A Controller for your Lifts

Langue : Français ***English*** Deutsch Dutch Italiano Español

AUTINOR

Table of Contents

3 – *iCan* Controller structure.

4 – *iCan* Special Features.

5 – Trouble Shooting.

Contact us: Back Cover Page

1 – Starting with *iCan*

1.1 – Specifications.

1.2 –

1 – Starting with *iCan*

1.1 – Specifications.

Main features:

- Lift controller for frequency drives: Mlift Autinor – iDrive Autinor – Ziehl abegg – Fuji - Yaskawa…
- Lift controller for hydraulic lifts: GMV – Blain – Bucher – Algi…
- Lift controller for 1 or 2 Speed lifts.
- Up to 64 Levels (Simplex).
- Up to 32 Levels (Multiplex).
- Multiplex Up to 16 Lifts.
- 2 doors Selective or not.
- Speed: Up to 3, 5 m/s.
- Destination control.
- Vertical Can Bus: for the lift.
- Horizontal Can Bus: for the inter lifts communication.
- Economic Bus (CRep).
- Isolated safety chain.
- Multi-Languages interface.
- Temperature: 0°C to 40°C.
- EN81 - 1/2:A3 – 21 – 70 – 72 Compliance

Secondary features:

- INS: inspection input
- MAN: Emergency rescue operation
- ↑: Inspection Upward button
- ↓: Inspection Downward button
- Gong: Slow down / Stop information.
- FM: Up Arrow
- FD: Down arrow
- CRep: Mono directional bus signal for the indicators /speech devices.
- LU: Automatic car light management.
- Pom: fireman mode.
- CabRes: Car priority key.
- SU: Overload
- NS: Full Load
- MHS: out of service mode input.
- Came: Electro-came management.
- Zone: Input from N57 board Door zone control.
- SH8: Output to the N57, movement with doors open asked.
- EM: Extreme up slow down contact (Magnet switches).
- ED: Extreme down slow down contact (Magnet switches).

- CaA: O03 Reader Top beam.
- CaB: O03 reader Bottom Beam.
- CaA: Selection Magnets witches Top contact
- CaB: Selection magnet switches bottom contact.
- Sth: Motor T° sensor
- M: Upward signal
- D: Downward signal
- 0 to 23: Car, Up landings, Down landings. Can be programmed (§2.1.3 – Board configuration / Cabin & / At levels).
- Fireman Car Key.
- Additional down Button at the main floor.
- Pit Flood.
- Machine room T°.
- Lift departure delayed.
- Out of service information.
- Lift available.
- Lift free.
- Fault information.
- Overload display.
- Car light management.
- OU1: Door 1 opening signal.
- FE1: Door 1 closing signal.
- COI1: Door 1 opening button.
- CS1: Door 1 photo cell.
- FCFE1: Door 1 close limit.
- FCOU1: Door 1 close limit.
- Inh1: Door 1 nudging.
- FF1: Door 1 closing button.
- OU2: Door 2 opening signal.
- FE2: Door 2 closing signal.
- COI2: Door 2 opening button.
- CS2: Door 2 photo cell.
- FCFE2: Door 2 close limit.
- FCOU2: Door 2 close limit.
- Inh2: Door 2 nudging.
- FF2: Door 2 closing button.
- V1: Output 1 for electro valves.
- V2: Output 2 for electro valves.
- V3: Output 3 for electro valves.
- V4: Output 4 for electro valves.
- DNH: Oil tank level too low.
- IGV: High speed inspection.
- PH: Phase control relay input.
- Taq1: Cleats statement checking input 1.
- Taq2: Cleats statement checking input 2.
- L/GV: Line (hydrau.) or High speed (2S) contactor.
- Y/MO: Star (hydrau.) or Upward (2S) contactor.
- D/DE: Delta (hydrau.) or Downward (2S) contactor.
- RL/RG: Line (hydrau.) or High speed (2S) contactor feedback.
- RY/RM: Y/MO: Star (hydrau.) or Upward (2S) contactor feedback.
- RD/RD: Delta (hydrau.) or Downward (2S) contactor feedback.
- RLbis: X contactor feedback (hydrau.).
- FCH: Top limit switch (safety lane) input.

1.2 –

2 – *iCan* Electronic Boards.

2.1 – *Main Board – iC01.*

2.2 – Human Machine Interface – iC02.

2.3 – Automatic Doors Module – iC03.

2.4 – Contactors & Drives Interface – iC04.

2.5 – Smart Buttons ***iBB*** – iC06 & iC07.

2.6 – Supplies – Alim01 & TOR.

2.7 – 24Vdc and 12Vdc Saved/Isolated supplies – iC05.

2.8 – Lift Positioning Sensors.

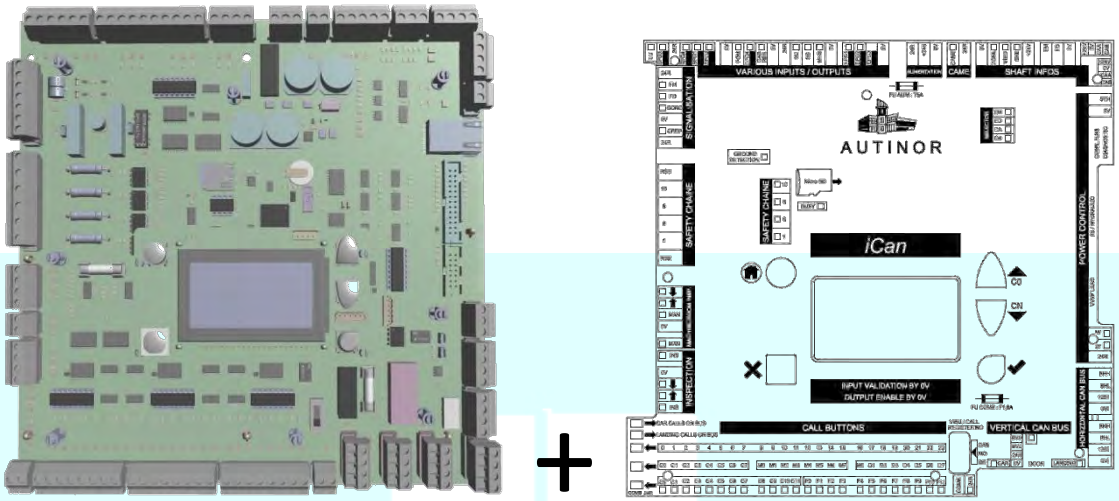
2.9 – Movements with doors open – N57.

2.10 - Car CAN bus Board – AC10.

2.11 - Landing CAN bus Board – AC03.

2.12 - Human Machine Interface – VEC30.

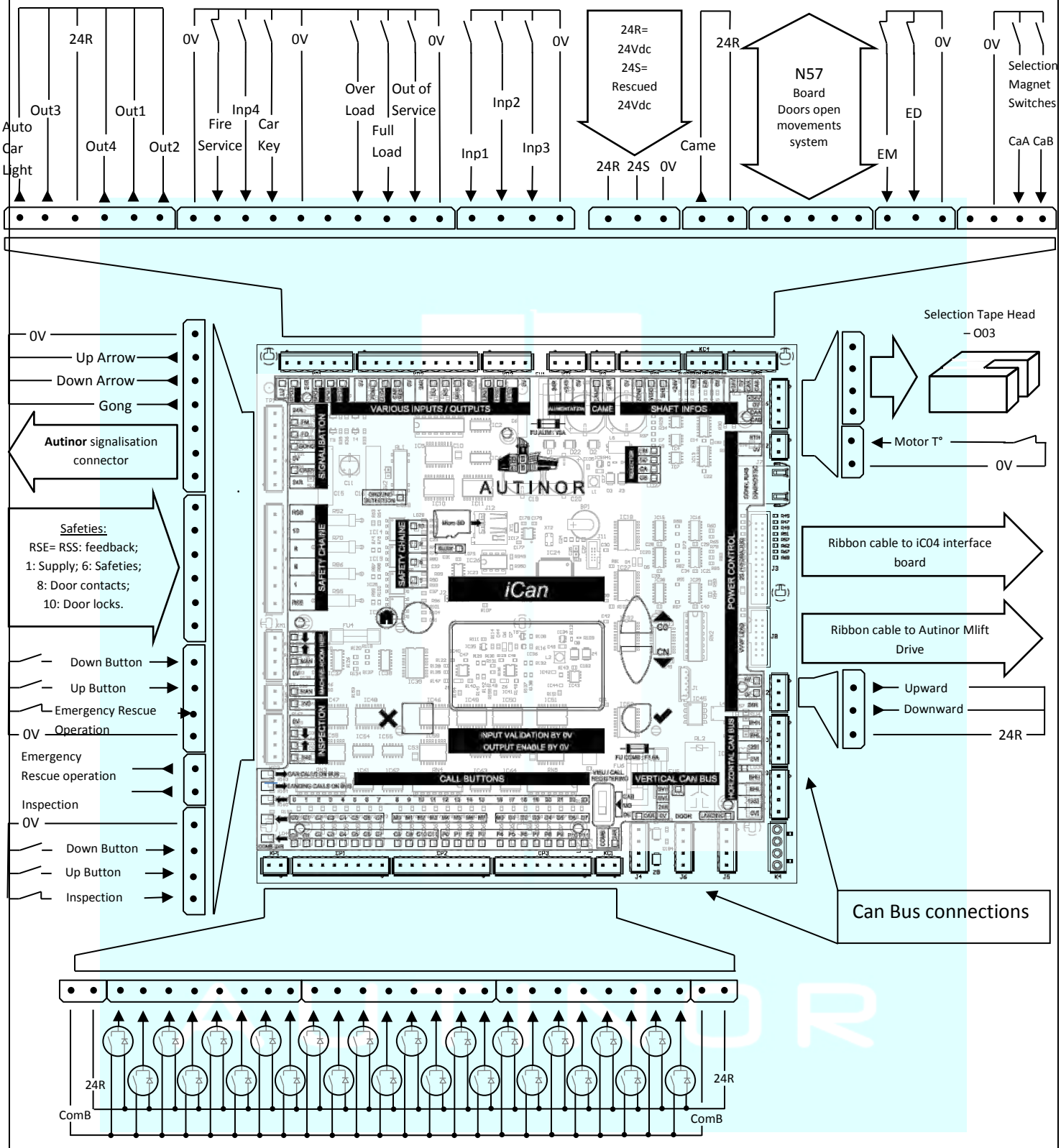
2.1 – Main *iCan* Board – iC01.



2.1.1 Specifications.

iC01 Board is the main *iCan* Controller Board.
Its Supply is 24Vdc.
Its Consumption is 5W (including iCom HMI).
The Outputs are Electronic: 24V - 50 mA - 1,2w Maximum
The Inputs are Normally Opened or Normally Closed depending on the Functions, triggered with a 0V.
Dedicated Isolated safeties Inputs
Safety chain voltage is 110 Vac.
There is an Internal Clock on the main board.
A CAN Bus is available.
Twisted/Shielded cable is necessary on the Can bus.
Its T° range is between 0°C and 40°C.
Size: 230 mm * 230 mm

2.1.2 Connections.



- Sorties : 50mA – 1,2W Maxi. 24Vdc au repos, 0Vdc en marche.
- Entrées : Connectées au 0Vdc.
- Entrées & Sorties : Allumées lorsque la fonction est active.

2.1.3 Settings.

iCan - Ic01 - MENU & structure

(Software Version V3.40 14 January 2016)

Menu → 5 Submenus

Site Configuration	:	Configuring the lift features on the ***iCan*** controller.
Commands	:	To command the lift from the menu.
Info & visu	:	Gives information's about States of inputs/outputs, data values.
Assistance	:	Help during different operations of installation, commissioning, maintenance.
Board configuration	:	Configuring the card to handle functions that are not dependent on the elevator (Time, Date, and Language) or that depend on the technology used (Bus, Traction Type, and Assignment of the E/S). There is also an Expert menu, for rare or special functions.

Site Configuration:

/Levels	All about the configuration of the different levels of the lift. Note that the lowest level of an elevator or a battery of lift is always level "0".

/Levels number (8)	Number of levels (2-64).
/Main	Position of the main level.
/Top level (7)	highest level of the multiplex.
/Bottom level (7)	lowest level of the multiplex.
/Call back	
//Level	If the timer is active, level of the automatic call back.
//Timer	Time for the call back activation (from inactive to 1 hour).
/Out of service	
//Level	parking Level when the Out of Service function is activated (MHS).
//Door	Door Parking choice when Out of Service (Opened; Closed).
//Door 2 (1)	Door 2 Parking choice when Out of Service (Opened; Closed).
/Altitudes	
//Level 0	Altitude of level 0 in mm (ex: 0.000 mm).
//Level XX (6)	Altitude of level XX in mm (X.xxx mm).

/Doors — All about the doors configuration and the door(s) operator(s) management.

/Faces & Types

//Cabin	Choice: Auto; Manual; None.
//Landings	Choice: Auto; Swing (at every floor); Mixed (Default choice is automatic door at the main floor).
//Cabin f2 (1)	idem side 1.
//Landings f2 (1)	idem side 1.
//Selective doors	Side (1) choice: Yes; No.

/Operator

//TP Opening	Time the lift remains doors open (1s to 5min).
//TP Reopening	Time the doors open after a 1st closing (1s to 5min).
//Time OU1/FE1	Duration of the open/close signal before a fault (1s to 1min).
//8 rebound filtering	Time to avoid the rebounds of the car door contact(s) (Inactive to 3s).
//10 rebound filtering	Time to avoid the rebounds of the locks (inactive to 3s).
//Lock timer (2)	Protection time to avoid electro cam to be damaged in case of locking default (inactive to 30s).
//Cell cancelation timer	Photo cell/detector cancelation time (inactive to 5min).
//Cam delay (2)	on a swing door lift, arriving at the floor. Time before releasing the cam signal permitting the car door to open before unlocking (inactive to 5min).
//Type command	choices: Open/Close (Car door managed by ***iCan***); Cam (Autonomous car door).
//Door limit switches	If ***iCan*** is operating the car door, it is possible to choose the type of door information's to manage it. Choices: Open / Close; Opening; Closing; None.
//Powered during motion	If ***iCan*** is operating the car door it's possible to choose the way the car door is powered. Choices: During motion; permanently; Never.

/Operator f2 (1)

//TP Opening f2	Time the lift remains doors open (1s to 5min).
//TP Reopening f2	Time the doors open after a 1st closing (1s to 5min).
//Time OU2/FE2	Duration of the open/close signal before a fault (1s to 1min).
//8 rebound filtering	Time to avoid the rebounds of the car door contact(s) (Inactive to 3s).
//10 rebound filtering	Time to avoid the rebounds of the locks (inactive to 3s).
//Lock timer (2)	Protection time to avoid electro cam to be damaged in case of locking default (inactive to 30s).
//Cell cancelation timer	Photo cell/detector cancelation time (inactive to 5min).
//Cam delay (2)	on a swing door lift, arriving at the floor. Time before releasing the cam signal permitting the car door to open before unlocking (inactive to 5min).
//Type command	choices: Open/Close (Car door managed by ***iCan***); Cam (Autonomous car door).
//Door limit switches	If ***iCan*** is operating the car door, it is possible to choose the type of door information's to manage it. Choices: Open / Close; Opening; Closing; None.
//Powered during motion	if ***iCan*** is operating the car door it's possible to choose the way the car door is powered. Choices: During motion; permanently; Never.

/At levels

//Level 0

///A level	Door position (closed; opened)
///Level f2 (1)	Door 2 position (closed; opened)
///No access	Door deactivation (Yes; Non)
///No access f2 (1)	Door 2 deactivation (Yes; Non)
///SAS Effect (1)	Avoids to open 2 doors at the same time at the same level (Yes; No).
///Cam advance	Locked automatic door: first step unlocking and second opening (No; Yes).
///Cam advance f2 (1)	Locked automatic door f2: first step unlocking and second opening (No; Yes).

//Level XX (6)

///See Level 0 for all other levels.

/Door access 2 — Lift with 1 or 2 car door(s) (Yes; No).

/Buttons — Everything concerning the buttons (Landing & Car calls). The collective type, the button direction…

/Cabin

//Closure on order — clears the registered car calls if the photo-cell is not activated after 3 movements (Yes; No).

/At levels

//Re-open on a landing — Re-opens the door when pressing a present landing call (Yes; No).

//Priority call — from any landing, the ***iCan*** activates a priority call. The priority level can be chosen. (None (inactive); Empty car; In the direction; VIP).

//Moving — lightening of the landing buttons (Blinking; fixe)

//1 Button selective — Permit the ***iCan*** to intercept the car on both direction with only one button at the main floor (Yes; No).

/Mode

The way the iCan will collect the call. (Collective; Full SAPB; Landing SAPB; Car SAPB).
Collective: 1 button on the landings
Full Single Automatic Push Button: 1 call at a time.
Landing SAPB: 1 landing and several car calls at a time (Permit to get up with several people in the car).
Car SAPB: 1 Car several landing at a time (Permit to register a landing without waiting).

/Hiding buttons (6) (9) to activate/deactivate Car and landing calls individually.

/Smart Button

//Color registration	(White; Yellow; Orange; Red; Pink; Blue; Light Blue; Green)
//registration Brightness	(0 to 7)
//Idle Color	(White; Yellow; Orange; Red; Pink; Blue; Light Blue; Green)
//Idle Brightness	(0 to 7)
//Buzzer tone	(2 octaves – Fa4 to Sol6)

/Signalization — Signalization devices.

/Crep codes

//Level 0	Select your display in the list.
//Level XX (6)	Select your display in the list.

/Gong — Gong activation (Stopping; slowing down).

/Gong duration — Gong duration (inactive; 30s).

/Arrows — fixe arrows (Blinking; Fixed)

/TP Opening	Time the lift remains doors open (1s to 5min).
/TP Reopening	Time the doors open after a 1st closing (1s to 5min).
/TP Opening f2 (1)	Time the lift remains doors open (1s to 5min).
/TP Reopening f2 (1)	Time the doors open after a 1st closing (1s to 5min).
/Time OU1/FE1	Duration of the open/close signal before a fault (1s to 1min).
/Time OU2/FE2 (1)	Duration of the open/close signal before a fault (1s to 1min).
/Cell cancelation timer	Photo cell/detector cancelation time (inactive to 5min).
/Cam delay (2)	on a swing door lift, arriving at the floor. Time before releasing the cam signal permitting the car door to open before unlocking (inactive to 5min).
/Lock timer (2)	Protection time to avoid electro cam to be damaged in case of locking default (inactive to 30s).
/Call back Timer	Time for the call back activation (from inactive to 1 hour).
/Tp Traction	Cable sliding timer in high speed (1s to 5min).
/Tp Low speed	Cable sliding timer in low speed (1s to 30s).
/8 rebound filtering	Avoid the car automatic door or Swing door contact rebounds (inactive to 3s).
/10 rebound filtering	Avoid the locks (10) rebounds (inactive to 3s).
/Car Light	Car light switch off delay after stopping (inactive to 5min).
/Gong duration	Gong duration (inactive; 30s).
/Tp relevelling	Re-levelling movement time protection (inactive to 10s).
/Star Delta time (11)	Star Delta (YD) time (0,4 s to 2 s).
/ Tp stop A3 (11)	In the Down direction, it permits to maintain the A3 valve for a small time after the lift stop (inactive to 3s).

/Selector	Selector type selection, and associated settings.
/Type	Choice of the selector type. Slotted tape and O03 reader or magnet switches (Tape; ILS)
/Altitudes (4)	
//Level 0	Altitude of level 0 in mm (0.000 mm).
//Level XX (6)	Altitude of the other levels in mm (X.xxx mm).
/ Zones & Distances (4)	
//V2 Zone	Deceleration distance for the high speed (given by ED magnets) (X.xxx mm).
//V1 Zone	Deceleration distance for the intermediate speed, ex: small inter-floors (X, xxx mm)
// V0 Up Zone	Deceleration distance for the final approach speed in the up direction. Corresponding to the UP stopping precision (0 to 150 mm).
// V0 Down Zone	Deceleration distance for the final approach speed in the down direction. Corresponding to the DOWN stopping precision (0 to 150 mm).
//V2 Departure	Distance to allow/forbid ***iCan*** to run the lift in intermediate or high speed (X,xxx mm).
//Unlocking Zone	Length of the possible unlocking zone, from 0 to 350mm above and below the floor.
//Iso Zone	Distance from the floor which is acceptable before relevelling (1 to 20 mm).
/Timers (4)	
//Tp Traction	Cable sliding timer in high speed (1s to 5min).
//Tp Low speed	Cable sliding timer in low speed (1s to 30s).
//Tp relevelling	Re-levelling movement time protection (inactive to 10s).
/Sensor (4)	Lift position sensor type. One with only a bottom resetting contact (O03-1) the other with a bottom + a top resetting contact (O03-2).
/Slow points crossed (5)	
//Slow point crossed 0-1	In case of 2 speeds systems or hydraulics. It is possible to swap the 2 intermediate slow down magnets in between floors if the inter-floor 0/1 distance is quite short (minimum 1m).
//Slow point crossed 1-2	In case of 2 speeds systems or hydraulics. It is possible to swap the 2 intermediate slow down magnets in between floors if the inter-floor 1/2 distance is quite short (minimum 1m).
//Slow point crossed L-L+1	In case of 2 speeds systems or hydraulics. It is possible to swap the 2 intermediate slow down magnets in between floors if the inter-floor L/L+1 distance is quite short (minimum 1m).

/Drive (10)	Settings linked to Autinor Mlift drive, to Autinor iDrive or to any other drives (Ziehl abegg, Fuji, Yaskawa…) by using iC04 Interface board.
/Order (12)	List of the drives models driven by ***iCan***: Gefran - ADL300 Gefran - ADL300 ContactorLess Ziehl abegg - Zetadyn3 And list of the available ***iCan*** interface boards - To drive new Vvvf unit: iC04 (See § 2.4.2.3) N65 (Old interface).
/iC04 I/O settings (13)	
//Start V2	Choice of the ***iCan*** outputs for the: Starting High speed sequence
//Start V1	Choice of the ***iCan*** outputs for the: Starting intermediate speed sequence
//Start Ins	Choice of the ***iCan*** outputs for the: Starting Inspection speed sequence
//Start V0	Choice of the ***iCan*** outputs for the: Starting approach speed sequence
//Deceleration	Choice of the ***iCan*** outputs for the: Deceleration sequence
//Deceleration in Ins	Choice of the ***iCan*** outputs for the: Deceleration in Inspection sequence - To slow down precisely by pushing the opposite direction button of the inspection box.
//Stop	Choice of the ***iCan*** outputs for the: Stop sequence
//Learning	Choice of the ***iCan*** outputs for the: “Learning phase” of the machine: Send a command to the drive & motor avoiding the lift to move during this phase.
/K Controls	***iCan*** is able to control / Check a movement contactor (K). It can be useful with certain brands of drives (See § 2.4.2.3)

/Hydraulic (11)	Settings linked to the Hydraulic pump unit and hydraulics special features.
/Central type	List of the Hydraulic pump unit models driven by ***iCan***. See §2.4.2.1 Contactors & Drives interface iC04 for the i/o connections.
/Valves programming (12)	Necessary sequences to drive a new unit for ***iCan*** (appears if - Central type = Other).
//GV Rise	Choice of the ***iCan*** outputs for the: High speed upward sequence
//Mounted PV	Choice of the ***iCan*** outputs for the: Low speed Upward sequence. This is also the default Inspection speed, it can be increased to High speed (<0,63 m/s) by using the IGV input.
//Stop rising	Choice of the ***iCan*** outputs for the: Stopping Upward sequence used to continue the upward movement after the stop for a fraction, otherwise 0.
//Tp Stop rising	Permits to continue the upward movement for a small time (inactive to 3s).
//Anticipated engine stop	Permits to keep the valves after the lift stopping information during a small time programmed in the previous parameter - //Tp stop rising - ; In that case the - //Stop rising - parameter will have to be programmed with the desired valves for this sequence.
//GV descent	Choice of the ***iCan*** outputs for the: High speed Downward sequence
//PV descent	Choice of the ***iCan*** outputs for the: Low speed downward sequence. This is also the default Inspection speed, it can be increased to High speed (<0,63 m/s) by using the IGV input.
//Stop A3	Permits to maintain the A3 valve until the lift is stopped at the floor (during a short time see //Tp Stop A3). It is possible to choose here the desired output dedicated to this A3 valve.
// Tp stop A3	In the Down direction, it permits to maintain the A3 valve for a small time after the lift stop (inactive to 3s).
//Slow to high speed	Permits to star in low speed and to accelerate in high speed. Can be useful for Heavy lifts which cleats (Yes; No).

