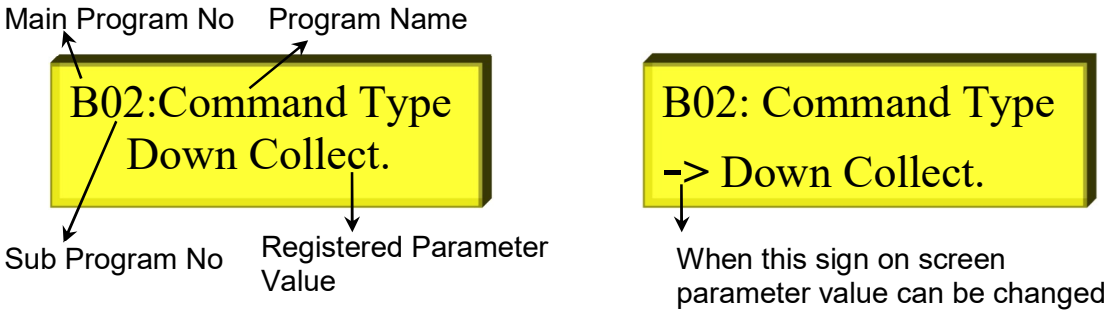
MLCOMBO40 PROGRAMMING (Version 1.01 and over)

- When the lift is stand by position, by pressing ENTER button for 2 seconds, programming mode starts.
- ML40P and MLDRIVER 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.

ML40P PARAMETERS

Program	***Factory Set***	***Parameters / Explanations***
	A.Language	
A.Language	Turkce	**Turkce, English, Русский, Polski, Български, Français**
	B.SystemSettings	
B01:Lift Type	Electrical	**Electrical** *(lift that has geared motor)* **Gearless** *(lift that has gearless motor)* **Gearless MRL** *(lift that has gearless motor and machine roomless)*
B02:Command Type	Up/DownMixCo.	**Up/DownMixCo.**

		(Car Calls and Floor Calls are connected to the same *terminal. They are collective in both directions)* **Down Collect.** *(Car calls are collective in both directions, floor calls are collective in down direction)* **Up Collective** *(Car calls are collective in both directions, floor calls are collective in up direction)*
		Selective Co. *(Car calls are collective in both directions, floor down calls are collective in down direction, floor up calls are collective in up direction)* **OneWayCollect** *(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)*
B03:Num. Of Floor	16	**2-24**
B04:Car Lamp Time	5 seconds	**1-20 seconds** *(The duration of car lamp ON)*
B05:LockWait Time	15 seconds	**5-25 seconds** *(After CAM energized waiting time for lock signal)*
B06:Max.HighSpeed	15 seconds	**10-100 seconds** *(Max moving time at high speed between two floors)*
B07:Max.Low Speed	10 seconds	**5-100 seconds** *(Max moving time at low speed)*
B08:Parking Time	30 seconds	**10-100 seconds** *(On stand-by, time of moving to park floor)*
B09:Park Floor	Passive	**Passive, 0,1,..23** *(On stand-by, park floor to go)*
B10:Fire Floor	Passive	**Passive, 0,1,..23** *(Target floor when detecting fire warning signal)*
B11:StopDelCalls	Passive	**Passive, Active** *(When pressed the stop button if the parameter value is passive, car calls are kept in the memory and vice versa)*
B12:DoublexSelect	Passive	**Passive** **A Panel** **B Panel**
B13:Phase Protect	Not Sequence	**Passive** **Not Sequence** **Sequence 50Hz** **Sequence 60Hz**
B14:PTC Control	Active	**Passive, Active**
B15:Phase Level	50	**0-100** *(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	**Passive, 10-5000 ms** *(At electrical lifts, after the motor stops, dropping time of the contactors that are connected to inverter output)* *(In hydraulic lifts, at starting to move in down direction, waiting time for dropping the direction valves after A3 valve droppped and at stopping, A3 valve dropping time after direction valves picked up)*
B17:Ins.Mov.Type	ToLimitSwitch	**ToLimitSwitch**

