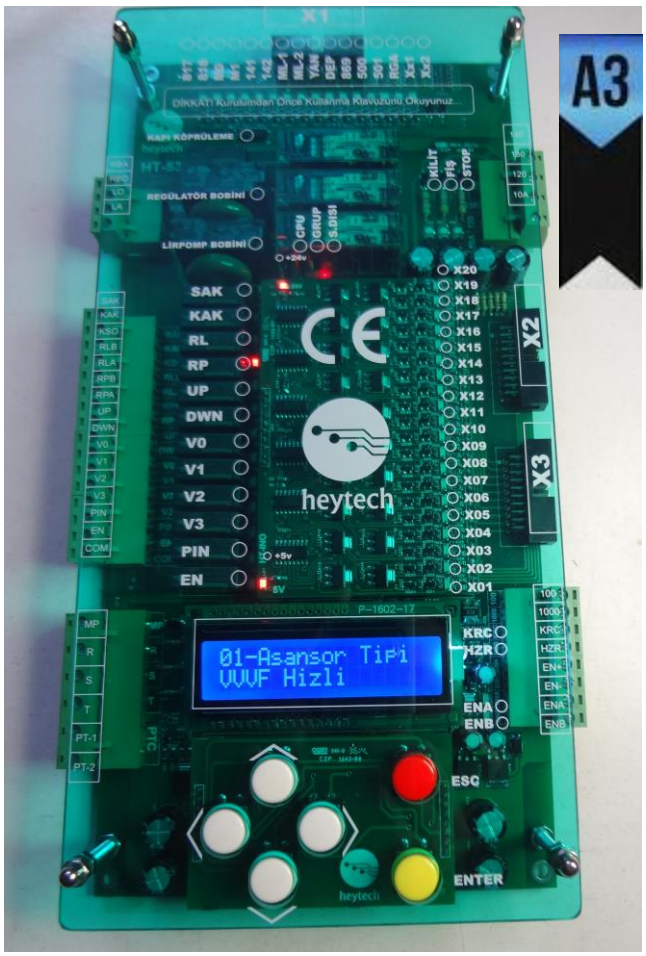
heytech

HT-53 ASANSÖR KUMANDA KARTI
(LİFT CONTROL CARD)



KULLANIM KILAVUZU
(USER MANUEL)

EN81-1/2+A3 **CE 103.3784**

SAFETY NOTES

HEYTECH HT-53 Control card, comply with EN81-1/2 +A3 standard, is an integrated and electronic control card that has been designed for drive type hydraulic and roped Lifts. Users can make the programs of control card according to control and Lift system utilised by them by means of the keyboard on the LCD screen.
The system can make level renovation and early door opening with built-in door bridging relays.
There are built-in door relays for double automatic doors.
There is built-in phase control circuit.
For the Lift system to be electrically complies with EN81-1/2+A3 standards:

 the electrical connections of the control card and control panel should be appropriate.

 Check certainly whether there is earth connection or not. Connect especially control panel, motor body, all safety device, cabin and its suspension to the earth line.

 Do not remove the glass housing without cutting the power of the control card.

 Dust, dirt, oil and rusting arising from the long-time working may prevent the good operation of the safety devices. During periodic maintenances, necessary cleaning should be performed.

 If your system has A3 compatible speed regulator, do not cancel its electrical and mechanical connection

 If your motor has mechanical brake switches, connect them.

This document has been prepared to inform the users. HEYTECH cam make changes the content of the document, if required.

LİST OF PARAMETERS

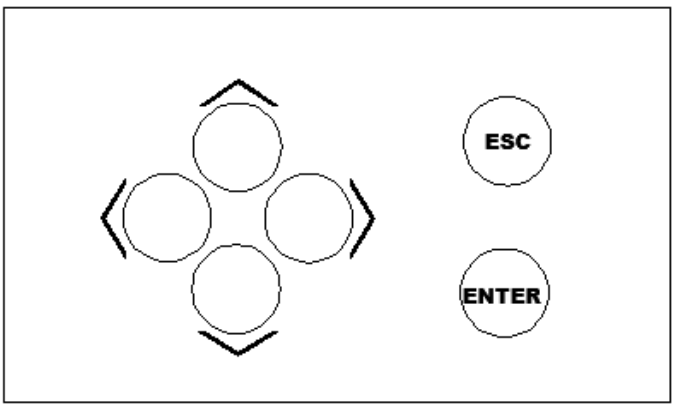
00-First Installation
01-Lift Type
02-Command Type
03-Number of Floors
04-Number of Basement
05-Door Type
06-Busy Time
07-Lock Waiting Time
08-Waiting Time on the Floor
09-High Speed Time
10-Low Speed Time
11-Door Maximum Time
12-Park Going Time
13-Parking Floor
14-Fire Park Floor
15-Dırectıon Arrow Flash
16-Password Change
17-Paswword Cancel
18-Maintenance Done
19-Maintenance Time
20-Error List
21-Digital Settings
22-Door Special Setting
23-Rescue (active/passive)
24-Group ID
25-Gong Signal
26-Phase Control
27-Ptc (Thermostat)
28-Car Serial Card
29-Auto Door Opening Time
30-Single Door Full Automatic
31-RP Delay >>>>>> (for roped VVVF and Hydraulic Lifts)
32-Revision Movement Style
33-Door Pre Opening
34-Star-Triangle >>>>>> (for Hydraulic Lifts)
35-Engıne Valve Time >>>>>> (for Hydraulic Lifts)
36-Door Open Releveling
37-The Bottom Floor
38-Early Opening Way
39-Call Transfer
40-G0,G1,G2,G3,G4 Outputs
41-Maximum Car Call
42-Safety Delay
43-Mechanical Brake Monitoring
44-Counter Type
45-Go After Jf
46-Photocel Time
47-KRC (Contactor Control)
48-Encoder Multiplier
49-Auto Door At Floor
50-Position Reset
51-Regulator Monitoring
52-Floor Decline Correction
53-Floor Rising Correction
54-Audio Settings
55-Deceleration Coefficient
56-UCM TEST
57-Restore Factory Settings

HT-53 TECHNICAL SPECIFICATIONS

Length-Width-Height (mm)	285-136-30
Protection Class	IP20
Operating Temperature	±0 - +60 °C
Network Control Inputs	3 x 380V, 50Hz, N
Control Supply Voltage	24 ± 5 Vdc
Power Consumption	Max.400mA 10W, for 24V
Safety Current Tension	230Vac
Control Signal Input	24 ± 5 Vdc
Control Signal Output	24 ± 5 Vdc
Emergency Lowering Voltage in Hydraulic	24Vdc

- 2-row 16-characters LCD screen and 6-button keyboard
- RS-485 series communication for group working
- RS-485 serial communication with cabin for serial installation connection
- In-built door bridging safety circuit
- In-built phase ordered motor protection circuit
- In-built control inputs and outputs for two automatic doors
- Digital and signal outputs with short circuit protection
- 7-segment adjustable from menu for indicators, Gray and Binary code outputs
- Emergency lowering with ups support in hydraulic lifts
- Recovery function by vvvf driver in roped lifts

KEYBOARD FEATURES



Menu can be adjusted via the keyboard easilyand error records can be seen; record can be given to the desired station and lift can be observed.

