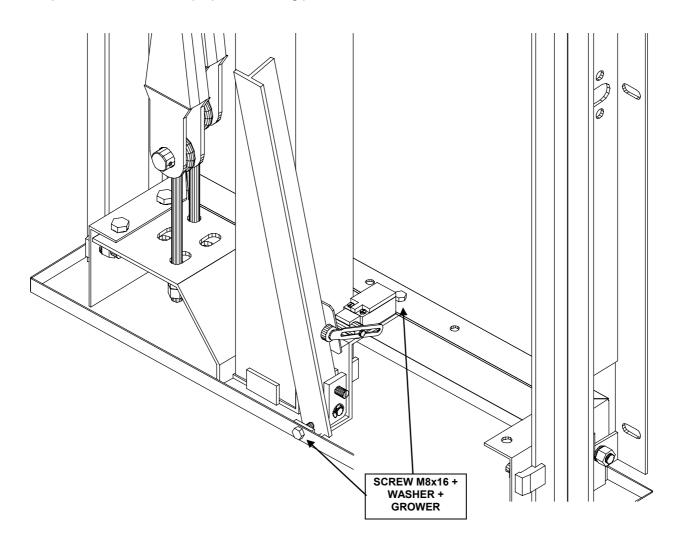


3. The diverter pulley frame guides have to be supported by a specific starting bracket, with a side for supporting the guides and a spacer.



STRUCTURE AND GUIDES INSTALLATION

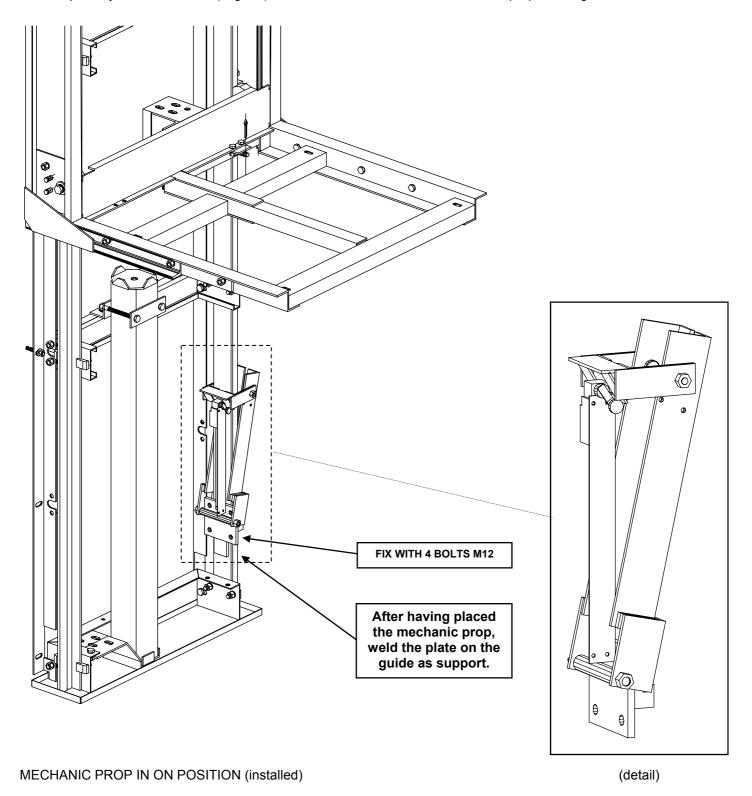
f1) Install the mechanic props as following pictures:



MECHANIC PROP IN ON POSITION (= OPEN SWITCH)

STRUCTURE AND GUIDES INSTALLATION

f2) Only for the Model M (Mignon) with reduced DBG, install the mechanic prop on the guide.

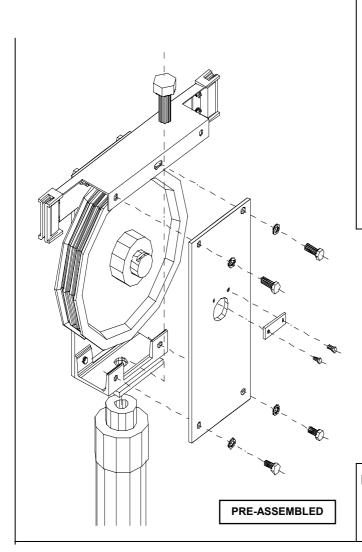


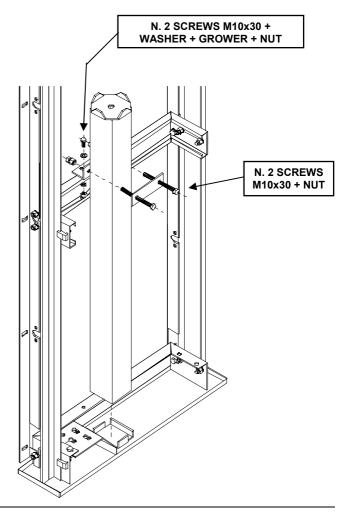
PISTON SUPPORT - PISTON - DIVERTER PULLEY FRAME

a) Place and block the ropes attachments on the pit frame in right or left position. Then place the piston support in the corresponding housing and block it to the guides support cross-bar by means of the specific fixing bracket (not for piston support of 250 mm).

ad

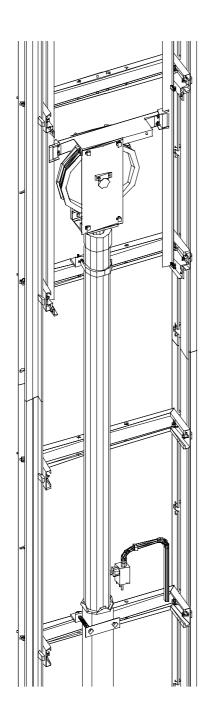
NOT FOR 250 MM **PISTON SUPPORT**





b) Montare l'arcatina sul pistone togliendo la piastra frontale e fissando l'arcatina con l'apposito bullone già fissato sulla sommità dello stelo.

PISTON SUPPORT - PISTON - DIVERTER PULLEY FRAME



- c) Remove the shoes and their support from the diverter pulley frame and install that frame over the piston. Then place the piston over the piston support and block it with the bracket to the corresponding crossbar. The safety valve of the piston must be located in the rope attachments side in order to arrange properly the junction of the oil pipe without interference with the moving components.
- d) Re-insert the frame shoes, tune them and later block them with their supports.

(car)

CHECK CAREFULLY THAT THE PISTON IS PERFECTLY PLUMB.



REMOVING OF THE PISTON PROTECTION LOCKS

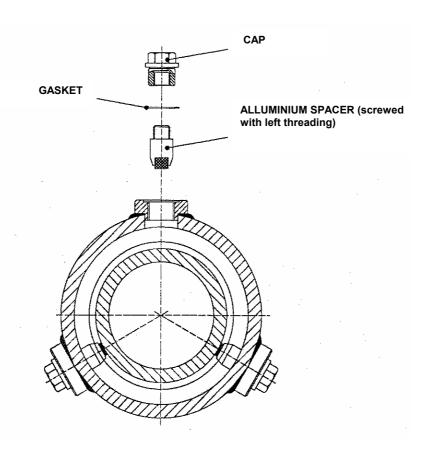


WARNING: WITH ALGI'S PISTONS ONLY

In the case of high travels, in order to prevent damages during the transport, some locks are welded. Those locks are welded to the piston and they have some aluminium spacers (look at the drawing).

The aluminium spacers keep centred the ram with respect to the cylinder. They must be taken out before proceeding with the operation or installing into the piston well.

After removing the spacers, re-insert the caps and tight them strongly.



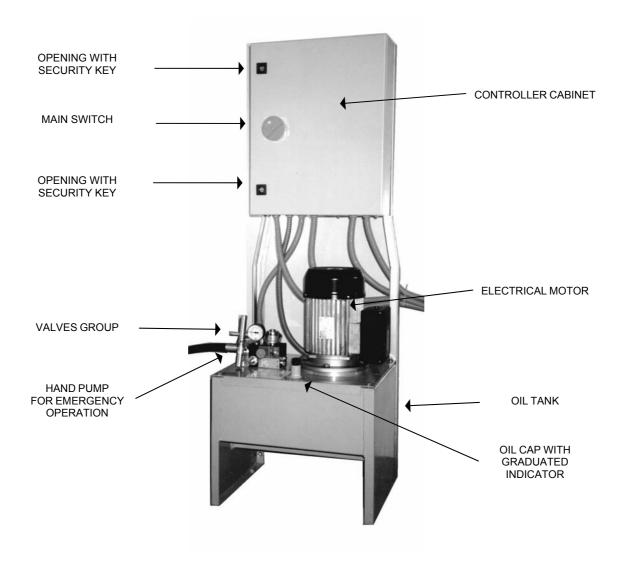


IF YOU DON'T REMOVE THE LOCKS, THEY WILL BE CUT OUT BY THE RAM DURING THE FIRST OPERATION, **CAUSING PERMANENT DAMAGES.**



PUMP UNIT AND PIPES

- a) Place the Pump Unit as per drawing PIT LAY-OUT AND MACHINE ROOM.
- b) Make the electrical connections between the Pump Unit and the Main Circuit Breaker pre-installed by the Client in according to the unit electrical drawing.
- c) Install the oil pipe between the Pump Unit valves and the Piston safety valve.





INSTALLATION SEQUENCE **CONTROLLER**

ONLY FOR CONTROLLER UNIT NOT PRE-ASSEMBLED TOGETHER WITH PUMP UNIT

- a) Place the Controller cabinet as per drawing PIT LAY-OUT AND MACHINE ROOM.
- **b)** Connect the Controller to the Pump Unit in according to the electrical drawing included.



BE SURE THAT THE MOTOR IS TURNING IN THE RIGHT DIRECTION.



PISTON AIR LEAKING

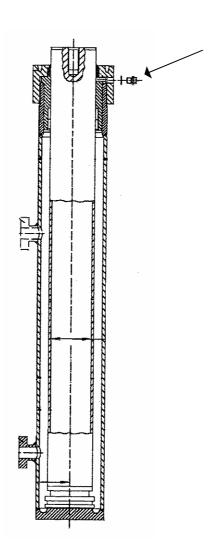
In order to leak the piston, follow the hereby instructions:

Bring a little bit up the piston. Untight the leaking screw pointed out in the drawing; keep it unscrewed until the oil comes out without air bubbles.



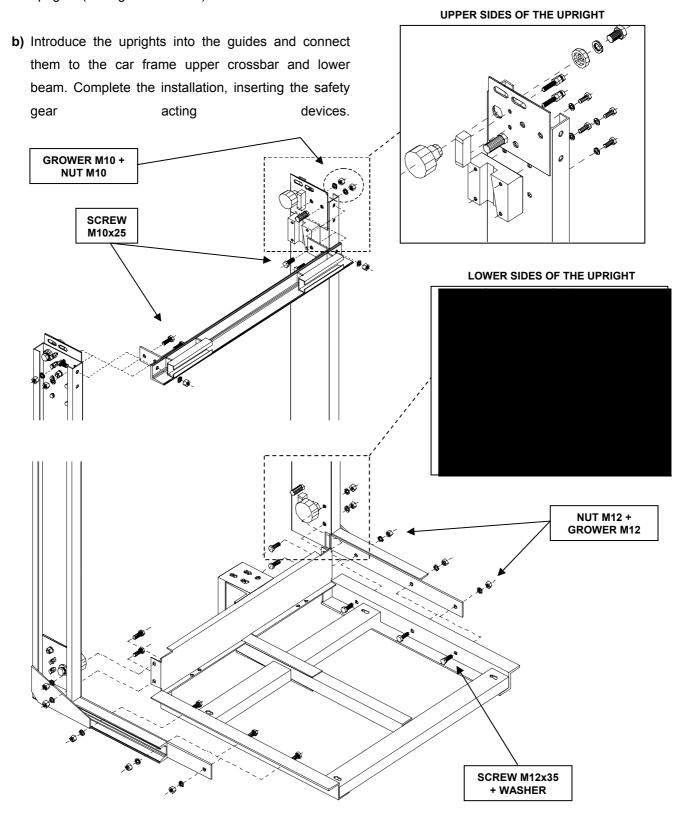
WARNING: THIS OPERATION CAUSES THE FALL OF THE PISTON

You can perform a good result repeating the above operation more times. This operation must be performed the latest time at the end of the installation, before the release of the unit.



