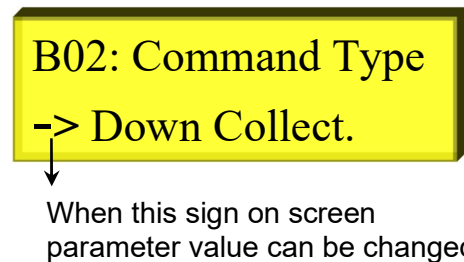
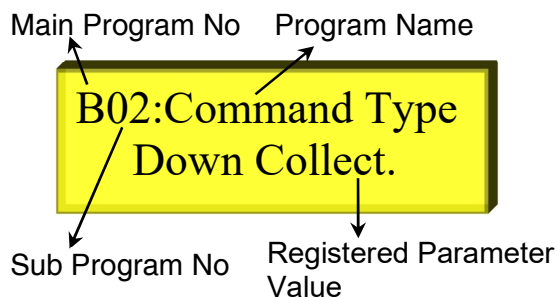


## MLCOMBO-X PROGRAMMING (Version 1.01 and over)

- When the lift is stand by position, by pressing ENTER button for 2 seconds, programming mode starts.
- CONTROLLER and DRIVER menus selection screen is shown first.



- Arrow position is changed using UP and DOWN buttons. The programmin section that the arrow shows is started with ENTER button.



- You can choose any program by using UP and DOWN buttons.
- To exit the programming mode ESC button in the main menu is used, Exit Program is displayed on LCD screen. Press the ENTER button and exit the programming mode; to return the main menu again press the ESC buton.
- When ENTER button in the main menu is pressed, the program on the screen starts.
- If the program has parameter, an arrow appears at the beginning of the second line of LCD screen. You can change the parameter value by using UP and DOWN buttons. To store the value, press the ENTER button and return the main menu. By pressing the ESC button the registered value is valid and you can return the main menu. If the program is a function, it is run and Okey appears on LCD screen for 2 seconds.

## CONTROLLER PARAMETERS

Program	Factory Set	Parameters / Explanations
<b>A.Language</b>		
A.Language	English	Turkce, English, Русский, Polski, Български, Français
<b>B.SystemSettings</b>		
B01:Lift Type	GearedAsynch.	<b>GearedAsynch.</b> (lift that has geared motor) <b>Gearless</b> (lift that has gearless motor)

<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
B02:Command Type (This parameter is shown when CX-TERM-P is selected on menuB37)	Up/DownMixCo.	<b>Up/DownMixCo.</b> (Car Calls and Floor Calls are connected to the same terminal. They are collective in both directions) <b>Down Collect.</b> (Car calls are collective in both directions, floor calls are collective in down direction) <b>Up Collective</b> (Car calls are collective in both directions, floor calls are collective in up direction) <b>Selective Co.</b> (Car calls are collective in both directions, floor down calls are collective in down direction, floor up calls are collective in up direction) <b>OneWayCollect</b> (Car calls are collective in both directions; on the entry floor, car calls are collective in down direction and under the entry floor, car calls are collective in up direction)
B02:Command Type (This parameter is shown when CX-TERM-S is selected on menuB37)	Up/DownColle.	<b>Up/DownColle.</b> (Floor down calls are collective in down direction, floor up calls are collective in up direction. Car calls are collective in both directions) <b>Mix.Collect.</b> (Floor and car calls are collective in both directions)
B03:Num. Of Floor	16	<b>2-24/2-32</b>
B04:Car Lamp Time	5 seconds	<b>1-20 seconds</b> (The duration of car lamp ON)
B05:LockWait Time	15 seconds	<b>5-25 seconds</b> (After CAM energized waiting time for lock signal)
B06:Max.HighSpeed	15 seconds	<b>10-100 seconds</b> (Max moving time at high speed between two floors)
B07:Max.Low Speed	10 seconds	<b>5-100 seconds</b> (Max moving time at low speed)
B08:Parking Time	30 seconds	<b>10-100 seconds</b> (On stand-by, time of moving to park floor)
B09:Park Floor	Passive	<b>Passive, 0,1,..24/31</b> (On stand-by, park floor to go)
B10:Fire Floor	Passive	<b>Passive, 0,1,..24/31</b> (Target floor when detecting fire warning signal)
B11:StopDelCalls	Passive	<b>Passive, Active</b> (When pressed the stop button if the parameter value is passive, car calls are kept in the memory and vice versa)
B12:DoublexSelect	Passive	<b>Passive</b> <b>A Panel</b> <b>B Panel</b> <b>C Panel</b>
B13:Phase Protect	Active	<b>Passive, Active</b>
B14:PTC Control	Active	<b>Passive, Active</b>
B15:Phase Level	50	<b>0-100</b> (It can be controlled phase level sensitivity, when the parameter value is increased it can be accepted existing phases if their voltage levels are low)
B16:RX Delay Time	2000 ms	<b>Passive, 10-5000 ms</b>

