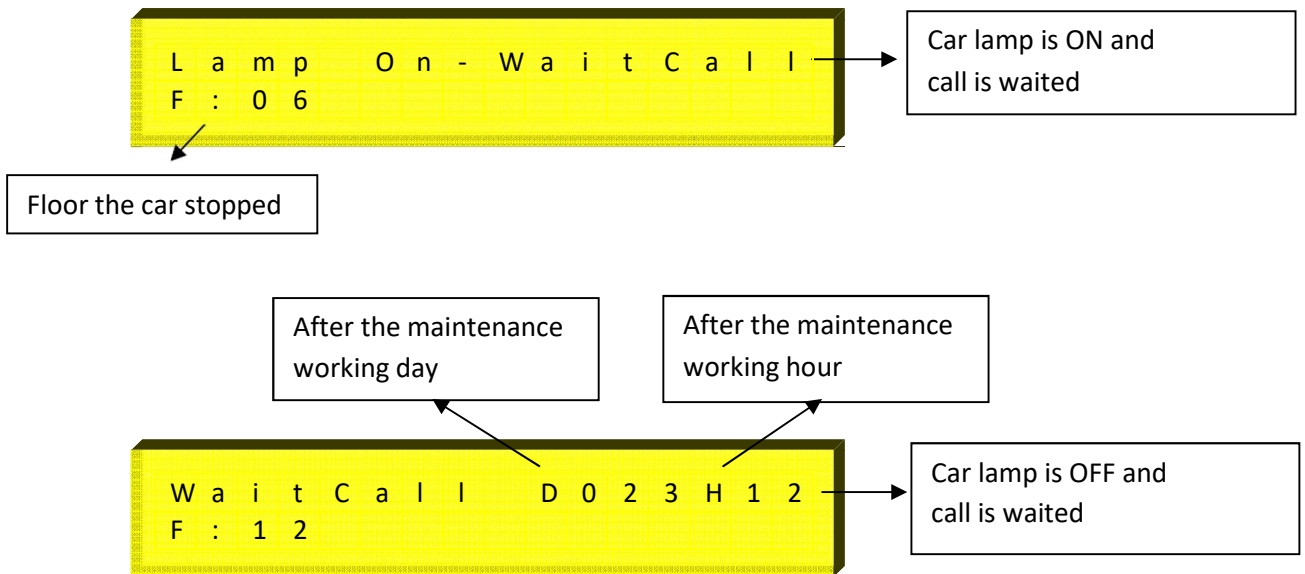
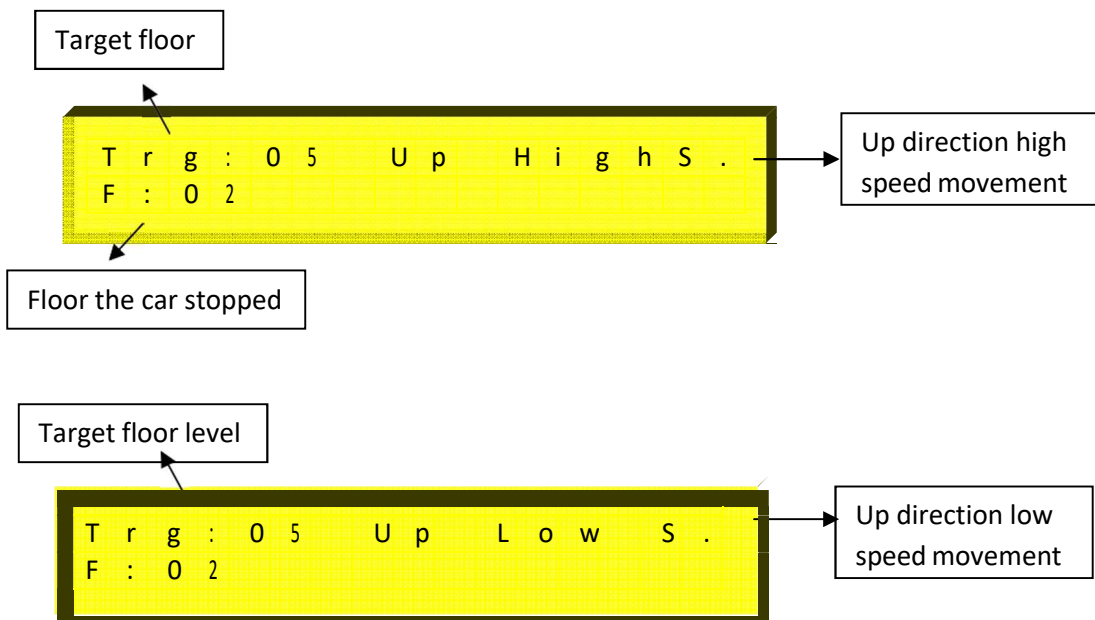


SKY65X LCD Screen Usage

Lift position and fault datas are screened on LCD top line on SKY65X card. When the car is on stand by position, floor number is on LCD lower line.



When the car is moving, on the left side of LCD top line, there is target floor and on the right side of LCD top line, there are movement direction, speed and fault datas. On the lower line, the floor that the car position at the moment is screened.



