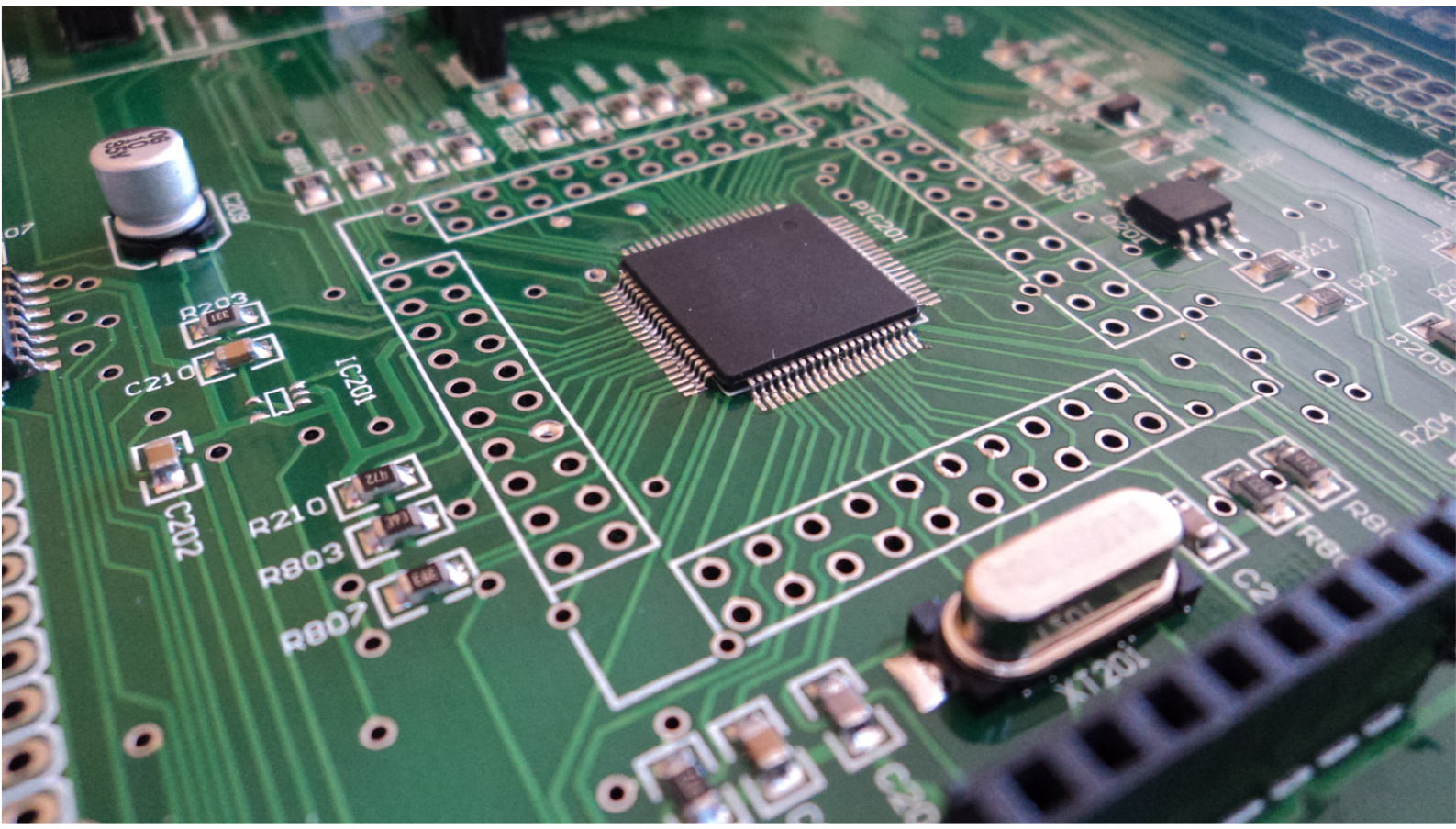
asronik®
ELEVATOR CONTROL SYSTEMS

CE

birINCI

Lift Controller Board

User Manual



Serial No:.....

Manual Version: 1.01r1 (HV: 1.00, SV: 1.08)

NOTE: This manual is in use for 1.00 hardware version and 1.08 software verison boards. It is possible that, some features and functions are different then the manual if the board version is different. Please check your product's compliance to the manual.

asronik®
ELEVATOR CONTROL SYSTEMS

OUR FACTORY AND SERVICE STATION:

ASRONIK ELEVATOR & ELECTRONIC LTD. STI.

Fevzi Cakmak mah. 10569. Sok. No:26 Karatay / Konya / TURKIYE

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Expected life is 10 years.

birINCI TERMINAL NUMBERS AND THE MEANINGS:

R,S,T : Phase protection for the network input terminal phases
10A : Neutral of safety circuit
120 : Stop return, Door contact start
130 : Door contact return, Lock start
140 : Lock return
11A : Ru1/Rah, Ru2/Ryh relays common terminal.
11B : Rh/Ray, Rf/Ryy relays common terminal.
RU1 : Down direction terminal for traction elevators, down-fast terminal for hydraulic elevators.
RU2 : Up direction terminal for traction elevators, up-fast terminal for hydraulic elevators.
RH : Fast speed for traction elevators, down-slow terminal for hydraulic elevators.
RF : Slow speed for traction elevators, up-slow terminal for hydraulic elevators.
RX1,RX2 : Rx relay NO terminals.
1,2 : Car lamp NO terminals.
LO, LA : Cam relay NO terminals.
NC,CM,NO : Rsvr relay NO, NC, COM terminals.
K3 : Close signal *(Common terminal is K15)*
K5 : Open signal *(Common terminal is K15)*
K15 : Common terminal of K3-K5
K16 : Automatic door opening limit terminal *(Common terminal is 100)*
K19 : Automatic door closing limit terminal *(Common terminal is 100)*
9V : Supply of 9V AC
100 : +24 Volts
1000 : Common terminal of 100 signal *(-24 Volt)*
a,b,c,d,e,f,g,2bc,2g : Display outputs *(Common terminal is 100)*
02 : Out of service output *(Common terminal is 100, adjustable)*
12 : Busy output *(Common terminal is 100, adjustable)*
031 : Up direction arrow output *(Common terminal is 100, adjustable)*
032 : Down direction arrow output *(Common terminal is 100, adjustable)*
190 : Landing call common terminal for simple control
M0,M1,M2,M3 : Bistable switch inputs *(Common terminal is 100)*
142 : JF Bistable switch input *(Common terminal is 100)*
OSB(1) (2) : Auto leveling zone bistable switch input *(Common terminal is 100)*
JFA(1) : Down direction bistable switch input for hydrolic elevators *(Common terminal is 100)*
JFY(1) : Up direction bistable switch input for hydrolic elevators *(Common terminal is 100)*
817 : Lower limit switch input *(Common terminal is 100)*
818 : Higher limit switch input *(Common terminal is 100)*
804 : Over load input *(Common terminal is 100)*
805 : Full load input *(Common terminal is 100)*
DN1,DN2,DN3 : Adjustable flexible digital inputs *(Common terminal is 100)*
K20 : Automatic door open button, photocell input, thrust force contact input *(Common terminal is 100)*
DTS : Automatic door close button *(Common terminal is 100)*
867a, 867b : Panel inspection switch terminals *(Common terminal is 100)*
867 : First cabin inspection switch input *(Common terminal is 100)*
869 : Second cabin inspection switch input *(Common terminal is 100)*
500 : Inspection down buton input *(Common terminal is 100)*
501 : Inspection up buton input *(Common terminal is 100)*
KRC : Contactor control signal input *(Common terminal is 100)*
PTC : Motor termistor connection.
X1-X16 : Call terminals *(Common terminal is 100, LED common terminal is 1000)*

(1) : These inputs are properly active only “Hydrolic lifts.
(2) : These inputs are properly active only “Hydrolic lifts” and panels which KSK bridging board is integrated.
NOTE: Down, up, busy and out of service signals default common terminal is 1000.
It is possible to arrange the common terminal of down, up, busy and out of servis signals from J2 jumper on birINCI. And also the common terminal of busy lamp can be arrangeable from the J1 jumpers on birINCI. This situaiton must be taken into account that when changing the supply of busy lamp, the 190 terminal supply changes.

CONTROL PANEL TERMINAL NUMBERS AND MEANINGS:

R,S,T : Main Phases
Mp : Neutral
PE : Ground
U1,V1,W1 : High speed motor outputs for rope lifts and motor winding terminals for hydrolic lifts..
U2,V2,W2 : Low speed motor outputs for rope lifts, and motor winding terminals for hydrolic lifts.
99 : Landing call common terminals (+24V) for panels with integrated UPS rescue system.
100 : +24 Volts
1000 : Common terminal of 100 signal (-24 Volt)
FR+,FR- : Mechanical brake coil supply.
PO+,PO- : Cam coil supply.
1F : Direct phase
1 : Direct phase output over the cabin
2 : Cabin lamp
110 : Safety circuit start point.
111,112,113 : Null terminals.
120 : Stop return, door contact start point.
130 : Door contact return, lock start point.
140 : Lock return.
K3 : Close signal *(Common terminal is K15)*
K5 : Open signal *(Common terminal is K15)*
K15 : Common terminal of K3-K5
K16 : Automatic door opening limit terminal *(Common terminal is 100)*
K19 : Automatic door closing limit terminal *(Common terminal is 100)*

Dear Customer,

We would like to thank you for chosing the birINCI controller board which is produced the Surface Mounting technology in full automatic pick&place machines with the latest permitted facilities of microelectronic systems. We want to give you the best performance of our products which are produced in modern facilities with supreme quality control. For this purpose, please read this document carefully before you start installation and keep this as a reference for further requirements.

We are spending many times for correctly installation and use of our products Thats why we are updating these documents consistently. All technical drawings are controlled again and again before presented to you. But of course we might have some mistakes in prolonged work. Please inform us immediately if you encounter a mistake in the document, especially with the drawings to help us. We will be with you with the new documents and updated versions.

Please follow new products and updates at www.asronik.com.

ATTENTION! : All documents in this catalog are advisory. Inspite of our hard work it may contain errors. Please control the information in this document, think on them and ask yourself before implementing.

TABLE OF CONTENTS

1. INTRODUCTION:

birINCI lift controller board is a microcontroller based electronic lift control system. This board can be used to control both traction drive rope lifts, hydrolic lifts and machine-roomless elevators with PMSM's. Connector module that comes with birINCI control board is used to connect easily control board connectors to control panel connectors. Fast call board allows calls during repair-maintenance of the lift easily and flawlessly.

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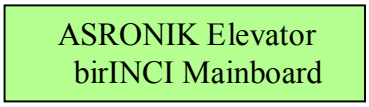
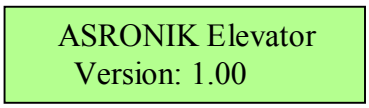
2. FEATURES OF THE PRODUCT:

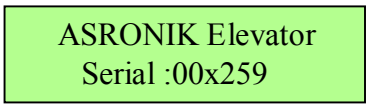
- Easy using and best performance for all type of lifts by different application macros of different lift types.
- It is possible to add new features with optional boards. birINCI has got flexible architecture.
- birINCI has got mobil keypad. You can save the parameters to keypad and also load the parameters back to birINCI.
- Adjustable control type.
- Adjustable number of stops.
- Call inputs and stop capacities can be increased with card addition.
- Call lamps and buttons can be connected to the system with a single cable.
- All parameters can be adjusted easily using LCD screen and program buttons.
- Simple and error-free installation provides savings from time and number of control panel connectors.
- Short circuit protected display outputs having adjustable codes for every stop is available.
- Overload function is available.
- Full load function is present.
- VIP function is available.
- In case of fire, lift can be guided to a pre-defined stop.
- Adjustable parking stop and park travel time is available.
- Gray code, counter mode and encoder mode is available.
- Adjustable position reset function is available.
- In case of bistable switch faults, broken bistable switch can be detected easily.
- Auto reset feature of KRC fault, low-speed fault and hi-speed fault can be selected.
- Programmable relays for different using which aren't used on some type of applications.
- Warning function in LCD screen is available for the situation the door is left open for a long time.
- Adjustable busy time, wait time on the floor, lock wait time, door stay open time, door open error time, parking time, maximum high speed time and maximum low speed time features are present.
- For different types of buttons, display output type can be choosed as "a,b,c,d Segment", "Gray Code", "Inverted Gray", "Binary Code", "Inverted Binary".
- On the "TeleKon Serial Communication Board", display output type can be choosed as "a,b,c,d Segment", "Gray Code", "Inverted Gray", "Binary Code", "Inverted Binary".
- Password function is available.
- With TeleKon Serial Communication Board, communication can be done with only 2 cables. .
- It can operate in dublex mode.
- Auto-door type is eligible and Open/Closed standby mode for the fully automatic door can be chosen. Also auto-door type can be choosen in different types for per floors. For example door type can be choosen as full automatic for ground and first floor, and then it can be choosen as semiauto for garage floor. Also it can be choosen as "stay open" for ground floor and "stay closed" for first floor.
- Adjustable Rx time and drifting time for soft stop on the VVVF lifts.
- This card can properly run till 2,0 m/s speed lifts. Number of neighbor stops can be adjusted. Different decelerate zones can be determined by birINCI for neighbor calls and the others.
- Run properly with hydrolic lifts which is driven by "star-delta" or "soft-starter".
- In star-delta hydrolic lifts; star-delta time, start-up valve delay, stopping motor delay, stopping valve delay can be adjusted individually.
- Adjustable soft starter contactor delay in soft starter hydrolic lifts.
- In roped or hydrolic lifts, door pre-opening can be done with the addition of KSK bridging board.
- In roped or hydrolic lifts, door relevelling when the open door is open can be done with the addition of KSK bridging board.
- In hydrolic and VVVF lifts, rescuing can be done with UPS addition.
- It stores the last 50 errors .
- All inputs and outputs can be tested on test menu.
- Turkish and English language options are present as standard feature.

3. LCD SCREEN AND KEYPAD

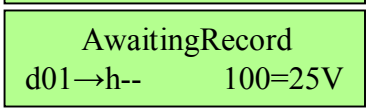
birINCI lift controller board includes two line 16 character LCD screen and four push-buttons designated as ENTER, ESC, UP and DOWN keys.



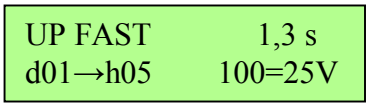




When the system is powered, LCD screen displays messages named "Initialize Screen". In the first message, manufacturing company and product names are displayed. Afterwards the version number of the product is displayed. In the third message, the serial number of the board used is shown. Each of these screens are displayed for one second and then the screen called "Main screen" is displayed.



Main screen displays that lift waits for an entry and also transformer voltage feeding control signals are shown. On this screen, "c" denotes the stop where the Cabin is located and "t" denotes the Target stop of the cabin.

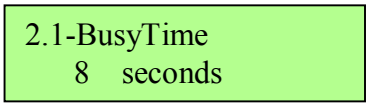


For example, while the cabin is located in the 1st stop, if it gets an call for 5th stop, after the lift starts moving, the screen shown on the left side is displayed..

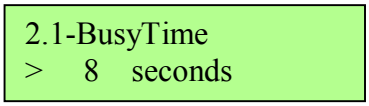
4. USE OF MENUS IN birINCI LIFT CONTROLLER BOARD:

In birINCI lift controller board all parameters have been grouped and numbered. Hence, reaching any parameter, displaying its value and making changes are extremely easy.

When birINCI is in standby mode in main screen, menu is entered by pressing ENTER key for 3 seconds. Here, the screen shown in the left side is displayed. User can browse in main menu by using UP and DOWN keys. ENTER key can be pressed to enter in the desired parameter group.

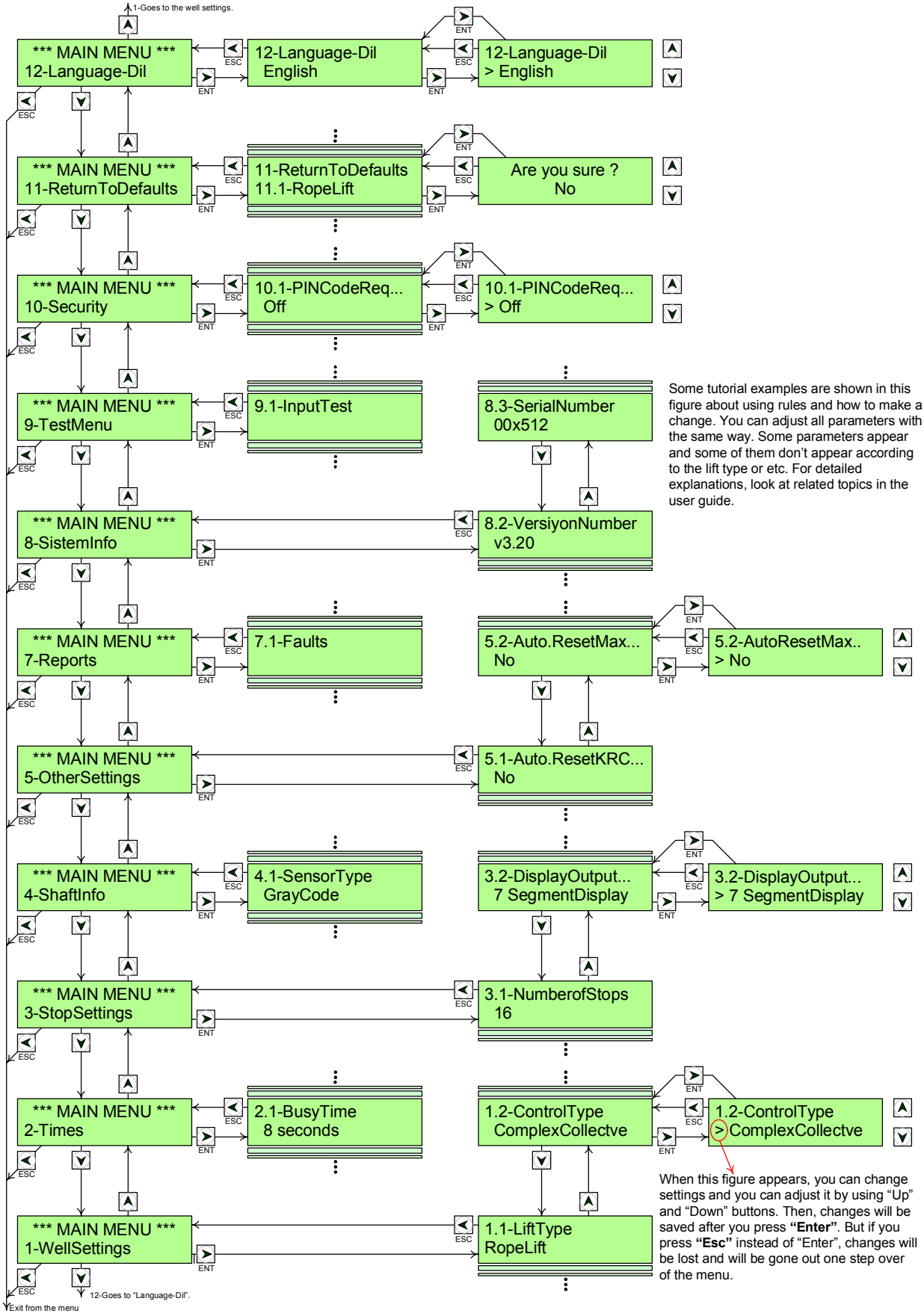


For example, to enter in the 2nd parameter group, when ENTER key is pressed, the first one of the 2nd parameter group "2.1-Busy Time" parameter is displayed as shown in the left. Similarly, other parameters can be browsed using UP and DOWN buttons. To change the parameter, desired paremeter is chosen by pressing ENTER button.



When ENTER key is pressed a right ARROW sign is displayed on the screen. Now, it is possible to change this parameter using UP and DOWN keys. Pressing ENTER key confirms the changes or ESC key can be pressed to cancel the changes and current menu is exited. When the ENTER key pressed, the arrow sign disappears and the changes you have made is immediately stored and activated. Similarly, after all necessary adjustments have been made; menu can be exited by pressing ESC key.

Use of menus scheme is shown on the next page.



Some tutorial examples are shown in this figure about using rules and how to make a change. You can adjust all parameters with the same way. Some parameters appear and some of them don't appear according to the lift type or etc. For detailed explanations, look at related topics in the user guide.

When this figure appears, you can change settings and you can adjust it by using "Up" and "Down" buttons. Then, changes will be saved after you press **"Enter"**. But if you press **"Esc"** instead of "Enter", changes will be lost and will be gone out one step over of the menu.

5. PARAMETERS:

A large number of adjustable parameters are provided to the user to meet demands of lifts in the field. Because many number of parameters exist, for ease of use, they have been classified in terms of their characteristics and functions. Parameter list is shown below.

5.1. System Parameters:

birINCI controller board provides high quality features to the user by presenting different application macros of different lift types. The constant system parameters are conceived as follows.

Par. No:	Parameter Name	Setting Field	Default	Explanations
				6. OVERHAUL
6.1.	Overhaul Period		cancel	
6.2.	End of Period		-	
6.3.	Remain Time		-	
6.4.	Make Overhaul		-	
				7. REPORTS
7.1.	Faults		-	Previously occured 50 faults can be seen here. The number of the latest fault is 1 and the number of the first fault is 50. When more than 50 faults occur, the earliest occured fault is lost
7.2.	Erase Faults		-	It can be used to erase the recorded faults from the memory..
				8. SYSTEM INFO
8.2.	Version		-	Version number of the software can be seen from this parameter.
8.3.	Serial No		-	Serial number of the product can be seen from this parameter.
8.4.	Manufacturer		-	The contact information of the manufacturer ASRONIK can be seen from this parameter. Other communication data can be obtained by using up-down buttons inside this parameter
8.5.	Dealer		-	The communication information of the authorized seller firm on your area can be seen from this parameter. Other communication data can be obtained by using up-down buttons inside this parameter
				9. TEST MENU
9.1.	Input Test		-	19 general purpose inputs located just below the LCD screen can be tested by this parameter. SDL is the abbreviation for stop, door contact and lock. 110 data just below the SDL abbreviaton implies that stop and door contact are energized and lock is not. The numbers lying in two lines located on the right hand side represent 19 inputs located below the LCD screen, which is ordered from left to right, i.e. the first info on the upper line represent M0 and the second one represent M1. Therefore, all inputs whether they can be sensed by microcontroller or not can be tested
9.2.	Call Test		-	The inputs coming from call buttons can be tested by this parameter. The information seen on the screen represents call inputs in the ordered way. The first character on the upper line represents the first one of the call inputs located on birINCI. Therefore, all calls whether they can be sensed by microcontroller or not can be tested
9.3.	Exp. Call Test		-	If an expansion call card connected to birINCI is present, the inputs on this card can be tested by this parameter. The information seen on the screen represents expansion call inputs in the ordered way. NOTE: If control type and stop number parameters was set in a way that an expansion call card is not required, testing the expansion call card is not possible
9.4.	RelayTest		-	All relays placed on birINCI can be tested by this parameter. To prevent an undesired motion of the lift, before starting test process, emergencey stop button must be pressed and the lift must be taken to the inspection. When these conditions are satisfied, R31 relay is instantly switched on. Using up and down buttons, switching the relays on and off one by one is possible. However, at the moment a relay is switched on, if KRC signal is cut off (i.e. contactor is activated), for safety, all relays are automatically switched off and the menu is exited
				10. SECURITY
10.1.	PIN Request	On Off	Off	Password query can be activated by this parameter to ensure no unauthorized person to get access to birINCI, observe parameters and modifying them. If password query is enabled, the password must be correctly submitted to disable it. NOTE: When password query was disabled and enabled again the former password is valid. For that reason, even if you disable password query, don't forget it. The factory default of the password is "000000". NOTE: If you submit wrong password 5 times, birINCI blocks itself. System goes on operating but parameter access is prevented. After your password is blocked, a key number is seen on the screen. Call ASRONIK and notify us this key number. You can reactivate the card by entering birINCI the number provided to you.
10.2.	PIN Change		-	This menu can only be displayed if password query is enabled. When you wanted to change the password, your old password is asked. Then you submit your new password. For approval, birINCI asks for the new password again. Then,

				"PasswordChanged" message is displayed on the screen. Your new password is now active
11. RETURN TO DEFAULTS				
11.1.	Roped Lift		-	Lift type can only be changable with returning the factory defaults. After this process the hidden parameters are visible. For example, Rx time parameter is only accesible at Rope VVVF macros, Star-Delta time parameter is only accesible at Star-Delta Hydrolic Macros.
11.2.	Rope VVVF		-	
11.3.	Star/Delta Hydrolic		-	
11.4.	Soft Starter Hydrolic		-	
11.5.	Copy to Keypad		-	Copy all parameters from birINCI to Keypad.
11.4.	Copy to birINCI		-	Copy all parameters from Keypad to birINCI.
12. DİL - LANGUAGE				
12.	Dil - Language	Turkish – English	Turkish	birINCI controller board supports Turkish and English languages as standart. Please contact the manufacturer for other language demands.

5.2. Rope Lift Application Macro:

If the lift type is selected as "Rope Lift", the application macro which is prepared for rope lifts turns on. In this macro, parameters below are activated.

Par. No:	Parameter Name:	Setting Fields	Default	Explanations
1. WELL SETTINGS				
1.1.	LiftType	-	RopeLift	Only displayable, not changeabled. To make a change, look for 11.th group parameters
1.2.	ControlType	SimplePushButon FullCollective 1But.DownCollec 1But.UpCollectv 1But.FullCollec 2But.FullCollec	Full Collective	For connection principle have a look at the drawings numbered 6x
1.3.	CarComm.	Parallel Serial	Parallel	
1.5.	LiftGroups	Simplex Duplex A Duplex B	Simplex	
1.6.	Auto.Door-1	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	SemiAutomatic	
1.7.	SpecialDoor-1	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only if the "1.6-Auto.Door-1" was set as "SpecialDoor-1"
1.8	Auto.Door-2	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	None	
1.9.	SpecialDoor-2	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only if the "1.8-Auto.Door - 2" was set as "SpecialDoor-2"
1.10.	SelectDoor	1.Dr (1th Door) 2.Dr (2nd door) 1-2D (1th and 2nd Door)	-	This parameter can be displayed only if the "1.8-Auto.Door-2" was set except "None"
1.11	DoorPreOpening	No Yes	-	This parameter can be displayed only if the "4.1-SensorType" was set as "GrayCode" or "Encoder". If "Yes" is selected, OSB signal is required. So you must put OSB bistabil switch on the shaft.
1.12.	Releveling	Cancel DoorClose DoorOpen	-	This parameter can be displayed only if the "4.1-SensorType" was set as "Encoder"
2. TIMES				
2.1.	BusyTime	1 ~ 20 seconds	8 seconds	
2.2.	WaitTimeAtStops	1 ~ 15 seconds	4 seconds	
2.3.	LockWaitTime	5 ~ 25 seconds	15 seconds	
2.4.	DoorStayOpenedTime	1 ~ 40 seconds	6 seconds	This parameter can be displayed only if the type of door was set as "FullAutomatic" or "SpecialDoor"

2.5.	PhotocellTime	1 ~ 40 seconds	3 seconds	This parameter can be displayed only if the “1.6-Auto.Door-1” and “1.8-Auto.Door-2” was set as “FullAutomatic” or “SpecialDoor”.
2.6.	OpenDoorFaultTime	10 ~ 240 seconds	60 seconds	
2.7.	ParkingTime	20 ~ 250 seconds	30 seconds	This parameter can be displayed only if the “3.7-ParkingStop” was set except “Cancel”
2.8.	SlowTravelTime	5 ~ 20 seconds	10 seconds	
2.9.	FastTravelTime	10 ~ 100 seconds	15 seconds	
3. STOP SETTINGS				
3.1.	NumberOfStops	2 ~ 16 stops	16	
3.2.	DisplayOutputType	7 SegmentDisply GrayCode InvertedGray BinaryCode InvertedBinary	7 Segment Disply	
3.3.	TeleKonDisplayOutput Type			This parameter can be displayed only if the “1.3-CarComm.” was set as “Serial”
3.4.	TelekonReserveOutput Type	GrayCode InvertedGray BinaryCode InvertedBinary	Gray Code	
3.5	DisplaySettings			This parameter can be displayed only if one of “3.2-DisplayOutputType” or “3.3-TelekonDisplayOutputType” parameter was set as “7 SegmentDisplay”. Also stops that adjusted by “3.1-NumberOfStops” can be adjusted only.
3.6.	FireStop	Cancel, 1 ~ 16 stops	Cancel	
3.5.	ParkingStop	Cancel, 1 ~ 16 stops	Cancel	
4. SHAFT INFO				
4.1.	SensorType	Gray Code Counter Encoder	GrayCode	Encoder details are written in the user’s manual of encoder
4.2.	PositionReset	No Yes	No	This parameter can be displayed only if the sensor type is “Counter”.
5. OTHER SETTINGS				
5.1.	AutoResetKRC	No Yes	No	
5.2.	AutoResetMaxLow SpeedFault	No Yes	No	
5.3.	AutoResetMaxHigh SpeedFault	No Yes	No	
5.4.	PhaseControl	No Yes	Yes	
5.5.	StopClearCall	No Yes	Yes	
5.6.	Animation	No Yes	Yes	
5.20.	ExpertUser	No Yes	No	This parameter is exceeded from the Menu automatically “No”
5.21.	Rh Relay	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3	O-Rh,Ray	This parameter can be displayed only if the “5.20-ExpertUser” was set as “Yes”.
5.22.	Rf Relay		O-Rf,Ryy	
5.23.	Rx Relay		Cancel	
5.24.	Rkl Relay		O-Rkl	
5.25.	Rlir Relay		O-Rlir	
5.26.	Rsvr Relay		O-Gong	
5.27.	Rdo Relay		O-Door1Open	These parameters can be displayed only , “5.20-ExpertUser” parameter was set “Yes”.

5.28.	Rdc Relay	O-ReverseBinary0 O-ReverseBinary1 O-ReverseBinary2 O-ReverseBinary3	O-Door1Close	
5.31.	DN1	Cancel I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.32.	DN2		Cancel	
5.33.	DN3		Cancel	
5.41.	OPT1A I/O 1	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run. O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray 1 O-ReverseGray 2 O-ReverseGray 3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1 O-ReverseBinary2 O-ReverseBinary3 I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.42.	OPT1A I/O 2		Cancel	
5.43.	OPT1A I/O 3		Cancel	
5.44.	OPT1A I/O 4		Cancel	
5.45.	OPT1A I/O 5		Cancel	
5.46.	OPT1A I/O 6		Cancel	
5.47.	OPT1A I/O 7		Cancel	
5.48.	OPT1A I/O 8		Cancel	
5.49.	OPT1B I/O RO1	See parameter 5.21.	Cancel	
5.50.	OPT1B I/O RO2		Cancel	
5.51.	OPT1B I/O Din 1	See parameter 5.31.	Cancel	
5.52.	OPT1B I/O Din 2		Cancel	

5.3. Rope VVVF Lift Application Macro:

If the lift type is selected as “Rope VVVF Lift”, the application macro which is prepared for speed controlled lifts turns on. In this macro, parameters below are activated.