		<i>(At electrical lifts, after the motor stops, dropping time of the contactors that are connected to inverter output)</i> <i>(In hydraulic lifts, at starting to move in down direction, waiting time for dropping the direction valves after A3 valve dropped and at stopping, A3 valve dropping time after direction valves picked up)</i>
B17:Ins.Mov.Type	ToLimitSwitch	<b>ToLimitSwitch</b> <i>(In inspection mode, car is moved to up and down limit switches)</i> <b>ToExactFloor</b> <i>(In inspection mode, car is moved to up and down floor levels)</i>
B18:Re-lev.RXtime	1000 ms	<b>Passive, 10-5000 ms</b> <i>(At electrical lifts, after the motor stops, dropping time of the contactors that are connected to inverter output)</i>
B19:OSGreactionT.	1500 ms	<b>Passive, 10-5000 ms</b> <i>(At electrical lifts, if menu B32.OSG/BrakeCtrl parameter is selected "Passive", at starting to move, needed time for dropping of OSG selenoid or gearless motor brake)</i>
B20:Ins.Stop Ctrl	Passive	<b>Passive, Active</b> <i>(Selection of controlling the presence of 120 input without pressing direction buttons in inspection)</i>
B21:PositionReset	Passive	<b>Passive, Active</b> <i>(After the power off, when the card is energized, the car is moved to floor which has down limit bi-stable switch. Note:In shaft learning systems, when this parameter is selected "Passive", if the car is not in the door zone when the main power is ON, position reset is done!)</i>
B22:Max. Car Call	8	<b>1,2,..24/32</b> <i>(maximum call number from the car)</i>
B23:KRC Control	Active	<b>Passive, Active, Full Active</b> <i>(Detection type of contactor dropped-picked up data that is coming to contactor control input (KRC))</i>
B24:Top LessFloor	Passive	<b>Passive, 1,2,..5</b> <i>(In duplex working, up direction missing floor number of one of the lifts)</i>
B25:LowerLessFlo.	Passive	<b>Passive, 1,2,..5</b> <i>(In duplex working, down direction missing floor number of one of the lifts)</i>
B26:Gong Timing	When Stop	<b>When Stop</b> <i>(Gong signal is given when the car is stopped)</i> <b>While Slowing</b> <i>(Gong signal is given when the car is slowing for the target floor)</i> <b>Passive</b>
B27:Entry Floor	0	<b>0-7</b> <i>(Selection of entry floor used for OneWayCollective command type)</i>
B26:GrayBin.Start	0	<b>0-5</b> <i>(At the up missing floor lifts, selection of the starting number of gray-code or binary output)</i>
B28:EvacuationFl.	Passive	<b>Passive, 0,1,..23/31</b>

		<i>(If panic input detected, floor that the car will be parked)</i>
B29: CarCallCancel	Passive	<b>Passive, Active</b> <i>(If this parameter is selected active, accepted call by pressing the button inside the car is canceled by pressing this button once again)</i>
B30: CallSCProtect	Active	<b>Passive, Active</b> <i>(If the parameter is active short-circuit protection of the call lamps are provided by microcontroller and vice versa)</i>
B31:Fl. Detection	M0pulse2magn	<b>M0pulse2magn, Encoder</b> <i>(selection of how to do the floor detection)</i>
B32:OSG/BrakeCtrl	Passive	<b>Passive, Active, A3 Canceled</b> (It can be selected by entering Puk code) <i>(when this parameter is selected "Passive", OSG/Brake contact is controlled only at the movement. If "Active" is selected, it is controlled at taking off and movement both. <u>If it is used for the lifts that is not suitable to En81-20 standard, to do this parameter "A3 Canceled", MLCOMBO40 user must declare to our firm with writings and must accept the responsibility</u>)</i>
B33:Re-levelling	Passive	<b>Passive, Active</b>
B34:Standart Type	EN 81-20	<b>EN 81-20, EN 81-1/2+A3</b> <i>(selection of which standard that MLCOMBO40 device will be run)</i>
B35:AtSpd.TimeEnd	Only Warn	<b>Only Warn, SystemBlocked</b> <i>(Selection of the lift what to do at the end of the time that is set in B06 and B07 parameters)</i>
B36:Mov.StartTime	200	<b>200,210...5000 ms</b> <i>(Selection of the waiting time to start the moving after coming 140 signal)</i>
B37:LOPConnection	CX-TERM-P 24d	<b>CX-TERM-P 24d , CX-TERM-S 32d</b> <i>(Selection of whether floor call connections are parallel or serial)</i>
B38:CarCardSelect	SERI40 &INT40	<b>SERI40&amp;INT40, IBOX-P &amp;INT40, IBOX-S &amp; COP</b> <i>(Selection of car communication cards)</i>
B39:B side Calls	Passive	<b>Passive, Active</b> <i>(Selection of allowing B side calls, when floor call connections are parallel,)</i>
B40:WellLightTime	Passive	<b>Passive, 10...600 seconds</b> <i>(If the value of this parameter is different from 'passive', pit lights are turned off by pulling pit lighting pulse current switch relay after the cabin lights turn off at the end of the time that was set.)</i>