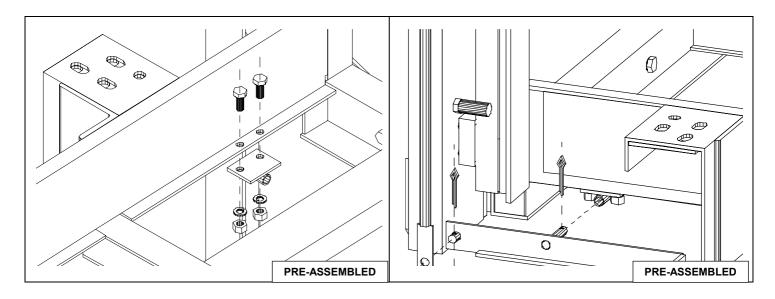
INSTALLATION SEQUENCE **CAR FRAME**

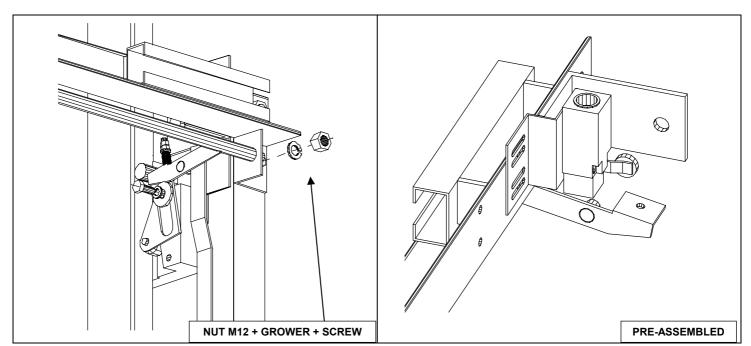
a) Install all the accessories (wheels, shoes, safety gears and pin) on the upper and lower sides of the uprights (see figures in detail).



INSTALLATION SEQUENCE **CAR FRAME**

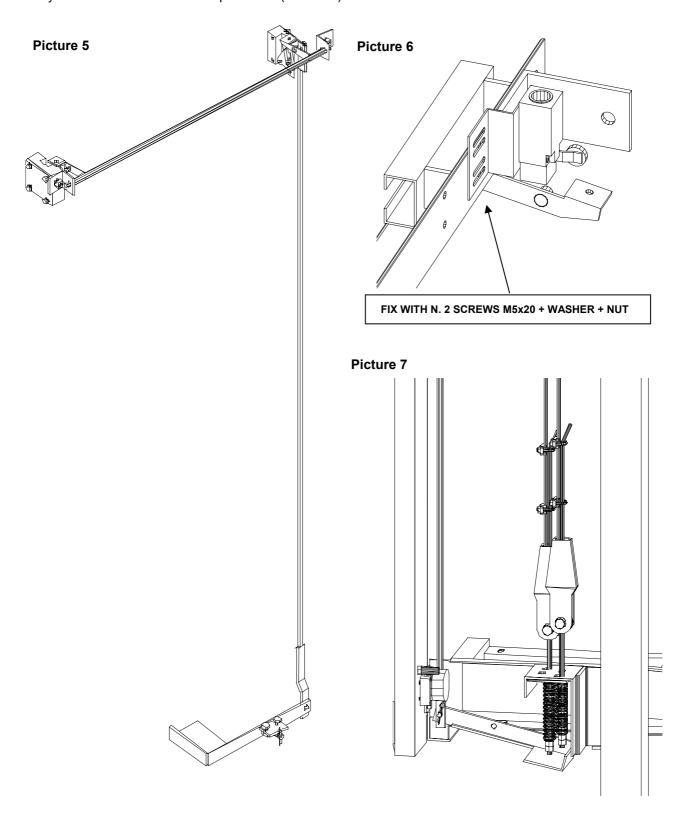
c) Perform the assembling of the safety gear acting devices as listed in following pictures.





INSTALLATION SEQUENCE **CAR FRAME**

d) Control that the safety gear acting devices (Picture 5) are perfectly functioning and that are correctly acting on the guides and the electrical contact (Picture 6) by means of the vertical connection rod, acted by the lever under the slack rope device (Picture 7).



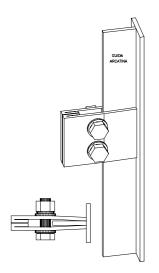
LIFT ATTACHMENT TO THE ROPES

a) By means of the commands on the controller, bring the piston in the top position. We consider the following standard over travel parameters, having pit = 200 mm and overhead = 2400 mm.

> upper cabin over travel = 100 mm (upper piston over travel = 50 mm); lower cabin over travel = 30 mm (lower piston over travel = 15 mm);

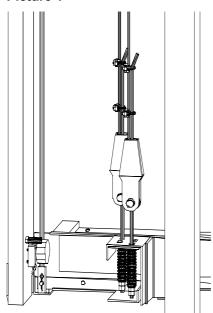
b) Bring the piston down to a hight = travel/2 + 50 + 15; with this piston position, the cabin will be in lower extra travel. At this point fix the ropes attachments keeping in mind the following warnings:

Install the piston fixing bracket (look at the right Picture) on the diverter pulley frame guides, 10 mm under the position of the frame itself, the cabin lower extra-travel. having



WARNINGS:

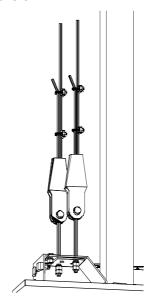
Picture 1



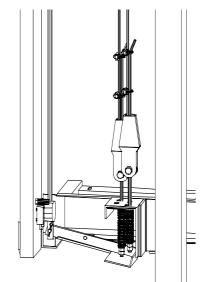
2) Place the attachments on the pit frame, in such a way you can stretch the ropes with the specific bolts (Picture 3)

1. Working on the specific bolts, place the ropes attachments (side car frame) in such a way they operate correctly on the safety gear acting lever (Picture 2, lever ON).

Picture 3



Picture 2

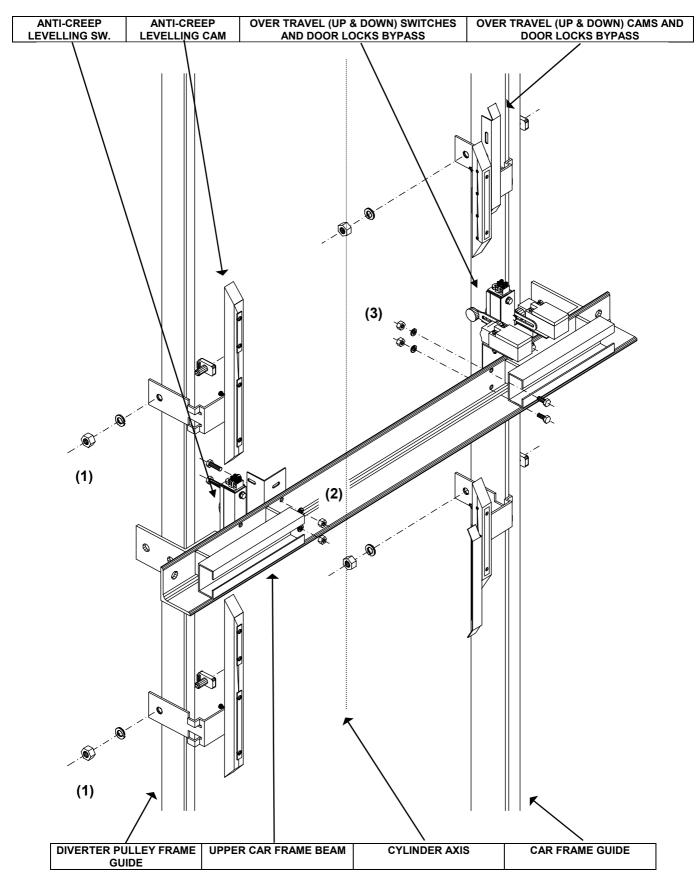


REMARK:

in case of pit greater than 200 mm and overhead greater than 2400 mm, in order to determinate the cabin position in lower extra travel bring down the piston to the height:

(travel + upper extra travel + lower extra travel) / 2

ELECTRICAL SHAFT COMPONENTS FOR 2 STOPS

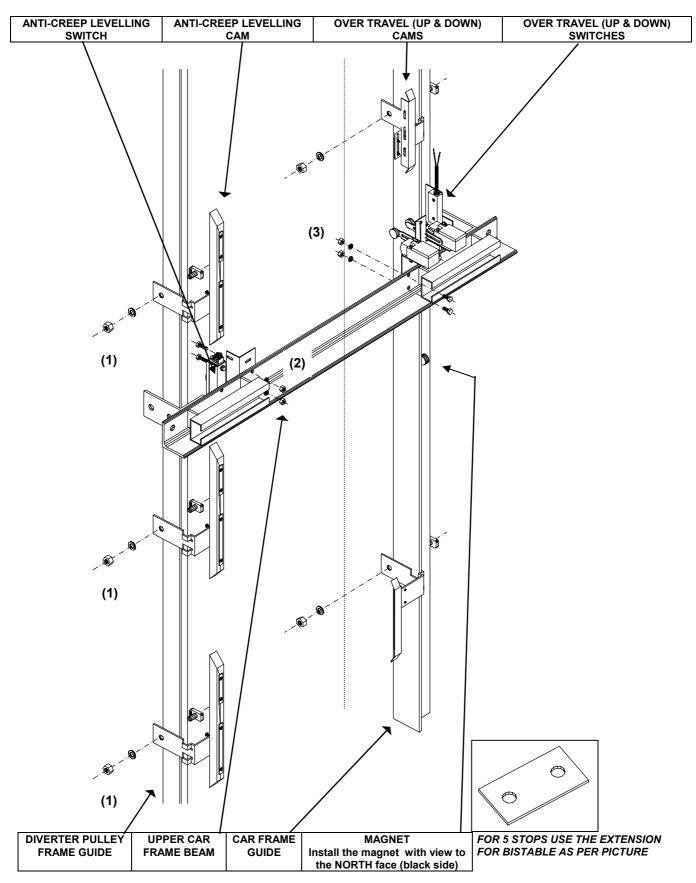


(1) BOLT M10 + GROWER + NUT

(2) SCREWS M5 + NUT

(3) SCREW M5 + GROWER + NUT

ELECTRICAL SHAFT COMPONENTS FOR 3 - 4 - 5 STOPS

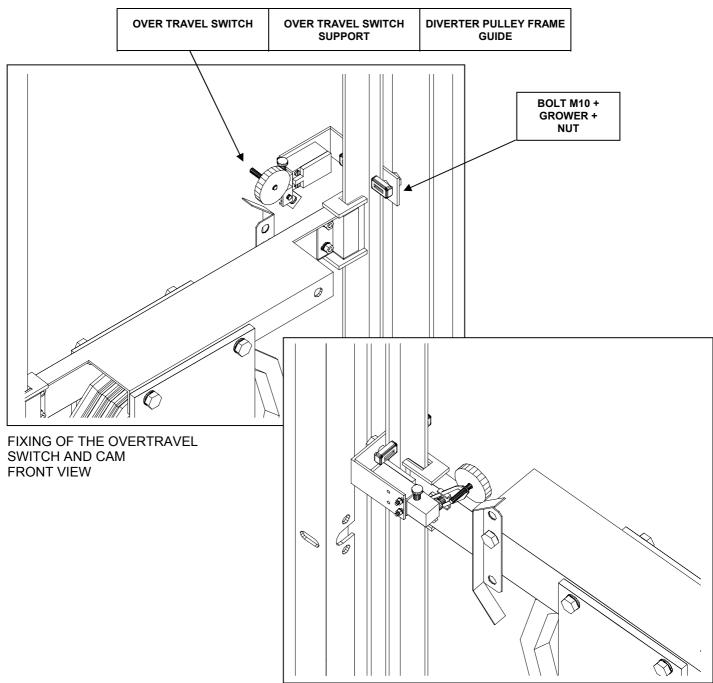


(1) BOLT M10 + GROWER + NUT

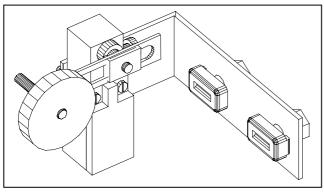
(2) SCREWS M5 + NUT

(3) SCREW M5 + GROWER + NUT

OVER TRAVEL SET



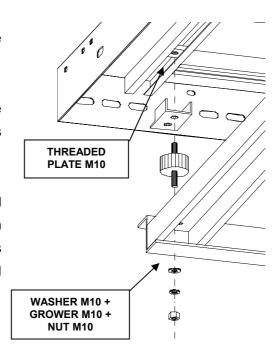


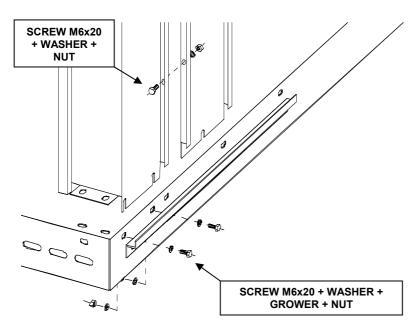


DETAIL OF THE OVERTRAVEL SWITCH FIXING FOR CAR FRAME WITH REDUCED DBG

CABIN

- a) Fix the specific "L" supports on the buffers and place them in the slots of the car frame beam.
- b) Lean and fix the cabin ground on the car frame beams, inserting the "C-E" ground reinforcements into the "L" buffers supports.
- c) Take care to tighten the fixing car frame ground bolts after you have placed correctly the cabin ground with respect to the landing doors (the slots and the buffer supports leave a clearance of around 2 cm).