Par. No:	Parameter Name:	Setting Field	Default	Explanations
1. WELL SETTINGS				
1.1.	LiftType	-	RopeVVVF	Only displayable, not changeabled. To make a change, look for 11.th Group parameters
1.2.	ControlType	SimplePushButon FullCollective 1But.DownCollec 1But.UpCollectv 1But.FullCollec 2But.FullCollec	FullCollective	For connection principle have a look at the drawings numbered 6x
1.3.	CarComm.	Parallel Serial	Parallel	

1.5.	LiftGroups	Simplex Duplex A Duplex B	Simplex	
1.6.	Auto.Door-1	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	SemiAutomatic	
1.7.	SpecialDoor-1	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	. This parameter can be displayed only , “1.6-Auto.Door-1” parameter was set “SpecialDoor”
1.8	Auto.Door-2	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	None	This parameter can be displayed only if the “4.1-SensorType” was set as “GrayCode” or “Encoder”
1.9.	SpecialDoor-2	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only , “1.8-Auto.Door-2” parameter was set “SpecialDoor”
1.10.	SelectDoor	1.Dr (1th Door) 2.Dr (2nd door) 1-2D (1th and 2nd Door)	-	This parameter can be displayed only if the “1.8-Auto.Door-2” was set except “None”
1.11	DoorPreOpening	No Yes	-	This parameter can be displayed only if the “4.1-SensorType” was set as “Counter” or “Encoder”. If “Yes” is selected, OSB signal is required. So you must put OSB bistabil switch on the shaft.
1.12.	Releveling	Cancel DoorClose DoorOpen	-	This parameter can be displayed only if the “4.1-SensorType” was set as “Encoder”
2. TIMES				
2.1.	BusyTime	1 ~ 20 seconds	8 seconds	
2.2.	WaitTimeAtStops	1 ~ 15 seconds	4 seconds	
2.3.	LockWaitTime	5 ~ 25 seconds	15 seconds	
2.4.	DoorStayOpened Time	1 ~ 40 seconds	6 seconds	This parameter can be displayed only if the type of door was set as “FullAutomatic” or “SpecialDoor”.
2.5.	PhotocellTime	1 ~ 40 seconds	3 seconds	This parameter can be displayed only if the “1.6-AutoDoor-1” and “1.8-AutoDoor-2” was set as “FullAutomatic” or “SpecialDoor”.
2.6.	OpenDoorFault Time	10 ~ 240 seconds	60 seconds	
2.7.	ParkingTime	20 ~ 250 seconds	30 seconds	This parameter can be displayed only if the “3.7-ParkingStop” was set except “Cancel”
2.8.	SlowTravelTime	5 ~ 20 seconds	10 seconds	
2.9.	FastTravelTime	10 ~ 100 seconds	15 seconds	
2.30.	DriftTime	0,0 ~ 2,0 seconds	0,0 seconds	
2.31.	RxDelay	0,0 ~ 5,0 seconds	1,5 seconds	
3. STOP SETTINGS				
3.1.	NumberOfStops	2 ~ 16 stops	16	
3.2.	DisplayOutputType	7 SegmentDisply GrayCode InvertedGray BinaryCode InvertedBinary	7 Segment Disply	
3.3.	TeleKonDisplayOutput Type			This parameter can be displayed only if the “1.3-CarComm.” was set as “Serial”.
3.4.	TelekonReserveOutput Type	GrayCode InvertedGray BinaryCode InvertedBinary	GrayCode	This parameter can be displayed only if the “1.3-CarComm.” was set as “Serial”.
3.5	DisplaySettings			This parameter can be displayed only if one of “3.2-DisplayOutputType” or “3.3-TelekonDisplayOutputType” parameter was set as “7 SegmentDisply”. Also stops that adjusted by “3.1-NumberOfStops” can be adjusted only.
3.6.	FireStop	Cancel, 1 ~ 16 stops	Cancel	
3.5.	ParkingStop	Cancel, 1 ~ 16 stops	Cancel	
4. SHAFT INFO				
4.2.	PositionReset	No Yes	No	This parameter can be displayed only if the sensor type is “Counter”.
5. OTHER SETTINGS				
5.1.	AutoResetKRC	No Yes	No	
5.2.	AutoResetMaxLow SpeedTimeFault	No Yes	No	
5.3.	AutoResetMaxHigh SpeedTimeFault	No Yes	No	
5.4.	PhaseControl	No Yes	Yes	

5.5.	StopClearCall	No Yes	Yes	
5.6.	Animation	No Yes	Yes	
5.20.	ExpertUser	No Yes	No	This parameter is exceeded from the Menu automatically "No"
5.21.	Rh Relay	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1 O-ReverseBinary2 O-ReverseBinary3	O-Rh,Ray	This parameter can be displayed only if the "5.20-ExpertUser" was set as "Yes".
5.22.	Rf Relay		O-Fault+Insp.	
5.23.	Rx Relay		O-Rx	
5.24.	Rkl Relay		O-Rkl	
5.25.	Rlir Relay		O-Rlir	
5.26.	Rsvr Relay		O-Rescue	
5.27.	Rdo Relay		O-Door1Open	
5.28.	Rdc Relay		O- Door1Close	
5.31.	DN1	Cancel I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	I-818Y	
5.32.	DN2		I-PowerDown	
5.33.	DN3		Cancel	
5.41.	OPT1A I/O 1	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run. O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1	Cancel	
5.42.	OPT1A I/O 2		Cancel	
5.43.	OPT1A I/O 3		Cancel	
5.44.	OPT1A I/O 4		Cancel	
5.45.	OPT1A I/O 5		Cancel	These parameters can be displayed only , "5.20-ExpertUser" parameter was set "Yes".
5.46.	OPT1A I/O 6		Cancel	

5.47.	OPT1A I/O 7	O-ReverseBinary2 O-ReverseBinary3 I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.48.	OPT1A I/O 8		Cancel	
5.49.	OPT1B I/O RO1	See parameter 5.21.	Cancel	
5.50.	OPT1B I/O RO2		Cancel	
5.51.	OPT1B I/O Din 1	See parameter 5.31.	Cancel	
5.52.	OPT1B I/O Din 2		Cancel	

5.4. Star-Delta Hydrolic Lift Application Macro:

If the lift type is selected as "Star-Delta Hydrolic Lift", the application macro which is prepared for hydrolic lifts which are driven by star-delta method, turns on. In this macro, parameters below are activated

Par. No:	Parameter Name:	Setting Fields	Default	Explanations
1. WELL SETTINGS				
1.1.	LiftType	-	Star-Delta Hydrolic	Only displayable, not changeabled. To make a change, look for 11.th group parameters
1.2.	ControlType	SimplePushButon FullCollective 1But.DownCollec 1But.UpCollectv 1But.FullCollec 2But.FullCollec	FullCollective	For connection principle have a look at the drawings numbered 6x
1.3.	CarComm.	Parallel Serial	Parallel	
1.5.	LiftGroups	Simplex Duplex A Duplex B	Simplex	
1.6.	Auto.Door-1	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	FullAutomatic	
1.7.	SpecialDoor-1	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only if the "1.6-Auto.Door-1" was set as "SpecialDoor"
1.8	Auto.Door-2	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	None	
1.9.	SpecialDoor-2	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only if the "1.8-Auto.Door-2" was set as "SpecialDoor"
1.10.	SelectDoor	1.Dr (1th Door) 2.Dr (2nd door) 1-2D (1th and 2nd Door)	-	This parameter can be displayed only if the "1.8-Auto.Door-2" was set except "None"
1.11	DoorPreOpening	No Yes	No	If "Yes" is selected, OSB signal is required. So you must put OSB bistabil switch on the shaft.
1.12.	Releveling	Cancel DoorClose DoorOpen	DoorClose	If "DoorOpen" is selected, OSB signal is required. So you must pur OSB bistabil switch on the shaft. Otherwise OSB is not required.
2.TIMES				
2.1.	BusyTime	1 ~ 20 seconds	8 seconds	
2.2.	WaitTimeAtStops	1 ~ 15 seconds	4 seconds	
2.3.	LockWaitTime	5 ~ 25 seconds	15 seconds	
2.4.	DoorStayOpenedTime	1 ~ 40 seconds	6 seconds	This parameter can be displayed only if the type of door was set as "FullAutomatic" or "SpecialDoor".
2.5.	PhotocellTime	1 ~ 40 seconds	3 seconds	This parameter can be displayed only if the "1.6-AutoDoor-1" and "1.8-AutoDoor-2" was set as "FullAutomatic" or "SpecialDoor".
2.6.	OpenDoorFaultTime	10 ~ 240 seconds	60 seconds	
2.7.	ParkingTime	20 ~ 250 seconds	30 seconds	This parameter can be displayed only if the "3.7-ParkingStop" was set except "Cancel"
2.8.	SlowTravelTime	5 ~ 20 seconds	10 seconds	

2.9.	FastTravelTime	10 ~ 100 seconds	15 seconds	
2.60.	StarDeltaTime	0,0 ~ 5,0 seconds	0,8 seconds	
2.61.	ValveDelayAtRunning	0,0 ~ 5,0 seconds	0,5 seconds	
2.62.	MotorDelayAtStopping	0,0 ~ 5,0 seconds	0,4 seconds	
2.64.	ValveDelayAtStopping	0,0 ~ 5,0 seconds	0,0 seconds	
2.65.	StopDelayAt Inspec.Speed	0,0 ~ 2,0 seconds	0,0 seconds	
3. STOP SETTINGS				
3.1.	NumberOfStops	2 ~ 16 stops	16	
3.2.	DisplayOutputType	7 SegmentDisply GrayCode InvertedGray BinaryCode InvertedBinary	7 Segment Disply	
3.3.	TeleKonDisplayOutputType			This parameter can be displayed only if the “1.3-CarComm.” was set as “Serial”
3.4.	TelekonReserveOutputType	GrayCode InvertedGray BinaryCode InvertedBinary	GrayCode	
3.5	DisplaySettings			This parameter can be displayed only if one of “3.2-DisplayOutputType” or “3.3-TelekonDisplayOutputType” parameter was set as “7 SegmentDisply”. Also stops that adjusted by “3.1-NumberOfStops” can be adjusted only.
3.6.	FireStop	Cancel, 1 ~ 16 stops	Cancel	
3.5.	ParkingStop	Cancel, 1 ~ 16 stops	Cancel	
4. SHAFT INFO				
4.1.	SensorType	Counter Encoder	Counter	Encoder details are written in the user’s manual of encoder
4.2.	PositionReset	No Yes	No	This parameter can be displayed only if the sensor type is “Counter”.
5. OTHER SETTINGS				
5.1.	AutoResetKRC	No Yes	No	
5.2.	AutoResetMaxLow SpeedTimeFault	No Yes	No	
5.3.	AutoResetMaxHigh SpeedTimeFault	No Yes	No	
5.4.	PhaseControl	No Yes	Yes	
5.5.	StopClearCall	No Yes	Yes	
5.6.	Animation	No Yes	Yes	
5.20.	Expert User	No Yes	No	This parameter is exceeded from the Menu automatically “No”
5.21.	Rh Relay	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1 O-ReverseBinary2 O-ReverseBinary3	O-Rh,Ray	This parameter can be displayed only if the “5.20 Expert User” was set as “Yes”
5.22.	Rf relay		O-Rf,Ryy	
5.23.	Rx relay		O-Delta,SS Cont.	
5.24.	Rkl relay		O-Rkl	
5.25.	Rlir relay		O-Rlir	
5.26.	Rsvr relay		O-Star,SS Run.	These parameters can be displayed only , “5.20.Expert User” parameter was set “Yes”
5.27.	Rdo relay		O-Door1Open	
5.28.	Rdc relay		O-Door1Close	

5.31.	DN1	Cancel I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.32.	DN2		I-PowerDown	
5.33.	DN3		Cancel	
5.41.	OPT1A I/O 1	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1 O-ReverseBinary2 O-ReverseBinary3 I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.42.	OPT1A I/O 2		Cancel	
5.43.	OPT1A I/O 3		Cancel	
5.44.	OPT1A I/O 4		Cancel	
5.45.	OPT1A I/O 5		Cancel	
5.46.	OPT1A I/O 6		Cancel	
5.47.	OPT1A I/O 7		Cancel	
5.48.	OPT1A I/O 8		Cancel	
5.49.	OPT1B I/O RO1	See parameter 5.21.	Cancel	
5.50.	OPT1B I/O RO2		Cancel	
5.51.	OPT1B I/O Din 1	See parameter 5.31.	Cancel	
5.52.	OPT1B I/O Din 2		Cancel	

5.5. Soft Starter Hydrolic Lift Application Macro:

If the lift type is selected as “Soft Starter Hydrolic Lift”, the application macro which is prepared for hydrolic lifts which are driven by soft-starter method, turns on. In this macro, parameters below are activated.

Par. No:	Parameter Name:	Setting Fields	Default	Explanations
1. WELL SETTINGS				
1.1.	LiftType	-	SoftStarter-Hydrolic	Only displayable, not changeabled. To make a change, look for 11.th group parameters
1.2.	ControlType	SimplePushButon FullCollective 1But.DownCollec 1But.UpCollectv 1But.FullCollec 2But.FullCollec	FullCollective	For connection principle have a look at the drawings numbered 6x
1.3.	CarCommunication	Parallel Serial	Parallel	
1.5.	LiftGroups	Simplex Duplex A Duplex B	Simplex	

1.6.	AutoDoor-1	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	FullAutomatic	
1.7.	SpecialDoor-1	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only if the “1.6-AutoDoor-1” was set as “SpecialDoor”.
1.8	AutoDoor-2	None SemiAutomatic FullAutomatic FullAuto.Open Special Door	None	
1.9.	SpecialDoor-2	SA (SemiAutomatic) FA (FullAutomatic) FADO (FullAuto.DoorOpen)	-	This parameter can be displayed only if the “1.8-AutoDoor-2” was set as “SpecialDoor”.
1.10.	SelectDoor	1.Dr (1th Door) 2.Dr (2nd door) 1-2D (1th and 2nd Door)	-	This parameter can be displayed only if the “1.8-AutoDoor-2” was set except “None”
1.11	DoorPreOpening	No Yes	No	If “Yes” is selected, OSB signal is required. So you must put OSB bistabil switch on the shaft.
1.12.	Releveling	Cancel DoorClose DoorOpen	DoorClosed	If “DoorOpen” is selected, OSB signal is required. So you must pur OSB bistabil switch on the shaft. Otherwise OSB is not required.
2. TIMES				
2.1.	BusyTime	1 ~ 20 seconds	8 seconds	
2.2.	WaitTimeAtStops	1 ~ 15 seconds	4 seconds	
2.3.	LockWaitTime	5 ~ 25 seconds	15 seconds	
2.4.	DoorStayOpenedTime	1 ~ 40 seconds	6 seconds	This parameter can be displayed only if the type of door was set as “FullAutomatic” or “SpecialDoor”.
2.5.	PhotocellTime	1 ~ 40 seconds	3 seconds	This parameter can be displayed only if the “1.6-AutoDoor-1” and “1.8-AutoDoor-2” was set as “FullAutomatic” or “SpecialDoor”.
2.6.	OpenDoorFaultTime	10 ~ 240 seconds	60 seconds	
2.7.	ParkingTime	20 ~ 250 seconds	30 seconds	This parameter can be displayed only if the “3.7-Parking Stop” was set except “Cancel”.
2.8.	SlowTravelTime	5 ~ 20 seconds	10 seconds	
2.9.	FastTravelTime	10 ~ 100 seconds	15 seconds	
2.61.	ValveDelayAtRunning	0,0 ~ 5,0 seconds	0,5 seconds	
2.62.	MotorDelayAtStopping	0,0 ~ 5,0 seconds	0,4 seconds	
2.63.	SoftStarterContactor Delay	0,0 ~ 5,0 seconds	1,0 seconds	
2.64.	ValveDelayAtStopping	0,0 ~ 5,0 seconds	0,0 seconds	
2.65.	StopDelayAt Inspec.Speed	0,0 ~ 2,0 seconds	0,0 seconds	
3. STOP SETTINGS				
3.1.	NumberOfStops	2 ~ 16 stops	16	
3.2.	DisplayOutputType	7 Segment Disply GrayCode InvertedGray BinaryCode InvertedBinary	7 Segment Disply	
3.3.	TeleKonDisplayOutput Type			This parameter can be displayed only if the “1.3-CarComm.” was set as “Serial”.
3.4.	TelekonReserveOutput Type	GrayCode InvertedGray BinaryCode InvertedBinary	GrayCode	
3.5	DisplaySettings			This parameter can be displayed only if one of “3.2-DisplayOutputType” or “3.3-TelekonDisplayOutputType” parameter was set as “7 SegmentDisply”. Also stops that adjusted by “3.1-NumberOfStops” can be adjusted only.
3.6.	Fire Stop	Cancel, 1 ~ 16 stops	Cancel	
3.5.	Parking Stop	Cancel, 1 ~ 16 stops	Cancel	
4. SHAFT INFO				
4.1.	SensorType	Counter Encoder	Counter	Encoder details are written in the user’s manual of encoder
4.2.	PositionReset	No Yes	No	This parameter can be displayed only if the sensor type is “Counter”.
5. OTHER SETTINGS				
5.1.	AutoResetKRC	No Yes	No	
5.2.	AutoResetMaxLow SpeedTimeFault	No Yes	No	

5.3.	AutoResetMaxHigh SpeedTimeFault	No Yes	No	
5.4.	PhaseControl	No Yes	Yes	
5.5.	StopClearCall	No Yes	Yes	
5.6.	Animation	No Yes	Yes	
5.20.	ExpertUser	No Yes	No	This parameter is exceeded from the Menu automatically "No"
5.21.	Rh Relay	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Insp. O-Gong O-Star,SS Cont. O-Delta,SS Run O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1 O-ReverseBinary2 O-ReverseBinary3	O-Rh,Ray	This parameter can be displayed only if the "5.20 Expert User" was set as "Yes".
5.22.	Rf Relay		O-Rf,Ryy	
5.23.	Rx Relay		O-Delta,SS	
5.24.	Rkl Relay		O-Rkl	
5.25.	Rlir Relay		O-Rlir	
5.26.	Rsvr Relay		O-Star,SS.	
5.27.	Rdo Relay		O-Door1Open	
5.28.	Rdc Relay		O-Door1Close	
5.31.	DN1	Cancel I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.32.	DN2		Cancel	
5.33.	DN3		Cancel	
5.41.	OPT1A I/O 1	Cancel O-Rh,Ray O-Rf,Ryy O-Rvh O-Rx O-Rescue O-Rkl O-Rlir O-Door1Open O-Door1Close O-Door2Open O-Door2Close O-Inspection O-Fault O-Fault+Rev. O-Gong O-Star,SS Cont. O-Delta,SS Run O-Gray0 O-Gray1 O-Gray2 O-Gray3 O-ReverseGray0 O-ReverseGray1 O-ReverseGray2 O-ReverseGray3 O-Binary0 O-Binary1 O-Binary2 O-Binary3 O-ReverseBinary0 O-ReverseBinary1	Cancel	
5.42.	OPT1A I/O 2		Cancel	
5.43.	OPT1A I/O 3		Cancel	
5.44.	OPT1A I/O 4		Cancel	These parameters can be displayed only , "5.20.Expert User" parameter was set "Yes".
5.45.	OPT1A I/O 5		Cancel	
5.46.	OPT1A I/O 6		Cancel	

5.47.	OPT1A I/O 7	O-ReverseBinary2 O-ReverseBinary3 I-PowerDown I-818Y I-Door2-K20 I-Door2-DTS I-805 I-812 I-815 I-816	Cancel	
5.48.	OPT1A I/O 8		Cancel	
5.49.	OPT1B I/O RO1	See parameter 5.21.	Cancel	
5.50.	OPT1B I/O RO2		Cancel	
5.51.	OPT1B I/O Din 1	See parameter 5.31.	Cancel	
5.52.	OPT1B I/O Din 2		Cancel	

P1-WELL SETTINGS:

1.1-LiftType
RopeLift

1.1-Type of Lift: The type of lift previously set can be seen from this parameter and it is not user changeable. The type of lift can be changed by adjusting 11th group parameters to factory default settings.

1.2-ControlType
FullCollective

1.2-Control Type: The control type of the lift can be chosen by this parameter.

- Simple Push Button: Only one call is accepted at the same time.
- Full Collective: Floor calls and cabin calls are wired to the same terminal.

If the common of outer calls are taken from 190, no collecting is done for landing calls. Collecting is done only for the cabin calls.

- 1 Button Down Collective: For landing calls, the lift stops only for down travel direction.
- 1 Button Up Collective: For lanfing calls, the lift stops only for up travel direction.
- 1 Button Full Collective: For landing calls the lift stops for both directions.
- 2 Buttons Full Collective: On each floor, two call buttons are available

Car Communication: Parallel		
Control Type	Max. Stops Numbers **Without** Expansion Card	Max. Stops Numbers **With** Expansion Card
Simple Collective	16	-
Full Collective	16	-
1 Button Down Collective	8	16
1 Button Up Collective	8	16
1 Button Full Collective	8	16
2 Buttons Full Collective	6	11

Car Communication: Serial		
Control Type	Max. Stops Numbers **Without** Expansion Card	Max. Stops Numbers **With** Expansion Card
Simple Collective	16	-
Full Collective	16	-
1 Button Down Collective	16	-
1 Button Up Collective	16	-
1 Button Full Collective	16	-
2 Buttons Full Collective	9	16

1.3-CarComm.
Parallel

1.3-Cabin Communication: The connection type between birINCI and TeleKon serial communication board at the cabin can be establish through this parameter.

- **Parallel:** A one-by-one connection is done between birINCI controller and all buttons, sensors in the cabin.
- **Serial:** A serial connection between birINCI controller and cabin is establish through TeleKon serial communication board. Thus, serial communication system saves you noney and time.

1.5- LiftGroups Simplex

1.5- Lift Groups: This parameter determines the lift groups
- Simplex : Control panel functions privately.
- Duplex A Panel : In double group operation, it functions as decider (master) panel.
- Duplex B Panel : In double group operation, it operaets as 2nd (slave) panel.

1.6- AutoDoor-1 FullAutomatic

1.6- Automatic Door-1 (1.8- Automatic Door -2):
This parameter determines the type of the automatic door.
- None : This parameter is set if the lift has only swing door.
- Semi Automatic : The lift has only safety door in cabin and has only swing door on floor.
- Full Automatic : The lift has fully automatic floor and cabin doors.
- Full Automatic Open At Floor : This parameter is used for the case where the lift has full automatic door landing and cabin doors and full automatic door is desired to be standing open on the floor.
- Special Door : At birINCI, all doors at stops can be adjusted as “Semi Automatic” or “Full Automatic” or “Full Auto-Open” for per floors individually. To make this adjust, this parameter must be selected as “Special Door” at first, and then all doors must be adjusted individually for all floors

WARNING ! For the conformity to EN81-1/2 directives, the full automatic door MUST be adjusted to be closed on the floor. This parameter was intended for the countries which are not bound to EU standards.

1.7- SpecialDoor -1

1.7- SpecialDoor -1 (1.9-SpecialDoor -2): This parameter can be displayed only if the type of door was set as “special door”. By this parameter, all doors at stops can be adjusted as “Semi Automatic” or “Full Automatic” or “Full Auto-Open” for every floors individually.

1.10-SelectDoor

1.10- Select Door: This parameter can be displayed only if the “1.8-Automatic Door-2” parameter was set a diffrent value from “None”.

P2-TIMES:

2.1-BusyTime 8 seconds

2.1-Busy Time: This parameter determines busy time.

2.2-WaitTimeAtStops 4 seconds

2.2-Wait Time At Stops: During collecting, before heading towards the other calls, the wait time on the stop is determined by this parameter.

2.3-LockWaitTime 10 seconds

2.3-Lock Wait Time: birINCI controller board lets the cam released at the end of a pre-determined time to prevent the cam to be harmed by staying pulled for a long time and a fault code is generated. This limit time can be set through this parameter.

2.4-DoorStayOpenedTi 6 seconds

2.4-Door Stay Opened Time: In lifts with fully automatic doors, after the lift’s door opened the control card starts to count the time set through this parameter. At the end of this time the door is closed.

2.5-Photocell Time 20 seconds

2.5-Photocell Time: After K20 input is active, lift opens the door and resets the photocell time. When K20 inputs becomes passive, lift waits till the photcell time and closes the door.

2.6- OpenDoorFaultTim 20 seconds

2.6- Open Door Fault Time: At the end of the time whch is determined by this parameter and if the door has not closed yet, controller comes to the out of service mode. If group operation is present, the calls are transferred to the other lift.

2.7- Parking Time 30 seconds

2.7-Parking Time: The wait time before heading towards the park stop can be set through this parameter.

2.8- SlowTravelTime 10 seconds

2.8- Slow Travel Time: This parameter is used to prevent slow winding of lift motor staying energized for a long time and being damaged. To prevent burning of the winding, motor is not allowed to be started for more than determined time.

2.9- FastTravelTime 15 seconds

2.9- Fast Travel Time: The maximum allowed time between two neighbor stops are determined by this parameter. For example, if a lift accidentally turned into the brake mode, as it will not be able to reach to the new stop, it can stop safely.

2.30- DriftingTime 0.0 seconds

2.30- Drifting Time: This parameter can only be displayed for the roped VVVF type lifts. In speed controlled control panels, to obtain more sensitive stopping, at the end of the second speed after this determined time a third speed command is given to the lift.

2.31-Rx Delay 1.5 seconds

2.31-Rx Delay: This parameter can only be displayed for the roped VVVF type lifts. In speed controlled control panels, the main contactors are desired to be released with a delay. This delay is set through this parameter.

2.60- StarDeltaTime 0.8 seconds

2.60- Star Delta Time: This parameter can only be displayed for the lift types set as star-delta hydrolic. The operation time of the motor during star connected starting can be set through this parameter.

2.61- ValveDelayAtRun 0.5 seconds

2.61- Valve Delay At Running: This parameter can only be displayed for hydrolic lifts with star-delta or soft start. To obtain a comfortable start-up, which depends also on the brand of the hydrolic unit, after the motor starts to operate in delta connected mode, the valve opening delay time having a value advised by the manufacturer can be set through this parameter.

2.62- -MotorDelayAtStop 0.4 seconds

2.62- Motor Delay At Stopping: This parameter can only be displayed for hydrolic lifts with star-delta or soft start. To obtain a comfortable stopping, which depends also on the brand of the hydrolic unit, after the exact floor level (JF) signal comes, the stop delay of the motor having a value advised by the manufacturer can be set through this parameter.

2.63- SoftStartContDelay 1.0 seconds

2.63- Soft Start Contactor Delay: This parameter can only be displayed for hydrolic lifts with soft start. As is well-known, to reduce mechanical stres and vibrations and high inrush current during start-up, the motors are started with soft starters. Most of the soft starters on the market, has soft stop feature besides the soft start feature. To be able to use this function of the starters, the contactor at the output of the starter can be delayed for a period of time set through this parameter. Stopping time can be set on the soft starter.

2.64- ValveDelayAtStop 0.0 seconds

2.64- Valve Delay At Stopping: This parameter can only be displayed for hydrolic lifts with star-delta or soft start. To obtain a comfortable stopping, which depends also on the brand of the hydrolic unit, after the exact floor level (JF) signal comes, the delay time to shut off the valves can be set through this parameter.

2.65-StopDelayAtInpec. 0.0 seconds

2.64-Stop Delat At Inspection Speed: This parameter can only be displayed for hydrolic lifts with star-delta or soft start. With this parameter, you can adjust the inspecton speed in your hydrolic unit. When this parameter is set to a value different from zero seconds, both “slow” and “fast” relays switch on at inspection. Thus, the lift moves with inspection speed.

P3-STOP SETTINGS:

3.1- NumberofStops
16

3.1- Number of Stops: This parameter determines the number of stops on the lift. Thus, assigning a record for a larger number than the determined stop number is prevented during the installation and maintenance. Number of stops has to be set for particularly the lifts which use "counter" as flor selector. birINCI controller board can operate for up to 16 stops without requiring any expansion board, in which control type is set as simple control or full collective. For the lifts, in which the control type was set as one button down collective, one button up collective or one button full collective, it can operate for up to 8 stops without expansion call card and 16 stops with expansion call board.

For the lifts, in which control type was set as 2 button full collective mode, it can operate for up to 6 stops without expansion call card and 11 stops with expansion call card. If the serial communication system is used on the cabin, you can use birINCI controller up to 16 stops at the 2 button full collective mode. Please check the drawings for details.

3.2- DisplayOutputType
7 Segments Display

3.2- Display Output Type (3.3-Telekon Display Output Type): birINCI controller board can give the outputs of gray, inverted gray, binary, inverted binary outputs, as well as classical 7 segments from display outputs. Hence, the system operation is possible without needing any converter for different buttons (Display output signals are active low signals.)

- 7 Segments Display : Classically used parallel wired connection system.
- Gray Code : From a,b,c,d outputs, M0,M1,M2 and M3 gray code outputs respectively can be used.
- Inverted Gray : The inverse of gray code can be obtained from a,b,c,d outputs.
- Binary Code : From a,b,c,d outputs, B0,B1,B2 and B3 binary code outputs can be used.
- Inverted Binary : The inverted binary code can be obtained from a,b,c,d outputs.

3.4-TeleKonReserveOutputTyp
7 Segments Display

3.4-TeleKon Reserve Output Type: When using TeleKon board, reserve outputs can give gray, inverted gray, binary, inverted binary outputs, as well as classical 7 segments from display outputs. Hence, the system operation is possible without needing any converter card for different buttons. These output signals are active high signals.

- Gray Code
- Inverted Gray
- Binary Code
- Inverted Binary

3.5-DisplaySettings

3.5-Display Settings: This parameter can only be displayed if "3.2-Display Output" Type and "3.3-Telekon Display Output Type" parameters are set **7** segments display. For each stop, display settings can be set through this parameter. When you are enter this menu for adjust parameters, the bottom line of the screen displays "Stop:" Disp:0". To change the stop number, while it blinks up-down buttons are used to reach the desired stop. Then, Enter buton is pressed to make the display value blink. Up-down buttons again used to make desired digital adjustment. To make adjustment for another stop, Esc button is pressed and stop number is made blinking. When the stop number is blinking, pressing the Esc button, or similarly, when display number is blinking, pressing the Enter buton saves the changes and menu is exited.

3.6-Fire Stop
Cancel

3.6-Fire Stop: If this function is activated, when the fire contact is closed and 24V is applied to the 816 function, the lift automatically directed to the lift stop determined by this parameter. If during the movement of the lift, the fire stop is on the movement direction, all calls are erased and the lift instantly directed to the fire stop. If the lift is moving on the opposite direction, it stops on the first stop. All calls are erasen. It moves towards the lift stop without opening the door. On the lift stop the lift waits with its doors open and calls are not responded. In that situation, the lift can only move by VIP or inspection buttons. When 24V power is cut from the 816 function, the lift turns back to its normal operating mode. If you do not want to use this feature, set this parameter as "cancel".

3.7-Parking Stop
Cancel

3.7-Parking Stop: If the lift stays in standstill during the parking time parameter, the lift gives a call to parking stop by itself which can adjustable by this parameter. If you do not intend to use this feature, set this parameter as "Cancel".

P4-SHAFT INFO:

4.1- SensorType
GrayCode

4.1-Sensor Type: As well as operating with four bistables classically ordered in gray code, birINCI controller can also operate with one bistable ordered in counter type. And also, it can work by taking feedback from encoder. By this parameter, you have to info the the control card about the used system.

WARNING! In the lifts using counter type magnet order, make sure that 817 lower limit breaker switch, and 818 higher limit breaker switch operates correctly

- Gray code : Classical gray coded magnet ordered operating system.
- Counter : Counter type magnet ordered operating system.
- Encoder : Encoder feedback operationg system.

4.2-PositionReset
No

4.2-Position Reset: In systems operating in counter type, even in case of grid-line power interrupt, the latest stop lift stands are kept in memory. But ins some special circumstances, when power is recovered, a position reset may be desired. For example, in lifts with battery powered rescue systems, position reset may be done by activating this parameter. In systems using gray code, this menu is not displayed because position reset is not needed.

- No : Do not apply position reset operation.
- Yes : Apply position reset operation.

4.3- NeighborStopsNum
15

4.3-Neighbor Stops Number: birINCI control system can set two different slow down points for neighbor and distant calls for the lifts with speeds more than 1,0m/sec. For neighbor calls, the speed of the lift must be set to approximately 1,0m/sec and for neighbor calls the lift starts to slow down 1 magnet prior, in regard to the information coming from M1 magnet. For distant calls, it starts to slow down on the magnet set through "4.4-Neighbor Stops Number". Therefore, the point to start slow down can be determined by the following manner.
A=[Target stop]-[The stop cabin is parked]
If A is lower or equal to the neighbor stop number, the lift moves with a speed of 1,0m/sec. If number of neigbor stops is larger than A, the lift runs at rated lineer speed. You can find detailed information at technical drawings.

NOTE: In speed controlled panel systems, in which the speed is less than 1m/sec and in classical double speed systems, there is no need to place M0 magnet. Placing only M1 magnet is enough. However, "4.3-Number of Neighbor Stops" parameter has to be set as "CANCEL".

P5-OTHER SETTINGS:

5.1-Auto.ResetKrc
No

5.1-Automatic Reset KRC: For the conformity to EN81-1/2 directives, the positions of the contactors used in control panel are controlled by birINCI. However, for the countries in which Europe standarts are not applied, KRC has automatic reset function. This function can be set through this parameter

WARNING ! : For the conformity to EN81-1/2 directives, it has to be set as "no".

- Yes : Automatic reset function is on.
- No : Automatic reset function is off.

5.2- Auto.ResetMaxLowS
No

5.2-Auto Reset Max. Low Speed Time Fault: For the conformity to EN81-1/2 directives, after the maximum low speed fault occured, the lift must be blocked. For the countries in which Europe standards are not applied, low speed movement time fault has automatic reset function. It can be set through this parameter.

WARNING ! : For the conformity to EN81-1/2 directives, it has to be set as "no".

- Yes : Automatic reset function is on.
- No : Automatic reset function is off.

5.3- Auto.ResetMaxHighS No

5.3-Auto Reset Max. High Speed Time Fault: For the conformity to EN81-1/2 directives, after the maximum high speed fault occured, the lift must be blocked. For the countries in which Europe standards are not applied, high speed movement time fault has automatic reset function. It can be set through this parameter.

- Yes : Automatic reset function is on.
- No : Automatic reset function is off.

5.4-PhaseControl Yes

5.4-Phase Control: This control is present in birINCI controller board. This is standart active. If you don't want to use this, this can be canceled.

- Yes : Phase Protection Control is on
- No : Phase Protection Control is off

5.5-StopClearCall Cancel

5.5-Stop Clear Call: When the "Stop" info is not given, you can decide to clear or not to clear existing calls by this parameter.

- Yes : Clears existing calls.
- No : Do not clear existing calls.

5.6-Animation Cancel

5.6-Animation: You can adjust the 7 segment displays reflecting the state of floors more visual with this parameter.

- Yes : Visual display active.
- No : Visual display pasive.

5.20-Expert User No

5.20-Expert User: birINCI control board software is built on a very flexbile architecture to meet the demands of the field. You can adjust the Rh, Rf, Rx, Rkl, Rlir, Rsvr, Rdo, Rdc output relays and optional inputs DN1, DN2, DN3. For this, you have to choose this parameter as "Yes". When existing from the Menu, this parameter returs automatically "No".

5.21-Rh Relay O-Rh,Ray

5.21-Rh Relay:
5.22-Rf Relay:
5.23-Rx Relay:
5.24-Rkl Relay:
5.25-Rlir Relay:
5.26-Rsvr Relay:
5.27-Rdo Relay:
5.28-Rdc Relay:
5.49-Opt1B RO 1:
5.50-Opt1B RO 2:

These relays functions can be adjusted to the desired. Alternatively functions are listed below. The names of functions in the first place "O" character means the function is "Output" and "I" character means the function is "Input". In this parameter group, you can only display the output functions. You can find the table containing the parameters of the macro outputs for the functions assigned to the factory settings using application macro.

5.31-DN1 cancel

5.31-DN1:
5.32-DN2:
5.33-DN3:
5.51-Opt1B Din 1:
5.52- Opt1B Din 2:

The function of the entries can be adjusted to the desired. Alternatively functions are listed below. The names of functions in the first place "O" character means the function is "Output" and "I" character means the function is "Input". In this parameter group, you can only display the input functions. You can find the table containing the parameters of the macro outputs for the functions assigned to the factory settings using application macro.

5.41-Opt1A I/O 1 cancel

5.41-Opt1A I/O 1:
5.42- Opt1A I/O 2:
5.43- Opt1A I/O 3:
5.44- Opt1A I/O 4:
5.45- Opt1A I/O 5:
5.46- Opt1A I/O 6:

5.47- Opt1A I/O 7:
5.48- Opt1A I/O 8:

These input/output functions can be adjusted to the desired. Alternatively functions are listed below. The names of functions in the first place "O" character means the function is "Output" and "I" character means the function is "Input". In this parameter group, you can display both input and output functions.

NOTE: After setting the I/O as input or output, make sure that OPT1A cards related I/O jumper is positioned correctly. Otherwise, OPT1A card may be damaged.

- Cancel : Related output is not used.
- O-Rh,Ray : Related output is linked, Rh or Ray function
- O-Rf,Ryy : Related output is linked Rf or Rfy function.
- O-Rvh : Related output is linked Rvh (very high speed) function
- O-Rx : Related output is linked Rx function.
- O-Recue : Related output is linked Rescue function
- O-Rkl : Related output is linked Rkl function.
- O-Rlir : Related output is linked Rlir function.
- O-Door1Open : Related output is linked Door1Open function
- O-Door1Close : Related output is linked Door1Close function.
- O-Door2Open : Related output is linked Door2Open function.
- O-Door2Close : Related output is linked Door2Close function.
- O-Inspection : Related output is linked Revision function.
- O-Fault : Related output is linked Fault function.
- O-Fault+Rev. : Related output is linked Fault+Inspection function. Any time a function is active, this output is active
- O-Gong : Related output is linked Gong function.
- O-Star,SS Cont. : Related output is linked Star or SS contactor function.
- O-Delta,SS Run : Related output is linked Delta or Softstarter Run function.
- O-Gray0 : Related output is linked Gray0 function.
- O-Gray1 : Related output is linked Gray1 function.
- O-Gray2 : Related output is linked Gray2 function.
- O-Gray3 : Related output is linked Gray3 function.
- O-ReverseGray0 : Related output is linked ReverseGray0 function.
- O-ReverseGray1 : Related output is linked ReverseGray1 function.
- O-ReverseGray2 : Related output is linked ReverseGray2 function.
- O-ReverseGray3 : Related output is linked ReverseGray3 function.
- O-Binary0 : Related output is linked Binary0 function.
- O-Binary1 : Related output is linked Binary1 function.
- O-Binary2 : Related output is linked Binary2 function.
- O-Binary3 : Related output is linked Binary3 function.
- O-ReverseBinary0 : Related output is linked ReverseBinary0 function.
- O-ReverseBinary1 : Related output is linked ReverseBinary1 function.
- O-ReverseBinary2 : Related output is linked ReverseBinary2 function.
- O-ReverseBinary3 : Related output is linked ReverseBinary3 function.

- I-PowerDown : Related input is linked power down input. Used for rescue function activation.
- I-818Y : Related input is linked 818Y input. Fast lifts limit switch. (See diagrams.)
- I-Door2-K20 : Related input is linked Door2-K20 input.
- I-Door2-DTS : Related input is linked Door2-DTS input.
- I-805 : Related input is linked 805 input (full load function)
- I-812 : Related input is linked 812 input (VIP function)
- I-815 : Related input is linked 815 input (quake function)
- I-816 : Related input is linked 816 input (fire function)

6. OTHER FEATURES

Press UP - DOWN c01→InspectCabin

Press UP - DOWN c02→InspectWell

Inspection: birINCI control card senses the lift is in inspection from two terminal points namely 867 and 869. 867 come from inspection switch in the panel, while 869 comes from inspection switch over the cabin. If 24V is not present in any of these connectors, that means the lift is in inspection. The priority is always on the cabin. The screen shows whether the lift is taken to inspection from the panel or from the cabin.
When the lift is taken to inspection (i.e. 24V power is cut in connector 869 or 867) maintenance operation takes place. In that case, if the lift is moving it halts and all available calls are erasen, out of service lamp turnes on. Using inspection down (500) and inspection up (501) buttons, the lift can be moved upwards and downwards in low speed. The movement of the lift in inspection is limited by lower limit bistable switch at the first stop and upper limit bistable switch at the last stop. When terminal 867 and 869 are supplied with 24V, the lift returns to its normal operation

Over Load: If the cabin weights more than allowed, the over load contact in cabin is turned on and 24V is supplied to the connector numbered 804. Microcontroller does not let the lift to move. In that case, LCD screen displays "F5.OverLoad" warning. Cabin lamp is left turned on and if the automatic door type is chosen fully automatic, it is ensured to be stayed open. When the over load contact is turned on, the movement is re-allowed. During movement, over load control is not implemented.