- **Entering to the menu:** Press the Enter button to enter the menu
- **Exit the menu:** Press the Esc button and then Enter button to exit the menu
- **Entering to Manuel movement:** Enter to revision movement via the card by pressing Ecs button for 3 seconds
- **Well copying:** Press on Esc button for 2 seconds while the lift is in revision

HT-53 Symbols of the Control Card

R,S,T	Main Phase
MP	Neutral
10A	Safety Circuit Neutral Return/ Neutral Output of the Contactors
120	Stop Circuit (max 230vac)
130	Door Plug Contact Circuit (max 230vac)
140	Door Lock Circuit (max 230vac)
PTC-1	Motor Thermistor & Panel Thermostat & Oil Thermostat (Hydraulic) &Break Resistance Thermostat
PTC-2	Motor Thermistor & Panel Thermostat & Oil Thermostat (Hydraulic) &Break Resistance
RBO	Regulator Coil Joint
RBA	Regulator Coil Openness
LO	Door Pump Relay Contact Joint
LA	Door Pump Relay Contact Openness
RPA	Engine Contactor Output is Used İn VVVF and Hydraulıc (RPA,RPB)
RPB	Engine Contactors input (RPO RPA)
RLA	Spare
RLB	Spare
SAK	Main Phase Active Contactor
KAK	Rescue Active Contactor
KSO	KAK SAK Joint
UP	Up Direction Relay Output
DWN	Down Direction Relay Output
V3	High Speed Relay Output
V2	Intermediate Relay Output
V1	Revision Speed Relay Output
V0	Low Speed Relay Output
PIN	Error Reset (not used)
EN	Releveling Relay Output
COM	V0-V1-V2-V3-En Relay Joint
100	Card Supply Input (+24v dc)
1000	Signal Circuit Graund
HZR	Ready Information Coming From the Driver
KRC	Feedback Input of the Main Contactor. The 100 signal should be connected to this input by series passing the closed contacts of the main contactors.
EN+	Encoder Supply Voltage Output (+5v dc)
EN-	Encoder Supply Voltage Output (-5v dc)
ENA	Encoder ‘A’ channel
ENB	Encoder ‘B’ channel

HT-53 Symbols of the Serial Card

S1A	Communication Input
S1B	Communication Input
1000	Signal Circuit Ground
100	Card Supply Input (+24vdc)
2	Cabin Lamp Output
1	Cabin Phase Input
A3	A Door Opening Signal Output
A5	A Door Closing Signal Output
A15	A Door Signal Joint Input
B3	B Door Opening Signal Output
B5	B Door Closing Signal Output
B15	B Door Signal Joint Input
401....420	Cabin Inside Button Inputs
2G	7 Segment Digital Output
2BC	7 Segment Digital Output
G	7 Segment Digital Output
F	7 Segment Digital Output
E	7 Segment Digital Output
D	7 Segment Digital Output
C	7 Segment Digital Output
B	7 Segment Digital Output
A	7 Segment Digital Output
32	Up Arrow Signal Output
31	Down Arrow Signal Output
02	Out of Service Signal Output
01	Overload Lamp Output
AKÜ+	Accumulator Input (+)
AKÜ-	Accumulator Input (-)
12V+	12V Output (+)
12V-	12V Output (-)
AA+	Emergency Lighting Lamp Output (+)
AA-	Emergency Lighting Lamp Output (-)
AB	Alarm Button
AB	Alarm Button
500	Revision Down Direction Signal Input
501	Revision Up Direction Signal Input
803	Minimum Load Signal Input
804	Overload Signal Input
805	Full Load Signal Input
VAT	Vatman Signal Input
K20	Door Opening Button, Photocell Signal Input
DTS	Door Closing Button Signal Input
G0	Gray & Bınary Code Outputs (set the menu)
G1	Gray & Bınary Code Outputs (set the menu)
G2	Gray & Bınary Code Outputs (set the menu)
G3	Gray & Bınary Code Outputs (set the menu)
G4	Gray & Bınary Code Outputs (set the menu)

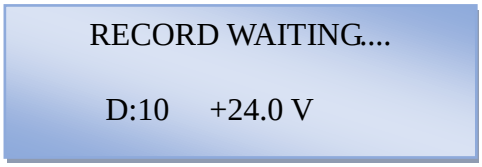
HT-53 Symbols of the Terminal Card

X1…X20	Outer Button Call Inputs
869P	Revision Key (Hand Terminal)
869K	Revision Key (Hand Terminal)
500	Revision Down Signal (Hand Terminal)
501	Revision Down Signal (Hand Terminal)
817	Down limit Mechanical Swich İnput
818	Up limit Mechanical Swich İnput
M0	Magnetic Bistable Switch Input
M1	Magnetic Bistable Switch Input
141	Magnetic Switch Input (used by Lift Drive Type)
142	Magnetic Switch Input (used by Lift Drive Type)
ML1	Door Zone Magnetic Swich input (for VVVF and Hydraulic Systems)
ML2	Door Zone Magnetic Swich input (for VVVF and Hydraulic Systems)
869	Revision Key (Well)
YAN	Fire Active Signal Input +24v dc
DEP	Earthquake Active Signal Input +24v dc
RGA	Regulator Contact Active Signal Input (It should be came a +24v dc from the contact to this input)
S1A	Serial Communication Output A Channel
S1B	Serial Communication Output B Channel
S2A	Duplex Communication Output A Channel
S2B	Duplex Communication Output B Channel
XX1	Mechanical Break Control Input for Synchronous Motor
XX2	Spare
A	7 Segment Digital Output
B	7 Segment Digital Output
C	7 Segment Digital Output
D	7 Segment Digital Output
E	7 Segment Digital Output
F	7 Segment Digital Output
G	7 Segment Digital Output
2BC	7 Segment Digital Output
2G	7 Segment Digital Output
G0	Gray & Bınary Code Outputs (set the menu)
G1	Gray & Bınary Code Outputs (set the menu)
G2	Gray & Bınary Code Outputs (set the menu)
G3	Gray & Bınary Code Outputs (set the menu)
G4	Gray & Bınary Code Outputs (set the menu)
31	Down Arrow Signal Output
32	Up Arrow Signal Output
02	Out of Service Signal Output
100	+24v dc Inputs-Outputs
1000	Signal Circuit Ground Inputs-Outputs

OPENING SCREEN

When power is given the system, the “SPLASH SCREEN” will be appeared on the LCD screen. On this screen, the software version of the card and serial number are shown. After waiting for 2 seconds, the screen will select the display called as “MAIN SCREEN”.