SKY65X Button Usage Explanations

There are four buttons at the right side of SKY65X card. Some functions are appointed to these buttons except the situation that the car is stopped, stop signal is off or stop signal is cut and re-applied and inspection mode.

ENTER BUTTON (Red) : Manual movement mode is started when pressed this button. At this situation, if safety circuit is OK, the car is moved with UP and DOWN buttons. Soft stop is done at the end of the movements for Speed Control Systems. ESC button must be pressed to exit Manual Movement mode.

UP BUTTON (Brown): Situation screens are shown in order when pressed this button. The explanations related this function will be done below.

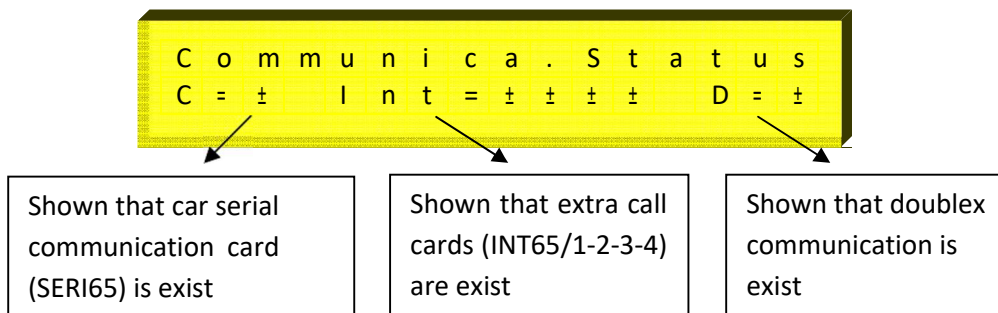
DOWN BUTTON (Brown): Car calls function is started when pressed this button. The explanations related this function will be done below.

ESC BUTTON (Black): Registered fault observing function is started when pressed this button. The explanations related this function will be done below.

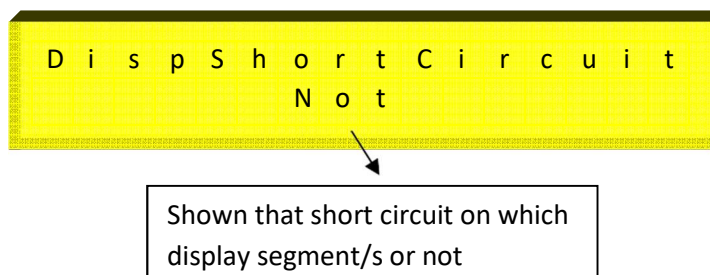
SITUATION SCREENS TRACING

Situation screens data can be reached with up button and looked at between the screens.