Full Load: If the cabin weight is in full capacity, full load contact is switched on and 24V is supplied to terminal 805. In that case, the microcontroller ensures that the lift does not stop for the landing calls, because there is no free space for new passengers at the cabin, but call information is preserved.

VIP : If the watman switch is turned ON and thus 24 Volt is supplied to the 812 function, all calls are erasen and from now on only cabin calls are accepted. System returns to normal mode when the VIP switch is turned off.

Contactor control (KRC): 24V signal, which is serially connected through normally closed contacts of contactor providing movement, is connected to birINCI controller KRC terminal. Therefore, birINCI checks that contactors operate well when the lift stopped or moved. In case a fault occures, system halts instantly.

7. FAULT CODES

birINCI lift controller system detects a large number of faults, shows them on the screen and assists the user solving the problem easily. The fault codes shown in screen are explained here.

F1.StopFault d02→h-- 100=25V

F1.Stop Fault: Stop circuit does not conduct. When this fault occurs the lift is instantly halted and all calls are erasen. The lift returns to its normal operation when stop circuit is ok.

F2.DoorCantClose d02→h-- 100=25V

F2.Door Can't Close: If the door is left open for a period of time longer than determined by "P2.5-Open door fault time" parameter, control card erases all records, gives this fault and out of service lamp signals. The lift returns to its normal operation when the door is closed.

F3.PTC Fault d02→h-- 100=25V

F3.PTC Fault: Motor's temperature is continously monitored by a temperature sensor attached to the coils of the lift's motor. If the temperature limit value is exceeded while the lift is moving, the control system halts at the nearest stop in moving direction and existing records are cancelled. New records are not accepted until the temperature decreases below the limit value.

F4.KRC Fault d02→h-- 100=25V

F4.KRC Fault: A signal terminal connected through normally closed contacts of contactors is connected to KRC. Therefore, in case of any fault such as sticking of contactor terminals, this fault is generated and new call is not accepted. If automatic reset KRC parameter was set as "Yes", thafter the fault is cleared when the KRC signal returns to normal and lift starts to service. If the parameter was set as "No", the lift is shut down until technician fixes the problem and reset the system.

F5.OverLoad
d02→h05 100=25V

F5.Over Load: If the weight of the cabin is more than allowed, over load contact is turned on and 24V reaches to the connector numbered 804. birINCI does not let the lift to move.

F6.No 818 LimitSwitch.
d02→h05 100=25V

F6.No 818 Limit Switch: When higher limit bistable switch informs that the lift is on the latest floor, running of the lift upward is not allowed. If the lift is not on the latest floor, check the higher limit switch and connections..

F7.No 817 LimitSwitch
d02→h05 100=25V

F7.No 817 Limit Switch: When lower limit bistable switch informs that the lift is on the first floor, the running of the lift downward is not allowed. If the lift is not on the lowest floor, check the lower limit switch and connections.

F8.MaxLowSpeedTime
d02→h-- 100=25V

F8.Max. Low Speed Time: It determines the maximum allowed time for the lift to move in low speed. If the lift can not reach to the new stop in this time the lift instantly stops. If automatic reset parameter of low speed fault was set as "Yes", fault is reset and lift starts to service. If this parameter was set as "No", the lift can not in service until technician fixes the problem and reset the system

F9.MaxHighSpeedTime
d02→h-- 100=25V

F9.Max. High Speed Time: It determines the maximum allowed time for the lift to move from one floor to the other at high speed. If the lift can not reach to the new stop in this time the lift instantly stops. If automatic reset parameter of high speed fault was set as "Yes", fault is reset and lift starts to service. If this parameter was set as "No", the lift can in service until technician fixes the problem and reset the system.

F10.M0 Fault
d02→h-- 100=25V

H10.M0 Fault:
H11.M1 Fault:
H11.M1waitedJFchange
H12.M2 Fault:
H13.M3 Fault:
This fault occurs in case the sensed floor selection information is different than the expected, during the travel of the lift in high speed. The lift instantly stops and calls are erasen.

F14.JFwaitedM0change
d02→h-- 100=25V

H14.JF waited M0 change:
H15.JF waited M1 change:
H16.JF waited M2 change:
H17.JF waited M3 change: In double speed lifts, while travelling in low speed, the stopping of the lift at the precise floor level is accomplished by cutting 24V power from bistable power switch numbered 142. During travelling of the lift in low speed, if different magnetic information comes while waiting the information from JF to stop, "JF fault" occurs. The lift is stopped and calls are erasen.

F18.OSB Fault
d02→h-- 100=25V

F18.OSB Fault: Door pre-opening and relevelling feature when the door is open, OSB magnet and OSB arm must be installed. As soon as the lift gets out of the lock opening zone, OSB information must be terminated. If it reaches to the new stop with uninterrupted the OSB information, this fault is generated and system does not accomplish door pre-opening and door open levelling functions because of safety reasons.

F19.LevellingTravelTime
d02→h-- 100=25V

F19.Levelling Travel Time Fault: A time duration of 10 seconds has been determined for system to be levelled. If in this duration, the levelling operation has not been completed, system generated a fault and cancels the levelling process.

F20.LockFault
d02→h-- 100=25V

F20. Lock Fault: birINCI controller board lets the Rlir cam relay turned on and wait the lock to be energized for a duration determined by **"**P2.3-LockWaitTime. If the lock signal is not come at the end of this time, Rlir relay switches off for a second and it switches on again. It tries three times for the lock to get energized. If it still does not get energized, it signals this fault, erases all calls and turns to the standby mode

F21.CarCommFault
d02→h-- 100=25V

F21.CarCommunication Fault: When "1.3-Car Communication" parameter is chosen "Serial", if there is no communication with Telekon card, this fault occurs.

8. FREQUENTLY ASKED QUESTIONS (FAQ):

- *No movement during inspection.*

When the system was taken to inspection using inspection power switch placed on the panel, signal numbered 867, when it was taken to inspection using inspection power switch in cabin, signal numbered 869 and 867 must turn off. birINCI displays whether the lift was taken to inspection from the cabin or from the panel. Inspection movement buttons turn on signals numbered 500 and 501. If they are not turned on, check the 867 terminal.

Limit switches should not prevent the movement at least one direction. Thereby, 817 (KSR1) and 818 (KSR2) limit LED's on the board must be on. Else, limit power switches must be checked.

Make sure that 120 (Stop), 130 (Door contact), 140 (Lock) circuits conduct. (All signals on birINCI must be on).

- *The lift stops without decelerating.*

If the same problem is present in every stop, probably precision stop magnetic switch (JF) is damaged. When the lift starts decelerating, signal 142 in the card must be on. If the problem exists in only one stop, the magnets and the distance between magnets and magnetic switches must be checked.

- *The lift hits above.*

Check that upper limit switch 818 (KSR2) circuit functions well. In last stop's deceleration level 818 signal in the card must be off. Else, deceleration distance, tubes and magnets must be checked.

Floor stopping magnetic 142 may be sticked. Signal 142 must be off in precise floor levels. If not, check the magnetic switches and magnets

- *The lift hits below.*

Check that lower limit switch 817 (KSR1) circuit functions well. In the last stop's deceleration level, 817 signal in the card must be off. Else, deceleration distance, tubes and magnets must be checked.

Floor stopping magnetic 142 may be sticked. Signal 142 must be off in precise floor levels. Else, check the magnetic switches and magnets.

- *When giving one call, all calls are turn on.*

Probably, the common terminal of signal lamps are connected to each other, but 100 (+24V) is not connected to the connector. Thereby, buttons loop through common terminal.

- *Position count gets mixed.*

Check that number of stops and digital settings are adjusted correctly. Make sure that 817 and 818 limit switches are work properly. By monitoring M1 signal during movement, check if any faulted signal is generated. M1 must be blinking at least once in each stop. If any problem is observed, magnetic switch may be too far from the magnets, it may be damaged or a magnetisation in the rails may have occured.

- *M1 signal is blinking but the card does not count the stops.*

The stops can only be counted correctly, only when 817,818 signals are on. Therefore, 817, 818 signals are supposed to be on, except for upper and lower limits. Keep in mind that when the lift is moved by switching the contactors manually, the counting can not be done as the board does not know which direction the lift moves.

9. IMPORTANT CONSIDERATIONS IN INSTALLATION OF THE PRODUCT:

Panel manufacturer company producing birINCI controller board and lift control panel must have sufficient knowledge and experience on EN-81 standard, other norms, regulations and directives dealing with this subject. In case the instructions given here have not been complied, ASRONIK does not assume responsibility in appropriateness of the produced panel to the EN-81 standards. Installation of birINCI controller board and double speed lift control panel is shown in schematics. The important considerations throughout the manufacturing of control panel are explained below item by item.

- A minimum space of 9mm must exist between birINCI controller board and control panel surface. birINCI must be fixed on 4 holes at least in each corner.
- For EMC compliance, birINCI must be laid away from the contactors.
- 24VDC signal cables and other cables must be placed seperately.
- Some conductive particles such as iron powder produced during installation of all electronic cards into the panel must be carefully cleaned. Else, these particles may cause damage by falling over the controller or other equipment during transport or installation.

- Connections between birINCI and terminal board must be implemented as shown in the schematics. To avoid any mistake, connector names are written in large typesize.
- The contactors must be AC3 class as described in EN60947 and they must be rated in regards to motor power. The connections must be done as shown in the schematics.
- The auxiliaty contacts placed over the contactors must comply with EN60947 standard and it must be assured that contactors open and close at the same time with power contacts.
- It must be assured that damping circuits (suitable for RC circuit-varistor or capacitor) are connected to contactor coil terminals.
- Rectifier diode connections of brake and cam must be done as shown in the schematics and they must be electrically isolated.
- For long and healthy operation, brake coil is needed to be powered from the power contacts of RU1 and RU2.
- Control panel inspection switch connection must be done as shown in the schematics. By means of this connection, when the inspection switch over the cabin is turned ON, inspection buttons on the control panel can not move the lift.
- Cable contactors, connected to KRC connector that is used to check whether contactors operate well must be serially connected through normally closed contacts. If possible, these normally closed contacts should be fixed on contactor, instead of additional auxiliary contacts.
- Following the completion of control panel production, manufacturer must test it by checking all connections.

10. IMPORTANT CONSIDERATIONS IN CONNECTION OF CONTROL PANEL AND STARTUP

The information given here only aims a general description and recommendation. ASRONIK in any circumstance does not assume responsibility for any damages and accidents caused by the descriptions given here. The product must only be installed and operated by qualified, trained technicians who have knowledge on EN-81 standard and practices. The operation of the lift must be carried out only after assuring all precautions.

10.1- Important Considerations in Connecting Control Panel to Lift System

- The connections between control panel and motor, cabin and well must be carefully implemented in accordance with the schematics.
- Contactor, automatic fuse, motor protection switch and thermic relay must be rated in accordance with the motor power.
- Neutral and ground cables must be installed seperately and panel chassis must be connected to the ground properly.
- The lift must have all the stopping mechanisms mentioned in EN-81 standard and these mechanisms' contacts must be connected to control panel carefully. These connections to safety contacts must be done in accordance with the schematics properly. All safety contacts used must be in compliance with EN60947 standarts.

10.2- Important Considerations on Preparing the System Become Operational

- Check that the connections between control panel and lift system are consistent with the schematics.
- Using a measuring device check whether any short-circuit exist between connections.
- Turn ON the inspection switch in control panel.
- Turn ON motor protection switch and power the panel.
- Check that 02-Out of service led in birINCI control card and out of service leds on flor buttons are operating.
- By checking the leds on control card (which are labelled 9V and 24V) make sure that supply voltages exist. Measuring between 100 and 1000 connectors, a voltage should read between 20…26VDC.
- Make sure that all safety contacts are connected in consistence with the schematics and make sure they operate correctly. By checking the leds on control card (120,130,140), make sure that safety contact inputs are active.
- In order to be able to move the cabin in both ways, temporarily connect lower and upper stopper bistable switch inputs with the connector numbered 100. In that case, as the lower and upper stopper bistable switches will not be able to perform their duties, give extreme care during working in the lowest and highest floors.
- As the control panel inspection switch is ON, cabin travels only in low speed. Make sure that low speed coil of the motor is correctly connected, by moving the cabin using up and down buttons placed on control panel. If the pressed button and the travel direction of the cabin do not match, exchange the connection of any two of the U2,V2,W2 terminals on the motor between low speed coil and control panel.
- While the cabin is travelling, measure the voltages between FR+,FR- and CAM+,CAM- terminals. The values should read between 180…240VDC.
- Afterwards, move the cabin in one of the interval floors and turn ON the inspection switch on the cabin. In that case, cabin can not be conveyed using inspection buttons on the control panel.

- Move the cabin to the lowest stop. Place the magnets of gray code, floor stopper and upper and lower limit bistable switches in consistent with the magnets.
- By monitoring stop numbers in LCD screen or in display placed over the control card, check that the ordering has been done correctly.
- Remove the connecting link between lower and upper stopper bistable switch inputs applied through the connector numbered 100.
- Place the cabin in one of the interval floors and turn OFF the over-cabin inspection switch.
- Turn OFF the control panel inspection switch. Therefore, lift returns to its normal operation state and OUT OF SERVICE leds on floor buttons turn off.
- Give a call to the lift and make sure it travels in expected direction in high speed. If the lift does not travel in the expected direction, reverse only two terminals (U1,V1,W1) of motor's connection between high speed coil and control panel.
- In each floor, give calls for both directions and check that the cabin stops in exact flor level. If needed, re-arrange the positions of stopper bistable switch magnets.

In normal operation state of the lift, it must be assured that lower and upper bistable switch inputs are not linked through the connector numbered 100.

Check that all safety contacts operate correctly before the lift returns to its normal operating mode..

Never link safety circuits (120 emergency stopping, 130 door, 140 lock).

11. MAINTENANCE AND CLEANING OF birINCI CONTROLLER BOARD:

- It does not need periodical maintenance.
- If any faulted operation is detected, it must be sent to the manufacturer firm for test and repair.
- It must be kept free of water and any other kind of liquids.
- If needed, the dust over the control card must be cleaned using low pressure air.

12. SAFETY NOTICES:

Averting any accident risks in a lift without having user risk (in a lift having security measures such as automatic door complying with standarts and over-load system) is in responsibility of subsidiary companies and installation and maintenance companies. Some fundamental safety subjects concerned with lift control system are touched on below.

For the lift system to be fully complied with EN81 standards, control panel of controller board and electrical connections must be appropriate. Our company warranties that controller board is complied to the standards. However, installer company is responsible for inner and outer connections of control panel and other electrical connections.

Safety circuit of birINCI controller operates from 220VAC. Motor start-up contactors are directly supplied from the return terminal of safety circuit. Therefore, in safety circuit, unintentional operations besides control are prevented.

The terminal numbered 11 in birINCI control card have to be connected to the return terminal of safety circuit (140-lock return). Otherwise, risks grow. However, if controller board does not sense the return terminal of safety circuit, it halts the lift instantly.

Do not connect safety circuit through any relays or contacts in any way directly or indirectly except for safety arrangements.

Hide the connectors that you attached door contact and lock circuits to the door apertures by avoiding any contact to door chassis. Keep in mind that during the building cleaning water may drain through the cabin. Therefore, it may be necessary to implement safety connections in isolated channels. Otherwise, they must be isolated with isolation bands.

Door frames must be assured to be connected to the ground. In case the grounding has not been installed, there is a risk that safety circuit is indirectly linked through door chassis.

It must be assured that the contactors are not released manually. In that case, safety circuits and controller board can not prohibit the lift's movement.

When the 24 VAC signal fuse is damaged or it permanently remained on, it must be ensured it is not shunted. This may damage birINCI controller board.

To make sure that cabin lamp stays on when thermic relay in the panel is switched off, supply voltage of cabin lamp (1F) must be directly connected to the electic panel on machine room.

The safety circuit may lose its functionality by subjecting to wear and tear and exposing to dust, dirt and oil. In periodical maintenances remember to check functions of door contacts and locks. Consider important that all these precautions are necessary to operate our lifts safely and
therefore reduce any accident risk.

Asronik Asansör ve Elektronik Ltd.Şti.
Fevzi Çakmak Mah. 10569. Sok. No:26 Karatay/Konya/Türkiye
Tel: +90.332.342 41 39 Fax: +90.332.342 41 43

AB UYGUNLUK BEYANI
EC- DECLARATION of CONFORMITY

İMALATÇI / *MANUFACTURER :*
ASRONİK ASANSÖR ve ELEKTRONİK LTD.ŞTİ.

TİP / *TYPE :*
birİNCİ

İMALATÇI ADRESİ / *MANUFACTURER ADRESS :*
Fevzi Çakmak Mah. 10569. Sok. No:26
Karatay / Konya / Türkiye

ÜRETİM YILI / *YEAR OF MANUFACTURE :*
Etiket Üzerinde */ See data label on product*

ÜRÜNÜN ADI / *PRODUCT NAME :*
Asansör Kumanda Kartı */ Lift Controller Board*

SERİ NO / *SERIAL NUMBER :*
Etiket Üzerinde */ See data label on product*

UYGULANAN STANDARTLAR / *THE FOLLOWING STANDARTS :*
TS EN 81-1+A3, EN 81-2+A3

UYGULANAN DİREKTİFLER / *THE FOLLOWING DIRECTIVES :*
Asansör Direktifi 95/16/AT / *Lift Directive 95/16/EC*

Üzerinde seri numarası yer alan ürün için, kullanıcıya teslim edilen kullanım kılavuzundaki şartlara uyulması durumunda yukarıda belirtilen standartlara ve direktiflere uygunluğunu beyan ederiz.

We declare eligibility of above mentioned standards and directives to comply with the represented conditions on the user manual for the serial number on the product.

ONAYLANMIŞ KURULUŞ / *NOTIFIED BODY*
LiftInstituut B.V.
Buikslotermeerplein 381 P.O Box 36027
1020 MA Amsterdam / Netherlands

FİRMA SORUMLUSU / *RESPONSIBLE OF COMPANY :* Elk.Elt.Yük.Müh. Zafer Dedeoğlu

YER–TARİH / *PLACE-DATE :* KONYA / TÜRKİYE / 07.12.2012

YETKİLİ İMZA / *LEGALLY BINDING SIGNATURE :*

ASRONİK ASANSÖR ve ELEKTRONİK SAN.TİC.LTD.ŞTİ.
Fevzi Çakmak Mah. 10569. Sokak No:26
Tel: 0 332 342 41 39 Fax: 0 332 342 41 43
Selçuk V.D. 324 041 9874 Karatay/KONYA

LIFTINSTITUUT

TYPE-EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.

Certificate nr.	: NL12-400-1002-172-01	Revision nr.:
Description of the product	: PCB; Controller board for electric and hydraulic lifts with monitoring circuit for safety chain	
Trademark, type	: ASRONiK, birINCI Liftcontroller Board V2.02	
Name and address of the manufacturer	: ASRONiK Asansör ve Elektronik Ltd.Sti. Fevzi Çakmak mah. 10569. Sok. No:26 Karatay / Konya / Turkiye	
Name and address of the certificate holder	: ASRONiK Asansör ve Elektronik Ltd.Sti. Fevzi Çakmak mah. 10569. Sok. No:26 Karatay / Konya / Turkiye	
Certificate issued on the following requirements	: EN 81-1:1998+A3:2009, article 9.11.3, 9.11.9, 14.1.1, 14.1.2.1.3, Annex F.8 and H; EN 81-2:1998+A3:2009 art. 9.13.3, 9.13.9, 14.1.1, 14.1.2.1.3, Annex F.8 and H	
Test laboratory	: None	
Date and number of the laboratory report	: None	
Date of type-examination	: November 14 and 15, 2012	
Annexes with this certificate	: Report belonging to the type-examination certificate nr.: NL12-400-1002-172-01	
Additional remarks	: The printed circuit board IS NOT subjected to the laboratory tests according to annex F.6 of EN 81-1 / EN 81-2.	
Conclusion	: The printed circuit board meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.	

Issued in Amsterdam
Date of issue : 06-12-2012

ing. A.J. van Ommen
Manager Business Unit
Certification

Certification decision by

LIFTINSTITUUT

TYPE-EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.

Certificate nr.	:	NL12-400-1002-172-03 Revision nr.: -
Description of the product	:	PCB for electric and hydraulic lifts with door bridging circuit, also applied as detection of unintended movement of the car (UCMP)
Trademark, type	:	ASRONiK, KSK Board V1.01
Name and address of the manufacturer	:	ASRONiK Asansör ve Elektronik Ltd.Sti. Fevzi Çakmak mah. 10569. Sok. No:26 Karatay / Konya / Turkiye
Name and address of the certificate holder	:	ASRONiK Asansör ve Elektronik Ltd.Sti. Fevzi Çakmak mah. 10569. Sok. No:26 Karatay / Konya / Turkiye
Certificate issued on the following requirements	:	EN 81-1+A3 art. 9.11.7, 14.1.1, 14.1.2.1.3 annex F.8.3 and H EN 81-2+A3 art. 9.13.7, 14.1.1, 14.1.2.1.3 annex F.8.3 and H
Test laboratory	:	None
Date and number of the laboratory report	:	None
Date of type-examination	:	November 14 and 15, 2012
Annexes with this certificate	:	Report belonging to the type-examination certificate nr.: NL12-400-1002-172-03
Additional remarks	:	The printed circuit board IS NOT subjected to the laboratory tests according to annex F.6 of EN 81-1 / EN 81-2. Max. response time KSK : 15 msec
Conclusion	:	The printed circuit board meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.

Issued in Amsterdam
Date of issue : 06-12-2012

ing. A.J. van Ommen
Manager Business Unit
Certification

Certification decision by

LIFTINSTITUUT

TYPE-EXAMINATION CERTIFICATE

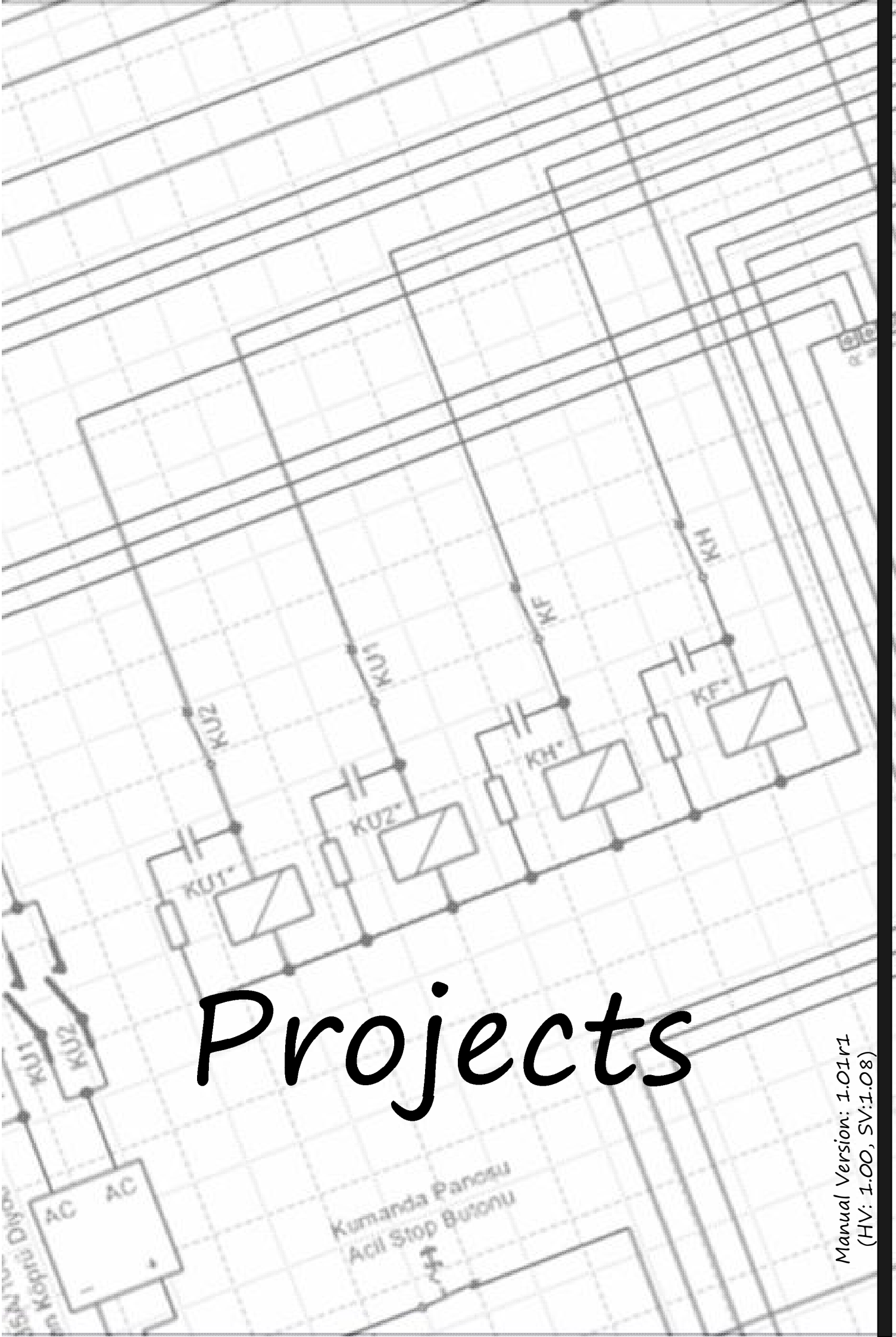
Issued by Liftinstituut B.V.

Certificate nr.	:	NL12-400-1002-172-02 Revision nr.:
Description of the product	:	Complete Lift Control Panel for electric and hydraulic lifts
Trademark, type	:	ASRONiK, birINCI Lift Control Panel
Name and address of the manufacturer	:	ASRONiK Asansör ve Elektronik Ltd.Sti. Fevzi Çakmak mah. 10569. Sok. No:26 Karatay / Konya / Turkiye
Name and address of the certificate holder	:	ASRONiK Asansör ve Elektronik Ltd.Sti. Fevzi Çakmak mah. 10569. Sok. No:26 Karatay / Konya / Turkiye
Certificate issued on the following requirements	:	EN 81-1:1998 + A3:2009 / EN 81-2:1998 + A3:2009
Test laboratory	:	None
Date and number of the laboratory report	:	None
Date of type-examination	:	November 14 and 15, 2012
Annexes with this certificate	:	Report belonging to the type-examination certificate nr.: NL12-400-1002-172-02
Additional remarks	:	The control panel IS NOT subjected to the laboratory tests according to annex F.6 of EN 81-1/2+A3 Key parameters for detecting UCM: Detection distance (variable) : door-zone vane/magnet Max. response time incl. contactors : 60 ms Speed and distance travelled : to be calculated
Conclusion	:	The printed circuit board meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.

Issued in Amsterdam
Date of issue : 06-12-2012

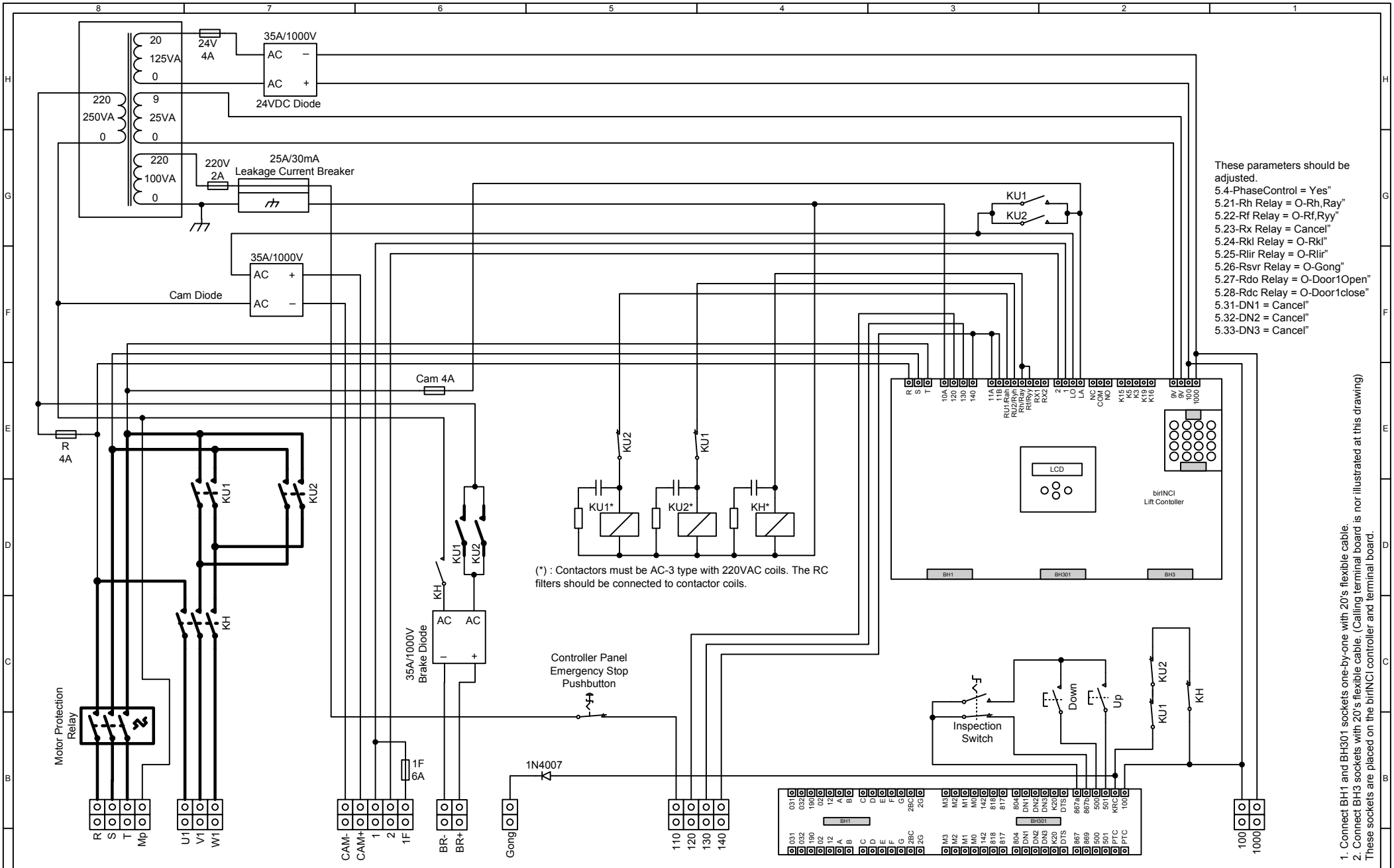
ing. A.J. van Ommen
Manager Business Unit
Certification

Certification decision by

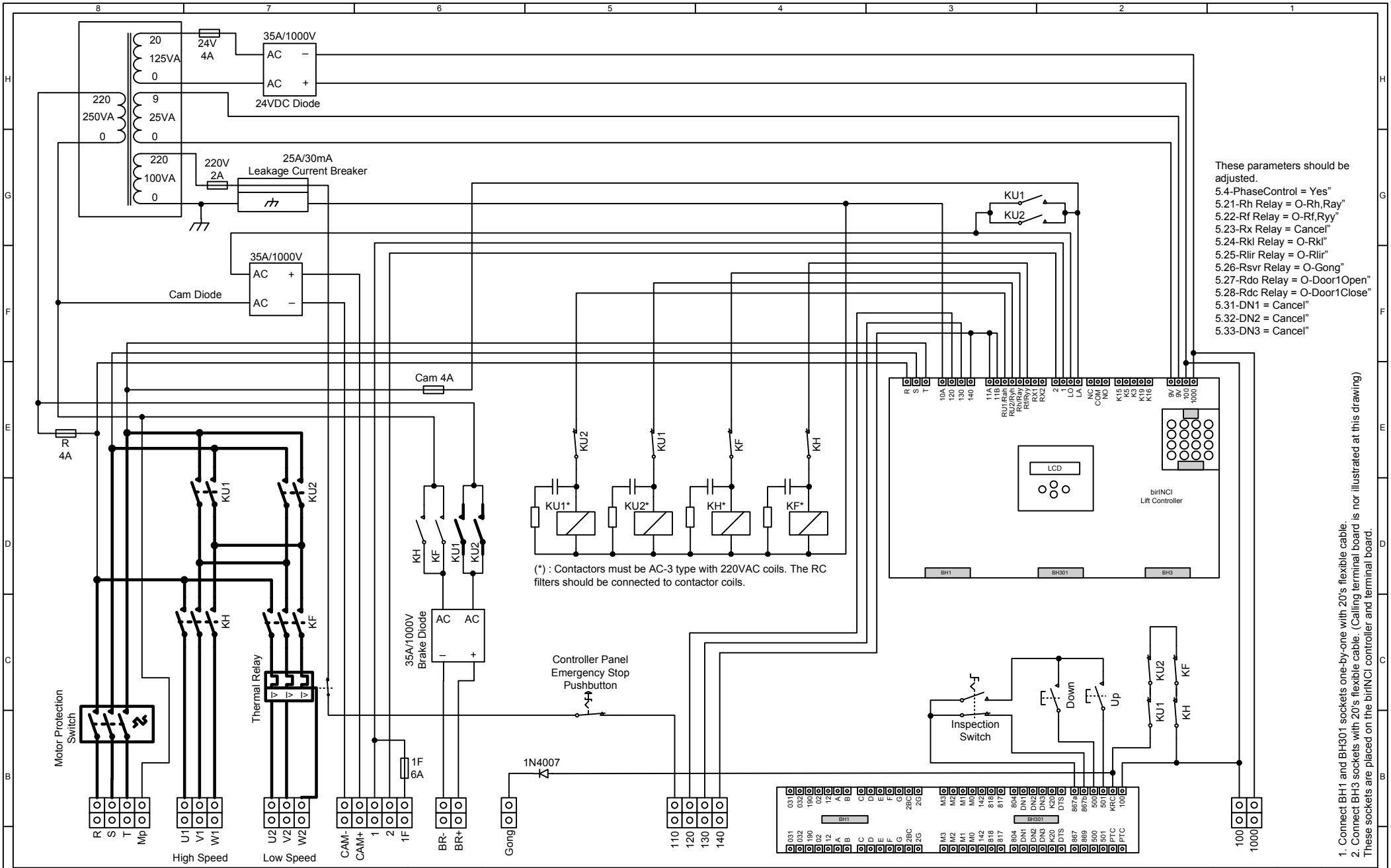


Projects

Manual Version: 1.01r1
(HV: 1.00, SV:1.08)



asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name Single Speed Control Panel Connection Drawing			CE	Drawer ZD
	Drawing Name Power and Control Circuit				Control SH
	Description	Project No DL1-THZ-BI-KURY-0.01	Date 09.10.2010	Group DL1-THZ-BI-KURY	Sayfa 1