/Contactors	Types of motor pump starting: L= Line contactor only (for an hydraulic unit including a vvvf drive for instance); LYD for LYD start; LD for a direct start; Unmanaged = Special feature.	
/Star Delta time	Star Delta (YD) time (0,4 s to 2 s).	
/Lockers	3 choices :	1) No cleats: the lift will be send back at the bottom floor automatically; 2) Anti creep: lift will stay at the floor; 3) Loading: for heavy lifts, the car will stand on the cleats at the level. To start the lift it will be necessary to make the cleats free and only to start the movement.
/EN81-2:A3	A3 Activation (Yes;No).	

/Relevelling & Pre-opening — All concerning the movements with doors open. Using a specific CE marking N57 board (see § 2.9).

/Iso	No : No relevelling. Doors opened: using an extra n57 board. Doors closed: will close the doors before relevelling.
/Iso Zone (3)	appears only with the tape selector. Distance from the floor which is acceptable before relevelling (1 to 20 mm).
/Tp Relevelling (3)	Time allowed for the relevelling movement (inactive to 10s)
/Preopening	Opening the before arriving at the floor (Yes; No).

/Multiplex	Group of lifts (Simplex to 16)
/lift number	In case of multiplex lifts, the different lifts must be numbered to permit the different ***iCan*** to communicate together. The number of the lifts must be different (Simplex to 16).
/Top level (7)	highest level of the multiplex.
/Bottom level (7)	lowest level of the multiplex.
/People in the car (7)	Maximum desired people in the car, before calling another car.
/Predestination (7)	Predestination control, special feature which needs extra additional boards (No; Yes).

/Fireman & fire floors	Setting "Firefighter" functions & "not sinister levels serving."
/Fire service	Fireman control options. 1) Function deactivation – No 2) Activation in the French mode – P82-207 3) Activation in the Euro mode – EN81-72
/Floors Fire	To activate this option it is necessary to use an additional AC10 board (§ 2.10). Each fire detector will be connected on all the floor AC10 inputs, the contact type can be chosen on ***iCan.*** 1) Not activated: No 2) Activated with Closed contacts: NC Contact 3) Activated with Opened contacts: NO contact
/Safeties	All about the safety lane.
/8 rebound filtering	Avoid the car automatic door or Swing door contact rebounds (inactive to 3s).
/10 rebound filtering	Avoid the locks (10) rebound (inactive to 3s).
Options setting	Optional functions, i.e.: The lift doesn't need those options to work properly.
/Call back	
//Level	If the timer is active, level of the automatic call back.
//Timer	Time for the call back activation (from inactive to 1 hour).
/Out of service	
//Level	parking Level when the Out of Service function is activated (MHS).
//Door	Door Parking choice when Out of Service (Opened; Closed).
//Door 2 (1)	Door 2 Parking choice when Out of Service (Opened; Closed).

Commands:

All commands kinds of commands done by ***iCan***

/Take an order	Registration/signalization of the car calls, up landing calls, down landing calls on every floors.
/Doors	Opening and Closing the doors manually by using the Up and Down Buttons on ***iCom***. Visualization of the door(s) statement (All the door(s) input/output : Limit switches, photocell, Reopening button, Open / Close signal…) If the lift's got 2 doors the "validation" button permits to swap from door 1 to door 2.
/Traffic	This option permits to simulate traffic with nobody pushing on the lift buttons. The traffic can be set from (from inactive to 255 dem/h).
//Traffic duration	Setting the traffic simulation duration (from inactive to 18h).

Info & Visu:

All commands kinds of information's given by ***iCan.***

/Calls and Sends (6)	Registration/signalization of the car calls, up landing calls, down landing calls on every floor.
/Doors	Opening and Closing the doors manually by using the Up and Down Buttons on ***iCom***. Visualization of the door(s) statement (All the door(s) input/output : Limit switches, photocell, Reopening button, Open / Close signal…) If the lift's got 2 doors the "validation" button permits to swap from door 1 to door 2.
/Starts counter	Number of movements done by the lift, and time the lift has been used. Total: Movement number since the origin Time: Working time since the origin Partial: Movement number since the last reset of the counter (with "Validation" button).
/Default history	The ***iCan*** is able to register the 10 last faults. It registers the date, time, the fault code, the safeties statement, the lift position and direction… It is possible to clear the 10 faults of the fault log with the "Validation" button. See § 5 – Trouble Shooting If the analysis of the fault history log is not powerful enough for a good diagnostic iCan includes a "Black Box" for specialists. See § 4.3 ***iCan*** Special features/ Black box.
/ New fault	Details about the current default.
/Tape diagnostic (4)	Diagnostic of the tape reading. Permits to locate a potential dirty tape or an alignment problem with the O03 reader…
/Last events	The ***iCan*** is able to display the 10 last events. It registers the details of the event. An event is not a lift fault but it may alter the lift operation, it linked to something external to the lift (Flood, Inspection, Overload…) It is possible to clear the 10 events of the events log with the "Validation" button. See § 5 – Trouble Shooting If the analysis of the fault history log is not powerful enough for a good diagnostic iCan includes a "Black Box" for specialists. See § 4.3 ***iCan*** Special features/ Black box.
/Version	Software version to run ***iCan***. Example: iCan V3.40 160114

Assistance:

Procedures for different situations

/Assistant	List of the available wizards: - None: No activated assistant - Floor settings: procedure for the level registration - Expert : Permits to hide the unusual parameters (Yes; No) See - Menu/Board Configuration/Expert - Reset Fault log. - Updating – ***iCan*** software updating trough SD Card (§4.2) - Save settings – ***iCan*** lift parameters saving in the SD Card (§4.2) - Load settings – ***iCan*** lift parameters reading from the SD Card (§4.2) - Recovery settings – ***iCan*** lift parameters restoration (if a bad parameter file from an SD Card has been sent to ***iCan***, it is possible to restore the lift parameters which were before. The only condition is that the ***iCan*** has not been resetted) (§4.2) - Drive learning – For the drive/motor learning sequence.
/Black Box (See § 4.2)	Needs an SD Card. The ***iCan*** is able to reveal what were the last movement's conditions. The latest data's (about the 20 last movements) are registered in the SD card. The registration on the card is done on a - Permanent fault: definitive - Every fault: All

Board configuration:

All concerning the board(s) features

/Controller type

Choice of the lift type ***iCan*** will have to manage.

None: R&D feature.
Hydraulic: ***iCan*** will manage an Oleo dynamic lift.
Contactors 2 speeds: for 2 speeds lifts
Autinor Mlift: Autinor old generation drive.
Drive interface: Interface for different drives (Fuji, Yaskawa…)
iDrive: Autinor new generation drive

/ Programmable I/O's

//EPG1

Programmable input 1, available functions

- None: the input is no used.
- COI1: In the case of autonomous doors managed by «Came» (No iC03), ***iCan*** takes into account the reopening signal on EPG1.
- CS1: In the case of Swing doors and elevators with No Car doors, the photocell is taken into account on EPG1.
- Cabin fireman key: If the fireman has a key in the cabin.
- Additional Down Button at the main floor.
- Float: In case of flood in the shaft pit. If activated the extreme levels are cancelled.
- TH40: Machine room T° over 40°C.
- SusD: External conditions avoiding the lift to start.

//EPG2
//EPG3
//EPG4

Programmable input 2, available functions.
Programmable input 3, available functions.
Programmable input 4, available functions.

- None: the input is no used.
- COI1: In the case of autonomous doors managed by «Came» (No iC03), ***iCan*** takes into account the reopening signal on EPG1.
- CS1: In the case of Swing doors and elevators with No Car doors, the photocell is taken into account on EPG2/3/4.
- Cabin fireman key: If the fireman has a key in the cabin.
- Float: In case of flood in the shaft pit. If activated the extreme levels are cancelled.

//SPG1	Programmable output 1, available functions - None: Output not used - VHS: Lift out of service information - Dispo: Lift available. - FE1: In the case of autonomous doors managed by «Came» (No iC03), ***iCan*** takes into account the closing signal FE1 on SPG1. - Lockers: Cleats or Anti creep systems. - Visu Defaults: Fault information - Light fireman: Fire service display information. - Buzzer fireman: In fireman mode, after 2min of kept <I> pushed or photo cell activated, the output is activated for a signalization and the door(s) closes. - Visu overload: Overload display - Car light: Automatic car light management - Free: Lift free information.
//SPG2	Programmable output 2, available functions
//SPG3	Programmable output 3, available functions
//SPG4	Programmable output 4, available functions
/Cabin	Type of buttons connection for the Car Box - Bus: The car operation panel is triggered by a CAN bus (the car buttons are not send trough the flat cable). - Wired: The car operation panel is connected directly to the iCan board (a button is a wire in the flat cable). - 1 pendant: Only 1 flat cable. This option requires specific extra cards.
/At levels	Type of buttons connection on the landings. - Bus 1bt: The landing panels are triggered by a CAN bus, 1 button only on each floor. This configuration needs extra landing boards (AC03) or special Smart buttons (IC07). - Bus 2bt: The landing panels are triggered by a CAN bus, 2 buttons or 1 button on each floor. This configuration needs extra landing boards (AC03) or special Smart buttons (IC07). - Wired 1 bt: Each landing button directly is wired to the ***iCan*** board (input 0 to 23 – 24 levels max). - Wired 2bt: Each landing button directly is wired to the ***iCan*** board (input 0 to 23 – 12 levels max).

/Langue — Available Languages (Need SD card to change the language).

Languages used by ***iCom***.

- français
- english
- deutsch
- Polski
- Nederlands
- Espanol
- Italiano
- Portuges
- Roman
- Turk

/Date & time — Setting the date and time.

/Expert (13) — Non usual features.

//ED level (4) — Position of the ED magnet. The Ed magnet can be set at any positon on the tape. It permits for instance to avoid little steps at the floor in case of lifts with many underground levels by positioning the magnets at a floor in the middle of the shaft.

//Bt >I< — If someone wants to reopen the while closing, if he pushes either on <I> or >I< button, the door reopens during this phase.

//Autinor — Autinor option

//Omnibus — this permits to the lift to operate alone on certain levels without pushing the buttons. This option needs a special omnibus extra board for the different inputs, outputs.

///Omnibus options
Door(s) temporization (inactive to 240s).
Cycle time (inactive to 60 min).
Omnibus level 0 (No; Yes)
Omnibus level n-1 (No; Yes)
Omnibus level n (No; Yes)

(1) = Appears only in case this second side of service.
(2) = In the case of hinged doors.
(3) = In case of releveling.
(4) = When using the selector to tape + O03 reader.
(5) = In case of using the selector to magnets + magnet contacts.
(6) = Depends on the number of levels of ***iCan***.
(7) = In case of multiplex battery.
(8) = Disappear in Multiplex
(9) = Appears in selective mode: Board config / At levels // Bus 2Bt // Wired 2 Bt
(10) = Appears if: Menu/Board configuration/ Controller type = Autinor Mlift; Drive interface; iDrive
(11) = Appears if: Menu/Board configuration/ Controller type = Hydraulic
(12) = Appears if: Configuration site / Hydraulic / Centrale type = others
(13) = Expert

2.2 – Human Machine Interface – iC02 – ***iCom***

2.2.1 Specifications.

LCD display for Human Machine Interface.
Always included on the main iC01 controller board.
Supplied by the Main iC01 board.
Its Consumption is 5W (including iCan main board).
Its T° range is between 0°C and 40°C.
7 lines menu.
5 navigation buttons.

2.2.2 Connections.

Plugged on the ***iCan*** Main iC01 Board.

2.2.3 Settings.

Contrast:

- ➔ Home+Back Buttons to Enter/Exit Setting
- ➔ Up/Down Arrow button for More/Less contrast.

2.3 Automatic Doors Module – iC03.

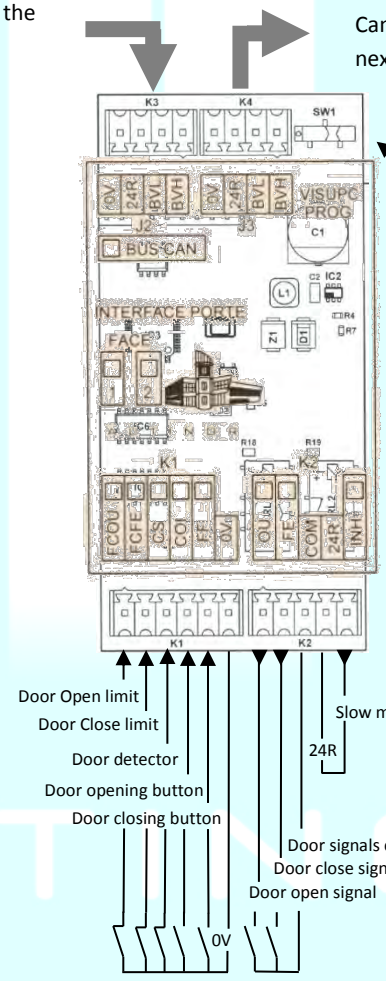
2.3.1 Specifications.

iC03 Board is the ***iCan*** doors Controller Board.
Supplied by the Main iC01 Board.
Its T° range is between 0°C and 40°C.
The Outputs are Electronic: 24V - 50 mA - 1,2w Maximum
The Inputs are Normally Opened or Normally Closed depending on the Functions, triggered with a 0V.
A CAN Bus is available.
Twisted/Shielded cable is necessary on the Can bus.

2.3.2 Connections.

Can bus connections –24R; 0V; BVH; BVL– from the ic01 main board.

Can bus connections –24R; 0V; BVH; BVL– to the next board on the bus (Door2; Car; Indicators…).



Door 1 (Left) or Door 2(Right) Switch selection

x2

in case of a 2 doors.

2.3.3 Settings.

Red switch: On the left position Door 1 on the right position Door 2

- Electronic outputs: 50mA – 1,2W Maxi. 24Vdc released, 0Vdc active.
- Dry contact outputs: 125Vac-500mA maxi ou 30Vdc-2A maxi.
- Inputs : Connected to 0Vdc.

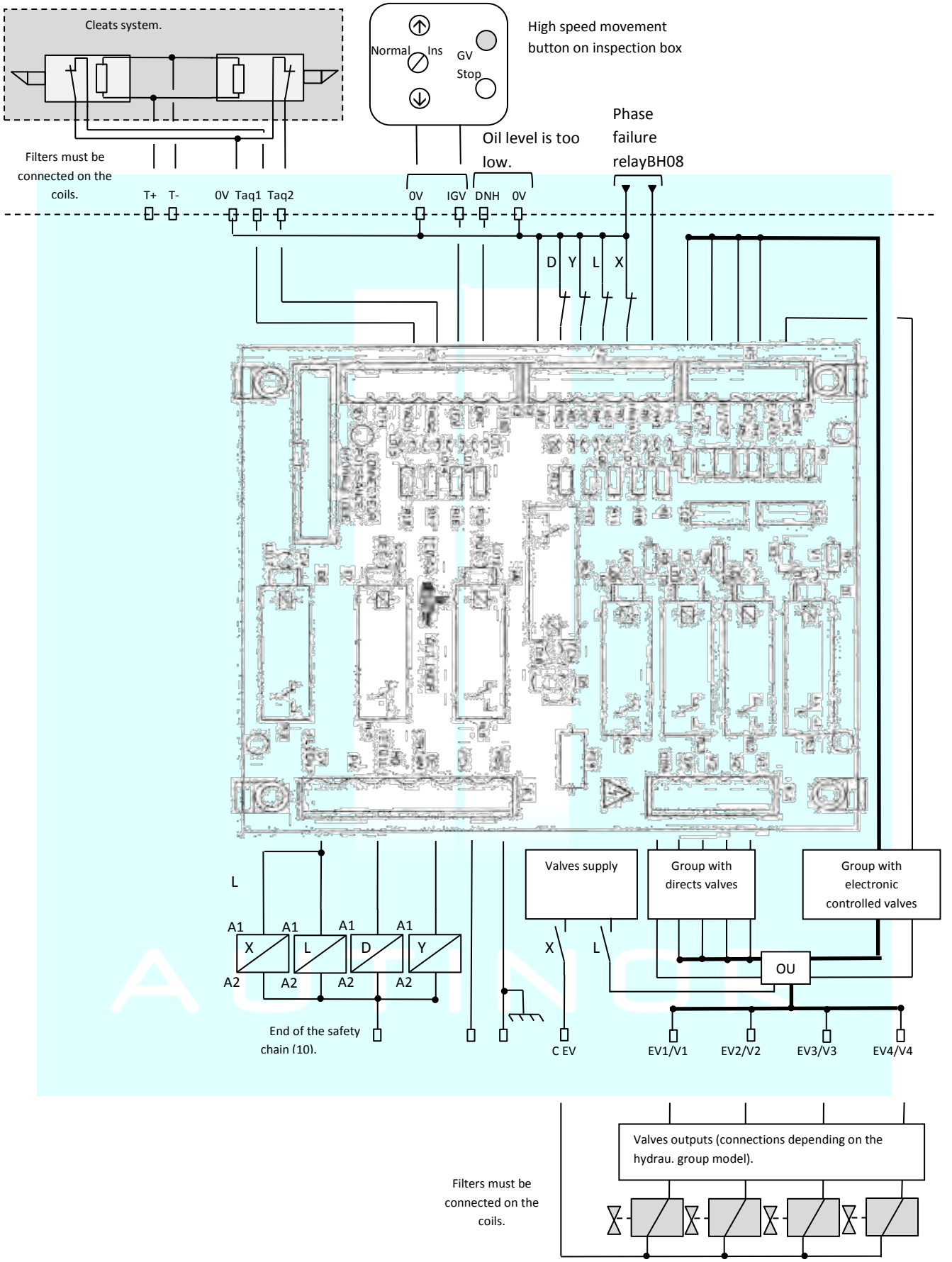
2.4 – Contactors & Drives Interface – iC04.

2.4.1 Specifications.

iC04 Board is the “Power interface board” for hydraulics; 2speeds; foreign drives.
Its Supply is 24Vdc.
Its consumption is 2W max.
Its T° range is between 0°C and 40°C.
The Outputs are Electronic: 24V - 50 mA - 1,2w Maximum.
The Inputs are Normally Opened or Normally Closed depending on the Functions always triggered with a 0V.

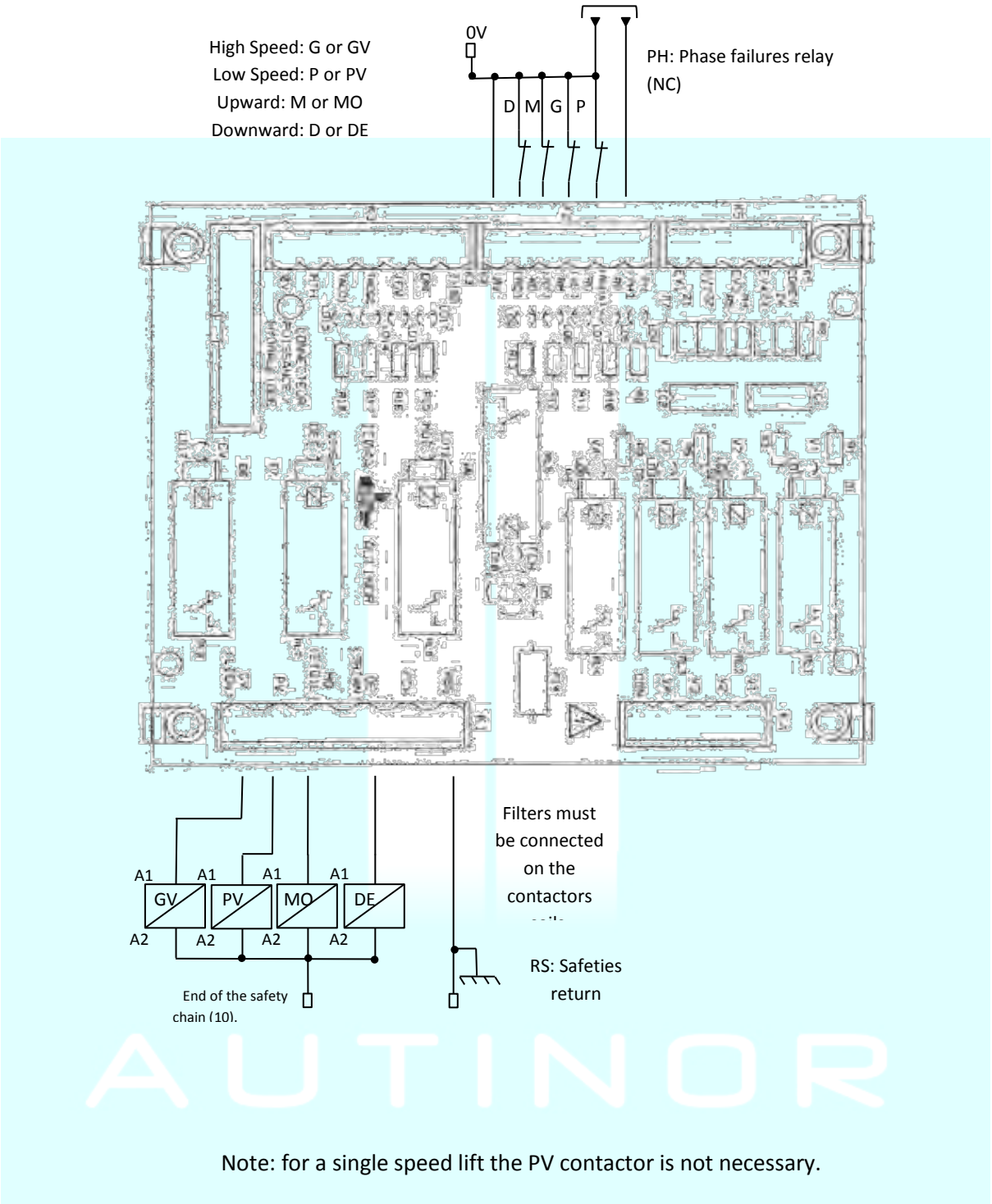
2.4.2 Connections.