		(In inspection mode, car is moved to up and down limit switches) **ToExactFloor** *(In inspection mode, car is moved to up and down floor levels)*
B18:Re-lev.RXtime	1000 ms	**Passive, 10-5000 ms** *(At electrical lifts, after the motor stops, dropping time of the contactors that are connected to inverter output)*
B19:OSGreactionT.	1500 ms	**Passive, 10-5000 ms** *(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)*
B20:Reserve 1		
B21:PositionReset	Passive	Passive, Active *(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!)*
B22:Max. Car Call	8	**1,2,..24** *(maximum call number from the car)*
B23:KRC Control	Active	**Passive, Active, Full Active** *(Detection type of contactor dropped-picked up data that is coming to contaktor control input (KRC))*
B24:Top LessFloor	Passive	**Passive, 1,2,..5** *(In doublex working, up direction missing floor number of one of the lifts)*
B25:LowerLessFlo.	Passive	**Passive, 1,2,..5** *(In doublex working, down direction missing floor number of one of the lifts)*
B26:Gong Timing	When Stop	**When Stop** *(Gong signal is given when the car is stopped)* **While Slowing** *(Gong signal is given when the car is slowing for the target floor)* **Passive**
B27:Entry Floor	0	**0-7** *(Selection of entry floor used for OneWayCollective command type)*
B28:GrayBin.Start	0	**0-5** *(At the up missing floor lifts, selection of the starting number of gray-code or binary output)*
B29: CallSCProtect	Active	**Passive, Active** *(If the parameter is active short-circuit protection of the call lamps are provided by microcontroller and vice versa)*
B30:Seri40 Gong	Active	**Passive, Active** *(Selection of giving gong output from the alarm speaker that is connected to MLSERI40 top of the car card)*
B31:Fl. Detection	M0pulse2magn	**M0pulse2magn, Encoder** *(selection of how to do the floor detection)*

B32:OSG/BrakeCtrl	Passive	**Passive, Active, A3 Canceled** (It can be selected by entering Puk code) *(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,</u> to do this parameter "A3 Canceled", MLCOMBO40 user must declear to our firm with writings and must accept the responsibility)*
B33:Re-levelling	Passive	**Passive, Active**
B34:Standart Type	EN 81-20	**EN 81-20,EN 81-1/2+A3** *(selection of which standard that MLCOMBO40 device will be run)*
B35:AtSpd.TimeEnd	Only Warn	**Only Warn, SystemBloked** *(Selection of the lift what to do at the end of the time that is set in B06 and B07 parameters)*
B36:Mov.StartTime	200	**200,210…5000 ms** *(Selection of the waiting time to start the moving after coming 140 signal)*

C.Door Settings

Program	***Factory Set***	***Parameters / Explanations***
C01:DoorTypeSet A	Flr00 CarDo.	*(For each floor, A side door type can be set one by one and can be set at the same time)*
C02:DoorTypeSet B	Flr00 NoDoor	*(For each floor, B side door type can be set one by one and can be set at the same time)*
C03:A D.Lim.Type	Without Limit	**With Limit, Without Limit** *(Limit type selection of A side door mechanism)*
C04:B D.Lim.Type	Without Limit	**With Limit, Without Limit** *(Limit type selection of B side door mechanism)*
C05:EndOfDoorErr.	SystemBloked	**Only Warn, SystemBloked** *(Selection of the lift behaviour after the door contact error occurs)*
C06:Wait At Floor	5 seconds	**1-99 seconds** *(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)*
C07:PhotocellTime	Passive	**Passive, 1,2,..99 seconds** *(Selection the time of cutting photocell signal and starting the nudging signal)*
C08:Door OpenMax.	180 seconds	**10-180 seconds** *(When the door stayed open, selection the time of warning)*
C09:CAM Delay	Passive	**Passive, 1,2,..10 seconds** *(Selection of the pick-up time of the CAM relay after the car has stopped coming from the movement)*
C10:Adv.Door Open	Passive	**Passive, Active**
C11:Dir.-Op.Style	Passive	**Passive, Active** *(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)
C12:Door WaitOpen	Passive	**Passive, Active**(It can be selected by entering Puk code) *(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 declear to our firm with writings and must accept the responsibility)*

D.DisplaySetting

Program	***Factory Set***	***Parameters / Explanations***
D01:FloorDisp.Set	Flr00 Disp 0	**Flr00-23 Disp 0-19,1A,1b,1c,1d** *(Display datas that will be screened on floors are changed)*
D02:TargetF.Flash	Passive	**Passive, Active** *(If this parameter is selected, in every floor, target floor is flashed twice)*