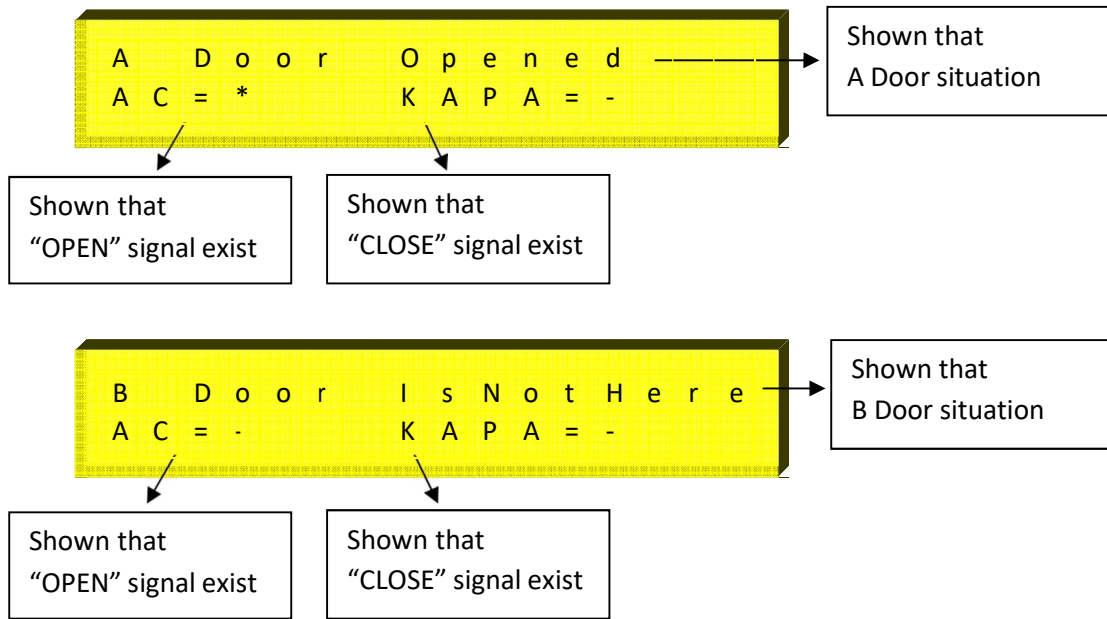
Communication Screen



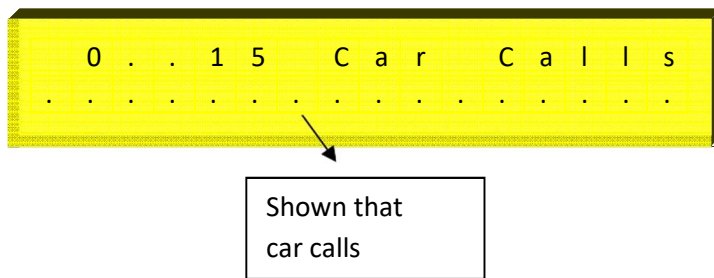
Display Short Circuit Screen



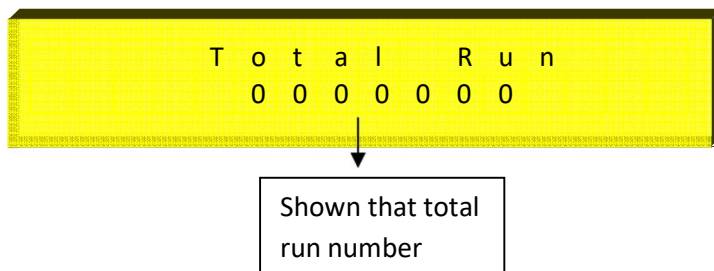
Door Situation and Signals Screen



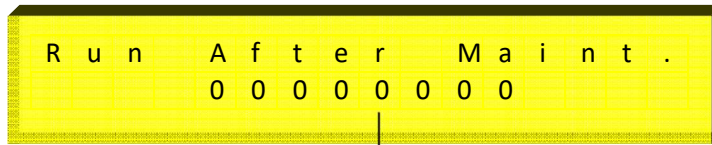
Call Screen



Total Run Screen

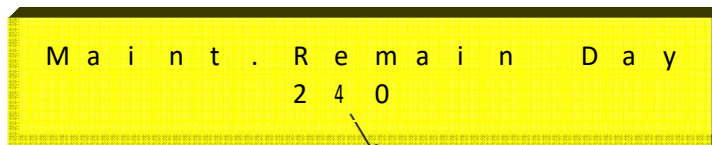


Run After Maintenance Screen



Shown that total run after maintenance

Remain Day To Maintenance Screen



Shown that the remaining day to maintenance

SKYKR1 Fault Screen



Shown that the last fault about SKYKR1 card

ENTER CAR CALL

Manual car call can be entered to the lift with down button.

Enter Call Screen



Shown that floor calls

Dots on the screen indicate floor numbers in order. Floor that will be given call is selected with cursor and put “+” sign with “ENTER” on the floor number. More than one call, the other floors are selected the same.



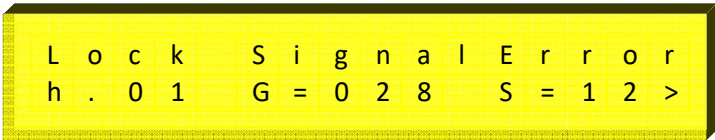
To exit the function, it must be pressed to “ESC” button.



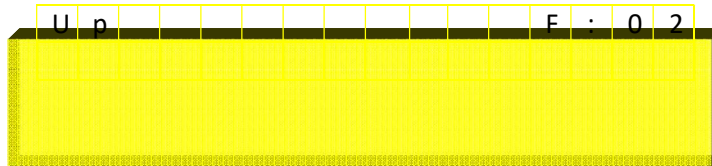
On the screen, registrations are canceled with “ESC” button or registrations are confirmed with “ENTER” button and exit from the function.

SKY65X Registration Faults Tracing

When the lift is working, some faults being in the system are registered with the direction, station, day and hour datas. It can be registered the last 16 faults. When the car is stopped, if ESC button is pressed except the situation that the car is stopped, stop signal is off or stop signal is cut and re-applied and inspection mode, fault tracing function is started. Out of service lamp is ON.



When the function is started, the first fault shown at the screen is the last fault. If another fault is not exist “ No Fault “ message is screened. It is get to trace the faults by pressing UP and DOWN buttons. At the tracing time, the number of the faults are not related to occurring time of the faults before or later. Day and hour determinates the occurring order of the faults. When any fault is screened, if ENTER button is pressed, during 2 sec. the direction and station of the fault are shown at the screen.



When ESC button is pressed or detected the car or control panel inspection key, fault tracing function is end. At the programming mode, if enter to “G.Maint.Settings” section and select YES in (G03) parameter “Maintenanced?” menu, registered faults are deleted.

