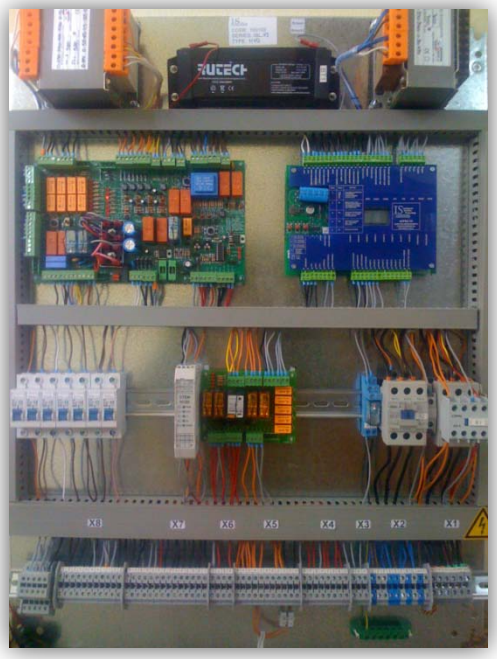
Installation Manual

Lift Controller ISL_V2 Series
by IS technology



VERSION V2
(REV 2.4)

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1. Technical Specification of Lift Controller ISL-V2.

1.1. Technical Features.

Control panel features	• Electrostatic Painted • Protection Class IP-54 • Wall mounting set included • Machine Room Stop Switch, Cabin at floor indication and power switch included	
Dimensions	1.Traction 2.Hydraulic	800 x 700 x 180 mm
	3.INVERTER- VVVF	900 x 750 x 250 mm
Power supply - Power Lines	**400 VAC** (3Ph , PE) - Motor supply **230 VAC** (L, N) – Lightning , Controller supply **230 VAC** (Lu, Nu) – UPS Supply	
Safety circuit voltage	**110 V AC**	
Signals & Indicators electrical ratings	**24 V DC** Peak Max Current **5A** Average Max Current **3A**	
Transformers	• **Power: 520 VA (Main Transformer – Typical)** Primary: 0-230-240-400-410 V AC Secondary A: 0-55-65-115-135V AC (400VA) Secondary B: 0 – 17Vac (20VA) Secondary C: 0 – 15 - 18 - 20Vac (100VA) • **Power: 300 VA (Lightning Transformer for 42Vac Cabin Lights)** Primary: 0-230-240 AC Secondary: 0 - 20 - 42V AC (300VA).	
Main Contactors	Category: AC3	
Battery	12 Volt –2.3 Ah	
Counting Method	Magnetic Switches (Pencil switches) or Hall sensors (Optionally >1.6m/sec)	
No off Stops	**Eight (8)** Collective Down	
Lightning	• Cabin: 42VAC – 300W / 220VAC – 900W • Shaft: 220VAC – 900W	
Cam - Brake Coil (Traction) **Cam - Valves (Hydraulic)**	• **Two Separate rectify circuits** • Voltage ratings: 48 or 110VDC	
Indicators (DISPLAYS)	ABC (Binary coded)	Max Current Ratings: 1A (Per Signal)
Direction Arrows	Max Current Ratings: 2A (Per Signal)	

1.2. Symbols.

SYMBOL	Description
U	Modules
F	Fuse
G	Encoder
J	Terminal
K (KT)	Contactor (Auxiliary contactor)
I	Coil
M	Motors - Fan
FL	Filters
R	Resistance
S	MCB
TR	Transformer
X	Terminal Group

Table 1: Drawing Symbols

Terminal Group	Voltage	Description
X1	400Vac	3 phase circuits (Supply, Motor Output)
X2	230Vac	1 phase (Supply, Lights)
X3	<230Vac	Doors, Cam, Brake control
X4	48/12Vdc	Valves
X5	110Vac or 48Vdc	Safety elements
X6	12Vdc	Battery
X7	24Vdc	Control Signals
X8	24Vdc	Calls and Indicators

Table 2: Terminal Groups

No	Color	size	voltage	Used in ....
1	Orange	0,75 mm²	110 Vac	Safety circuit (Phase)
				Relay Coils
2	Yellow	0,75 mm²	Neutral 110Vac	Safety circuit (Neutral)
				Relay Coils
3	Red	0,75 mm²	+12Vdc	Battery circuit (Battery +)
			+48 Vdc	Valves +
			+110 Vdc	Brake + / Cam +
4	Light Grey	0,75 mm²	0 Vdc	Brake- / Cam- / Valves-
5	Grey	0,75 mm²	0 Vdc	24 Vdc - / 12Vdc -
7	Blue	0,75 mm²	230 Vac	Mains Neutral
8	Brown	0,75 mm²	230 Vac	Mains Phase
9	Black	0,38 mm²	24 Vdc	Control Signals (Calls, Count Display – Inspection)
		4mm²(min)	400 Vac	Power Cables
10	Yellow-Green	0,5 mm²	Groung	
		2.5mm²(min)		
11	Green	0,75 mm²	42 Vac	Cabin lights 42Vac
12	White	0,75 mm²	42 Vac	Permanent Cabin lights 20Vac
13	Magenta	0,75 mm²	125 Vac	Cam (AC)
14	Pink	0,75 mm²	125 Vac	Brake (AC)
			48 Vac	Valves (AC)

Table 3: Wiring of ISL controllers

No	SYMBOL	Name/Value
1	S1	Main Switch • 3x32A (5.5kw) • 3x40A(7.5kw) • 3x63A(11kw)
2	S2	Shock Protection MCB / 30mA
3	I1	Latch Relay / 48VAC
4	S3	Safety Circuit / 2A
5	S4	Controller / 6A
6	S5	24V / 6A
7	S6	Shaft Lights / 10A
8	S7	Cabin Lights / 10A (220Vac) - 4A (42Vac)
9	S8	Doors • 10A (Automatic) • 3x10A (3 Phase automatic) • 2A (Folding Cabin doors)
10	S9	• Brake / 6A (Traction) • Valves / 6A (Hydraulic)
11	S10	Cam / 6A (for 1 cam) KAMA / 10A (for 2 cams)
12	SU	UPS / 6A (FU = 6A FUSE)
13	I2	Shaft Light Latch Relay / 220Vac