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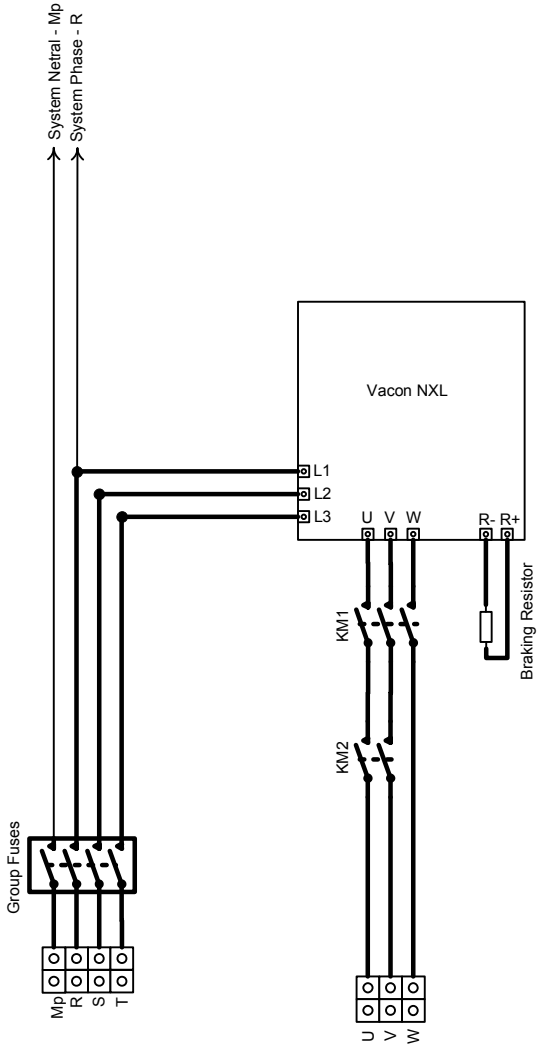
Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com

Project Name	Double Speed Control Panel Connection Drawing			Drawer	ZD
Drawing Name	Power And Control Circuits			Control	SH
Description		Project No DL1-CHZ-BI-KURY-0.01	Date 09.10.2010	Group DL1-CHZ-BI-KURY	Page 2



Relays :
RHT: Fault relay (24VDC coil)

Contactors : (220VAC coils, AC3 type)
KM1: Motor contactor 1
KM2: Motor contactor 2
KF: Brake contactor

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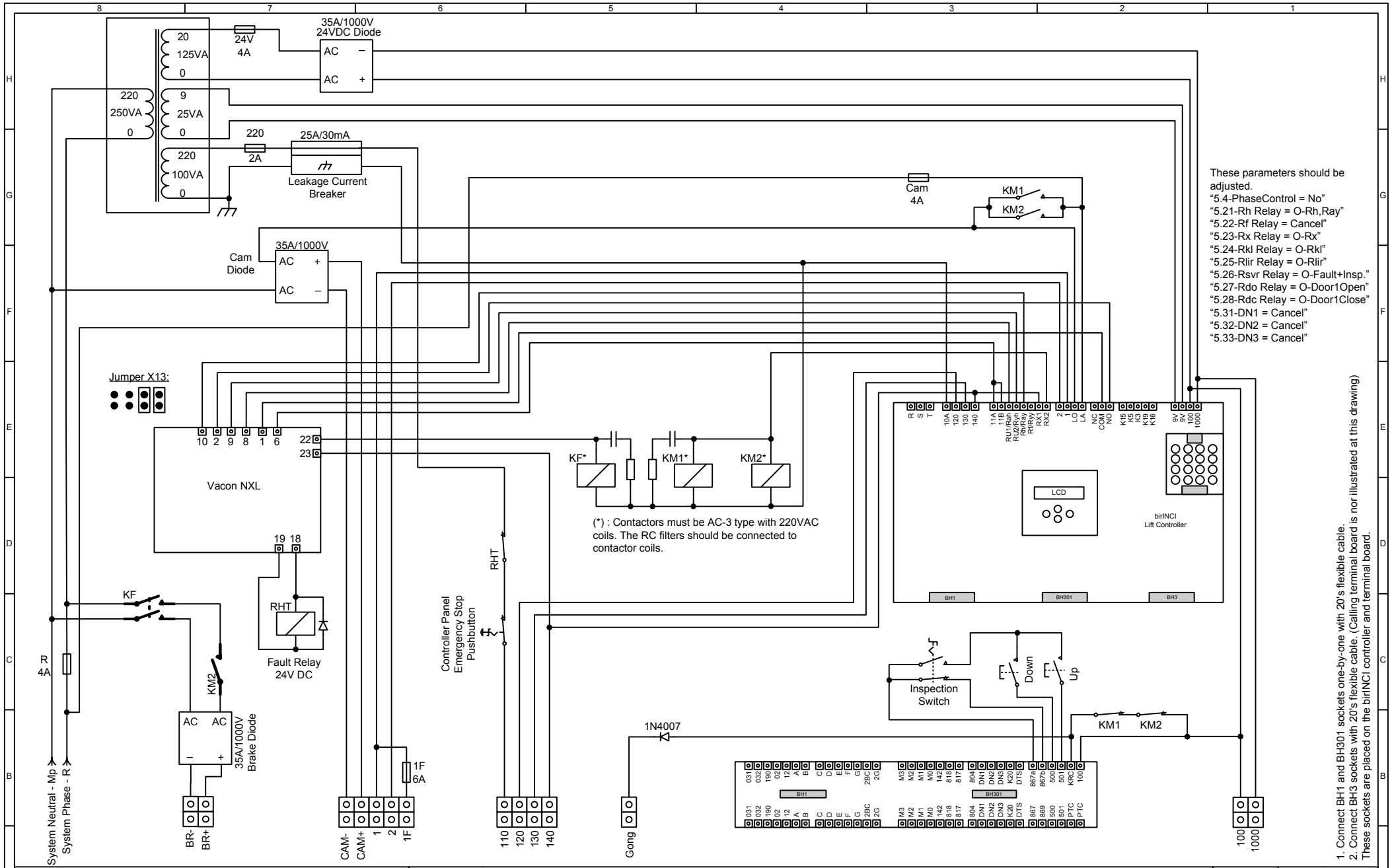
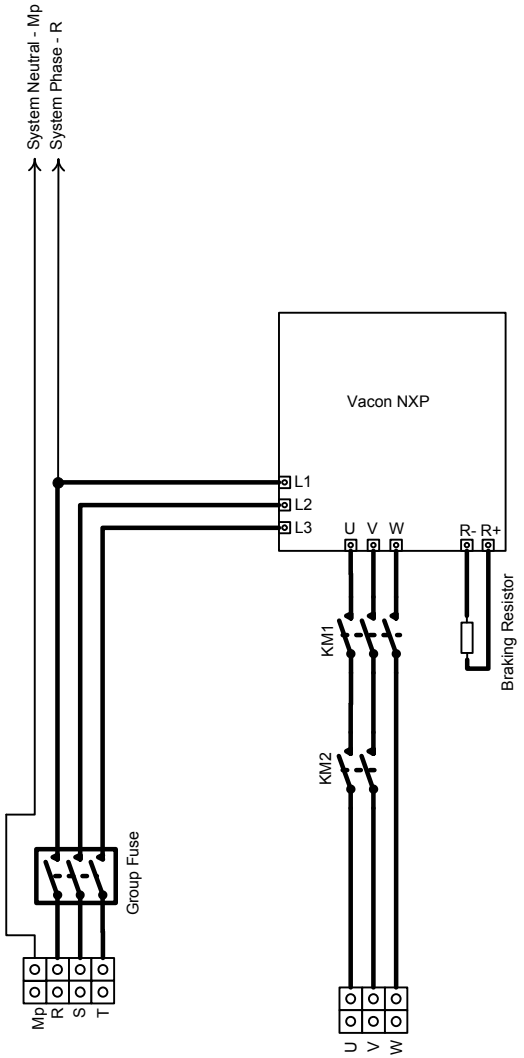
Project Name	Controller Panel with Vacon NXL Open Loop Inverter				Drawer	ZD
Drawing Name	Power Circuit				Control	SH
Description		Project No	DL1-NXL-BI-KURY-0.02-28V206-0.00	Date 09.10.2010	Group	DL1-NXL-BI-KURY-0.xx-28V206-0.00	Page	3



asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name	Controller Panel with Vacon NXL Open Loop Inverter	CE	Drawer	ZD
	Drawing Name	Control Circuit		Control	SH
	Description		Project No **DL1-NXL-BI-KURY-0.02-28V206-0.00**	Date 09.10.2010	Group DL1-NXL-BI-KURY-0.xx-28V206-0.00	Page 4



Relays :
RHT: Fault Relay (24VDC Coil)

Contactors : (220VAC coil, AC3 type)
KM1: Motor Contactor 1
KM2: Motor Contactor 2
KF: Brake Contactor

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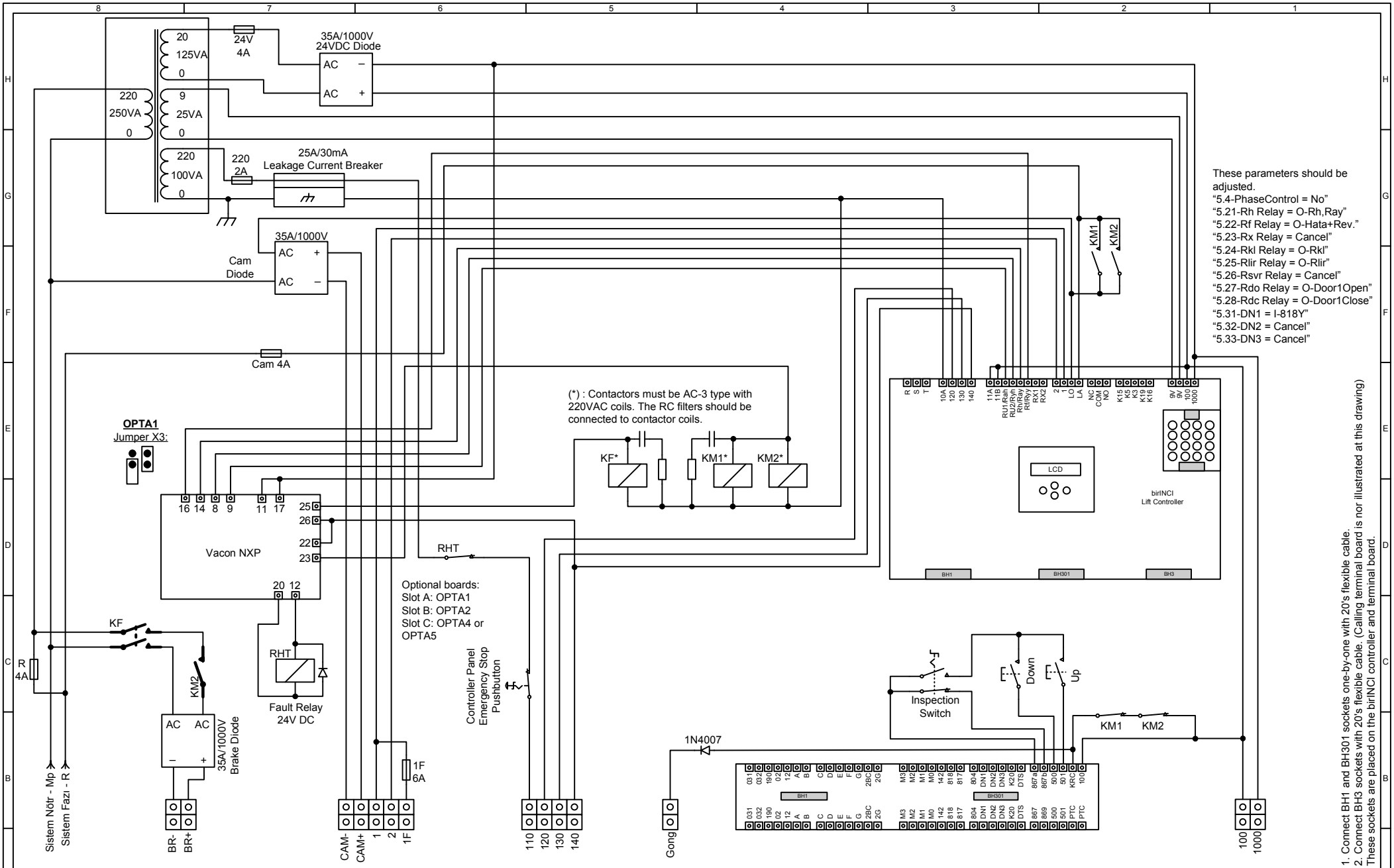
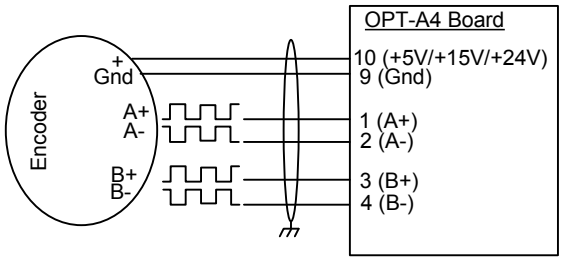
Project Name	Controller Panel with Vacon NXP Closed Loop Inverter				Drawer	ZD
Drawing Name	Power Circuit				Control	SH
Description	**Project No**	**DL1-NXP-BI-KURY-0.04-33V111-0.00**	Date 09.10.2010	Group DL1-NXP-BI-KURY-0.xx-33V111-0.00	Page	5

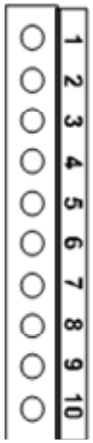


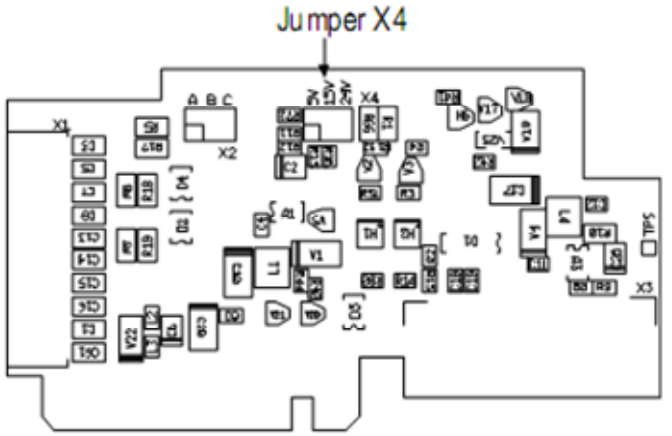
asronik® ELEVATOR CONTROL SYSTEMS Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name	Controller Panel with Vacon NXP Closed Loop Inverter	CE	Drawer	ZD
	Drawing Name	Control Circuit		Control	SH
	Description	**Project No** DL1-NXP-BI-KURY-0.04-33V111-0.00	Date 09.10.2010	Group DL1-NXP-BI-KURY-0.xx-33V111-0.00	Page 6



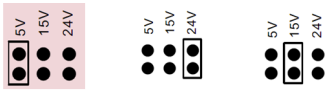
Connection drawing for TTL output (RS-422 standart) encoders.

1 ----- A+
2 ----- A-
3 ----- B+
4 ----- B-
9 ----- GND
10 ----- +5V/+15V/+24V





X4 Jumper adjustment:



Factory Default

MEANINGS OF COLOURS IN DIFFERENT LANGUAGES

TURKISH	ENGLISH	GERMAN	ITALIAN	SPANISH	FRENCH
SİYAH	BLACK	SCHWARZ	NERO	NEGRO	NOIR
BEYAZ	WHITE	WEISS	BIANCO	BLANCO	BLANC
KIRMIZI	RED	ROT	ROSSO	ROJO	ROUGE
SARI	YELLOW	GELB	GIALLO	AMARILLO	JAUNE
MAVİ	BLUE	BLAU	BLU	AZUL	BLEU
YEŞİL	GREEN	GRUN	VERDE	VERDE	VERT
KAHVERENGİ	BROWN	BRAUN	MARRONE	MARRON	BRUN
MOR	VIOLET	VIOLETT	VIOLA	VIOLETA	VIOLET
PEMBE	PINK	ROSA	ROSA	ROSA	ROSE
GRİ	GRAY	GRAU	GRIGIO	GRIS	GRIS
TURUNCU	ORANGE	ORANGE	ARANCIONE	NARANJA	ORANGE
ŞEFFAF	TRANSPARENT	DURCHSICHTING	TRANSPARENTE	TRANSPARENTE	TRANSPARENT
BEJ	BEIGE	BEIGE	BEIGE	BEIGE	BEIGE

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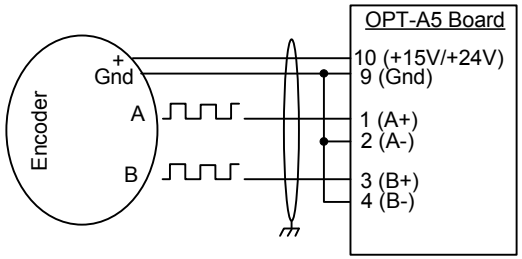
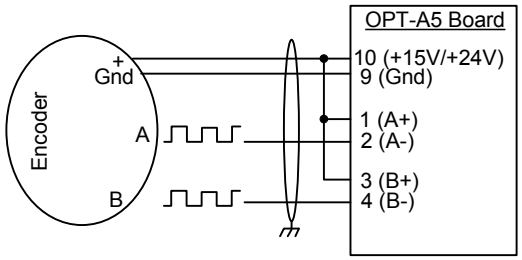
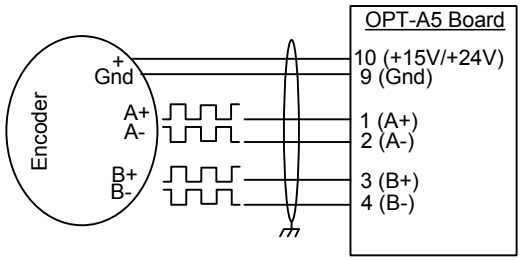
Project Name	Encoder Connections for Vacon NXP inverters				Drawer	ZD
Drawing Name	OPTA4 encoder board connections				Control	SH
Description		Project No	DL1-NXP-BI-Enkoder-0.00	Date 20.09.2010	Group DL1-NXP-BI-Enkoder	Page 7



Open source single ended encoder connection.

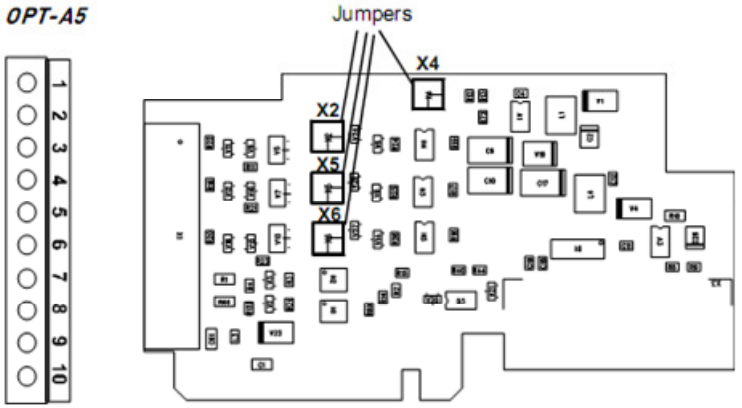


Open collector single ended encoder connections

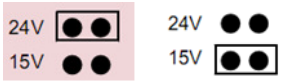


Differantial input, line driver encoder connection

1 ----- A+
2 ----- A-
3 ----- B+
4 ----- B-
9 ----- GND
10 ----- +15V/+24V



X4 Jumper adjustment:



Factory Default

NOT: OPT-A5 encoder board is suitable encoder board for push-pull HTL and open collector HTL type encoders

MEANINGS OF COLOURS IN DIFFERENT LANGUAGES

TURKISH	ENGLISH	GERMAN	ITALIAN	SPANISH	FRENCH
SİYAH	BLACK	SCHWARZ	NERO	NEGRO	NOIR
BEYAZ	WHITE	WEISS	BIANCO	BLANCO	BLANC
KIRMIZI	RED	ROT	ROSSO	ROJO	ROUGE
SARI	YELLOW	GELB	GIALLO	AMARILLO	JAUNE
MAVİ	BLUE	BLAU	BLU	AZUL	BLEU
YEŞİL	GREEN	GRUN	VERDE	VERDE	VERT
KAHVERENGİ	BROWN	BRAUN	MARRONE	MARRON	BRUN
MOR	VIOLET	VIOLETT	VIOLA	VIOLETA	VIOLET
PEMBE	PINK	ROSA	ROSA	ROSA	ROSE
GRİ	GRAY	GRAU	GRIGIO	GRIS	GRIS
TURUNCU	ORANGE	ORANGE	ARANCIONE	NARANJA	ORANGE
ŞEFFAF	TRANSPARENT	DURCHSICHTING	TRANSPARENTE	TRANSPARENTE	TRANSPARENT
BEJ	BEIGE	BEIGE	BEIGE	BEIGE	BEIGE

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Project Name	Encoder Connections for Vacon NXP inverters			Drawer	ZD
Drawing Name	OPTA5 encoder board connections			Control	SH
Description		Project No **DL1-NXP-BI-Enkoder-0.00**	Date 20.09.2010	Group DL1-NXP-BI-Enkoder	Page 8

Brand : AUTONICS
Power : 12 – 24 VDC
Pulse : 1024

CODE : E50S8 – 1024 – 3 – T – 24

Cable	Colour	OPT-A5
A+	Black	1
B+	White	3
Gnd	Blue	2-4-9
Vcc	Brown	10
Grounding	Naked	Ground

NOTE: This encoder can not be used with OPT-A4

Brand : NIDEC NEMICRON
Power : 4,5 – 5,5 VDC
Pulse : 1024

CODE : NOC – S – 1024 – 2MD

Cable	Colour	OPT-A4
A+	Green	1
A-	Blue	2
B+	White	3
B-	Gray	4
Gnd	Black	9
Vcc	Red	10
Grounding	Naked	Ground

NOTE: This encoder can not be used with OPT-A5

Brand : METRONICS
MECAPION
Power : 12 – 24 VDC
Pulse : 1024

CODE : S48 – 8 – 1024 – VL

Cable	Colour	OPT-A4 veya OPT-A5
A+	Green	1
A-	Blue	2
B+	White	3
B-	Pink	4
Gnd	Black	9
Vcc	Red	10
Grounding	Naked	Ground

Brand : LIKA
Power : 5 – 30 VDC
Pulse : 1024

CODE : I58S – Y – 1024 – Z

Cable	Colour	OPT-A4 veya OPT-A5
A+	Yellow	1
A-	Blue	2
B+	Green	3
B-	Orange	4
Gnd	Black	9
Vcc	Red	10
Grounding	Naked	Ground

Brand : WACHENDORFF
Power : 4,75 – 5,5 VDC
Pulse : 1024

CODE : WDG 58B – 1024 – AB – IO5 – S3 – C30

Cable	Colour	OPT-A4
A+	Green	1
A-	Gray	2
B+	Yellow	3
B-	Blue	4
Gnd	White	9
Vcc	Brown	10
Grounding	Naked	Ground

NOTE: This encoder can not be used with OPT-A5

Brand : WACHENDORFF
Power : 10 – 30 VDC
Pulse : 1024

CODE : WDG 100H –38 – 1024 – ABN – I24 – K3 – 050

Cable	Colour	OPT-A4 veya OPT-A5
A+	Yeşil	1
A-	Red	2
B+	Yellow	3
B-	Black	4
Gnd	White	9
Vcc	Brown	10
Grounding	Naked	Ground

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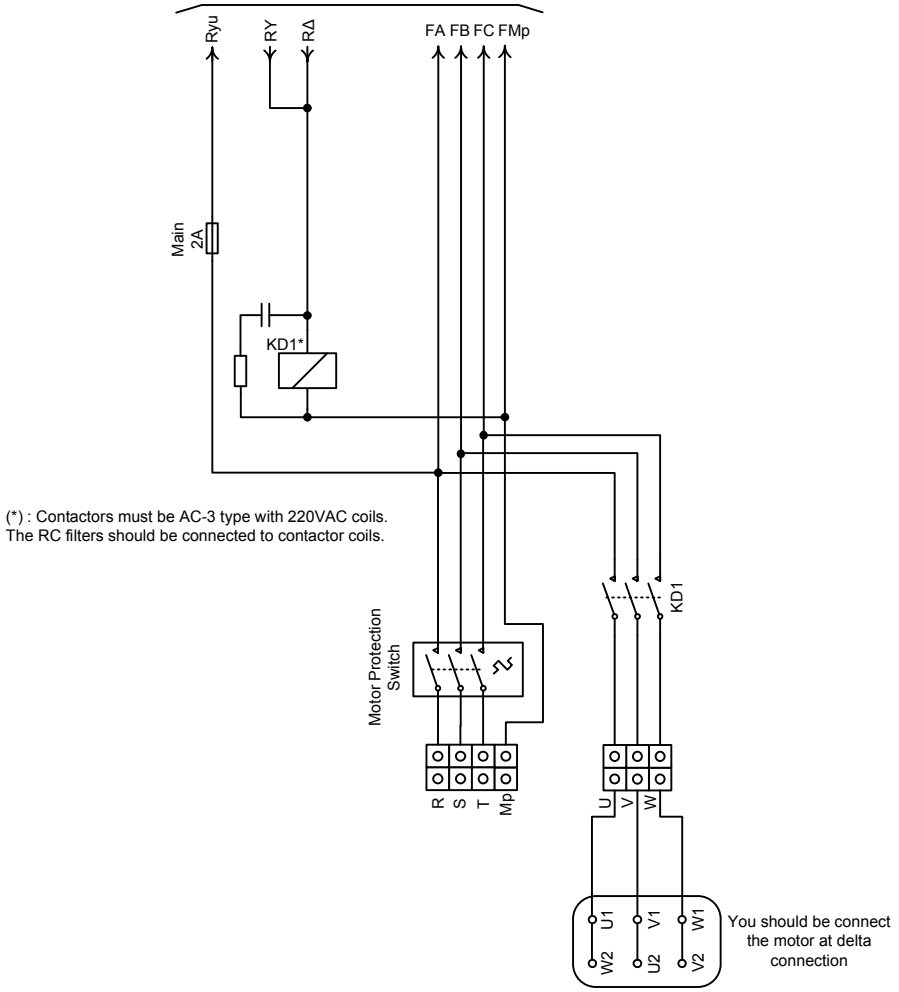
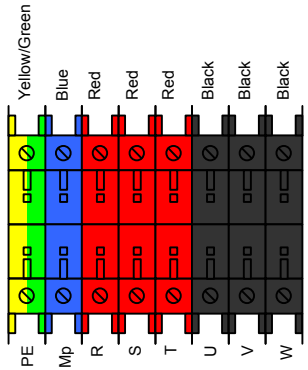
Project Name	Vacon NXP sürücülü panolar için enkoder bağlantıları			Drawer	ZD
Drawing Name	OPTA5 enkoder kartı bağlantısı			Control	SH
Description		Project No **DL1-NXP-BI-Enkoder-0.00**	Date 20.09.2010	Group DL1-NXP-BI-Enkoder	Page 9

Please look the control drawings according to your hydrolic unit brand name





ATTENTION! : PLEASE SET THE birINCI CONTROLLER BOARD TO HYDROLIC-STAR-DELTA MACRO FIRST OF ALL. OTHERWISE FATAL DANGER MAY BE BECOME. ALSO PERMANENT DAMAGE MEY BE BECOME

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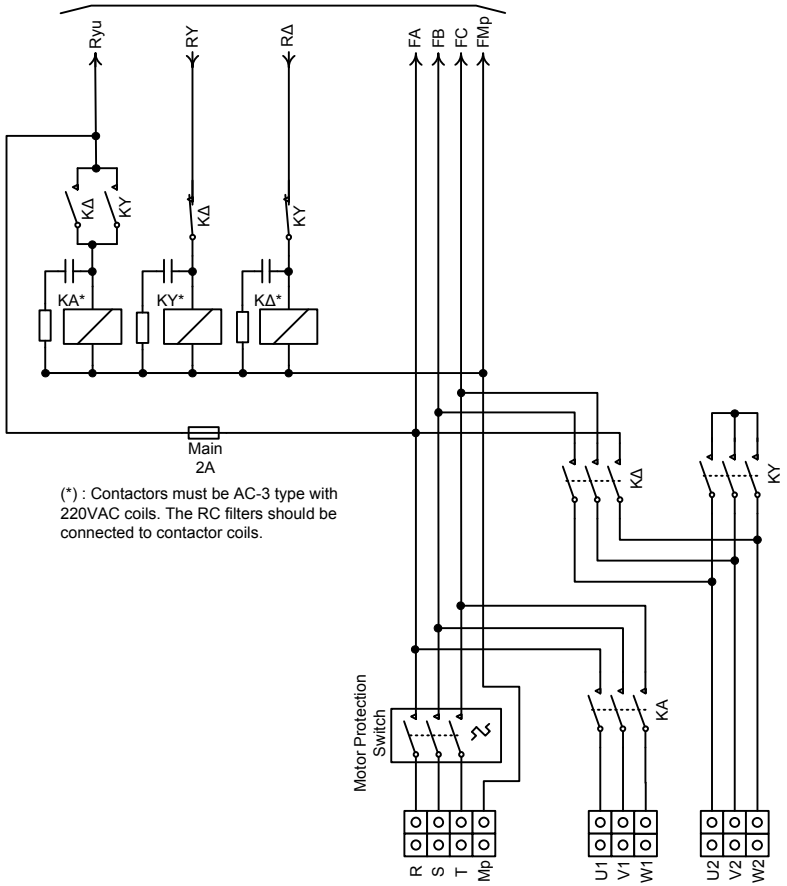
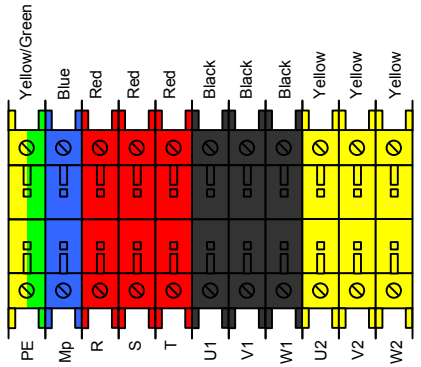
Project Name	Hydrolic Lift Power Circuit			Drawer	ZD
Drawing Name	Direct Drive Power Circuit			Control	SH
Description		Project No **GUC-DY-0.00**	Date 30.08.2010	Group GUC-xx	Sayfa 10

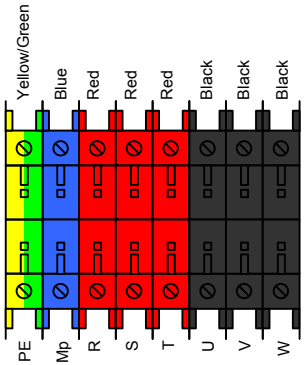
Please look the control drawings according to your hydrolic unit brand name



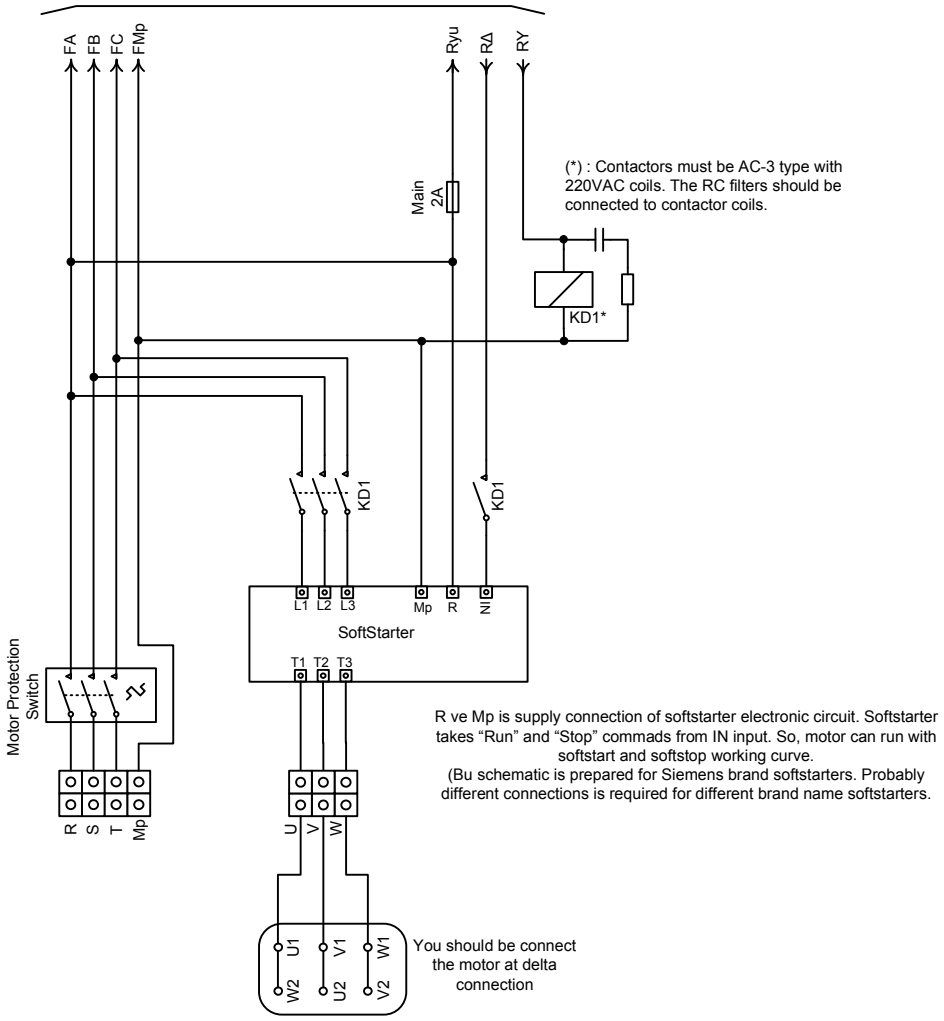


ATTENTION! : PLEASE SET THE birINCI CONTROLLER BOARD TO HYDROLIC-STAR-DELTA MACRO FIRST OF ALL. OTHERWISE FATAL DANGER MAY BE BECOME. ALSO PERMANENT DAMAGE MEY BE BECOME

asronik ELEVATOR CONTROL SYSTEMS Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name Hydrolic Lift Power Circuit Drawing Name Star-Delta Power Circuit Description	CE	Drawer ZD Control SH		
		Project No **GUC-YU-0.00**	Date 30.08.2010	Group GUC-xx	Sayfa 11



Please look the control drawings according to your hydrolic unit brand name



R ve Mp is supply connection of softstarter electronic circuit. Softstarter takes “Run” and “Stop” commads from IN input. So, motor can run with softstart and softstop working curve.
(Bu schematic is prepared for Siemens brand softstarters. Probably different connections is required for different brand name softstarters.