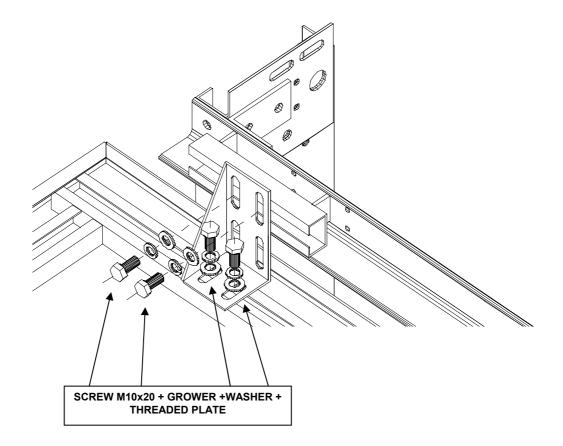




d) Place the "Z" profiles on the boundary of the cabin ground, without tightening the bolts; insert the cabin walls between those profiles and the cabin ground, paying attention that the walls open slots and the bolts on the ground are coincident. Then interfix the cabin walls by means of 2 bolts.

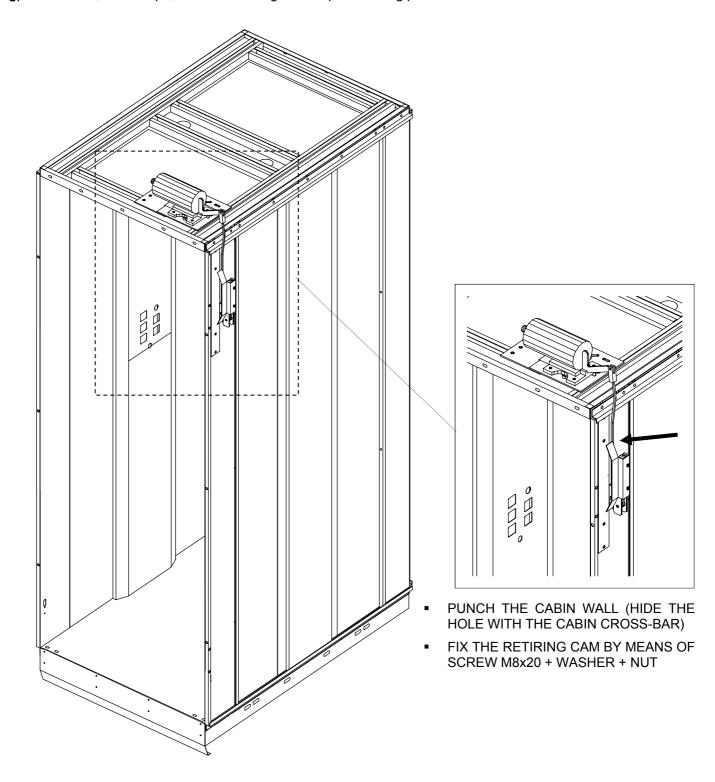
INSTALLATION SEQUENCE **CABIN**

- e) Proceeding in the same way used for the ground, insert the cabin ceiling. Fix all the bolts, taking care that the cabin elements are at right angles.
- f) Then fix the cabin to the upper car frame crossbar by means of the specific brackets.



CABIN

g) In case of 3, 4 o 5 stops, install the retiring cam as per following picture:





FIX THE ELECTROMAGNET AND THE CAM BY MEANS OF THE SCREWS ALREADY PRE-MOUNTED

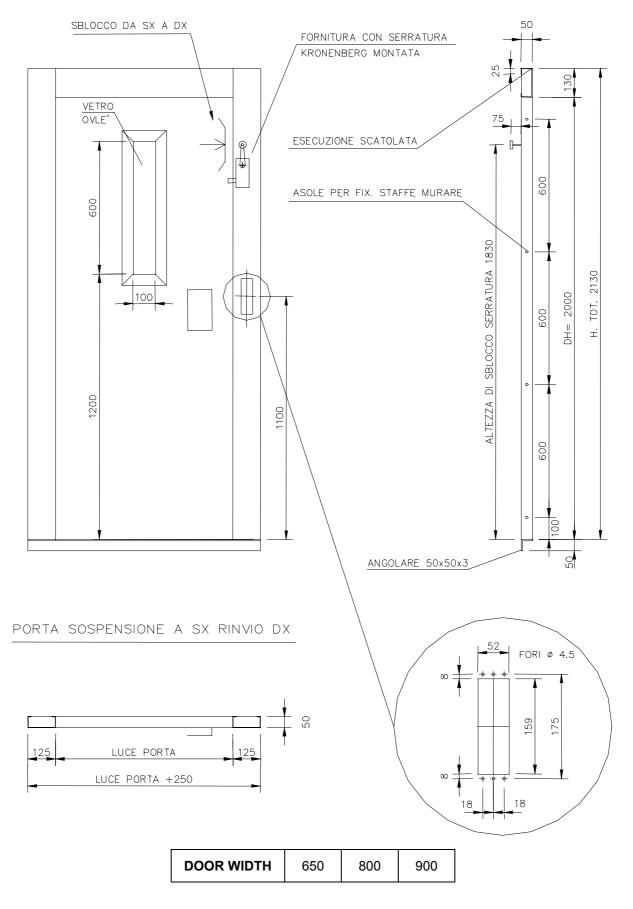
TRAVELLING CABLE AND CABIN'S ELECTRICAL EQUIPMENT

- a) Place the cables as per following tables.
- b) Connect the travelling cable and the other cables as per the pointed out labelling.

2 STOPS INSTALLATIONS							
FLOOR	PUSH BUTTONS	LANDING DOOR LOCK	LANDING DOOR CLOSING	BY PASS	ANTI-CREEP LEVELLING CAM		
2	PE-1-13-P2-LO 2-7-8		5A-6	8	20-30		
1	PE-1-13-P1-LO	2-6-7	5-5A	6	20-30		
OVER	TRAVEL SWITCH	AL	T IN PIT	CAR FRAME			
2A-3		2-2A		3-4			
	CONTROLLER TERMINALS						
PE 1 2 2A 3 4 5		678911	13 20 30 2A 4	A AL AL1 P1 P2 LO LO1			
TRAVELLING CABLE							
	PE 1 2 .	3 4 5 6 7	9 11 4A AL	AL1 P1	P2 LO/1		

3 - 4 - 5 STOPS INSTALLATIONS							
FLOOR	PUSH BUTTONS	LANDING DOOR LOCK	LANDING DOOR CLOSING	ANTI-CREEP LEVELLING CAM			
5	PE-1-13-P5-LO	2-6D-8	5D-6	20-30			
4	PE-1-13-P4-LO	2-6C-6D	5C-5D	20-30			
3	PE-1-13-P3-LO	2-6B-6C	5B-5C	20-30			
2	PE-1-13-P2-LO	2-6A-6B	5A-5B	20-30			
1	PE-1-13-P1-LO	2-6-6A	5-5A	20-30			
OVER	TRAVEL SWITCH	CAR FRAME					
	2A-3		2-2A	3-4			
		CONT	ROLLER TERMINALS				
-PR +PR PE 1 2 2A 3 4 5 6 8 9 11 13 20 30 2A 4A							
AL AL1 P1 P2 P3 P4 P5 LO LO/1							
TRAVELLING CABLE							
-PR +PR PE 1 2 3 4 5 6 9 11 4A AL AL1 P1 P2 P3 P4 P5 LO/1							

LANDING DOORS



GENERAL CHECKS AND TESTS ON THE SAFETY DEVICES

Before the release of the lift, perform the following checks:

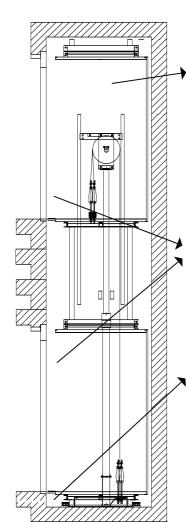
- f) Check the correspondences to the reference normatives
- g) Check that the documentation is exhaustive and that the machine and the data reported into the certificates are corresponding to the lift features (if required)
- h) Perform checks on:
 - 1. landing door locks and retiring cam;
 - 2. safety electrical devices;
 - 3. suspension and attachments devices;
 - 4. cabin safety gear and levers set with cabin in down direction loaded with a 125% of the nominal load.
 - 5. free spaces in proximity to the entrances for all the cabin travel length;
 - 6. keeping of speed during the cabin running;
 - measurement of the isolation resistance of different circuits; 7.
 - 8. check on grounding of all the devices that can be under voltage accidentally;
 - 9. alarm device (if present);
 - 10. mechanical pit props.
- **d)** Check the lift hydraulic components, particularly:
 - 1. piston travel limit;
 - 2. max static pressure;
 - 3. valve group.
- e) Check that the plates are installed as per our instructions.



KEEP IN WELL CONDITION THE PRESENT SHEET FOR FUTURE REFERENCES.



WARNING AND INSTRUCTION PLATES



> PLATES ON THE CABIN (min. 10 mm):

- MAX RATED LOAD (IN KG), NUNMBER OF PASSEGGERS
- NAME OF MANUFACTURER, N. OF SERIE, INSTALLATION YEAR
- ALARM BUTTON (IEC 417:1973, NO. 5013), YELLOW COLOUR
- EMERGENCY STOP BUTTON, RED COLOUR ("STOP")

PLATES ON EACH LANDING (min. 50 mm):

DISABLE PEOPLE SYMBOL (ISO 7000:1989, NO. 0100)

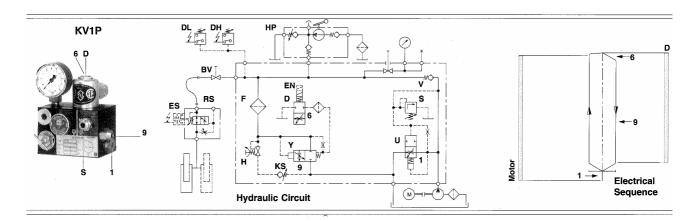
PLATES IN PIT

- CUT OFF THE MAIN SWITCH BEFORE ENTERING THE PIT
- INSTRUCTIONS FOR CORRECT POSITIONING OF THE PIT PROPS.

APPLY THE PLATE WITH THE CE LOGO IN WELL VISIBLE POSITION ON THE CONTROLLER

PLATES IN MACHINE ROOM					
DESCRIPTION					
DANGER –MACHIN ROOM – Entrance prohibited to not authorised persons					
Step by step instructions for the hand emergency operation					
DANGER – Down Emergency valve					
Cut off the power supply only when the platform is at the lowest level					
Alarm of the lifting platform					

HYDRAULIC PUMP "BLAIN KV1P"



LEGENDA

6	Down acceleration	DH	Pressure switch (optional)
D	Coil (stop in down direction)	F	Main filter
9	Down speed	Н	Manual lowering
S	"Relief" valve	HP	Hand pump
1	Bypass	KS	Slack rope valve
ES	Pipes rupture valve and switch (optional)	EN	Coil for emergency return (optional)
RS	Pipes rupture valve (optional)	Υ	Lowering valve
BV	Ball cock	U	Bypass valve
DL	Pressure switch (optional)	V	"Check" valve

The valves are already tested and tuned. Check the electrical operation before changing the regulations. Check that the coil is correctly powered.