MAIN SCREEN



On the main screen, the station number where the lift is and the supply tension of control card are shown

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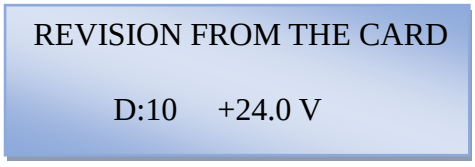
REVISION FRON THE CARD

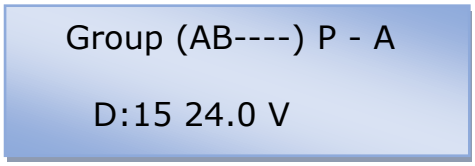


Take the lift to the position of revision from card by pressing on ECS button for 2 seconds and then move it by up-down buttons.

RECORD FROM BUTTONS

When press U-Down button, manual record monitor will appear. Select the station and then press ENTER button.

GROUP WORKING DISPLAY



On the screen, the situations of six panels on the group working are as follow:

A-B-C-D-E-F : indicates group identification for for control panels.

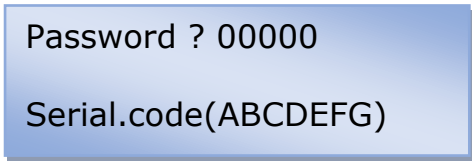
A-a : Indicates control panel with communication whether it is included in group working (If it shows lower case, the lift is not included in group)

P - A : Indicates the group identification of the controller panel

-- : indicates no existing or non-communicating control panels.

『 **:** indicates the communication speed.

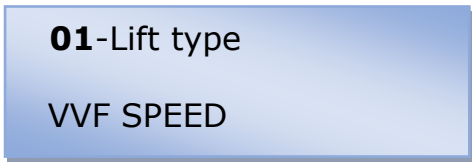
PASSWORD DISPLAY



If there is a previously determined password, enter your password by utilising the UP and DOWN buttons, then press ENTER button for confirm the password. If your password is entered correctly, first parameter will be displayed on the screen. If the password is entered incorrectly, “WRONG PASSWORD!!ENTRY DONE” warning will appear and the card will return to the main screen. Wrong password entering does not bloc your card. The card continues to its work but the system does not allow to do any changes on the parameters. You can obtain the correct password by sending the serial code to our firm.

CARD MENU

If the lift starts to operation newly, setup is made by activating this parameter.



You can set your lift drive type by this parameter.

-SINGLE SPEED LIFT : For single-speed roped lifts, this setting should be selected.
-DOUBLE SPEED LIFT : For double-speed lifts, this setting should be selected.
-ROPED VVVF : stepped geared (asynchronous machine) and gearless (synchronous machine)
-HYDRAULIC : For hydraulic lifts, this setting should be selected.

You can set your lift control type with this parameter.

● **SIMPLE CONTROL** : Cabin and floor buttons are connected in parallel. It only takes one record.
● **UNIVERSAL**: Cabin and floor buttons are connected in parallel. Record memory is kept.
● **COLLECTION IN LANDING :** Cabin and floor button are connected separately. Cabin records are collected in both directions. Floor calls are collected while the cabin is moving downward.
● **DOUBLE DIRECTION COLLECTION** : Cabin record and the Up and Down buttons of the floors are connected separately. Cabin records and floor calls are collected in accordance with the movement direction.

- **DUPLEX SPECIAL:** If station number is more than 11 in duplex lifts, the double button is used for collection.

03-Number of Station

S:20

You can set the number of station of your lift with this parameter up to 20 stations.

● **2-20**

04-Number of Basement

01

You can set the number of basement with this parameter. Elevator control type landing in the collection becomes available floor outlet collection under the number entered in the basement floor. Type of sand used in the collection of the landing outside.

05-Door Type

Swinging Door

You can set the on-off signal type for automatic doors with this parameter.

● **SWINGING DOOR** :used only for non-automatic door lifts.
● **D.AUTO LIMITED** : used only for lifts which have automatic limited cabin door.
● **D. AUTO UNLIMITED** : Used for lifts which have automatic unlimited cabin doors.
● **FULL AUTO LIMITED** : used for lifts which have full automatic limited door.
● **FULL AUTO UNLIMUTED** : used for lifts which have full automatic unlimited door.

According to EN 81-1/2 standards, the automatic door should remain immobile in revision and recall positions.

06-Busy Time

006 Second

● **5-20 Seconds:** this is the delay time of cabin lamp

According to EN 81-1/2 standards, the deactivation of cabin lamp delay in manual doors is prohibited.

In lifts with simple control (without collection), this parameter should be kept same with “WAITING TIME IN THE STATION” and set to at least to 2 seconds.

07-Lock Waiting Time

008 Second

After door closed signal has given, the maximum time to be waited for arrival of lock signal (140) is set with this parameter.

● **8-30 Seconds**

08-Waiting Time at the Floor

During the collection, you can set the waiting time in the station with this parameter before going to the records.

- **3-15 Seconds**

According to EN81-1 and EN81-2 standards, in manual door lifts, when the cabin reaches the floor, it should wait at least 2 second before starting the operation again.

In lifts with simple control (without collection), this parameter should be kept same with the “CABIN LAMP” time and set to at least 2 seconds.

09-High Speed Time

015 Second

- **5-120 Seconds**

During the movement of the lift from one floor to another, the permitted maximum course time is set by means of this parameter. If this time is exceeded, the system will automatically stop the movement of the cabin and will be blocked.

According to EN 81-1/2 standards, the time of motor operation timeout is set in a way that it is not exceeding the smaller of the following times:

a. 45 seconds
b. The longest course distance + 10 seconds
c. If the longest course distance is less than 10 seconds, the timeout time should be at least 20 seconds.

10-Low Speed Time

- **5-60 Seconds**

When the lift reach the target floor, the maximum low speed time of the lift until it show the stopper on the floor is set by means of this parameter. If this time is exceeded, the card will automatically stop the movement of the cabin.

11-Door Maximum Time

- **15-250 Seconds**

At the end the time that has been set by this parameter, if the lift door does not closed, the control panel will go out of the service. İf required this function can be cancelled (t (the time to pass to door open error)

12-Time to Reach the Park

You can set the waiting time with this parameter before going to Park Station
● **0-250 Seconds**

13-Park Station

20

The station where the lift will wait at the end the set time is set with this parameter.

14-Fire Station

Fire station is set with parameter. When the fire entry (YAN) is active, lift goes directly to the defined floor and waits with open doors. With cutting the fire signal, the lift returns to normal operation.

● **CANCEL** : Fire station is not defined in the system.
● **1-20** : Fire is defined to 1-20th station in the system.

15-Direction Arrow Flash

When the lift is active, you can set the flashing of the direction arrow by this parameter.

