



MIK-EL ELEKTRONİK SAN. TİC. LTD. ŞTİ.

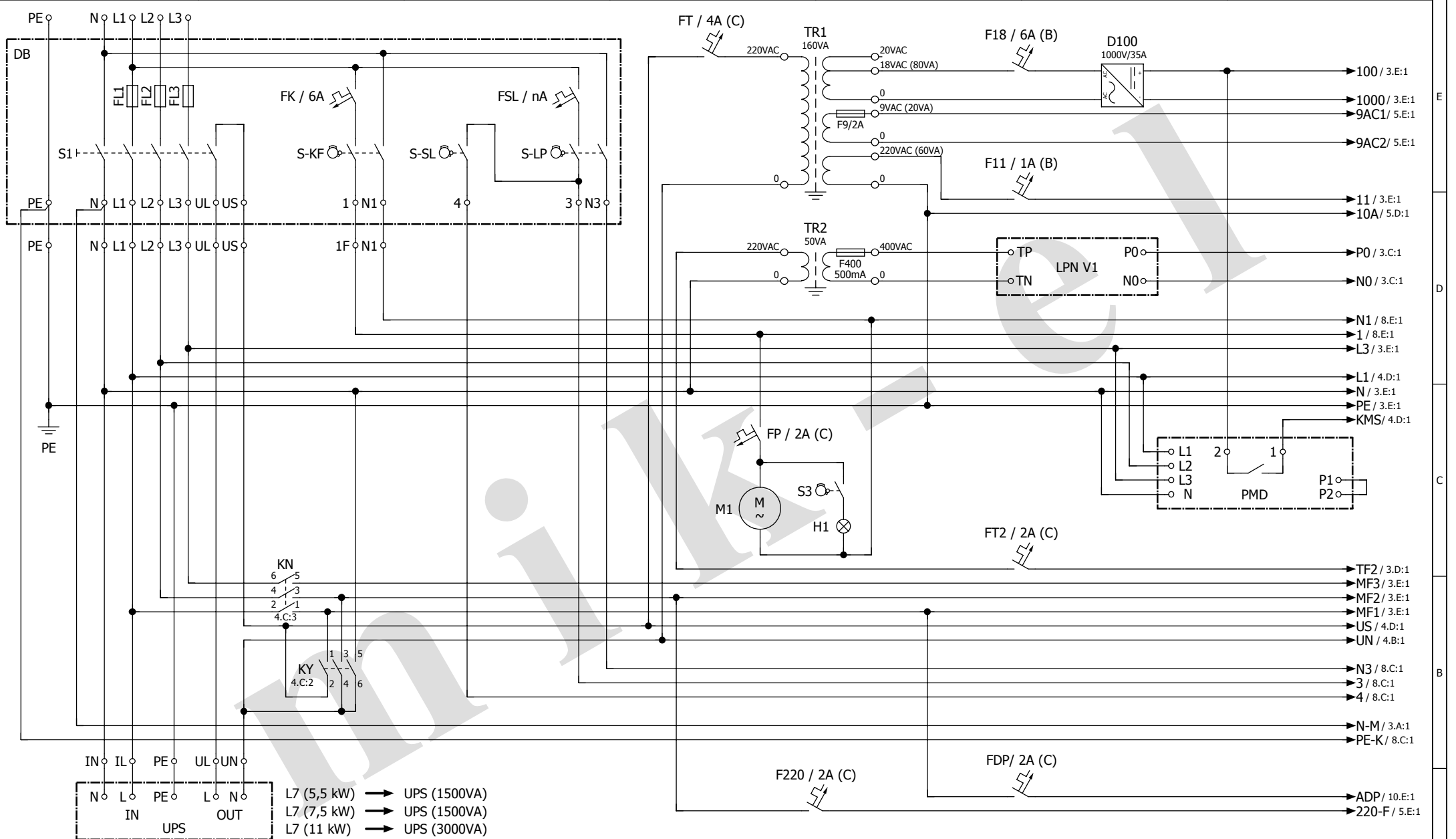
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COMPANY	MIK-EL ELEKTRONİK SAN. TİC. LTD. ŞTİ.
CONTROL SYSTEM	MIKRONİK S-Hi / P (PARALLEL COMMUNICATION WITH LANDINGS, SERIAL COMMUNICATION WITH CAR)
PROJECT DESCRIPTION	APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH UPS
DRIVE UNIT	-
DRIVE CONNECTION	-
LEVELLING WITH OPEN DOOR	-
ADVANCED DOOR OPENING	-
VALVE VOLTAGE	-
RE-CALL OPERATION	PRESENT
H/W	CPU : V2 , CAB : V1 , PIO8 : V1
S/W	CPU : V2.04 , CAB : V1.00 , PIO8 : V1.01
DATE	07.01.2009
SCHEMATIC NO	9011 - 2 / P
FILE NAME	SHP-L7-UPS-V2
NUMBER OF PAGES	18
DRAWING	ESAT ÖZASLAN
CONTROL	MURAT TEZEL



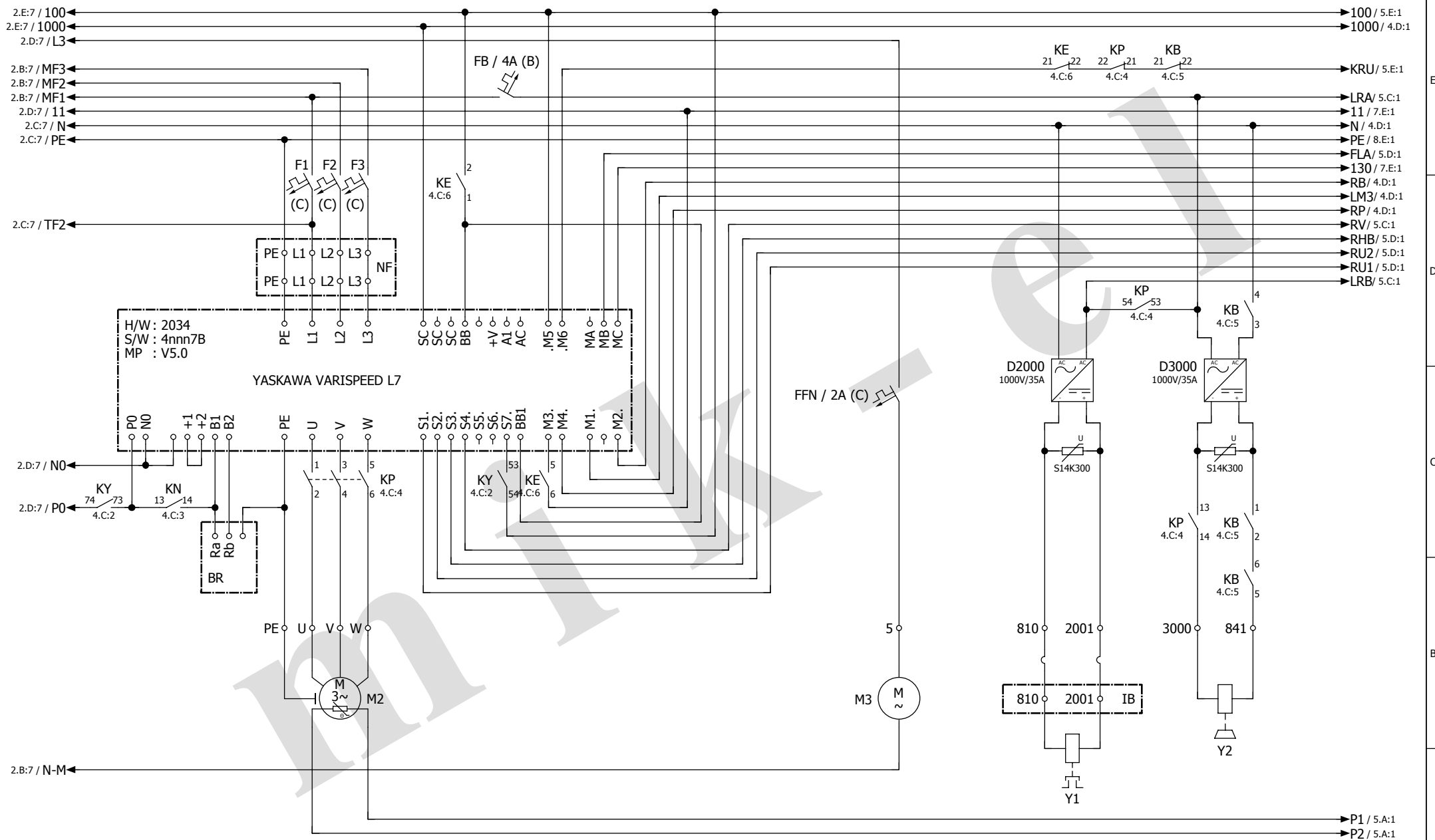
UPS : Uninterruptable power supply
 DB : Distribution box in machine room
 S1 : Main circuitbreaker
 S-KF : Switch for car power supply
 S-SL : Shaft illumination switch
 S-LP : Switch for shaft power supply

TR1: Main power supply and isolation transformer
 TR2: Transformer for feeding the control section of L7
 M1 : Panel fan motor
 S3 : Panel illumination switch
 H1 : Panel illumination lamp