2.4.2.1 For hydraulic lifts



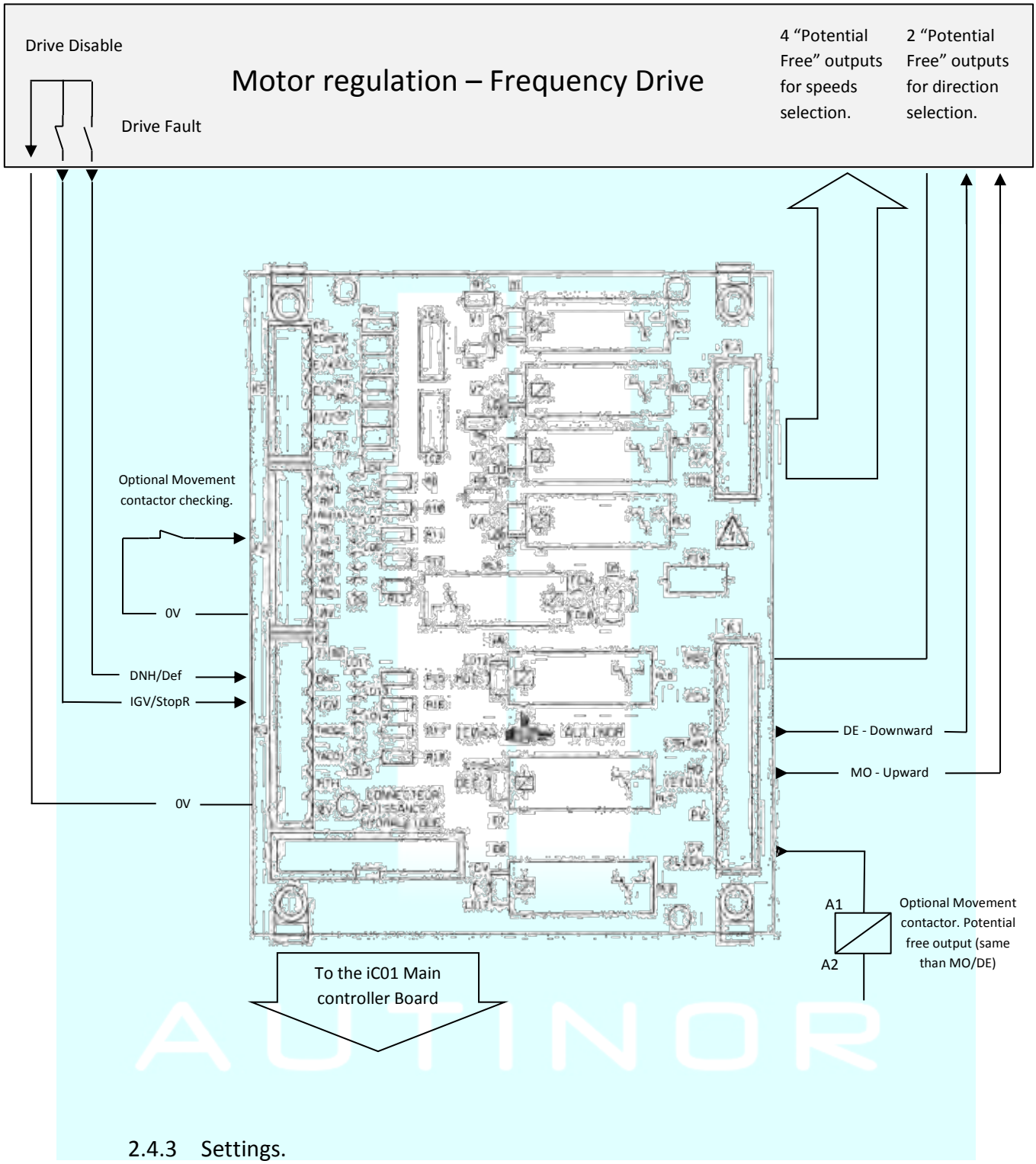
iCan		*V4*	*V3*	*V2*	*V1*
Brand	*Model*	*Valves*			
Algi	AZRV	V0	V2	DN	UP
GMV	3010 2CH		VMD	VMP	VML
Blain / Leistritz	KV1P	D			
Blain / Leistritz	KV1S	D			A
Blain / Leistritz	KV2P	D	C		
Blain / Leistritz	KV2S	D	C		A
Blain / Leistritz	EV0	D	C		
Blain / Leistritz	EV1	D	C		A
Blain / Leistritz	EV4	D	C	S4	S1
Blain / Leistritz	EV10	D	C	B	A
Blain / Leistritz	EV100	D	C	B	A
Bucher / Beringer	E-LRV	K4	K3	K2	K1
Bucher / Beringer	VF-LRV	K4	K3	K2	K1
Bucher / Beringer	LRV-1	K4	K3	K2	K1
Uraca	FSB I 3MR	S4	S3	S2	
Hydronic	Serie 300			12H	12N
Wittur	Hi-NXL		9	3	8
Other	Allows iCan to « Learn » a new hydraulic model which is not present in the list. See: Menu / Site configuration/ Hydraulic / Valves programming.				

2.4.2.2 For 2/1 speeds



Note: for a single speed lift the PV contactor is not necessary.

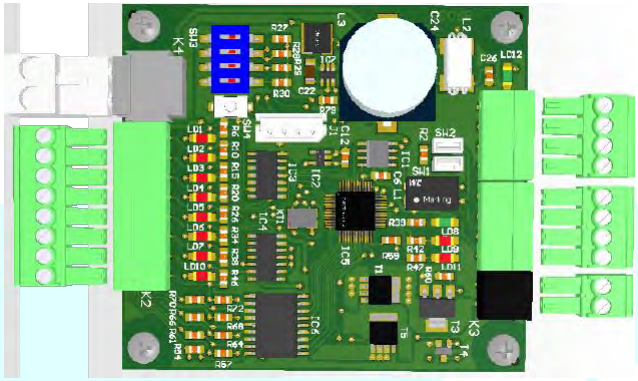
2.4.2.3 For Frequency Drives



2.4.3 Settings.

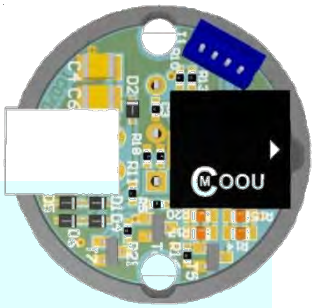
- Menu/Board configuration/Controller type/Drive interface
- Menu/Site configuration/Drive/iC04 I-O settings

2.5 - *iBB* Smart Buttons– iC06 & iC07.



2 wires

iBB smart buttons



iC06 – Can/Smart ***iBB*** buttons and 8 i/o interface

iC07 – ***iBB*** Smart buttons

2.5.1 Specifications.

General features:

- Configuration possible with the ***iBB*** :
  1 Service 64 levels maximum.
  2 Services 32 levels maximum.

iC06

iC06 Board is the ***iCan*** interface for ***iBB*** Smart Buttons.
Interface between iC01 (CAN bus) and iC07 (2 wires).
Can be placed in the Car operation Panel or in the controller panel.
Each Board is able to receive 32 call buttons + a >I< and a <I> button.
Supplied by the Main iC01 Board.
8 i/o are available for external devices or special features.
Twisted and Shielded cable is necessary on the Can bus.
Not Twisted and Not Shielded cables can be used for the buttons connection.
The Outputs are Electronic: 24V - 50 mA - 1,2w Maximum.
The Inputs are Normally Opened or Normally Closed depending on the Functions but always triggered with a 0V.
Its T° range is between 0°C and 40°C.

iC07

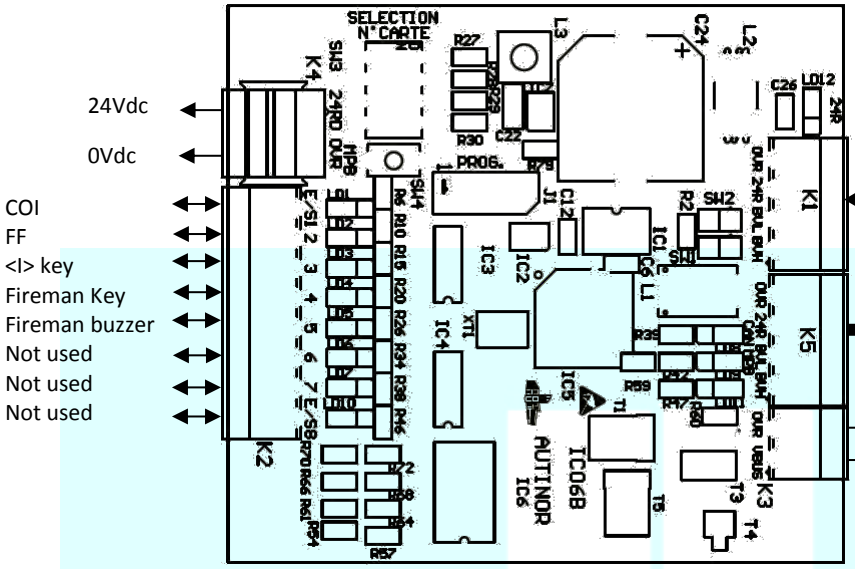
IC07 is the ***iBB*** Smart Buttons board.
Supplied by the iC06 Board.
They are able to communicate with the other buttons and keys.
Only 2 reversible wires connections between the buttons.
8 colours are includes.
6 levels of lightening are available for 3 applications (Call registration, Lighted button, Access code).
2 octaves are available for the sound receipt (EN81-70).
Its T° range is between 0°C and 40°C.

Number of iC06 depending on the levels; faces; type of collective

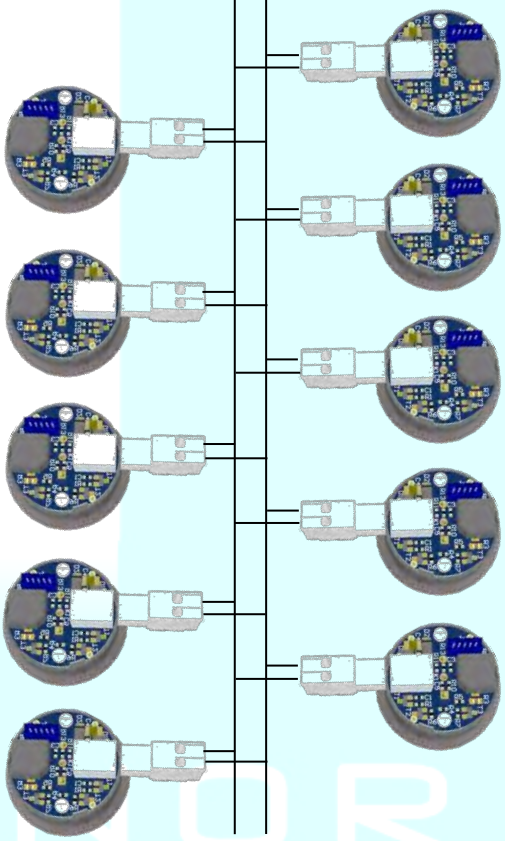
Face(s)	Landing buttons	Levels	Car	Landings	Total
1 face	1 button	2 -> 16	***1***	***1***	***2***
		17 -> 32	***1***	***1***	***2***
		33 -> 48	***2***	***2***	***4***
		49 -> 64	***2***	***2***	***4***
	2 buttons	2 -> 16	***1***	***1***	***2***
		17 -> 32	***1***	***2***	***3***
		33 -> 48	***2***	***3***	***5***
		49 -> 64	***2***	***4***	***6***
2 faces Seléctives Ou	1 button	2 -> 16	***2***	***2***	***4***
		17 -> 32	***2***	***2***	***4***
		33 -> 48	–	–	–
		49 -> 64	–	–	–
	2 buttons	2 -> 16	***2***	***2***	***4***
		17 -> 32	***2***	***4***	***6***
		33 -> 48	–	–	–
		49 -> 64	–	–	–

"_" Not done yet.

2.5.2 Connections.



iC06 – Smart buttons interface board

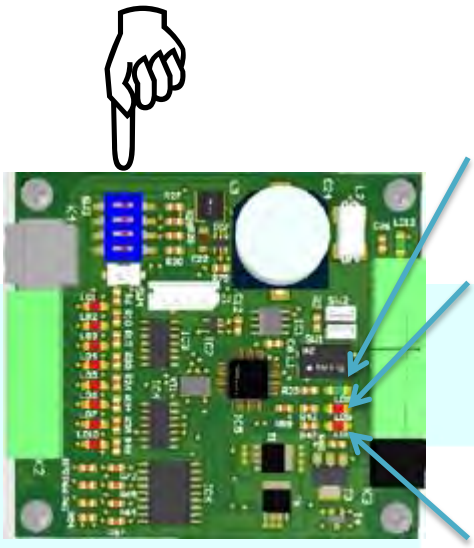


- The 2 wires bus cable must be adjusted to the necessary length.. **In ANY case the wires must be rolled up in the Car operation panel.**
- 2 standard wires (0,5 mm2 max.) can be used, Not twisted, Not shielded.
- No cabling direction is necessary. Each button must be connected on the bus, but the wires can be crossed or not…

1 iC06 interface board is able to receive:

- 32 Car ***iBB*** buttons maxi + a <I> button and a >I< button.
- 32 Landing ***iBB*** buttons (16 Up+16 Down) maxi.
- 32 Landing ***iBB*** buttons (32 Up or 32 Down) maxi.

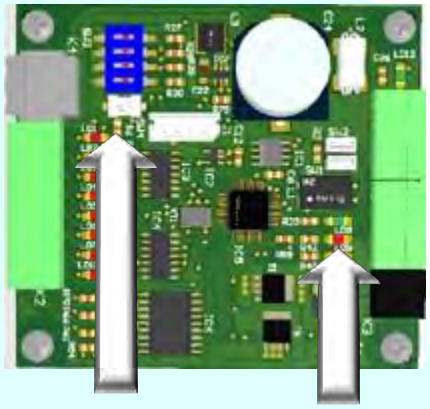
2.5.3 Settings.



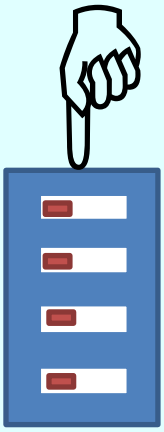
- LED08 (Green): Can communication status.
  Communication between iC06 & iC01 (Flashes).
- LD09 (Red): Buttons learning phase.
  - On normal: OFF
  - Button Learning procedure: RED (by pushing the programing button during 5s – See after)
  - Ic06 replacement procedure: RED flashes (by pushing the programing button during 5s and keeping it pushed – See after)
- LD10 (Red): 2 wires bus communication status.
  Communication between iC06 & buttons (Flashes).

MAXI 32 Buttons / Board

Buttons learning procedure:



Push HERE until the (LD09) **LED** Lights
to set the Car / Landings ***iButton*** or
to replace one or several ***iButton***



1 - Buttons location:	Car	Landings
2 – Face Selection :	Face 1	Face 2
3 – Levels (Car board only):	2 to 32	33 to 63
4 – Not used:		

To program the CAR *iBB* buttons:

- Set the switches – Location, Face, Level – (See before).
- Push on the programming button of the ic06 board during 5s. LED09 above the button light → you are entering the car buttons learning mode.

- You must now push during 3s on each car button one by one to program them (give them a level and a function – see after).
- You can select the different functions - colors - by pressing the selected button several times :
  - Red : <I>
  - Blue: >I<
  - Green: Car destination buttons
- When the good color is selected release the button – Beep – It's programmed!
- You **must** program the buttons from the **bottom one to the top one** (if you make a mistake, quit the procedure and start back from the beginning).
- When the highest – Latest - Car button is programmed, you must quit the procedure by pushing the ic06 board button (5s). LED09 will return green (Quit the procedure).

Note: if several ic06 boards are present on the lift, follow the same procedure for each board.

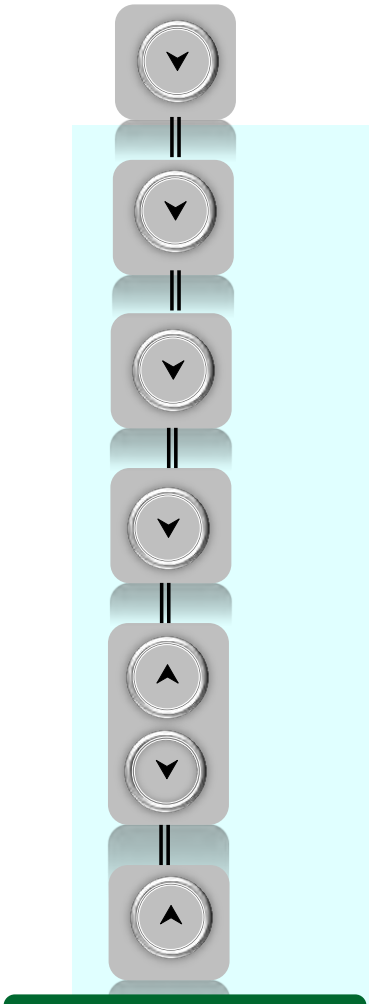
The key functions can be connected directly on the buttons, on the small white plastic connector.
<I>: is used for the doors maintained open (Cleaning lady).
C0: is used for the car reservation key.
C1: is used for the fire man car key.

To program the LANDING *iBB* buttons:

- Set the switches – Location, Face – (See before).
- Push on the programming button of the ic06 board during 5s. LED09 above the button light → you are entering the Landing buttons learning mode.
- Get into the car and get to each floor one by one to program them (the landings order registration doesn't matter).
- Place the car to the level to program it.
- Push on the button during 5s to program them.
- It will light RED: Down landing or Blue: Up landing by pushing on it several times.

  Note that at the bottom floor, the only possible choice is Blue (up direction call).
- When the right color is selected release the button – Beep - it's programmed!
- When you have registered all the buttons, you must quit the procedure by pushing the ic06 board button during 5s. LED09 will return green (Quit the procedure).

Note: if several ic06 boards are present on the lift, follow the same procedure for each board.



Landing buttons iC06

The key functions can be connected directly on the buttons, on the small white plastic connector.

Priority landing buttons or keys on each floor.
(See also Menu/site configuration/Buttons/At levels/priority call).

Other settings see iC01: Menu / Site Configuration / Buttons / Smart buttons.

Replacing an iC06 Board:

Connect the new board instead of the old one, push the programming button for 5s, LED09 becomes RED, don't release the button you will see the RED Led flashing – it's done. Quit the procedure by releasing the button and pushing it again, the Led09 lights off.

2.6 – Supplies – Alim01 & TOR.

2.6.1 Specifications.

TOR 191

Controller transformer.

Mains supply is 230Vac; 370 Vac; 400 Vac or 450 Vac.

Alim01

Board above TOR191 containing:

A 24 Vdc - 5A protected supply for the electronic boards.

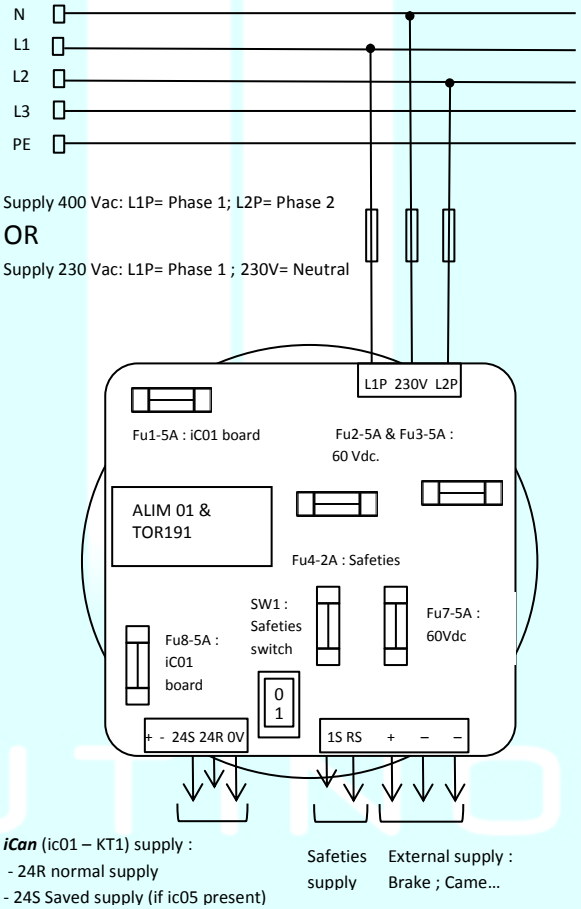
A 120 Vac - 2A protected supply for the safeties.

A 60 Vdc – 5A protected supply for external items like brakes; valves…

A lighted switch is available to interrupt the safeties supply.

Its T° range is between 0°C and 40°C.

2.6.2 Connections.



2.6.3 Settings.

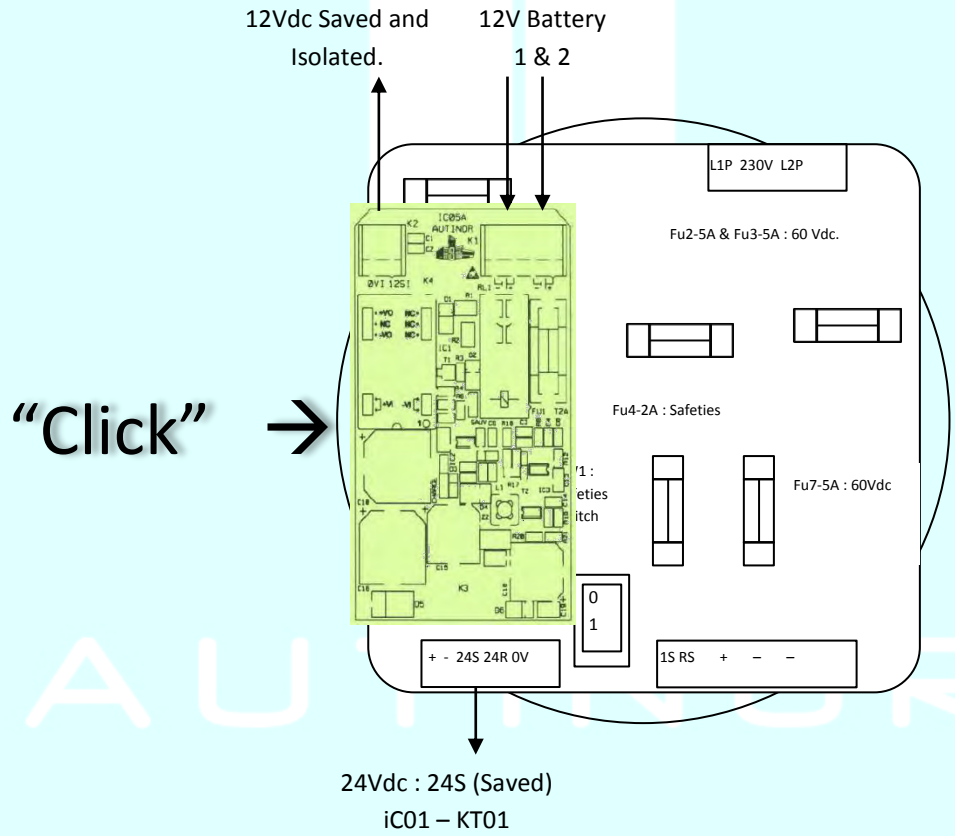
The 3 position plastic jumper permits to select the mains voltage supply : 230Vac; 400Vac; 450Vac.

2.7 – 24Vdc and 12Vdc Saved/Isolated supplies – iC05.

2.7.1 Specifications.

iC05 is the ***iCan*** "Saved/Isolated" supplies board.
This board is necessary in multiplex mode (Using Horizontal Bus), 1 board per Lift. If it's a simplex it is useless.
This board must be plugged on the alim01 board (See after).
It creates a 24Vdc called 24S (24 Saved) to keep the board alive to prevent Mains power Failure.
It creates a 12Vdc Saved and isolated for the Horizontal bus supply (this bus is common to many lifts).
It needs to be connected to two 12Vdc batteries.
Its T° range is between 0°C and 40°C.
Its Size is 97mm * 56 mm.

2.7.2 Connections.



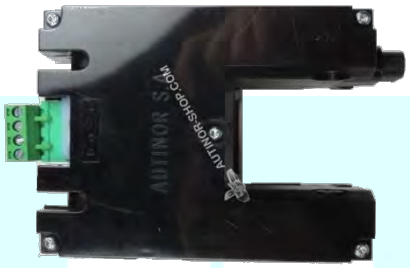
2.7.3 Settings.