● **CANCEL:** Direction arrows lights in the direction of movement.
● **ACTIVE:** Direction arrows flash in the direction of movement.

16-Change Password

The card password is changed or determined with this parameter
● if it is **1_0_0_0_0,** the password become active.

17-Password Cancel

You can cancel the password with this parameter.
● İf it is **_0_0_0_0 ,** the password is cancelled.

18-Maintenance Done

Maintenance time is zeroed with this parameter.

19-Maintenance Time

As long as your card works, the set value of this parameter will be reduced by 1 every day. For example, this parameter which is set to 45 days shows 15 values after 30 days and shows 0 values at the end of 45 days. In case of this parameter takes 0 value, the movement style of the lift is set by "MAINTENANCE TIME EXPIRATION" parameter. (Day).

- **45-250 days**

20-Error List

With this parameter, the last 20 error are monitored with station names by starting from the last error until the first error. After the first error, Delete Errors option appears. All errors can be deleted by pressing ENTER.

21-Digital Setting

To change the station number, come to the station you want to change by utilising UP-DOWN buttons while the station digit flashes. Then press come to the digital value pressing RIGHT button and enter the value that should be written. If you want to make a setting for another station also, come on the station you want to change again pressing LEFT button and repeat the same process. At the end of the process, exit the menu by ESC button.

Indıcator type	**Outputs that can be selected**
7-segment indicator	-4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, , A, b, C, d, E, F, H, J, L, n, o, P

22-Door Special Setting

With this parameter, the floor on which the automatic a and b doors will be opened is set. To change the station number, come to the station you want to change by utilising UP-DOWN button while station digit flashes and then come upon the door value by pressing RIGHT button. Determine the door the will be opened by utilising again UP-DOWN buttons.

- **A-B- AB**

23-Saver

If the lift will be used for rescue, this option is activated.

24-Duplex Selection

You can set the group identification of the control panel during group working. Group identifications can be as A, B, C, D, E or F. The identification of each lift should be different. In the records at the same distance, the priority is given to the lift which has low group identify.

25-Gong Signal

Gong signal is set with this parameter.

26-Phase Protection

You can utilise this parameter to activate leak of phase and phase sequence control.

- **CANCEL** : Deactivated.
- **AKTIVE**: non phase sequence
- **AKTIF**: phase sequence

27-Ptc

Ptc motor thermistor input is CANCELLED or ACTIVATED with this parameter.
- **CANCEL** : Deactivated.
- **ACTIVE**: Activated

28-Cabin Serial Card

ıt is reported to the main card in which the serial communication cards is inserted, by this parameter. If serial card is inserted, this parameter is activated.

29-Auto Door Opening Time

By this parameter, the time period from the opening of the door until stopping is entered.
- **05-20 Seconds**

30-Single Door Full Auto

In swinging door lifts, if the lift has a single automatic door, the automatic part is determined by this parameter.

31-RP Delay

In roped VVVF systems, it can be wanted the delayed fall of the main contactor. In such cases, Rp relay out delay is set from this parameter. It is used as motor delay in hydraulic lifts.

- **00000-25000 Milliseconds**

32-Rev. Movement Style

You can set the movement style of lower-upper limit breakers in revision by this parameter.
- UNTIL BREAKER : As soon as breakers cut, lift is stopped before reaching the floor.
- UNTIL THE FLOOR : Even if the breakers cut it, the lift goes until its floor.

33-Early Door Opening

To activate the early door opening function, this parameter is used. [for roped VVVF and Hydraulic Lifts].

- **CANCEL** : Early door opening is cancelled
- **ACTIVE** : Early door opening is active.

For early door opening, the cabin movement with opening door is allowed only within the limits of door opening area and under the control of door bridging circuit on HEYTEC HT-53 when lift speed is under 0,15 m/s

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34-Star Triangle

In hydraulic systems, by this parameter, you can set the time that the motor will wait before starting the triangle connection after completing of star connection. (Second) (for hydraulic systems).

- **00000-25000 Milliseconds**

35-Motor Valve Time

In hydraulic systems, the delay of valves is set from this parameter during departure. (Second) (for hydraulic systems).
- **00000-25000 Milliseconds**

36-Door Open Levelling

To activate level renewal, this parameter is used. (for roped VVVF and Hydraulic Lifts) (Floor setting from inside of the cabin cannot be made without activate this parameter)

- **CANCEL** : Level renewal is cancelled.
- **ACTIVE**: Level renewal is active.

37-Lowest Station

This parameter is used only for group work. If there is station difference among the lifts in group, the first station setting for the different lift is made with this parameter. While this setting is made, station number of the lifts in the group should be set same from menu. For example, in a duplex system with 10 station, if A lift does not give service for the lowest floor and B lift do this: Both lifts are set to 10 station and the first station setting for A lift should be set as 2.

38-Early Opening Way

The opening distance of automatic door in millimetres from the floor is set with this parameter.(It is used only if the early door opening is active).

- **040-150 mm**

39-Call Transfer

Call transfer is set with this parameter.

40-Display Output

HT-52 control card and HT SERIAL card display output settings are made with this parameter.

- **7 SEGMENT OUTPUT** : Normal
- **GRAY CODE OUTPU** : Gray code output
- **BINARY CODE OUTPUT** : Binary code output

41-Max. Internal Record

This parameter determine maximum record number that can be given by cabin inside. After reaching this number, the record coming from cabin inside will not be given.

- You can enter a value between **01-20** stations.

42-Safety Delay

This parameter is used to retard the movement of the lift after arriving of 130 and 140 safety circuits.

- **0000-1000 Milliseconds**

43-M. Break Monitoring

If this parameter is active, the break monitoring points should be connected. In case of falling in a3 involuntary in gearless machines, the error will not be detected while the cancel status. For this reason, it should not be cancelled. If it is cancelled, our firm will not be responsible.

NOTE: If there is break monitoring error, press ESC button for 30 seconds.

- **CANCEL** : It is cancelled
- **ACTIVE**: It is active

44-Counter Type

The selection of the lift floor detection is made by means of this parameter.

- **STANDARD M0** : Standard M0 counter
- **STANDARD M1** : Standard M1 counter
- **ML1&ML2** : ML1-ML2 counter, Conform to A3 Standards (for hydraulic)
- **ENCODER:** used in well copying, conform to A3 Standards

45-After Going Jf

In low speed lifts, if the stopper magnet distance is insufficient, the stopping distance is increased with this parameter.

- **0000-2000 Milliseconds**

46-Photocell Time

By this parameter, the door closing time is determined with the signal coming from photocell after automatic door has closed.

47-KRC

This parameter activates or deactivates the passing of the contactor card to the contactor feedback error. If it is cancelled, the control card does not detect contactor bonding.

- **CANCEL** : KRC is cancelled
- **ACTIVE**: KRC is active.