PMD: Phase balance and phase sequence monitoring device

1	2	3	4	5	6	7
DRAWING	ESAT ÖZASLAN	DATE	07.01.2009	APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH	POWER SUPPLY, ILLUMINATION AND FAN CONNECTIONS	DRIVE CONNECTION
CONTROL	MURAT TEZEL	SCH. NO	9011 - 2 / P	UPS	INSIDE THE CONTROL PANEL	LEVELLING WITH OPEN DOOR
		FILE	SHP-L7-UPS-V2			ADVANCED DOOR OPENING
						VALVE VOLTAGE
						PAGE
						2 / 18

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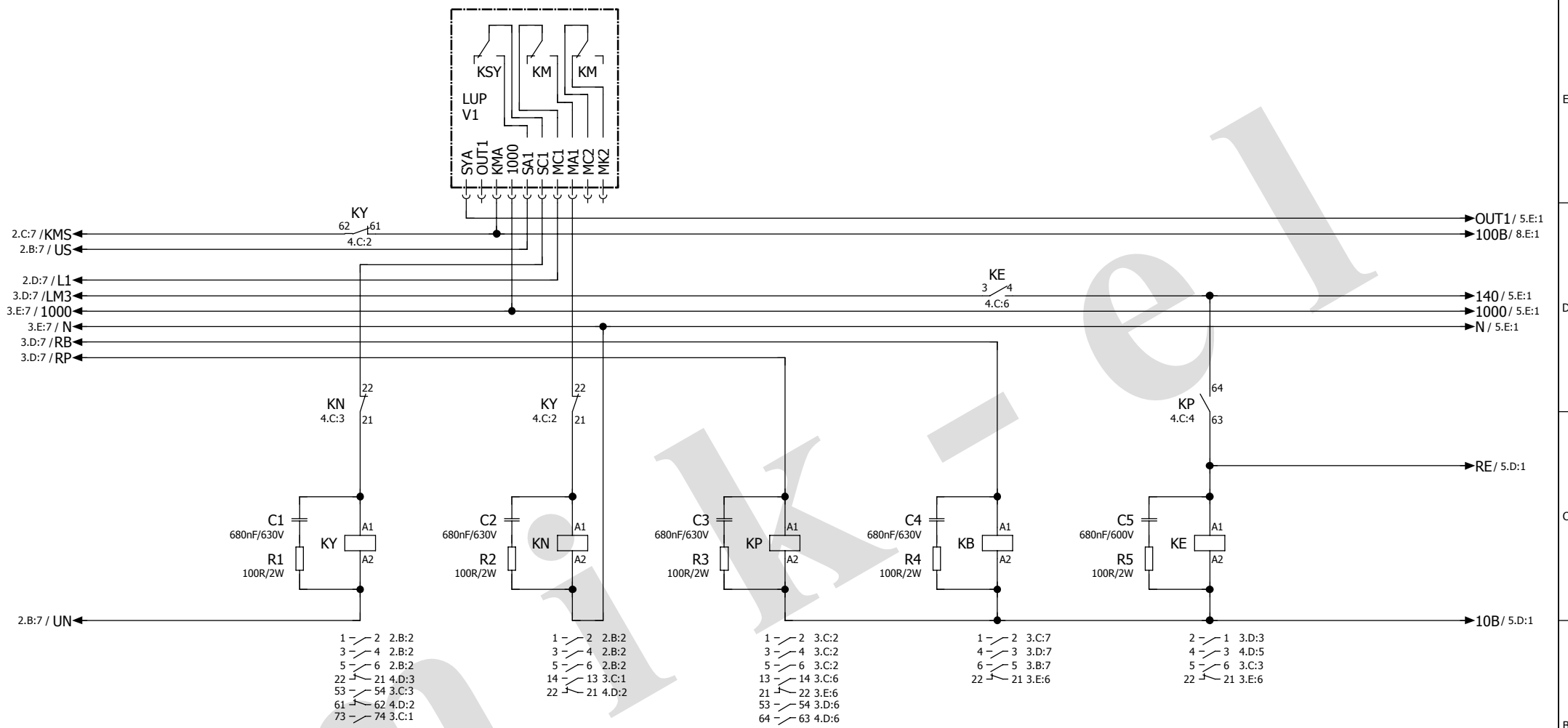
NF : Network filter
 BR : Braking resistor
 M2 : 3 phase asynchronous motor

Yaskawa Varispeed L7 Jumper Settings		
:	:	:
B1	B2	B3
A1	A2	A3

M3 : Cooling fan motor for main motor

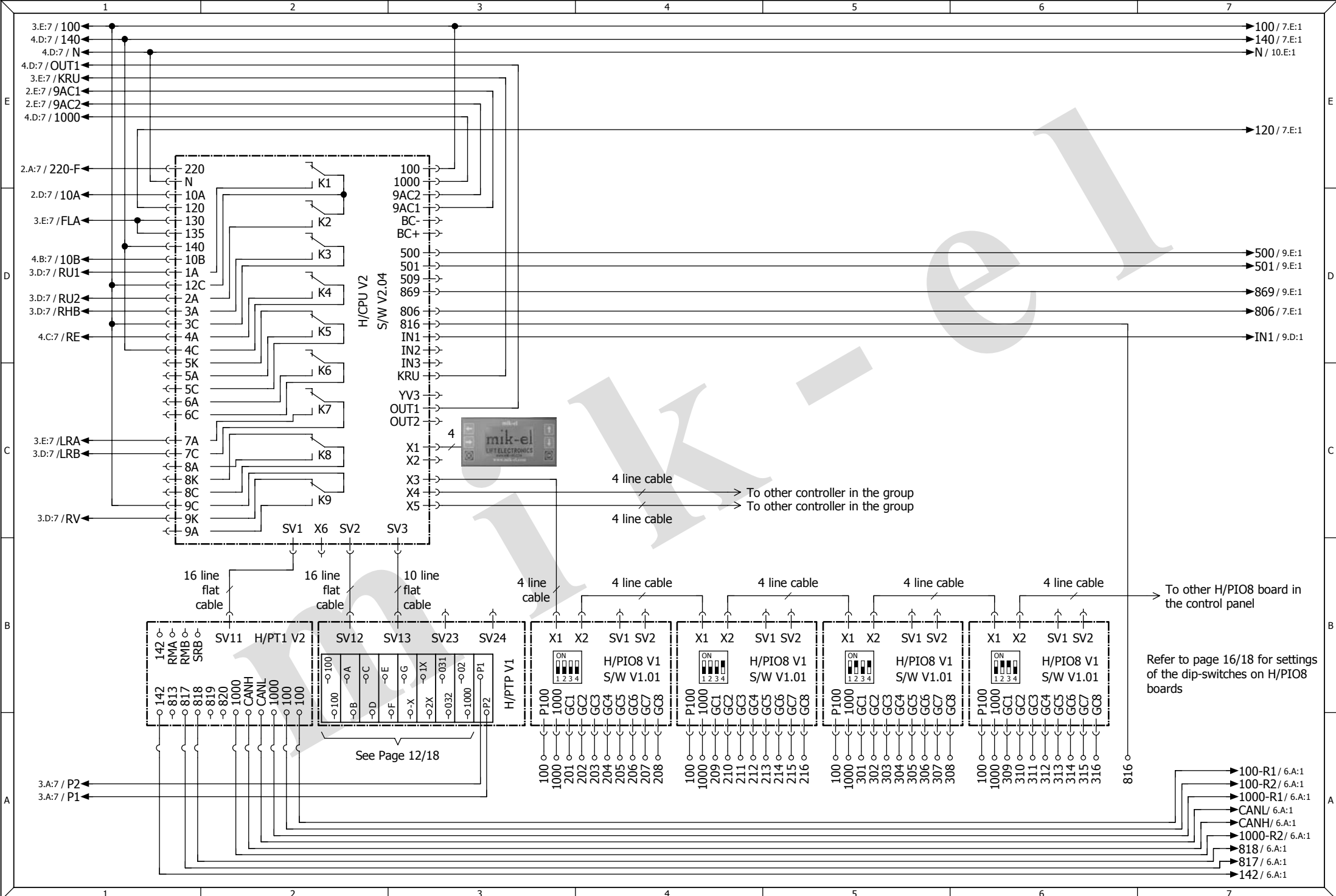
IB : Inspection box
 Y1 : Door lock magnet