ATTENTION! : PLEASE SET THE birINCI CONTROLLER BOARD TO HYDROLIC-SOFTSTARTER MACRO FIRST OF ALL. OTHERWISE FATAL DANGER MAY BE BECOME. ALSO PERMANENT DAMAGE MEY BE BECOME

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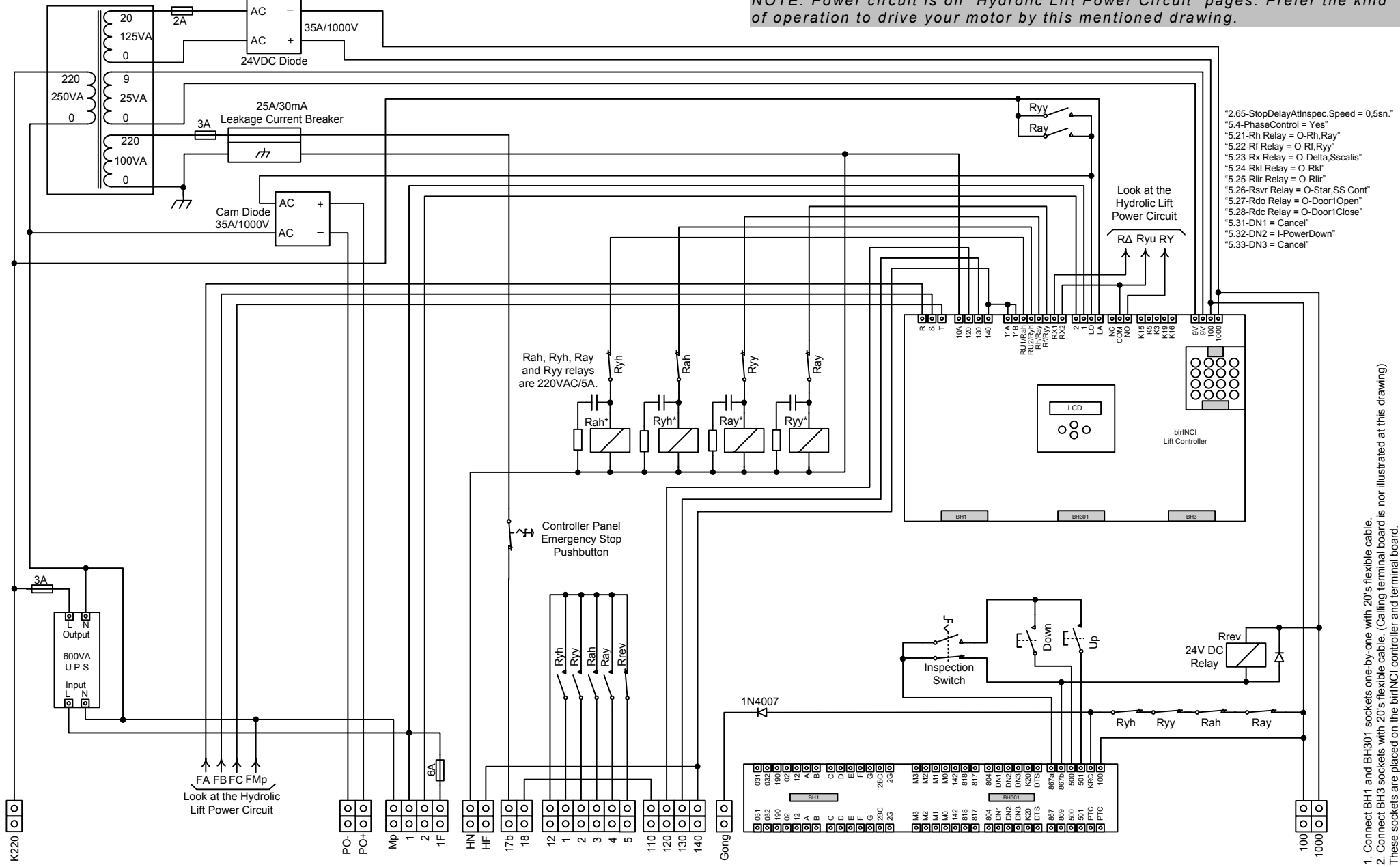
Project Name	Hydrolic Lift Power Circuit			Drawer	ZD
Drawing Name	Softstarter Power Circuit			Control	SH
Description		**Project No** **GUC-SS-0.00**	Date 30.08.2010	Group GUC-xx	Sayfa 12

NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.



1. Connect BH1 and BH301 sockets one-by-one with 20's flexible cable.
2. Connect BH3 sockets with 20's flexible cable. (Calling terminal board is nor illustrated at this drawing)
These sockets are placed on the birINCI controller and terminal board.

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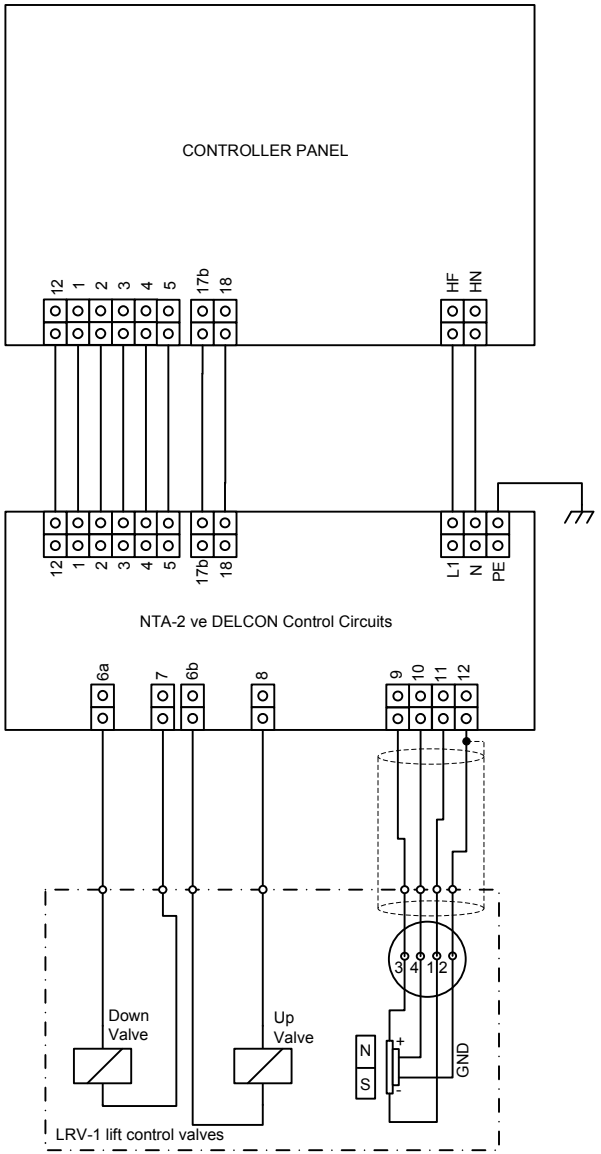
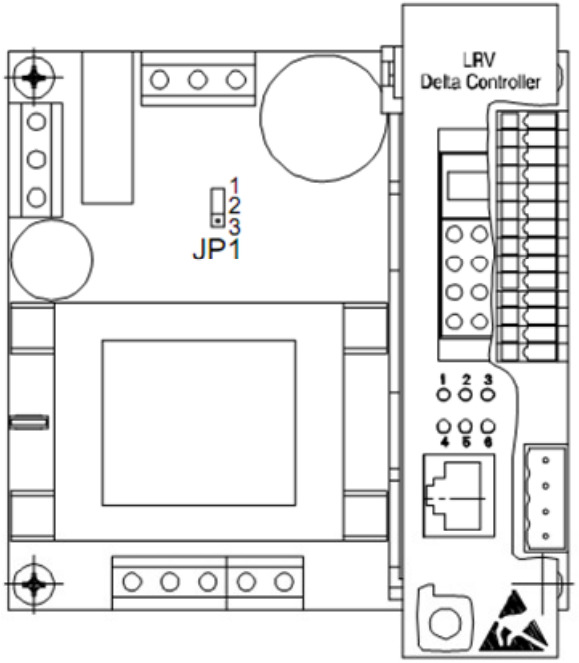
Project Name	Control Circuits For Bucher Hydrolic Units with UPS Rescue System.			Drawer	ZD
Drawing Name	Control Circuits (With External Unit Controller (NTA-2 ve DELCON))			Control	SH
Description		Project No: HDR-BI-BCH-NTDE0-0.01	Date 09.10.2010	Group HDR-BI-BCH-NTDE0	Page 13



IMPORTANT NOTE:
JP1 jumper is connected 1-2 pins as standart.



JP1 Jumper Settings

JP1

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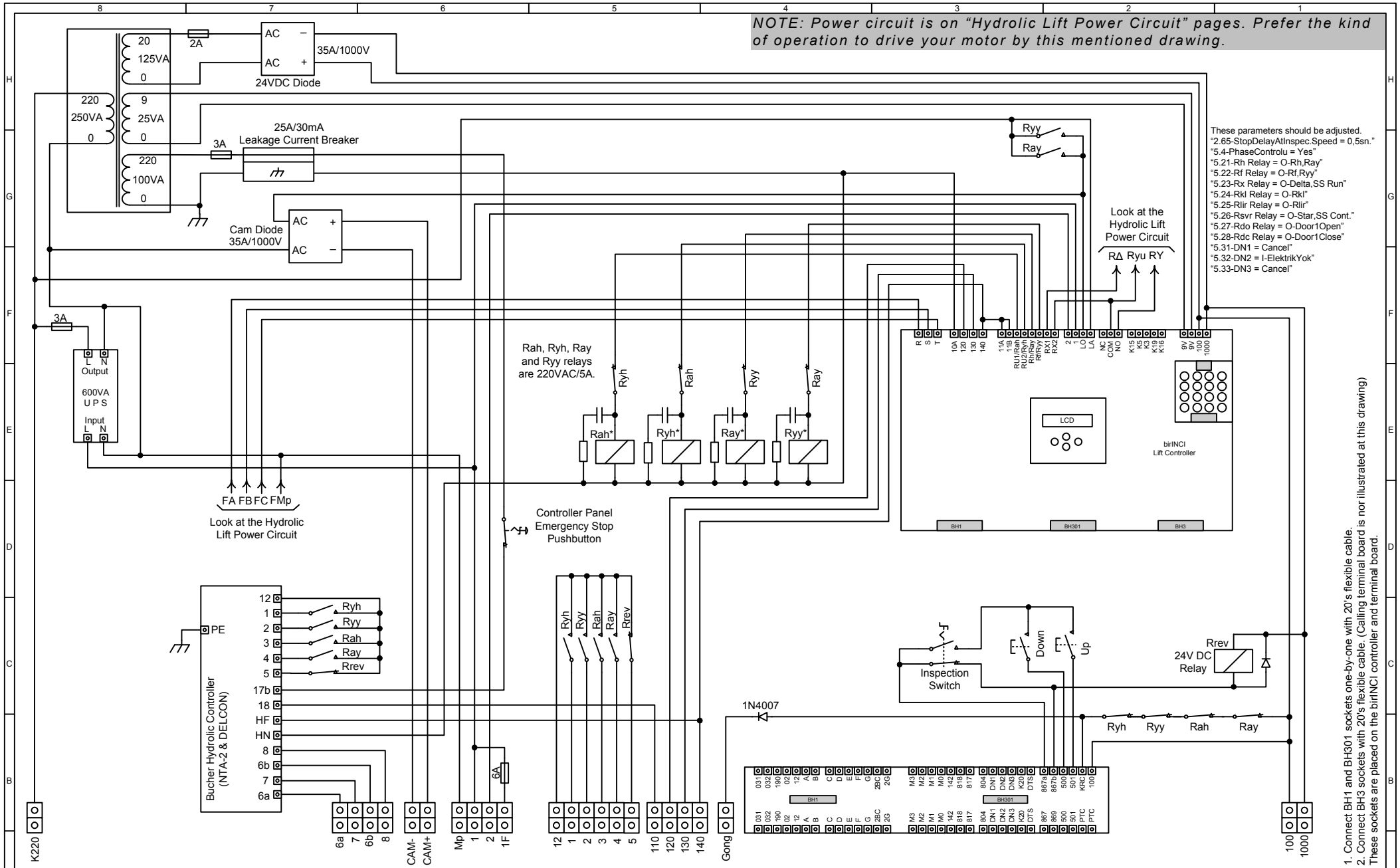
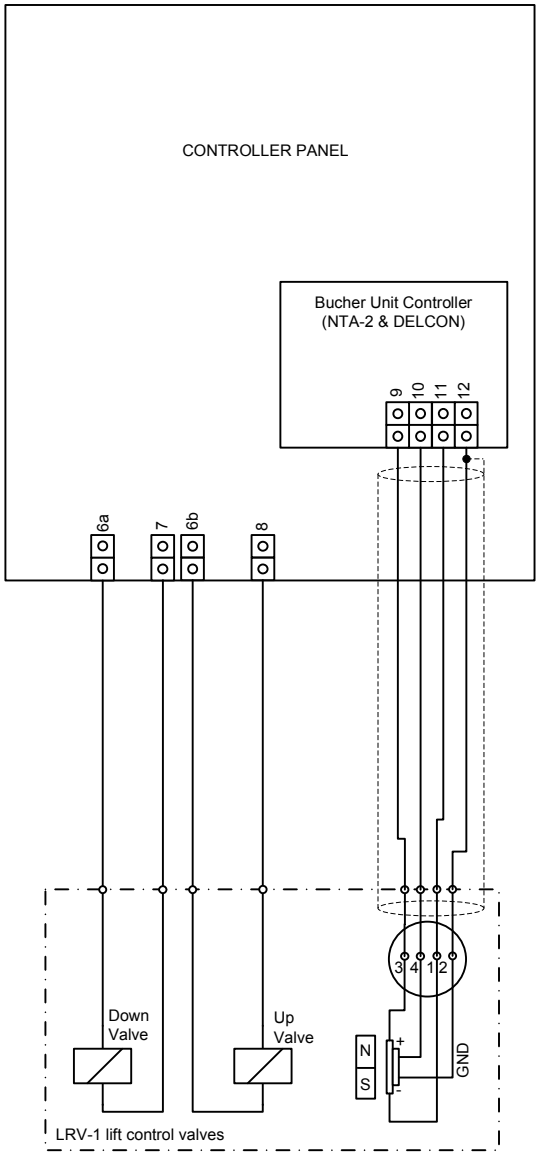
	Drawing Name Application Project (With External Unit Controller (NTA-2 and DELCON))				Control SH
	Description	**Project No: HDR-BI-BCH-NTDE0-0.01**	Date 09.10.2010	Group HDR-BI-BCH-NTDE0	Page 14

NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.

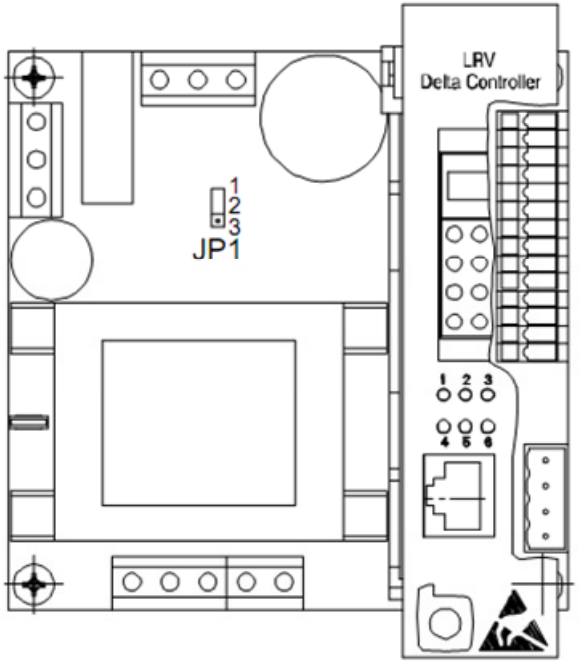


1. Connect BH1 and BH301 sockets one-by-one with 20's flexible cable.
2. Connect BH3 sockets with 20's flexible cable. (Calling terminal board is nor illustrated at this drawing)
These sockets are placed on the birINCI controller and terminal board.

asronik® ELEVATOR CONTROL SYSTEMS Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name	Control Circuits For Bucher Hydrolic Units with UPS Rescue System.	CE	Drawer	ZD
	Drawing Name	Control Circuits (With Internal Unit Controller (NTA-2 ve DELCON))		Control	SH
	Description	**Project No: HDR-BI-BCH-NTDE1-0.01**	Date 09.10.2010	Group HDR-BI-BCH-NTDE1	Page 15



IMPORTANT NOTE:
JP1 jumper is connected 1-2 pins as standart.



JP1 Jumper Settings

JP1

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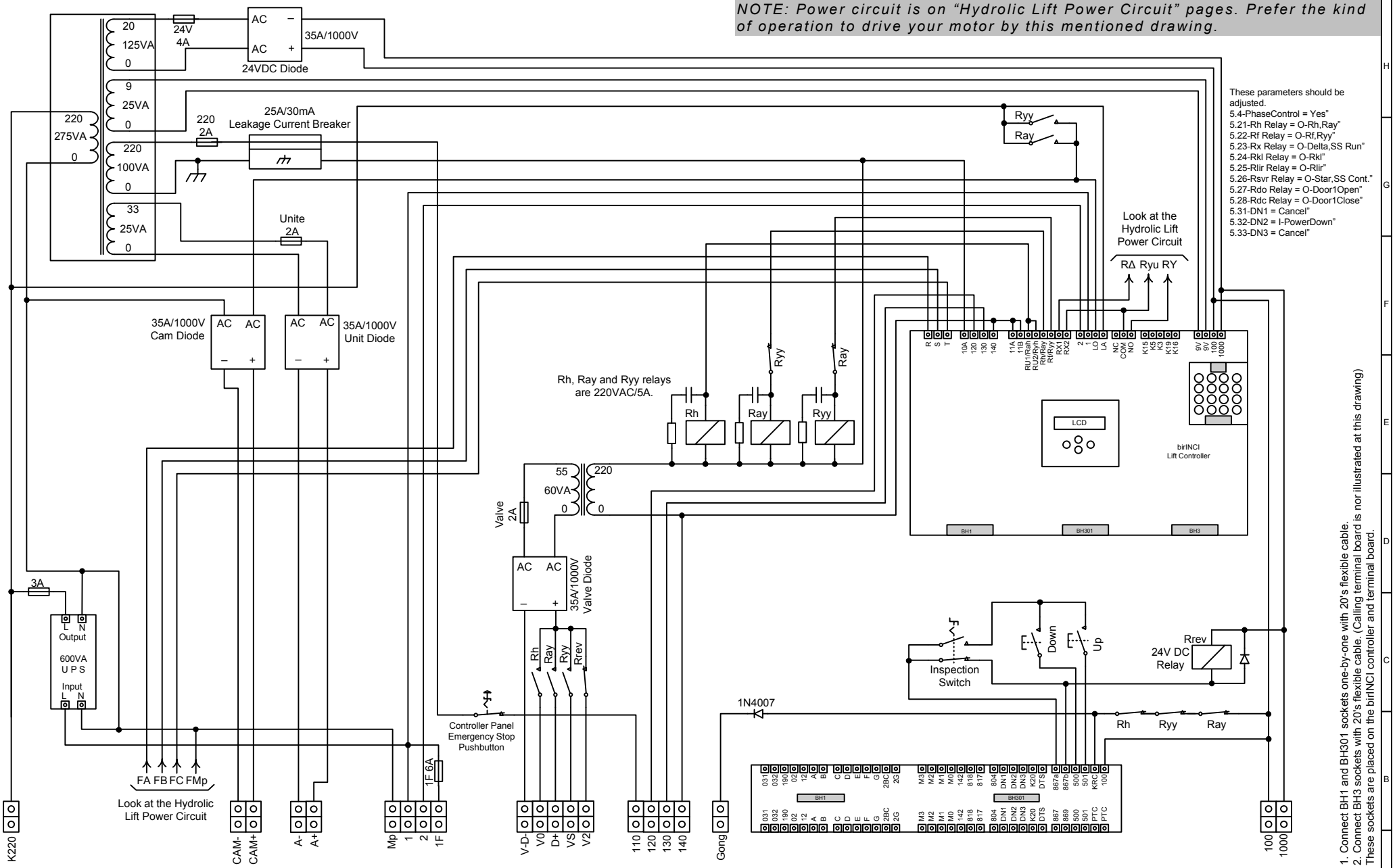
	Drawing Name Application Project (With Internal Unit Controller (NTA-2 and DELCON))					Control SH
	Description	**Project No: HDR-BI-BCH-NTDE1-0.01**	Date 09.10.2010	Group HDR-BI-BCH-NTDE1		Page 16

NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.



1. Connect BH1 and BH301 sockets one-by-one with 20's flexible cable.
2. Connect BH3 sockets with 20's flexible cable. (Calling terminal board is nor illustrated at this drawing)
These sockets are placed on the birINCI controller and terminal board.

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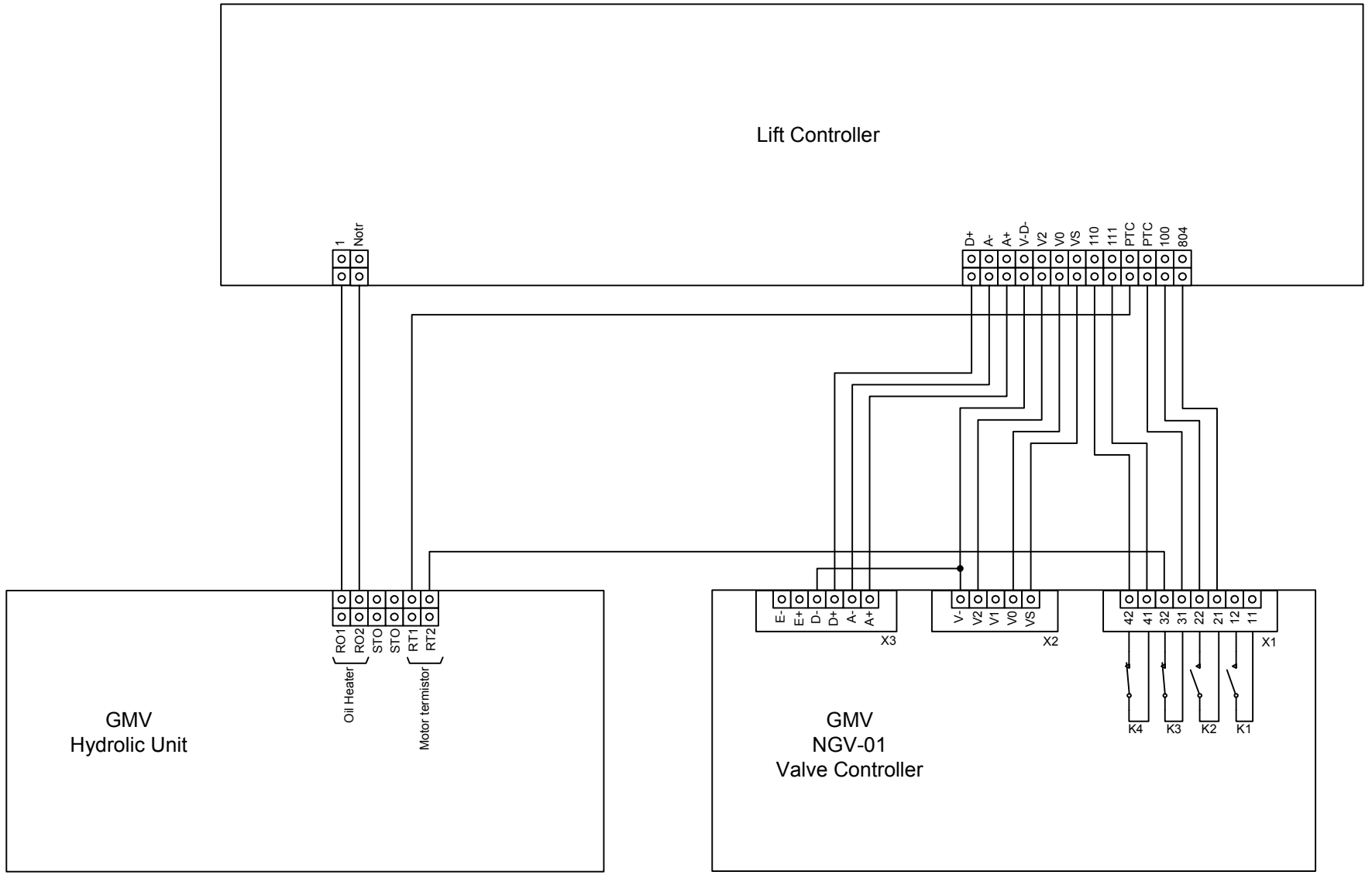
Project Name	Control Circuits For GMV, NGV Valve Hydrolic Units With UPS Rescue Systems.			Drawer	ZD
Drawing Name	Control Circuits			Control	SH
Description		**Project No** **HDR-BI-GMV-NGV01-0.01**	Date 09.10.2010	Group HDR-BI-GMV-NGV01	Page 17



Set “8.4 OUTPUT 41-42” parameter to “FUN012NC”.

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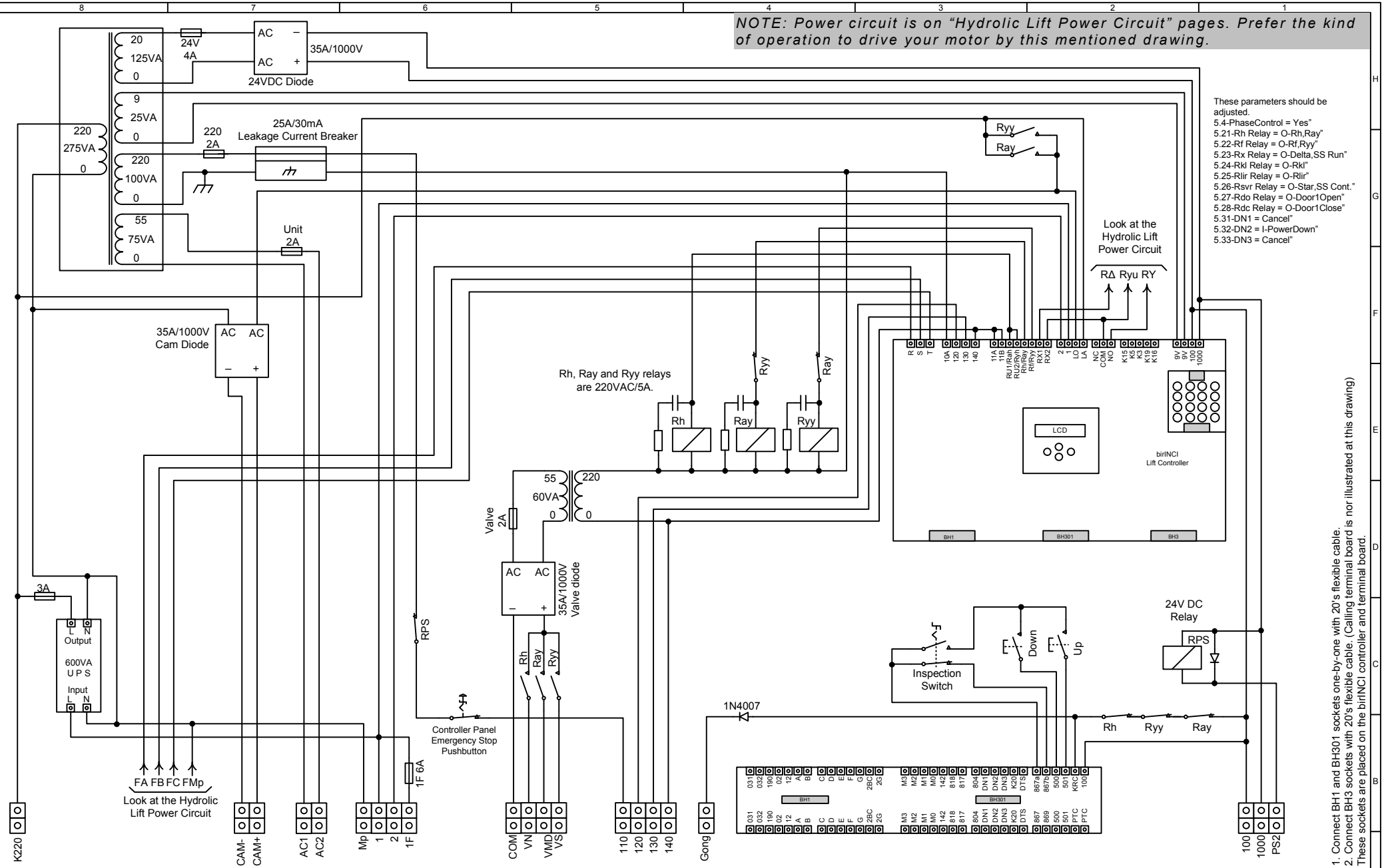
Project Name	Control Circuits For GMV, NGV Valve Hydrolic Units With UPS Rescue Systems.				Drawer	ZD
Drawing Name	Application Project				Control	SH
Description		Project No	HDR-BI-GMV-NGV01-0.00	Date 09.10.2010	Group HDR-BI-GMV-NGV01	Page 18

NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.



1. Connect BH1 and BH301 sockets one-by-one with 20's flexible cable.
2. Connect BH3 sockets with 20's flexible cable. (Calling terminal board is nor illustrated at this drawing)
These sockets are placed on the birINCI controller and terminal board.

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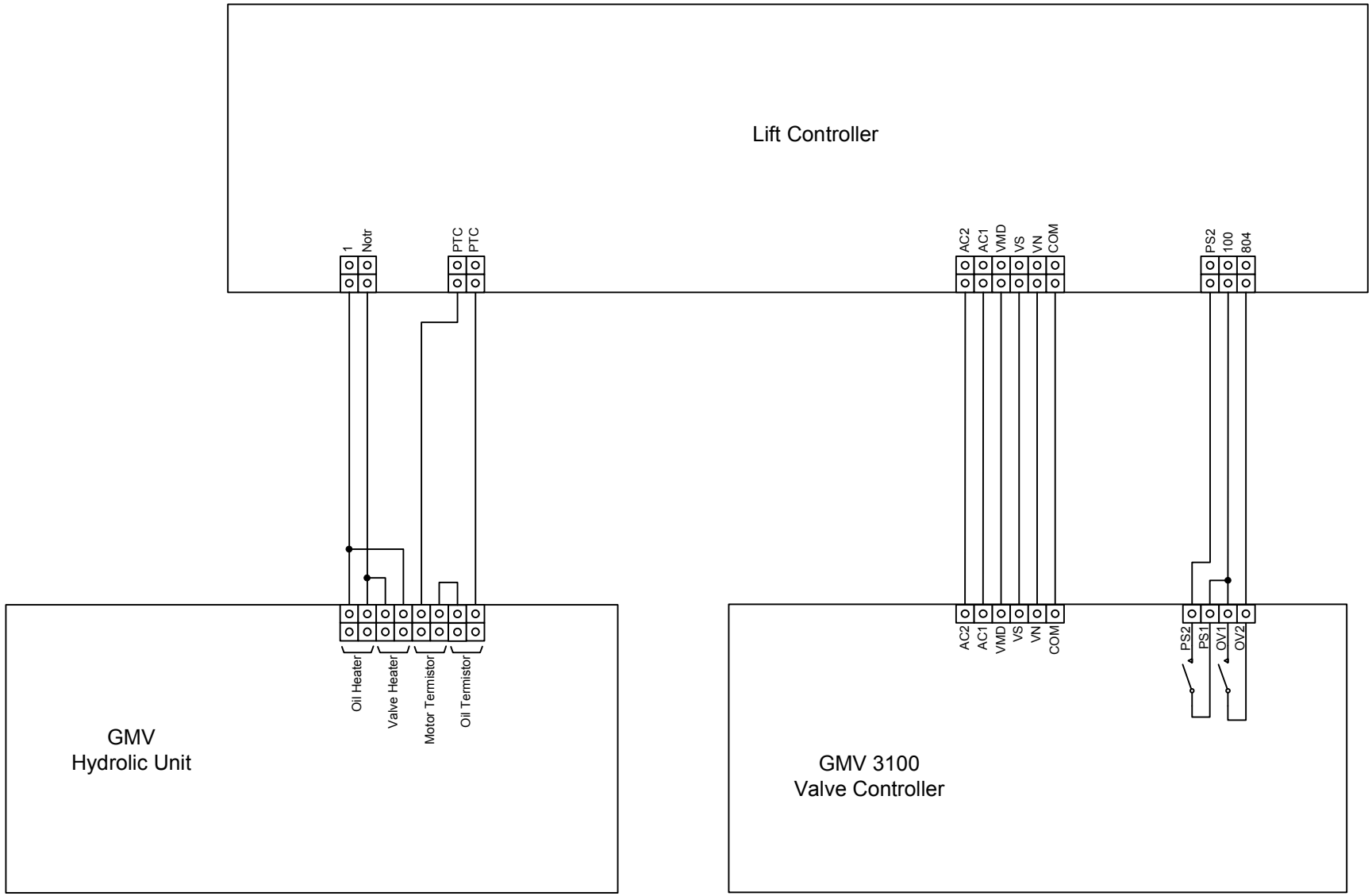
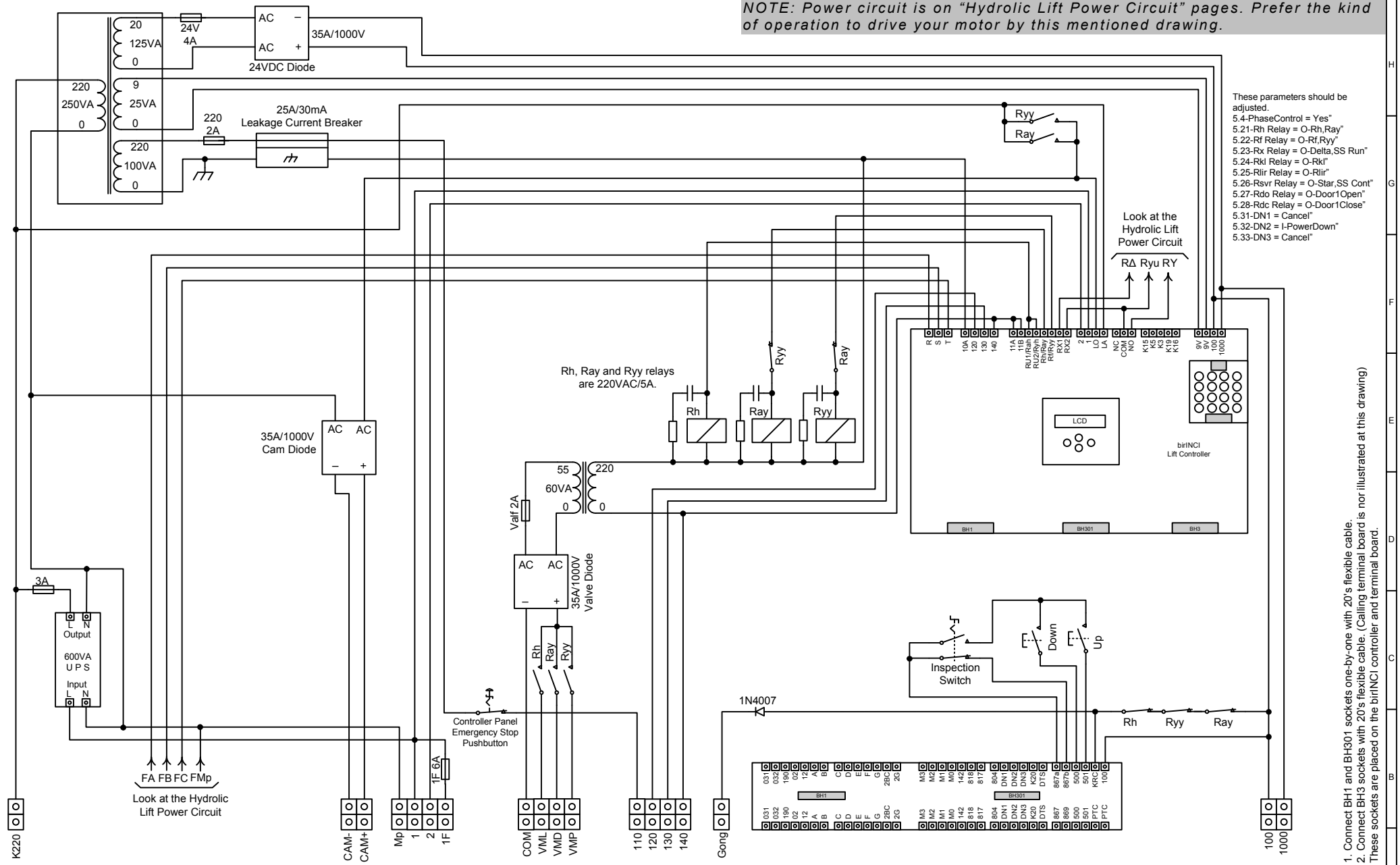
	Drawing Name: Control Circuits				Control SH
	Description	Project No: HDR-BI-GMV-3100-0.01	Date: 09.20.2010	Group: HDR-BI-GMV-3100	Page: 19