### **C.Door Settings**

<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
C01:DoorTypeSet A	Flr00 CarDo.	<i>(For each floor, A side door type can be set one by one and can be set at the same time)</i>
C02:DoorTypeSet B	Flr00 NoDoor	<i>(For each floor, B side door type can be set one by one and can be set at the same time)</i>
C03:A D.Lim.Type	Without Limit	<b>With Limit, Without Limit</b> <i>(Limit type selection of A side door mechanism)</i>
C04:B D.Lim.Type	Without Limit	<b>With Limit, Without Limit</b>

		<i>(Limit type selection of B side door mechanism)</i>
C05:EndOfDoorErr.	SystemBloked	<b>Only Warn, SystemBloked</b> <i>(Selection of the lift behaviour after the door contact error occurs)</i>
C06:Wait At Floor	5 seconds	<b>1-99 seconds</b> <i>(At full automatic door systems, stay opened time of automatic door; at only indoor systems, if the door doesn't open after the car stopped, selection the time of the next call)</i>
C07:PhotocellTime	Passive	<b>Passive, 1,2,..99 seconds</b> <i>(Selection the time of cutting photocell signal and starting the nudging signal)</i>
C08:Door OpenMax.	180 seconds	<b>10-180 seconds</b> <i>(When the door stayed open, selection the time of warning)</i>
C09:CAM Delay	Passive	<b>Passive, 1,2,..10 seconds</b> <i>(Selection of the pick-up time of the CAM relay after the car has stopped coming from the movement)</i>
C10:Adv.Door Open	Passive	<b>Passive, Active</b>
C11:Dir.-Op.Style	Passive	<b>Passive, Active</b> <i>(If parameter value is passive, when the direction arrows are on, the same floor call is not imported. If parameter value is active, when the direction arrows are on and if the same floor call is come, the automatic door is opened)</i>
C12:Door WaitOpen	Passive	<b>Passive, Active</b> (It can be selected by entering Puk code) <i>(At full automatic door lifts, selection of waiting the door opened. <u>This situation is not suitable to EN 81-20 standard.</u> To do this parameter active, ML40P_v2 user must declare to our firm with writings and must accept the responsibility)</i>
C13:CloseBt.Delay	Passive	<b>Passive, 1,2,..20 seconds</b> <i>(Delay time of close buton detection)</i>
C14:Fireman Door	Side A	<b>Side A, Side B</b> <i>(Selection of door side to open to firefighter rescue corridor in case of fire)</i>

### **D.DisplaySetting**

<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
D01:FloorDisp.Set	Flr00 Disp 0	<b>Flr00-31 Disp 0-31,a..z,A..Z</b> <i>(Display datas that will be screened on floors are changed)</i>
D02:TargetF.Flash	Passive	<b>Passive, Active</b> <i>(If this parameter is selected, in every floor, target floor is flashed twice)</i>
D03:TERMsegme.Out	ABCDEFG2BC-2G	<b>ABCDEFG2BC-2G, Gray-Code, Binary</b> <i>(Selection of display segment, gray-code or binary output from CX-TERM-P segment outputs)</i>
D04:IBOXsegme.Out	ABCDEFG2BC-2G	<b>ABCDEFG2BC-2G, Gray-Code, Binary</b>

		(Selection of display segment, gray-code or binary output from CX-IBOX segment outputs)
D05:GrayBin.Start	0	<b>0-5</b> (At the up missing floor lifts, selection of the starting number of gray-code or binary output)
Following parameters are shown when CX-TERM-S is selected in menuB37		
D06:Dir.ArrowType	Type 4	<b>Type 1..4</b> (Selection of direction arrow types on MLKAT-D card)
D07:ArrowShiftSpd	Normal	<b>No Shift,Very Slow, Slow,Normal,Fast,Very Fast</b> (Selection of direction arrow shift speed on MLKAT-D card)
D08:ArticleShiftS	Normal	<b>No Shift,Very Slow, Slow,Normal,Fast,Very Fast</b> (Selection of article shift speed on MLKAT-D card)
D09:OUTofSER.Apx.	No Appendix	<b>No Appendix,..(FLOOR=1),...(FAULT-2)</b> (Selection of appendix that will added to (OUT OF SERVICE) article end on MLKAT-D card)
D10:FloorDisp.Set	Passive	<b>Passive, Active</b>
D11:FloorIDopera.	No Operation	<b>No Operation, ID Definition, ID Reset !</b> (Selection of identity operation of floor cards)