SKY65X General Fault Explanations

ERROR SCREEN DISPLAY	EXPLANATION
<i>Lock SignalError</i>	When the lift will move, the situation that the lock signal is not detected at the lock wait time after the pump pulled. The fault is registered with the direction data. At this situation the calls are deleted and lift is out of service during 10 sec.
<i>MaxHighSpeedTime</i>	While the lift is high speed movement, the situation that floor changing is not detected from pulse bi-stable in adjusted time at parameter. At this situation the calls are deleted and fault is registered with direction data. The lift is blocked with lightening the out of service lamp.
<i>MaxLowSpeedTime</i>	While the lift is low speed movement, the situation that jf signal is not detected in adjusted time at parameter. At this situation the calls are deleted and fault is registered with direction data. The lift is blocked with lightening the out of service lamp.
<i>Contactor Fault</i>	The situation that KRC contactor control input is not detected in 2 sec. after the relays that pulls the contactors are dropped. At this situation the calls are deleted and the fault is registered. The lift is blocked with lightening the out of service lamp.
<i>817=0 818=0</i>	The situation that both necessary cutter is not exist at the same time. At this situation the calls are deleted and the lift is out of service till the one of the cutter is detected.
<i>DoorOpenLongTime</i>	The situation that the door is open till the end of the adjusted time at the door maximum time parameter. At this situation the calls are deleted and the lift is out of service till the door signal is detected.
<i>StopBut.LongTime</i>	The situation that stop signal is remained cut till the end of the adjusted time at the door maximum time parameter. At this situation the calls are deleted and the lift is out of service till the stop signal is detected.

<i>R PhaseError S PhaseError T PhaseError</i>	The situation that one of the phases is not exist. If this situation is occurred while the lift is moving, the car is stopped by locating a call to the nearest floor in the same direction. If there is not a phase when the lift is stopped at the nearest floor or the car is stopped, the calls are deleted and the lift is out of service.
<i>R,S PhaseError R,T PhaseError S,T PhaseError R,S,T PhaseError</i>	The situation that two or three of the phases are not exist. If the car is moving, it is stopped; the calls are deleted and the lift is out of service.
<i>PhaseOrderError</i>	The situation that the phases orders connected to phase protection terminals (R, S, T) are wrong. At this situation the calls are deleted and the lift is out of service (Phase order is only controlled when the lift is stopped).
<i>Driver Fault</i>	When one of the gearless rescue options is selected, the driver fault control is done from EIN input. When this input is not detected, this fault warning is shown at lcd screen.
<i>No 817 Signal</i>	Before coming the bottom floor, the situation of cutting 817 signal. The fault is registered with the direction data. At this situation the calls are deleted and lift is out of service during 10 sec.
<i>No 818 Signal</i>	Before coming the top floor, the situation of cutting 818 signal. The fault is registered with the direction data. At this situation the calls are deleted and lift is out of service during 10 sec.

Notes :

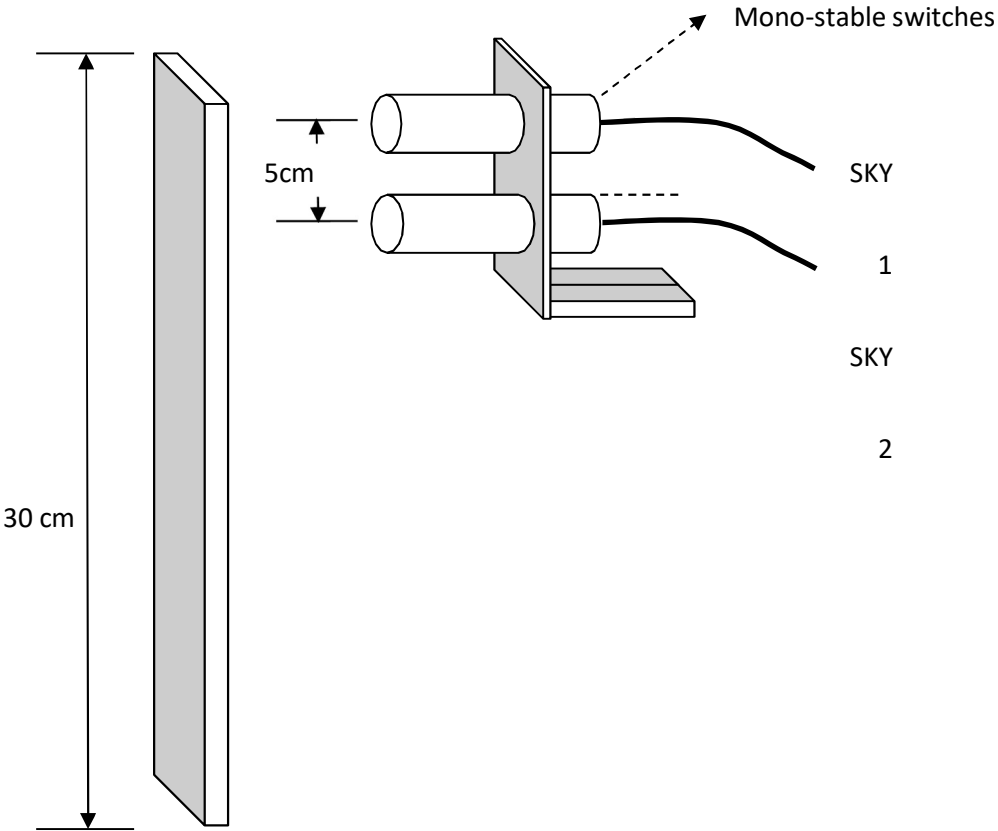
- 1- Controls that phases are not exist are shown at screen during SKY65X card has power.
- 2- Phase order fault is only controlled when the lift is stopped.
- 3- If one of the lifts is out of service at doublex working because of any fault, external calls appointed on this lift are transfered to the other lift.