Table **4**: MCB's

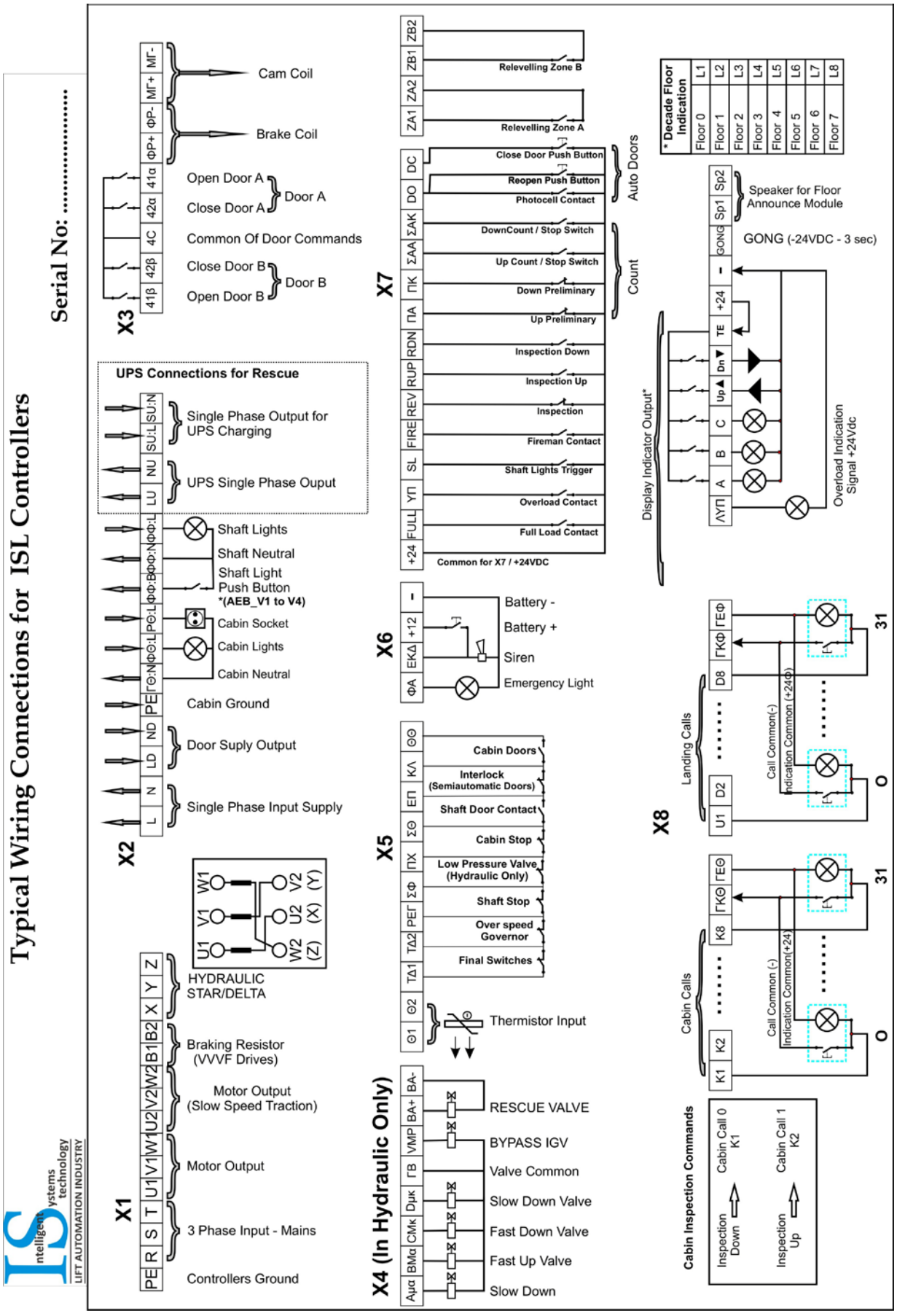
1.3. ISL_V2 Controller Terminal Description.