## **E.Prog. Inputs**

### **(Programmable Inputs Sub Section)**

<b>Program</b>	<b>Factory Set</b>	
E01:CX-MAIN-PG1	M0 Pulse	
E02:CX-MAIN-PG2	142 Contact	
E03:CX-MAIN-PG3	Not Used	
E04:CX-MAIN-PG4	Not Used	
E05:CX-MAIN-PGFT	Not Used	
E06:SERI40/CX-IBOX-EIN1	Down Re-lev.	
E07:SERI40/CX-IBOX-EIN2	Up Re-level.	
E08:SERI40/CX-IBOX-EIN3	Door A Contact	
E09:SERI40/CX-IBOX-EIN4	Not Used	
Following parameters are shown when CX-TERM-S is selected in menuB37		
E10:CX-IBOX-EIN5	Not Used	
E11:COP-A1-EIN1	Not Used	
E12:COP-A1-EIN2	Not Used	
E13:COP-A2-EIN1	Not Used	
E14:COP-A2-EIN2	Not Used	
E15:COP-B1-EIN1	Not Used	
E16:COP-B1-EIN2	Not Used	
E17:COP-B2-EIN1	Not Used	
E18:COP-B2-EIN2	Not Used	
E19..50:LOP-0..31-A-EIN	Not Used	
E51..82:LOP-0..31-B-EIN	Not Used	

### **Assignable Functions**

- 1- K16 OpenLmt-B (Door B open limit input)
- 2- K19CloseLmt-B (Door B close limit input)
- 3- Down Re-lev. (Down re-levelling input)
- 4- Up Re-level. (Up re-levelling input)
- 5- Overload (Overload contact)
- 6- 142 Contact (JF Levelling Sw.)

- 7- G.M.BrakeTest (Gearless machine fren test input)
- 8- Open-B (Door B open button input)
- 9- Close-B (Door B close button input)
- 10- Full Load (Full load contact)
- 11- Vatman (Vatman key input)
- 12- Fireman (Fireman key input)
- 13- K16 OpenLmt-A (Door A open limit input)
- 14- K19CloseLmt-A (Door A close limit input)
- 15- M0 Pulse (M0 bi-stabil contact)
- 16- CarCallEnable
- 17- Photocell-A (Door A photocell input)
- 18- Photocell-B (Door B photocell input)
- 19- DoorControl-1 (MLDC card communication input 1)
- 20- DoorControl-2 (MLDC card communication input 2)
- 21- FiremanCarKey
- 22- 819 DownLimit (Down limit swith input for middle speed)
- 23- 820 Up Limit (Up limit swith input for middle speed)
- 24- 2mToTopOfWell (Two meters to top of well contact)
- 25- 2meters ToPit (Two meters top it contact)
- 26- Door A Contact (Extra contact for car door A)
- 27- Shaft Protect
- 28- DoorMotor NTC
- 29- 130A Input
- 30- Door B Contact (Extra contact for car door B)
- 31- Panic (Panic button input)
- 32- BrakeTracing2 (Second brake tracing contact of gearless machine)

### ***F.Prog. Outputs (Programmable Outputs Sub Section)***

<b>Program</b>	<b>Factory Set</b>	
F01:CX-MAIN-RD	CAM Relay	
F02:CX-MAIN-RC1	Open Relay-B	
F03:CX-MAIN-RC2	Close Relay-B	
F04:CX-MAIN-OUT1	Res.Completed	
F05:SERI40/CX-IBOX-EO1	Bridging Warn	
F06:SERI40-GCx	Gray-Code	
Following parameters are shown when CX-TERM-S is selected in menuB37		
F07:CX-IBOX-S-ER1	Open Relay-B	
F08:CX-IBOX-S-ER2	Close Relay-B	
F09:COP-A1-EO1	Gray-Code M0	
F10:COP-A1-EO2	Gray-Code M1	
F11:COP-A1-EO3	Gray-Code M2	
F12:COP-A1-EO4	Gray-Code M3	
F13:COP-A1-EO5	Overload	
F14:COP-A1-EO6	Inspection	
F15:COP-A1-EO7	Down Arrow	
F16:COP-A1-EO8	Up Arrow	
F17..24:COP-A2-EO1..8	Not Used	
F25..32:COP-B1-EO1..8	Not Used	
F33..40:COP-B2-EO1..8	Not Used	
F41..72:LOP-0..31-A-EIN	Not Used	
F73..A4:LOP-0..31-B-EIN	Not Used	

## Assignable Functions

- 1- Inspection
- 2- Car Lamp
- 3- Open Relay-B
- 4- Close Relay-B
- 5- Gong
- 6- OSG Relay
- 7- UPS Contactor
- 8- Nudging (At full automatic door lifts, output at the end of photocell blocking time)
- 9- AtFloorSignal
- 10- Fault(Invers)
- 11- CAM relay
- 12- Fire Alert
- 13- FireMainPower (Fire main power contactor output)
- 14- Bridging Warn (Bridging warn output)
- 15- Mach.RoomLig. (Machine Room Lighting)
- 16- Gray-Code M0
- 17- Gray-Code M1
- 18- Gray-Code M2
- 19- Gray-Code M3
- 20- Gray-Code M4
- 21- Binary M0
- 22- Binary M1
- 23- Binary M2
- 24- Binary M3
- 25- Binary M4
- 26- Up Arrow
- 27- Down Arrow
- 28- Overload
- 29- Out of service
- 30- Open Relay-A
- 31- Close Relay-A
- 32- Res.Completed (Rescue completed)