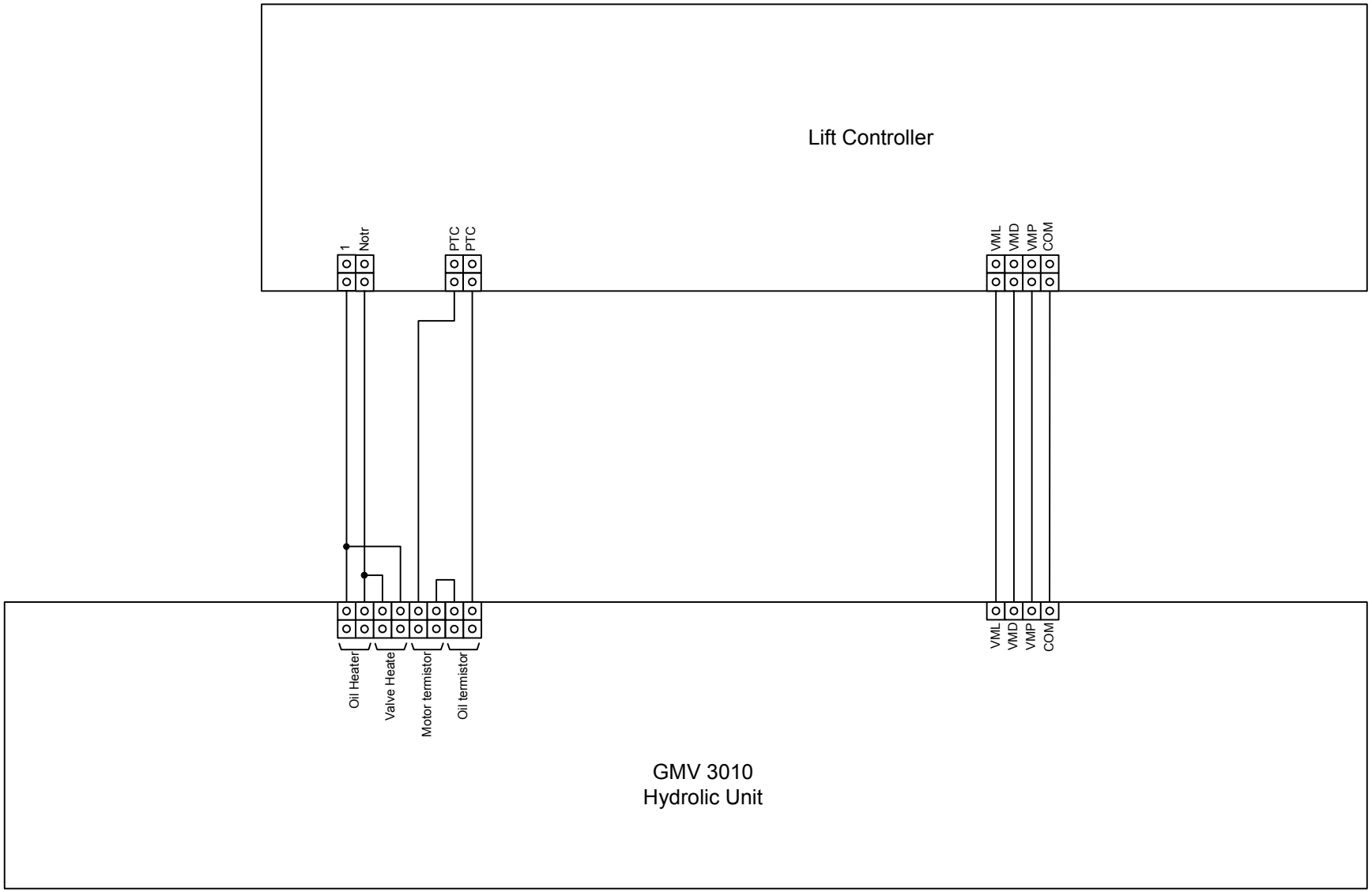


asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name Control Circuits For GMV 3100 Valve Hydrolic Units With UPS Rescue Systems				CE	Drawer ZD
	Drawing Name Application Projects					Control SH
	Description	**Project No HDR-BI-GMV-3100-0.01**	Date 09.10.2010	Group HDR-BI-GMV-3100		Page 20

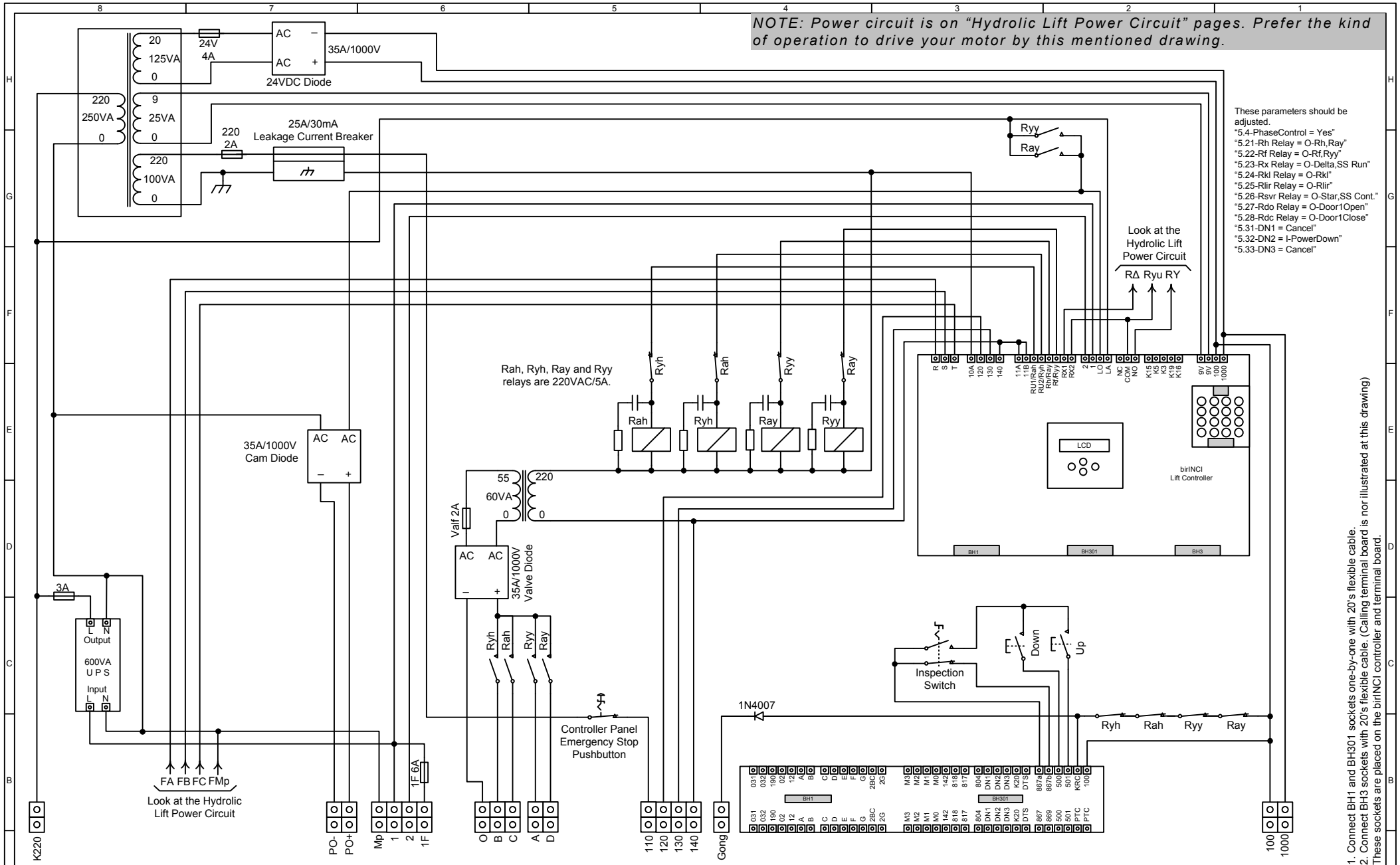
NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.



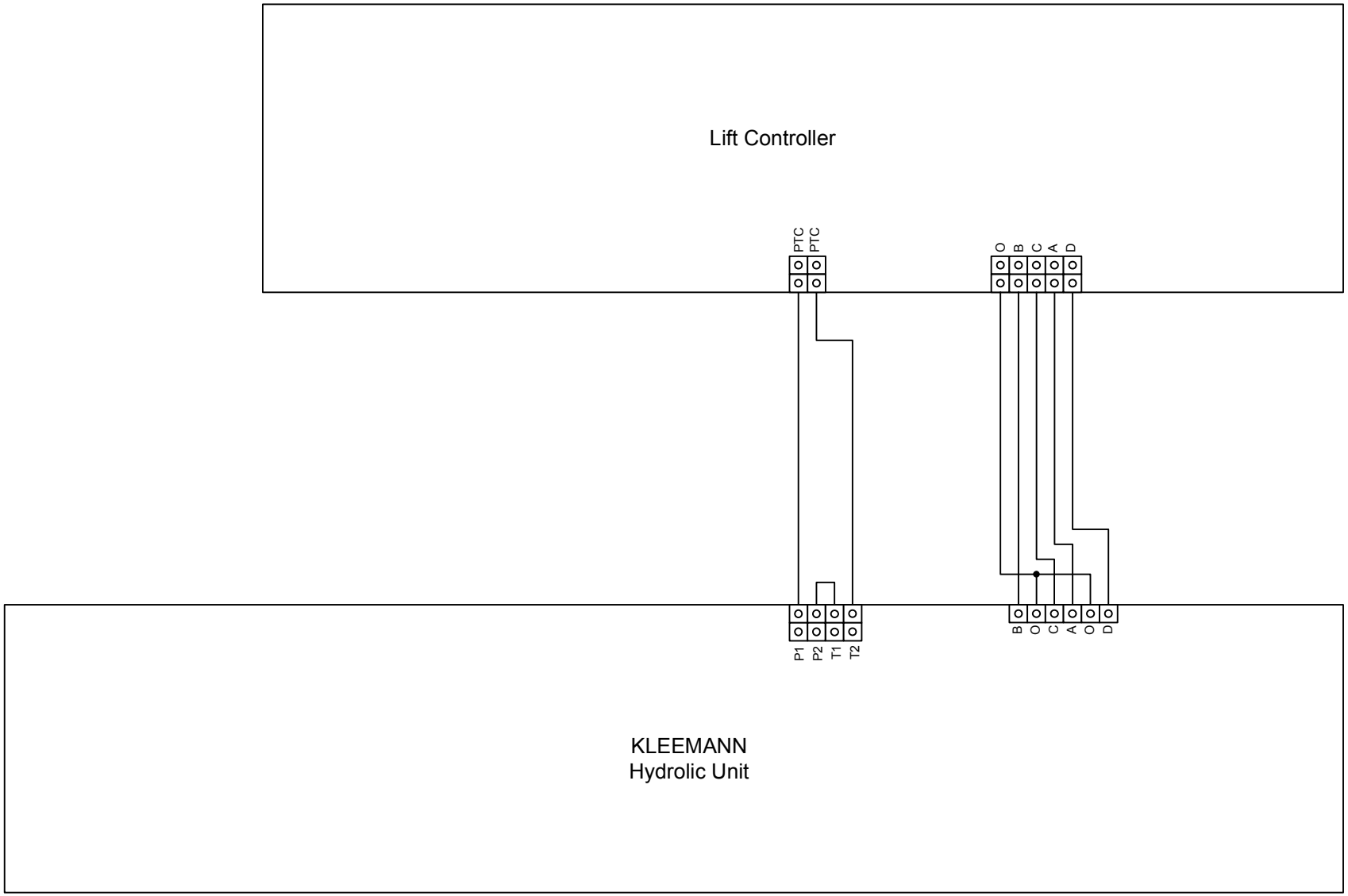
asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name	Control Circuits For GMV 3010 Valve Hydrolic Units With UPS Rescue Systems.	CE	Drawer	ZD
	Drawing Name	Control Circuits		Control	SH
	Description		Project No **HDR-BI-GMV-3010-0.01**	Date 09.10.2010	Grup HDR-BI-GMV-3010	Page 21



asronik ELEVATOR CONTROL SYSTEMS Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name Control Circuits For GMV 3010 Valve Hydrolic Units With UPS Rescue Systems.			CE	Drawer ZD
	Drawing Name Application Projects				Control SH
	Description	**Project No HDR-BI-GMV-3010-0.01**	Date 09.10.2010	Grup HDR-BI-GMV-3010	Page 22

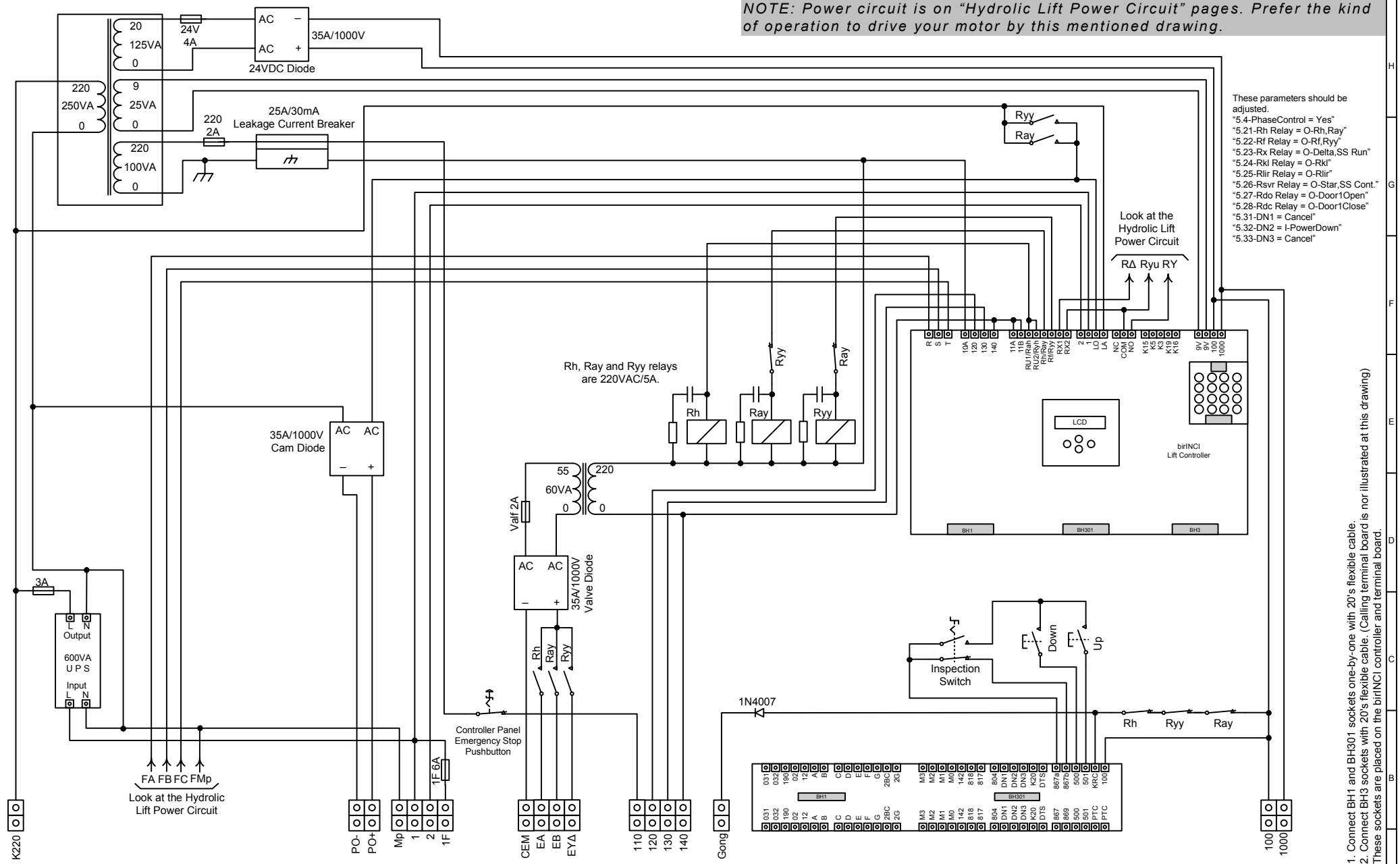


asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name: Control Circuit For Kleemann Hydrolic Units With Rescue Systems.				Drawer: ZD
	Drawing Name: Control Circuit				Control: SH
	Description	Project No: HDR-BI-KLM-DC48-0.01	Date: 09.10.2010	Group: HDR-BI-KLM-DC48	Page: 23



asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name Control Circuit For Kleemann Hydrolic Units With Rescue Systems.					Drawer ZD
	Drawing Name Application Project					Control SH
	Description	**Project No** **HDR-BI-KLM-DC48-0.01**	Date 09.10.2010	Group HDR-BI-KLM-DC48	Page 24	

NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.



1. Connect BH1 and BH301 sockets one-by-one with 20's flexible cable.
2. Connect BH3 sockets with 20's flexible cable. (Calling terminal board is nor illustrated at this drawing)
These sockets are placed on the birINCI controller and terminal board.

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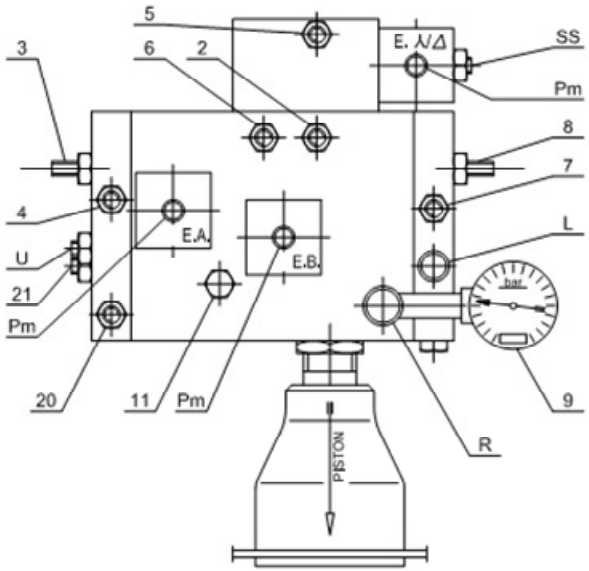
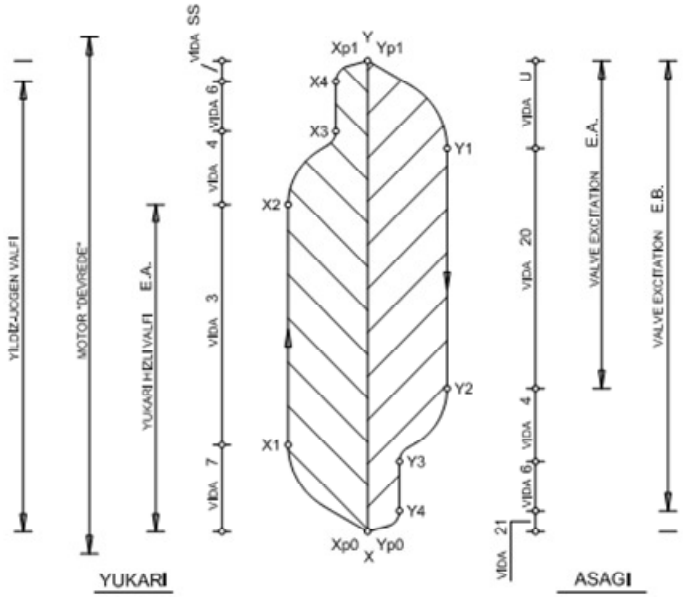
Project Name	Control Circuit For Moris Hydrolic Units With UPS Rescue Systems.			Drawer	ZD
Drawing Name	Control Circuit			Control	SH
Description		Project No **HDR-BI-MOR-xxxx-0.01**	Date 09.10.2010	Group HDR-BI-MOR-xxxx	Page 25





AYARLAR

Vida -	1	PISTON KAYMA BASINC AYARI - VIDA SIKILDIKCA BASINC ARTAR
Vida -	2	HORTUM PATLAMA VALFI TEST VIDASI (bknz. cizim no 9340)
Vida -	3	YUKARI VE ASAGI YUKSEK HIZ AYARI - VIDA SIKILDIKCA HIZ AZALIR
Vida -	4	ILK YAVASLAMA AYARI - VIDA SIKILDIKCA YAVASLAMA UZAR VE YUMUSAR
Vida -	5	MAX. BASINC AYARI - VIDA SIKILDIKCA BASINC ARTAR
Vida -	6	YUKARI VE ASAGI YAVAS HIZ AYARI - VIDA SIKILDIKCA HIZ AZALIR
Vida -	7	YUKARI HIZLANMA EGRISI - VIDA SIKILDIKCA KALKIS EGRISI UZAR VE KALKIS YUMUSAR
Vida -	8	GERI DONUS BASINC AYARI - VIDA SIKILDIKCA BASINC ARTAR
	9	MANOMETRE
Vida -	11	SUKUNET HALINDE CEKVALF BASINCI AYARI
Vida -	20	ASAGI YONDE YUKSEK HIZ AYARI - VIDA SIKILDIKCA HIZ ARTAR
Vida -	21	ASAGI ISTIKAMETTE KATA VARIS HIZI AYARI - VIDA SIKILDIKCA DURUS YUMUSAR (2)
Vida -	SS	YUKARI ISTIKAMETTE KATA VARIS HIZI AYARI - VIDA SIKILDIKCA DURUS YUMUSAR (3)
	E.A.	YUKARI VE ASAGI YONDE YUKSEK HIZ VALFI
	E.B.	ASAGI YONDE YAVAS HIZ VALFI
	E. λ /Δ	YUKARI YONDE YAVAS HIZ VALFI
	L	MANUEL ASAGI INDIRME BUTONU
	Pm	MANUEL YEDEK INDIRME VALFI BUTONU
	R	MANOMETREYI KAPATMA VIDASI
Vida -	U	ASAGI HIZLANMA EGRISI - VIDA SIKILDIKCA KALKIS EGRISI UZAR VE KALKIS YUMUSAR (1)

NOTE (1): VIDAYI TAMAMEN SIKMAYINIZ, SON DURUS SEYRINI ENGELLER
(2): VIDAYI TAMAMEN SIKMAYINIZ, KATINA VARMADAN DURUR, DIGER YONDE ISE KATINI GECER
(3): 7 NOLU VIDAYI SISTEM DURANA KADAR SIKINIZ (SOGUK YAGDA)

CALISMA SEKLI

YUKARI ISTIKAMET	X	→ Xp0	ELEKTRIK MOTORU DEVREDE
	Xp0	→ X1	MOTOR VE E.A. + E. λ ΔVALFI DEVREDE YUKARI ISTIKAMETTE HIZLANMA EGRISI, ISTEGE GORE VIDA 7 ILE AYARLANABILIR
	X1	→ X2	YUKARI ISTIKAMETTE HIZLI SEYIR - YUKSEK HIZ VIDA 3 ILE AYARLANABILIR
	X2	→ X3	YUKARI ISTIKAMETTE ILK YAVASLAMA EGRISI - E.A. VALFI DEVRE DISI YAVASLAMA VIDA 4 ILE AYARLANABILIR
	X3	→ X4	YUKARI ISTIKAMETTE YAVAS HIZ - ISTEGE GORE VIDA 4 ILE AYARLANABILIR
	X4	→ Xp1	YUKARI ISTIKAMETTE KATA VARIS EGRISI - "SS" VIDASIYLA AYARLANABILIR
	Xp1	→ Y	MOTORUN DURUSDAKI GECIKMESI
ASAGI ISTIKAMET	Yp1	→ Y1	ASAGI ISTIKAMETTE HIZLANMA EGRISI E.A. VE E.B. VALFLERI DEVREDE HIZLANMA VIDA U ILE AYARLANABILIR
	Y1	→ Y2	ASAGI ISTIKAMETTE YUKSEK HIZ - VIDA 20 ILE AYARLANABILIR
	Y2	→ Y3	ASAGI ISTIKAMETTE ILK YAVASLAMA EGRISI - E.A. VALFI DEVRE DISI VIDA 4 ILE AYARLANABILIR
	Y3	→ Y4	ASAGI ISTIKAMETTE YAVAS HIZ - 6 NOLU VIDA ILE AYARLANABILIR
	Y4	→ Yp0	ASAGI ISTIKAMETTE KATA VARIS EGRISI - E.B. VALFI DEVRE DISI 21 NOLU VIDA ILE AYARLANABILIR

NOT: E.A. VALFININ DEVRE DISI KALMASINDAN ITIBAREN SON DURUSA KADAR OLAN YAVASLAMA MESAFESININ 15-20 cm DEN DAHA DUSUK OLMAMASINA DIKKAT EDINIZ

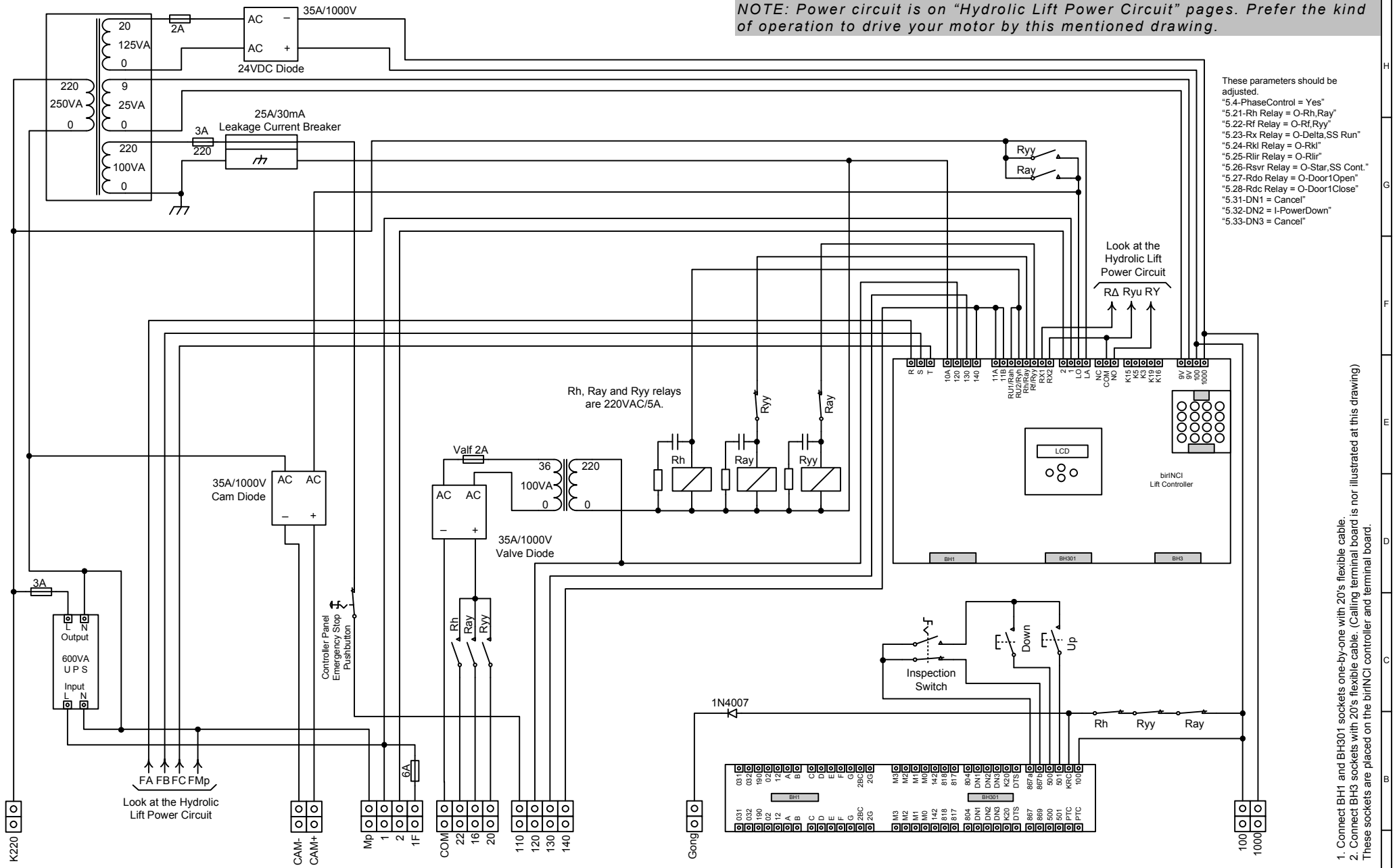
SOFT STOPLU+21 VALF BLOGUNUN CALISMA SEKLI VE AYARLAMA YONTEMI

(15/250 L/DAK VALF BLOKLARI ICIN GECERLI)

0567/SS (250) TR

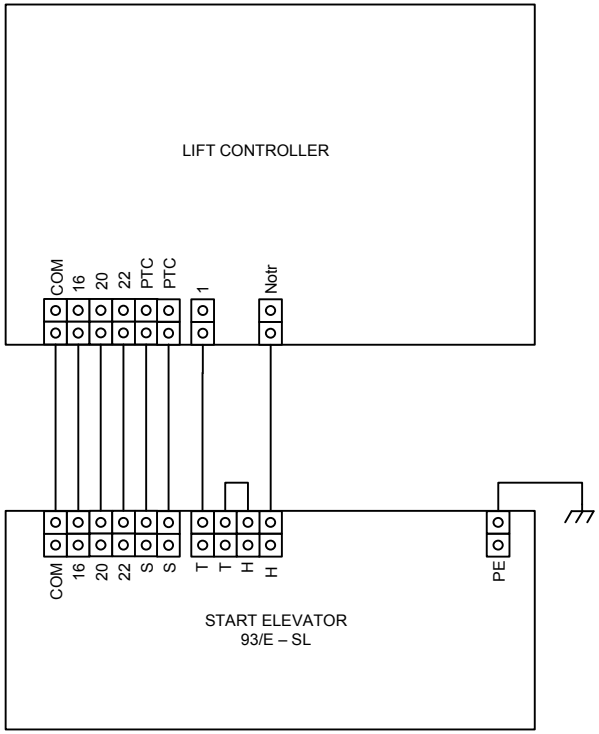
asronik ELEVATOR CONTROL SYSTEMS Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name	Control Circuit For Moris Hydrolic Units With UPS Rescue Systems.			CE	Drawer ZD
	Drawing Name	Application Project				Control SH
	Description		Project No HDR-BI-MOR-xxxx-0.01	Date 09.10.2010	Group HDR-BI-MOR-xxxx	Page 26

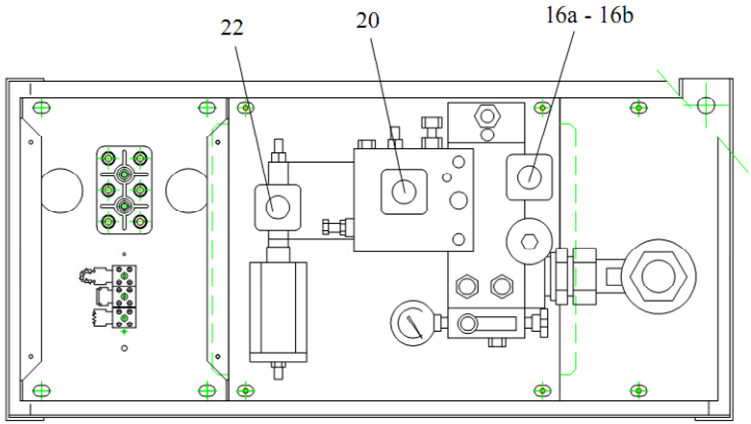
NOTE: Power circuit is on "Hydrolic Lift Power Circuit" pages. Prefer the kind of operation to drive your motor by this mentioned drawing.

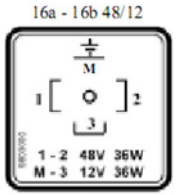


1. Connect BH1 and BH301 sockets one-by-one with 20's flexible cable.
2. Connect BH3 sockets with 20's flexible cable. (Calling terminal board is nor illustrated at this drawing)
These sockets are placed on the birINCI controller and terminal board.