Category	Terminal Group	Name	Description
3 phase connections (High Voltage 400Vac)			
Machine Room	**X1**	PE	**Ground**
Machine Room	**X1**	R,S,T	Input of 3 phase supply – **Mains L1, L2, L3**.
Machine Room	**X1**	U1,V1,W1	**Output Motor** (In traction 2 speed machine - Fast speed winding)
Machine Room	**X1**	U2,V2,W2	**Output Motor** (In traction 2 speed machine - Slow speed winding)
Flat Cable	**X1**	Ud,Vd,Wd	Output Motor of 3phase Automatic Door
Machine Room	**X1**	B1, B2	Braking resistance VVVF
One Phase Supply (Voltage 230Vac)			
Machine Room	**X2**	L, N	**Single Phase Mains Input** 220Vac
Machine Room	**X2**	Lu, Nu	**Single Phase Input from UPS** 220Vac (in VVVF only)
Machine Room	**X2**	SU:L, SU:N	**Single Phase Output for UPS Charge** 220Vac
Flat Cable	**X2**	PE – Ld – Nd	**Door Supply output** 220Vac
Shaft - Loom	**X2**	ΦΦ:L – ΦΦ:N	**Shaft Lights Output** 220VAC (900W max.) (ΦΦ:L = Phase / ΦΦ:N = Neutral)
Shaft & Loom	**X2**	ΦΦ.B – ΦΦ:N ***(AEB-V1 to AEB-V4)**	**Shaft Lights Control Button. We can connect in parallel as many push button as we need for controlling the shaft lightning**
Flat Cable	**X2**	ΦΘ:L – ΓΘ:N **	****Cabin Lights output** 42 / 220VAC (300 / 900 W max). (ΦΘ:L = Phase / ΓΘ:N = Neutral)
Flat Cable	**X2**	PΘ:L – ΓΘ:N ****	**Cabin Socket** 230Vac (PΘ:L = Phase / ΓΘ:N = Neutral)
Door - Cam - Brake Control (Voltage <230Vac)			
Flat Cable	**X3**	41β	1. **Open Door B Command Output** (Relay Output). 2. **Opening Final Switch in 3 phase Automatic Door** B (NC).
Flat Cable	**X3**	42β	1. **Close Door B Command Output** (Relay Output). 2. **Closing Final Switch in 3 phase Automatic Door** B (NC).
Flat Cable	**X3**	4C	1. **Door commands Common** (Relay Output). 2. **Common for Door Final Switches in 3 phase Automatic Door**s
Flat Cable	**X3**	42α	1. **Close Door A Command Output** (Relay Output). 2. **Closing Final Switch in 3 phase Automatic Door** A (NC).
Flat Cable	**X3**	41α	1. **Open Door A Command Output** (Relay Output). 2. **Opening Final Switch in 3 phase Automatic Door** A (NC).
Machine Room	**X3**	ΦΡ+ , ΦΡ-	**Brake Output (4A)**
Flat Cable	**X3**	ΜΓ+ , ΜΓ-	**Cam Output (6A)**
Valves Control (Voltage +48/12Vdc)			
Machine Room	**X4**	Aμα	**Slow Up Valve Output** (+48Vdc)
Machine Room	**X4**	BMα	**Fast Up Valve Output** (+48Vdc)
Machine Room	**X4**	CMκ	**Fast Down Valve Output** (+48Vdc)
Machine Room	**X4**	Dμκ	**Slow Down Valve Output** (+48Vdc)
Machine Room	**X4**	ΓΒ	**Common Valves Signal** (-48Vdc / -12Vdc)
Machine Room	**X4**	VMP	**Bypass Valve for IGV** (-48Vdc)
Machine Room	**X4**	BA+	Rescue Valve Positive Output (+12Vdc / 4A)
Machine Room	**X4**	BA-	Rescue Valve Negative Output (-12Vdc)
Safety Elements (Voltage 110Vac or 48Vdc)			
Machine Room	**X5**	Θ1 – Θ2	**Motor / Oil Thermistor** - PTC
Shaft - Loom	**X5**	ΤΔ1 , **ΤΔ2**	**Final Switches** (NC).
Shaft - Loom	**X5**	ΤΔ2 , **ΡΕΓ**	**Over speed Governor** (NC).
Shaft - Loom	**X5**	ΡΕΓ, **ΣΦ**	**Shaft Stop Switches** (NC).
Machine Room	**X5**	ΣΦ, **ΠΧ**	**Low Pressure (Rapture Valve) contact** (NC).
Flat Cable	**X5**	ΠΧ , **ΣΘ**	**Cabin Stop Sequence (Safety Gear - Inspection Stop)** (NC).
Shaft - Loom	**X5**	ΣΘ , **ΕΠ**	**Shaft Doors Contacts** (NO).
Shaft - Loom	**X5**	ΕΠ , **ΚΛ**	**Semi Automatic interlock Contact** (NC).
Flat Cable	**X5**	ΚΛ , **ΘΘ**	**Cabin Door Contact** (NC).
Battery Circuit (Voltage 12Vdc)			
Flat Cable	**X6**	ΦΑ	**Emergency Light**, +12Vdc.
Flat Cable	**X6**	ΕΚΔ	Input From Siren Push Button - Output to Siren
Flat Cable	**X6**	+12	**Battery positive voltage output +12Vdc**
Flat Cable	**X6**	-	**Battery negative output 0Vdc**
Control Signal inputs (Voltage 24Vdc)			
Flat Cable	**X7**	+24 , FUL	**Full Load -** (NO / +24V).
Machine Room / Flat Cable	**X7**	+24 , ΥΠ	**Overload Contact** - (* as ordered / +24Vdc).
Machine Room & Flat Cable	**X7**	+24 , SL ***(AEB-V5)**	**Shaft Lights Trigger** - (NO / +24Vdc).
Flat Cable	**X7**	+24 , EXP	**Express** (Cancels all landing calls) - (NO / +24V).
Flat Cable	**X7**	+24 , FIRE	**Fire Alarm** - (NO / +24V).