E.Prog. Inputs

(Programmable Inputs Sub Section)

Program	***Factory Set***	***Parameters / Explanations***
	Factory Settings for EN 81-1+A3	***Factory Settings for EN 81-20***
E01:ML40P-PG1	M0 Pulse	M0 Pulse
E02:ML40P-PG2	142 Contact	142 Contact
E03:ML40P-PG3	Not Used	Inspect.Reset
E04:ML40P-PG4	Not Used	Not Used
E05:ML40P-PG5	Not Used	Not Used
E06:ML40P-PG6	Not Used	Not Used
E07:ML40P-PG7	Not Used	Not Used
E08:MLSERI40-EIN1	Down Re-lev.	Down Re-lev.
E09:MLSERI40-EIN2	Up Re-level.	Up Re-level.
E10:MLSERI40-EIN3	Not Used	Not Used
E11:MLSERI40-EIN4	Not Used	Not Used

Assignable Functions

1- Reserve 1
2- Reserve 2
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- Reserve 3
8- Open (Door Open button)
9- Close (Door Close button)
10- Full Load (Full load contact)
11- Vatman (Vatman key input)

12- Fireman (Fireman key input)
13- K16 OpenLimit
14- K19CloseLimit
15- M0 Pulse (M0 bi-stabil contact)
16- Inspect.Reset (Pit inspection reset input)
17- Photocell
18- OSG / 1.Brake
19- DoorControl-1 (MLDC card communication input 1)
20- DoorControl-2 (MLDC card communication input 2)
21- FiremanCarKey
22- 819 DownLimit (Down limit swicth input for middle speed)
23- 820 Up Limit (Up limit swicth 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- BridgingExist (Safety Circuit Bridging Box information input)
28- DoorMotor NTC
29- 130A Input
30- Door B Contact (Extra contact for car door B)
31- 135A Input
32- BrakeTracing2 (Second brake tracing contact of gearless machine)

F.Prog. Outputs
(Programmable Outputs Sub Section)

Program	***Factory Set***	***Parameters / Explanations***
	Factory Settings for EN 81-1+A3	***Factory Settings for EN 81-20***
F01:ML40P-RD	CAM Relay	CAM Relay
F02:ML40P-RC1	Gray-Code M0	Gray-Code M0
F03:ML40P-RC2	Gray-Code M1	Gray-Code M1
F04:ML40P-RC3	Gray-Code M2	Gray-Code M2
F05:ML40P-RC4	Gray-Code M3	Gray-Code M2
F06:MLSERI40-EO1	Not Used	Bridging Warn
F07:MLSERI40-GCx	Gray-Code	Gray-Code

Assignable Functions

1- Inspection
2- Car Lamp
3- Open Relay-B (Side B automatic door open relay)
4- Close Relay-B (Side B automatic door close relay)
5- Gong
6- OSG Relay
7- UPS Contactor
8- Gray-Code M0
9- Gray-Code M1
10- Gray-Code M2
11- Gray-Code M3
12- Gray-Code M4
13- Binary M0
14- Binary M1
15- Binary M2
16- Binary M3
17- Binary M4

18- Nudging (At full automatic door lifts, output at the end of photocell blocking time)
19- AtFloorSignal
20- Fault(Invers)
21- CAM relay
22- Fire Alert
23- FireMainPower (Fire main power contactor output)
24- Bridging Warn (Bridging warn output)
25- MR-WellLight. (Machine room and Well Lighting)
26- Res.Completed (Rescue completed)

G.Maint.Settings

Program	***Factory Set***	***Parameters / Explanations***
G01:Mainten.Time	240 Days	**10-240 Days** *(The number of days for the maintenance warning)*
G02:AtEndOfM.Time	Only Warn	**Only Warn** **SystemBlocked**
G03:Maintenanced?	No	**Yes, No** *(After the maintenance it is run, day and hour datas are deleted, working number after maintenance is deleted and saved faults are deleted)*
G04:Delete Fault?	No	**Yes, No** *(All registered faults are deleted)*