## G.Maint.Settings

Program	Factory Set	Parameters / Explanations
G01:Mainten.Time (This parameter is shown when CX-TERM-P is selected on menuB37)	240 Days	<b>10-240 Days</b> (The number of days for the maintenance warning)
G01:NextMainten. (This parameter is shown when CX-TERM-S is selected on menuB37)	01.01.2020	(Setting of next maintenance date)
G02:AtEndOfM.Time	Only Warn	<b>Only Warn</b> <b>SystemBlocked</b>
G03:Maintenanced? (This parameter is shown when CX-TERM-P is selected on menuB37)	No	<b>Yes, No</b> (After the maintenance it is run, day and hour datas are deleted, working number after maintenance is deleted and saved faults are deleted)
G03:ResetRun Num. (This parameter is shown when CX-TERM-S is selected on menuB37)	No	<b>Yes, No</b> (After the maintenance, total run is reset)
G04>Delete Fault?	No	<b>Yes, No</b> (All registered faults are deleted)



G05:Automatic Run	Passive	<b>Passive,10,...,5000 times</b> (The lift is randomly run up or down in the selected number)
<b>H.RescueSettings</b>		
<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
H01:Rescue Type	AKU-UPS Down	<b>AKU-UPS Down, AKU-UPS Up,L1-2-3 Down, L1-2-3 Up</b> (Select of rescue type)
H02:Rescue Delay	5 seconds	<b>1-15 seconds</b> (After the detection of main power is cut, selection of waiting time to start the rescue operation)
H03:RescueMaxTime	40 seconds	<b>10-200 seconds</b> (Selection of maximum movement time at rescue)
H04:Res.JF M.Time	Passive	<b>Passive, 0,1-10,0 seconds</b> (At rescue operation, after the detection of JF, selection of needed time to re-levelling)
<b>I.Shaft Learning</b>		
<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
I01:Learn Shaft	No	<b>Yes, No</b> (If this parameter is chosen "Yes", shaft learning procedure is started)
I02:HighSpd.Slow.	150 cm	<b>10-500 cm</b> (Starting distance selection of passing from the high speed to slow speed to the exact floor)
I03:DriftDistance	10 cm	<b>5-50 cm</b> (Drift distance selection at low speed)
I04:Stop Distance	70 mm	<b>1-200 mm</b> (While approaching to the target floor, selection of cutting distance of low speed signal)
I05:Dist.ToMidSpd	500 cm	<b>1-500 cm</b> (To give the high speed signal, selection of the nearest floor minimum distance)
I06:Reader Lenght	30 cm	(This value is fixed.)
I07:817 Position	Between0-1Fl.	<b>Between0-1Fl. Between1-2Fl.</b> (Selection position of 817 lower limit switch)
I08:Up Correct	Flr01 00mm	<b>Flr01-23, All -99, 0, 99mm</b> (Selection of precision levelling adjustment in up direction for each floor)
I09:Down Correct	Flr00 00mm	<b>Flr01-22, All -99, 0, 99mm</b> (Selection of precision levelling adjustment in down direction for each floor)
I10:Floor Height	Flr01 00mm	<b>Flr01-23, 1mm=0cnt</b> (After shaft learning, tracing of measured floor heights and count number per mm)
I11:Calc.Distance	Passive	<b>Passive, Active</b> (Selection of passing the slow speed with always calculating the distance to target floor)
I12:DirectToFloor	Passive	<b>Cancel, Comfort -1,2,3,4,5</b> (While the stop type "Distance Mode1 (2-3) is selected, the selection of the car stopping with

		<i>decreasing zero speed without sliding with low speed)</i>
I13:CorrectionMod	Passive	<b>Passive, Active</b> <i>(Selection of floor level correction mode from the car)</i>
I14:TopOfWellDis.	200 cm	<b>10-500 cm</b> <i>(Distance between the top floor and the top of well)</i>
I15:Pit Distance	200 cm	<b>10-500 cm</b> <i>(When the car is stopped at the exact floor at the bottom, distance between under the car and the bottom of the well)</i>
I16:819-820Limit.	Passive	<b>Passive, Active</b> <i>(If this parameter selected "Active"; when 819 and 820 limits switches are opened, middle speed (S3) is cut)</i>

### ***J.GeneralSetings***

<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
J01:Factory Set ?	No	<b>Yes, No</b> <i>(All parameter values are changed into factory settings)</i>
J02:ResetCounters	No	<b>Yes, No</b> <i>(Total working number reset)</i>
J03:Change Passw.	0000	<i>(Changing password)</i>
J04:Cancel Passw.	No	<b>Yes, No</b> <i>(Password is cancelled, new value is 0000)</i>
J05:Del.BridgeErr	No	<b>Yes, No</b> <i>(Stored faults info is deleted about bridging section)</i>
J06:Del UCM Error	No	<b>Yes, No</b> <i>(Stored faults info as a result of UCM is deleted)</i>
J07:UCM Up Test	No	<b>Yes, No</b>
J08:UCM Down Test	No	<b>Yes, No</b>
J10:SaveTo CxIBOX	No	<b>Yes, No</b> <i>(Stores all parameters and floor heights in MLCOMBO-X to CX-IBOX card)</i>
J11:Read CxIBOX	No	<b>Yes, No</b> <i>(Reloads all loaded parameters and floor heights in CX-IBOX to MLCOMBO-X)</i>
J12:Re-lev.magnet	2	<b>1, 2</b> <i>(The selection of number of magnets to be used for each floor in leveling from the cabin)</i>
J13:Enc.Err.Reset	Passive	<b>Passive, Active</b> <i>(The selection for automatic reset in case of encoder error)</i>
J14:AdvancedPar.1		
J15:RemoteMonitor	No	<b>Yes, No</b>