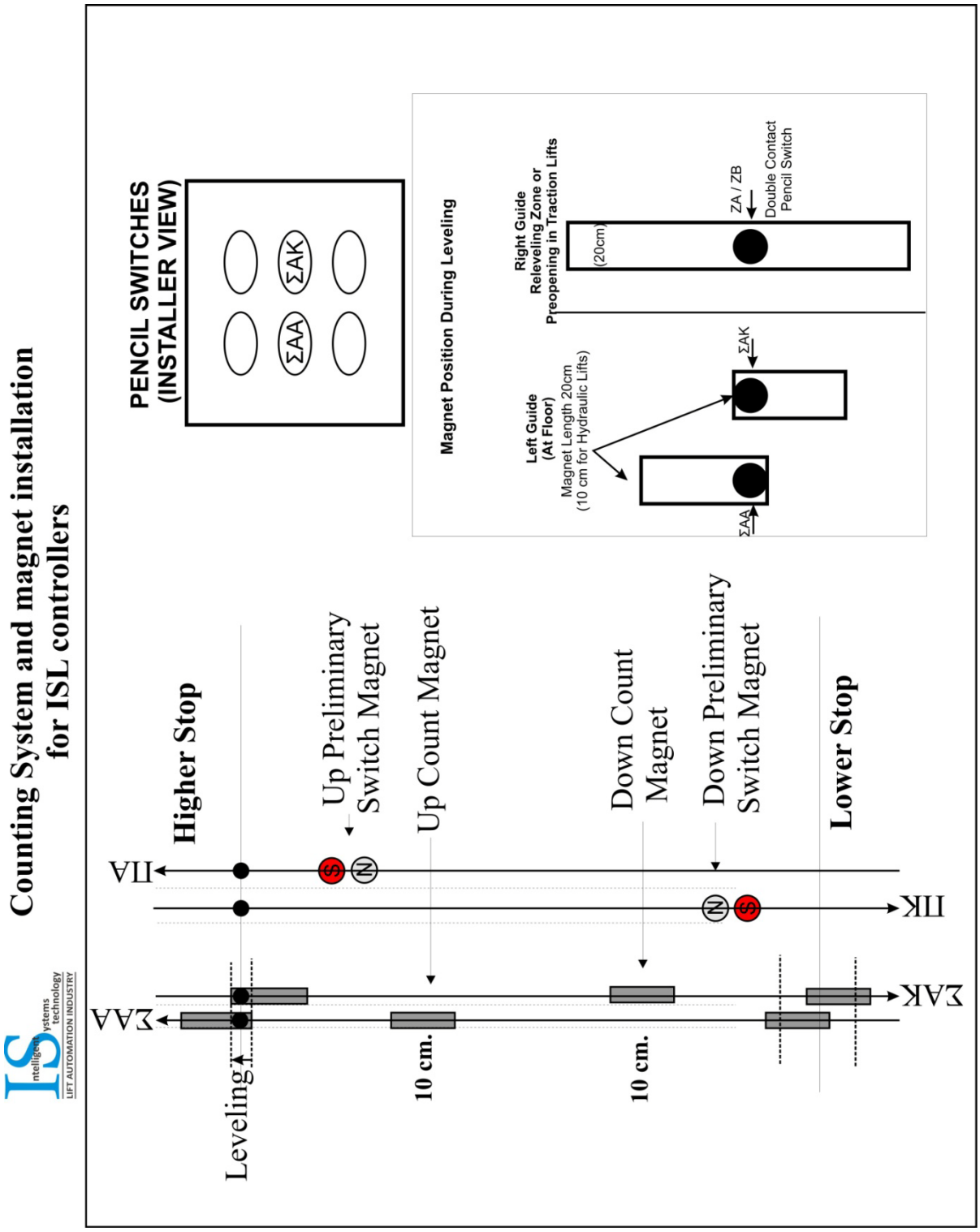
Flat Cable	**X7**	+24, REV	**Inspection** - (NC / +24Vdc) (Closed = Inspection / Opened = Normal)
Flat Cable	**X7**	+24, RUP	**Inspection Down** - (NO / +24V).
Flat Cable	**X7**	+24, RDN	**Inspection Up** - (NO / +24V).
Flat Cable	**X7**	ZA1 - ZA2	**Relevelling Zone A** (NO / +24V).
Flat Cable	**X7**	ZB1 - ZB2	**Relevelling Zone B** (NO / +24V).
Flat Cable	**X7**	+24, ΠΑ	**Down Preliminary** - (NC / +24V).
Flat Cable	**X7**	+24, ΠΚ	**Up Preliminary** - (NC / +24V).
Flat Cable	**X7**	+24, ΣΑΑ	**Up Count / Stop Switch** (NO / +24V).
Flat Cable	**X7**	+24, ΣΑΚ	**Down Count / Stop Switch** (NO / +24V).
Flat Cable	**X7**	+24 , DO	**Door Open** Push Button || **Photocell** NO Contact || **Obstruction** NO Contact
Flat Cable	**X7**	+24 , DC	**Door Close** Push Button
Calls And Indicators (Voltage 24Vdc)			
Shaft - Loom	**X8**	+24Φ	**Voltage Output +24Vdc for Shaft Wiring**
Flat Cable	**X8**	+24***	**Voltage Output +24Vdc for Cabin Wiring**
Shaft - Loom & Flat Cable	**X8**	-	**Voltage Output 0Vdc (GND of +24V)**
-	**X8**	TE	**Indicator Signal Voltage selection (Connect to +24 or - depending the Display)**
Shaft - Loom & Flat Cable	**X8**	A , B , C	**Indication Signals - Binary** (Output Voltage = TE)
Shaft - Loom & Flat Cable	**X8**	L1, L2 .... L8	**Indication Signals - Decade** (Output Voltage = TE)
Shaft - Loom & Flat Cable	**X8**	UP▲	**Up direction Arrow** (Output Voltage = TE)
Shaft - Loom & Flat Cable	**X8**	Dn▼	**Down direction Arrow** (Output Voltage = TE)
Flat Cable	**X8**	Gong , +24	**Gong** (+24 Vdc)
Flat Cable	**X8**	ΛΥΠ , -	**Overload Indication** output (Output voltage +24)
Flat Cable	**X8**	**ΓΚΘ / ΓΕΘ / K1 - K8**	Cabin Calls 1 - 8. **Common for Landing Calls = ΓΚΘ** **Common for Call Registered Indication = ΓΕΘ**
Shaft - Loom	**X8**	**ΓΚΦ / ΓΕΦ / D1 - D8**	Landing Down Calls 1 - 8. **Common for Landing Calls = ΓΚΦ** **Common for Call Registered Indication = ΓΕΦ**
Flat Cable	**X8**	SP1 , SP2	**Speaker Output** for Voice announce Module or MP3 Module

Table 5: Terminal Description ISL_V2

1.4. Typical Wiring Diagram for ISL-V2 Controllers.



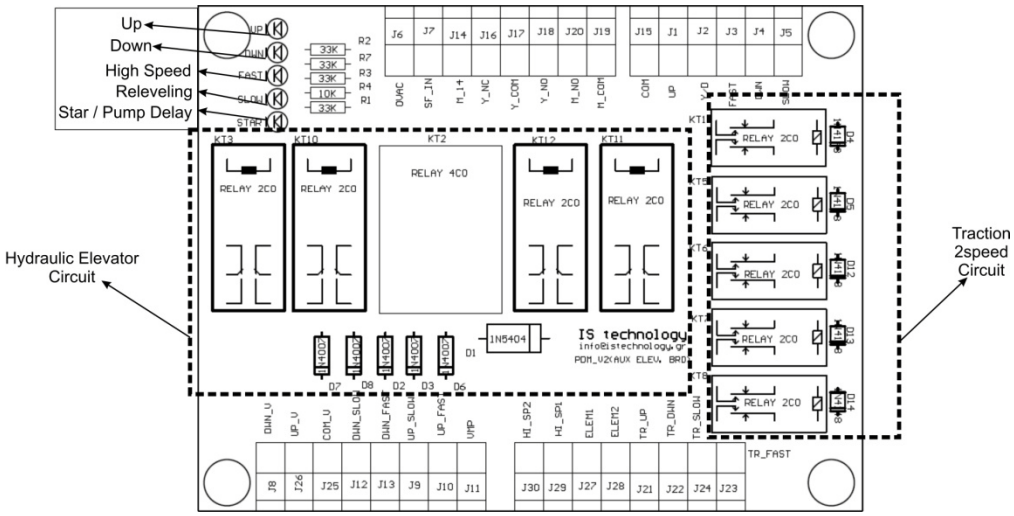
1.5. Counting System Installation for ISL_V2 controllers.