48-Encoder Divider

This parameter is entered by making a calculation according to lift speed, encoder pals number and motor cycle. EXAMPLE: The value that is entered 1ms 1500-cycle motor 1024 pals encoder is 26. If the encoder is connected in regulator, 1 is entered for 1024 pals encoder.

● **ENCODER DIVIDER CALCULATION:** Motor cycle x encoder pals number / 60 / lift speed EXAMPLE: 1000 = RESULT, EXAMPLE: Motor cycle: 160 X encoder pals: 2048 =327,680 ÷ 60 = 5,461 ÷ lift speed :1000 = 5,461 (5 is entered)

49-Automatic Door At Floor

By this parameter, you can set the automatic door that should be open or closed during the park.

50-Position Reset

The control card will kept the last position in its memory even if the mains power is interrupted. But in some special cases, a position reset may be wanted when the power is provided for the lift again. In this case, the will go to the lowest floor until seeing 817 interrupter. When it reaches the bottom floor, the floor counter is reset. For example, in the systems that has accumulator recovery units, position reset can be made by activating this parameter.

51-Regulatur monitoring

If this parameter is active, the regulator monitoring contacts should be connected. If it has been cancelled, it will not detect any error in case of falling in a3 involuntary status. For this reason, do not cancel it. If it is cancelled, our firm will not be responsible. While it is active, the lift will not depart before taking of regulator coil pulled information. For this reason, check RGA led if it lights or not during operating.

52-Floor Descent Correction

If the lift counter type is encoder, floor descent settings can be made by means of this parameter. If the lift is in upstairs, enter -, and in downstairs enter +mm.

53-Floor Ascent Correction

If the lift counter type is encoder, floor ascent settings can be made by means of this parameter. If the lift is in upstairs, enter -, and in downstairs enter +mm.

54-Audio Setting

If the lift has HT-ANNOUNCEMENT card, it can be controlled by this parameter.

- **There is no sound card :** it is selected if there is no announcement card
- **Only announcement:** Only floor announcements are read.
- **Only background music:**Floor announcements are not read. Only background music plays.
- **Announcement-background music:** Both floor announcements are read and background music is played.

55-Deceleration Coefficient

Deceleration coefficient is set by this parameter. It can be in factor defaults.

56- UCM Test

UCM test can be made by this parameter automatically.

- **Down direction**
- **Up direction**

57-Factory Defaults

Wait by passing ENTER button until OKEY appears on the screen. The system will be returned to factory settings.

MAGNETIC SWITCH and MAGNETS INSTALLATION

HT-53 System can be operated with 4 different position detection methods. These counter methods are:

Standard M0 counter system: It is used in double speed lift system whose deceleration distance is smaller than the half of the distance between the floors.

Standard M1 counter system :It is used in double speed lift system whose deceleration distance is smaller than the half of the distance between the floors.

ML1-ML2 counter system: It is used in VVVF and Hydraulic lifts system in which door bridging will be made.

Encoder counter system:It is used in VVVF and Hydraulic lifts system in which door bridging will be made.(141-142 will not be arranged).

Magnetic switches and magnets that will be used by drive type are shown in the following table.

Drive Type	**Cabin Position Detection**	**Door front opening Levelling**	**Magnetic switch**	**Magnet**
Double speed	Standard M0 counter Standard M1 counter	Unusable	M1-M0 Bistable 142- Bistable	Round magnet
VVVF Hydraulic	ML1-ML2 counter Encoder counter	Can be used depending on option	ML1, ML2 Monostable 141,142 Monostable	30cm and 10cm Band magnet

INSTALLATION FOR M1 and M0 COUNTER SYSTEM

In M1 and M0 counter systems, cabin movement and floor information are detected with 2 types magnetic switches.

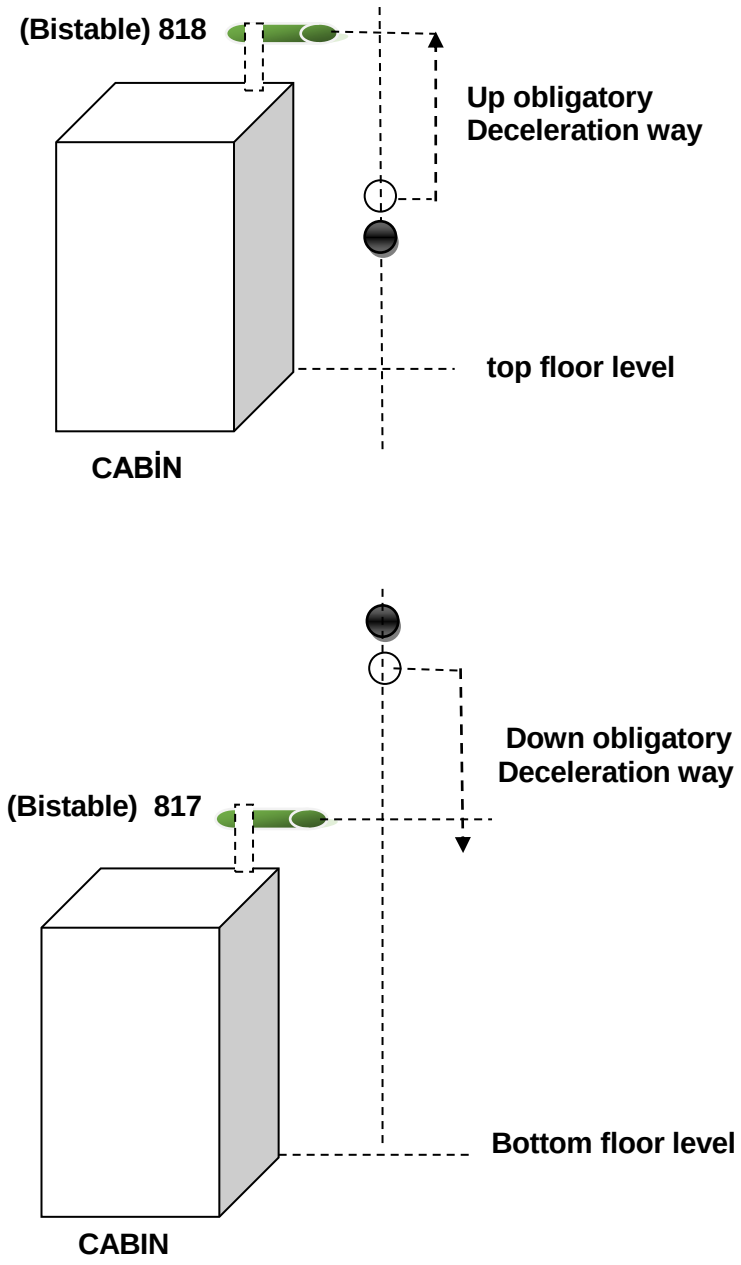
1. Floor counter and Retarder Magnetic Switch (M1, Bistable)
2. Magnetic Switch that provides stopping on the floor (142, Bistable)

Bistable magnetic switches and round magnets are used in this counter system.
M0 and M1 switch is used as floor counter and retarder. 142 switch operates as the element that provides stopping on the floor.