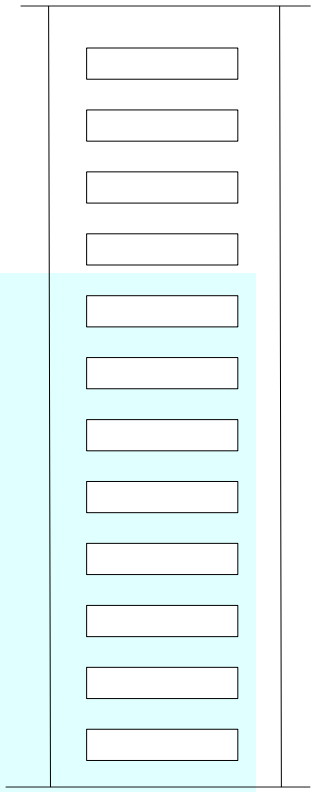
No Settings.

2.8 Lift Positioning Sensors.

2.8.1 Optical Sensor – O03 + Tape

O03: Optical Lift position sensor.



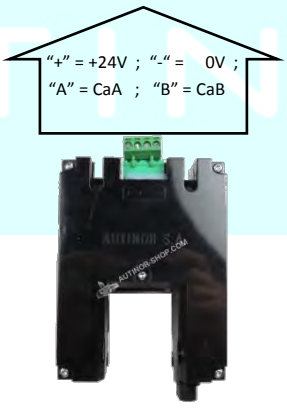


2.8.1.1 Specifications.

Dedicated sensor for lift positioning
Precision1mm.
Maximum Speed 3,5 m/s.
4 wires directly connected to iC01 board.
Needs a metallic tape in the shaft.
O03-1: 1 bottom resetting magnet (ED).
O03-2: 2 resetting magnets (ED & EM) for 1,6 m/s or more.
Its T° range is between 0°C and 40°C.
Consumption: 1W.
Its Size is 150mm * 90mm * 60mm.

2.8.1.2 Connections.

4 wires connected to iC01 – KC5 board.



2.8.1.3 Settings.

Levels setting

To set the levels, use the ***iCan*** interface and select: Menu/ Assistance/ Setting the levels → Ok.

Now you are entering the procedure. It will guide you all along the different step of the setting. The ***iCan*** controller will tell you the number of levels still to be set. Please note that you will need to take the Red/Blue magnets to fix them on the tape during the procedure. If leave the procedure before it's fully finished, you will have to start it again from the beginning.

Adjustment of the parameters, See §2.1 - iC01 Board :

Menu / Site Configuration / Selection / Altitudes.
Menu / Site Configuration / Selection / Zones & Distances.

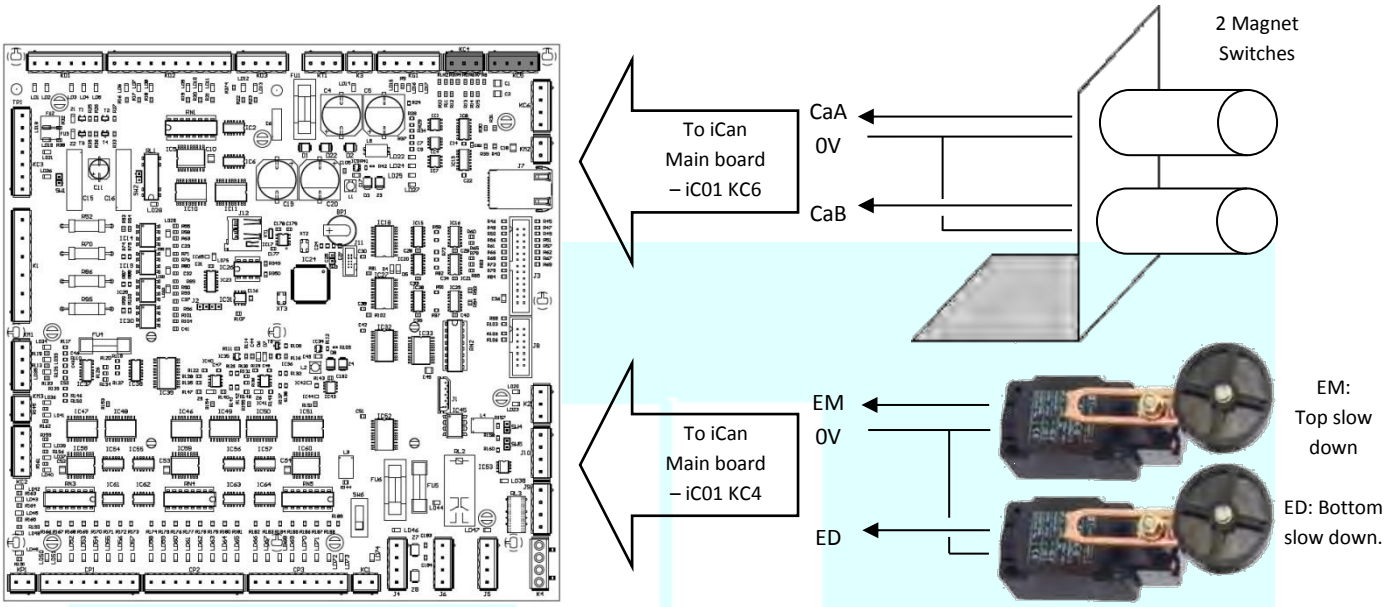
2.8.2 Magnetic Sensors – Switches + Magnets.

Magnet switches: Magnetic Lift position sensors sensor.

2.8.2.1 Specifications.

Dedicated sensor for lift positioning
Maximum Speed 1,2 m/s.
3 wires directly connected to iC01 board.
Needs 2 wires, for extra Up an Bottom extra slow down information (EM/ED).
Needs magnets for lift positioning in the shaft.
The magnet size is larger (4cm at least) than the distance between the 2 contacts (about 150mm).
Its T° range is between 0°C and 40°C.

2.8.2.2 Connections.



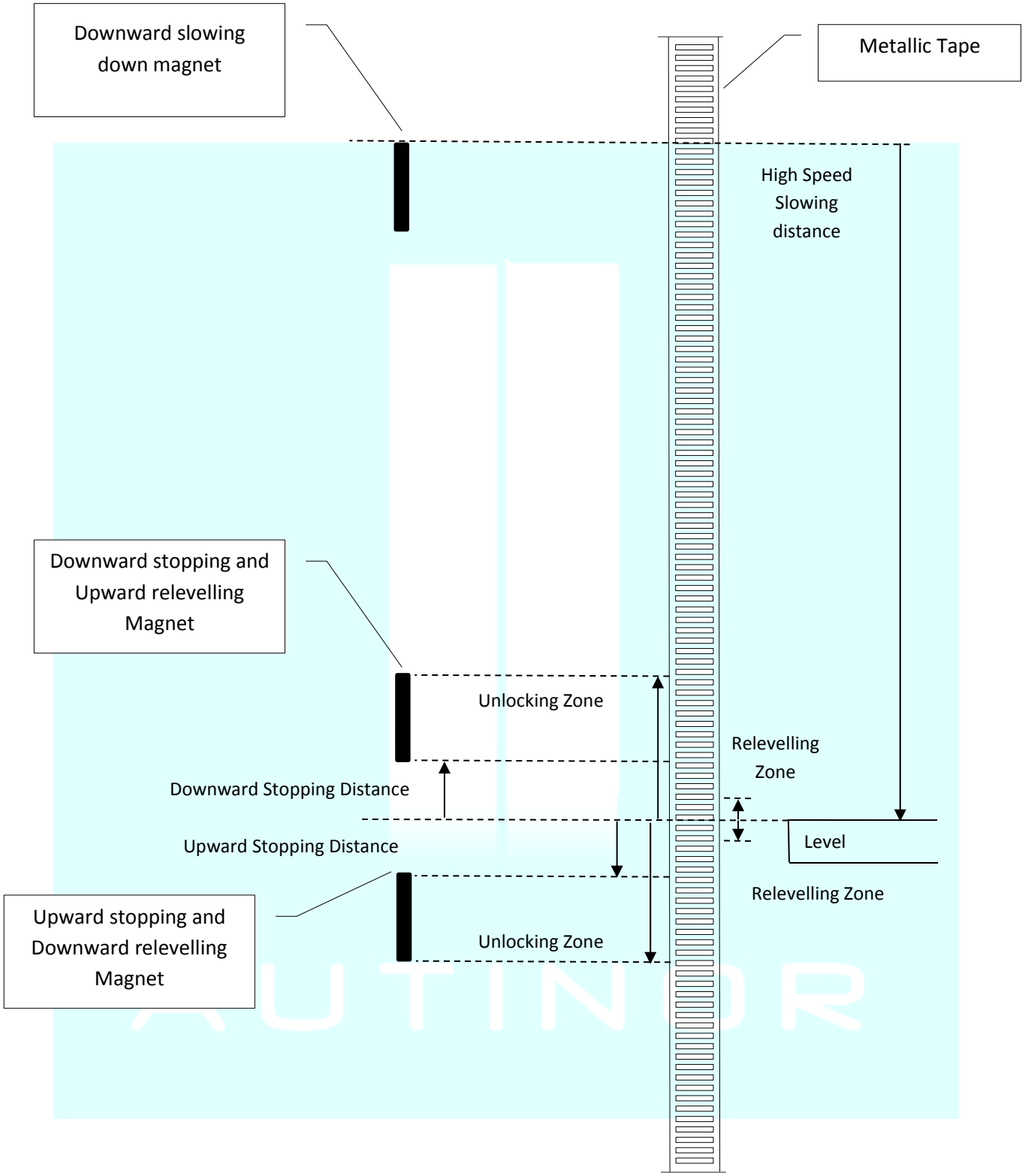
2.8.2.3 Settings.

Adjustment of the parameters, See §2.1 - iC01 Board:

Menu / Site Configuration / Levels
Menu / Site Configuration / Selection

4 magnets between 2 floors for 2 speeds, hydraulics and drive systems.
2 magnets between 2 floors for 1 speed systems.
The distances between the magnets must be adjusted according to the lift speed.

2.8.3 In Summary

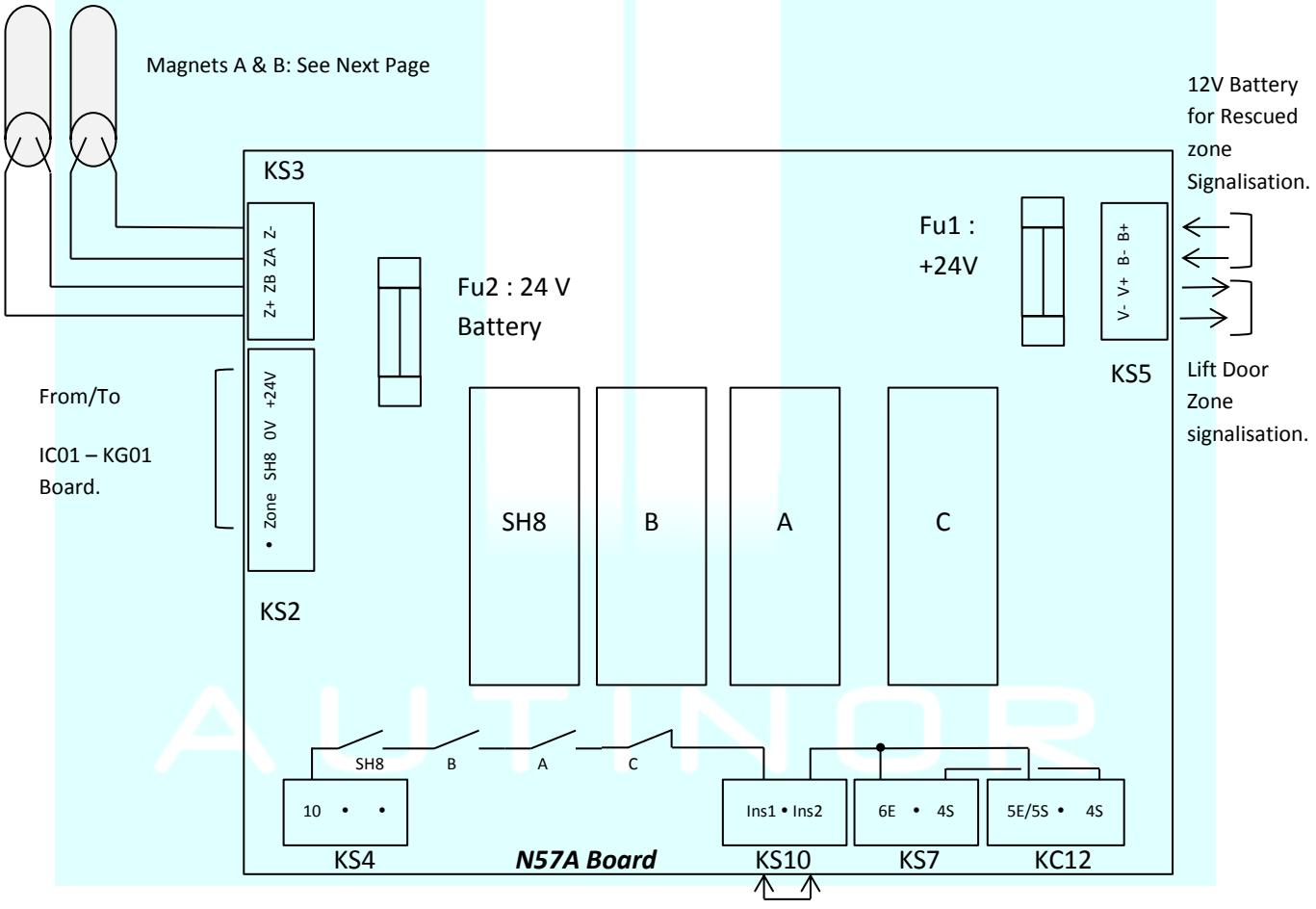


2.9 Movements with doors open – N57.

2.9.1 Specifications.

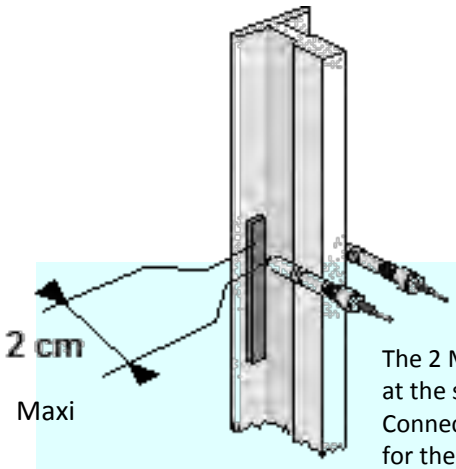
This system is designed for “Lift Movement with doors open”.
It is complementary to the iCan Board.
It is “CE” Marked.
It needs a dedicated reader for doors open zone. This zone Must be Given by 2 different readers, checked by the system.
Its T° range is between 0°C and 40°C.

2.9.2 Connections.

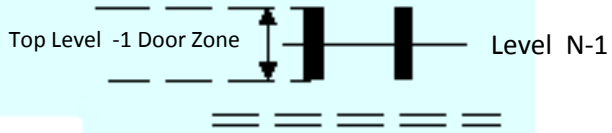


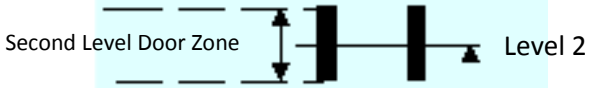
Safeties : « 10 » & « 6 ».

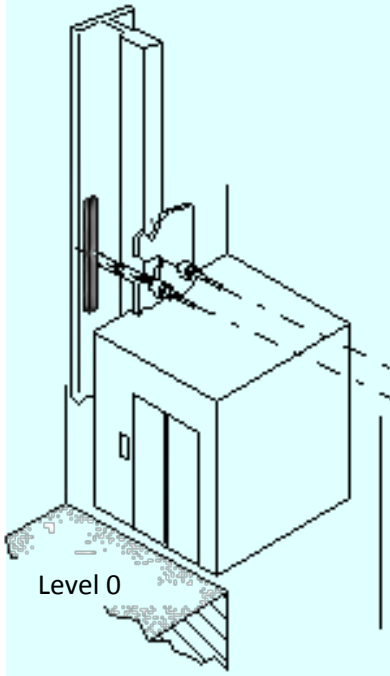
2.9.3 Settings.

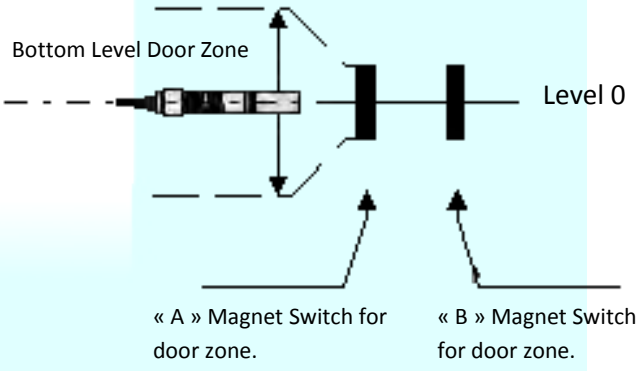


The 2 Magnets are set at the same position. Connected to (ZB; Z+) for the first and to – (ZA; Z-) for the Second.









Adjustments, See §2.1 - iC01 Board: Menu / Site Configuration / Relevelling & Pre Opening.

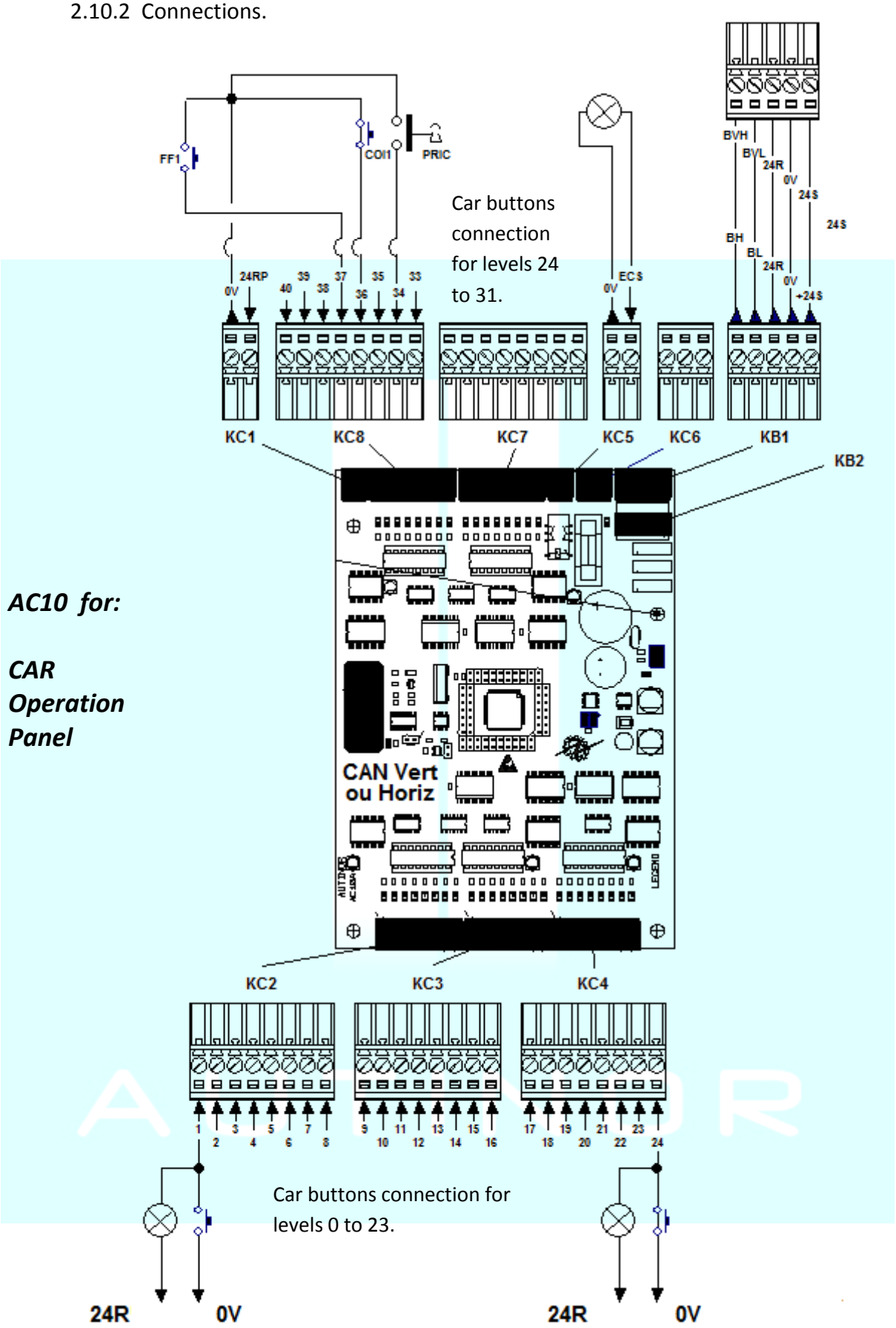
2.10 Car CAN bus Board – AC10.

AC10 Board.

2.10.1 Specifications.

The AC10 is the ***iCan*** Car Board.
Its Supply is 24Vdc thought the CAN
Its Consumption is 1W.
The Outputs are Electronic: 24V - 50 mA - 1,2w Maximum
The Inputs are Normally Opened or Normally Closed depending on the Functions, triggered with a 0V.
Twisted/Shielded cable is necessary on the Can bus.
Its T° range is between 0°C and 40°C.
Size: 165 mm * 115 mm

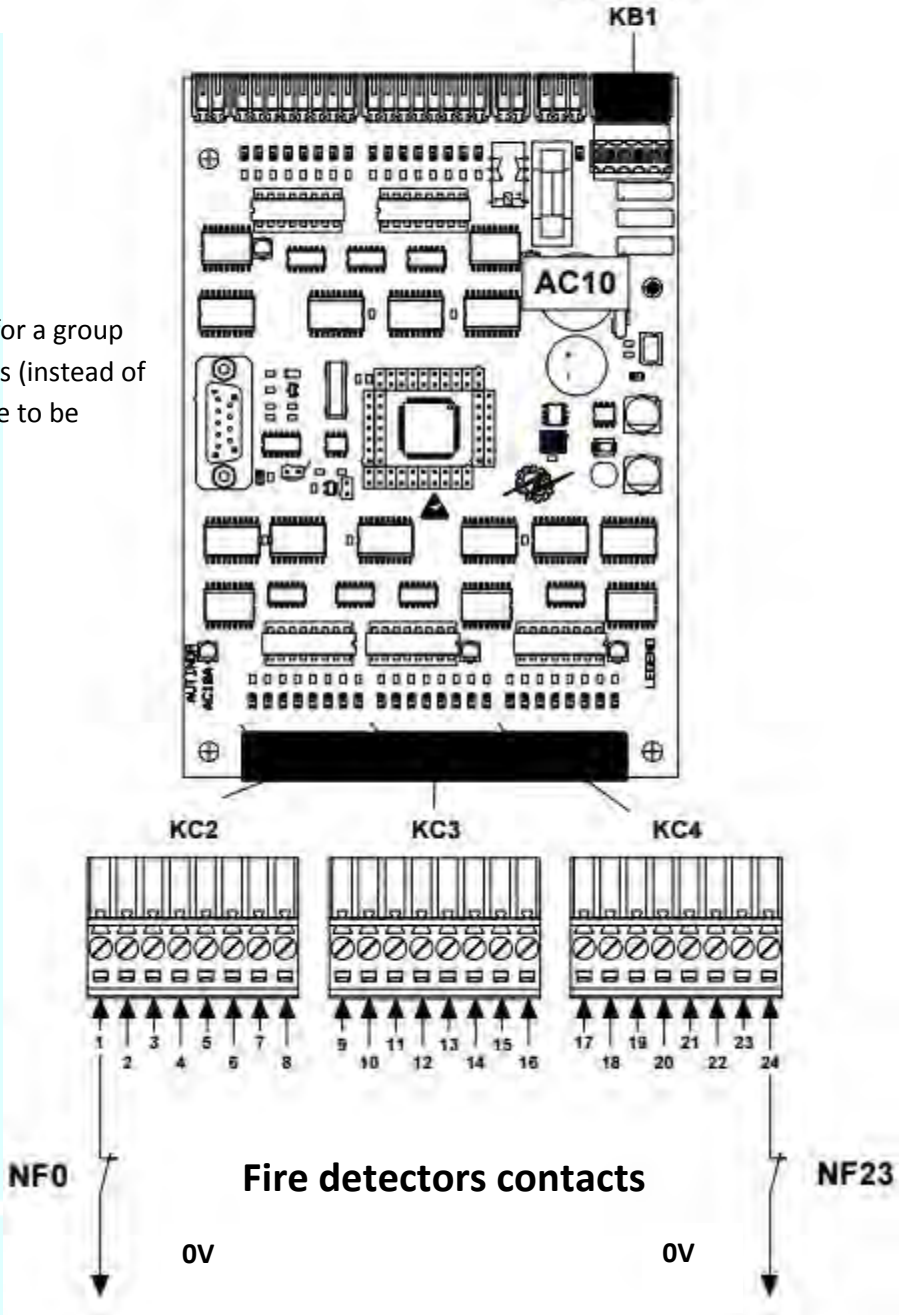
2.10.2 Connections.