Y2 : Mechanical brake magnet



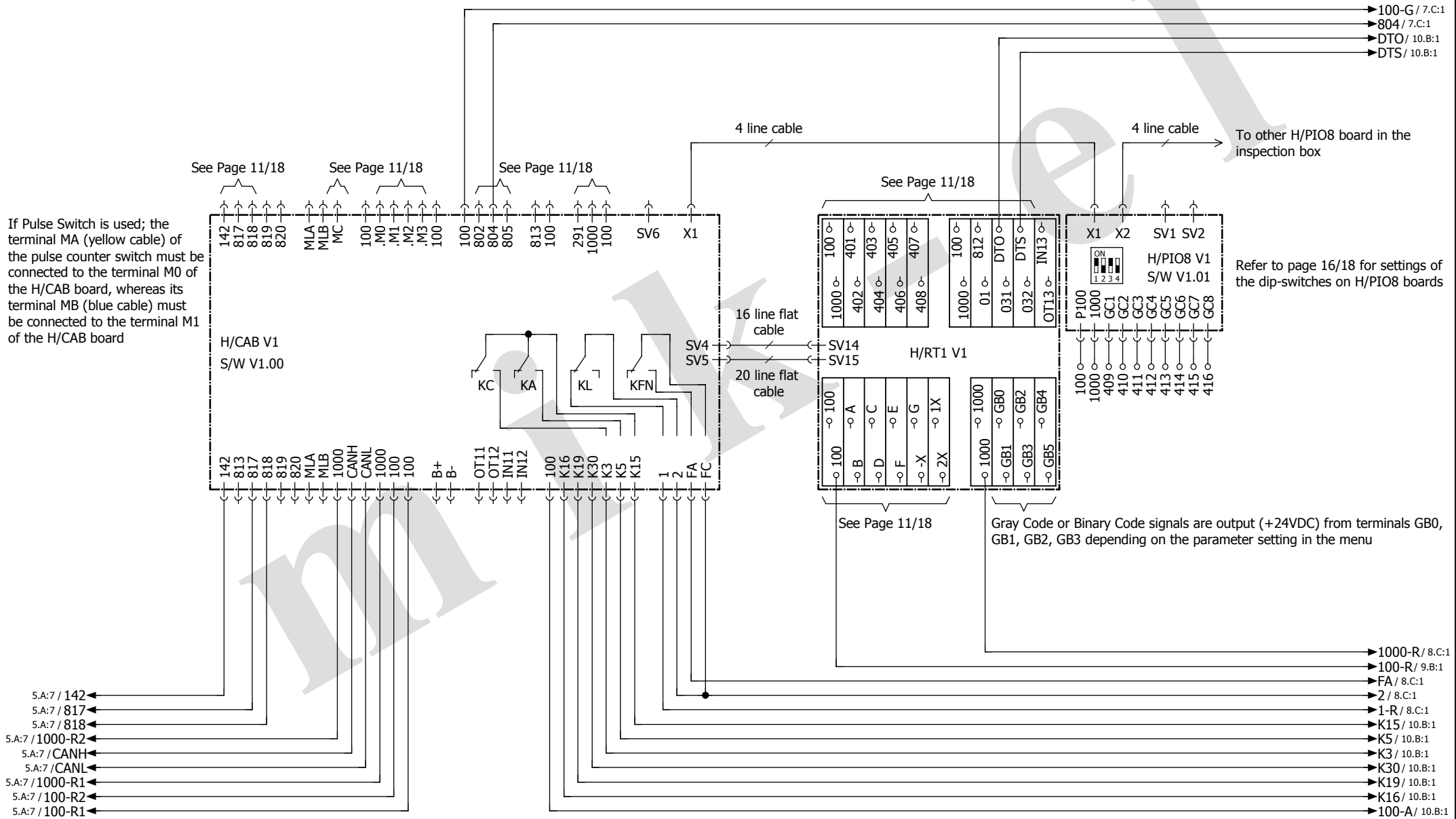
KY : Back-up power contactor (with 9A contact)
 KN : Mains power contactor (to motor power)

KP : Main motor contactor
 KB : Brake contactor (EN 60947-4-1 compatible mini contactor with 9A rating)
 KE : Travel safety contactor (EN 60947-4-1 compatible mini contactor with 9A rating)

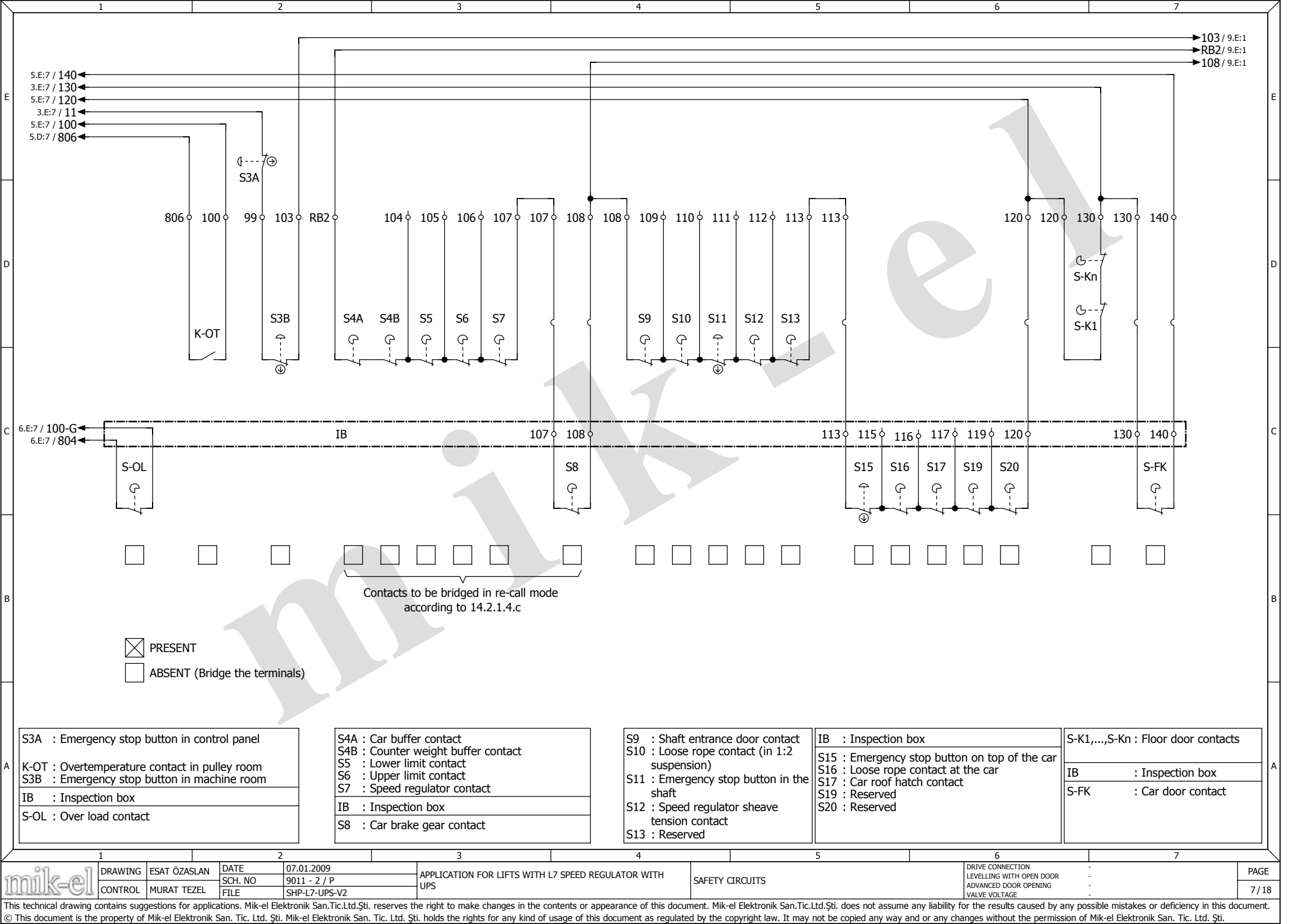


	DRAWING	ESAT ÖZASLAN	DATE	07.01.2009	APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH UPS	CONNECTIONS OF THE BOARD H/CPU WITH THE BOARDS H/PT1, H/PTP AND H/PIO8 INSIDE THE CONTROL PANEL	DRIVE CONNECTION	-	PAGE
	CONTROL	MURAT TEZEL	SCH. NO	9011 - 2 / P			LEVELLING WITH OPEN DOOR	-	
		FILE	SHP-L7-UPS-V2				ADVANCED DOOR OPENING	-	
							VALVE VOLTAGE	-	

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- 5.A:7 / 142 ←
- 5.A:7 / 817 ←
- 5.A:7 / 818 ←
- 5.A:7 / 1000-R2 ←
- 5.A:7 / CANH ←
- 5.A:7 / CANL ←
- 5.A:7 / 1000-R1 ←
- 5.A:7 / 100-R2 ←
- 5.A:7 / 100-R1 ←