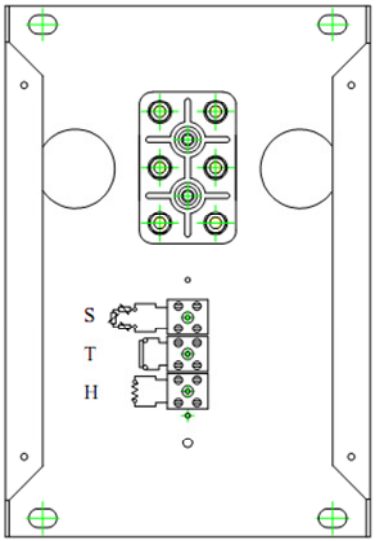
asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name: Control Circuits For Start 93ESL Valve Hydrolic Units With UPS Rescue Systems.			Drawer ZD
	Drawing Name: Control Circuits			Control SH
	Description	Project No: HDR-BI-STR-93ESL-0.01	Date: 09.10.2010	Group: HDR-BI-STR-93ESL — Page: 27







COM – Valve common terminal
16 – Down low speed valve
20 – Up low speed valve
22 – High speed valve



S – PTC
T – Oil thermostat (70 °C)
H – Oil heater (500W)

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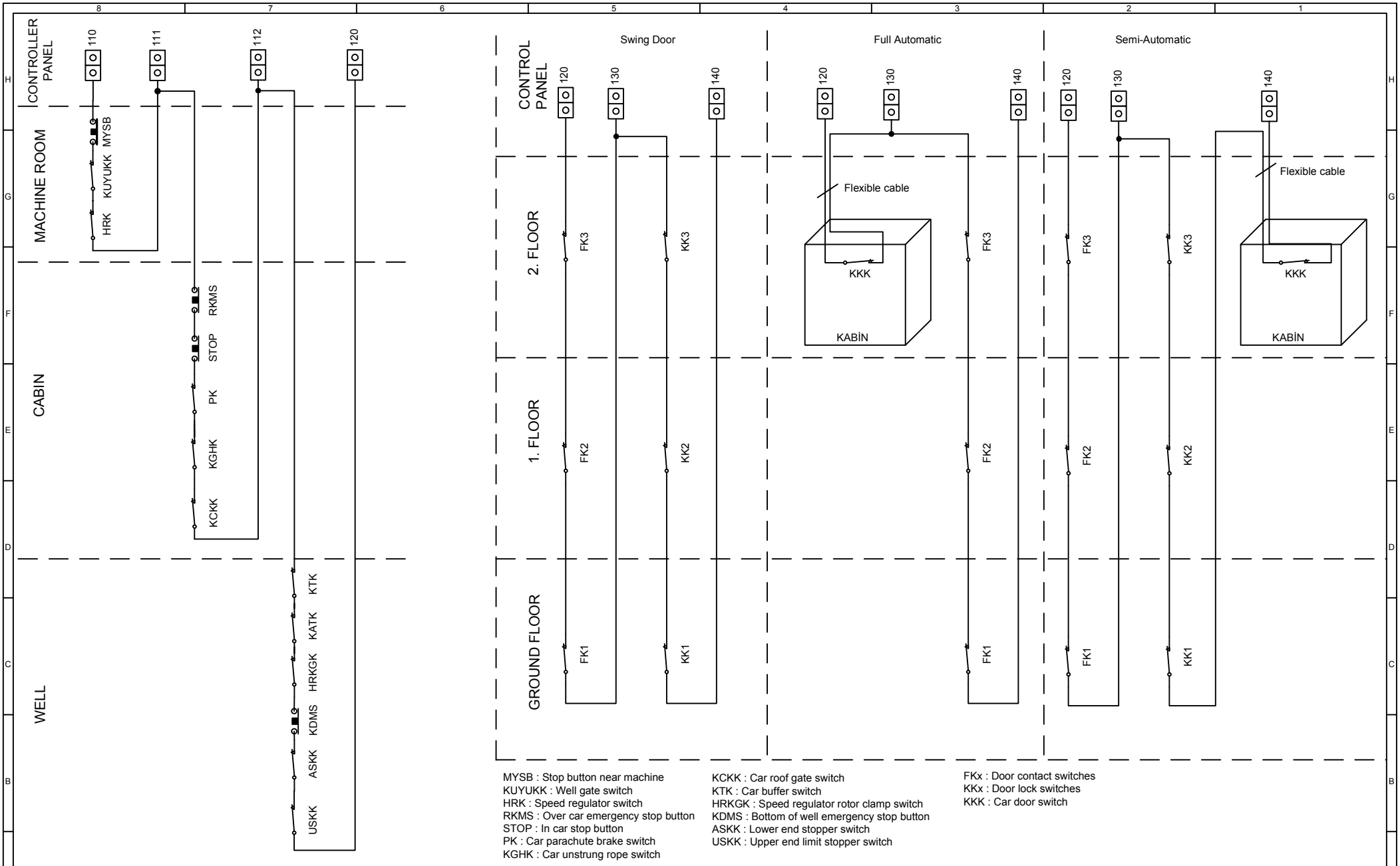
	Drawing Name Application Projects				Control SH
	Description	**Project No HDR-BI-STR-93ESL-0.01**	Date 09.10.2010	Group HDR-BI-STR-93ESL	Page 28



MYSB : Stop button near machine
KUYUKK : Well gate switch
HRK : Speed regulator switch
RKMS : Over car emergency stop button
STOP : In car stop button
PK : Car parachute brake switch
KGHK : Car unstrung rope switch

KCKK : Car roof gate switch
KTK : Car buffer switch
HRKGK : Speed regulator rotor clamp switch
KDMS : Bottom of well emergency stop button
ASKK : Lower end stopper switch
USKK : Upper end limit stopper switch

FKx : Door contact switches
KKx : Door lock switches
KKK : Car door switch

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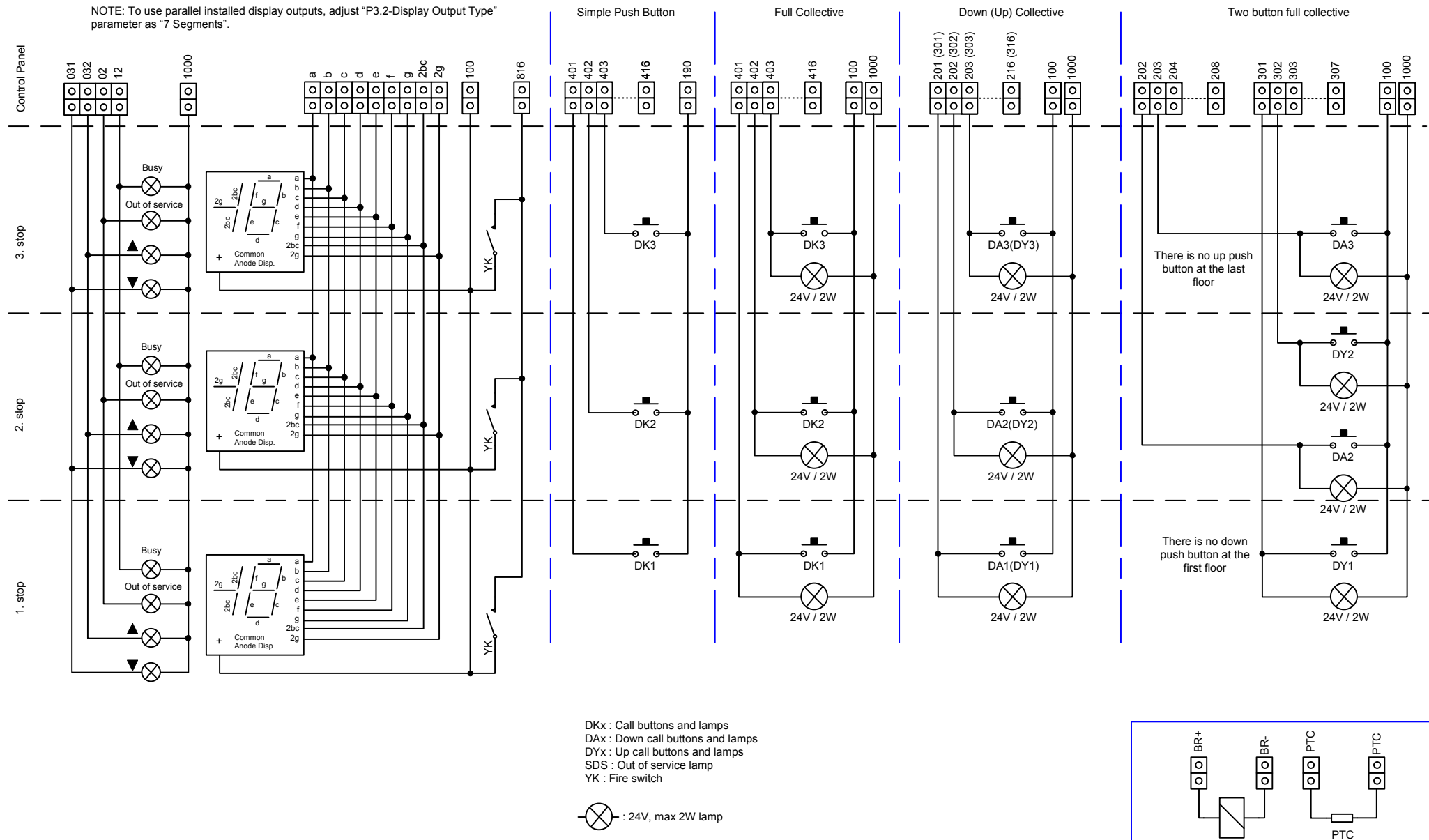
Project Name birINCI Controller Board					Drawer ZD	
Drawing Name Safety Circuit					Control SH	
Description	Project No **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 29		

NOTE: To use parallel installed display outputs, adjust “P3.2-Display Output Type” parameter as “7 Segments”.



DKx : Call buttons and lamps
DAx : Down call buttons and lamps
DYx : Up call buttons and lamps
SDS : Out of service lamp
YK : Fire switch

: 24V, max 2W lamp

NOTE: It is possible to arrange the common terminal of down, up, busy and out of servis signals from J2 jumper on birINCI. And also the common terminal of busy lamp can be arrangeable from the J1 jumpers on birINCI. This situaiton must be taken into account that when changing the supply of busy lamp, the 190 terminal supply changes.

MACHINE ROOM

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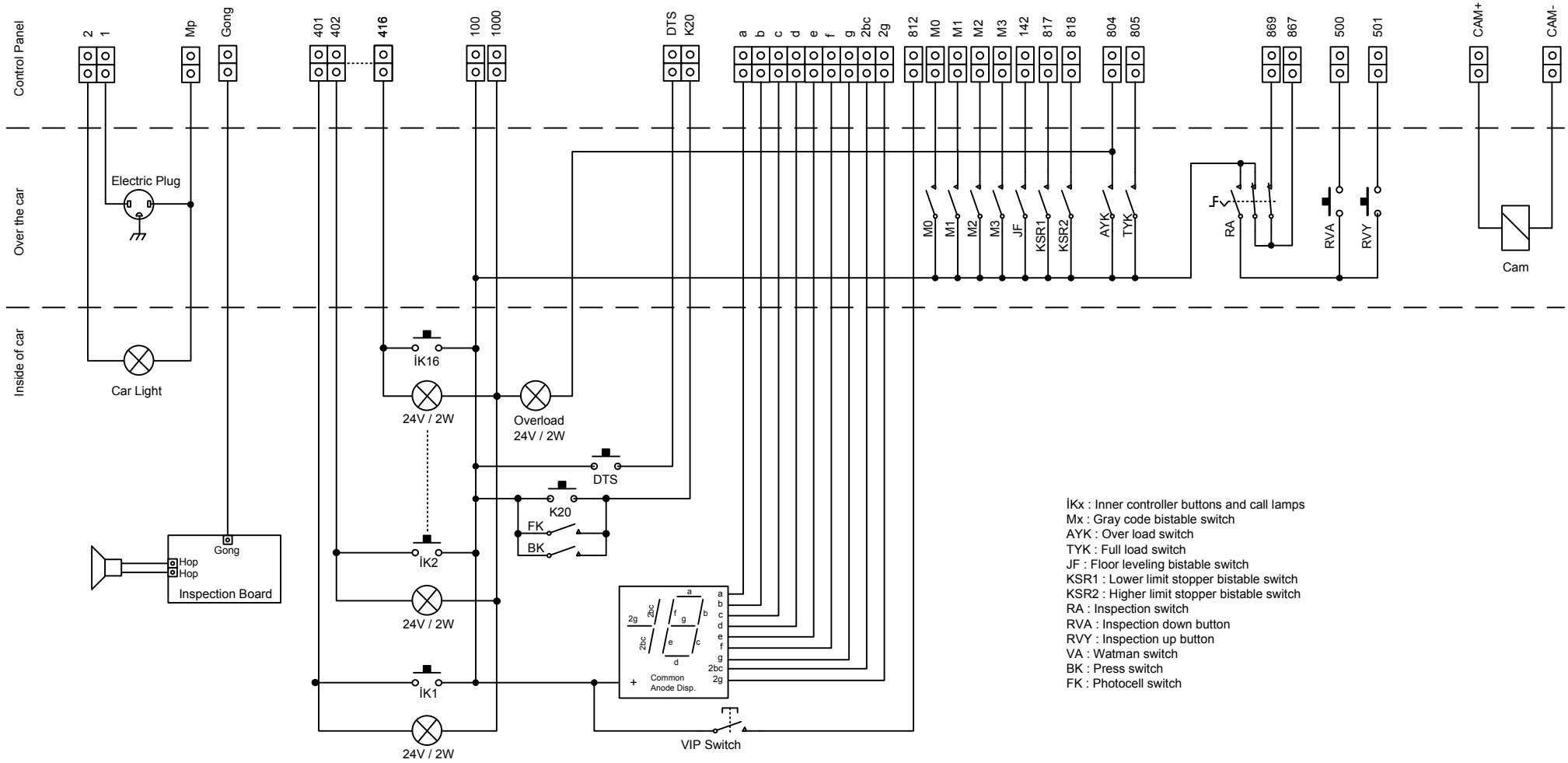
Project Name	birINCI Controller Board			Drawer	ZD
Drawing Name	Floor installation, brake and thermistor connections			Control	SH
Description		Project No **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 30



İKx : Inner controller buttons and call lamps
Mx : Gray code bistable switch
AYK : Over load switch
TYK : Full load switch
JF : Floor leveling bistable switch
KSR1 : Lower limit stopper bistable switch
KSR2 : Higher limit stopper bistable switch
RA : Inspection switch
RVA : Inspection down button
RVY : Inspection up button
VA : Watman switch
BK : Press switch
FK : Photocell switch

NOTE: To use parallel installed display outputs, adjust “P3.2-Display Output Type” parameter as “7 Segments”.

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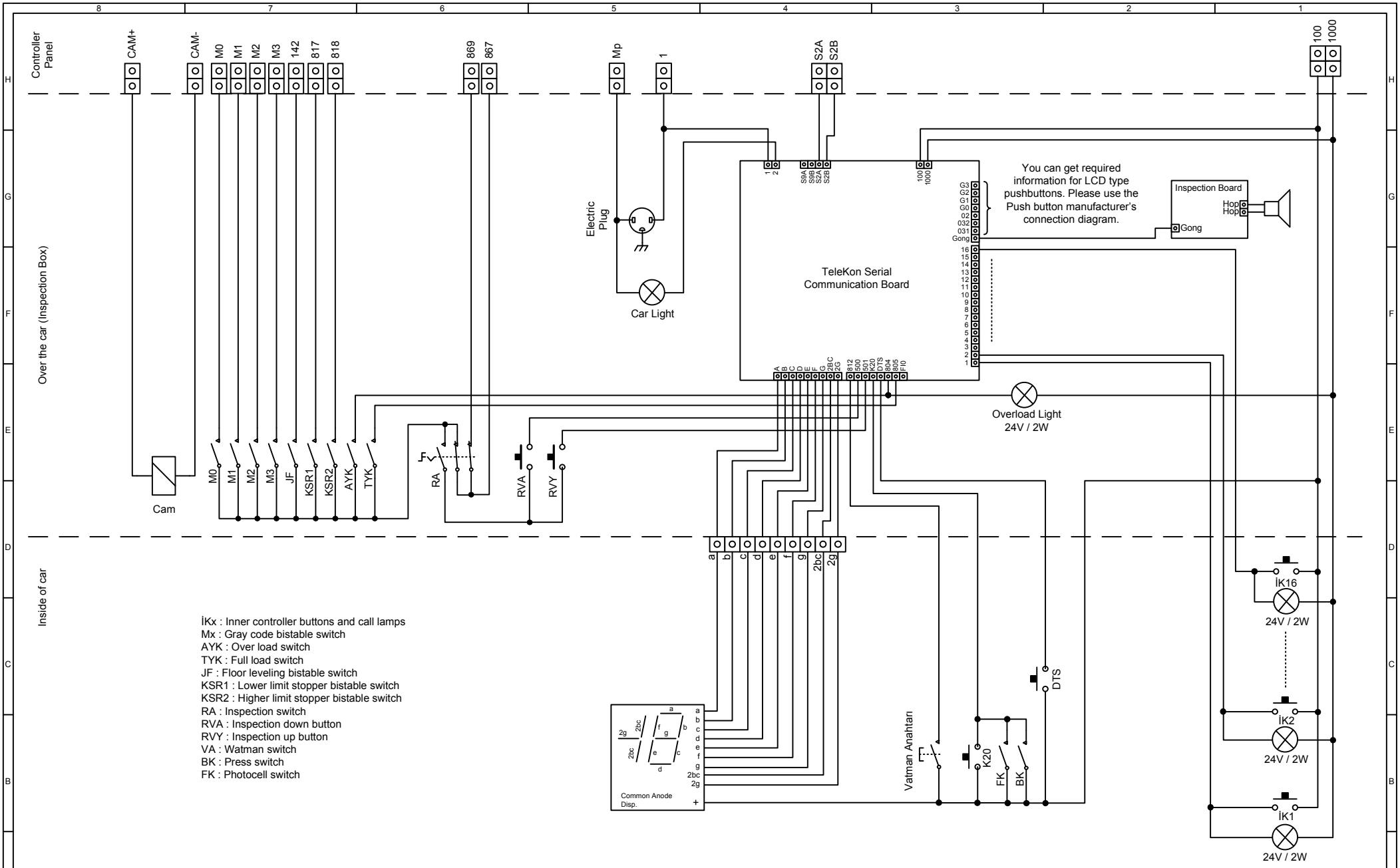
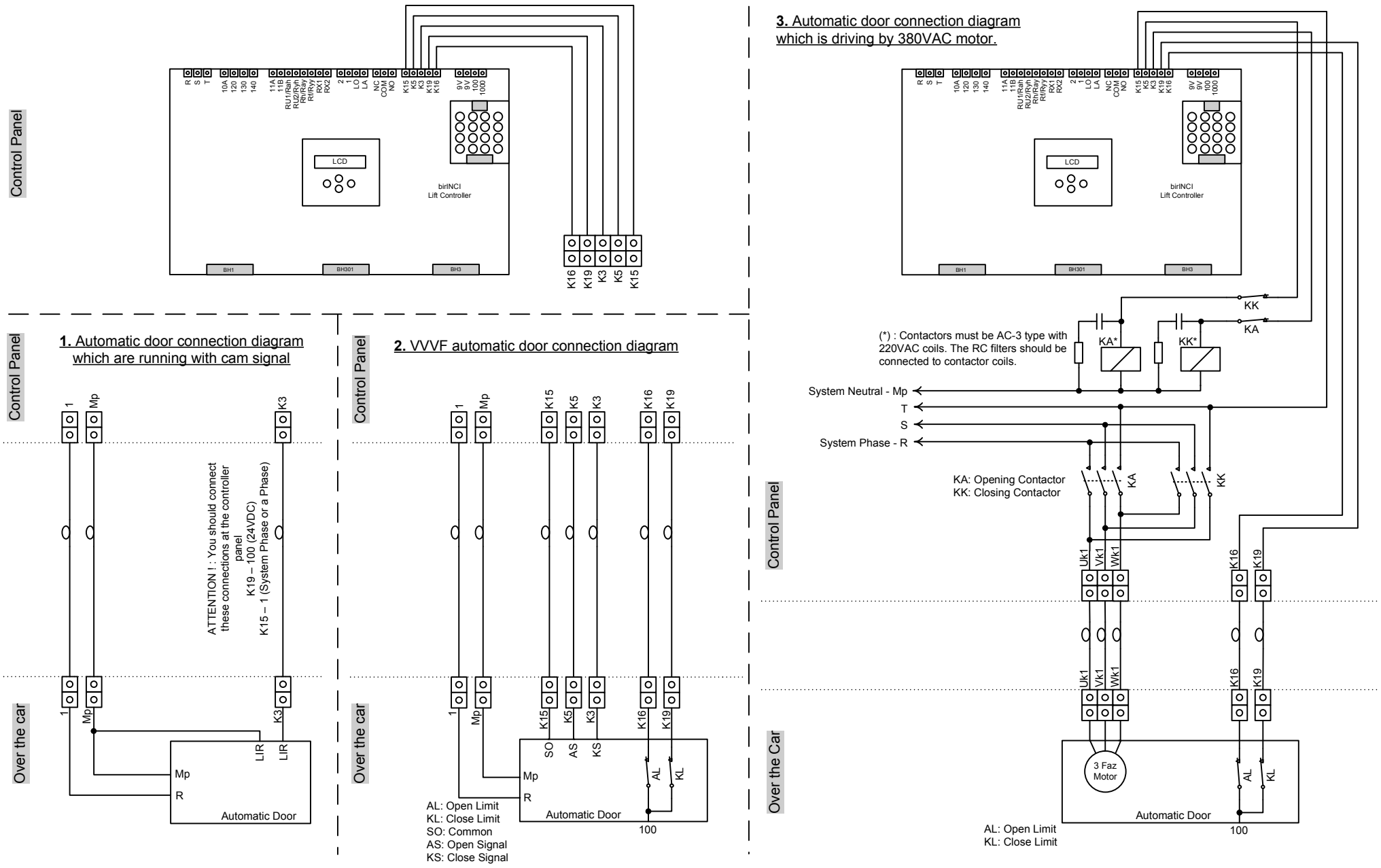
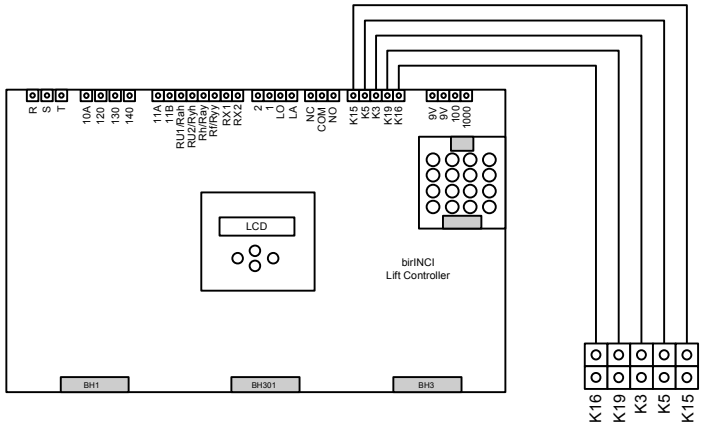
Project Name birINCI Controller Board					Drawer ZD	
Drawing Name Car connections					Control SH	
Description	Project No **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 31		



asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name birINCI Controller Board				CE	Drawer ZD
	Drawing Name Serial Cabin Connections (With TeleKon Serial Communication Board)					Control SH
	Description	Project No **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK		Page 32

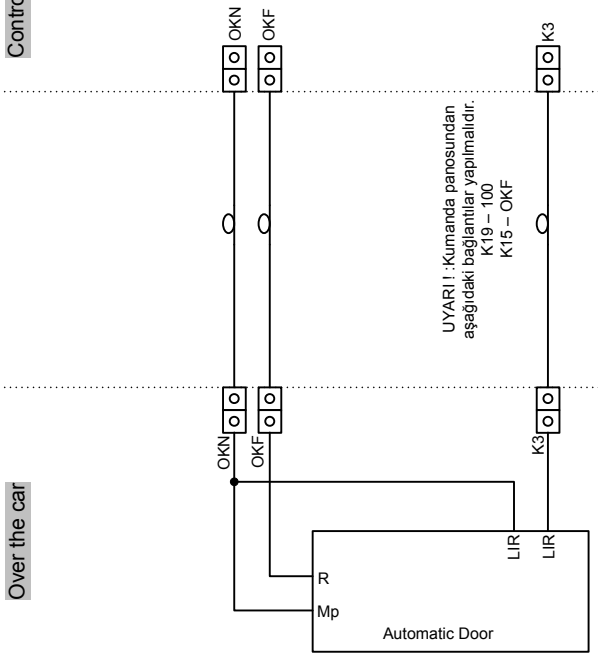


asronik ELEVATOR CONTROL SYSTEMS — Asronik Elevator & Electronic Ltd.Sti. Elevator Control Systems Tel : +90.332. 342 41 39 - Fax: 0.332. 342 41 43 www.asronik.com	Project Name birINCI Controller Board			CE	Drawer ZD
	Drawing Name Door connections for panels without UPS rescue system				Control SH
	Description	Project No **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 33

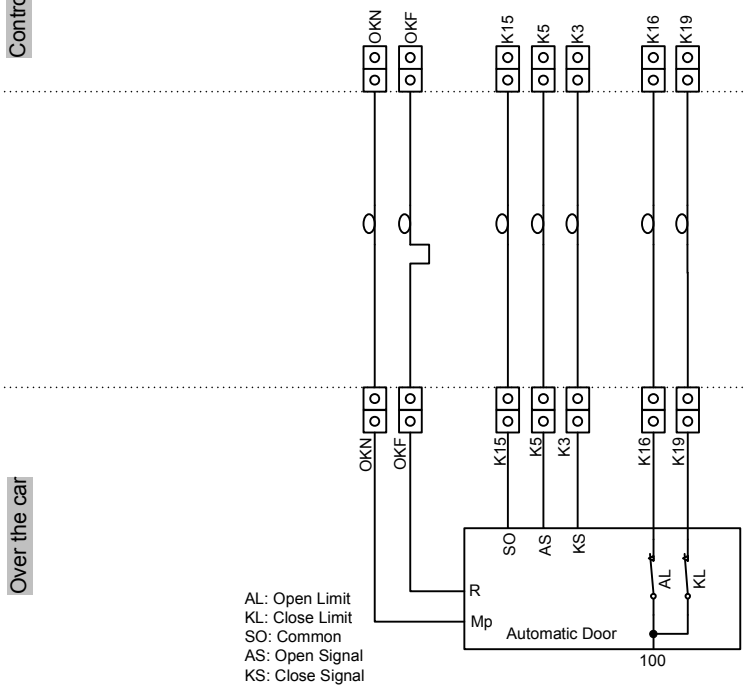


NOTE :
THE CONTROLLER PANELS WHICH ARE EQUIPPED WITH UPS RESCUE SYSTEM IS NOT WORKING WITH THREEPHASE MOTOR DRIVEN AUTOMATIC DOORS!

1. Automatic door connection diagram which are running with cam signal



2. VVVF automatic door connection diagram



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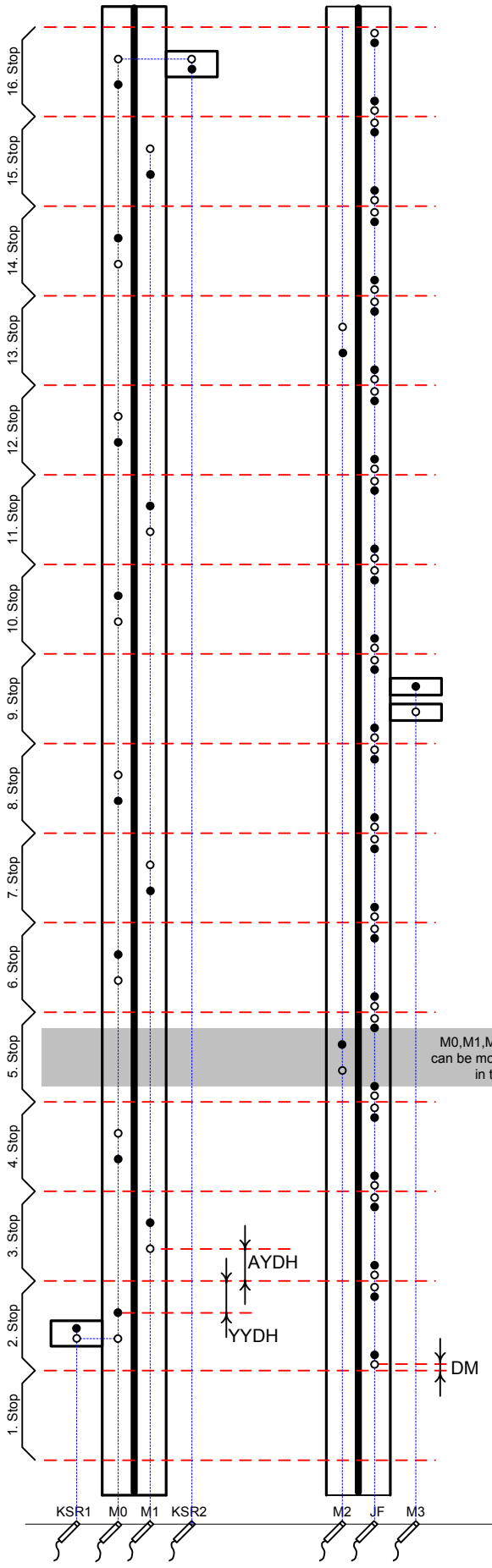
Project Name	birINCI Controller Board				Drawer	ZD
Drawing Name	Door connections for panels with UPS rescue system				Control	SH
Description		Project No	Dxx-xxx-BI-ORTAK-0.00	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 34



birINCI control card LED informations

Stop	M3	M2	M1	M0	817	818
16	●	○	○	○	●	○
15	●	○	○	●	●	●
14	●	○	●	●	●	●
13	●	○	●	○	●	●
12	●	●	●	○	●	●
11	●	●	●	●	●	●
10	●	●	○	●	●	●
9	●	●	○	○	●	●
8	○	●	○	○	●	●
7	○	●	○	●	●	●
6	○	●	●	●	●	●
5	○	●	●	○	●	●
4	○	○	●	○	●	●
3	○	○	●	●	●	●
2	○	○	○	●	●	●
1	○	○	○	○	○	●

M0 : Gray code bi-stable switch
M1 : Gray code bi-stable switch
M2 : Gray code bi-stable switch
M3 : Gray code bi-stable switch
JF : Floor leveling bi-stable switch
KSR1 : Lower limit bi-stable switch
KSR2 : Higher limit bi-stable switch
DM : Stopping distance
AYDH : Low speed distance for down direction
YYDH : Low speed distance for up direction

○ : Bi-stable switch at on state (The led on the controller is light off)
● : Bi-stable switch at off state (The led on the controller is light on)

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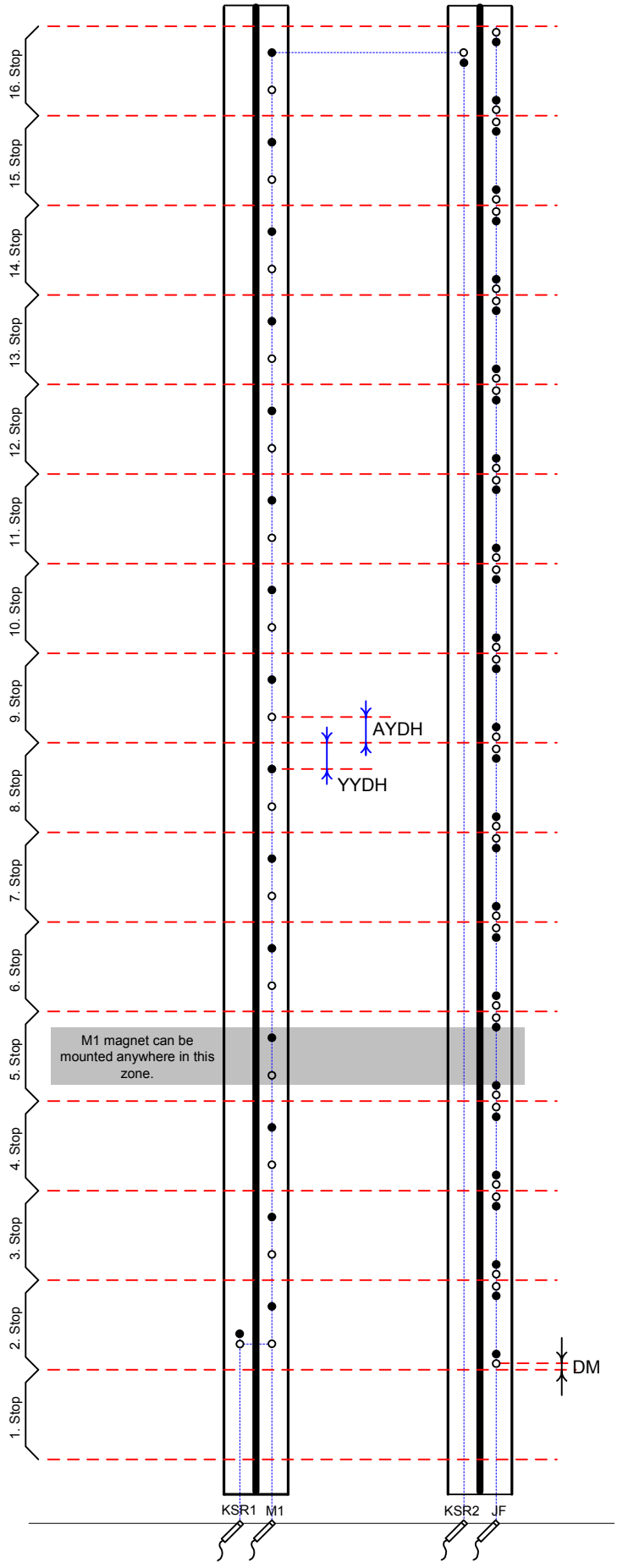
Project Name	birINCI Controller Board	CE	Drawer ZD
Drawing Name	Gray code magnetic order for rope lifts		Control SH
Description	**Project No** **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK / Page 35



If the speed of the lift lower than 1 m/sn then the use of M1 magnetic is sufficient. But P4.4-Neighbour Stop Number" must be set to "CANCEL".

NOTE: The distance between M1 magnet and floors are shown as a model. These magnets can be mounted anywhere between two black magnets of JF in the same stop because of to make a floor setting. But the distance must be 8-10cm between two side by side mounted M1 magnets.

IMPORTANT NOTE: This schema IS NOT USED on DOOR PRE-OPENING function activated ROPE LIFTS and HYDROLIC LIFTS.

M1 : Counter bi-stable switch
JF : Floor leveling bi-stable switch
KSR1 : Lower limit bi-stable switch
KSR2 : Higher limit bi-stable switch
DM : Stopping distance
AYDH : Low speed distance for down direction
YYDH : Low speed distance for up direction

○ : Bi-stable switch at on state (The led on the controller is light off)
● : Bi-stable switch at off state (The led on the controller is light on)

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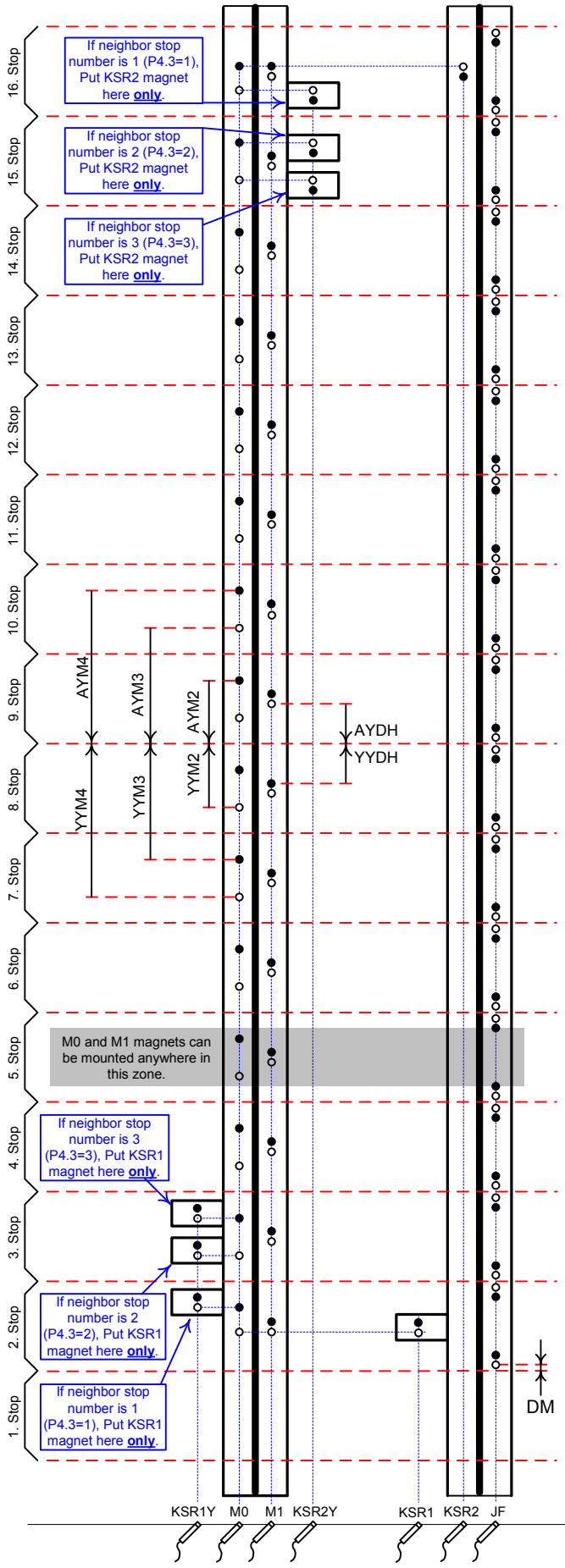
Project Name	birINCI Controller Board		Drawer ZD
Drawing Name	For Door pre-opening feature is NOT ACTIVATED rope lifts, counter system bistable magnets order (For lower and equal speeds than 1 m/s)		Control SH
Description	**Project No** **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 36



Suggested declaration zones is shown below.
1,7 meters for 1,2 m/s speed lifts
2,0 meters for 1,4 m/s speed lifts
2,2 meters for 1,6 m/s speed lifts
2,6 meters for 1,8 m/s speed lifts
2,8 meters for 2,0 m/s speed lifts
Mount M0 magnets on the right places according to these distances.

birINCI controller system can set two different slowing down points for neighbor and distant calls for the lifts with speeds more than 1,0m/sec. For neighbor calls the lift starts to slow down in regard to the information coming from M1 magnet.
Neighbor stops number can be adjusted in “P4.3-NeighborStopNumber” parameter. Therefore, decleration distance for neighbor calls must be like below.
YYDH : Low speed distance for up direction
AYDH : Low speed distance for down direction

For distant calls, the lift starts to slow down in regard to the information coming from M0 magnet. So, deceleration distances must be like below.
YYM2 : Deceleration distance for up direction in case of neighbor stop number is 1
YYM3 : Deceleration distance for up direction in case of neighbor stop number is 2
YYM4 : Deceleration distance for up direction in case of neighbor stop number is 3

AYM2 : Deceleration distance for down direction in case of neighbor stop number is 1
AYM3 : Deceleration distance for down direction in case of neighbor stop number is 2
AYM4 : Deceleration distance for down direction in case of neighbor stop number is 3

Mount KSR1Y and KSR2Y lower and higher limit stopper to marked points which are according to “P4.3=NeighborStopNumber” parameter

NOTE: The distance between M0 - M1 magnets and floors are shown in the figure as a model. These magnets can be mounted anywhere between two black magnets of JF in the same stop because of to make a floor setting. But the distance must be adjusted as 15-20cm between two side by side mounted M0 and M1 magnets.

IMPORTANT NOTE: This schema IS NOT USED on DOOR PRE-OPENING function activated ROPE LIFTS and HYDROLIC LIFTS.