Following parameters are shown when CX-TERM-S is selected in menuB37

J20:Clock Settings	00:00	<i>(Setting the clock)</i>
J21:Date Settings	01.06.2020	<i>(Setting the date)</i>
J22:DbIxCom.Speed	Normal(SC-SD)	<b>Normal(SC-SD), Fast (SA-SB)</b> <i>(Selection for duplex communication speed and connection terminal)</i>
J23:LOPCANprotocl	Mikrolift	<b>Mikrolift,Other-1,2,3</b>

		<i>(LOP CAN-BUS commication protocol select)</i>
J24:COPCANprotocl	Mikrolift	<b>Mikrolift,Other-1,2,3</b> <i>(COP CAN-BUS commication protocol select)</i>
J99:Version		Ver:1.01.01 Update:01.06.2020
<b>K.Sound Settings</b>		
<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
K01:Reading Style	Reached1stFl.	<b>Floor 1, Reached1stFl., 1st Floor</b> <i>(Chosing reading style)</i>
K02:FloorReadTime	When Stop	<b>While Slowing, When Stop</b> <i>(When slowing: When the lift is slow down, floor reading is done.</i> <i>When stop: When the lift is stop, floor reading is done.)</i>
K03:Gong Type	Ding	<b>Ding; Ding Dong; DownDing,UpDD; UpDing,DownDD</b> <i>(Chosing gong type.</i> <i>DownDing,UpDD: If the car direction is down, Ding sound; if the car direction is up, Ding-Dong sound is given.</i> <i>UpDing,DownDD: If the car direction is up, Ding sound; if the car direction is down, Ding-Dong sound is given)</i>
K04:Gong PlayTime	When Stop	<b>While Slowing, When Stop</b> <i>(When slowing: When the lift is slow down, gong is served.</i> <i>When stop: When the lift is stop, gong is served)</i>
K05:ReadWhenGoing	Passive	<b>Passive, Active</b> <i>(If this parameter is selected "Active", especially for the blinds detecting the floor changes, while each floor changing, the present floor is read)</i>
K06:869RepeatTime	10 seconds	<b>01,02,...,99 seconds</b> <i>(Chosing waiting time between "Lift Out of Servive" reading)</i>
K07:804RepeatTime	5 seconds	<b>01,02,...,99 seconds</b> <i>(Chosing waiting time between "Lift Overload" reading)</i>
K08:Status Read	Passive	<b>Passive, Active</b> <i>(Selection of the reading permission of car movement or door position)</i>
K09:MusicPlayLev.	Passive	<b>Passive, 1,2,3</b> <i>(Selection an cancelation of the music play level when SERISESMP3 card inserted on MLSERI40(CX-IBOX-P/S) board)</i>
K10:ManuelReading	Passive	<b>Passive, Active</b> <i>(Selection of reading in other languages except Turkish and English when SERISESMP3 card inserted on MLSERI40(CX-IBOX-P/S) board)</i>
K11:Floor00 Read. .... K34:Floor23 Read.  K35:Floor24 Read. K42:Floor31 Read.	Zero .... 31	Entry, Zero,1,2,3, ...,31, Lobby, Restaurant, Carpark, Carpark 1...5, Basement, Minus 1...5, Terrace, Cinema, Sport Saloon, Swimming Pool, OperatingRoom <i>(Chosing for each floor reading)</i>

## L.Gong Settings

<b>Program</b>	<b>Factory Set</b>	<b>Parameters / Explanations</b>
L01:Car Gong	Passive	<b>Passive, Active</b> (Selection of gong outputs on top of the car card passive or active)
L02:Flo.CardGongs	Passive	<b>Passive, Active</b> (Selection of gong outputs on floor card passive or active)
L03:LOP Gong Type	Single Sound	<b>Single Sound</b> (Single sound on up and down direction) <b>Double Sound</b> (Double sound on up and down direction) <b>UpOne, DownTwo</b> (Up direction single sound, down direction double sound) <b>DownOne, UpTwo</b> (Up direction double sound, down direction single sound) (Selection of gong type on floor cards)
L04:LOPGongTiming	When Stop	<b>While Slowing, When Stop</b> (When slowing: When the lift is slow down, floor reading is done. When stop: When the lift is stop, floor reading is done.)
L05:Seri40 Gong (CxIBOX Gong)	Active	<b>Passive, Active</b> (Selection gong output from the alarm speaker connected to the top of the car board)