SKY65X – SKYKR1 Door Bridging Fault Descriptions

If SKYKR1 door bridging card is used with SKY65X card; it can be done re-levelling and advanced door opening. When door bridging operation is done, if the faults that descriptions are belowed are occurred, fault message is shown at lcd screen and registered to the memory. At this situation the lift is blocked by lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "SKYKR1 ErrorExist" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "DelSKYKR1Error" menu in (J05) parameter, and registered fault must be deleted. To look the registered fault, UP button must be used that is explained in button descriptions.

FAULT SCREEN DISPLAY	EXPLANATION	WHAT TO DO
<i>SKY1-SKY2 Shunted</i>	SKY1 and SKY2 inputs are shortcircuit.	Check SKY1 and SKY2 inputs that they are short circuit or not. Use different switches for SKY1 and SKY2 re-levelling zone mono-stable swithes.
<i>RSKY1-2NotPickUp</i>	There is no situation signal of RSKY1 or RSKY2 bridging safetyrelays on SKYKR1 card.	1-Check "ST" (RSKY1 or RSKY2 situation signal) terminal connection between SKY65Xand SKYKR1 cards. 2-If there are SKY1 and SKY2signals, check RSKY3 relay isdropped at the start of bridging and then RSKY1, RSKY2 relays are dropped.
<i>RSKY1-2 Not Drop</i>	There is always situation signal of RSKY1 or RSKY2 bridging safety relays on SKYKR1 card.	1- Check "ST" terminal on SKY65X and SKYKR1boards isnot short circuit with 100. 2- Check RSKY1 or RSKY2 relaysare not pulled although there are no SKY1 or SKY2 signals.
<i>Not Bridged</i>	The signal is not detected from "140" input although bridging operations are done.	Check the connections between "SF1" and "SF2" terminals on SKYKR1 card to"120" and "140" signals.
<i>140OnAfterBridge</i>	Although the end of bridging operation, signal is detected from "140" input.	Check RE relay on SKYKR1 cardis dropped.
<i>SKY1 Shunt To 100 SKY2 Shunt To 100 SKY1=100,SKY2=100</i>	Detecting SKY1 and/or SKY2 signal when the lift is at low speed movement because of detecting the target floor.	1-Check SKY1 and/or SKY2 input is not short circuit with 100. 2-Take the zone that the car passed to low speed to the front than the re-levelling zone.
<i>SKY1 MissingSKY2 Missing SKY1-2 Missing</i>	Not detecting SKY1 and/orSKY2 signal when the car is stopped at call floor.	Check SKY1 and/or SKY2inputs.

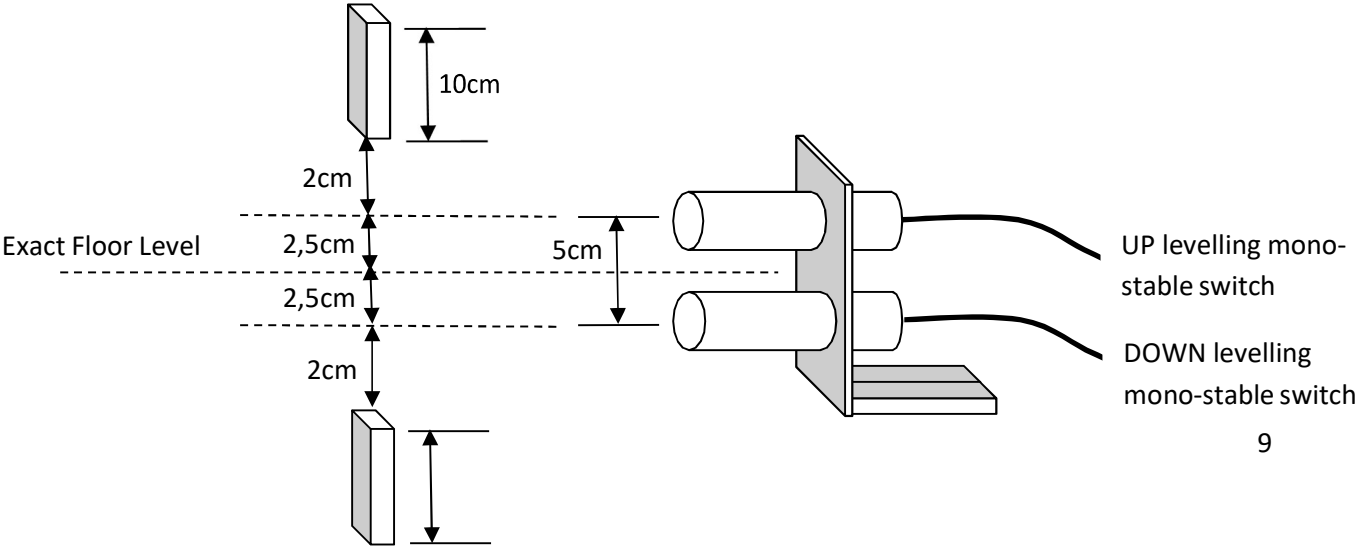
SKY1 ve SKY2 mono-stable swithes are shown how to be located below that will be used in the lift system do the re-levelling when the door is open with using SKYKR1.