H.RescueSettings

Program	***Factory Setting***	***Parameter Contents / Explanations***
H01:Rescue Type	DownWithBatt.	**DownWithBatt.,UpWithBattery,DownWithUPS,Up WithUPS** *(Select of rescue type)*
H02:Rescue Delay	5 seconds	**1-15 seconds** *(After the detection of main power is cut, selection of waiting time to start the rescue operation)*
H03:RescueMaxTime	40 seconds	**10-200 seconds** *(Selection of maximum movement time at rescue)*
H04:Res.JF M.Time	Passive	**Passive, 0,1-10,0 seconds** *(At rescue operation, after the detection of JF, selection of needed time to re-levelling)*

I.Shaft Learning

Program	***Factory Setting***	***Parameter Contents / Explanations***
I01:Learn Shaft	No	**Yes, No** *(If this parameter is chosen "Yes", shaft learning procedure is started)*
I02:HighSpd.Slow.	150 cm	**10-500 cm** *(Starting distance selection of passing from the high speed to slow speed to the exact floor)*
I03:Mid.Spd.Slow.	150 cm	**10-500 cm** *(Starting distance selection of passing from the middle speed to slow speed when going to the nearest floor)*
I04:Stop Distance	70 mm	**1-200 mm** *(While approaching to the target floor, selection of cutting distance of low speed signal)*
I05:Dist.ToMidSpd	500 cm	**1-500 cm**

		(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.	**Between0-1Fl.** **Between1-2Fl.** *(Selection position of 817 lower limit switch)*
I08:Up Correct	Flr01 00mm	**Flr01-23, All -99, 0, 99mm** *(Selection of precision levelling adjustment in up direction for each floor)*
I09:Down Correct	Flr00 00mm	**Flr01-22, All -99, 0, 99mm** *(Selection of precision levelling adjustment in down direction for each floor)*
I10:Floor Height	Flr01 00mm	**Flr01-23, 1mm=0cnt** *(After shaft learning, tracing of measured flor heights and count number per mm)*
I11:Calc.Distance	Passive	**Passive, Active** *(Selection of passing the slow speed with always calculating the distance to target floor)*
I12:SlowingDist.3	50 cm	**10-200 cm** *(Starting distance selection of passing from the second middle speed to slow speed when going to the nearest floor)*
I13:CorrectionMod	Passive	**Passive, Active** *(Selection of floor level correction mode from the car)*
I14:TopOfWellDis.	200 cm	**10-500 cm** *(Distance between the top floor and the top of well)*
I15:Pit Distance	200 cm	**10-500 cm** *(When the car is stopped at the exact floor at the bottom, distance between under the car and the bottom of the well)*
I16:819-820Limit.	Passive	**Passive, Active** *(If this parameter selected "Active"; when 819 and 820 limits switches are opened, middle speed (S3) is cut)*

J.GeneralSetings

Program	***Factory Set***	***Parameters / Explanations***
J01:Factory Set ?	No	**Yes, No** *(All parameter values are changed into factory settings)*
J02:ResetCounters	No	**Yes, No** *(Total working number reset)*
J03:Change Passw.	0000	*(Changing password)*
J04:Cancel Passw.	No	**Yes, No** *(Password is cancelled, new value is 0000)*
J05:Del.BridgeErr	No	**Yes, No** *(Stored faults info is deleted about bridging section)*
J06:Del UCM Error	No	**Yes, No** *(Stored faults info as a result of UCM is deleted)*
J07:UCM Up Test	No	**Yes, No**
J08:UCM Down Test	No	**Yes, No**
J09:Auto Tuning	No	**Yes, No**

		(If this parameter selected YES, at UP and DOWN direction first movement in inspection mode, OSG/Brake Control input is not watched during 180 seconds.)
J10:SaveTo Seri40	No	**Yes, No**
J11:Read Seri40	No	**Yes, No**
J12:Re-Lev.Magnet	2	**1, 2** *(Selected magnet number for every floor at re-levelling)*
J13:Enc.Err.Reset	Passive	**Passive, Active** *(If the parameter is active encoder reading error is automatic resetted)*
J99:Version		Ver:1.01.01 Update:01.02.2019