1. Make the magnet arrangement as described in the connection diagrams user manual.
2. Connect switches ends respectively to M1-100(24v) and 142-100(24v) terminals.

Level renewal cannot be made in this counter system.

INSTALLATION OF OBLIGATORY INTERRUPTORS (TO BE USED IN ALL COUNTER)



817 lowest floor and 818 top floor are obligatory retarder bistable switches. Whatever the counter system, these switches should be used in all lifts.

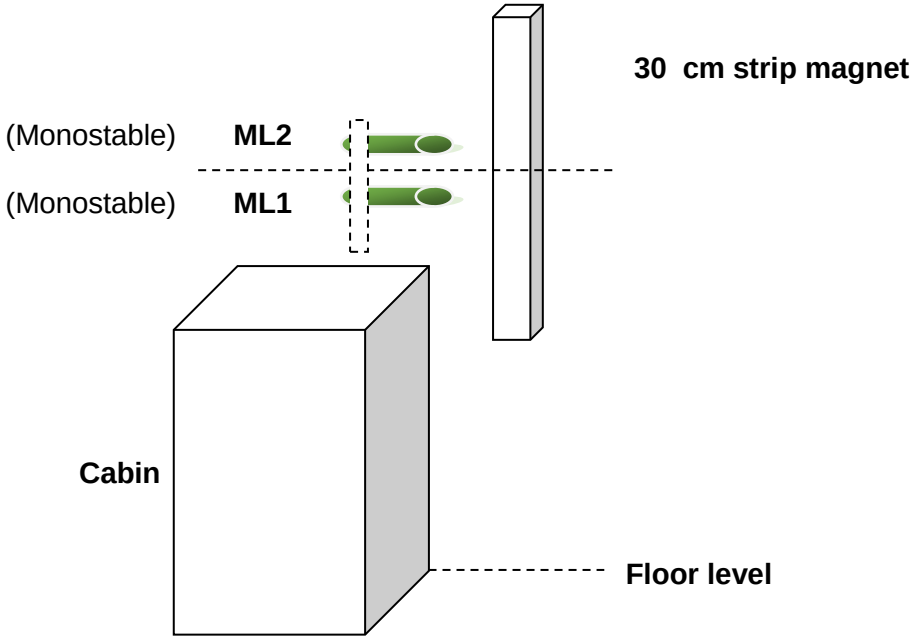
The gap between magnetic switch and rail should be maximum 3cm.

INSTALLATION FOR **ML1-ML2** COUNTER SYSTEM

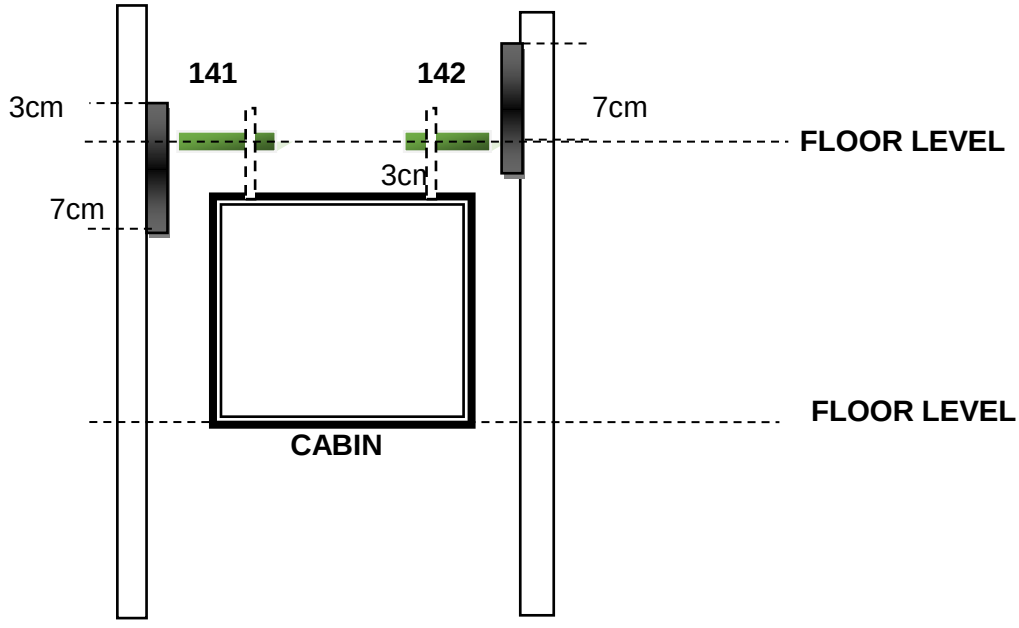
In ML1-ML2 counter systems, cabin movement and floor information are detected with 2 type magnetic switches.

1. Door Opening Area Magnetic Switch (ML1, ML2)
2. Course Magnetic Switches (141,142)
3.Level renewal can be used.
4.Apply the arrangement in the example for each floor.

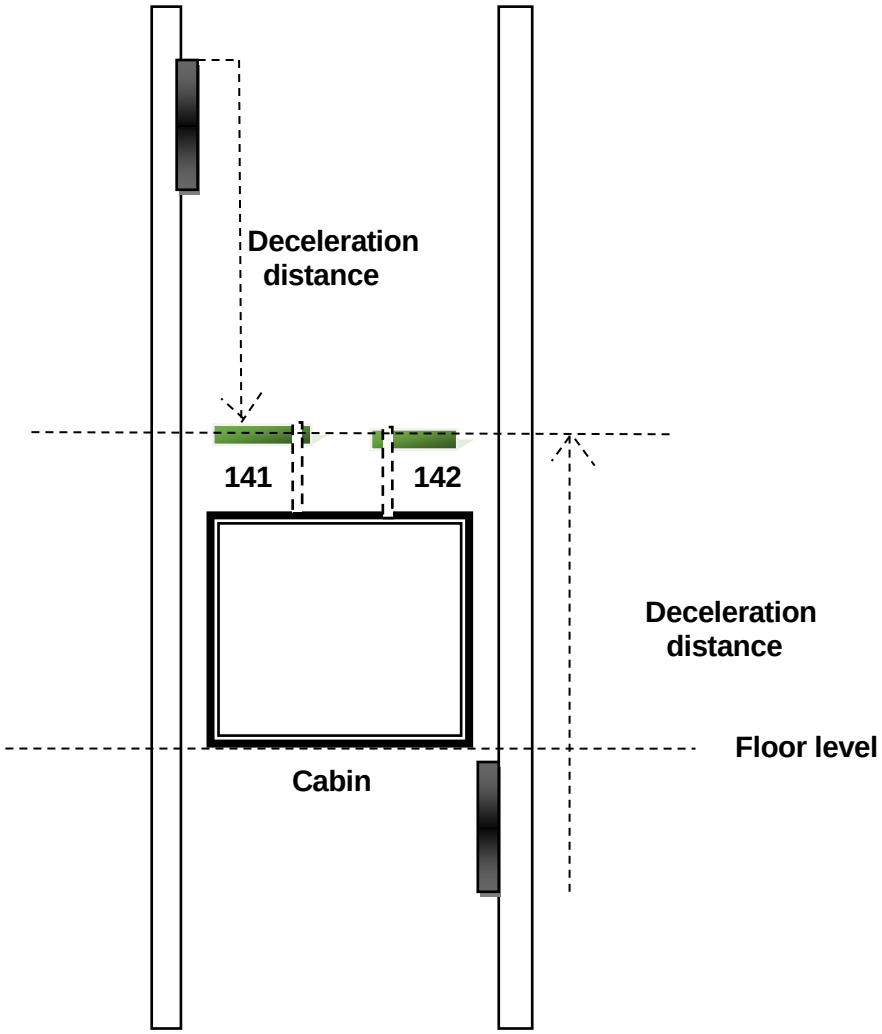
1) Arrangements of the floor level magnets:



2) Arrangements of the floor level magnets: (monostable)



2a) Arrangement of the deceleration way magnets (141-142 monostable)



INSTALLATION FOR **ENCODER** COUNTER SYSTEM

In encoder counter systems, cabin movement and floor information are detected with 2 type magnetic switches.

1. Door Opening Area Magnetic Switches **Encoder** or **(ML1, ML2)**
2. Course distance and stoppings are determined with encoder.

DOOR OPENING AREA MAGNETIC SWITCHES (ML1, ML2)

1. ML1 (Monostable)
2. ML2 (Monostable) , id est. 2 in total (NO-normally open).

The function of this switch is to give the information that the cabin is within the limits of door opening, to the control panel.

Installation of the magnetic switch

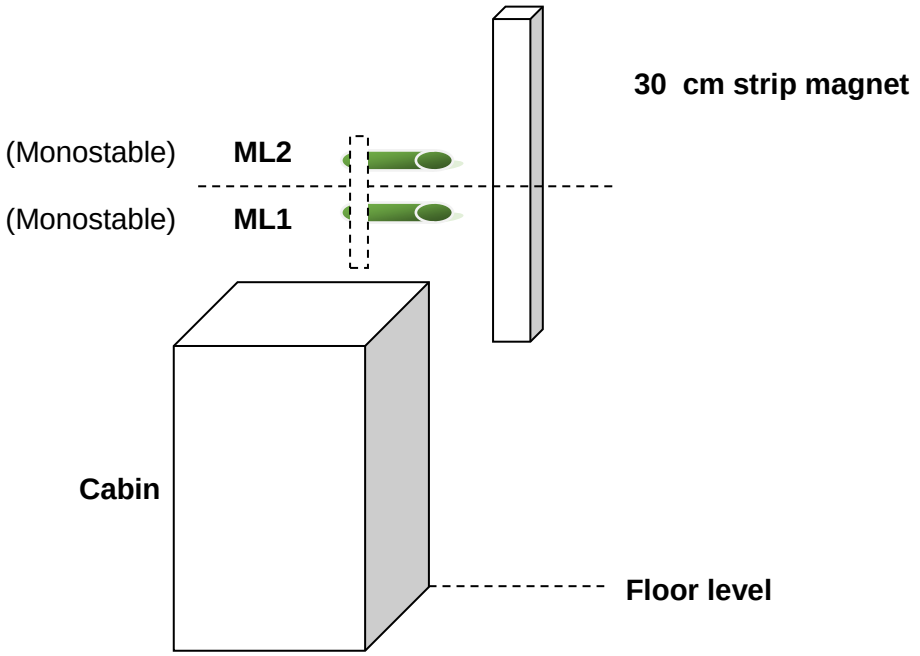
1. Place ML1 and ML2 magnetic switch on the carcase so that it see one side of the rail.
2. Connect the switches ends respectively to ML1-100 and ML2-100 terminals.

Long magnets strips that will be used for these magnetic switches are 30cm. Number of magnets strips are given by number of station.

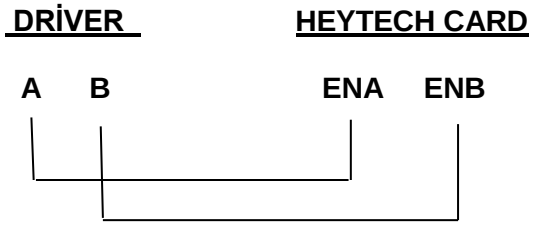
Number of magnets strips of 30cm = Station number

Installation oflong magnets strips

Bring the cabin to the bottom floor.
Cabin threshold should be at level of the bottom station.
In this case, place the strips against the magnetic switches in 1-2 cm distance so that the midpoints of the magnetic strips face with the midpoint of the magnet strip.
Fix it with adhesive of magnet or screw (only applying of 30cm magnets is sufficient)
Apply this procedure for other stations.

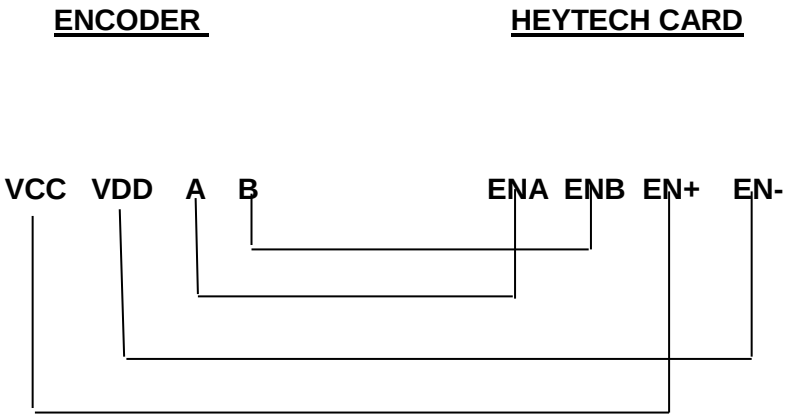


Encoder Connection 1 :



IF ENCODER INFORMATION IS GIVEN FROM THE DRIVER

Encoder connection 2 :



IF ENCODER INFORMATION IS GIVEN FROM THE DRIVER

ENCODER FAST SYSTEM SETUP

03-Station number 003	Enter the lift station number

44-Counter type Encoder counter	Enter the counter type as encoder counter

48-Encoder Dividing 026	Enter the encoder dividing number according to the following calculation: Motor cycle X Encoder pals number / 60 / Lift speed NOTE: the speed is entered as 1000 times. **Ex:** motor cycle 920 X encoder pals 1024 = 942080 / 60 /lift speed 600 Result: 26,168 26 encoder dividing is entered as 26.