AC10 for: Fired levels

To the iCan iC01 board Vertical CAN Connector (*)

(*): if the board is used for a group of lifts, the Horizontal bus (instead of the vertical one) will have to be connected.



2.10.3 Settings.

A. *AC10 for CAR operation panel:*

Parameters to be adjusted or checked in the AC10 board.

VEC30 Address	Digit7	Digit6	Digit5	Digit4	Digit3	Digit2	Digit1	Digit0
800	Speci	X	X	Cab16	Feux64	Feux32	Cab64	Cab32
OPT	0	0	0	0	0	0		

- For the Board managing the floors from 2 to 31: Digit0 = 1
- For the Board managing the floors from 32 to 63 (or 2 to 31 with selective doors) : Digit1 = 1
- ***iCan:*** Nothing

B. *AC10 for fired levels:*

Parameters to be adjusted or checked in the AC10 board.

VEC30 Address	Digit7	Digit6	Digit5	Digit4	Digit3	Digit2	Digit1	Digit0
800	Speci	X	X	Cab16	Feux64	Feux32	Cab64	Cab32
OPT	0	0	0	0			0	0
IV0	7	6	5	4	3	2	1	0
805	1	1	1	1	1	1	1	1
IV1	15	14	13	12	11	10	9	8
806	1	1	1	1	1	1	1	1
IV2	23	22	21	20	19	18	17	16
807	1	1	1	1	1	1	1	1
IV3	31	30	29	28	27	26	25	24
808	1	1	1	1	1	1	1	1
IV4	39	38	37	36	35	34	33	32
809	1	1	1	1	1	1	1	1

- For the Board managing the “fire floors” from 0 to 31: Digit2= 1
- For the Board managing the “fire floors” from 32 to 63: Digit3= 1
- For Normally close contacts on the fire detectors, the addresses 805 to 809 must be programmed to 1 for each contact/level.
- ***iCan:*** Menu/Site configuration/Fireman & fire floors/Floors fire

2.11 Landing CAN bus Board – AC03.

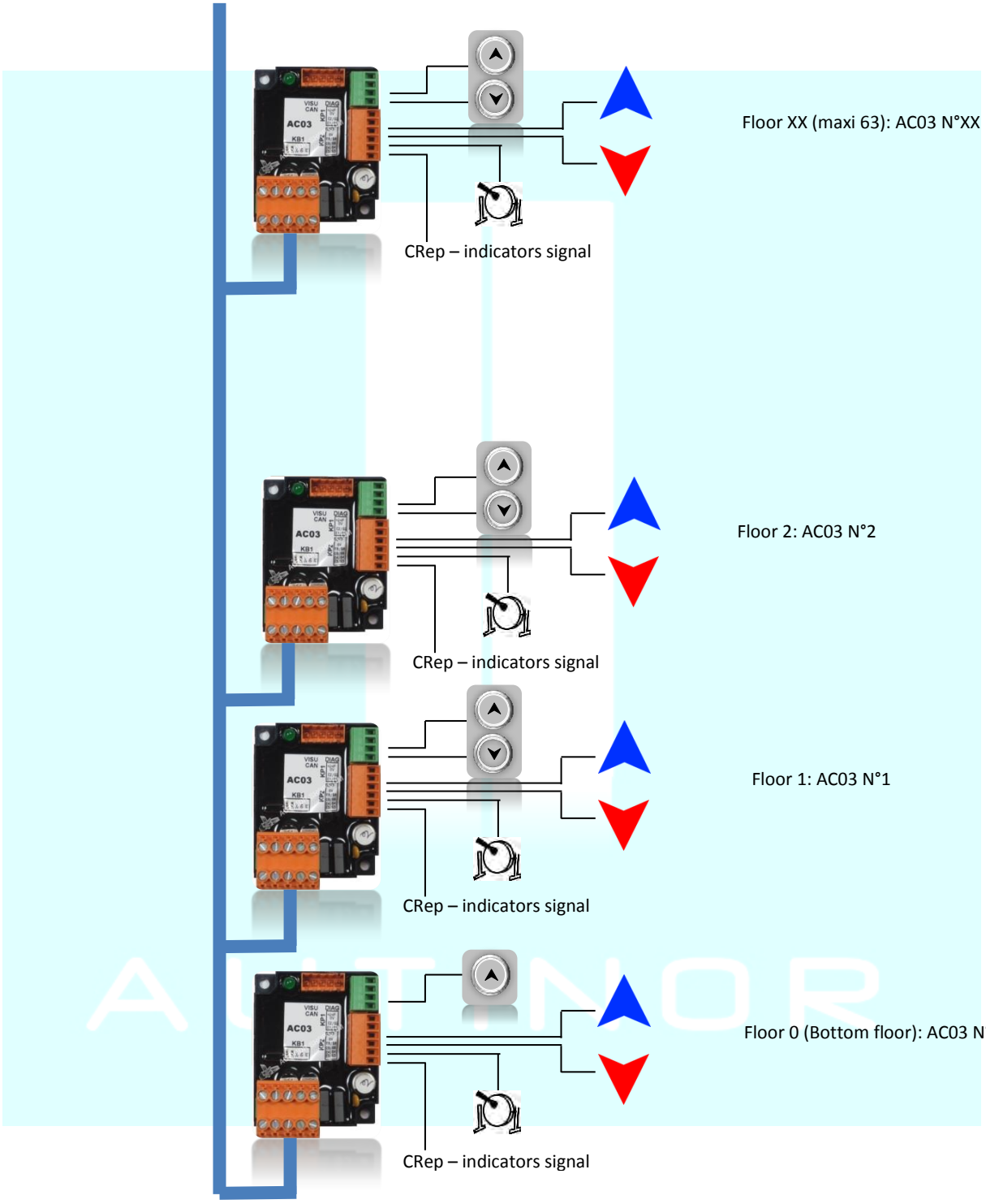
AC03 Board.

2.11.1 Specifications.

The AC03 is the ***iCan*** Landings Board (to connect the buttons).
Its Supply is 24Vdc thought the CAN
Its Consumption is 1W.
The Outputs are Electronic: 24V - 50 mA - 1,2w Maximum
The Inputs are Normally Opened or Normally Closed depending on the Functions, triggered with a 0V.
Twisted cable is necessary on the Can bus.
Its T° range is between 0°C and 40°C.
Size: 55 mm * 67 mm.

2.11.2 Connections.

4wires + Earth Shielded cable for the CAN bus
CANH; CANL; 24R; 0V; PE
From each AC03 board to ***iCan*** Landings connector



2.11.3 Settings.

Parameters to be adjusted or checked in the AC10 board.

VEC30 Address	Digit7	Digit6	Digit5	Digit4	Digit3	Digit2	Digit1	Digit0
002	AC03 number							
N-Niv	Level number							
003	CGong	BuzHan	3 Nv	FlchPD	OpApPri		2 Nv	DSer
Opt	0	0	0	0	0	0	0	0

- For a 1 level lift with an up and a down button on landing @003=00000000.
  - DSer: in case of double selective doors =1
  - OpApPri: In case of priority landing call.
  - 2 Nv; 3 Nv; FlchPD; BuzHan; CGong are not used, must be programmed to 0.
- ***iCan:*** No settings

2.12 Human Machine Interface – VEC30.

VEC30 HMI

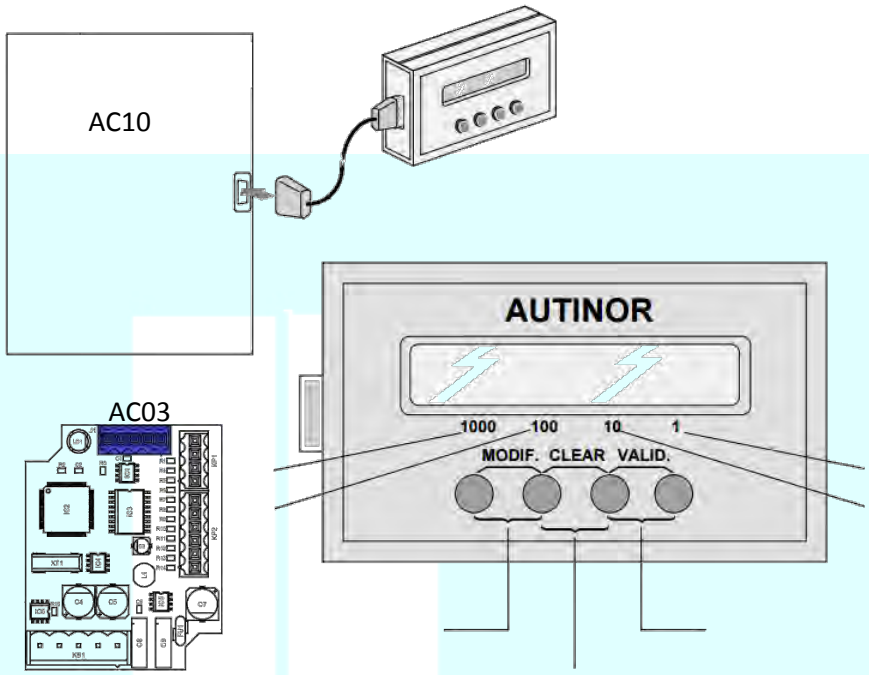
+

5383 Adaptor:
DB9 -> BL for AC03 board
DB9 -> Molex SPOX for iC01 main board; AF22 indicators

2.12.1 Specifications.

The VEC30/VEC03 is the ***iCan*** Car/Landings boards Autinor Mlift Human Machine Interface,
Its Supply is 24Vdc thought the CAN.
A cable is necessary to connect.
Its T° range is between 0°C and 40°C.
Size: 118*75*25 mm

2.12.2 Connections.



2.12.3 Settings.

No Settings

AUTINOR

3 - *iCan* Controller Structure.

3.1 – Traditional wiring or CAN bus.

3.2 – Car Vertical CAN Bus.

3.3 – Landings Vertical CAN Bus.

3.4 – Horizontal CAN Bus.

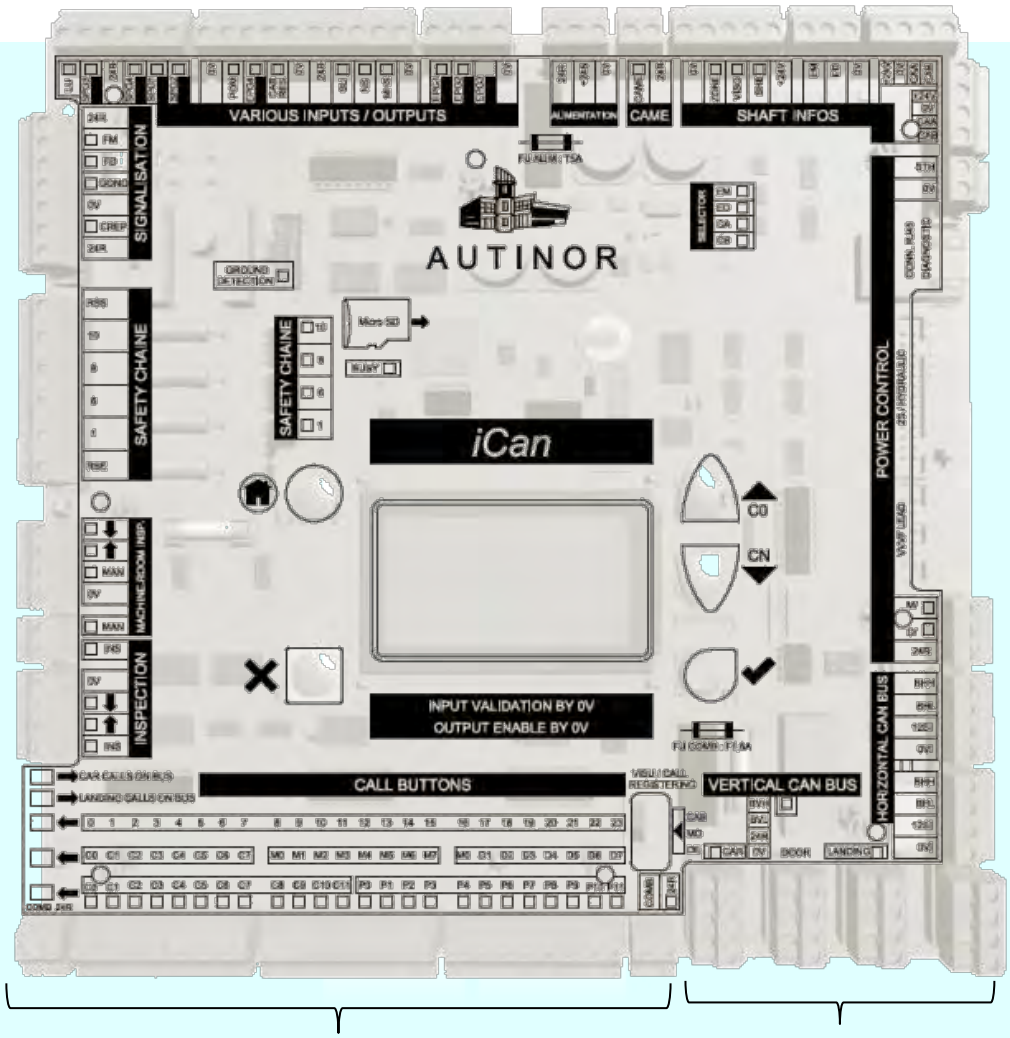
3.5 – Vertical Commutated CAN Bus.

3.6 – Signalization.

3.1 – Traditional wiring or CAN bus.

Depending on the costs of the electronic and the time to install the iCan controller is able to manage 4 different wirings solutions, without Can bus, with Can bus or mixes Can bus and traditional wiring.

In case of lifts using double selective doors, the number of levels in §3.1.1 & §3.1.2 is divided by 2.



Traditional 3 wires buttons. 24 buttons Maximum.

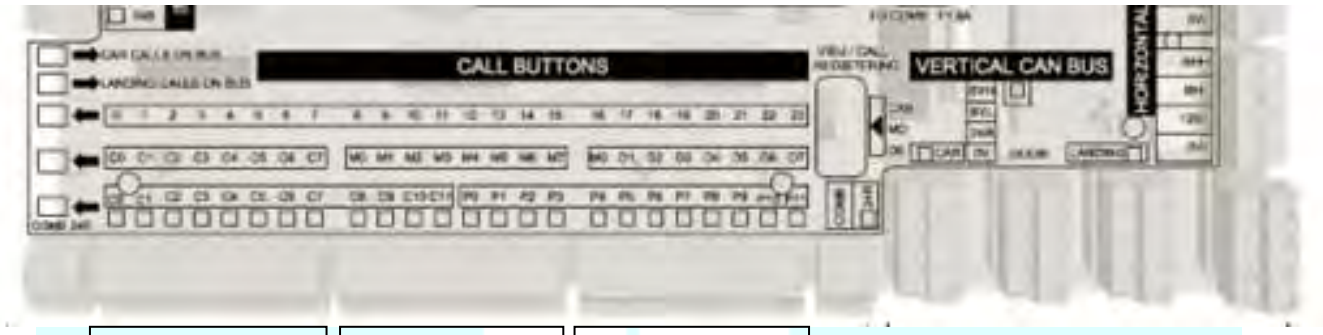
CAN Bus

Please note that with iCan, it is not necessary to get into the menu to know or even to register calls (Car, Up landings, Down Landings). With a simple wire between The Buttons Common (ComB) and the desired level it will register.

In the case of a full bus lift the 24 I/O for the buttons are not connected but they still works. It permits to See/Register a Car, Up landing or Down landing call by using the switch “Vertical Registering” locate on the right of this I/O.

3.1.1 Traditional wiring in the car

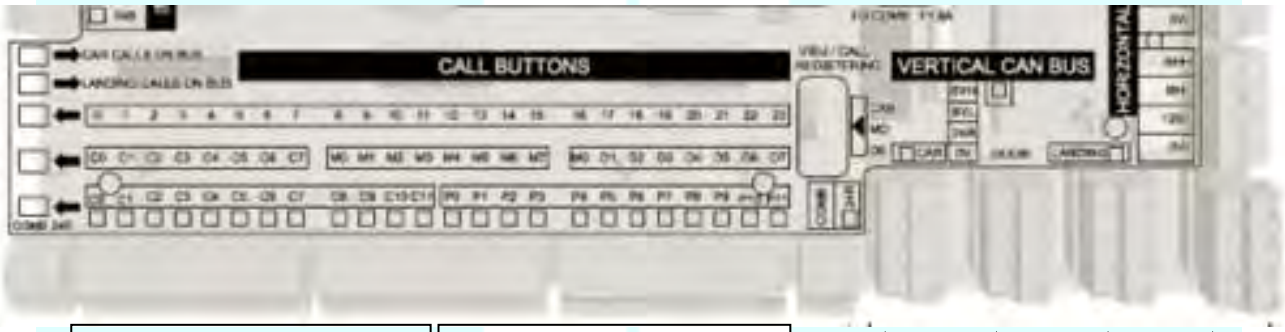
3.1.1.1 Selective traditional wiring at the floors – Up to 8 floors.



8 Car calls	8 ↑ Landing calls	7 ↓ Landing calls
C0 to C7	M0 to M7	D1 to D7

X X X X

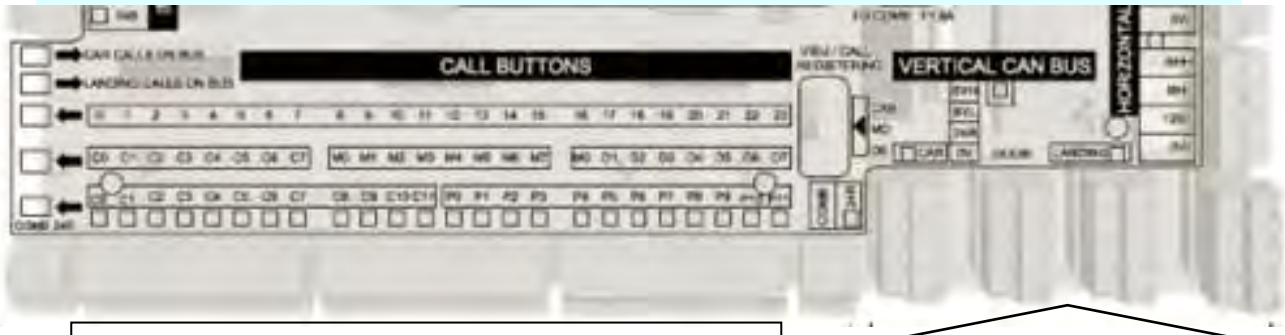
3.1.1.2 Collective traditional wiring at the floors – Up to 12 floors.



12 Car calls	12 ↑ or ↓ Landing calls
C0 to C11	P0 to P11

X X X X

3.1.1.3 Can bus at the floors – Up to 24 floors.

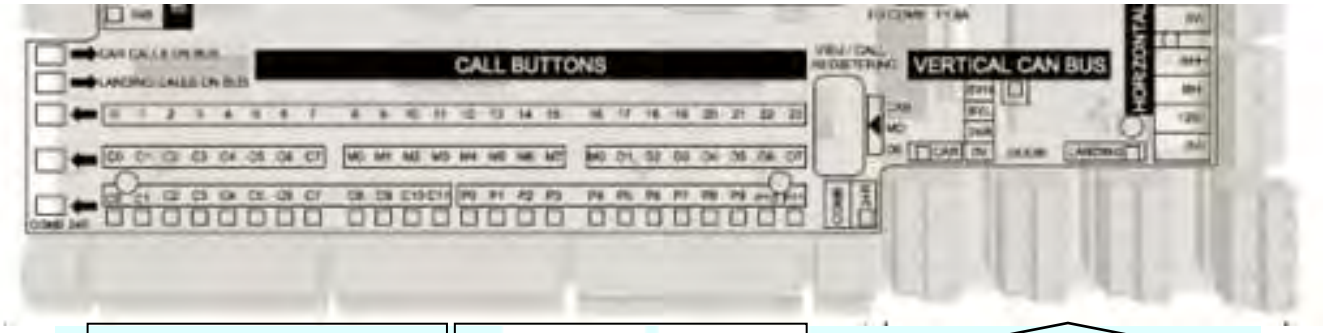


24 Car calls	C0 to C23

4W. Can Bus from the Landings.

3.1.2 Can bus in the car

3.1.2.1 Selective traditional wiring at the floors – Up to 12 floors.

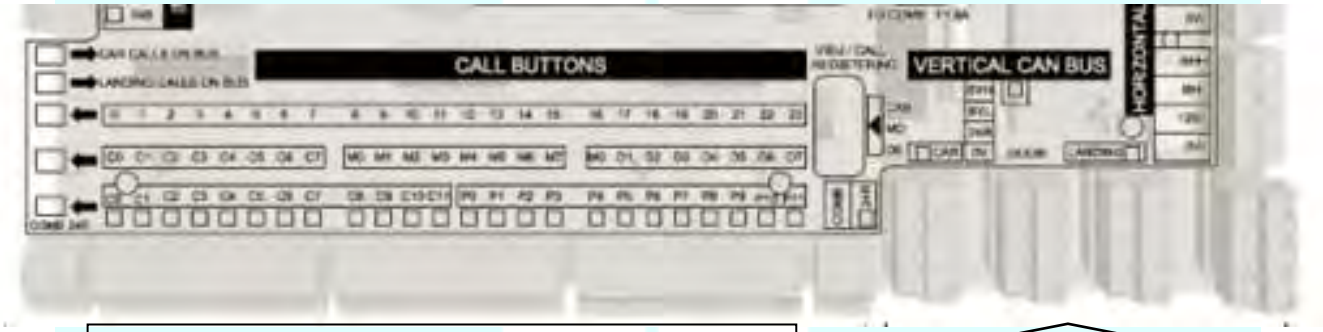


12 ↑ Landing calls
M0 to M11

11 ↓ Landing calls
D1 to P11

4W. Can Bus from the CAR

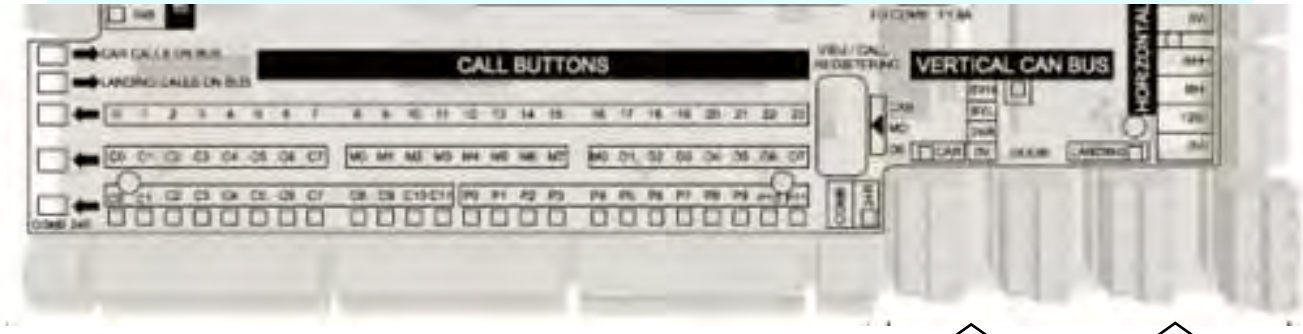
3.1.2.2 Collective traditional wiring at the floors – Up to 24 floors.