Ribbon magnet

Levelling Magnet Location

Mono-stable swithes using for UP and DOWN levelling and ribbon magnets are shown how to be located below that will be used in the lift system do the re-levelling when the door is open with using SKYKR1.



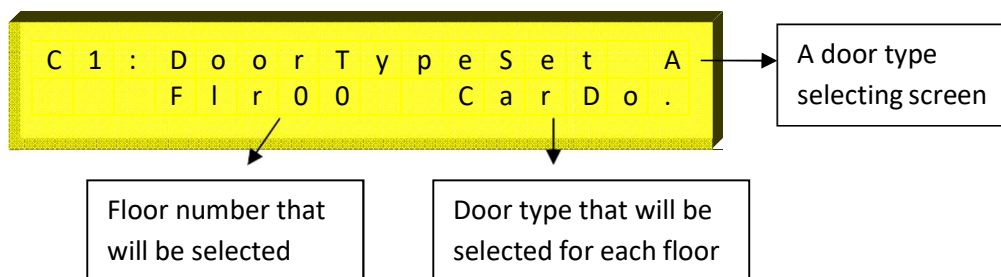
10cm

EXIT FROM INSPECTION

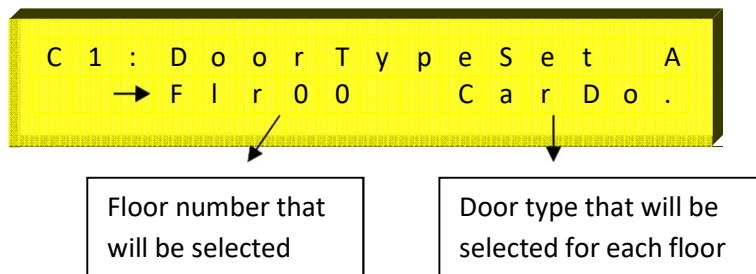
When the lift is "INSPECTION" mode, if exit with Inspection Key, the lift is still stays in "INSPECTION" mode. For this 130 signal must be cut once. Because of the security, when operator is on the car, in state of exit from inspection with unintentional movement, the door is need to open once time.

DOOR TYPES SELECTION IN PROGRAMMING

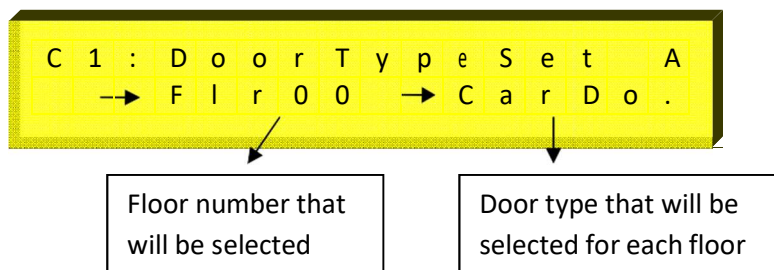
Door types on each floors can be selected A side and B side separately. Door types can be indicated as; CarDo. (only car door automatic), F.Auto (floor +car door automatic), NoDoor (there is no door).



For selection, with lightening left arrow by pressing ENTER button, required floor is selected.

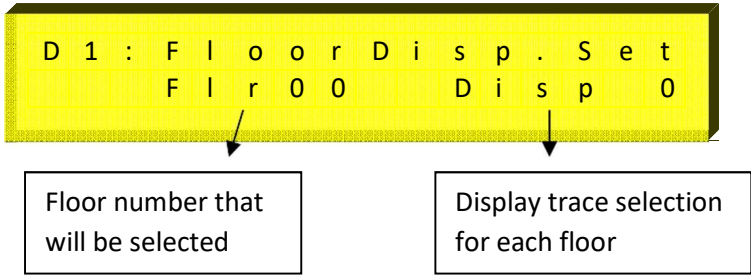


If floor door type is required to change, it is pressed ENTER button second time and lightened right arrow and door type is selected.



Also if all door types are the same type, "All" on the left side floor screen is selected, it is pressed ENTER button and door type is selected with second arrow on the right side and all floors door types are defined the same type.

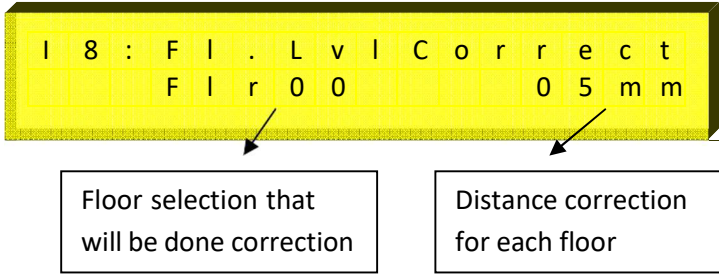
FLOOR DISPLAY SELECTION IN PROGRAMMING



It is used for trace type selection that is required to be traced on floor for every floor. To change the parameter; first, by pressing ENTER button, floor is selected with arrow on left side. By pressing ENTER button again, display that will be traced is adjusted with arrow on right side.