M0 : Counter bi-stable switch
M1 : Counter bi-stable switch
JF : Floor leveling bi-stable switch
KSR1 : Lower limit stopper bi-stable switch (Connect to 817 terminal)
KSR2 : Higher limit bi-stable switch (Connect to 818 terminal)
KSR1Y : Lower limit bi-stable switch (Connect to 817Y terminal)
KSR2Y : Upper limit bi-stable switch (Connect to 818Y terminal)
DM : Stopping distance

- o : Bi-stable switch at on state (The led on the controller is light off)
- ● : Bi-stable switch at off state (The led on the controller is light on)

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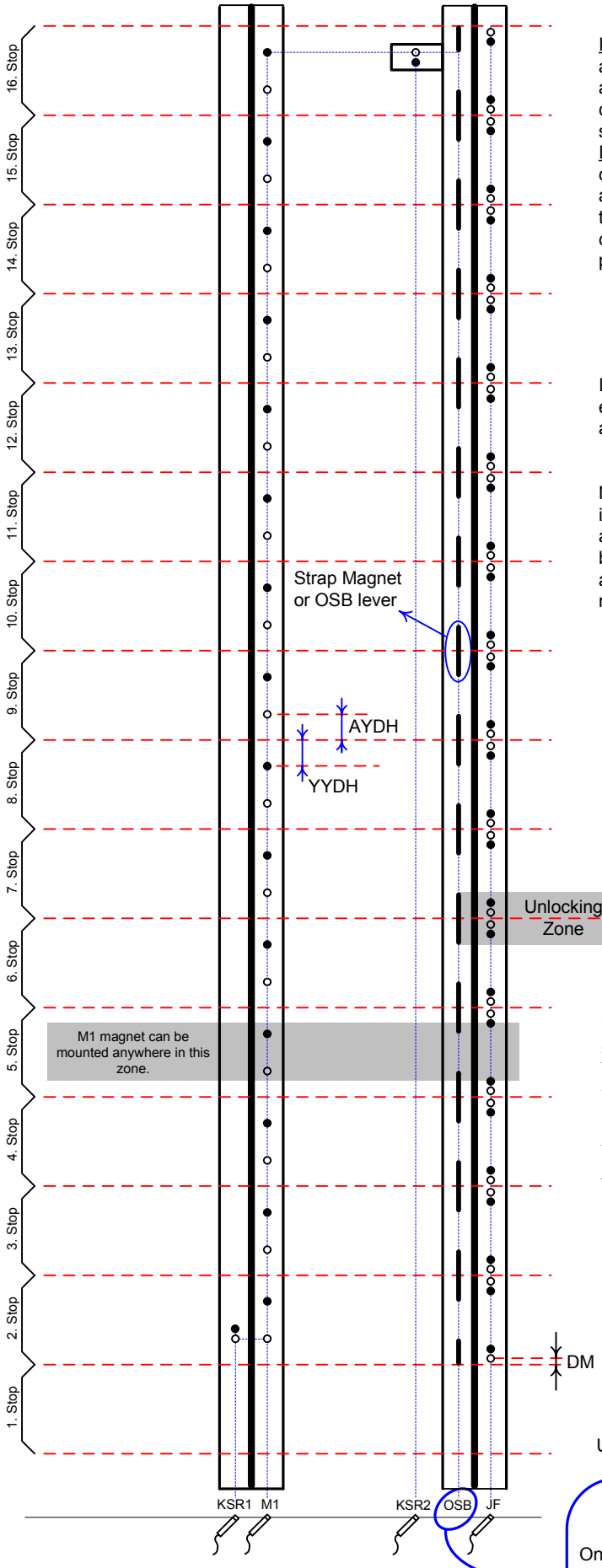
Project Name	birINCI Controller Board			Drawer	ZD
Drawing Name	For Door pre-opening feature is NOT ACTIVATED rope lifts, counter system bistable magnets order (Till 2 m/s speed)			Control	SH
Description	**Project No** **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page	37

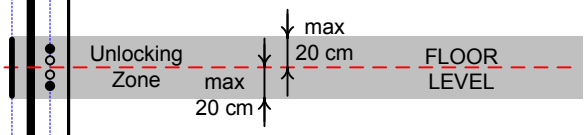


IMPORTANT NOTE: EN 81-1 and EN 81-2 give permission for adjust the unlocking zone as maximum 20cm under and 20 cm above from stop floor level. This zone is declarated to control card by using strap magnet, mono-stable switch or wheeled switch, OSB lever.
IMPORTANT NOTE: Be sure about lenght of the retractable cam is adequate to lenght of unlocking zone which was adjusted by yourself. When door pre-opening function is active, the control card will open the door when the OSB led lights. The car must be enter to the cam zone at this time. Otherwise, some permanent damages may occur on your door system.

If the speed of lift is lower than 1 m/sn, to use only M1 magnet is enough. But "P4.4-NeighborStopNumber" parameter has to be adjusted as **"CANCEL" CERTAINLY.**

NOTE: The distance between M1 magnet and floors are shown in the figure as a model. These magnets can be mounted anywhere between two black magnets of JF in the same stop because of to make a floor setting. But the distance must be adjusted as 8-10cm between side by side mounted two M1 magnets.

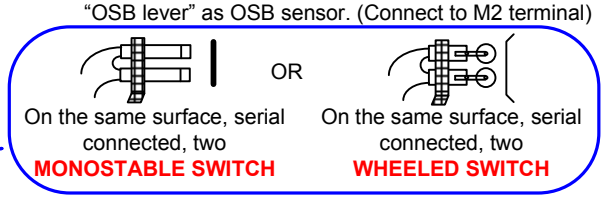
NOTE1: Screw strap magnets on the guide-rail of the car.
NOTE2: It is suggested to use limit switches instead of OSB mono-stable switches.
NOTE3: To make an operation for door pre-opening, ESP card must be integrated and this feature must be activated from the menu.



M1 : Counter bi-stable switch
OSB : Automatic releveling zone monostable switch or wheeled switch. OSB led must light only at unlocking zone. (Connect to M2 terminal.)
JF : Floor leveling bistable switch
KSR1 : Lower limit bi-stable switch
KSR2 : Higher limit bi-stable switch
YYDH : Low speed distance for up direction
AYDH : Low speed distance for down direction
DM : Stopping distance

- o : Bi-stable switch at on state (The led on the controller is light off)
- ● : Bi-stable switch at off state (The led on the controller is light on)

Use "strap magnet", "mono-stable switch" or "wheeled switch", "OSB lever" as OSB sensor. (Connect to M2 terminal)



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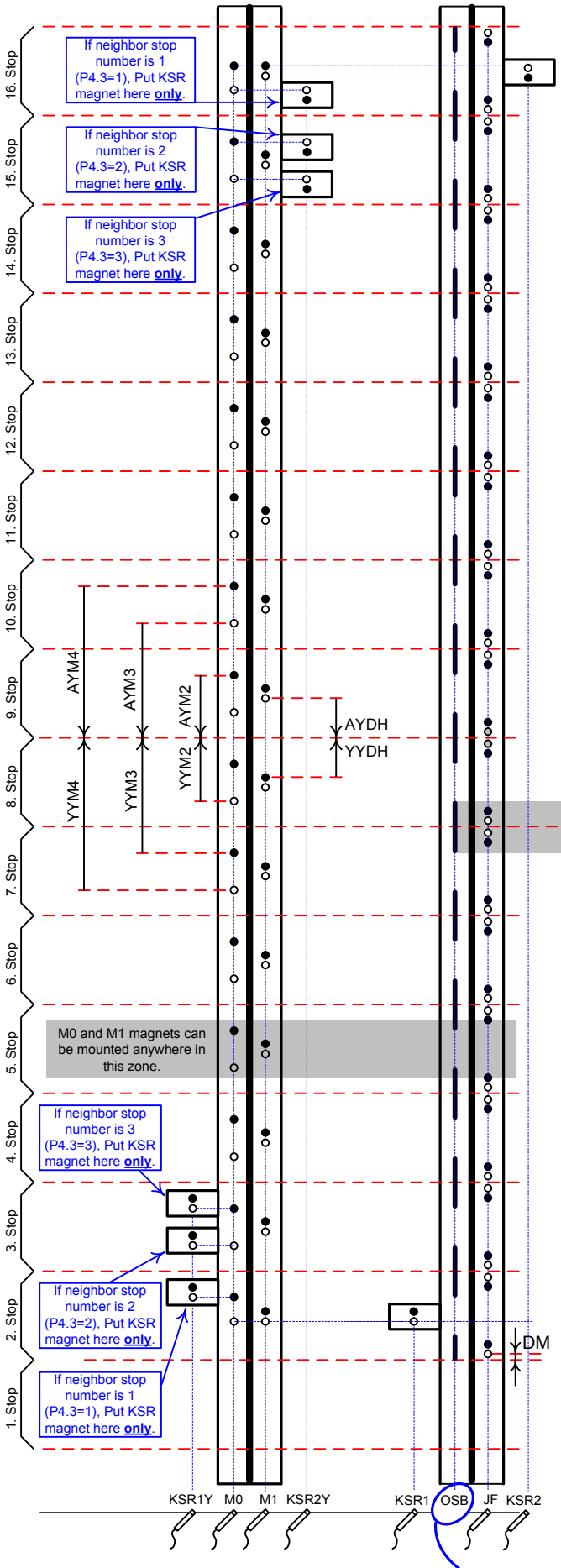
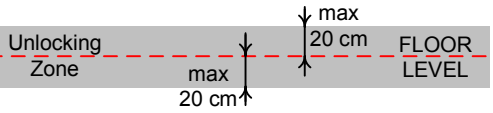
Project Name	birINCI Controller Board		Drawer ZD
Drawing Name	For Door pre-opening feature is ACTIVATED rope lifts, counter system bistable magnets order (For lower and equal speeds than 1 m/s)	CE	Control SH
Description	**Project No** **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 38



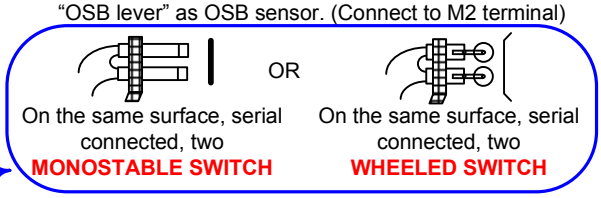
birINCI controller system can set two different slowing down points for neighbor and distant calls for the lifts with speeds more than 1,0m/sec. For neighbor calls the lift starts to slow down in regard to the information coming from M1 magnet.
Neighbor stops number can be adjusted in “P4.3-NeighborStopNumber” parameter. Therefore, decleration distance for neighbor calls must be like below.
YYDH : Low speed distance for up direction
AYDH : Low speed distance for down direction
On birINCI, for distant calls, the lift starts to slow down in regard to the information coming from M0 magnet. So, deceleration distances must be like below.
YYM2 : Deceleration distance for up direction in case of neighbor stop number is 1
YYM3 : Deceleration distance for up direction in case of neighbor stop number is 2
YYM4 : Deceleration distance for up direction in case of neighbor stop number is 3
AYM2 : Deceleration distance for down direction in case of neighbor stop number is 1
AYM3 : Deceleration distance for down direction in case of neighbor stop number is 2
AYM4 : Deceleration distance for down direction in case of neighbor stop number is 3
Mount KSR1Y and KRS2Y lower and higher limit stopper to marked points which are according to “P4.3=NeighborStopNumber” parameter
NOTE1: The distance between M0 - M1 magnets and floors are shown in the figure as a model. These magnets can be mounted anywhere between two black magnets of JF in the same stop because of to make a floor setting. But the distance must be adjusted as 8-10cm between two side by side mounted M0 and M1 magnets.
NOTE2: Screw strap magnets on the guide-rail of the car.
NOTE3: It is suggested to use limit switches instead of OSB mono-stable switches.
NOTE4: To make an operation for door pre-opening, ESP card must be integrated and this feature must be activated from the menu.



IMPORTANT NOTE: EN 81-1 and EN 81-2 give permission for adjust the unlocking zone as maximum 20cm under and 20 cm above from stop floor level. This zone is declarated to control card by using strap magnet, mono-stable switch or wheeled switch, OSB lever.
IMPORTANT NOTE: Be sure about lenght of the retractable cam is adequate to lenght of unlocking zone which was adjusted by yourself. When door pre-opening function is active, the control card will open the door when the OSB led lights. The car must be enter to the cam zone at this time. Otherwise, some permanent damages may occur on your door system.

M0 : Counter bi-stable switch
M1 : Counter bi-stable switch
OSB : Automatic releveling zone monostable switch or wheeled switch.
OSB led must light only at unlocking zone. (Connect to M2 terminal.)
JF : Floor leveling bistable switch
KSR1 : Lower limit bi-stable switch (Connect 817 terminal)
KSR2 : Low speed higher limit bi-stable switch (Conn. 818 terminal)
KSR1Y : High speed lower limit bi-stable switch (Connect to 817Y terminal)
KSR2Y : High speed upper limit bi-stable switch (Connect to 818Y terminal)
DM : Stopping distance
o : Bi-stable switch at on state (The led on the controller is light off)
● : Bi-stable switch at off state (The led on the controller is light on)

Use “strap magnet”, “mono-stable switch” or “wheeled switch”, “OSB lever” as OSB sensor. (Connect to M2 terminal)



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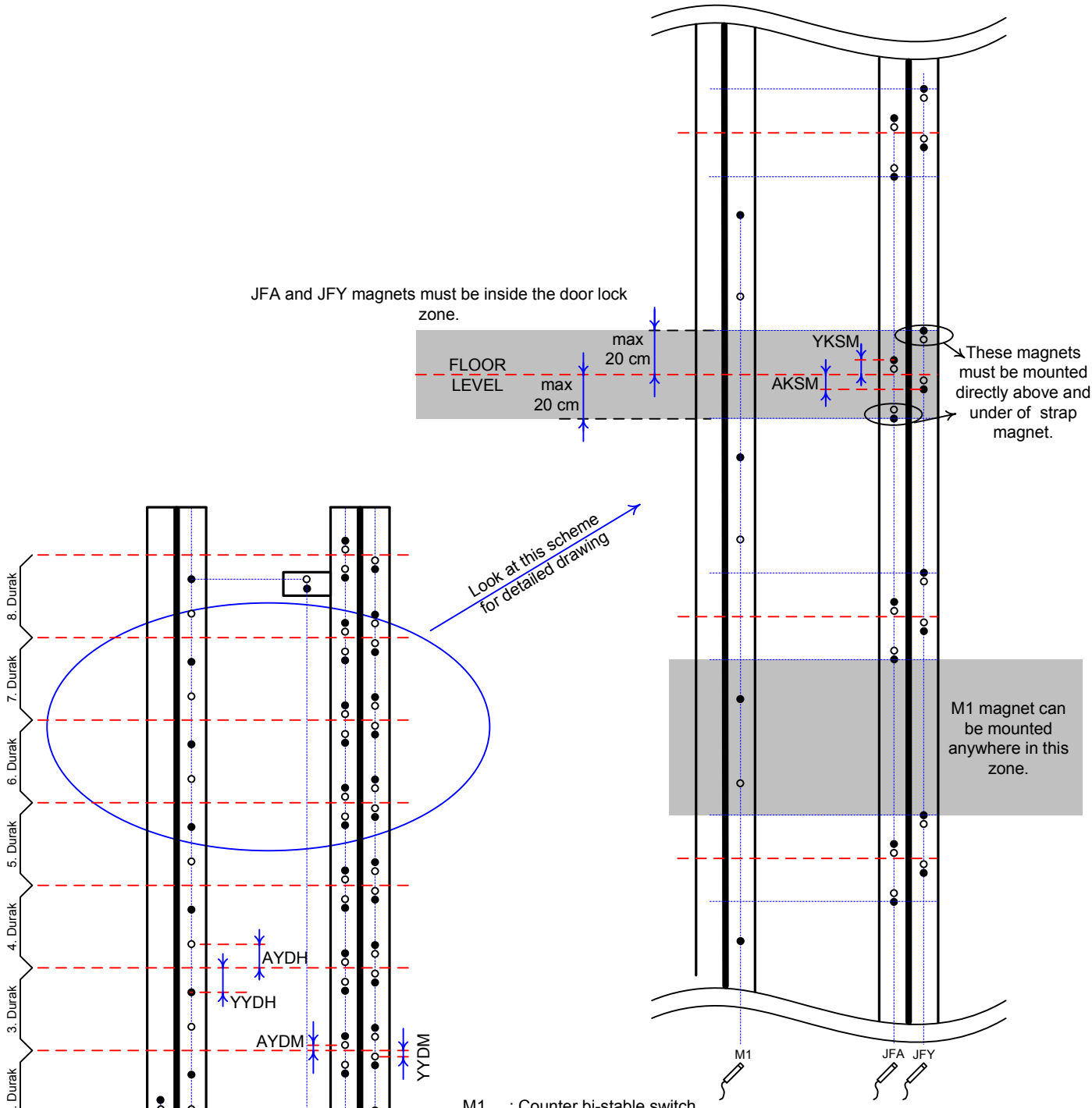
Project Name	birINCI Controller Board		Drawer ZD
Drawing Name	For Door pre-opening feature is ACTIVATED rope lifts, counter system bistable magnets order (Till 2 m/s speed)	CE	Control SH
Description	Project No Dxx-xxx-BI-ORTAK-0.00	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 39



M1 : Counter bi-stable switch
JFA : Floor releveling bi-stable switch for down direction. (Connect to M3 terminal)
JFY : Floor releveling bi-stable switch for up direction. (Connect to 142 terminal)
KSR1 : Lower limit bi-stable switch
KSR2 : Higher limit bi-stable switch
YYDH : Low speed distance for up direction
AYDH : Low speed distance for down direction
YYDM : Stopping distance for up direction
AYDM : Stopping distance for down direction
AKSM : Releveling start distance after slip to down
YKSM : Releveling start distance after slip to up
- o : Bi-stable switch at on state (The led on the controller is light off)
- ● : Bi-stable switch at off state (The led on the controller is light on)

NOTE1: This magnet order is using with closed door releveling function. If you don't want to use releveling function, set the "1.12-Releveling=Cancel" and use only one JF magnet and connect this JF signals to JFA and JFY terminals together.
NOTE2: There is no need to use ESP card on hydrolic lifts which haven't got "Releveling with open doors" feature.

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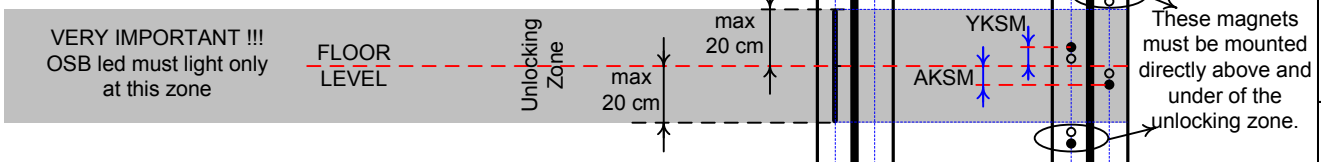
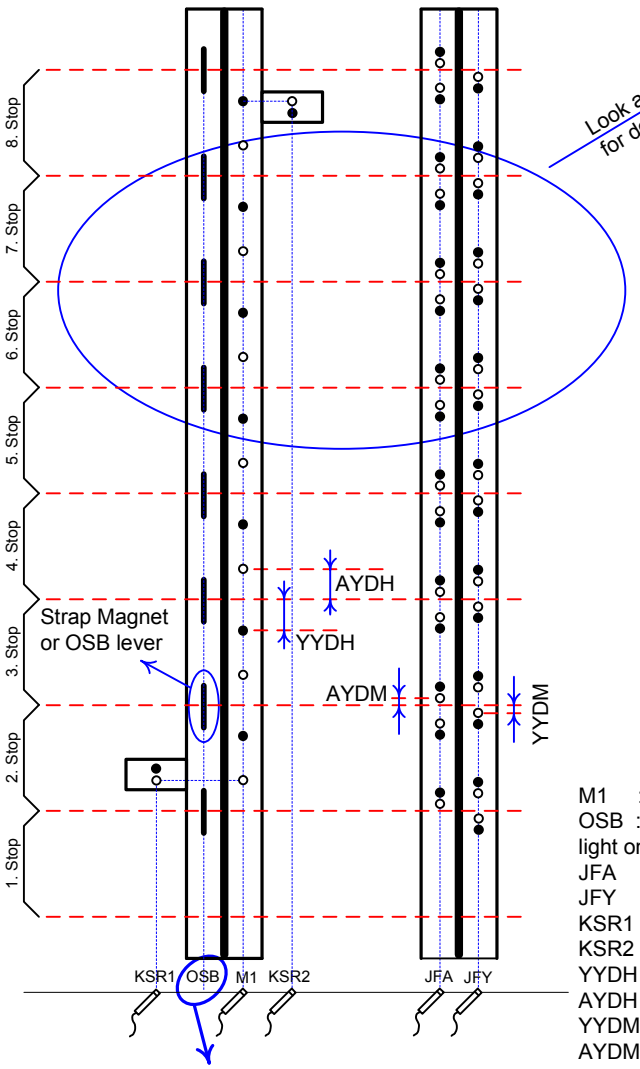
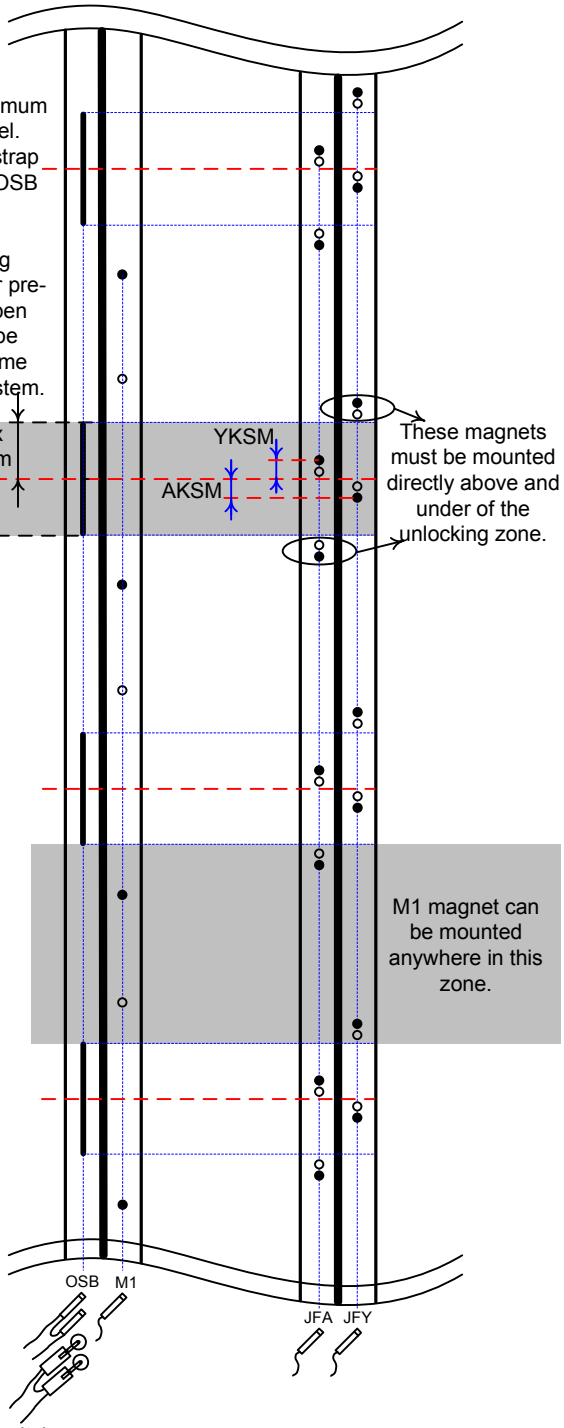
Project Name	birINCI Controller Board			Drawer	ZD
Drawing Name	Magnets order for "Releveling with open doors" and/or "door pre-opening" features are NOT ACTIVATED hydrolic lifts.			Control	SH
Description	**Project No** **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page	40

IMPORTANT NOTE: EN 81-1 and EN 81-2 give permission for adjust the unlocking zone as maximum 20cm under and 20 cm above from stop floor level. This zone is declared to control card by using strap magnet, mono-stable switch or wheeled switch, OSB lever.

IMPORTANT NOTE: Be sure about lenght of the retractable cam is adequate to lenght of unlocking zone which was adjusted by yourself. When door pre-opening function is active, the control card will open the door when the OSB led lights. The car must be enter to the cam zone at this time. Otherwise, some permanent damages may occur on your door system.

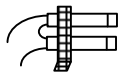






M1 : Counter bi-stable switch
OSB : Automatic releveling zone monostable switch or wheeled switch. OSB led must light only at unlocking zone. (Connect to M2 terminal.)
JFA : Floor leveling bi-stable switch for down direction (Connect to M3 terminal)
JFY : Floor leveling bi-stable switch for up direction (Connect to 142 terminal)
KSR1 : Lower limit bi-stable switch
KSR2 : Higher limit bi-stable switch
YYDH : Low speed distance for up direction
AYDH : Low speed distance for down direction
YYDM : Stopping distance for up direction
AYDM : Stopping distance for down direction
AKSM : Releveling start distance after slip to down
YKSM : Releveling start distance after slip to up
o : Bi-stable switch at on state (The led on the controller is light off)
● : Bi-stable switch at off state (The led on the controller is light on)

Use “strap magnet”, “mono-stable switch” or “wheeled switch”, “OSB lever” as OSB sensor.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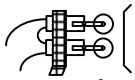

On the same surface, serial connected, two **MONOSTABLE SWITCH**

On the same surface, serial connected, two **WHEELED SWITCH**

NOTE1: Screw strap magnets on the guide-rail of the car.
NOTE2: It is suggested to use limit switches instead of OSB mono-stable switches.
NOTE3: To make an operation for door pre-opening, ESP card must be integrated and this feature must be activated from the menu.

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Project Name	birINCI Controller Board		Drawer ZD
Drawing Name	Magnets order for “Releveling with open doors” and/or “door pre-opening” features are ACTIVATED hydrolic lifts.		Control SH
Description	**Project No** **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 41

CALL BUTTONS CONNECTION PRINCIPLE

Call Inputs of Control Board

CONTROL TYPE \ CALL TERMINALS	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16
Simple Collective Complex Collective (Maximum 16 stops)	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416
One button down collective One button up collective One button full collective (Maximum 8 stops)	601	602	603	604	605	606	607	608	401	402	403	404	405	406	407	408
Two button full collective (Maximum 6 stops)	202	203	204	205	206	301	302	303	304	305	401	402	403	404	405	406

202-216 : Down external calls.
301-315 : Up external calls.
401-416 : Car internal calls.
601-616 : External calls.

CALL BUTTONS CONNECTION PRINCIPLE WITH ADDITIONAL CALL CARD

Call Inputs of Control Board

Call Inputs of ECK16 Call Card

CONTROL TYPE \ CALL TERMINALS	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16
One button down collective One button up collective One button full collective (Maximum 16 stops)	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416
Two button full collective (Maximum 11 stops)	202	203	204	205	206	207	208	209	210	211	301	302	303	304	305	306	307	308	309	310	401	402	403	404	405	406	407	408	409	410	411	BOŞ

CALL BUTTONS CONNECTION PRINCIPAL

Call Inputs of Control Card

CONTROL TYPE \ CALL TERMINALS	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16
Simple Collective Complex Collective One button down collective One button up collective One button full collective (Maximum 16 stops)	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616
Two button full collective (Maximum 9 stops)	202	203	204	205	206	207	208	209	301	302	303	304	305	306	307	308

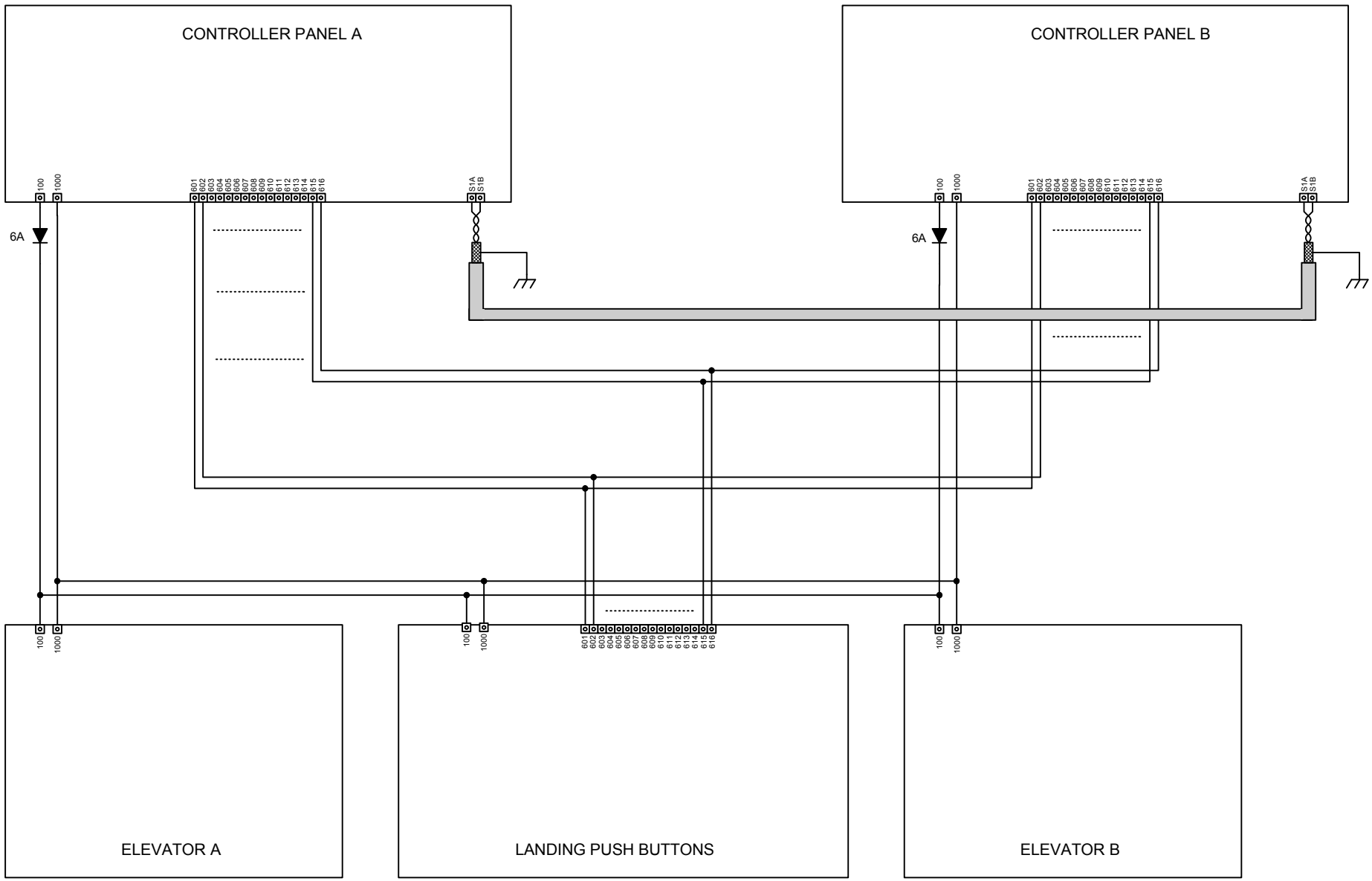
NOTE: Car calls are connected to serial communication card which is mounted to above the car.

202-216 : Down external calls.
301-315 : Up external calls.
401-416 : Car internal calls.
601-616 : External calls.

CALL BUTTONS CONNECTION PRINCIPAL WITH ADDITIONAL CALL CARD

Call Inputs of Control Card — Call Inputs of ECK16 Call Card

CONTROL TYPE \ CALL TERMINALS	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16
Two button full collective (Maximum 16 stops)	BOŞ	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	BOŞ



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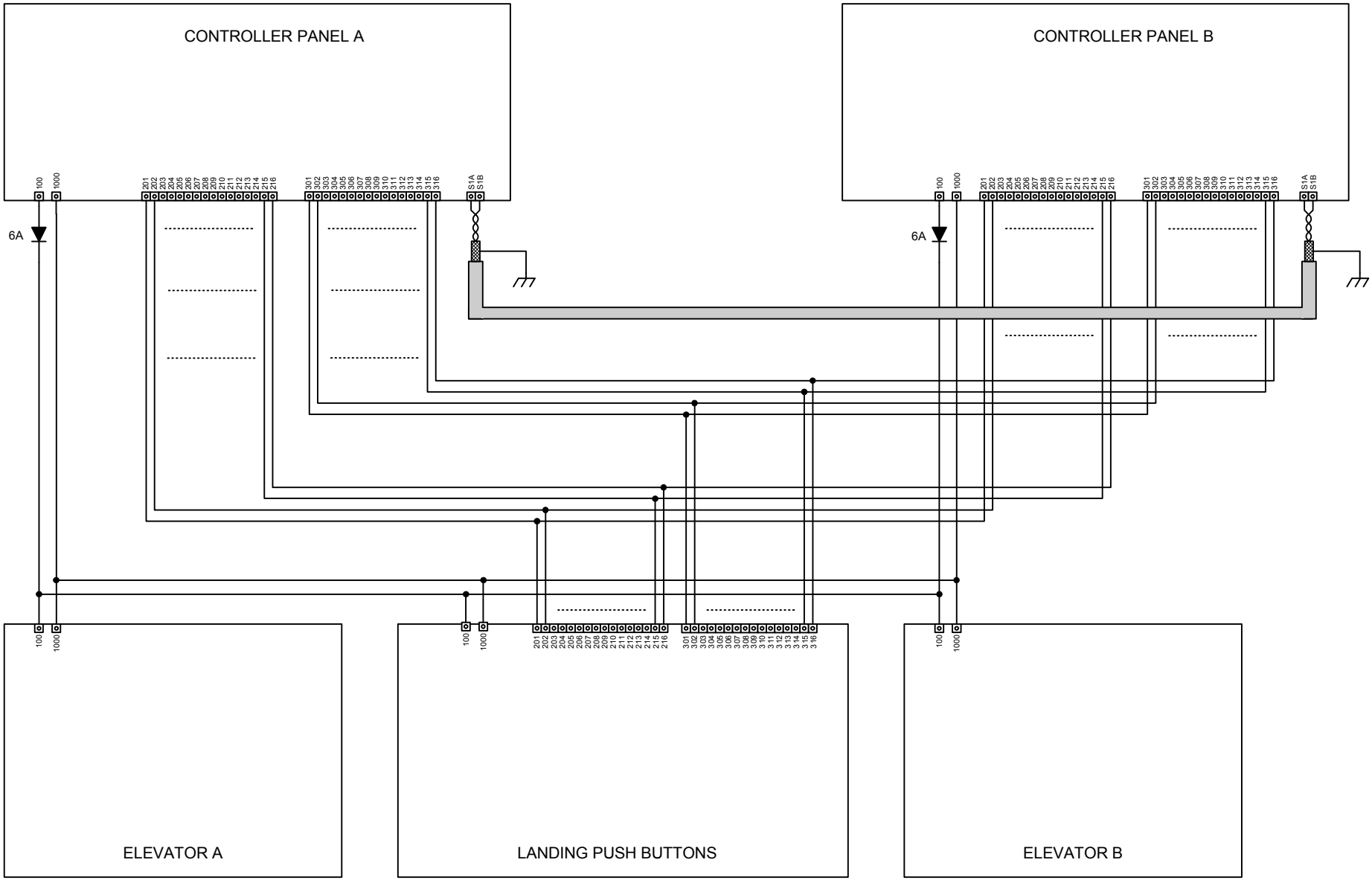
Project Name	birINCI Controller Board				Drawer	ZD
Drawing Name	Single LOP Pushbutton connection principle for Dublex Lifts.				Control	SH
Description		Project No	Dxx-xxx-BI-ORTAK-0.00	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK	Page 44



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	Drawing Name Double LOP Pushbutton connection principle for Dublex Lifts.					Control SH
	Description	Project No **Dxx-xxx-BI-ORTAK-0.00**	Date 20.08.2010	Group Dxx-xxx-BI-ORTAK		Page 45

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