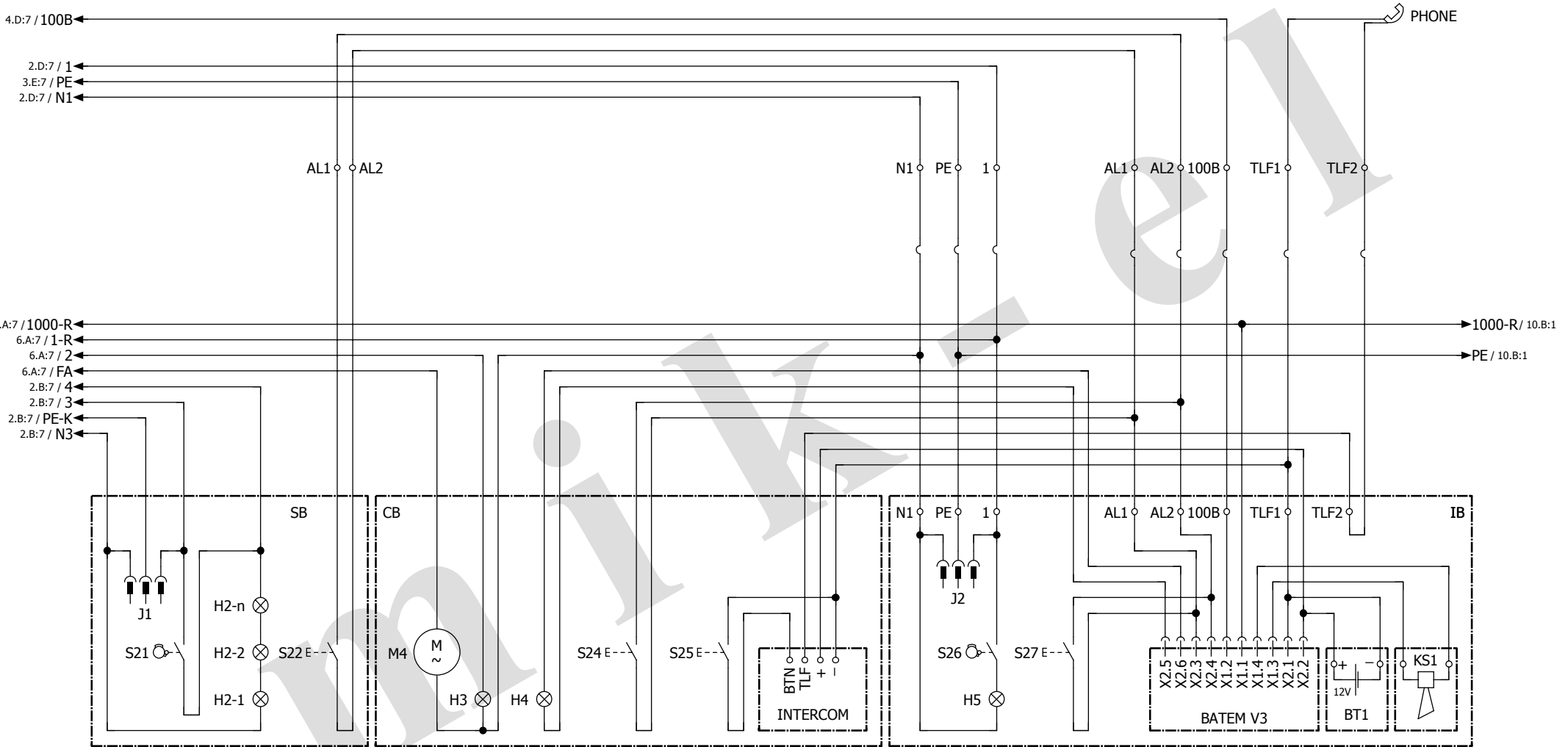
S3A : Emergency stop button in control panel
 K-OT : Overtemperature contact in pulley room
 S3B : Emergency stop button in machine room
 IB : Inspection box
 S-OL : Over load contact

S4A : Car buffer contact
 S4B : Counter weight buffer contact
 S5 : Lower limit contact
 S6 : Upper limit contact
 S7 : Speed regulator contact
 IB : Inspection box
 S8 : Car brake gear contact

S9 : Shaft entrance door contact
 S10 : Loose rope contact (in 1:2 suspension)
 S11 : Emergency stop button in the shaft
 S12 : Speed regulator sheave tension contact
 S13 : Reserved

IB : Inspection box
 S15 : Emergency stop button on top of the car
 S16 : Loose rope contact at the car
 S17 : Car roof hatch contact
 S19 : Reserved
 S20 : Reserved

S-K1,...,S-Kn : Floor door contacts
 IB : Inspection box
 S-FK : Car door contact

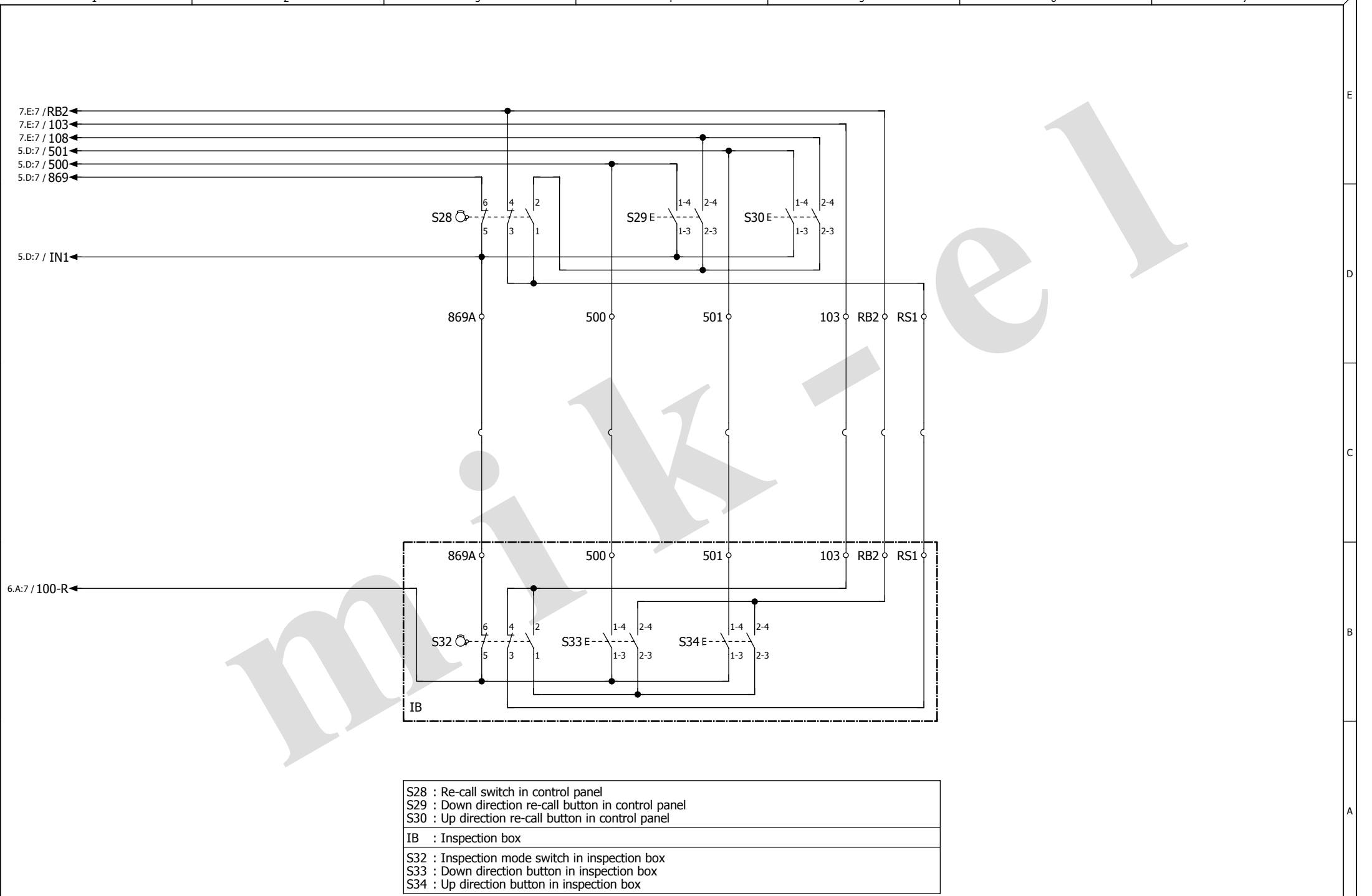


SB : Bottom of the shaft
 J1 : Shaft power plug
 S21 : Shaft illumination switch
 H2-1, H2-2, H2-n : Shaft illumination lamps
 S22 : Shaft alarm button

CB : Car
 M4 : Car fan motor
 H3 : Car illumination lamp
 H4 : Emergency illumination lamp in the car
 S24 : Alarm button in the car
 S25 : Intercom button in the car

IB : Inspection box
 J2 : Power plug in inspection box
 S26 : Illumination switch on top of the car
 H5 : Illumination lamp on top of the car
 S27 : Alarm button in inspection box
 BT1 : Battery (12V / 1.2Ah)
 KS1 : Alarm speaker (8 ohm)

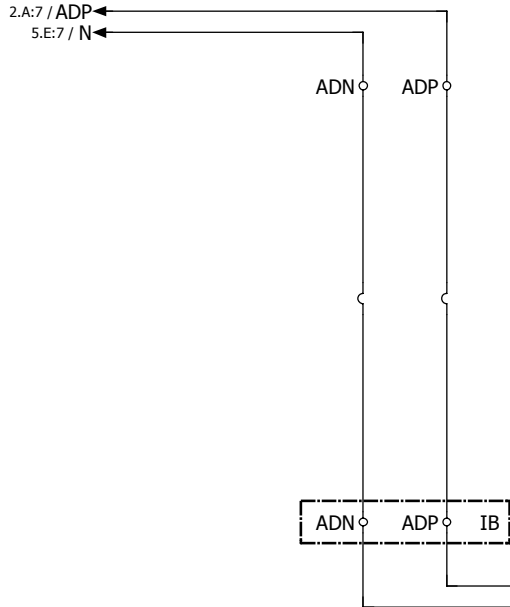
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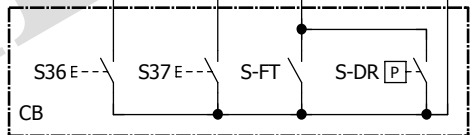
S28 : Re-call switch in control panel
 S29 : Down direction re-call button in control panel
 S30 : Up direction re-call button in control panel
 IB : Inspection box
 S32 : Inspection mode switch in inspection box
 S33 : Down direction button in inspection box
 S34 : Up direction button in inspection box