If any floor display is adjusted a number value and the other floors displays are required to sort, it is pressed ENTER button during 2 seconds. "ENTER forSorting" is started to flash on LCD bottom line. At this situation if it is confirmed by ENTER, all floor displays are sorted. ESC cancels the operation.

FLOOR LEVEL CORRECTIONS IN PROGRAMMING



For each floor in shaft learning, at the situation of the car doesn't stop the floor level, it is used for accuracy correction. To enter the parameter, floor is selected with the arrow on left side by pressing ENTER button and by pressing again, distance correction is done as (-) or (+) value with arrow on the right side. Distances are indicated one by one or by using "All" option in the left side of parameter, the same correction for all floors can be entered.

INSPECTION (RV) RELAY FUNCTIONS

10A relay which open, close and common tip are given to the terminal is located to SKY65X card. There are two type functions of this relay. It is run as INSPECTION relay when SKYSERI65 car serial communication card (CarSerialcard) parameter is "Active" and it is run as CAR LAMP relay when the parameter is "Cancel". These functions can not be changed. If this relay will be used as CARLAMP relay, close contact must be used.

UNINTENDENT CAR MOVEMENT (UCM) DETECTION OF SKY65X CARD

For systems that are suitable to A3 standards, cards that will be used are shown below:

System	SKY65X	SKYA 3	SKYKR1
Geared Without Re-levelling	*	*	-
Geared With Re-levelling	*	*	*
Gearless Without Re-levelling	*	-	-
Gearless With Re-levelling	*	-	*
Hydraulic	*	-	*

Explanations about these systems are below.

For the lifts has geared machine:

In these type systems, if re-levelling will be done, SKYKR1 door bridging card must be used. Because releveling can be done with door open or close. When the re-levelling is being done, it is detected that the car exit out of door zone with "ST" output on SKYKR1 by SKY65X card. If it is detected that the car exit from this zone "UCMErrorDetected" is traced on lcd and stopped running. At this situation lift is blocked with lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "UCMErrorDetected" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "Del UCM Error" menu in (J06) parameter, and registered fault must be deleted.

In these type systems (with re-levelling or without re-levelling); OSG must have a steel bar which blocks UCM suitable to A3 standards. SKYA3 card controls the solenoid that moves this steel bar on OSG. It is detected that safety relay on SKYA3 card dropped or not with "MNT" input by SKY65X card. If any problem is detected, operation is stopped with writing "SKYA3 Card Error" on lcd. At this situation lift is blocked with lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "SKYA3 Card Error" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "Del UCM Error" menu in (J06) parameter, and registered fault must be deleted.

It is detected that the info coming from close contact of the switch that is dropping and picking up with the solenoid on OSG and the solenoid dropped or not by SKY65X card. If it is detected that the solenoid dropped not correctly, "OSG/Brake Error" is traced on lcd. At this situation lift is blocked with lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "UCM Error Exist" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "Del UCM Error" menu in (J06) parameter, and registered fault must be deleted.

For the lifts has gearless machine:

In these type systems, if re-levelling will be done, SKYKR1 door bridging card must be used. Because releveling can be done with door open or close. When the re-levelling is being done, it is detected that the car exit out of door zone with "ST" output on SKYKR1 by SKY65X card. If it is detected that the car exit from this zone "UCMErrorDetected" is traced on lcd and stopped running. At this situation lift is blocked with lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "UCMErrorDetected" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "Del UCM Error" menu in (J06) parameter, and registered fault must be deleted.

In lift systems has a gearless machine, it is not needed to use SKYA3 card. It is detected that the info coming from close contact of the switch that is dropping and pickin up with motor brake and the brake dropped or not by SKY65X card. If it is detected that the brake dropped not correctly, "OSG/Brake Error" is traced on lcd. At this situation lift is blocked with lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "UCM Error Exist" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "Del UCM Error" menu in (J06) parameter, and registered fault must be deleted.

For hydraulic lifts:

In these type systems; because of not existing OSG, it is not needed to use SKYA3 card. In kydraulic units suitable to A3 standards, there is one A3 protection valve. In down direction movement, tis valve is being dropped with down landing valve. In hydraulic with re-levelling systems, while re-levelling operation, it is detected that the car exit out of door zone with "ST" output on SKYKR1 by SKY65X card. If it is detected that the car exit from this zone "UCMErrorDetected" is traced on lcd and stopped running. At this situation lift is blocked with lightening out of service lamp. After the block operation, when the control panel power is cut and re-applied, "UCMErrorDetected" is traced on lcd and blockage of the card is continues. To cancel the blockage, must be entered to "J.GeneralSetings" and selected YES on "Del UCM Error" menu in (J06) parameter, and registered fault must be deleted.

Manual test for unintended car movement:

In systems that are used SKYKR1 card; there are UP and DOWN direction test menus of SKY65X card for testing the detection of unintended car movement (UCM) correctly.


Before doing UP direction test operation, car is taken to the floor level of the floor that is under the the topper floor. Than to start the test, must be entered to "J.GeneralSetings" and selected YES on "UCM Up Test" menu in (J07) parameter.