FACTORY SETTING: 1 and 9 smooth regolation respect their regolation nut.

REGULATION - UP DIRECTION

(1) Bypass - UP: when the pump turns on, the cabin at zero load should stay stopped at the floor for around 1 sec before starting up. This delay depends on the regulation of the screw 1. If you turn in right direction, you have a shorter delay; in left direction, a longer delay.

Stopping in UP direction: at the floor level, the pump motor stops. The stopping should be not smooth, depending on the load or too high speed. No regulations are possible.

(S) "Relief" Valve: if you turn it in right direction, you increase the maximum pressure; in left direction, you decrease the maximum pressure.

REGULATION - DOWN DIRECTION

(6) Acceleration in down direction: the coil (D) has to be powered. The cabin accelerates in down direction depending on the regulation of the screw (6). If you turn it in right direction, you have a slow acceleration; in left direction, a quicker acceleration.

Pre-regulation: the starting condition is screw (6) completely tightened to right and coil powered. Unscrew slowly (6) until the cabin accelerates in down direction.

- (9) Speed in down direction: if you turn it in right direction, you have a slower speed; in left direction a quicker speed.
- Stopping in DOWN direction: when the cabin reaches the floor, the power to the coil is cut off. No regulations are required.
- (H) Lowering by hand: if you turn it in left direction, you lower the cabin. When you release it, automatically the cabin stops.

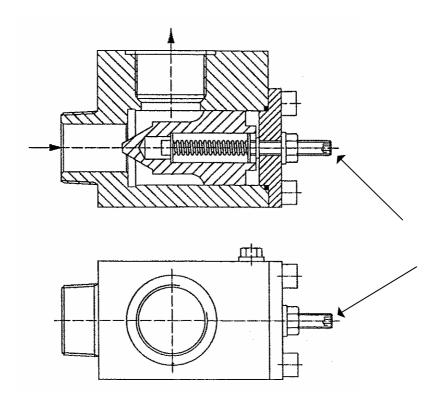
SAFETY VALVE

REGULATION OF VALVE

Bring the cabin at the top floor with full load. With cabin travelling down in high speed, screw the regulation screw (shown in drawing, two views) of the safety valve until the cabin stop. Unscrew now the regulation screw of ¼ round and tighten the specific block nut on the screw.

TEST OF VALVE

Bring the cabin at the top floor, then - with cabin stopped - increase to a maximum the down speed, working on the down regulation screw on the pump unit. When you start the cabin in down direction, the valve must block.





AFTER HAVING FINISHED THE TEST OF VALVE PUT BACK THE DOWN SPEED **REGULATION TO THE STARTING POSITION**

LEGEND OF ELECTRICAL DRAWINGS

LABEL	DESCRIPTION
AL	Alarm bell 12 Vac
AV	Landing door closing switch
BT1-BT2	Pb battery 12V – 6A/h
BV	Landing door locking switch
BYPASS BV	Bridging switch – by-pass of landing door locking
BC	Battery charger 27.2V 350mA – board 210BC
DC1	Auxiliary relay – down direction
DC2	Auxiliary relay – up direction
DP	Anti-creep levelling bridging switch
E1 – E2	Landing call buttons
EMP	Cam electromagnet
EVD	24 Vdc electro-valve – down direction
F1	Safety circuit protection fuse 5x20 3.15A
F2	Alarm protection fuse 5x20 3.15A
F3	Battery protection fuse 5x20 3.15A
F4	Transformer protection fuse 5x20 630mA
F5	Transformer main coil fuse T2 3.15A
F6	Transformer secondary coil fuse T2 55V 3/6.3A
H1 - H1	Cabin lighting lamp - 12V 10W
H2 - 3	"Present" lamp
IMT	Motor protection magnetic/thermic switch (1 phase)
IG	General breaker for the controller cabinet door
IPS/IPD	Bistable switches for intermediate floors (floor inverter)
K1	Relay 24Vdc – down direction
K2	Relay 24Vdc – up direction
K3	Main relay 24 Vdc
LO	Lamp/relay of busy cabin
LO/1	Timed light relay
n1	Safety circuit rectifier
n1/1	Cam rectifier
n2	Electro-valve no-noise DC filter (R 560 Ω Diode 1N4007)
P1 - P2	Cabin call buttons
PA	Cabin alarm button
RCF	Sill control light ray
RL	Control relay for power OFF
SW1	Emergency operation interruption switch
SW2	Over travel switch
SW3	Car frame switch
SW4	Stop button in cabin
SW5	Key switch in cabin
SW6	Key switch at landing station (if required)
SW7	Key switch at landing station (if required)
SW8	Stopping limit switch – down direction
SW9	Stopping limit switch – up direction
SW11	ALT in pit
T	Excitation delayed relay
T1	Main transformer 230/398-24 75VA
T2	Transformer for retiring cam 230/398 0/55/75 400VA
WDR	Rectifier protection varistor

LEGEND OF ELECTRICAL DRAWINGS

LABEL	DESCRIPTION
AL	Alarm bell 12 Vac
AV	Landing door closing switch
BT1-BT2	Pb battery 12V – 6A/h
BV	Landing door locking switch
BYPASS BV	Bridging switch – by-pass of landing door locking
BC	Battery charger 27.2V 350mA – board 210BC
DC1	Auxiliary relay – down direction
DC2	Auxiliary relay – up direction
DP	Anti-creep levelling bridging switch
E1 – E2	Landing call buttons
EMP	Cam electromagnet
EVD	24 Vdc electro-valve – down direction
F1	Safety circuit protection fuse 5x20 3.15A
F2	Alarm protection fuse 5x20 3.15A
F3	Battery protection fuse 5x20 3.15A
F4	Transformer protection fuse 5x20 630mA
F5	Transformer main coil fuse T2 3.15A
F6	Transformer secondary coil fuse T2 55V 3/6.3A
H1 - H1	Cabin lighting lamp - 12V 10W
H2 - 3	"Present" lamp
IMT	Motor protection magnetic/thermic switch (1 phase)
IG	General breaker for the controller cabinet door
IPS/IPD	Bistable switches for intermediate floors (floor inverter)
K1	Relay 24Vdc – down direction
K2	Relay 24Vdc – up direction
K3	Main relay 24 Vdc
LO	Lamp/relay of busy cabin
LO/1	Timed light relay
n1	Safety circuit rectifier
n1/1	Cam rectifier
n2	Electro-valve no-noise DC filter (R 560 Ω Diode 1N4007)
P1 - P2	Cabin call buttons
PA	Cabin alarm button
RCF	Sill control light ray
RL	Control relay for power OFF
SW1	Emergency operation interruption switch
SW2	Over travel switch
SW3	Car frame switch
SW4	Stop button in cabin
SW5	Key switch in cabin
SW6	Key switch at landing station (if required)
SW7	Key switch at landing station (if required)
SW8	Stopping limit switch – down direction
SW9	Stopping limit switch – up direction
SW11	ALT in pit
T	Excitation delayed relay
T1	Main transformer 230/398-24 75VA
T2	Transformer for retiring cam 230/398 0/55/75 400VA
WDR	Rectifier protection varistor





INSULATION TEST LEVEL

Instruction for perform the insulation test on LEVEL installation equipped with dead man operation, one speed, without dissect or extract any part of the circuit under test.

INSTRUCTION

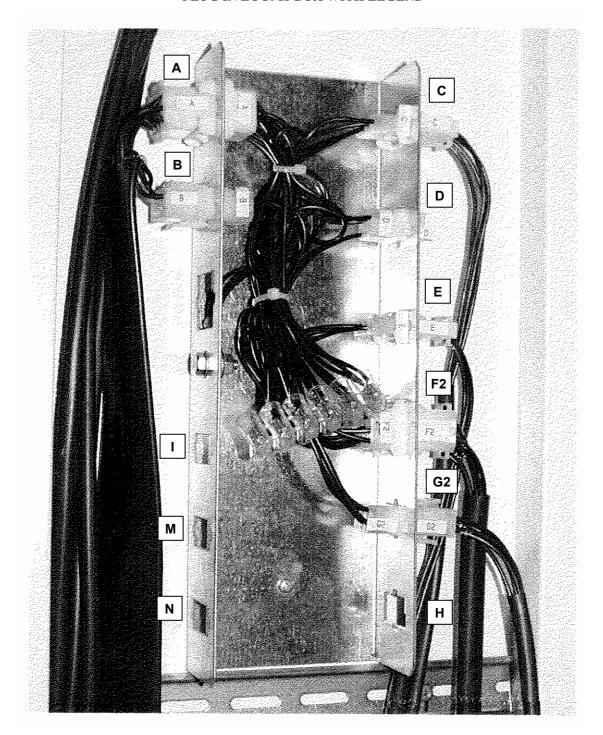
- 1. Stop the car between two level with doors closed
- 2. Switch off (open) the main AC power supply switch
- 3. Disconnect the earth connection from PE connector
- 4. Disconnect all the yellow–green connector from all they connection on the box and on the AC main transformer
- 5. Disconnect the connector from the 201 BC battery charge board

INSULATION TEST

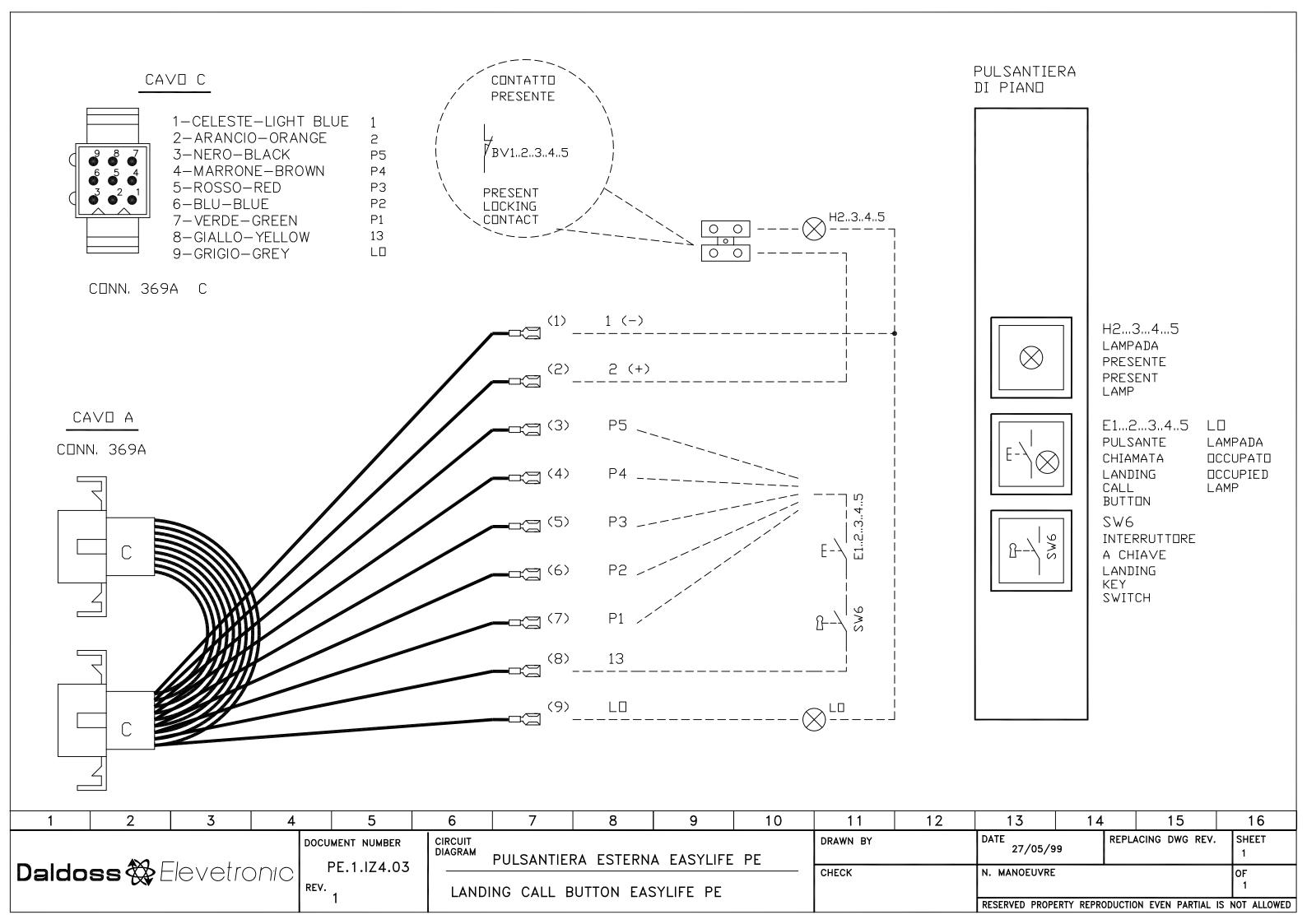
Check with one megaohmeter between earth bar and the following test point