1	2		3		4		5		6		7	
DRAWING	ESAT ÖZASLAN	DATE	07.01.2009		APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH		FOR INSPECTION MODE OPERATION AND RE-CALL		DRIVE CONNECTION		-	
CONTROL	MURAT TEZEL	SCH. NO	9011 - 2 / P		UPS				LEVELLING WITH OPEN DOOR		-	
		FILE	SHP-L7-UPS-V2						ADVANCED DOOR OPENING		-	
									VALVE VOLTAGE		-	
										PAGE	9 / 18	

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- 8.C:7 / PE
- 6.A:7 / 100-A
- 8.C:7 / 1000-R
- 6.A:7 / K3
- 6.A:7 / K5
- 6.A:7 / K15
- 6.A:7 / K16
- 6.A:7 / K19
- 6.A:7 / K30
- 6.E:7 / DTO
- 6.E:7 / DTS



IB : Inspection box

CB : Car

S36 : Door close button

S37 : Door open button

S-FT : Photocell

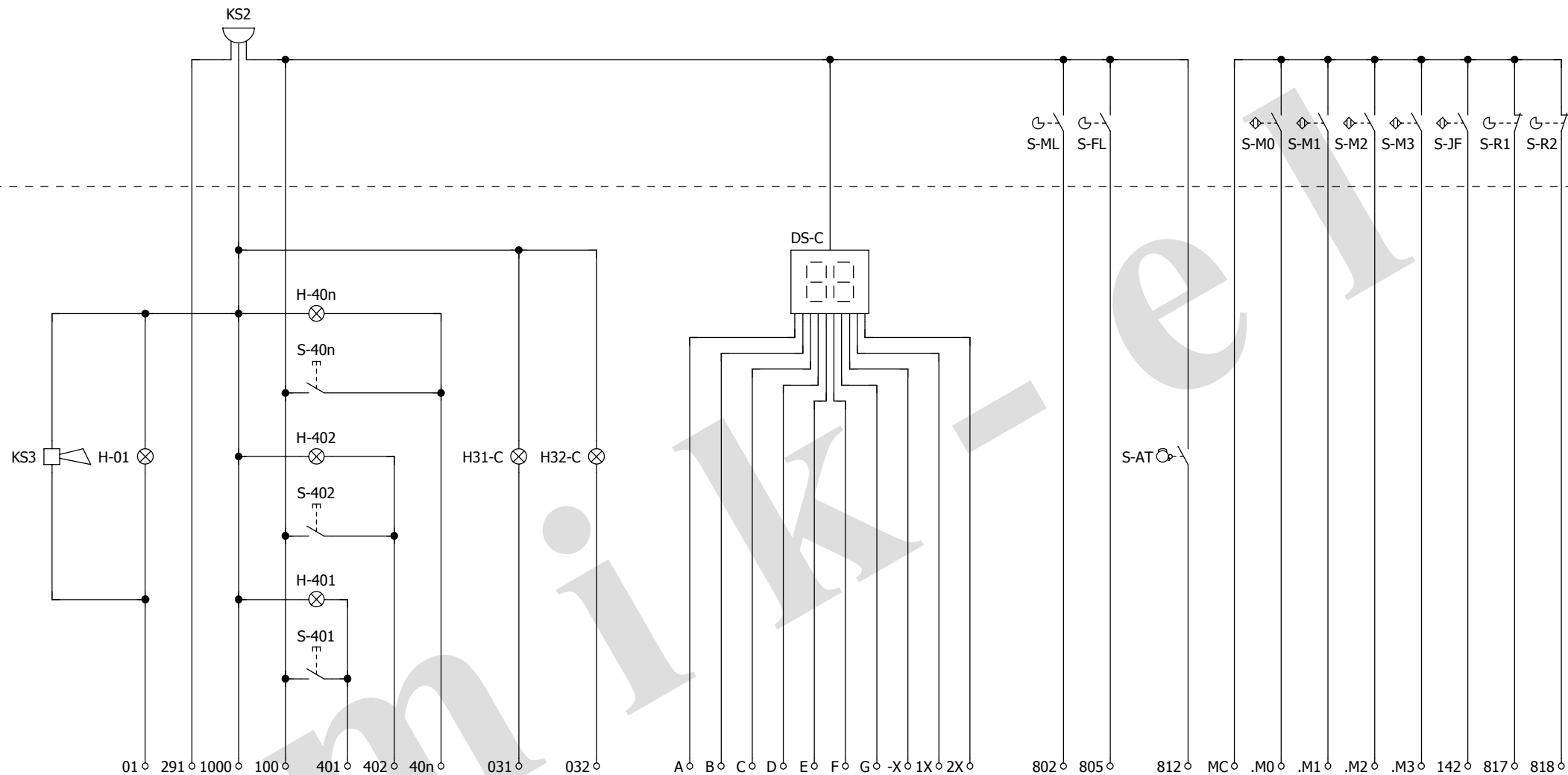
S-DR : Door forced re-open contact

	AKE OSMA	FERMATOR 40/10 220VAC	FERMATOR VVVF-4 / KLEFER VVVF-4	WITHOUT AUTOMATIC LANDING DOORS, BUT WITH TELESCOPIC OR FOLDING TYPE AUTOMATIC CAR DOORS	WITTUR HYDRA PLUS	SELCOM RCRE 24 / RC 48	SEMATIC 2000	SIEMENS AT25	PRISMA VVVF (FOX)	PRISMA VVVF (JAGUAR)
o ADP	19	-	7	220VAC	L1	TB1	8	5	220VAC	-
o ADN	20	1	5	220VAC	N	TB4	7	6	220VAC	-
o PE	-	-	6	-	PE	-	-	-	-	-
o 100	37	6, 7	31, 34, 37	-	01, 02, 03	6, 8	17, 18	11, 13, 27	5, 8, 11 / J2	5, 8, 11 / X3
o 1000	25	-	10	-	-	10	-	26, 28	-	-
o K3	31	3	8	-	I2	1	3	24	3 / J3	8 / X4
o K5	33	2	12	-	I1	2	5	25	4 / J3	9 / X4
o K15	6	NOTE1	NOTE2	-	COM	4	15	NOTE2	5 / J3	10 / X4
o K16	32	5	30	-	NC / 01	5	16	14	12 / J2	10 / X3
o K19	34	8	33	-	NC / 02	7	19	10	6 / J2	4 / X3
o K30	-	-	36	-	-	-	-	-	1 / J3	5 / X4

NOTE1 : The line K15 must be bridged to the line ADP for FERMATOR 40/10 220VAC door

NOTE2 : The line K15 must be bridged to the line 100 for FERMATOR VVVF-4, Klefer VVVF-4 and Siemens AT25 type doors

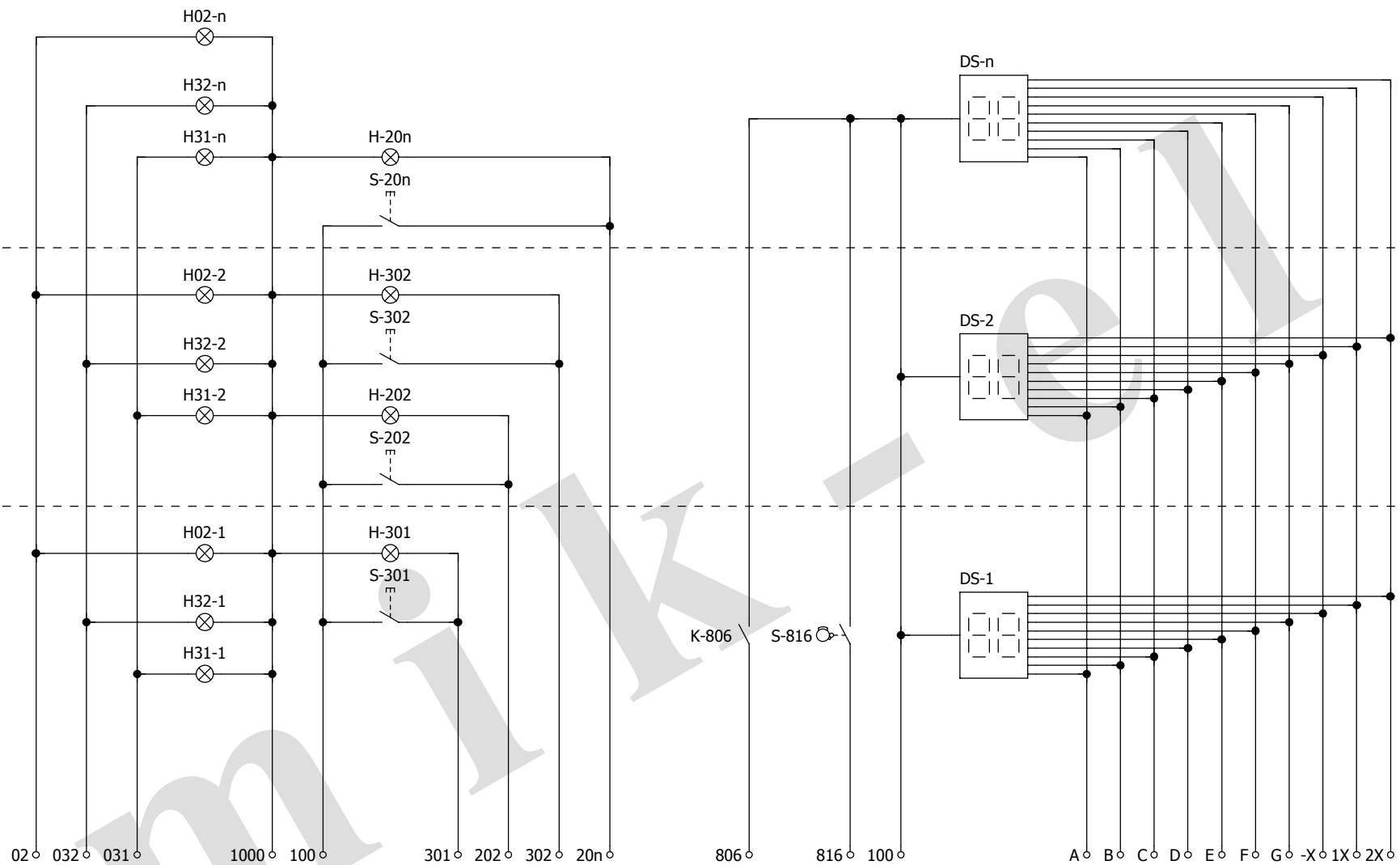
Choose the terminal numbers from the table above according to the type of the door