Before doing DOWN direction test operation, car is taken to the floor level of the floor that is on the bottom floor. Than to start the test, must be entered to "J.GeneralSetings" and selected YES on "UCM Down Test" menu in (J08) parameter.

These test operations simulates unintended car movement (UCM) error that occures when the door is open normally as closed door. During the test, car is moved with low speed to the test direction. When the car is exit from the door zone, unintended car movement (UCM) error occures and reset operations of the fault must be applied the same.

AUTO TUNING:

To do auto tuning as brake is closed in gearless systems, must be entered to "J.General Settings" and selected YES on "Auto Tuning" menu in (J09) parameter. So in INSPECTiON mode, during 100 seconds after the first movement, OSG/Brake Control is not done.




IMPORTANT WARNING !

CANH – CANL connections between SKY65X and SKYSERİ65 must bedone side by side in flexible cable and must be connected far from high

CANCELLATION OVER SPEED GOVERNOR SELENOID OR GEARLESS BRAKE CONTROL:

If B32 parameter is selected PASSIVE, control of OSG selenoid contact or gearless brake contact that dropped or not is canceled after the lift stopped. But when the lift is moving, control is still going on. If B32 parameter is selected CANCEL A3, all controls are canceled. In gearless systems, if PASSIVE selection required, "Are You Sure?" question is asked again.



IMPORTANT WARNING !

If B32 parameter is selected PASSIVE from SKY65X menu, system can damage more because of not checking of UCM faults that can be occured on OSG selenoid or gearless brake. If parameter selected "Cancel A3" SKY does not take any responsibility for these actions and Liftinstituut certificate is no longer valid.

WHAT NEEDS TO BE DONE FOR SHAFT LEARNING:

- 1) As shown at SKY65X_45 and SKY65X_46 schemes, 30cm ribbon magnets are must be used for all floor levels.
- 2) SKY1 and SKY2 that will be located across these magnets are must be electronic mono-stable switches.
- 3) SKY1 electronic mono-stable switch must be certainly ABOVE.
- 4) Location of SKY1 and SKY2 electronic mono-stables must be certainly done 5 cm far away from the centers as shown in SKY65X user manuals.
- 5) Shaft learning is done in INSPECTION speed and driver inspection speed input is must be connected to RV relay of SKY65X card (Inspection speed 0,30 - 0,50 m/sec. is advised).
- 6) A, A⁻, B, B⁻ve GND tips of encoder that is connected to driver, are must be connected to SKY65X card with shielded cable. Shielded tip is also connected to ground. In systems without rescue and with UPS rescue, + feeding tip of encoder is connected to driver. In rescue system with SKYKS10, + feeding tip of encoder is must be connected to 15V terminal on SKY65X card. To be activated 15V terminal, jumper that is near the terminal is to be taken to the right two position. So 15V led will be lightened.
- 7) In control panels used SKYKS10; **100** is given to RTCOM tip of RT relay that assigned AT FLOOR OUTPUT of SKY65X card, RTC tip is connected to **142** input of SKYKS10 card.
- 8) In systems that used gearless motor, encoder is must be on over speed governor.

SHAFT LEARNING USAGE DETAILS:

- 1) In pulse systems **817** and **818** limit switches were located a little bit top or a little bit bottom of magnets. In this system, limit magnets or limit switches are can be located to "passing to slow speed distance" place.
- 2) If there is really rope creep; if encoder value is not changed with the rope creep, **ASM** and **YSM** are must be connected..
- 3) In high speed systems that used middle speed output, when is moving to neighbour floor, passing to slow speed distance value (I03:Mid.Spd.Slow.) is accepted this value. In high speed systems that is not used middle speed, slowing distance from high speed (I02:HighSpd.Slow.) and slowing distance from middle speed (I03:Mid.Spd.Slow.) are must be selected the same.

SHAFT LEARNING TO BE DONE:

When the lift is standby, it is entered to programming. In "I.Shaft Learning" menu, "I01:Learn Shaft" sub menu is selected **YES**. The card is first moved to 817 bottom switch position. Then, it is moved to bottom level of SKY1 and SKY2 and Shaft learning is started in up direction. In the left bottom of LCD passing floor number, in the right bottom of LCD encoder value is screened. After detected that 818 top switch is not exist, when it is reached to top of SKY1 and SKY2 level, Shaft Learning is completed.

In the Shaft Learning operation if safety device is cut or the lift is taken to inspection mode, Shaft Learning is canceled.

FLOOR LEVEL CORRECTIONS TO BE DONE:

After Shaft Learning is completed, exit from programming mode, by calling each floors, floor level correction distances are noted one by one in up and down directions. If the car is not reached to the floor level, distance value must be stored as (+); if the car passed the level, distance value must be stored as (-). These values are registered to "I08:Up Correct" and "I09:Down Correct" menu. If correction distances are bigger than -99mm or +99mm, ribbon magnets must be checked.

POSITION RESET:

In systems with working encoder, when the electric came to control panel first, the car is sent to the first floor for position reset. If the car is in the zone that the bottom cutter is not exist or between the two floors that SKY1-SKY2 are not exist, first the car is moved to SKY1-SKY2 zone with INSPECTION speed. Then it is moved with normal speed in down direction.