K.Sound Settings

Program	***Factory Set***	***Parameters / Explanations***
K01:Reading Style	Reached1stFl.	**Floor 1, Reached1stFl., 1st Floor** *(Chosing reading style)*
K02:FloorReadTime	When Stop	**While Slowing, When Stop** *(When slowing: When the lift is slow down, floor reading is done.* *When stop: When the lift is stop, floor reading is done.)*
K03:Gong Type	Ding	**Ding; Ding Dong; DownDing,UpDD; UpDing,DownDD** *(Chosing gong type.* *DownDing,UpDD: If the car direction is down, Ding sound; if the car direction is up, Ding-Dong sound is given.* *UpDing,DownDD: If the car direction is up, Ding sound; if the car direction is down, Ding-Dong sound is given)*
K04:Gong PlayTime	When Stop	**While Slowing, When Stop** *(When slowing: When the lift is slow down, gong is served.* *When stop: When the lift is stop, gong is served)*
K05:ReadWhenGoing	Passive	**Passive, Active** *(If this parameter is selected "Active", especially for the blinds detecting the floor changes, while each floor changing, the present floor is read)*
K06:869RepeatTime	10 seconds	**01,02,…,99 seconds** *(Chosing waiting time between "Lift Out of Servive" reading)*
K07:804RepeatTime	5 seconds	**01,02,…,99 seconds** (Chosing waiting time between "Lift Overload" reading)
K08:Status Read	Passive	**Passive, Active** *(Selection of the reading permission of car movement or door position)*
K09:Floor00 Read. …. K32:Floor23 Read.	Zero …. 23	**Entry, Zero,1,2,3, …,31, Lobby, Restaurant, Carpark,** **Carpark 1…5, Basement, Minus 1…5, Terrace, Cinema, Sport Saloon, Swimming Pool, OperatingRoom** *(Chosing for each floor reading)*

K33:MusicPlayLev.	Passive	**Passive, 1,2,3** *(Selection an cancelation of the music play level when SERISESMP3 card inserted on MLSERI40 board)*
K34:ManuelReading	Passive	**Passive, Active** *(Selection of reading in other languages except Turkish and English when SERISESMP3 card inserted on MLSERI40 board)*

MLDRIVER PARAMETERS

A.Travel Curve		
Program	***Factory Setting***	***Parameter Contents / Explanations***
01:Initial.Acc.	0,30 m/s²	**0,01…0,99 m/s²** *(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	**0,00…0,10 m/s** *(See parameter ''01'' for explanation)*
03:Initial. Time	0,00 s	**0,00…1,00 s** *(See parameter ''01'' for explanation)*
04:Low Speed	0,10 m/s	**0,01…0,20 m/s** *(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	**0,01…0,10 m/s** *(Re-levelling speed value)*
06:Insp..LowSpeed	0,25 m/s	**0,15…0,30 m/s** *(Inspection low speed value)*
07:Insp.HighSpd.	0,50 m/s	**0,30…0,65 m/s** *(Inspection high speed value)*
08:MiddleSpeed-1	0,40 m/s	**0,01…2,50 m/s** *(First middle speed value)*
09: MiddleSpeed-2	0,80 m/s	**0,01…2,50 m/s** *(Second middle speed value)*
10:High Speed	1,00 m/s	**0,01…2,50 m/s** *(High speed value)*
11:Acceleration	0,40 m/s²	**0,01…1,00 m/s²** *(The speeding acceleration of car. As the value increases, the required value is reached more quickly)*
12:Acc.Jerk Time	1,10 s	**0,01…3,00 s** *(Starting acceleration and when required speed is reached stepless acceleration time)*
13:Deceleration	0,50 m/s²	**0,01…1,00 m/s²** *(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)
14:Dec.Jerk Time	1,50 s	**0,01…3,00 s** *(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)*
15:StopJerkCons.	2,0	**0,1…10,0** *(While Stopping type Distance Mode1 (2-3) is selected, stop jerk constant)*
16:Stopping Type	Distance Mode-1	**Parameter, Dist. Mode -1,2,3** *(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)*
17:Slowing Dist.	140 cm	**50-500 cm** *(Selecting the distance from which slowdown starts when Distance Mode1 (2-3) is selected)*
18:StoppingDist.	7,00 cm	**3,00-15,00 cm** *(When the stop type "Distance Mode1 (2-3) is selected, low speed to zero speed transition distance selection)*
19:Brake OnDelay	0,50 s	**0,01…5,00 s** *(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)*
20:BrakeOffDelay	0,50 s	**0,01…5,00 s** *(Mechanical brake closing time selection. During this time the engine is driven at zero speed)*
21:DirectToFloor	Passive	**Cancel, Comfort -1,2,3,4,5** *(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)*
24:Ref.Hold Time	0,10 s	**0,01…3,00 s** *(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)*