KS2 : Gong module
 KS3 : Over load alarm signal
 H-01 : Over load signal lamp
 H-401, H-402, ..., H-40n : Car call register lamps
 S-401, S-402, ..., S-40n : Car call buttons

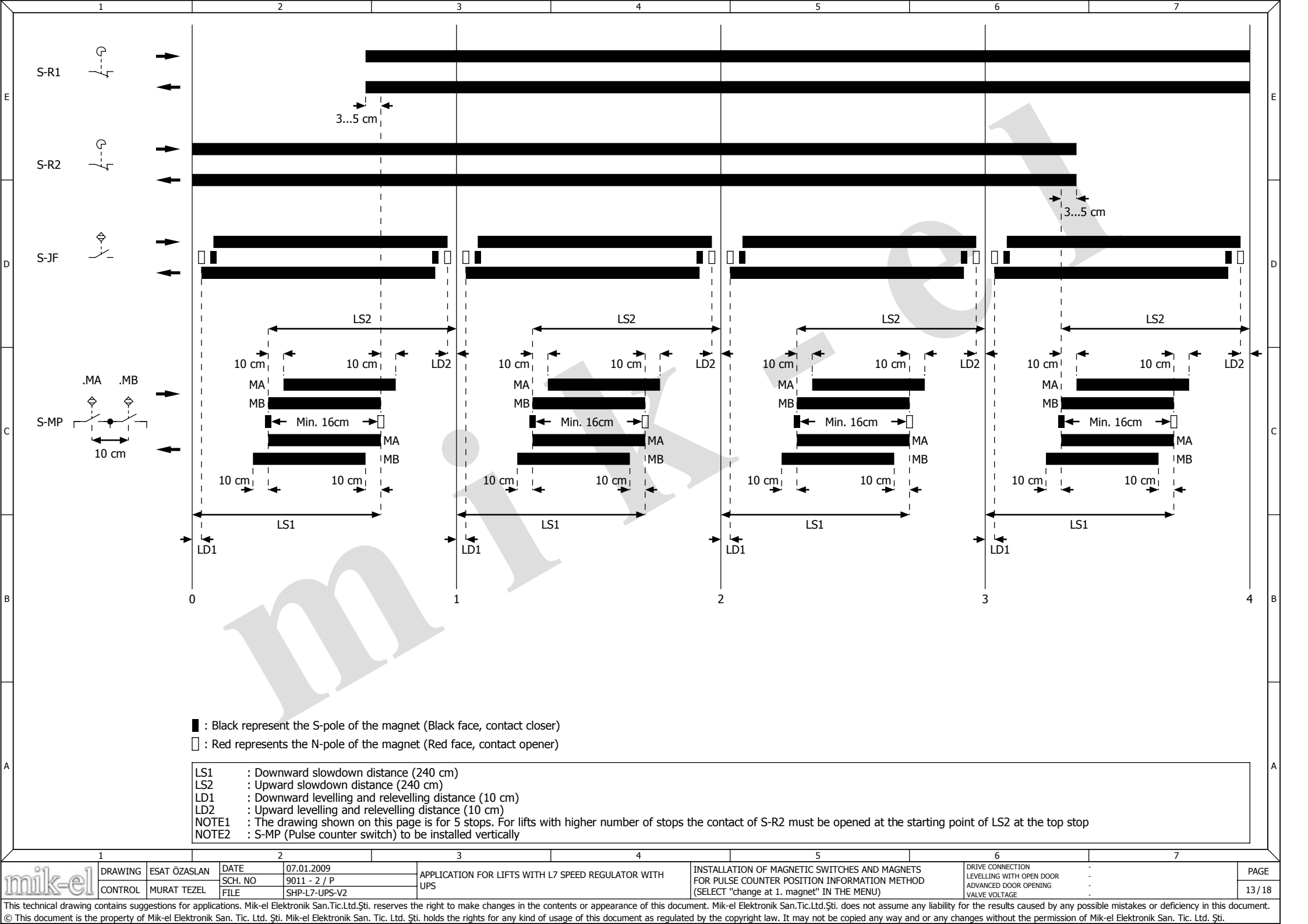
H31-C : Down direction arrow lamp
 H32-C : Up direction arrow lamp
 DS-C : Common anode display

S-ML : Minimum load contact
 S-FL : Full load contact
 S-AT : Attendant switch
 S-M0, S-M1, S-M2, S-M3 : Switches for gray coded position information
 S-JF : Levelling switch
 S-R1 : Lower forced slowdown switch
 S-R2 : Upper forced slowdown switch



H02-1,H02-2,...,H02-n : Out of service lamps
 H32-1,H32-2,...,H32-n : Up direction arrow lamps
 H31-1,H31-2,...,H31-n : Down direction arrow lamps
 H-202,...,H-20n : Downward call register lamps
 S-202,...,S-20n : Downward call buttons
 H-301,H-302 : Upward call register lamps
 S-301,S-302 : Upward call buttons

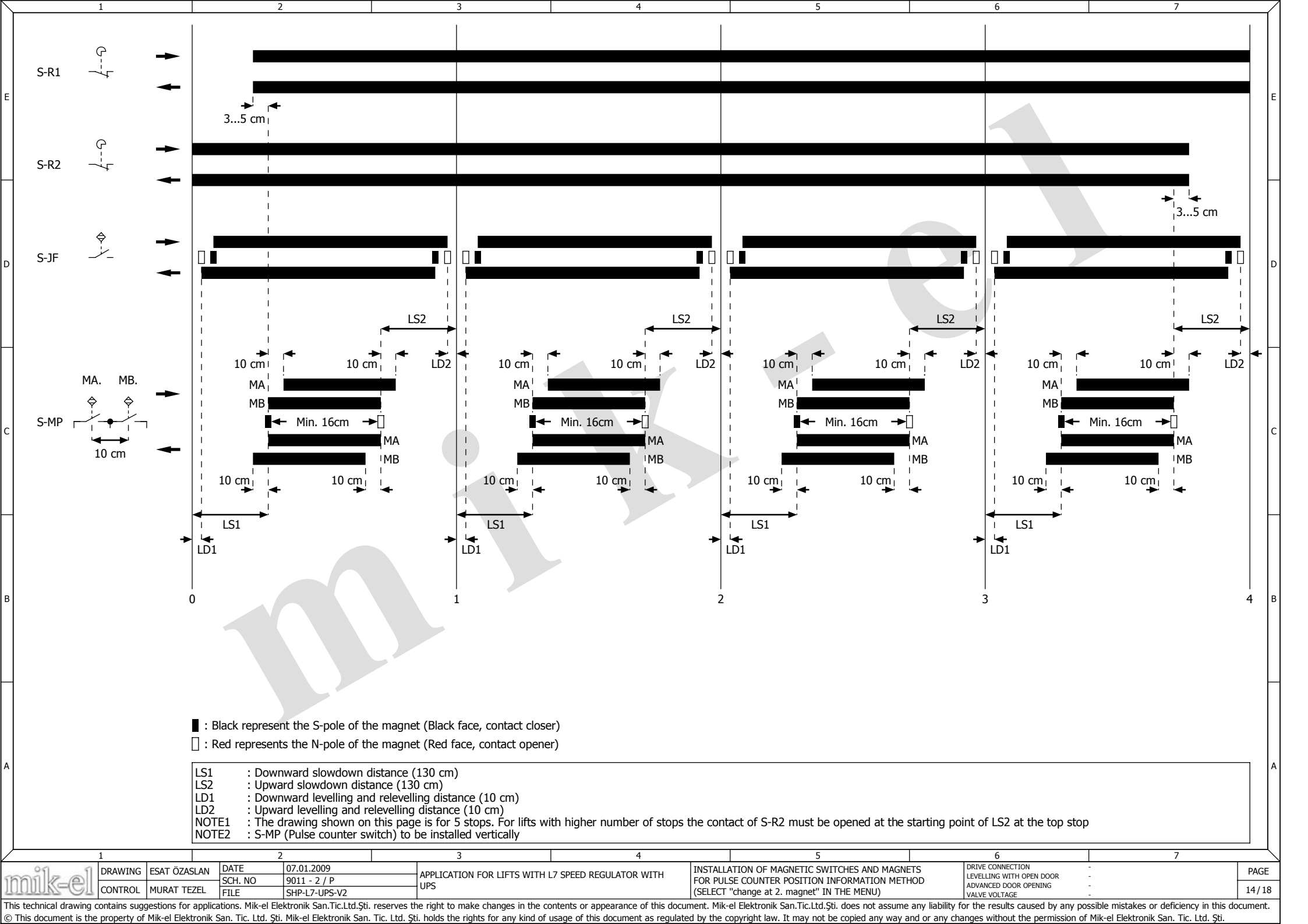
K-806 : Earthquake emergency contact
 S-816 : Fire emergency switch
 DS-1,DS-2,...,DS-n : Common anode displays