24 ↑ or ↓ Landing calls
P0 to P23

4W. Can Bus from the CAR

3.1.2.3 Can bus at the floors – Up to 64 floors.

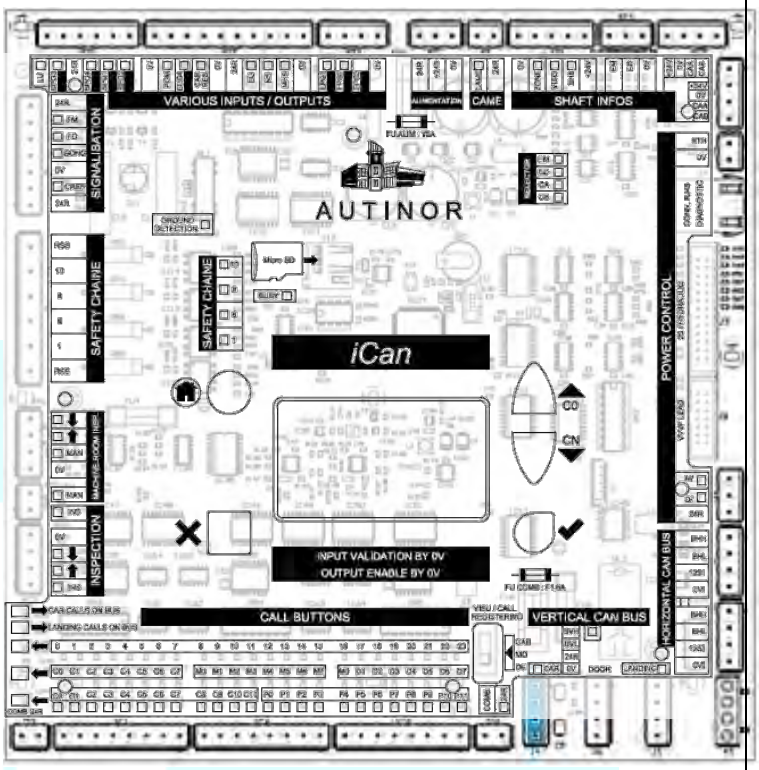


X X X

4W. Can Bus from the LANDINGS

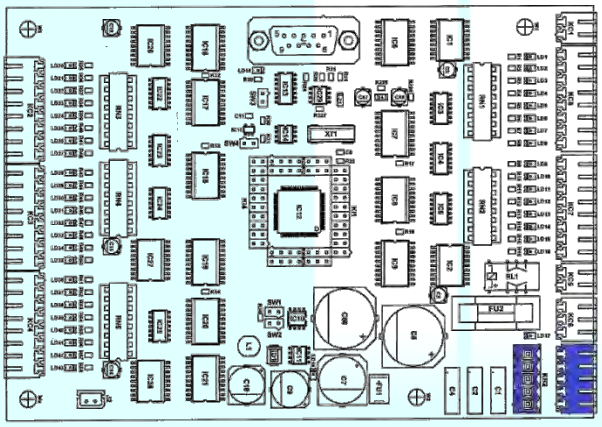
4W. Can Bus from the CAR

3.2 – Car Vertical CAN Bus.



0V - 24R - BVL - BVH

Car Operation panel / Car Top



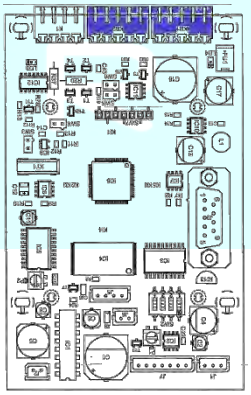
AUTINOR
AC10 –
Buttons board

0V - 24R - BVL - BVH

0V - 24R - BVL - BVH

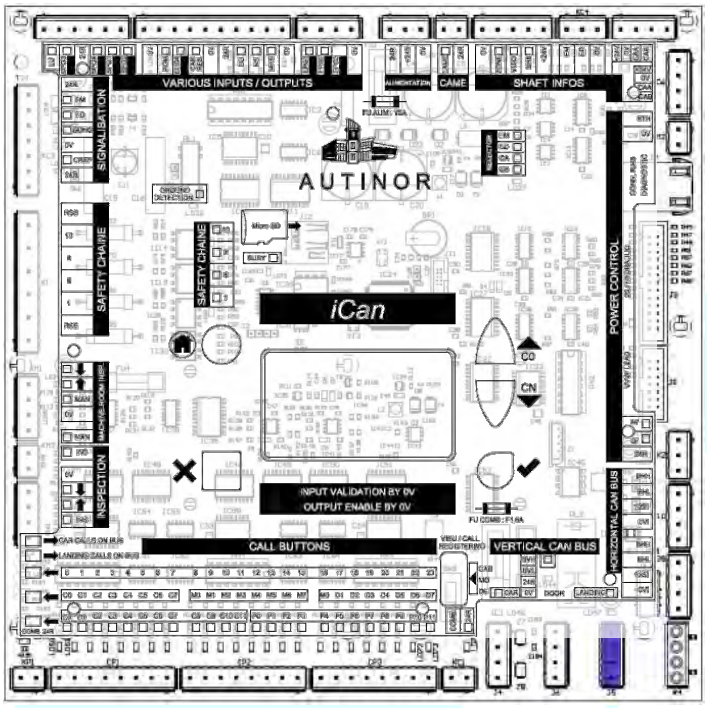
0V - 24R - BVL - BVH

AUTINOR
LCD - TFT - Dot Matrix displays



AUTINOR
AC27 – Speech Synthesizer

3.3 – Landings Vertical CAN Bus.



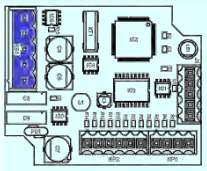
0V - 24R - BVL - BVH

Landings column

0V
24R
BVL
BVH

AUTINOR
LCD - TFT - Dot Matrix displays

0V
24R
BVL
BVH



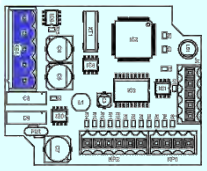
AUTINOR
AC03 – Landing buttons board

Level N

0V
24R
BVL
BVH

AUTINOR
LCD - TFT - Dot Matrix displays

0V
24R
BVL
BVH

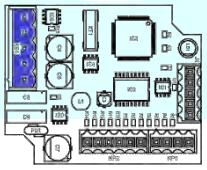


AUTINOR
AC03 – Landing buttons board

Level 1

0V
24R
BVL
BVH

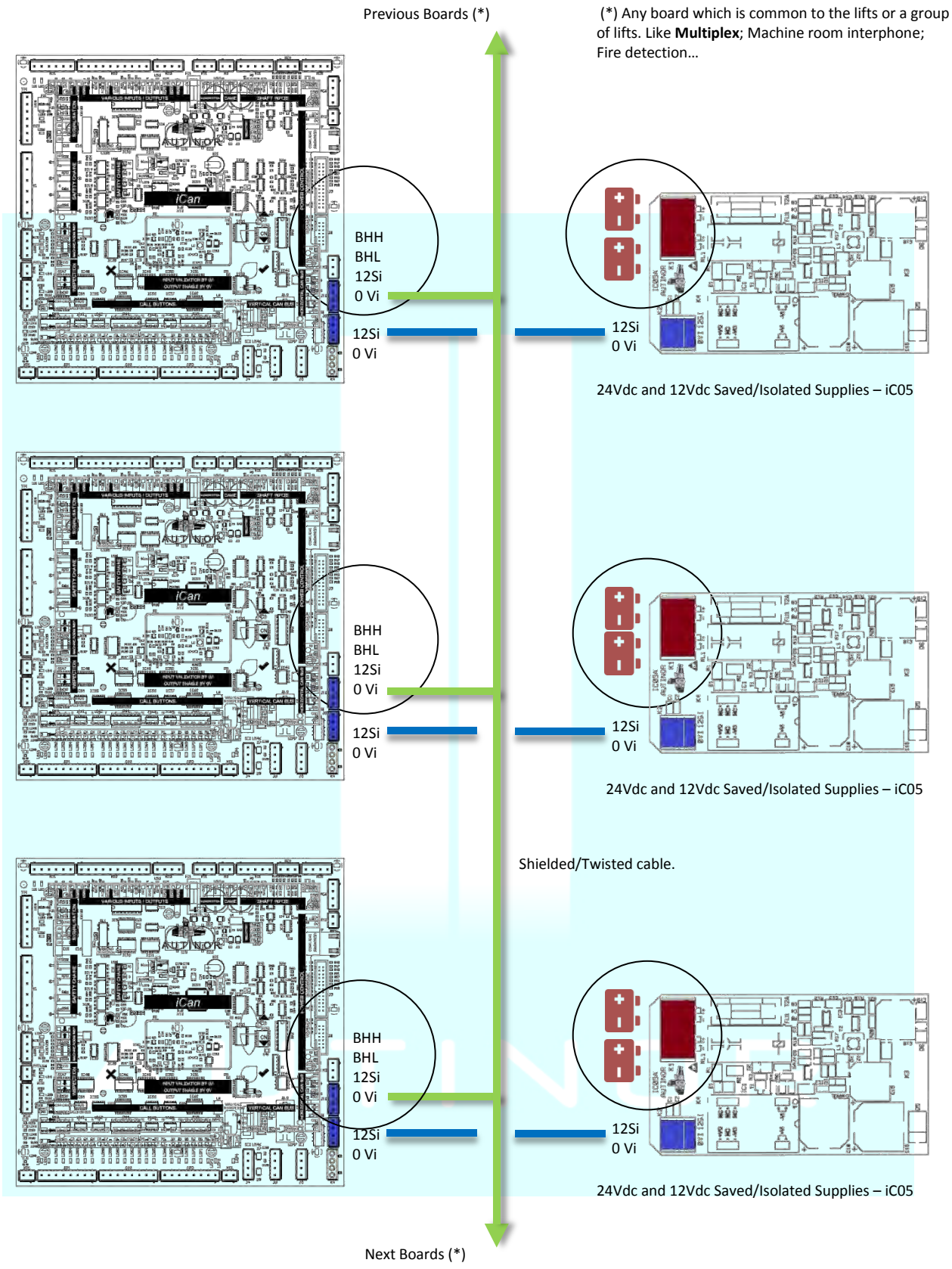
0V
24R
BVL
BVH



AUTINOR
AC03 – Landing buttons board

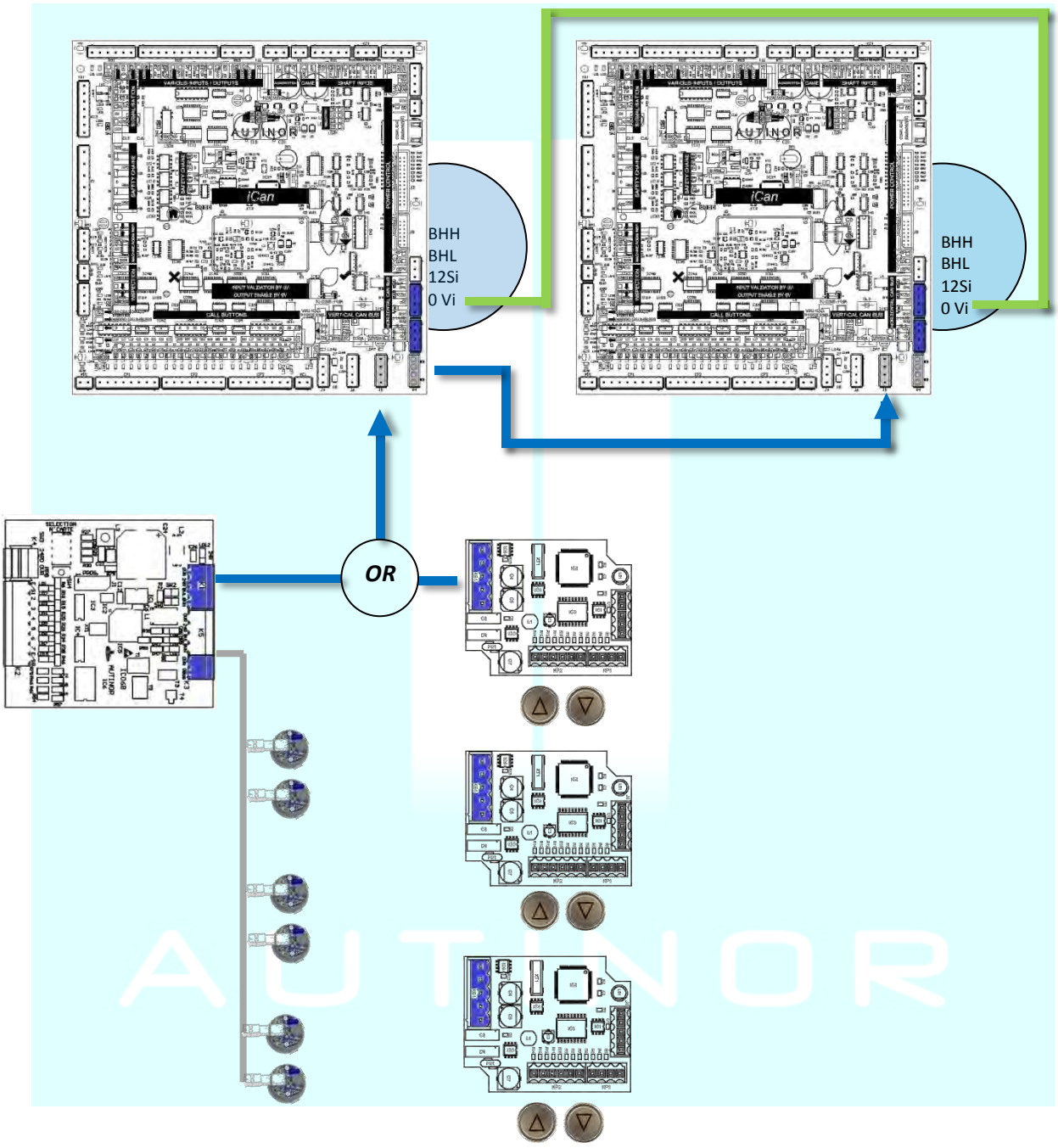
Level 0

3.4 – Horizontal CAN Bus.



3.5 – Vertical Commutated Can Bus

The Vertical commutated Can Bus is located on the right bottom corner of the iC01 board. The connector is inverted compared to the others. It's used on multiplex lifts only. It permits to transfer the Can bus Landing buttons to another lift in case of power failure. Of course if there is 2 lifts (or more) and 2 sets of buttons (or more) it's then useless.



Column of landing buttons for the 2 lifts:

Using the ***iBB*** Smart Buttons ***OR*** Using Landing card BUS board – AC03

3.6 – Signalization

***i*Can** Controller **always** provides the following solutions to activate the Signalization devices (Sound and Visual). Those solutions can be used individually or together.

3.6.1 Using Outputs

Up Arrow.
Down Arrow.
Gong.

See § 2.1.3 Menu / Site Configuration / Signalisation.

Outputs : 50mA – 1,2W Maxi. 24Vdc inactive, 0Vdc active.

3.6.2 Using 3 wires Mono-Directional Bus (CRep1)

Lift position - Indicator.
Lift position - Speech Synthesizer (1 more wire + Syn11 board).
Lift position 1 Output / Floor - (Using P324/7 board).

See § 2.1.3 Menu / Site Configuration / Signalisation.

3.6.3 Using 3 wires Mono-Directional Bus (CRep2)

Lift position - Indicator.
Lift position - Speech Synthesizer (Using Syn11 board).
Lift position 1 Output / Floor - (Using P324/7 board).
High/Low speed.
Up/Down Arrows. (Scrolling or Next departure).
Messages : “Lift Free”; “Fire Service”; “Special Service”; “Out of Service”; “Overload” (1 more wire);”Maintenance”).

See § 2.1.3 Menu / Site Configuration / Signalisation.

3.6.4 Using 4 wires Bi-Directional Bus (CAN)

Lift position - Indicator.
Lift position - Speech Synthesizer (Using AC27 board).
High/Low speed.
Up/Down Arrows. (Scrolling or Next departure).
Messages : “Lift Free”; “Fire Service”; “Special Service”; “Out of Service”; “Overload” (1 more wire);”Maintenance”).
Gong.

See § 2.1.3 Menu / Site Configuration / Signalisation.

4 - *iCan* Special Features.

4.1 – Human Machine Interfaces.

4.2 - MicroSD Card.

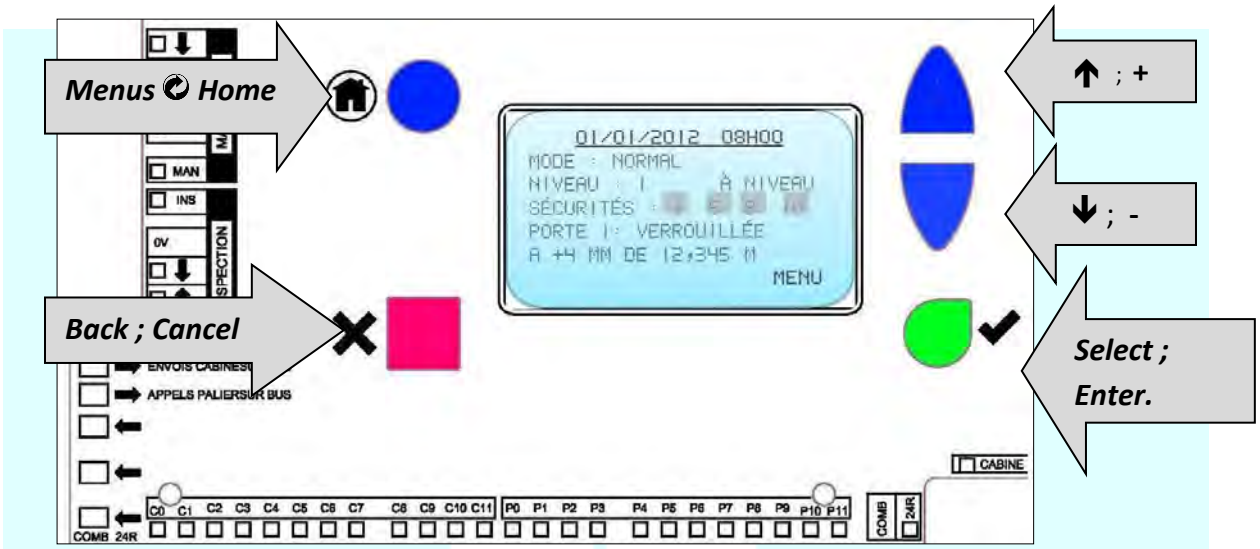
4.3 - Black Box.

4.4 – Multiplex Lifts.

4.1 – Human Machine Interfaces.

4.1.1 *iCom* – iC02.

This Human Machine Interface is ALWAYS Plugged on the main controller Board – iC01-. It permits to Program; to Drive; to check the iC01/02/03/04/05/06/07 boards. A Multi-lines intuitive and friendly menu appears on it in English. It can change in more than 10 other different languages.

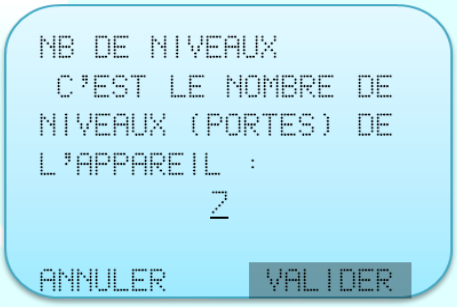


Main Page

Informations / Setting Zone

← Validation Zone

Page Title →



Informations /Setting Zone

Validation Zone ->

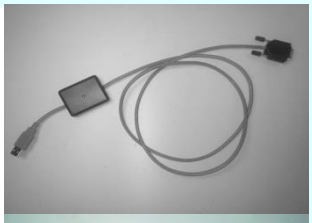
4.1.2 VEC30.

See § 2.12

4.1.3 Computer – ***VisuPC***

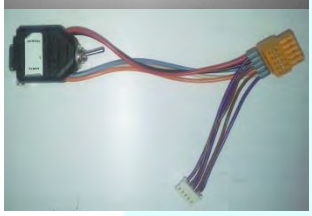
It is also possible to use a laptop PC. It can be used on iC01 board even if the ***iCom*** is so easy to use that it is really useless.

Mainly it can be used for Mlift Autinor drive comfort adjustment, “Black Box” analysis (§4.3) or Lift supervision, all this applications needs to have a big Screenplay.



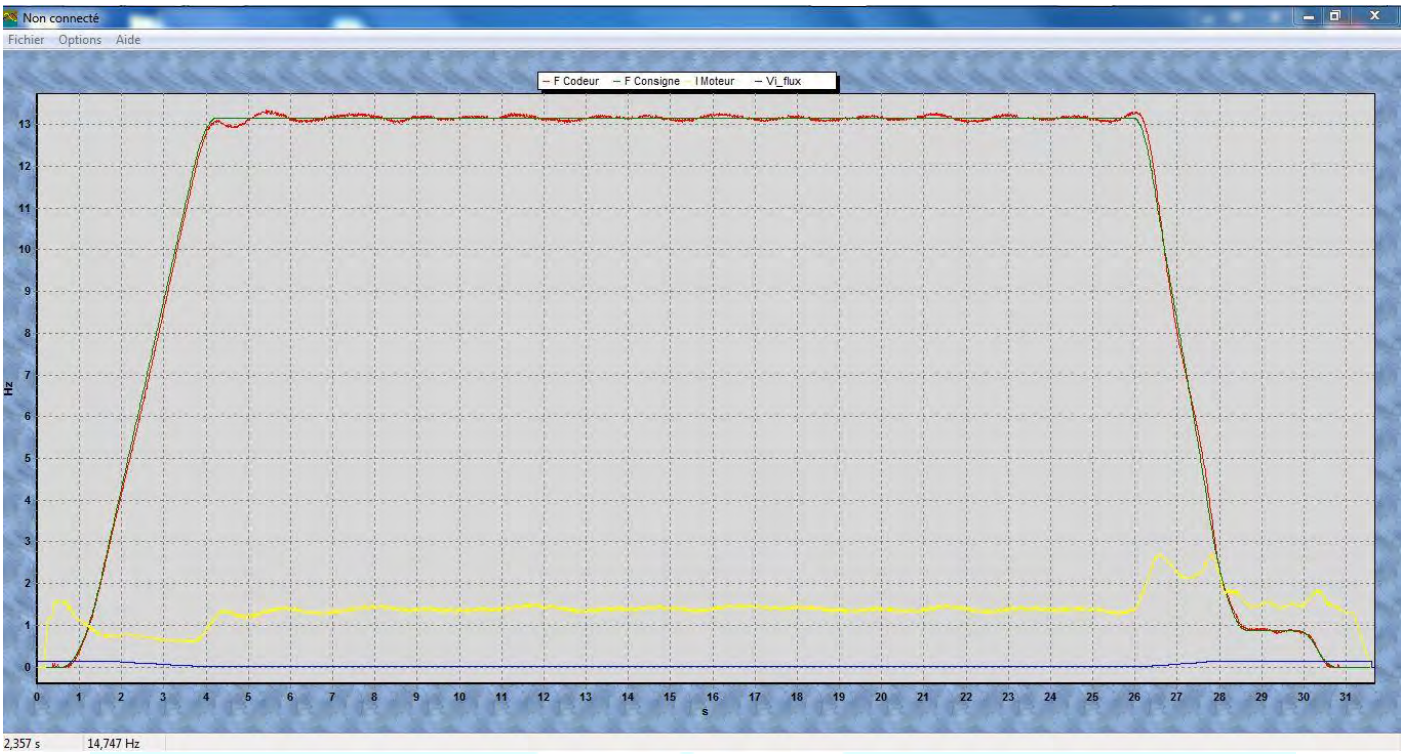
P343:
USB -> DB9 Cable for Milft Drive.