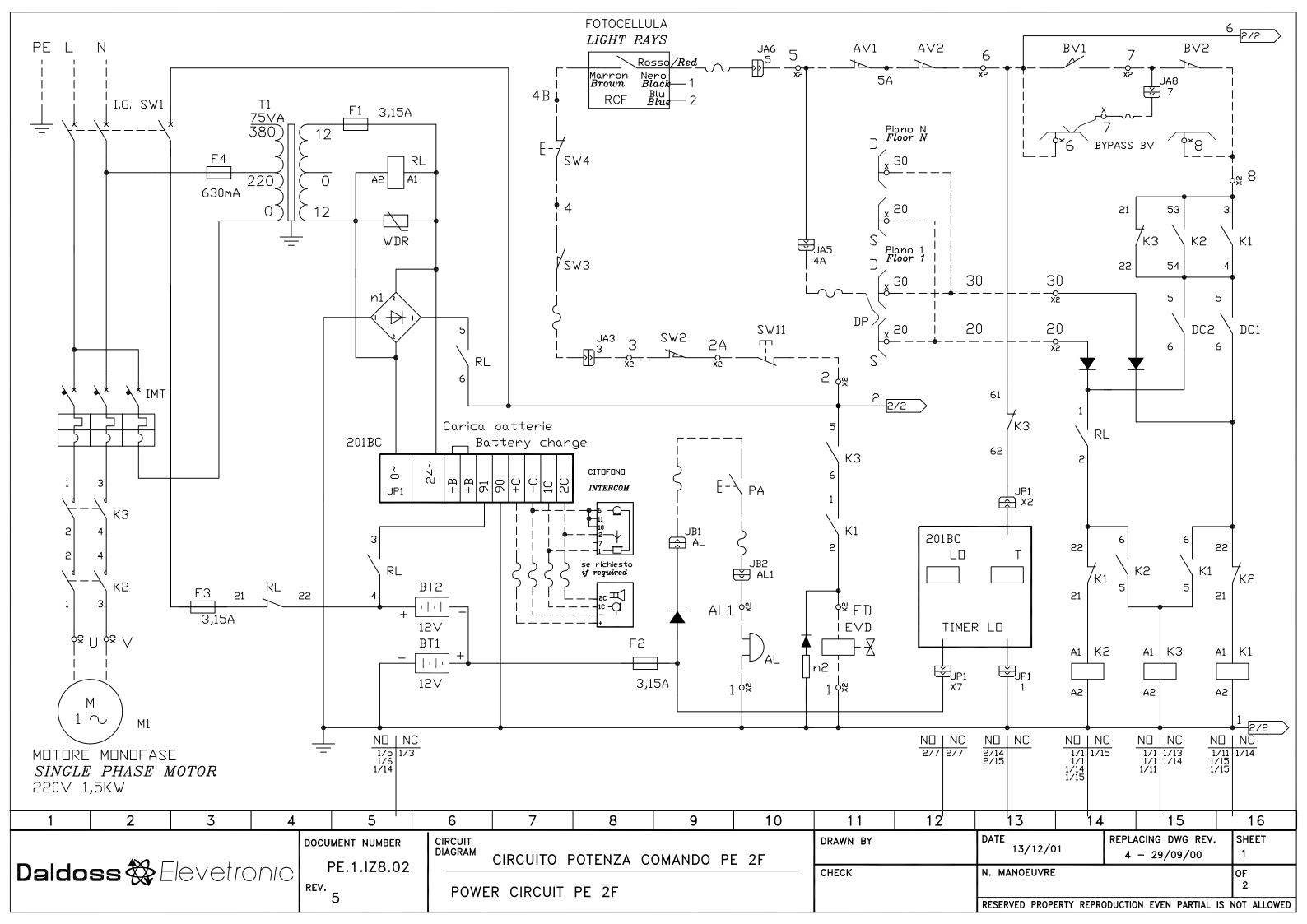
A)	FOR THE AC MAIN POWER SUPPLY	L1	L2	L3	U	V	W			
В)	FOR THE SAFETY CIRCUIT	1	2	4B	5	8	+PR	-PR	LO	LO/1
		9	11	13	P1	P2		ED	20	30
C)	CHECK ALL THE WIRES CONNECTED TO THE TERMINAL BLOCK									