■ : Black represent the S-pole of the magnet (Black face, contact closer)
 □ : Red represents the N-pole of the magnet (Red face, contact opener)

LS1 : Downward slowdown distance (240 cm)
 LS2 : Upward slowdown distance (240 cm)
 LD1 : Downward levelling and releveling distance (10 cm)
 LD2 : Upward levelling and releveling distance (10 cm)
 NOTE1 : The drawing shown on this page is for 5 stops. For lifts with higher number of stops the contact of S-R2 must be opened at the starting point of LS2 at the top stop
 NOTE2 : S-MP (Pulse counter switch) to be installed vertically

mik-el	DRAWING	ESAT ÖZASLAN	DATE	07.01.2009	APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH UPS	INSTALLATION OF MAGNETIC SWITCHES AND MAGNETS FOR PULSE COUNTER POSITION INFORMATION METHOD (SELECT "change at 1. magnet" IN THE MENU)	DRIVE CONNECTION	-	PAGE
	CONTROL	MURAT TEZEL	SCH. NO	9011 - 2 / P			LEVELLING WITH OPEN DOOR	-	
			FILE	SHP-L7-UPS-V2			ADVANCED DOOR OPENING	-	
							VALVE VOLTAGE	-	

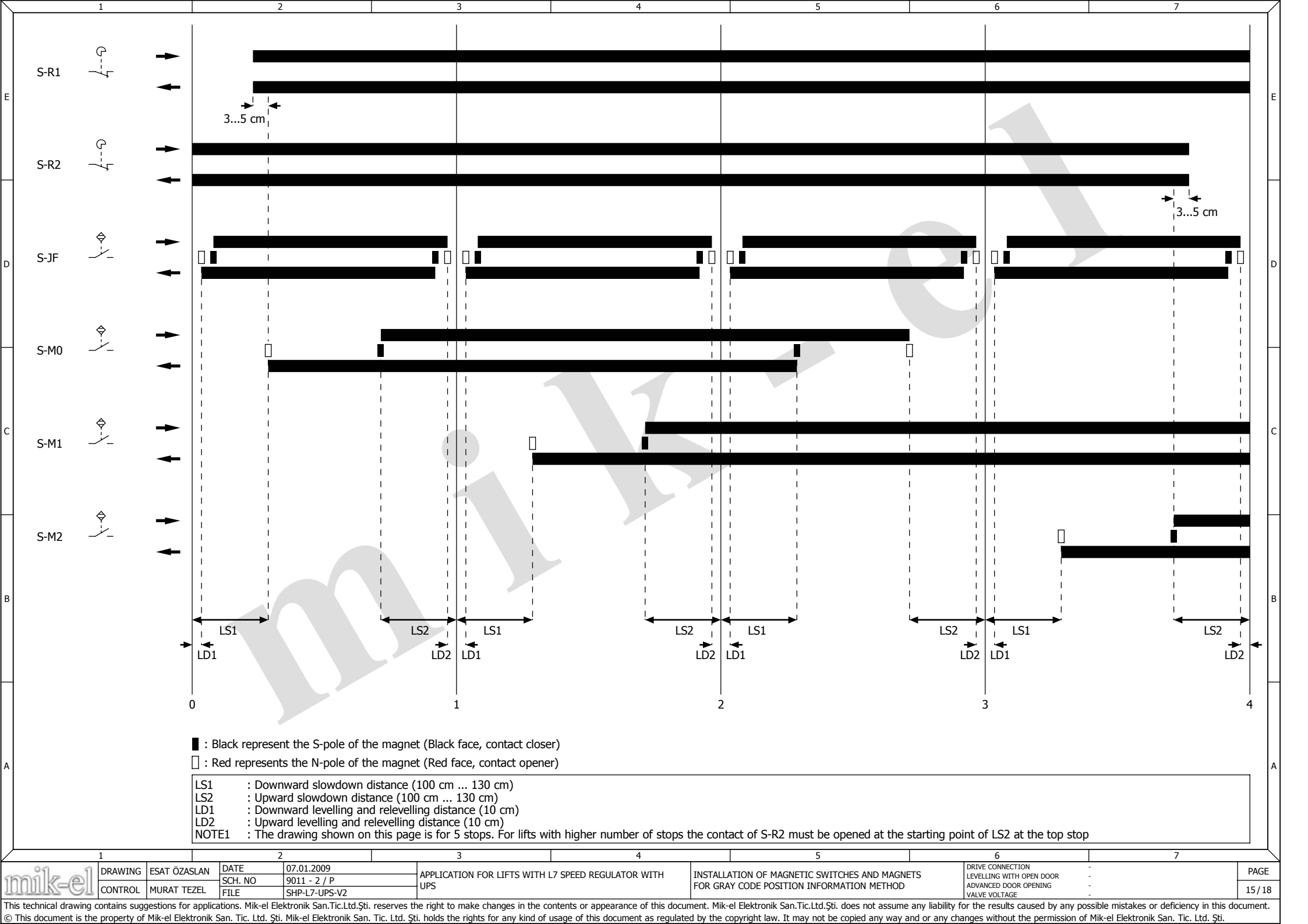


■ : Black represent the S-pole of the magnet (Black face, contact closer)
 □ : Red represents the N-pole of the magnet (Red face, contact opener)

LS1 : Downward slowdown distance (130 cm)
 LS2 : Upward slowdown distance (130 cm)
 LD1 : Downward levelling and releveling distance (10 cm)
 LD2 : Upward levelling and releveling distance (10 cm)
 NOTE1 : The drawing shown on this page is for 5 stops. For lifts with higher number of stops the contact of S-R2 must be opened at the starting point of LS2 at the top stop
 NOTE2 : S-MP (Pulse counter switch) to be installed vertically

mik-el	DRAWING	ESAT ÖZASLAN	DATE	07.01.2009	APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH UPS	INSTALLATION OF MAGNETIC SWITCHES AND MAGNETS FOR PULSE COUNTER POSITION INFORMATION METHOD (SELECT "change at 2. magnet" IN THE MENU)	DRIVE CONNECTION	-	PAGE
	CONTROL	MURAT TEZEL	SCH. NO	9011 - 2 / P			LEVELLING WITH OPEN DOOR	-	
			FILE	SHP-L7-UPS-V2			ADVANCED DOOR OPENING	-	
							VALVE VOLTAGE	-	