00-First Setup Active	Activate the first installation parameter. **Warning: Cancel the first setup when well reading and floor adjustments finished.** Exit the menu pressing ESC button

Make Well reading D:01 0.00 65842	This message recalls that you should to make well reading For making well reading, take the lift from the well to the revision position.

Revision from well D:01 0.00 65000	Before starting the well reading, observe the changing of the underlined digits on the left by moving up and down. These digits are information of speed and encoder. If there is no changing on the digits, check your encoder or its connection.

Revision from well D:01 0.00 65842	Ensure that 817,818 switches are active (leds lights). **Warning: When making well reading, do not make bridging for 817 and 818**

Revision from well D:01 0.00 65842	Press ESC for 3 seconds on the control card. The lift will move downward. **NOW ENJOY HEYTECH WELL READING SYSTEM READING BY SITTING BACK!**

Encoder reset D:01 0.00 65842	This message will appear on the LCD screen. The lift will go at high speed until it sees 817 interrupter. After seeing 817 interrupter, it will at low speed up to ML magnets and stop at floor level.

Up learning D:01 0.015 6542	In 1. Up learning, the lift goes at low speed on the top floor by slowing on the lower floor of the top floor. The low speed is the underlined digit on the left. It should not exceed 0.15. If it exceeds this value, reduce the low speed from the speed control.

Down learning D:01 0.15 65842	In 1.Down learning, the lift goes at high speed until 817 stopped and it stops when see ML1 and ML2 magnet.

Up learning D:01 0.15 65842	The lift will start learning in upward. When Up learning, it will slow down and speed up at each floor and then it will save all well information into the memory.

Down learning D:01 0.15 65842	The lift will go to the bottom floor and stop. Well revision will appear on the screen. The well copying operation has been completed. You can make your other settings.

52-Floor descent correction [20] 000	This menu is used to make down direction settings. If the lift is up direction, (-) digit is entered, if it is down direction, (+) digit is entered. Levelling is made. Each number is 1 mm. Correction can be made at maximum 125 mm.

52-Floor ascent correction [01] 000	This menu is used to make down direction settings. If the lift is up direction, (-) digit is entered, if it is down direction, (+) digit is entered. Levelling is made. Each number is 1 mm. Correction can be made at maximum 125 mm.

Note: WHEN WELL COPYING IS COMLETED, CANCEL THE FIRST SETUP OPTION FROM THE MENU.

To make the floor correction from within the cabin;

- ACTIVATE THE LEVEL RENEWAL FROM 36. PARAMETER
- ACTIVATE 00.PARAMETER
- HOLD DOWN THE FLOOR BUTTON WHERE YOU ARE IN THE CABIN
- PRESS DOOR OPENING BUTTON FOR 5 TIMES. THE CABIN LIGHT WILL TURN OFF. WHEN THE CABIN LIGHT TURN OFF, PREES THE DOOR OPENING BUTTON AND HOLD DOWN IT.
- RELEASE THE FLOOR BUTTON. ONLY HOLD DOWN THE DOOR OPENING BUTTON.
- MAKE DOWN CORRECTION WITH LOWER FLOOR BUTTON AND MAKE UPWARD LEVELLING WITH HIGHER FLOOR BUTTON. WHEN REACHE FLOOR LEVEL, RELEASE THE BUTTON. YOUR FLOOR INFORMATION HAS BEEN TAKEN INTO MEMORY.

ERRORS AND SOLUTIONS:

UCM ERROR: There may be an error in your magnet arrangement. There may be an error in your A3 connections.
SOLUTION**:** Press ESC button for 30 seconds and save your lift from USC error. Then, check the connections, magnets and tubes.

MAKE WELL READING:
SOLUTION: If you see this message again after well reading, check station number.
Check ML magnets and 817 818.

TAKE TO THE APPROPRIATE POSITION:
SOLUTION: Check if 817 or 818 is deactivated.

NO ENCODER PALS :
SOLUTION**:** Check Encoder connections.

REVERSE DIRECTION MOVEMENT:
SOLUTION: Change ML1 and ML2 positions.

ML SHORT CIRCUIT:
SOLUTION: Check ML1 and ML2 connections.

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CERTIFICATE OF COMPLIANCE

Name of the Manufacturer Üreticinin Adı	: Argefen Elektronik ve Seslendirme San. Tic. - İbrahim Ayhan
Address of the Manufacturer Üreticinin Adres	: A.Yesevi Mah Biberlik Cad. Kristal Sok. No:19/5 Burak Apt. Sultanbeyli İSTANBUL /TÜRKİYE
Description of the Product Ürün Tanımı	: PCB Lift Control Card for Electric and Hydraulic Lift Elektrikli ve Hidrolik Asansör Kumanda Kartı (PCB)
Description of the Product Type Ürün Tip Tanımı	: HEYTECH HT-53
Applicable EU Directive(s) Uygulanabilir AT Direktifi(leri)	: 95/16/EC Lift Directive Annex I
Applicable Standard(s) Uygulanabilir Standart(lar)	: EN 81-1/2 + A3
Inspection Place İnceleme Yeri	: Altınşehir Mah. Kumru Cad. Ceylan Sok.No:66/A Ümraniye İSTANBUL /TÜRKİYE

This certificate does not regards 2004/108/EC Electromagnetic Compatibility Directive.
Bu sertifika 2004/108/AT Elektromanyetik Uyumluluk Direktifi ile ilgili değildir.

The lift PCB control card is not subjected to the laboratory tests according to annex F-6 of EN 81-1/2 +A3.
Tanımlanan Asansör PCB Kontrol Kartı EN 81-1/2+ A3 Ek F 6' ya göre laboratuar testlerine tabi değildir

The lift PCB control card complies to the functional requirements referred to in this Certificate taking into account any additional remarks mentioned above.
Asansör PCB Kontrol Kartı, yukarıda belirtilen açıklamalar dikkate alınarak, bu belge de adı geçen şartlara fonksiyonel kriterler açısından uygundur.

Certificate Number	: M.2014.103.3784
Initial Assessment Date	: 17.11.2014
Registration Date	: 27.11.2014
Reissue Date/No	: -
Expiry Date	: 26.07.2015

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CE

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Address: Mutlukent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya – Ankara – TURKEY
Phone: +90 312 443 03 77 **Fax:** +90 312 441 87 72
E-mail: info@udemltd.com.tr www.udemltd.com.tr

HEYTECH ELEKTRİK ELEKTRONİK Sanayi Ticaret Şti.

Altınşehir Mahallesi Kumru Caddesi Ceylan Sokak No 66/A
Ümraniye/İstanbul/TÜRKİYE

TEL:+90 546 861 65 83
+90 545 207 20 28
+90 542 765 63 86

E-mail : info@heytechelektronik.com

www.heytechelektronik.com