2. Electronic Modules for ISL_V2 Controllers.

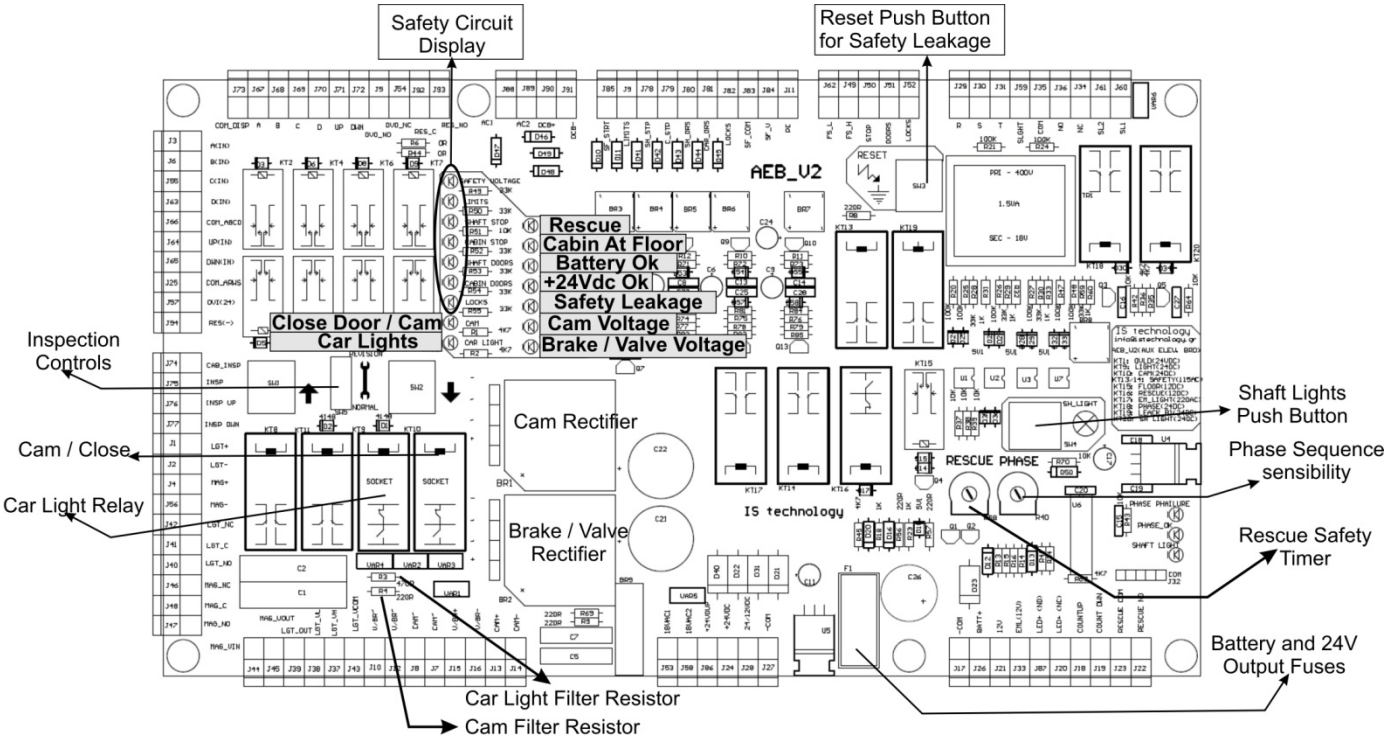
2.1 Power Drive Module PDM_V3 (For Valve block drive).

In ISL Lift Controllers and specific in Hydraulic lift Applications the valve block is driven by a specially designed module named PDM_V3. PDM module supports all known Valve blocks and ensures their fine operation with maximum safety.



2.2 Auxiliary Elevator Board AEB_V5.

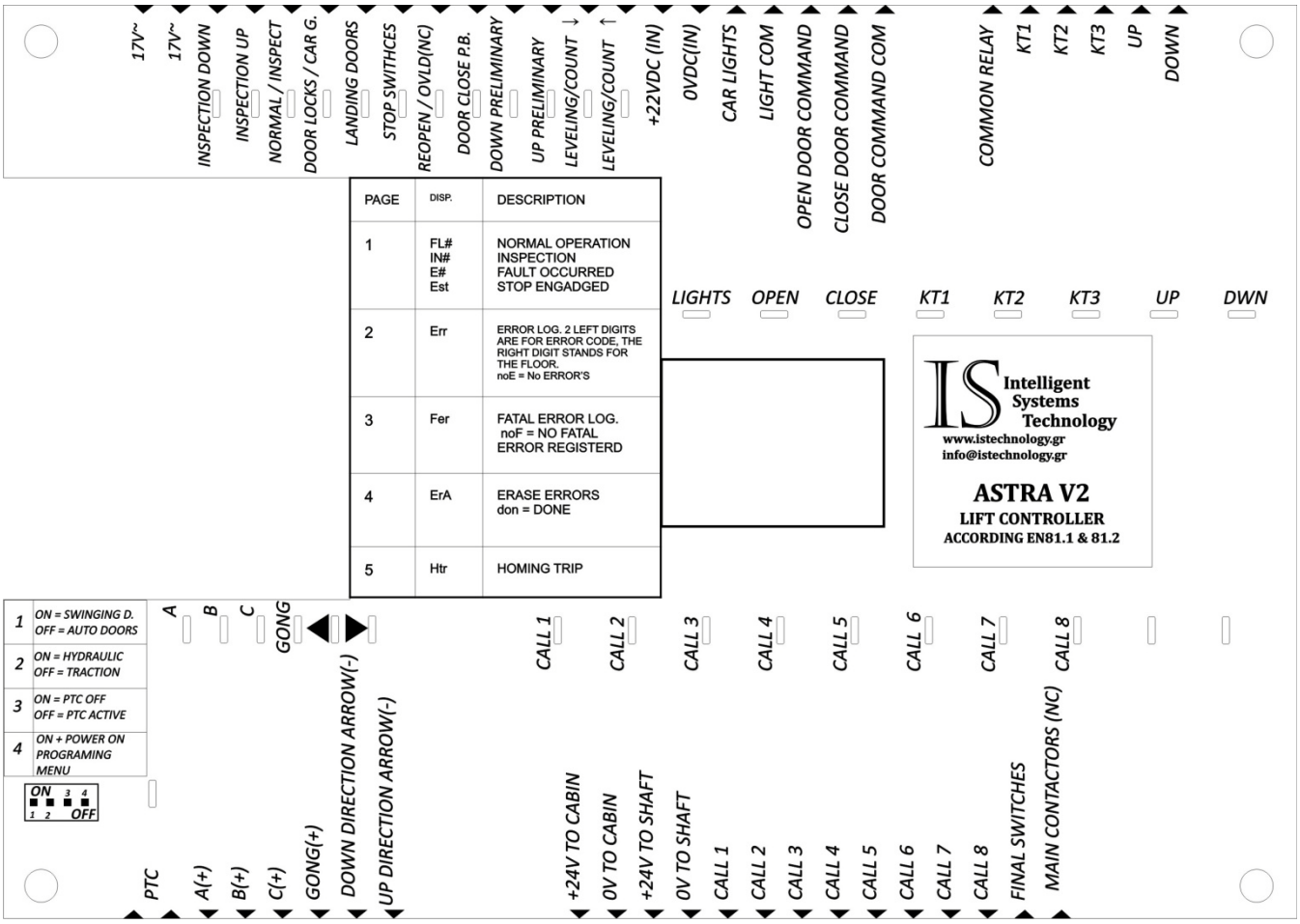
AEB Module is caring all necessary electrical circuit for the Lift application. This Board is designed to cooperate along with the main controller and offers double safety while minimizes the need of using external elements.