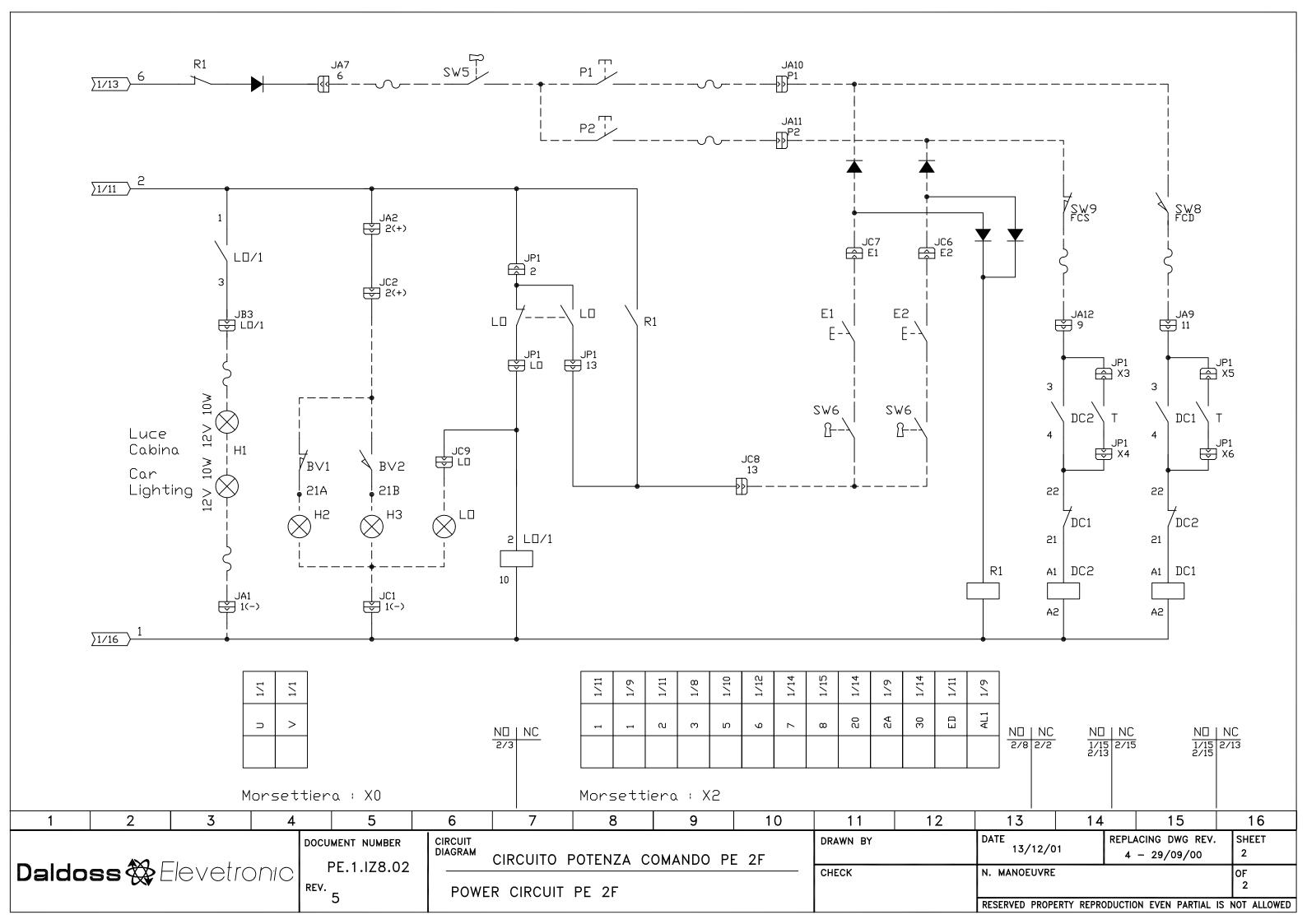
PLUG IN LOOMS BOX WITH LEGEND

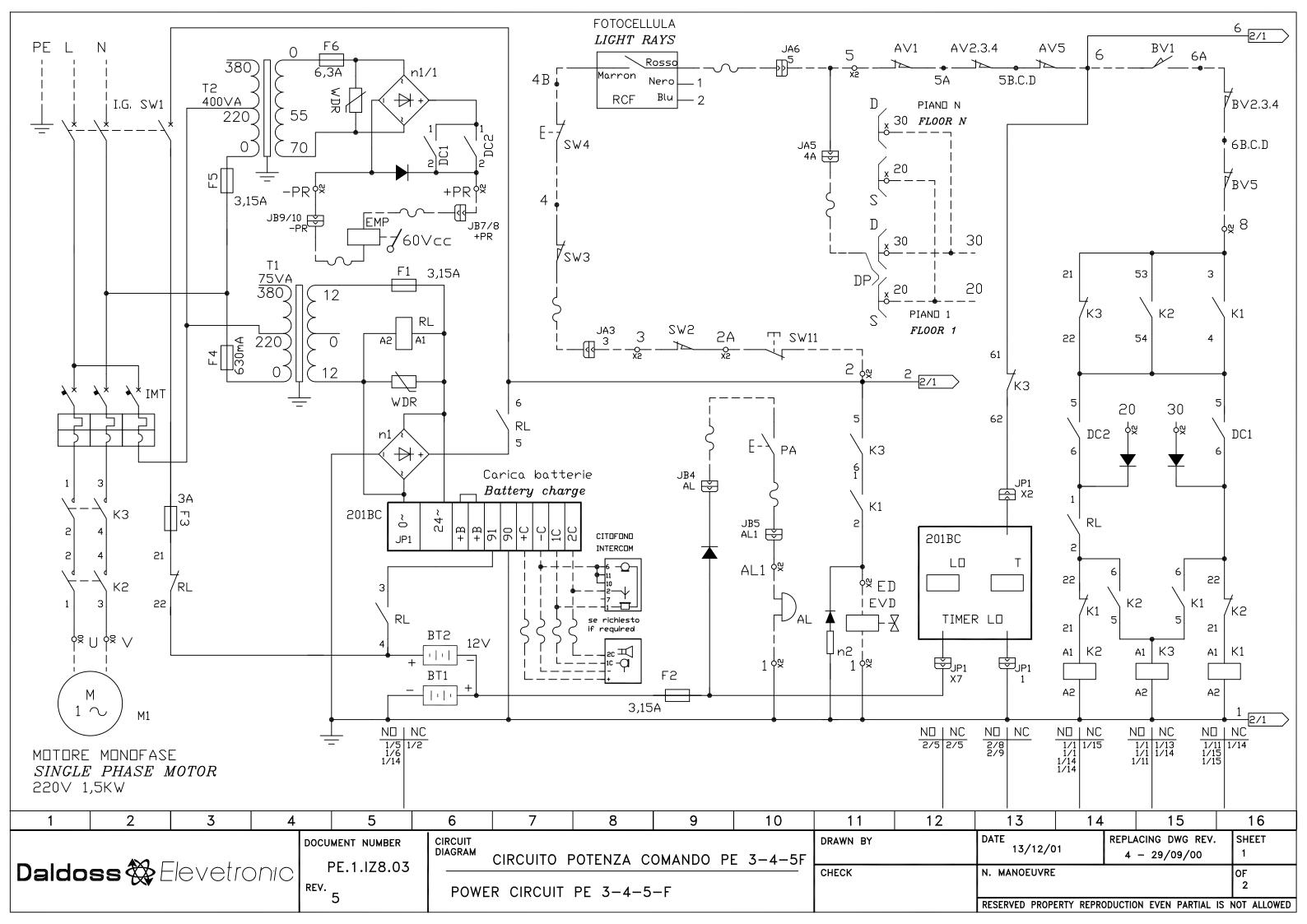


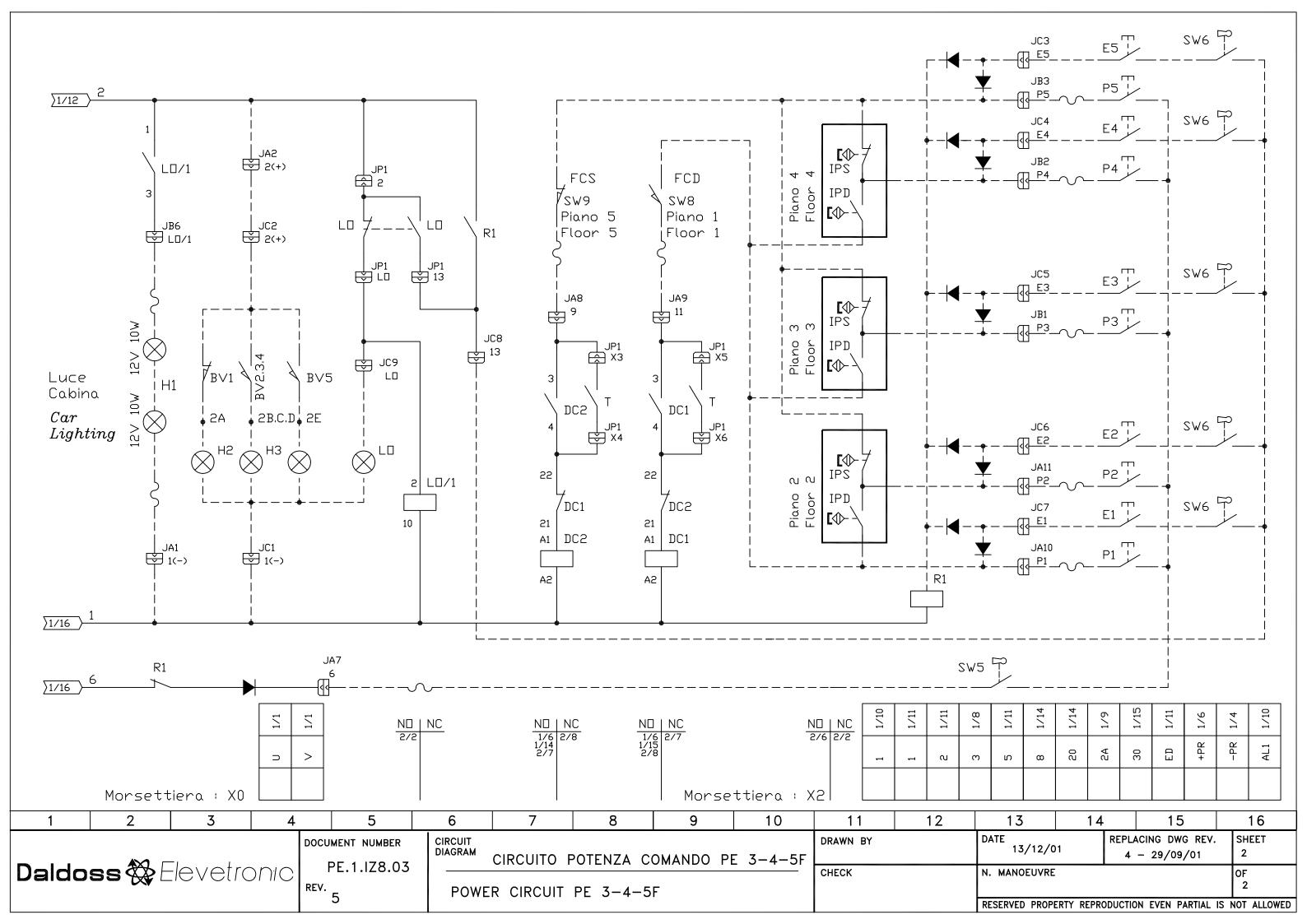
PLUG IN LOOMS TERMINAL LEGEND				
A – B	Travelling cable			
С	Cabin light			
D	Lighray			
E	Frame and levelling contact			
F	Push button			
G	Stopping limit switches (bypass for 2 floors)			
Н	Retiring cam			
I – M – N	Bistable floor switches			