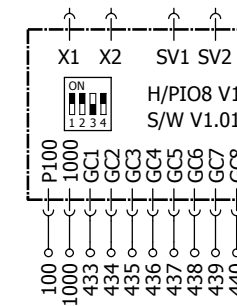
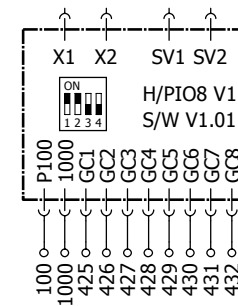
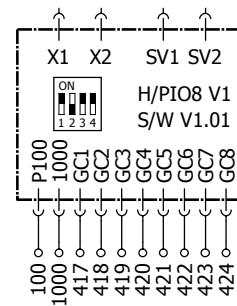
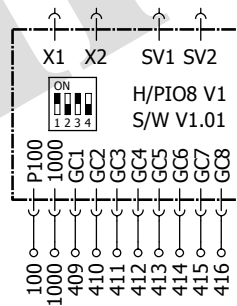
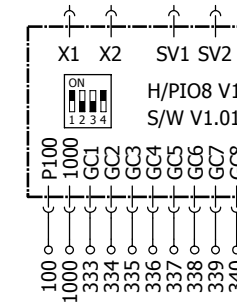
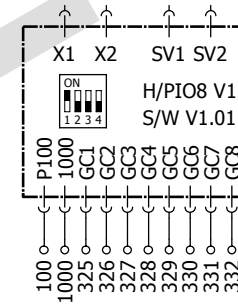
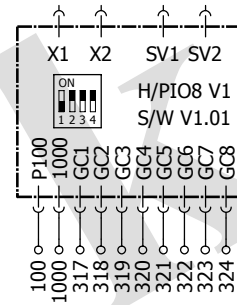
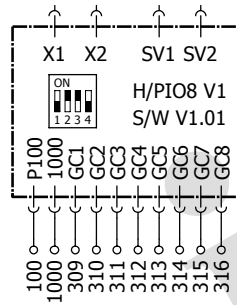
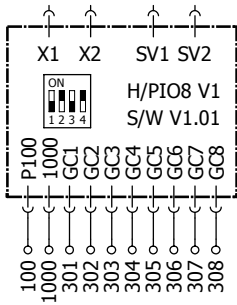
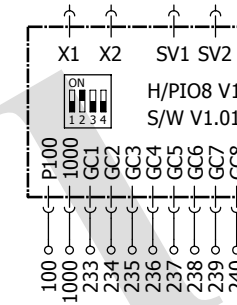
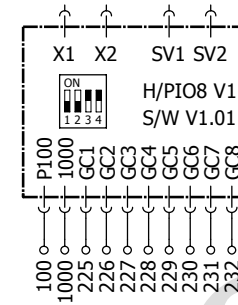
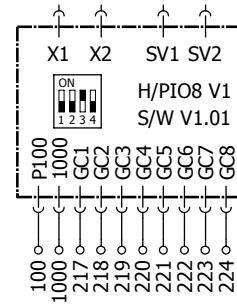
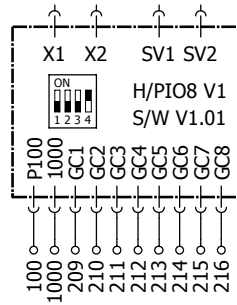
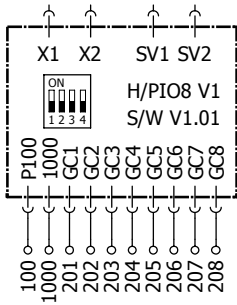
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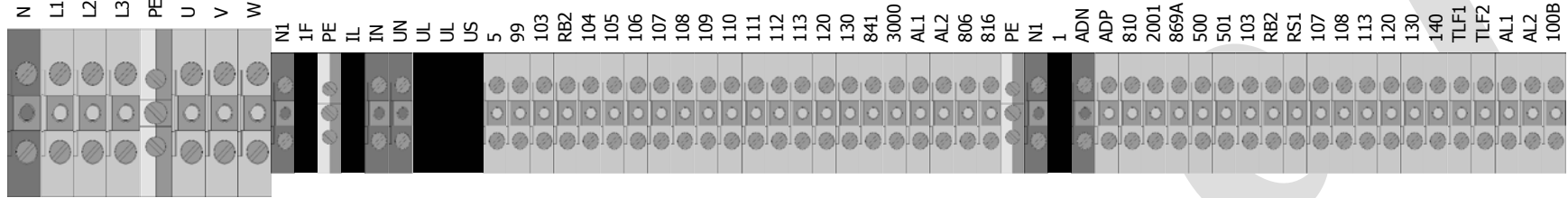
■ : Black represent the S-pole of the magnet (Black face, contact closer)
 □ : Red represents the N-pole of the magnet (Red face, contact opener)

LS1 : Downward slowdown distance (100 cm ... 130 cm)
 LS2 : Upward slowdown distance (100 cm ... 130 cm)
 LD1 : Downward levelling and releveling distance (10 cm)
 LD2 : Upward levelling and releveling distance (10 cm)
 NOTE1 : The drawing shown on this page is for 5 stops. For lifts with higher number of stops the contact of S-R2 must be opened at the starting point of LS2 at the top stop

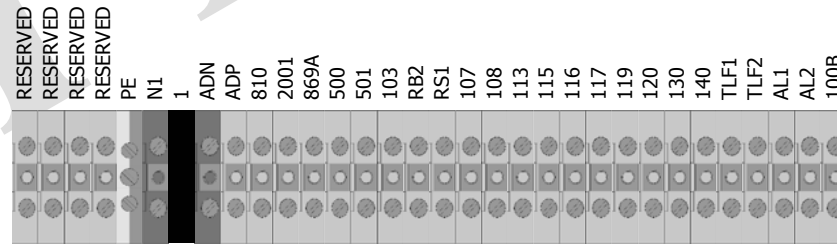
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CONTROL PANEL



INSPECTION BOX



mik-el	DRAWING	ESAT ÖZASLAN	DATE	07.01.2009	APPLICATION FOR LIFTS WITH L7 SPEED REGULATOR WITH UPS	TERMINAL SEQUENCES OF CONTROL PANEL AND INSPECTION BOX	DRIVE CONNECTION	-	PAGE
	CONTROL	MURAT TEZEL	SCH. NO	9011 - 2 / P			LEVELLING WITH OPEN DOOR	-	
			FILE	SHP-L7-UPS-V2			ADVANCED DOOR OPENING	-	

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01	: Over load signal output	(+24VDC)	A, B, C, D, E, F, G, -X, 1X, 2X	: 7 segment display signal outputs	(-24VDC)
02	: Out-of-service signal output	(+24VDC)	ADN	: Neutral of automatic door	(220VAC)
031	: Down direction arrow signal output	(+24VDC)	ADP	: Supply phase of automatic door	(220VAC)
032	: Up direction arrow signal output	(+24VDC)	AL1, AL2	: Alarm signal inputs	(+24VDC)
1	: Power phase of car and car lamp	(220VAC)	CANH, CANL	: Serial communication signals	
1F	: Phase line to the car passing via independent fuse	(220VAC)	DTO	: Door open signal input	(+24VDC)
2	: Car lamp phase	(220VAC)	DTS	: Door close signal input	(+24VDC)
5	: Cooling fan motor phase	(220VAC)	FA	: Car fan phase	(220VAC)
99	: Return of emergency stop button in control panel	(220VAC)	FC	: Power phase of car fan	(220VAC)
100	: (+) terminal of common display and command circuits	(+24VDC)	GB0, GB1, GB2, GB3, GB4, GB5	: Gray code or binary code signal outputs	(+24VDC)
100B	: Power of Batem board	(+24VDC)	IL	: Power phase of UPS	(220VAC)
103	: Return of emergency stop button in machine room	(220VAC)	IN	: Power neutral of UPS	(220VAC)
104	: Return of car buffer contact and counter weight buffer contact	(220VAC)	K3	: Return of door close contact	(*)
105	: Return of lower limit contact	(220VAC)	K5	: Return of door open contact	(*)
106	: Return of upper limit contact	(220VAC)	K15	: Common of door open and door close contact	(*)
107	: Return of speed regulator contact	(220VAC)	K16	: Door open limit signal input	(+24VDC)
108	: Return of car safety gear contact	(220VAC)	K19	: Door close limit signal input	(+24VDC)
109	: Return of shaft entrance door contact	(220VAC)	K30	: Door re-open signal input	(+24VDC)
110	: Return of loose rope contact	(220VAC)	L1, L2, L3	: Mains power supply inputs	(380VAC)
111	: Return of emergency stop button in the pit	(220VAC)	M0, M1, M2, M3	: Return of switches for gray coded position information	(+24VDC)
112	: Return of speed regulator sheave tension contact	(220VAC)	N	: Neutral	
113	: Reserved	(220VAC)	N1	: Neutral line to the car passing via independent fuse	(220VAC)
115	: Return of emergency stop button on top of the car	(220VAC)	P1, P2	: Motor thermistor signal inputs	
116	: Return of loose rope contact at the car	(220VAC)	PE	: Protective earthing	
117	: Return of car roof hatch contact	(220VAC)	RB2	: Return of safety (stop) circuit contacts in inspection and re-call switches	(220VAC)
119	: Reserved	(220VAC)	RS1	: Return of safety (stop) circuit contacts in inspection switch	(220VAC)
120	: Return of series connection of stop contacts	(220VAC)	TLF1, TLF2	: Phone line connection inputs	
130	: Return of floor door contacts	(220VAC)	U, V, W	: Speed winding outputs	(380VAC)
140	: Return of car door contact	(220VAC)	UL	: UPS output phase	(220VAC)
142	: Return of levelling switch	(+24VDC)	UN	: UPS output neutral	(220VAC)
201, ..., 240	: Downward call inputs	(+24VDC)	US	: UPS output phase passing via main circuitbreaker contact	(220VAC)
291	: Gong signal output	(+24VDC)			
301, ..., 340	: Upward call inputs	(+24VDC)			
401, ..., 440	: Car call inputs	(+24VDC)			
500	: Downward signal input in inspection operation	(+24VDC)			
501	: Upward signal input in inspection operation	(+24VDC)			
802	: Return of minimum load contact	(+24VDC)			
804	: Return of over load contact	(+24VDC)			
805	: Return of full load contact	(+24VDC)			
806	: Return of earthquake contact	(+24VDC)			
810	: (-) terminal of door lock magnet	(-180VDC)			
812	: Attendant signal input	(+24VDC)			
816	: Fire alarm signal input	(+24VDC)			
817	: Return of lower forced slowdown contact	(+24VDC)			
818	: Return of upper forced slowdown contact	(+24VDC)			
841	: (+) terminal of mechanical brake magnet	(+180VDC)			
869A	: Normal operation signal input coming from inspection mode switch	(+24VDC)			
1000	: (-) terminal of command circuits	(-24VDC)			
2001	: (+) terminal of door lock magnet	(+180VDC)			
3000	: (-) terminal of mechanical brake magnet	(-180VDC)			

(*) : Differs according to the type of the automatic door employed