2.3 Lift Control Board ISL_V2 (Astra_V2).

2.3.1 Terminal Description

The Astra_V2 elevator control board is the "brain" of the controller. Controls all signals for lift applications up to 8 stops collective down. This board is designed according the EN81.1-2 norm and ensures that vertical transport is conducted with maximum safety.



Terminal	*Name*	*Traction 2Sp*	*Hydraulic*	*VVVF*
Low_SP	KT2	Slow	Relevelling	Multi Speed 1
Hi_SP	KT3	Fast	Fast	Multi Speed 2
UP_DIR	UP	Up	Up	FWD
DN_DIR	DWN	Down	Down	REV
SPRE_1	PROG. OUT 1(KT1)	Programmable	Delta	Multi Speed 3

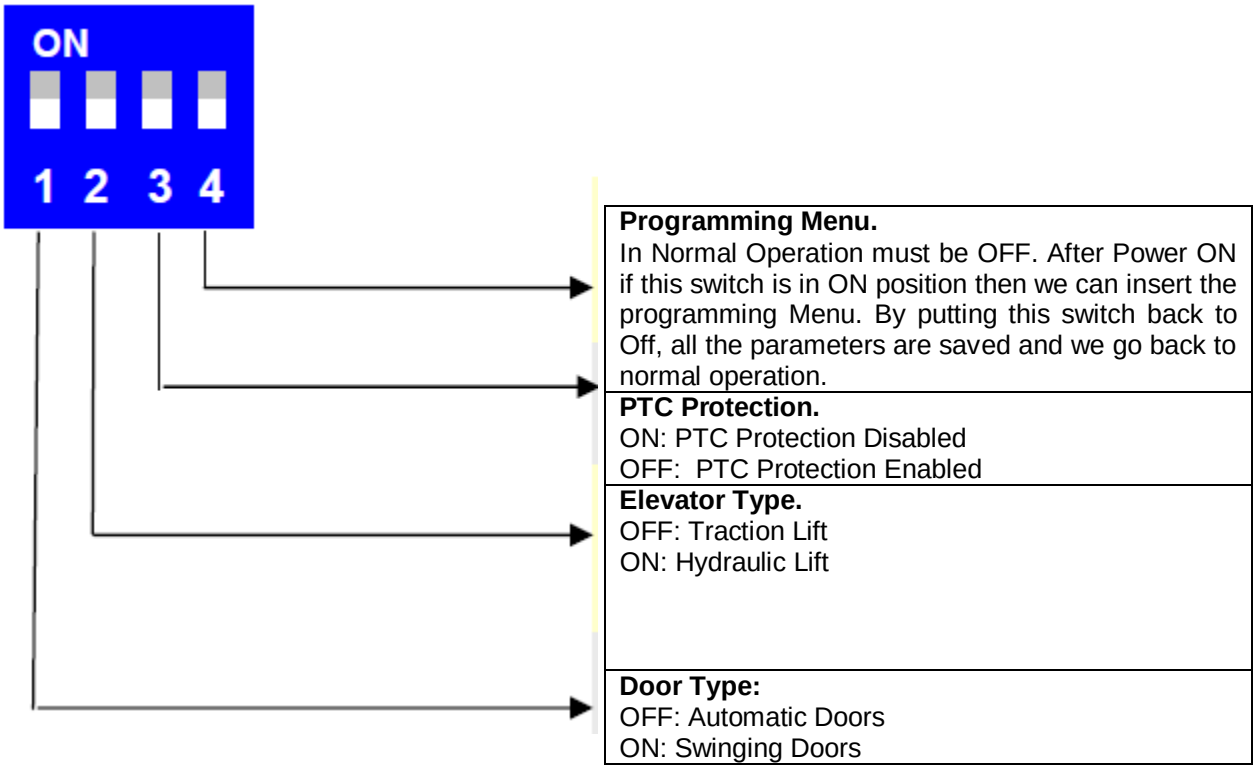
Speed	*KT1*	*KT2*	*KT3*	*Multi Speed*
Nominal (50Hz)	0	0	1	1
Leveling (5Hz)	0	1	1	3
Inspection (20Hz)	0	1	0	2
Intermediate. (35Hz)	1	0	1	5

2.3.2 ASTRA - V2 User Interface.

To operate or setup the ASTRA-V2 Elevator PCB module we can use the 4 ON Board Dip Switches and the 3 push button. The Astra - V2 Module has a 3 digit LCD screen where the user can see all necessary information for programming or troubleshoot the controller.