B.MotorParameter

Program	***Factory Setting***	***Parameter Contents / Explanations***
01:Motor ID	Standard	**Standard,1…999** *(Code selection for the motors in the user manual. If the engine code is selected, the motor label values stored in the device memory will be loaded automatically)*
02:Motor Type	Async.Geared	**Async.Geared, Sync.Gearless** *(Motor type selection)*
03:Frequency	50,0Hz	**5,0…99,9 Hz** *(Indicated frequency value on the motor label)*
04:NumberofPoles	4	**4…64** *(Number of poles of motor)*
05:Nom.Car Speed	1,0 m/s	**0,4…5,0 m/s** *(Nominal speed of the car)*
06:Nominal Speed	1360,0 rpm	**50,0…3600,0 rpm**

		(Number of period per motor label)
07:Nom. Voltage	380 V	**100…420 V** *(Number of voltage per motor label)*
08:Nom. Current	18 A	**1,0…18,0 A** *(Nominal current (In) value indicated on the motor label)*
09:CosQ	0,81	**0,01…0,99** *(Indicated CosQ value on the motor label)*
10:M.Max.Current	18,0 A	**1,0…18,0 A** *(Maximum current value selection)*
11:Overload Time	5 s	**1…10 s** *(Selection of the time allowed to continuously of the set maximum current value)*
12:NoLoadCurr.L.	40 %	**20…70** *(Selection of current level in asynchronous motors out-of-gear. If this value is increased unnecessary, energy consumption will be wasted)*

C.Drv.Parameters

Program	***Factory Setting***	***Parameter Contents / Explanations***
01:InertiaIdent.	No	**No, Yes** *(Measurement of inertia and friction coefficient when the motor out-of-gear)*
02:Inertia Value	25,0	**0,1…99,0** *(The amount of power required to accelerate the motor. Do not change this parameter value without consulting our technical service)*
03:FrictionValue	2,5	**0,1…49,9** *(The amount of friction force against the direction of rotation when the motor rotates. Do not change this parameter value without consulting our technical service)*
04:Encoder Type	Incremental	**Incremental** **ENDAT** **BISS** **SINCOS** *(Selection of encoder type connected to motor)*
05:Enc.Resoluti.	1024	**512,1024,2048,4096** *(Number of encoder pulses)*
06:MotorDirecti.	Not Inverted	**Not Inverted, Inverted** *(Selecting the direction of rotation of the motor)*
07:Rescue Mode	Rescue with Batt.	**Cancel, Res.With Batt., RescueWithUPS** *(The selection of rescue mode)*
08:Res.Direction	Easiest Dir.	**Easiest Dir., Command Dir.** *(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	**0,01…0,15 m/s** *(In the rescue mode speed value)*
10:UPS Power	1,50 kVA	**0,01…99,99** *(Selection of used UPS power when rescue mode is selected with UPS rescue)*
11:Control Mode	Closed Loop	**Closed Loop, Open Loop** *(Selection of motor control)*
12:MotorIdentify	Passive	**Cancel, Active** *(Selection of motor identification enable)*

13:Spd.Cont.Par1	5,00	**5,00…99,90** *(This parameter is the speed control hardness adjustment applied at zero speed)*
14:Spd.Cont.Par2	20,00	**5,00…99,90** *(This parameter is the speed control hardness adjustment before reaching the nominal speed of the motor)*
15:CurrentCont.H	5,0	**5,0…10,0** *(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	**Not Inverted, Inverted** *(How the UP and DOWN inputs rotate the motor)*

D.AdvancedSetting

Program	***Factory Setting***	***Parameter Contents / Explanations***
07:NoLoadCurrent	5,40	**1,00…40,00** (Measured value in motor identification process.)
08:Rotor Resist.	1,21 Ohm	**0,01…99,99 Ohm** *(Measured value in motor identification process.)*
09:LeakageInduc.	50,00 mH	**0,01…99,99 mH** *(Measured value in motor identification process.)*
10:StatorInduc.	7,00 mH	**0,01…99,99 mH** *(Measured value in motor identification process.)*
11:FluxCoeffici.	6,28 Wb	**1,00…9,99 Wb** *(Measured value in motor identification process.)*
12:StatorResist.	0,76 Ohm	**0,01…99,99 Ohm** *(Measured value in motor identification process)*

E.GeneralSetting

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