&

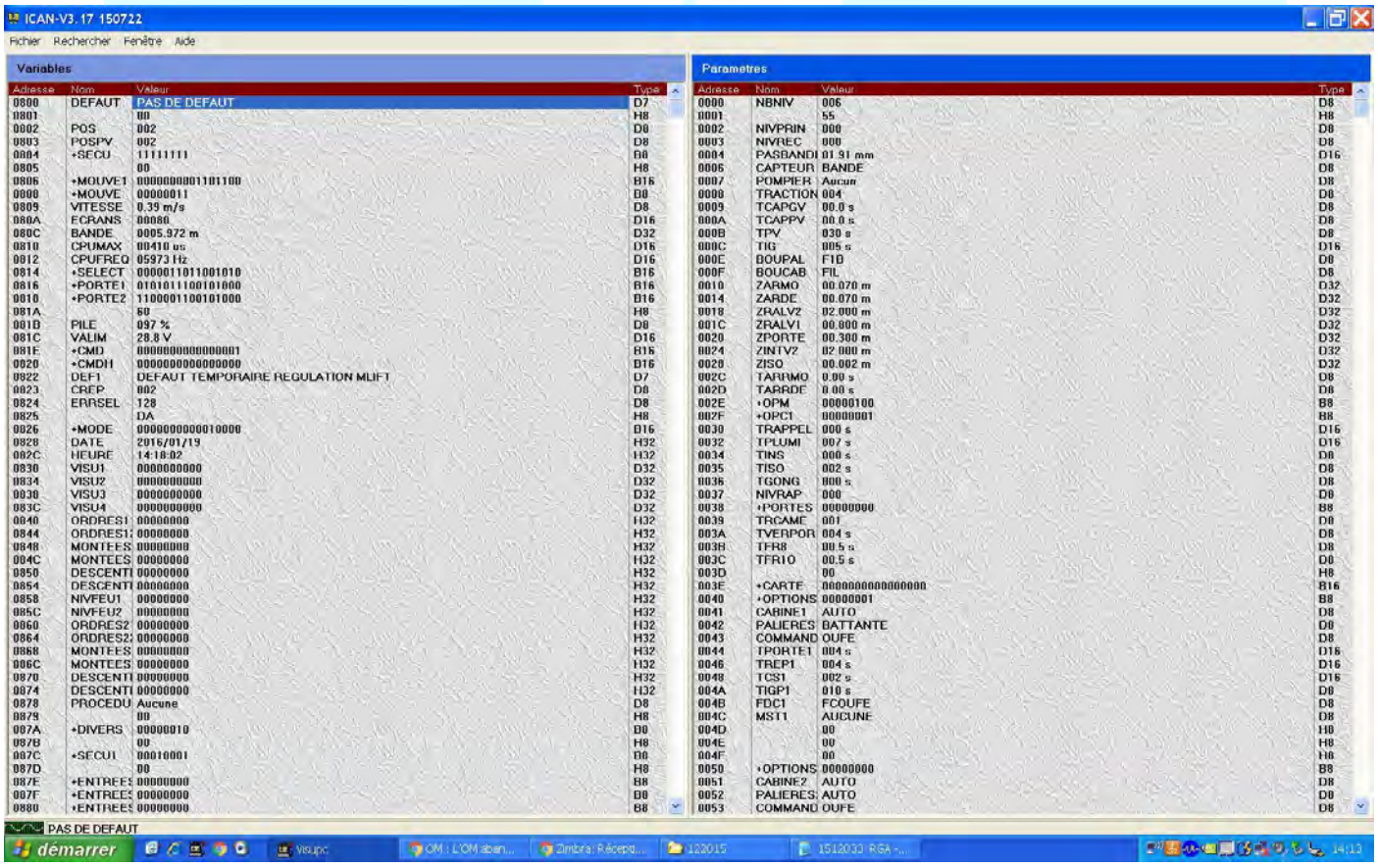


5383 Adaptor:
- DB9 -> BL for AC03 board
- DB9 -> Molex SPOX for iC01 main board; AF22 indicators.

You also need dedicated software: ***VisuPC*** , this software can be found on our web site.



Example: Curves registered by VisuPC.



Example: Parameters / Data trough VisuPC

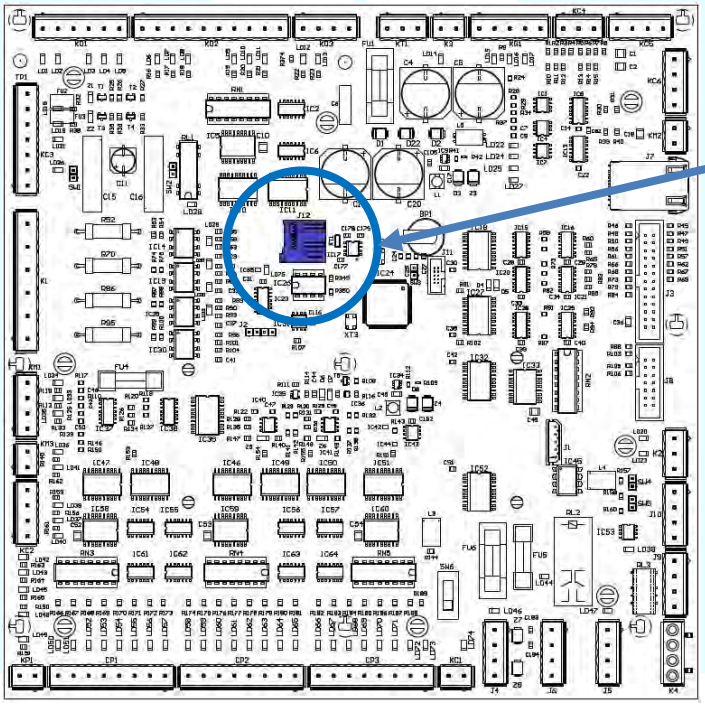
4.2 - MicroSD Card.

A microSD card can be plugged on the ***iCan*** iC01 main board. The card is a standard one and can be bought in any shop. Its size is form 2 to 32Go.

This memory permits to:

- Save the lift configuration from the iC01.
- Load a lift configuration into the iC01.
- Load a different language than the one in the board.
- To upgrade the software Version.
- Save the different events/Faults before a Lift problem (§4.3 Black Box).

If no board is plugged in his socket, the lift will work normally.



4.3 - Black Box.

It is easy to know what happened on ***iCan*** because it is able to register in its memory 10 faults and the conditions in which the fault appears (Up, Down, High speed, Time, etc…)

Sometimes it is not enough…

That's why **AUTINOR** creates the "Black Box". It permits to register the lasts events which appeared before the lift fault, movement, door movement, or everything else. For that you need an external memory (micro SD) to register the ***iCan*** memory.

On this card the states of the Inputs, Outputs, Zones, Position… will be registered at each state change. So it means that the Quantity of information registered is quite big and it needs to be displayed and ordered on a Computer screen.
For that you need to run ***iControl*** software on your Laptop, this software can be found on our web site.

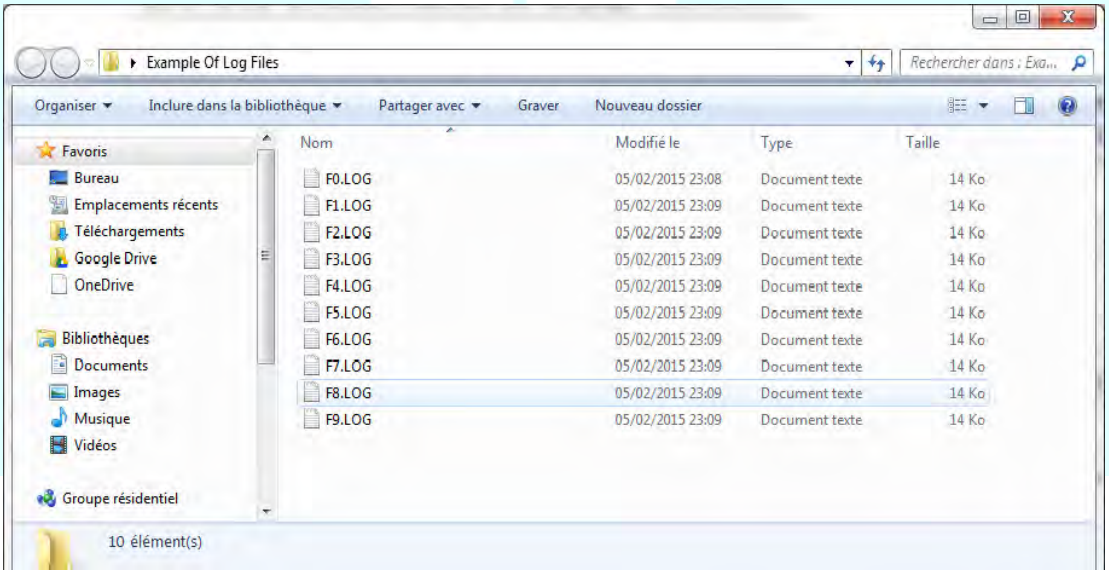
How does it work?

iCan registers in case of permanent fault the 500 latest's transitions that happened before on the SD micro card. You will see the registration of the file about 15s after the fault on the LED located just near the Micro SD socket. The card can contains 10 files (from F0.LOG – Newest - to F9.LOG – Oldest-).

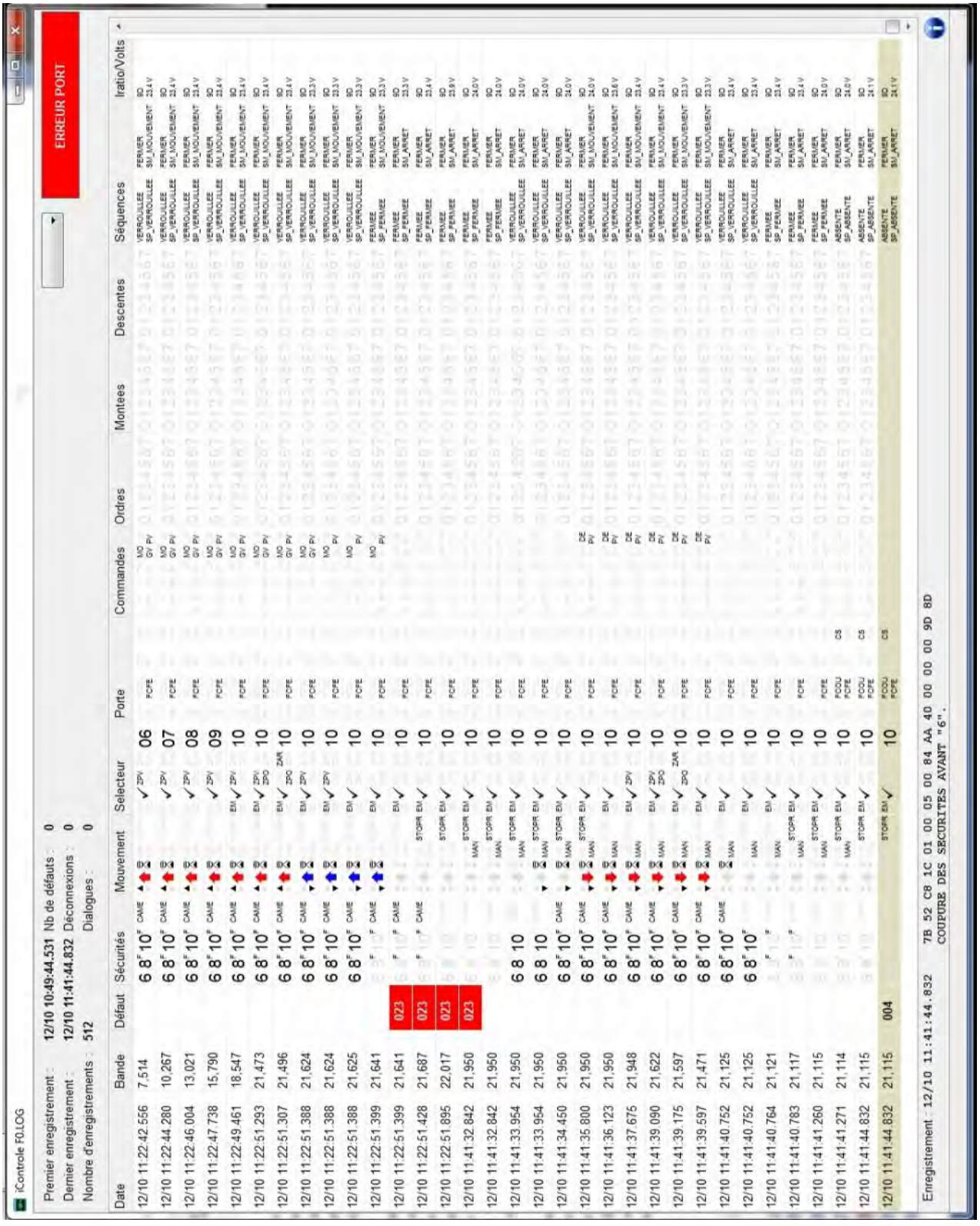
Insert the SD micro card on your LapTop.

Click ***iControl.exe*** it opens an empty windows of ***iControl.***

Right Click on this window and select the log file you want on the SD micro card.

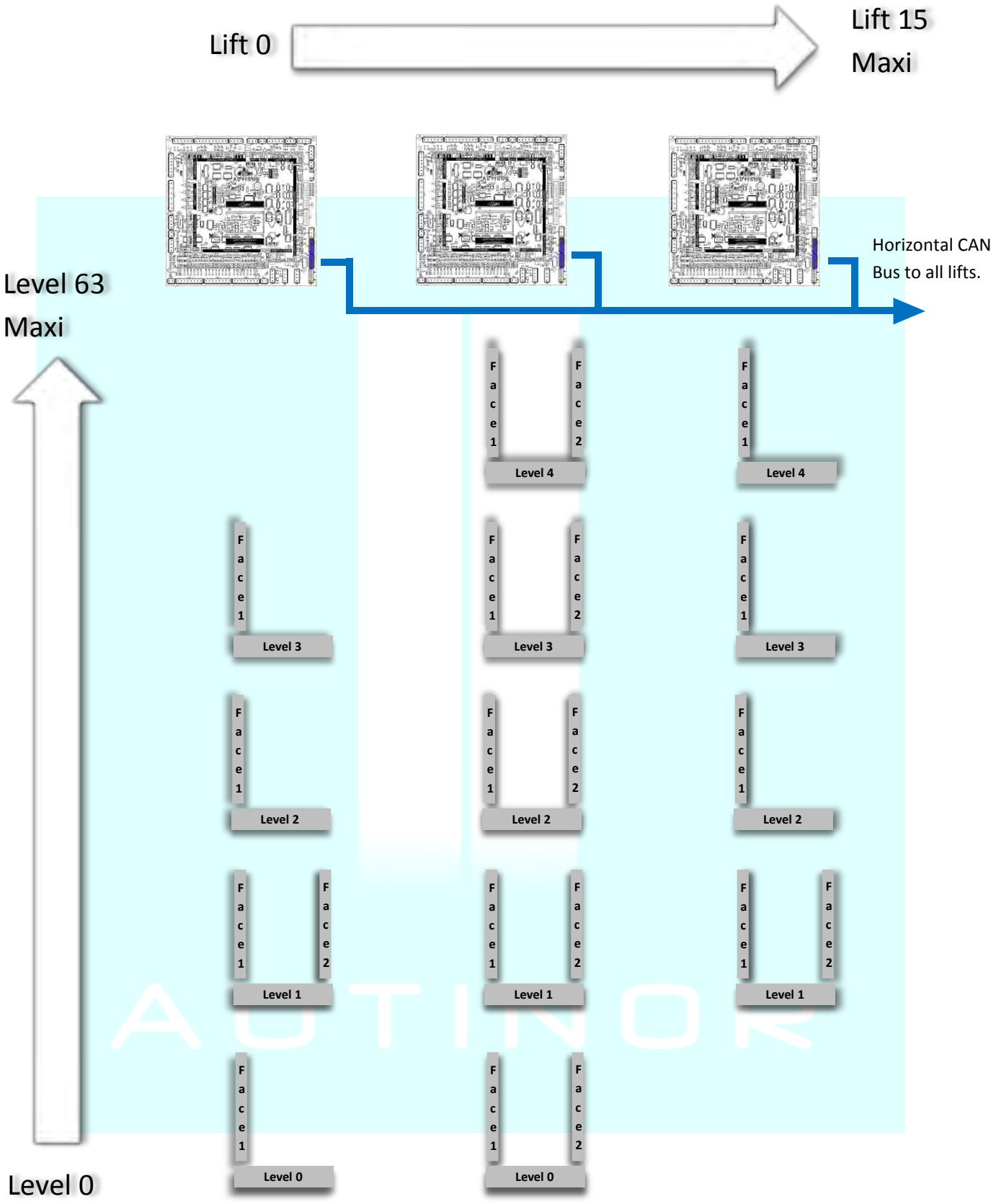


Example: It will open, and the following window will open.



The analysis of the Black Box files must be done by qualified people.

4.4 – Multiplex Lifts.



5 – Trouble Shooting.

5.1 – Restricted Modes.

5.1.1 Modes depending on an input (Normally Open/close).

5.1.2 Modes depending on an event.

5.2 – Contextual helping messages.

5.3 – Possible faults & Solutions.

5.3.1 Fault list

5.3.2 Trouble shooting

5.1 – Restricted Modes.

Those modes are NOT lifts faults or break downs, but they may interfere, change, or stop the lift "Normal" mode.

5.1.1 Modes depending on an input (Normally Open/close).

A message is displayed **on the first line of the iCom screen or on the full screen** (needs to be cleared by the lift engineer. Those modes are always depending on a contact statement (Normally open/close).

The different messages are the following:

Departure standby: The lift is waiting for the Starting information (iC01 - SusD – Normally Open)

➔ In particular when a generator system is starting…

Over Load: The lift can't start and remains doors open (iC01 - SU – Normally Open)

➔ Too many people in the car. There is also a signalization output.

Full Load: The lift starts but doesn't permit the landings to be served in this mode. (iC01 - NS – Normally Open).

Out of Service: The Lift remains Out of service at any floor, doors open or close (iC01 - MHS – Normally Open).

➔ During the night for example…

Special service mode: The lift is used by someone into the car, the landings are in standby mode. (iC01 - CabRes – Normally Open).

➔ In particular for the cleaning lady…

Landing Priority Call:	The lift Is called at a landing by a priority key. The priority level can be choosen in the parameters (AC03 – ApPri – Normally open). ➔ Hospital; VIP…
Fire service:	The lift is controlled by the fireman (iC01 - POM – Normally Close).
Fireman Car Key:	The lift is strictly under the fireman (at the level where the car is present) control, if this key is activated (iC01 – EPG inputs – Normally Open).
Flood:	In case of flood in the pit, the top and bottom floors are cancelled (iC01 – EPG inputs – Normally Open).
Test:	If the lift is on inspection (iC01 – INS – Normally Close).
Emergency Rescue Operation:	If the lift is on Machine Room movement box (iC01 – MAN – Normally Close).
Fire Restricted level:	If the fire detection is active on a floor (AC10 – 0 to 32 – Normally Open or Close).
Omnibus:	The lift moves to certain floors without pushing the buttons. (AC03 – Shabbat – Normally open). ➔ Shabbat.

5.1.2 Modes depending on an event.

A message is displayed **on the first line of the iCom screen or on the full screen** (needs to be cleared by the lift engineer. Those modes are always depending on a special event.

Resetting:	Reset sequence of the lift. On the main Menu it will be written Mode = Normal Level =? Not registered if the lift start Level =? Registration
Levels Setting:	Activated in the menu by the lift engineer.
Failure mode:	Several reasons ➔ Relevelling with doors opened (Hydraulic), loose of the door zone information: Level cleared, lift running. ➔ Recurrent problem when unlocking the doors: Level cleared, lift running.

5.2 – Contextual Helping messages.

iCan is also able to give you different informations which may ***alter the normal use of the lift*** without creating a fault or without any human intervention. This situation will always be signaled on ***iCom***, the clearing off this messages will have to be done by the engineer during is maintenance visit.

- Assistants

Different messages helping you, during the lift installation or later during lift life.

Examples:

- Setting the levels,
- Changing the slowing distance,
- Updating the software,
- Saving or Loading a lift configuration.
- Etc.

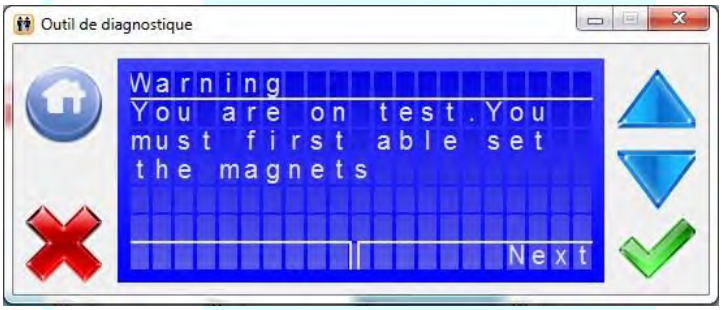


Fig.1 – During the levels setting.

- Input(s) "awekening"

iCan will tell you that an input is "now activated". Just by connecting it (by putting a wire on it) she automatically "awakes" the input and a message appears, such like - The fireman "POM" input is now activated – If you want to clear this message, you will have to press the "Enter" button.
This permits the engineer to connect the inputs/outputs with more flexibility and it's not necessary to care about the useless inputs of the moment.

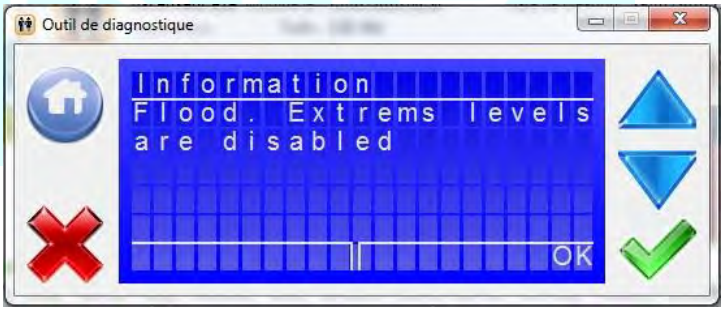


Fig.2 – During the installation of the flood detector.

- Lift configuration

Changing a setting in the ***iCan*** may alter some other parameters… In that case, ***iCan*** will change automatically or will propose you to change automatically or not the complémentary parameters.

Examples:

- After a modernization the main floor swing door is replaced by an autmotic door → Only 1 parmater to change.
- Add or suppress a floor. It propose a new button configuration → Are you agree? Yes; No.
- Setting an automatic return of the car at a floor → Just click Automatic return, it ask you which floor; In which time?
- Etc.

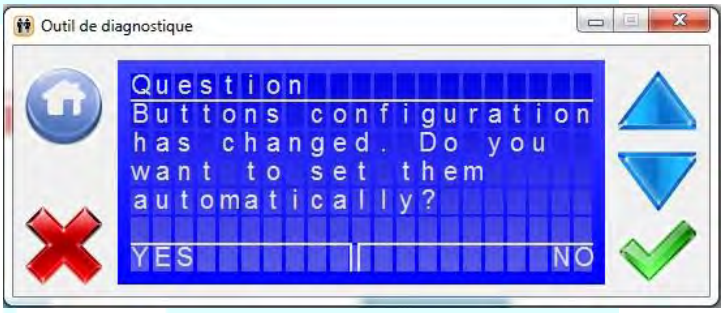


Fig.3 – Changing the number of floors.