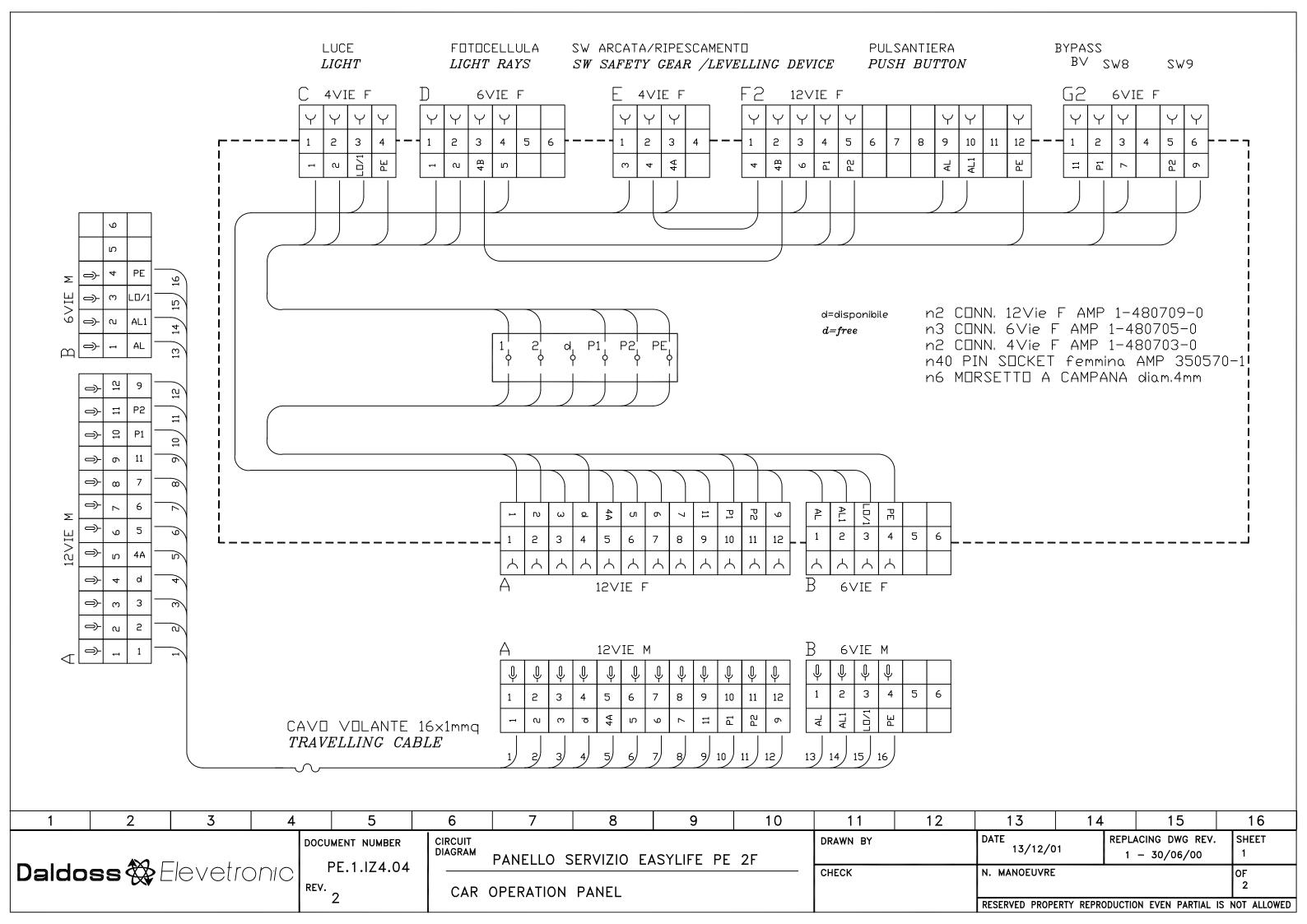


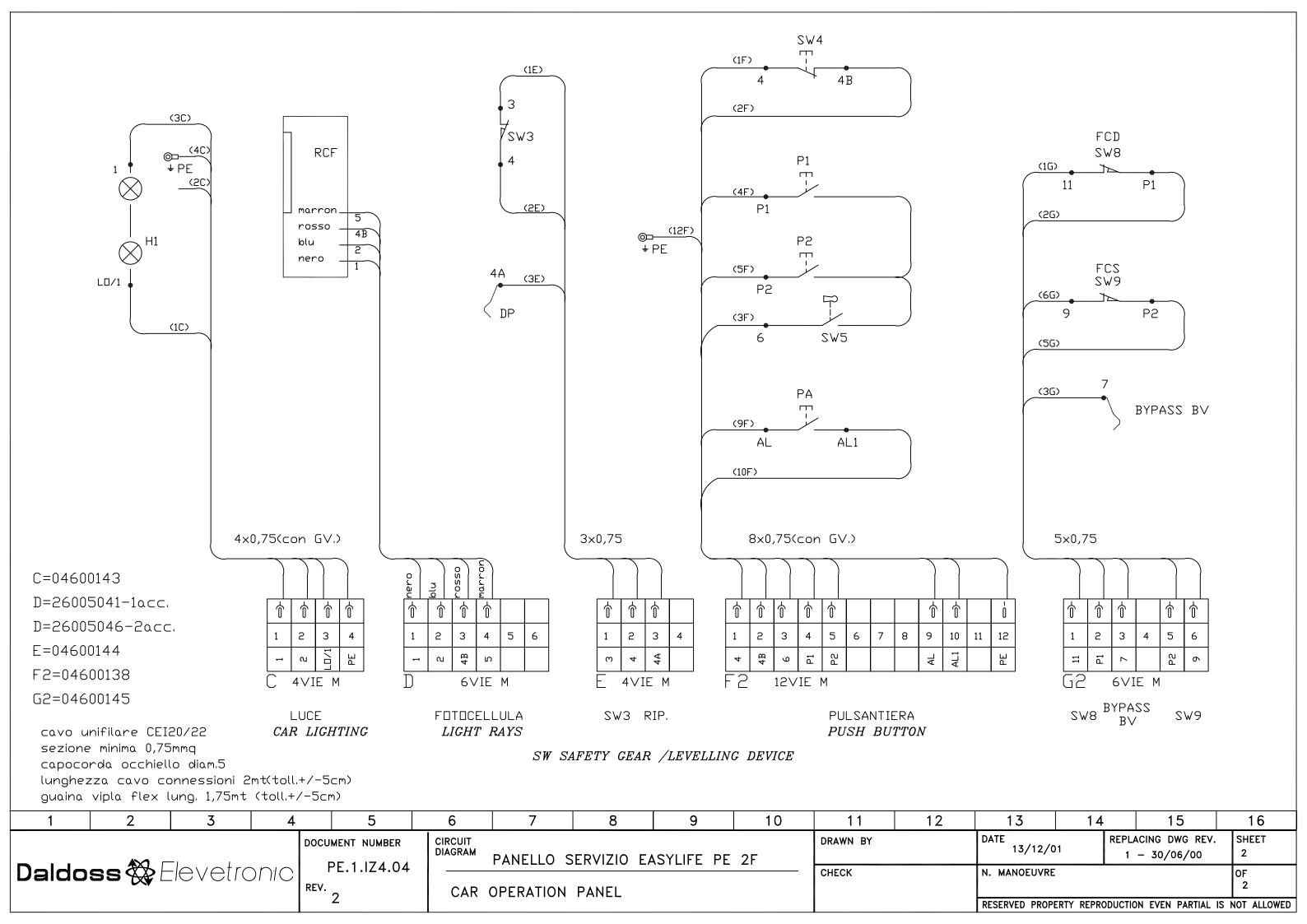


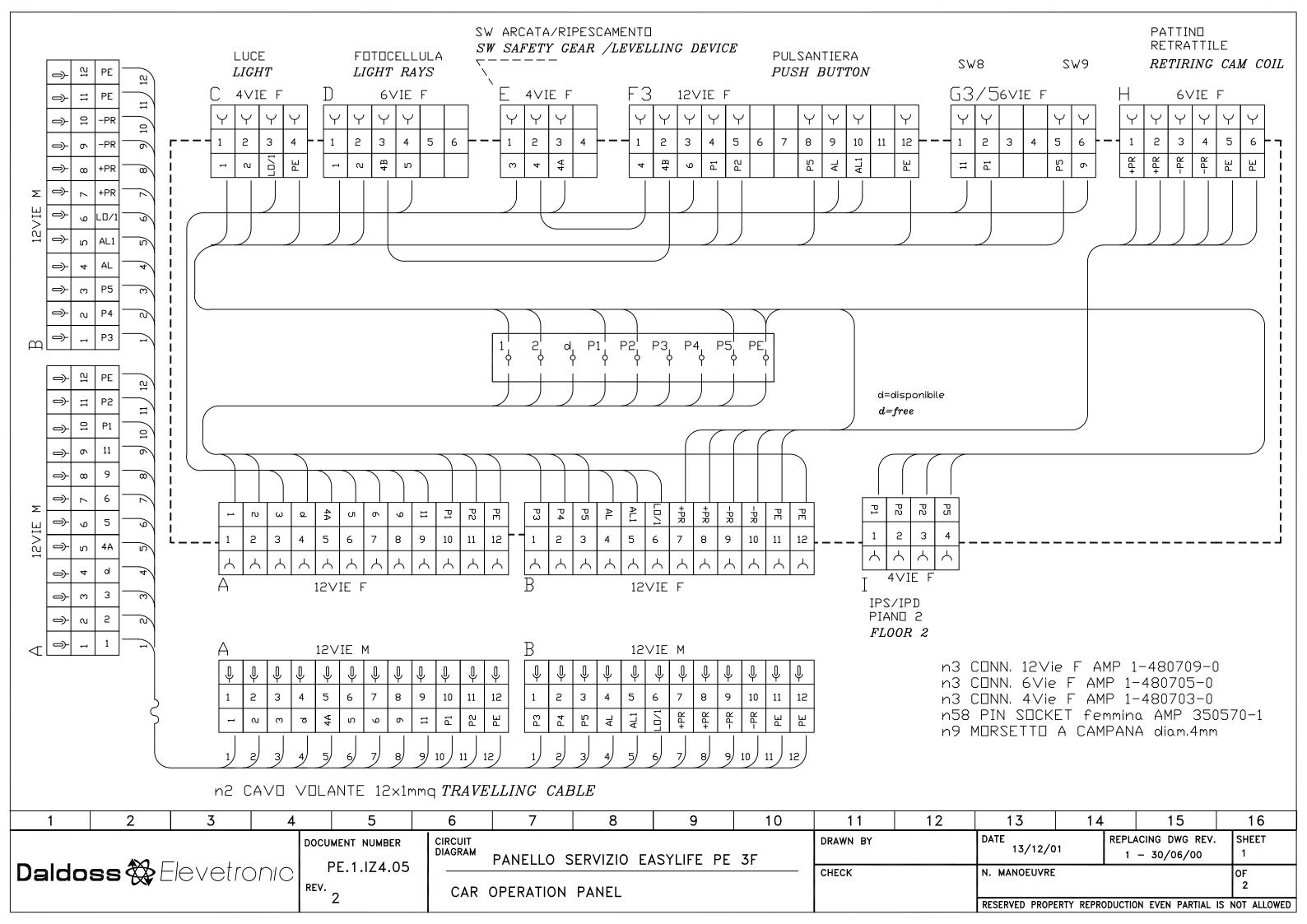


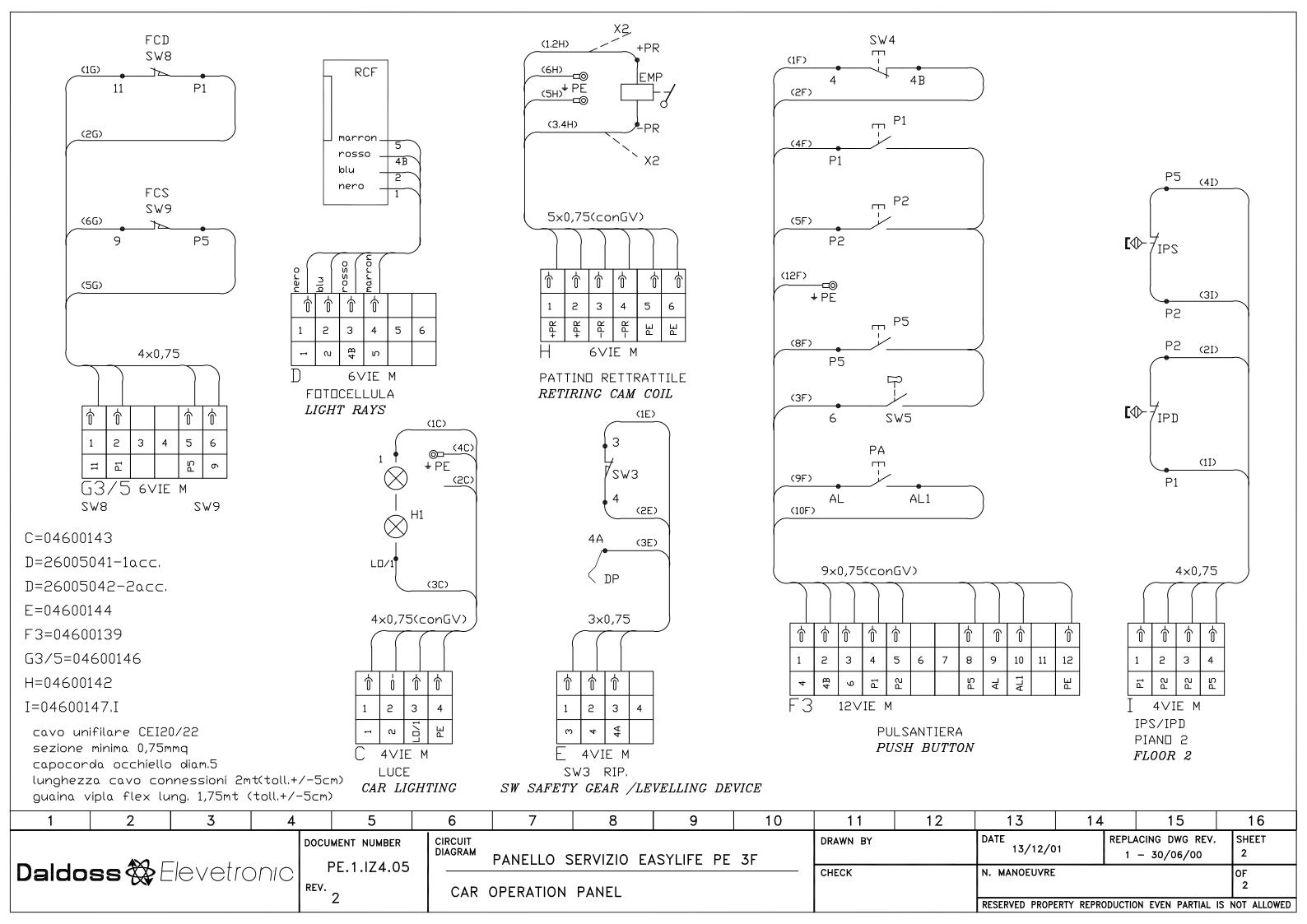


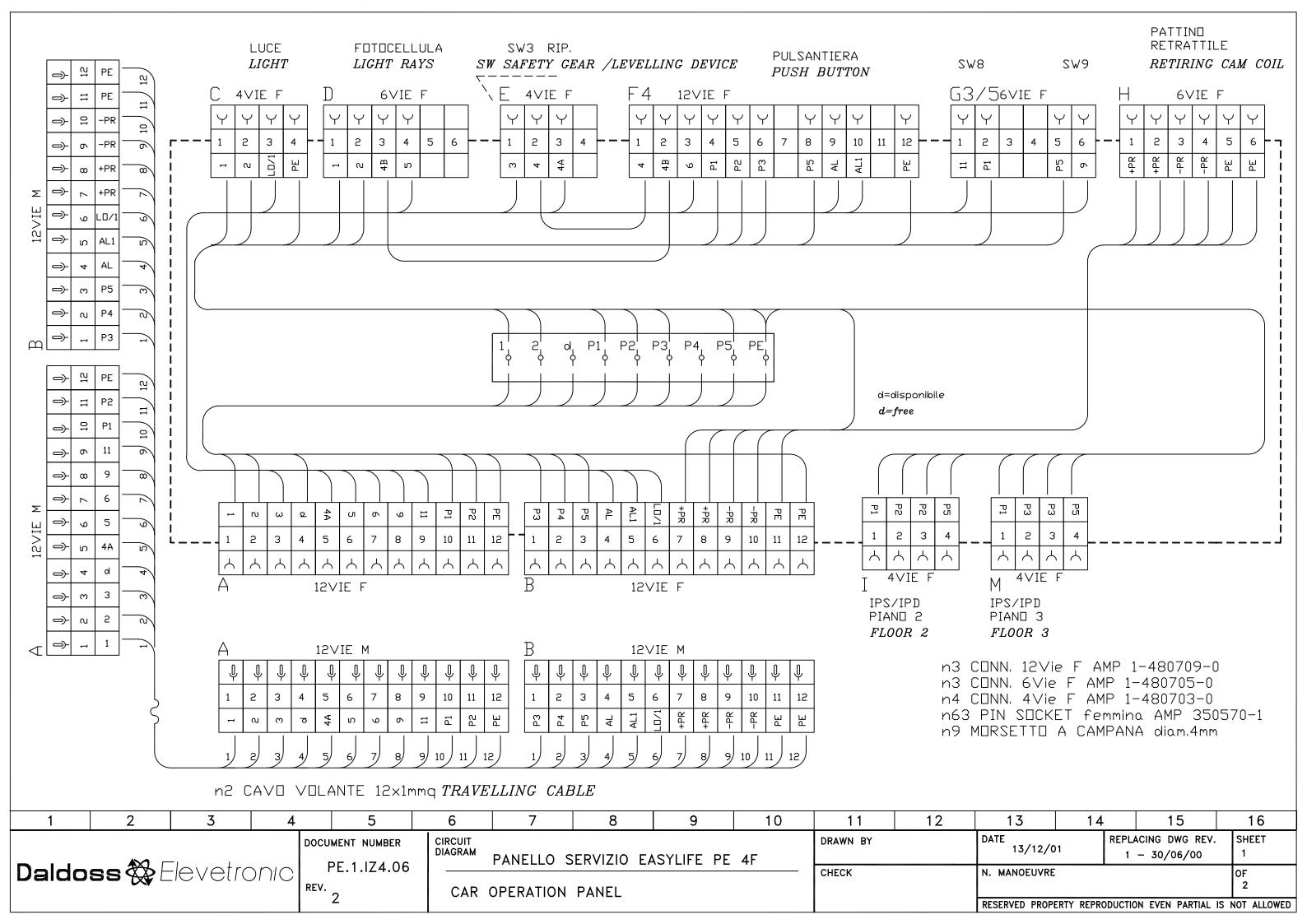


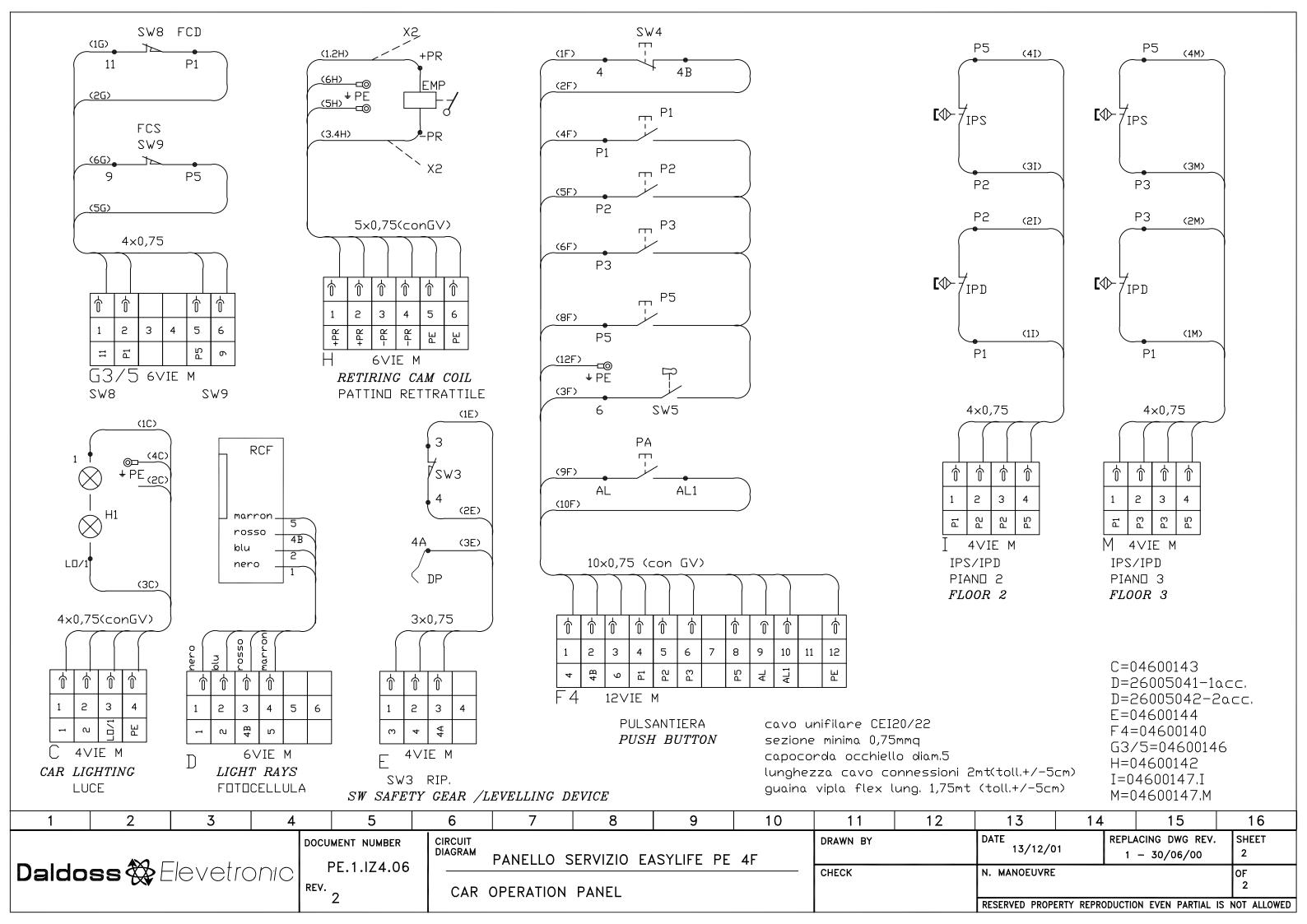


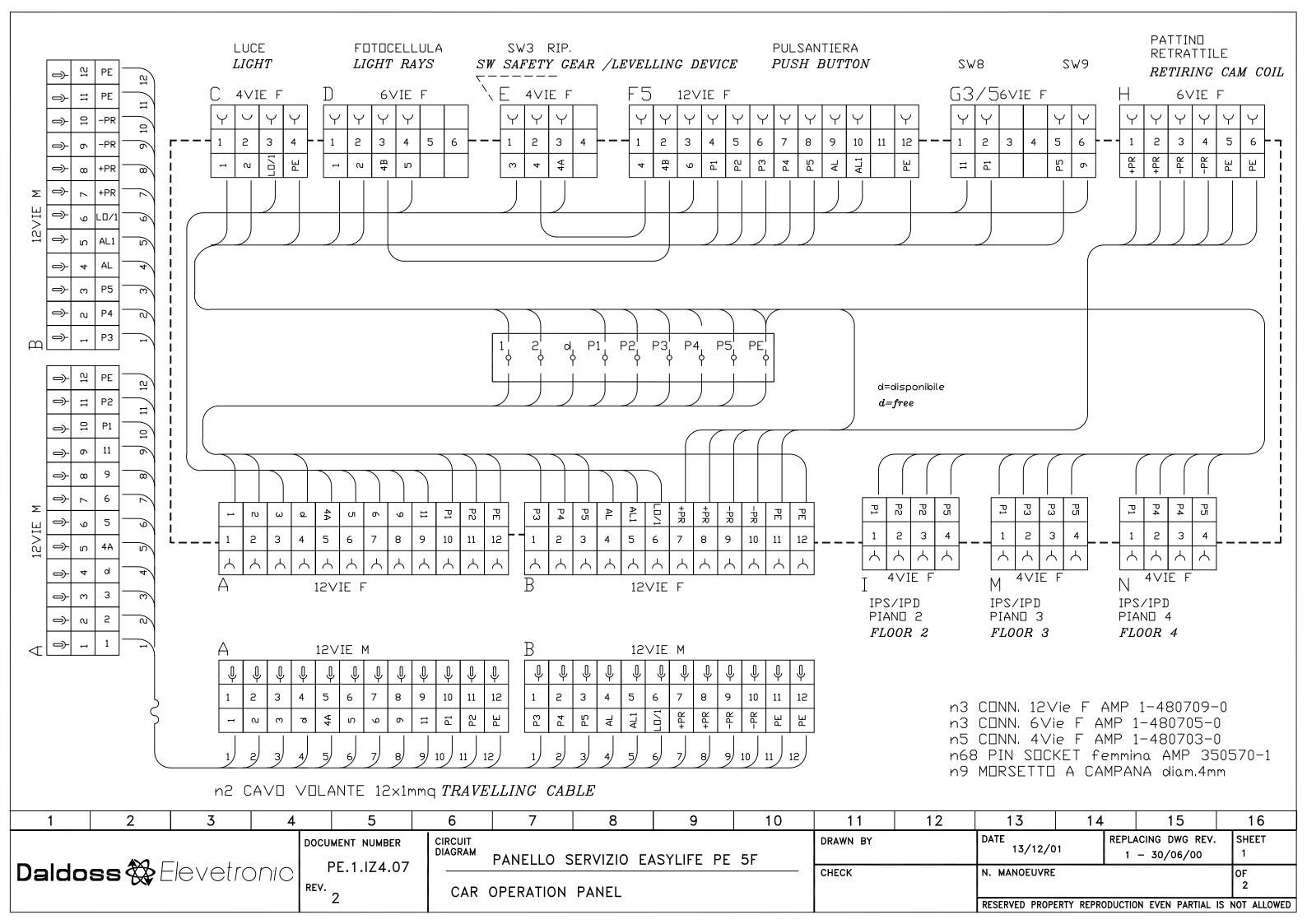


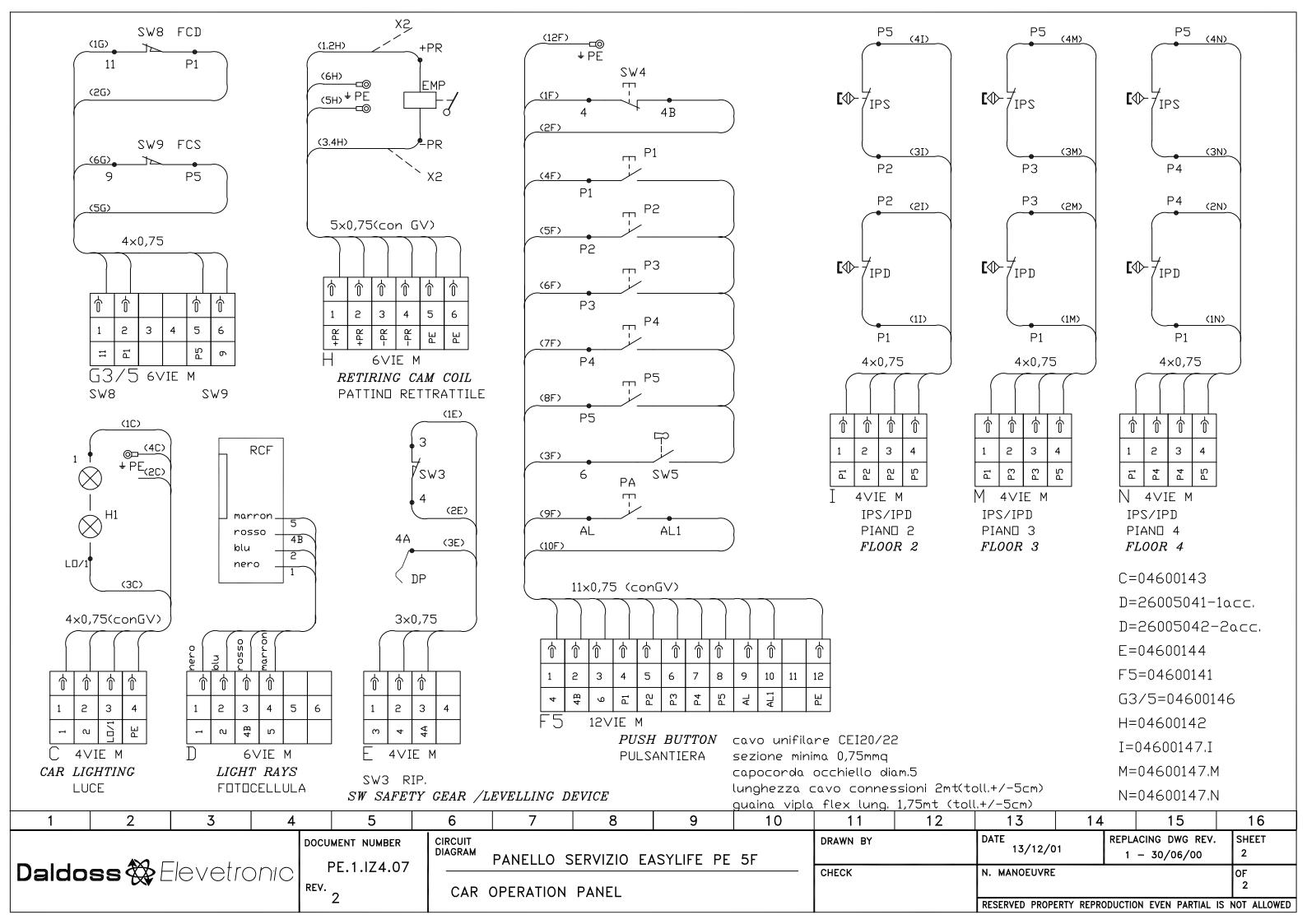
















PRE-COMMISSIONING AT END OF INSTALLATION

PRE-COMMISSIONING FORM						
CUSTOMER	BUILDER	JOB SITE	MODEL/YEAR			
MACHINE ROOM		PIT				
☐ Check on motor		☐ Check on internal pit	areas			
☐ Check on controller		☐ Check on the mechar	nic pit prop			
☐ Check on safety device	ces					
☐ Check on emergency	devices	PLATFORM				
☐ Check on Pump Unit		☐ Check on cabin walls	installation			
☐ Check on oil bathed p	oump	☐ Check on call/send po	ush buttons			
☐ Check on oil pipes		☐ Check on alarm butto	n			
☐ Check on free spaces	\$	☐ Check on emergency	stop button			
☐ Check on alarm device	e (if present)	☐ Check plumbing of pla	atform			
☐ Limit on piston travel		☐ Check on floor levelling	ng			
☐ Max static pressure		☐ Check on emergency	light			
☐ Valve group						
SHAFT		CAR FRAME				
☐ Check on internal sha	aft areas	☐ Check on suspension	and attachment devices			
☐ Check on free spaces on the entrances		☐ Check on safety gear	s and acting devices			
☐ Check on doors insta	llation	☐ Check on slack ropes	contacts			
☐ Check on door locks	operation					
☐ Check on emergency	door switch	MISCELLANEOUS				
☐ Check on emergency	key operation	☐ All the documentation was given				
☐ Check on call push bu	uttons	☐ All the warning/instruction labels are installed				
☐ Check on key switche	es for landing push stations	☐ Verbal instructions for using lift were given				
☐ Check on shaft lightin	g (min. 50 LUX)					
☐ Check on isolation res	sistance of different circuits					
☐ Check on grounding of the be under voltage accider	of all the devices that can ntally					
REMARKS:						
DATE:	FITTER SIGNATU	JRE:				