Operation Messages in Astra - V2 LCD Screen:

Page 1	➢ **FL#** ➢ **In#** ➢ **E##** ➢ **ESt**	In Normal Operation Floor Number is Displayed. When the Floor Number is unknown, then in floor No we have '-'. Inspection Operation Current Fault '##' Safety Stop Opened
Page 2	**Err**	By Pressing SELECT we can insert to Error Log. 'noE' Means No Errors registered. With Previous and Next Button, we can navigate in Error Log Menu.
Page 3	**Fer**	By Pressing SELECT we can insert to Fatal Errors Log. 'noE' Means No Fatal Errors registered. With Previous and Next Button, we can navigate in Fatal Error Log Menu. (Fatal Errors are All Level II Fault, See Error Menu)
Page 4	**ErA**	By Pressing SELECT we can Erase all registered Faults. 'noF' means that faults are erased.
Page 5	**Htr**	By Pressing SELECT we can reset the controller and conduct a homing trip.



- **Simulate Calls With Astra - V2**: When we are in Page 1 and the screen shows FL# by pressing Select the indication changes to Fr# and the # is flashing. With Prev and Next button we can alter the Floor No we want to simulate call. When we set the desired target Floor No by pressing the Select Button a new call is registered from the desired floor and the corresponding LED in Astra Lights. To deactivate the simulate calls function press select for 3 sec.
- **Inspection Commands**: When we are in Page 1 and In# is written on screen, by pressing Prev and Next buttons we can give up or down command for inspection operation

2.3.3 Fault Log.

Error Code	*Fault Description*	**Level*	*Action taken*
20	Safety circuit and/or door opened during travel	I	Waits for safety circuit to close
20	Safety circuit opened during travel	I	Waits for safety circuit to close, cancels calls if fault persists more than 5sec[3]
21	Door lock circuit opened during travel	I	Waits for lock circuit to close, cancels calls if fault persists more than 5sec[3]
22	Safety circuit failed to close after door closing	I	Cancels calls and opens door[3]
22	Failure in locking door after 3 attempts	I	Cancels calls[3]
22	Failure in closing door	II	Cancels calls, opens door[3]
24	UP Preliminary Switch fault (Moving Down And the up preliminary sw. is activated)	III	Blocks elevator[4]
25	Down Preliminary Switch fault (Moving Up And the down preliminary sw. is activated)	III	Blocks elevator[4]
26	Counting Error	II	Performs a homing trip
26	Counting Error	II	Performs a homing trip
28	Preliminary Switches Fault (both open)	III	Blocks elevator[7]
27	Emergency stop	I	Waits for a car call to resume
29	Motor has been powered for 25 sec, car did not move	III	Blocks elevator[4]
35	Preset number of operating days expired	III	Blocks elevator[11]
33	All orders on contactors were removed, one contactor or more is still engaged	I	Waits all contactors to be released
34	Motor temperature has exceeded its maximum allowable operating temperature	I	Elevator is stopped at the nearest floor. Waits for the motor to cool down
23	Locks/Cabin doors opened during travel	I	Waits for lock circuit to close, cancel calls if fault persists more than 5sec[3]
32	Final switches opened	III	Blocks elevator

[1] For swinging or ½ automatic door.
[2] For automatic door.
[3] Waits for a call to resume operation.
[4] When the cause of the fault is diagnosed and fixed, empty the faults log or request a homing trip so that the elevator resumes operation.
[5] When DZ magnetic switch is installed. Refer to section 5.
[6] When DZ magnetic switch is installed. Refer to section 5.
[7] When the cause of the fault is diagnosed and fixed, the elevator will automatically resume operation.
[8] Relevant in group mode only.
[9] Refer to section 5.
[10] In case of automatic door, waits for obstacle to clear.
[11] To recover from this fault, access menu and clear the count of elapsed days. Refer to Chapter Programming Menu.

2.3.4 Programming Menu.

To Enter the programming Menu follow the steps:

1. Turn Off the controller
2. Put the Dip Switch No4 in ON position
3. Power on the controller
4. Navigate the Menu with Next and Prev Buttons and Press select for saving new values.

To Leave programming Menu Just put the Dip Switch No4 back to Off position.

Παράμετρος	Περιγραφή	Πεδίο Τιμών
Par	Selects the parking mode for automatic door: **OPn** = Parking door opened **CLd** = Parking door closed	Opn - CLd
Lgt	Sets the car light time	0 - 25.0 sec
FLt	Sets the floor stopping time	0 - 25.0 sec
LdF	Sets the landing floor	non, 0 - 7
Ldt	Sets the landing time	1 - 99 min
Cjd	Set the car jammed delay	Dis, 1 - 255sec
Ado	Sets the opening time of the Automatic Door	Dis, 1 - 255sec
SPr	In case Hydraulic is not selected, sets the **STAR** output function: gong, intermediate speed[1] (used in VVVF operation) or base block (used in VVVF operation)	gng = Gong Int = Μεσαία Ταχ. bbL = Base Block
dΞo	When enabled, SDFS DN input is re-assigned as DZ for automatic door only. DZ should be active on every floor stop to allow door opening	DiS - EnA
Edi	When enabled, CLSE input is re-assigned as emergency stop for swinging door only	DiS
Aro	Arrows Type (With Next Direction Indication = Std / Only Present Direction Indication = run)	Std - **run**
CjF	Sets The Level for Car Jammed Fault	L3 / **L2**
roL	Sets the logic for Reopen-Overload Input	nc/**no**
Str	Sets the start time in hydraulic mode. If hydraulic is not selected, it selects VVVF and sets the start delay: Zero: AC2-speed is selected (StP has to be set to zero as well) Positive value: VVVF selected with direction engaging before speed reference Negative value: VVVF selected with speed reference engaging before direction	-9,9 - 9,9sec
StP	Selects VVVF and sets the Stop delay: Zero: AC2-speed is selected (Str has to be set to zero as well) Positive value: VVVF selected with speed reference disengaging before direction Negative value: VVVF selected with direction disengaging before speed reference	-9,9 - 9,9sec
rLL	Sets the re-leveling option in hydraulic mode	**ALL** = Always SEL = Closed Doors
EoS	Enables the EOS during the inspection	DiS - **EnA**
PoH	Enables Power-on homing	**DiS** - EnA
Ind	**grA** = Gray code floor information output **gr1** = Gray code floor information output starting from 1 **bin** = Binary code floor information output **EnH** = Enhanced scrolling display information output	**bin** grA gr1 Enh
bAS	Sets the number of basement (affects the direction of the hall calls)	0-7
PCL	Enables permanent close for automatic door	DiS - **EnA**
Cod	Press push button to access **CODE MENU**[2]	'Select'

- Code Menu.