- Downgraded modes

When a lift has got a problem at certain floor, it's handy not to make out of service if it's possible. It is particularly the case for the problems located at a floor.
In that case ***iCan*** put the lift on "Downgraded mode". But the lift is still working.

Examples :

- Door zone absente arriving at the floor → On an hydraulic doesn't open the doors, and cancel the level.
- Problem unlocking a door at a floor → Cancel the floor.
- Fire at a floor → Cancel the floor.
- Flood → Cancel Top & Bottom floors.

A message appears, such like - Foor(s) cancelled from XX reason – If you want to clear this message, you will have to press the “Enter” button.

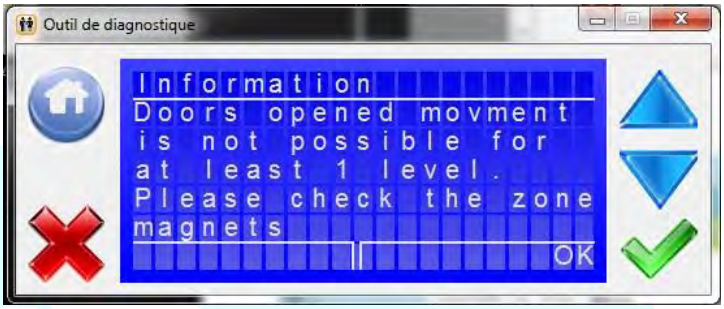
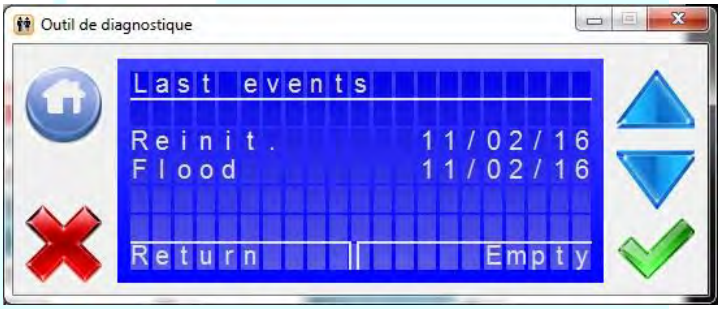


Fig.4 – Hydraulic Lift downgraded automatically, Zone problem.

The different events that may have occurred are registered in :

Menu / Infos & Visu / Last events.



5.3 - Possible faults & solutions.

The different faults could be **Temporary** or **permanent** faults in the following list d= temporary, D=permanent.

Examples: **d**21 = Doors not locked (10) → the lift will try to start several times
D04 = Safeties cut between 1&6 → The lift is out of service, an lift engineer will have to come.

5.3.1 Fault list

Code Number	***Fault name***
D01	Mass Fault
D02	Low speed duration exceeded
D04	Safeties cut between 1 & 6
D05	Machine Room T° higher than 40°C (TH40-EPGxx)
d/D06	No locks (10) made up when resetting
D09	Motor thermostat (STH)
D10	Wrong direction between car and tape head
D11	Tape head bad readings
d/D12	One of the contactors is not released on arrival – 1 or 2 speed(s)
d/D13	High speed contactor not released when slowing down – 1 or 2 speed(s)
d/D14	Low speed contactor not released – 1 or 2 speed(s)
d/D15	Up (Down) contactor not energized – 1 or 2 speed(s)
D17	Phase failure (PH) – 1 or 2 speed(s) or Hydraulics
d/D19	Loose of safeties (8)
d/D21	Doors not locked (10)
D22	Slip integrator
D23	Loose of safeties (6)
D24	Safeties supply off (1)
D26	Lift position magnet switch “A” broken
D27	Lift position magnet switch “B” broken
d/D29	High speed contactor not energized when starting – 1 or 2 speed(s)
d/D30	Low speed contactor not released in high speed – 1 or 2 speed(s)

Code Number	*Fault name*
D32	Lift photo-cells interrupted during motion (No car door)
D39	Supply voltage too low (<22,5 VDC)
d/D41	“8” cut
d/D44	Loose of “10” (locks control) when starting
d/D46	Door 1 opening problem
d/D47	Door 2 opening problem
d/D48	Door 1 closing problem
d/D49	Door 2 closing problem
d50	Input Out of service engaged
d/D52	Loose of “10” during motion
d/D53	Movement contactor not dropped when starting or released during motion
D55	Problem with ZONE information magnets – Hydraulics
D56	The door zone information disappear during a relevelling movement
D57	Relevelling Zone overtaking
D58	Pumping
D59	Relevelling time exceeds
D60	Slow down distance problem – Slotted tape + O03 reader
D61	Altitude problem – Slotted tape + O03 reader
d/D62	O03 reader wrong readings
D63	EM 1 ED contacts opened at the same time
D64	Inspection & Emergency rescue operation engaged simultaneously
D65	Drive permanent fault
D66	Drive temporary fault
d/D67	Drive disable problem
d/D68	X Contactor not released (RX) – Hydraulics
D69	Restoration of the top limit switch after the car drifts – Hydraulics
D70	Cleats not retracted when starting
D71	Cleats retracted when starting or released during motion – Hydraulics
D72	Cleats retracted lift stopped – Hydraulics
d/D73	Oil level too low – Hydraulics

Code Number	*Fault name*
d/D74	X contactor not energized when starting – Hydraulics
d/D75	Y contactor not energized when starting - Hydraulics
d/D76	D contactor not energized when starting – Hydraulics
d/D77	L contactor not energized when starting – Hydraulics
d/D78	One of the Y, D contactor is not released – Hydraulics
D84	Over speed during a relevelling movement
d/D87	L contactor is not released – Hydraulics
d/D88	Up & Down signals at the same time
d/D99	EEROM fault

5.3.2 Trouble Shooting

D01 Mass fault

- Appears if:
  - One of the wires of the installation is connected to a metallic part of the lift (earth).

- The lift will:
  - Open the door(s) (in the door zone).
  - The relevelling will be done with door(s) open if possible otherwise with door(s) closed.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.

D02 Low speed duration exceeded

- Appears if:
  - A car movement in low speed is longer than the timer value (see §Site Configuration/timers)

- The lift will:
  - Loose its position, the door(s) stay close.
  - No more relevelling.

- Disappears if:
  - After a reset.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.

D04 Safeties cut between 1 & 6

- Appears if:
  - One of the safeties contact between (1 & 6) is open.

- The lift will:
  - The door(s) stay(s) in its (their) state.
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - On Emergency Rescue operation Mode.

D05 Machine room T° higher than 40°C (TH40-EPGxx)

- Appears if:
  - The input EPgxx (TH40) is activated. This input is dedicated to the Machine room T° Thermostat.

- The lift will:
  - Open the door(s) (in the door zone).
  - Hydraulic lifts: After opening the door(s), it closes and goes to the bottom floor. The <I> button will stay active.

- Disappears if:
  - The cause disappears.
  - After a reset.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.

d/D06 No locks (10) made up when resetting.

- Appears if:
  - The locks (10) are not “ON” and the lift is attempting a reset sequence.

- The lift will:
  - Loose its position, the door(s) stay close.
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - 3 attempts before permanent fault.

D09 Motor Thermostat (STH)

- Appears if:
  - Arriving at the floor the motor T° probe informs the controller to wait.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: After opening the door(s), it closes and goes to the bottom floor. The <I> button will stay active.

- Disappears if:
  - The cause disappears.
  - On Emergency Rescue operation Mode.

D10 Wrong direction between car and Tape Head.

- Appears if:
  - ***iCan*** gives a direction and the tape head reads the opposite one. It can be due to a lift Roll Back, to a wiring mistake…

- The lift will:
  - Loose its position, the door(s) stay close.
  - No more relevelling.

- Disappears if:
  - After a reset.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.

D11 Tape head bad readings.

- Appears if:
  - ***iCan*** receives bad information's from Tape head. It can be dust on the tape, to much gap in the guide rails.

- The lift will:
  - Loose its position, the door(s) stay close.
  - No more relevelling.

- Disappears if:
  - After a reset.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.

d/D12 One of the contactors is not released on arrival - 1 or 2 speed(s).

- Appears if:
  - ***iCan*** doesn't allow the restart because one of the contactor is not released when stopped.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - After a reset.

d/D13 High speed contactor not released when slowing down – 1 or 2 speed(s).

- Appears if:
  - ***iCan*** receives the low speed contactor feedback when the high speed one is still engaged.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - After a reset.

d/D14 Low speed contactor not released – 1 or 2 speed(s).

- Appears if:
  - ***iCan*** doesn't receive the low speed contactor feedback when triggered.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - After a reset.

d/D15 Up (Down) contactor not energized – 1 or 2 speed(s).

- Appears if:
  - ***iCan*** doesn't receive the feedback from the Up (or Down) contactor when starting.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - After a reset.
  - 3 attempts before permanent fault.

D17 Phase failure (PH) – 1 or 2 speed(s) or Hydraulics.

- Appears if:
  - The phase control is not given to the iCan board.
- The lift will:
  - Open the door(s) (in the door zone).
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
- Disappears if:
  - The cause disappears.

d/D19 Loose of safeties (8).

- Appears if:
  - The “8” of the safeties chain - Swing door contact or Car door contact Automatic doors – was present and disappeared.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.
- Disappears if:
  - The cause disappears.
  - 3 attempts before permanent fault which is cleared by a car call.

d/D21 Doors not locked (10).

- Appears if:
  - The doors locking information is not established when starting.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.
- Disappears if:
  - The cause disappears.
  - 3 attempts before permanent fault which is cleared by a car call.

D22 Slip integrator

- Appears if:
  - Lift longer movement than the timer (@- § Menu / Site configuration / Timers / Slip integrator) with no tape head reading.

- The lift will:
  - No more relevelling.

- Disappears if:
  - After a reset.
  - On Inspection Mode.
  - *On Emergency Rescue operation Mode.*

D23 Loose of safeties (6).

- Appears if:
  - The “6” of the safeties chain - The contact was present and disappeared during motion.

- The lift will:
  - The door(s) stay(s) in its (their) state.
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - On Emergency Rescue operation Mode.

D24 Safeties supply off (1)

- Appears if:
  - The “1” (supply) of the safeties is not established.

- The lift will:
  - The door(s) stay(s) in its (their) state.
  - No more relevelling.

- Disappears if:
  - The cause disappears.

D26 Lift position magnets switch “A” broken

- Appears if:
  - In case of magnet switches selector. The “CaA” (Top) information on the ***iCan*** remains “On” for a too long time - 5s in High speed, 10s in Low speed - while the lift is moving.

- The lift will:
  - Loose its position, the door(s) stays close.
  - No more relevelling.

- Disappears if:
  - After a reset.
  - On Inspection Mode.
  - *On Emergency Rescue operation Mode.*

D27 Lift position magnets switch “B” broken.

- Appears if:
  - In case of magnet switches selector. The “CaB” (Bottom) information on the ***iCan*** remains “On” for too long time - 5s in High speed, 10s in Low speed - while the lift is moving.

- The lift will:
  - Loose its position, the door(s) stays close.
  - No more relevelling.

- Disappears if:
  - After a reset.
  - On Inspection Mode.
  - *On Emergency Rescue operation Mode.*

d/D29 High Speed contactor not energized when starting – 1 or 2 Speed(s).

- Appears if:
  - The lift tries to start, but the ***iCan*** doesn’t receive the High speed contactor feedback (RG).

- The lift will:
  - Loose its position, the door(s) stays close.
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - After a reset.
  - 3 attempts before permanent fault.

d/D30 Low Speed contactor not released in high speed – 1 or 2 Speed(s).

- Appears if:
  - ***i*Can** receive the Low speed contactor feedback (RP) when high speed is required.

- The lift will:
  - Loose its position, the door(s) stays close.
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - After a reset.

D32 Lift Photo-Cells interrupted during motion (No car door).

- Appears if:
  - The lift photo cell or photo detector is interrupted during motion (in the case of a no car Door lift), the lift stops.

- The lift will:
  - No more relevelling.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - If the cell is released the lift will restart on a car call or on a landing call if the “8” (swing door) has been opened and closed.
  - If the detector is released the lift will restart on a car or on a landing call.

D39 Supply voltage too Low (<22,5 Vdc)

- Appears if:
  - The card supply is too low.

- The lift will:
  - Open the door(s) (in the door zone).
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - No more relevelling.
  - After a reset.

- Disappears if:
  - The cause disappears.

d/D41 No “8” when starting

- Appears if:
  - The lift tries to start, but the “8” doesn’t appear.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.
- Disappears if:
  - The cause disappears.
  - 3 attempts before permanent fault which is cleared by a car call.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

d/D44 Loose of “10” (locks control) when starting.

- Appears if:
  - The lift want to start, the locks control “10” is established and disappear before the movement.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.
- Disappears if:
  - The cause disappears.
  - 3 attempts before permanent fault which is cleared by a car call.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

d/D46 Door 1 opening problem

- Appears if:
  - The door face 1 tries to open - OU1 - and after the time set in Menu/Site configuration/ Doors/ operator / Time OU/FE she doesn’t reach the door 1 open limit (FCOU1).
- The lift will:
  - Open the door(s) (in the door zone).
  - The relevelling will be done with door(s) open if possible.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.
  - 3 attempts before permanent fault which is cleared by a car call.

d/D47 Door 2 opening problem

- Appears if:
  - The door face 1 tries to open – OU2 - and after the time set in Menu/Site configuration/ Doors/ operator f2/ Time OU/FE f2 she doesn't reach the door 2 open limit (FCOU2).
- The lift will:
  - Open the door(s) (in the door zone).
  - The relevelling will be done with door(s) open if possible.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.
  - 3 attempts before permanent fault which is cleared by a car call.

d/D48 Door 1 Closing problem

- Appears if:
  - The door face 1 tries to close - FE1 - and after the time set in Menu/Site configuration/ Doors/ operator / Time OU/FE she doesn't reach the door 1 close limit (FCFE1).
- The lift will:
  - Open the door(s) (in the door zone).
  - The relevelling will be done with door(s) open if possible.
- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.
  - 3 attempts before permanent fault which is cleared by a car call.

d/D49 Door 2 Closing problem

- Appears if:
  - The door face 1 tries to close – FE2 - and after the time set in Menu/Site configuration/ Doors/ operator f2 / Time OU/FE f2 she doesn't reach the door 2 close limit (FCFE2).
- The lift will:
  - Open the door(s) (in the door zone).
  - The relevelling will be done with door(s) open if possible.
- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.
  - 3 attempts before permanent fault which is cleared by a car call.

d50 Input Out of service engaged (MHS)

- Appears if:
  - The Out of service input (MHS) is activated

- The lift will:
  - Go to the chosen level
  - Open/Close the doors depending on the choice done. <I> is still active.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

d/D52 Loose of “10” during motion

- Appears if:
  - The lift is moving, the locks control signal is suddenly lost.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - The door(s) stay(s) in its (their) state.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.
  - 3 attempts before permanent fault which is cleared by a car call.

d/D53 Movement contactor not dropped when starting or released during motion.

- Appears if:
  - In case of No-Autinor drives only. The iCan is able to check the movement information through a movement contactor (K) :
    - Menu / Site configuration / Drive / Order = iC04
    - Menu / Site configuration / Drive /Order / K controls = Yes

    This contactor statement is checked through an input (RGV – iC04 see 2.4.2.3)
  - The fault appears if the contactor is NOT released when starting, or if it is dropped during motion.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

D55 Problem with the Zone information magnets - Hydraulics

- Appears if:
  - The door zone information given by the “movement with doors open” system remains “ON” during a movement between 2 floors.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

D56 The Door zone information disappears during a relevelling movement.

- Appears if:
  - The N57 board inform the **iCan** controller that its redundant door zone disappear during a relevelling movement.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - The door(s) stay(s) in its (their) state.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

D57 Relevelling Zone overtaking during a relevelling movement

- Appears if:
  - During a relevelling movement the “N57 Zone” is suddenly lost.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

D58 Pumping

- Appears if:
  - The lift made 6 relevelling movement with no success.
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

D59 Relevelling timer exceeds.

- Appears if:
  - The lift made a relevelling movement exceeding the timer § Menu/ Site configuration / Timers – Tp Relevelling
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

D60 Slow down distance problem - Slotted Tape + O03 Reader

- Appears if:
  - The V2 (or V1) Slowing distance DV2 (DV1) is lower than 0.1 m or higher than 10 m.
  - The Top level altitude is lower than the altitude of the ED level + DV2
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
- Disappears if:
  - The cause disappears.
  - On Emergency Rescue operation Mode.
  - After a reset.

D61 Altitude problem - Slotted Tape + O03 Reader

- Appears if:
  - The distance between two floors is too small, or if the altitudes are not growing in the up direction.
  - The Magnets altitude is lower than the ED position altitude (during the level learning).
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
- Disappears if:
  - The cause disappears.
  - On Emergency Rescue operation Mode.
  - After a reset.

d/D62 O03 Reader wrong readings.

- Appears if:
  - The position reader is giving bad information's to iCan board. It may come from dust on the tape.

- The lift will:
  - Loose its position (goes for a reset), the door(s) stays close.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

D63 EM & ED contacts opened at the same time.

- Appears if:
  - The 2 extremes contacts (on O03 or magnets switches selector) are opened at the same time, saying that the lift is at the top and the bottom floor at the same time.

- The lift will:
  - Loose its position (goes for a reset), the door(s) stays close.
  - No more relevelling.
  - The door(s) stay(s) in its (their) state.
  - in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears.
  - On Emergency Rescue operation Mode.
  - After a reset.

D64 Inspection & Emergency Rescue operation engaged simultaneously

- Appears if:
  - The lift is in inspection (INS) & emergency rescue operation (MAN) at the same time.

- The lift will:
  - No more relevelling.
  - The door(s) stay(s) in its (their) state.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

D65 Drive permanent fault

- Appears if:
  - The iCan will not start until the drive fault as not been cleared.

- The lift will:
  - Open the door(s) (in the door zone).
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears.
  - After a reset.

D66 Drive temporary fault

- Appears if:
  - The drive have (or have had) a temporary problem.

- The lift will:
  - Open the door(s) (in the door zone).
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears.
  - After a reset.

d/D67 Drive disable problem

- Appears if:
  - The drive disable information (StopR) is not released when starting, or disappeared during motion. The control timer is 5s.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

d/D68 X contactor not released (RX) - Hydraulics

- Appears if:
  - On a hydraulic lift wants to start but the X contactor is not dropped. X contactor is checked through its NC contact connected to RX.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

D69 Restoration of the top limit switch after the car drifts - Hydraulics

- Appears if:
  - On Hydraulics if the lift is on the top limit switch, after a certain time and due to the drifting of the car the safety chain goes on again. To avoid the lift to be in service automatically it is send to the bottom floor with a permanent, non-resettable fault.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor after the 6 of the safety chain is re-established. The <I> button will stay active.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.

D70 Cleats not retracted when starting.

- Appears if:
  - On a Hydraulic if the lift wants to start, the feedbacks of the cleats (Taq1, Taq2) are not engaged after 5s avoiding any lift movements.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.

- Disappears if:
  - The cause disappears and on Inspection Mode.
  - The cause disappears and on Emergency Rescue operation Mode.
  - After a reset.

D71 Cleats retracted when starting or released during motion - Hydraulics

- Appears if:
  - On a Hydraulic if the lift starts, but the feedbacks of the cleats disappears during the lift movements (Taq1, Taq2).

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears and on Inspection Mode.
  - The cause disappears and on Emergency Rescue operation Mode.
  - After a reset.

D72 Cleats retracted lift stopped - Hydraulics

- Appears if:
  - On a Hydraulic when the lift stops, the feedbacks of the cleats (Taq1, Taq2) must release. Otherwise 72 fault.

- The lift will:
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.

- Disappears if:
  - The cause disappears.
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

d/D73 Oil level too low - Hydraulics

- Appears if:
  - On a Hydraulic. The Tank oil level is too low (DNH input), the fault will appear arriving at the floor.

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.

- Disappears if:
  - The cause disappears.

d/D74 X contactor not energized when starting - Hydraulics

- Appears if:
  - On a hydraulic lift, the X contactor not energized when starting (input RX).

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears and on Inspection Mode.
  - The cause disappears and on Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

d/D75 Y contactor not energized when starting - Hydraulics

- Appears if:
  - On a hydraulic lift, the Y contactor not energized when starting (input RY).

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears and on Inspection Mode.
  - The cause disappears and on Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

d/D76 D contactor not energized when starting – Hydraulics

- Appears if:
  - On a hydraulic lift, the D contactor not energized when starting (input RD).

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears and on Inspection Mode.
  - The cause disappears and on Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

d/D77 L contactor not energized when starting - Hydraulics

- Appears if:
  - On a hydraulic lift, the L contactor not energized when starting (input RL).
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.
- Disappears if:
  - The cause disappears and on Inspection Mode.
  - The cause disappears and on Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

d/D78 One of the Y, D contactor is not released - Hydraulics

- Appears if:
  - On a hydraulic lift, one of the Y, D contactor is not released (RY, RD).
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.
- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

D84 Over speed during a relevelling movement

- Appears if:
  - During a relevelling movement, the lift speed was higher than 0,3 m/s (only in case of O03 reader).
- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset

d/D87 L contactor is not released - Hydraulics

- Appears if:
  - On a hydraulic lift, the L contactor is not released (RL).

- The lift will:
  - Open the door(s) (in the door zone).
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and remains at the floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.
  - 3 attempts before permanent fault.

d/D88 Up & Down signals at the same time.

- Appears if:
  - If the Up & Down signals of the inspection box are activated at the same time.

- The lift will:
  - The door(s) stay(s) in its (their) state.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - The cause disappears.
  - After a reset.

d/D99 EEROM Fault

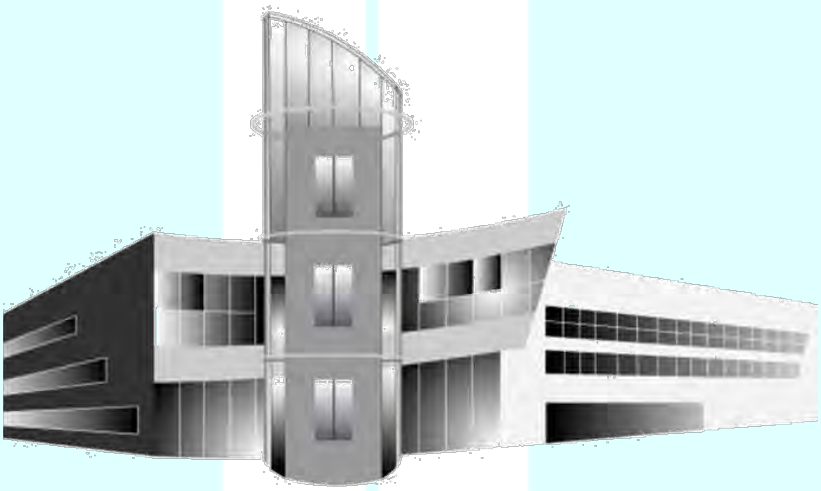
- Appears if:
  - Problem with EEROM Read / Write

- The lift will:
  - Open the door(s) (in the door zone).
  - The relevelling will be done with door(s) open if possible otherwise with door(s) closed.
  - No more relevelling.
  - Hydraulic lifts: Open the door(s) (in the door zone), closes the door(s) and get to the bottom floor. The <I> button will stay active.
  - Out of the door zone the door(s) remains as they were before.

- Disappears if:
  - On Inspection Mode.
  - On Emergency Rescue operation Mode.
  - After a reset.

Autinor SA

Lift up your Business



Autinor SA – Zone d'activités Les marlières – 59710 Avelin - France

Reception: +333 206 256 00
Sales: +333 206 256 12 Service: +333 206 256 55

contact@autinor.com

www.autinor.com

50,542812 N
3,096357 E