## MLDRIVER PARAMETERS

<b>Program</b>	<b>Factory Setting</b>	<b>Parameter Contents / Explanations</b>
<b>A.Travel Curve</b>		
01:Initial.Acc.	0,30 m/s <sup>2</sup>	<b>0,01...0,99 m/s<sup>2</sup></b> (In the initial movement car the straining of rope and for the regenerating of inertia motor with the acceleration value is be speeded to initial speed. During motor initial starting, it drives with this speed. At the end of the time normal acceleration will be started)
02:Initial.Speed	0,01 m/s	<b>0,00...0,10 m/s</b> (See parameter "01" for explanation)
03:Initial. Time	0,00 s	<b>0,00...1,00 s</b> (See parameter "01" for explanation)
04:Low Speed	0,10 m/s	<b>0,01...0,20 m/s</b> (When the motor is driven at high speed, speed reference at the end of deceleration. As a result of the either of UP or DOWN inputs, motor continues to drive with this speed)
05:Re-Level.Spd.	0,03 m/s	<b>0,01...0,10 m/s</b> (Re-levelling speed value)
06:Insp..LowSpeed	0,25 m/s	<b>0,15...0,30 m/s</b>

		<i>(Inspection low speed value)</i>
07:Insp.HighSpd.	0,50 m/s	<b>0,30...0,65 m/s</b> <i>(Inspection high speed value)</i>
08:MiddleSpeed-1	0,40 m/s	<b>2,50...0,01 m/s</b> <i>(First middle speed value)</i>
09: MiddleSpeed-2	0,80 m/s	<b>2,50...0,01 m/s</b> <i>(Second middle speed value)</i>
10:High Speed	1,00 m/s	<b>2,50...0,01 m/s</b> <i>(High speed value)</i>
11:Acceleration	0,40 m/s <sup>2</sup>	<b>1,00...0,01 m/s<sup>2</sup></b> <i>(The speeding acceleration of car. As the value increases, the required value is reached more quickly)</i>
12:Acc.Jerk Time	1,10 s	<b>0,01...3,00 s</b> <i>(Starting acceleration and when required speed is reached stepless acceleration time)</i>
13:Deceleration	0,50 m/s <sup>2</sup>	<b>1,00...0,01 m/s<sup>2</sup></b> <i>(It means car deceleration time. When the value increases, to the required value is reduced more quickly. The stopping type is valid while parameter was selected)</i>
14:Dec.Jerk Time	1,50 s	<b>0,01...3,00 s</b> <i>(The starting of slowing down and while it decreases to the desired velocity stepless acceleration time. The stopping type is valid while parameter was selected)</i>
15:StopJerkCons.	2,0	<b>0,10-10,0</b> <i>(While Stopping type Distance Mode1 (2-3) is selected, stop jerk constant)</i>
16:Stopping Type	Dist. Mode-1	<b>Parameter, Dist. Mode -1,2,3</b> <i>(Selection of whether the car will be moved from high (S6) to low speed and from low speed to zero speed according to distance or parameters)</i>
19:Brake OnDelay	0,5 s	<b>0,3...5,0 s</b> <i>(Mechanical brake opening time selection. During this time the motor is hold at zero speed. At the end of the time, the car starts accelerating)</i>
20:BrakeOffDelay	0,5 s	<b>0,1...5,0 s</b> <i>(Mechanical brake closing time selection. During this time the engine is driven at zero speed)</i>
21:DirectToFloor	Passive	<b>Cancel, Comfort -1,2,3,4,5</b> <i>(While the stop type "Distance Mode1 (2-3) is selected, the selection of the car stopping with decreasing zero speed without sliding with low speed)</i>
24:Ref.Hold Time	0,10 s	<b>0,01...3,00 s</b> <i>(If any one of the speed inputs (S1-S6) is cut before reaching the assigned speed, then after this time, the input is accepted as disappeared)</i>

## B.MotorParameter

<b>Program</b>	<b>Factory Setting</b>	<b>Parameter Contents / Explanations</b>
01:Motor ID	Standard	<b>Standard,1...999</b> <i>(Code selection for the motors in the user manual. If the engine code is selected, the motor label values</i>

		<i>stored in the device memory will be loaded automatically)</i>
02:Motor Type	Async.Gearred	<b>Async.Gearred, Sync.Gearless</b> (Motor type selection)
03:Frequency	50,0Hz	<b>5,0...99,9 Hz</b> (Indicated frequency value on the motor label)
04:NumberofPoles	4	<b>4...64</b> (Number of poles of motor)
05:Nom.Car Speed	1,0 m/s	<b>0,4...2,5 m/s</b> (Nominal speed of the car)
06:Nominal Speed	1360,0 rpm	<b>50,0...3600,0 rpm</b> (Number of period per motor label)
07:Nom. Voltage	380 V	<b>100...420 V</b> (Number of voltage per motor label)
08:Nom. Current	18 A	<b>1,0...18,0 A</b> (Nominal current (In) value indicated on the motor label)
09:CosQ	0,81	<b>0,01...0,99</b> (Indicated CosQ value on the motor label)
10:M.Max.Current	18,0 A	<b>1,0...18,0 A</b> (Maximum current value selection)
11:Overload Time	5 s	<b>1...10 s</b> (Selection of the time allowed to continuously of the set maximum current value)
12:NoLoadCurr.L.	40 %	<b>20...70</b> (Selection of current level in asynchronous motors out-of-gear. If this value is increased unnecessary, energy consumption will be wasted)