A blank screen appears with a decimal point on the first digit. Use the **INC** and **DEC** push buttons to set the first digit of the code. Use **OK** to enter it. The digit is instantaneously replaced by "**c**". A decimal point on the second digit prompts you to enter the second digit of the code by repeating the above procedure. Repeat this process until all six digits are entered.

Παράμετρος	Περιγραφή	Πεδίο Τιμών
StA	Selects the status of the code lock feature Press INC or DEC push buttons to change selection **DiS** = Disabled / **EnA** = Enabled	DiS - EnA
ELA	Displays the count of the number of days elapsed Pressing **INC** or **DEC** push buttons resets counter to zero	-
DAy	Displays the preset number of operating days Modify by pressing **INC** and **DEC** push buttons. Enter new value with **OK**	0 - 999
out	Press **SELECT** push button to exit code menu and go back to auxiliary functions menu	-

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24 Months
Product Guaranty

Name: _____
Address: _____
Telephone: _____ Fax: _____

ISL Controller Type : _____

Shipping Date :_____
Code :_____
Model :_____

The Product guaranty is valid within 24 months from shipping date and only if:

- The installation was done according our drawings
- No alterations was made in the product without the knowledge of IS technology Production Department
- The product was working under normal conditions (Humidity, Temperature)

This Controller has passed quality control by Lift Auto tester Machine (IS Property) and was produced according the: 95/16/EU, 89/336/EU, 73/23/EU, EN81-1 and EN81-2.

For any injury or damage caused from wrong wiring of the controller, IS technology has no responsibility what so ever.

Thessaloniki, Greece …../…../20...

General Manager:

Mr. Thomas Kelantonis

EBETAM (MIRTEC)

ΕΤΑΙΡΕΙΑ ΒΙΟΜΗΧΑΝΙΚΗΣ ΕΡΕΥΝΑΣ & ΤΕΧΝΟΛΟΓΙΚΗΣ ΑΝΑΠΤΥΞΗΣ ΜΕΤΑΛΛΩΝ Α.Ε. / METALLURGICAL INDUSTRIAL RESEARCH & TECHNOLOGICAL DEVELOPMENT CENTRE S.A.

CERTIFICATE OF COMPLIANCE

Certificate No: LF/A-C-1168/10

Applicant/ Manufacturer / Certificate-holder:	**IS TECHNOLOGY, THOMAS ATH. KELANTONIS, X. Perrevou 37, 54352, Thessaloniki**
Description/Product Type :	**Electrical Control Panel for Lifts ISL–HYD, ISL-TR** With main electronic unit MicroZed and STEM for relevelling
EU Directive/Norms :	95/16/EC, Annex I, 89/336/EC, 2006/95/EC EN81.1, 2, §13 &14, Annex H, EN 12015, EN 12016, EN 55011, EN 61000, EN 60439-1
Control and testing installations :	Laboratory IST, Thessaloniki (95/16/EC, Annex I, EN81.1&2, §13&14) EMC Laboratories, Report No: E10-033 electromagnetic compatibility Emc, Electrical Safety LVD

The lift testing and certification department of MIRTEC SA, certifies hereby that the over mentioned manufacturer has compiled a technical file in accordance with the requirements of Annex V of 95/16/EC which was submitted to us on 10.05.2010 for examination on its completeness and for archiving purposes.

The checks and compliance verification tests on the aforementioned Norms took place at the Laboratories of EMC as regards the electromagnetic compatibility (89/336/ EC), as regards the electromagnetic compatibility (89/336/EC) and electrical safety (Report No: E10-033) .

Control tests were carried out by the MIRTEC S.A. inspector at the IST Laboratory in Thessaloniki, on 10.05.2010 on a prototyp panel, as regards the correct and safe functioning, of the main, auxiliary and safety circuits (95/16/EC,EN 81.2).

Relevant reports: MIRTEC: LF/A-R-1168 /10

The manufacturer has to issue the declaration of conformity and attaches the CE Marking for guideline 89/336/EC and manufacturer's certificate for electrical safety & 95/16/EC.

This certificate is valid until May 2012.
Significant changes to the design and the manufacture of the control panel are to be notified to MIRTEC S.A.

Date of issue: 18.05.2010 MIRTEC's certification department

I. Dimitriadis

EBETAM A.E. MIRTEC S.A.

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Declaration of Conformity CE

EMC Compliance Standards and Directive: 89/336/EU & 95/54/EC

The Company : IS technology
PERREVOU 37
54 352, THESSALONIKI
GREECE

Declare that the products listed below are following the provisions of the 89/336/EU & 95/54/EC directive. The tests was made by EMC Hellas (Protocol No.: E10/033):

Product:	**Type:**
1. Elevator Controller	ISL_
1.1 For Hydraulic Elevators	HYD_
1.2 For Traction Elevators	TR_

Thessaloniki 26-04-2010
The Company,

"IS TECHNOLOGY"
ΘΩΜΑΣ ΑΘ. ΚΕΛΑΝΤΩΝΗΣ
ΚΑΤΑΣΚΕΥΗ ΗΛΕΚΤΡΟΝΙΚΩΝ ΣΥΣΤΗΜΑΤΩΝ
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ΤΗΛ: 2310 943169 ΦΑΧ: 2310 943169
ΑΦΜ: 112766718 ΔΟΥ: ΤΟΥΜΠΑΣ

IS technology