### C.Drv.Parameters

<b>Program</b>	<b>Factory Setting</b>	<b>Parameter Contents / Explanations</b>
04:Encoder Type	Incremental	<b>Incremental</b> <b>ENDAT</b> <b>BISS</b> <b>SINCOS</b> (Selection of encoder type connected to motor)
05:Enc.Resoluti.	1024	<b>512,1024,2048,4096</b> (Number of encoder pulses)
06:MotorDirecti.	Not Inverted	<b>Not Inverted, Inverted</b> (Selecting the direction of rotation of the motor)
07:Rescue Mode	Rescue with Batt.	<b>Cancel, Res.With Batt., RescueWithUPS</b> (The selection of rescue mode)
08:Res.Direction	Easiest Dir.	<b>Easiest Dir., Command Dir.</b> (In the direction in which the motor direction is detected by the device or selection from the input according to the command direction)
09:Rescue Speed	0,05 m/s	<b>0,01...0,15 m/s</b> (In the rescue mode speed value)
10:UPS Power	1,50 kVA	<b>0,01...99,99</b> (Selection of used UPS power when rescue mode is selected with UPS rescue)
11:Control Mode	Closed Loop	<b>Closed Loop, Open Loop</b> (Selection of motor control)

12:MotorIdentify	Passive	<b>Cancel, Active</b> (Selection of motor identification enable)
13:Spd.Cont.Par1	5,0	<b>5,0...999,0</b> (This parameter is the speed control hardness adjustment applied at zero speed)
14:Spd.Cont.Par2	20,0	<b>5,0...999,0</b> (This parameter is the speed control hardness adjustment before reaching the nominal speed of the motor)
15:CurrentCont.H	5,0	<b>5,0...10,0</b> (This parameter is the hardness adjustment of the PI loop in the current control algorithm. When this value increased, intervention to the current will be more frequent)
16:MotionDirect.	Not Inverted	<b>Not Inverted, Inverted</b> (How the UP and DOWN inputs rotate the motor)
17:Unblock Brake	Passive	<b>Passive, Active</b> (This parameter is activated to rescue the braked system. when this parameter is active, high torque is applied when it's on the move in inspection mode until the motor drives normal current. This parameter is cancelled automatically when the motor current reaches normal level.)
18:E..OffsetAngle	0,0	<b>0,0...360,0</b> (Synchronous motor encoder offset angle)
19:Enc.SpdFilter	3	<b>1...100</b> (Encoder input filtering value)
20:RollbackCons.	6,0	<b>0,0...20,0</b> Rollback hardness in synchronous motor driving (Rollback is not performed, if the value is 0,0)
21:RollbackThres	0,1	<b>0,1...5,0</b> (Rollback treshold value)
22:RollbackFiltr	0	<b>0...8</b> (Rollback filter value)

### **D.AdvancedSetting**

<b>Program</b>	<b>Factory Setting</b>	<b>Parameter Contents / Explanations</b>
07:NoLoadCurrent	5,40	<b>1,00...40,00</b> (Measured value in motor identification process.)
08:Rotor Resist.	1,21 Ohm	<b>0,01...99,99 Ohm</b> (Measured value in motor identification process.)
10:StatorInduc.	7,00 mH	<b>0,01...99,99 mH</b> (Measured value in motor identification process.)
11:FluxCoeffici.	6,28 Wb	<b>1,00...9,99 Wb</b> (Measured value in motor identification process.)
12:StatorResist.	0,76 Ohm	<b>0,01...99,99 Ohm</b> (Measured value in motor identification process)
14:BrakingLev.V.	650 V	<b>615...750</b> (DC bus voltage selection where braking resistor will be activated)

## ***E.GeneralSetting***

<b><i>Program</i></b>	<b><i>Factory Setting</i></b>	<b><i>Parameter Contents / Explanations</i></b>
04:SDCardSet1 RD	No	<b>No, Yes</b> <i>(In the device memory, the parameter values stored in Set1 are replaced by the current values)</i>
05:SDCardSet2 RD	No	<b>No, Yes</b> <i>(In the device memory, the parameter values stored in Set2 are replaced by the current values)</i>
06:SDCardSet1 WR	No	<b>No, Yes</b> <i>(The current parameter values are stored in the device memory in Set1)</i>
07:SDCardSet2 WR	No	<b>No, Yes</b> <i>(The current parameter values are stored in the device memory in Set2)</i>
09:Factory Default	No	<b>No, Yes</b> <i>(All parameter values are replaced by the factory settings)</i>
11>Delete Errors	No	<b>No, Yes</b> <i>(All registrated errors are deleted)</i>