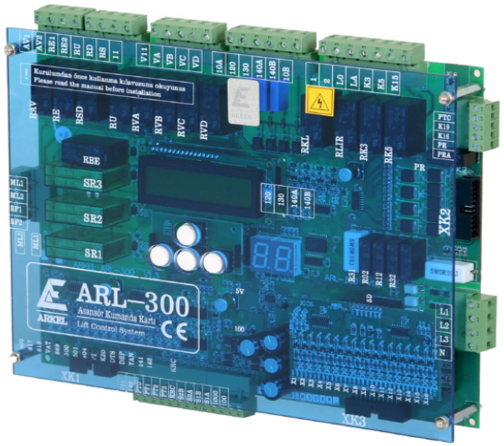
ARL-300 LIFT CONTROL PANEL

ELECTRICAL DIAGRAMS



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The schemes are reviewed and updated regularly. Updated diagrams are available on our web site.

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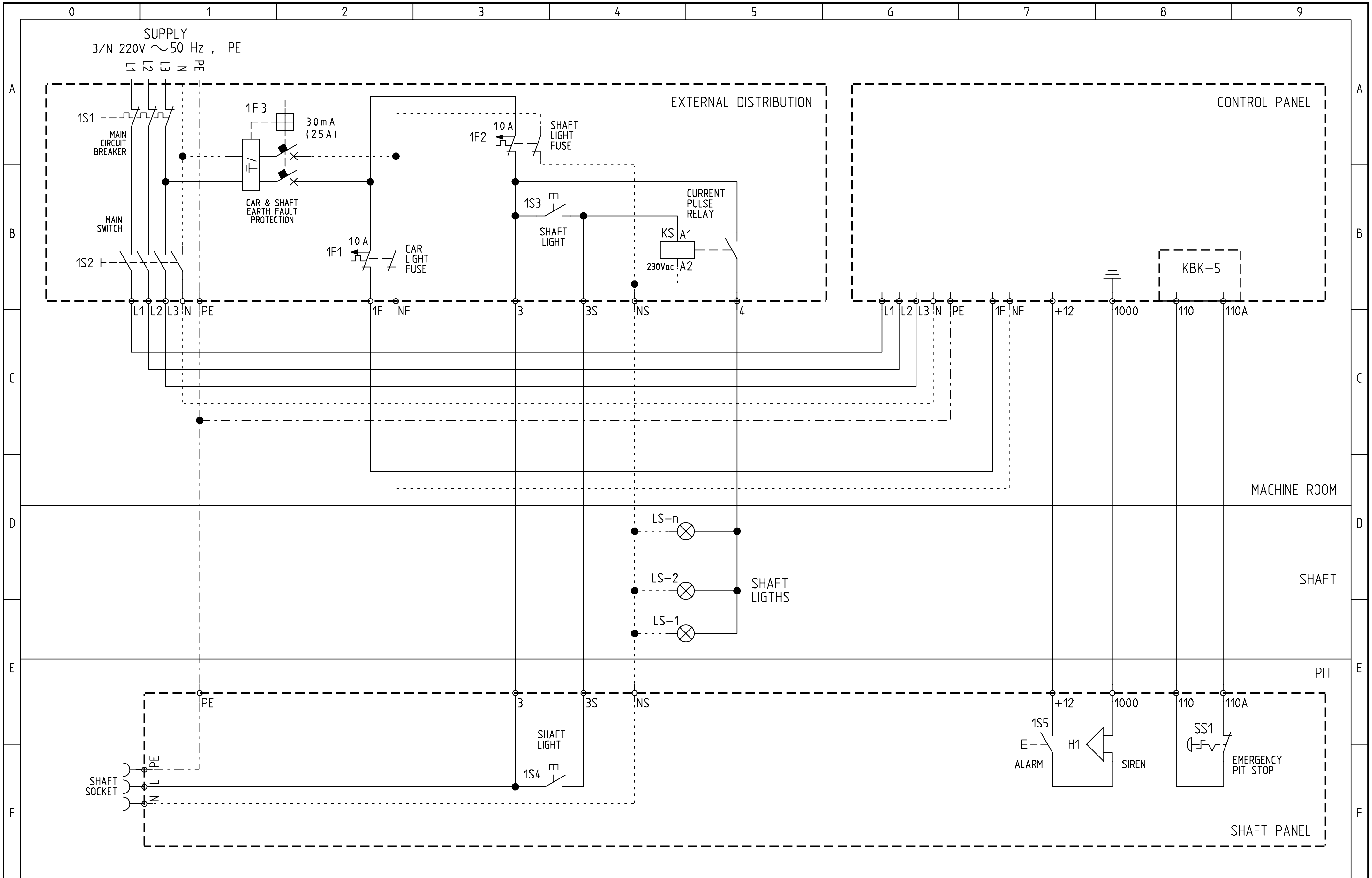
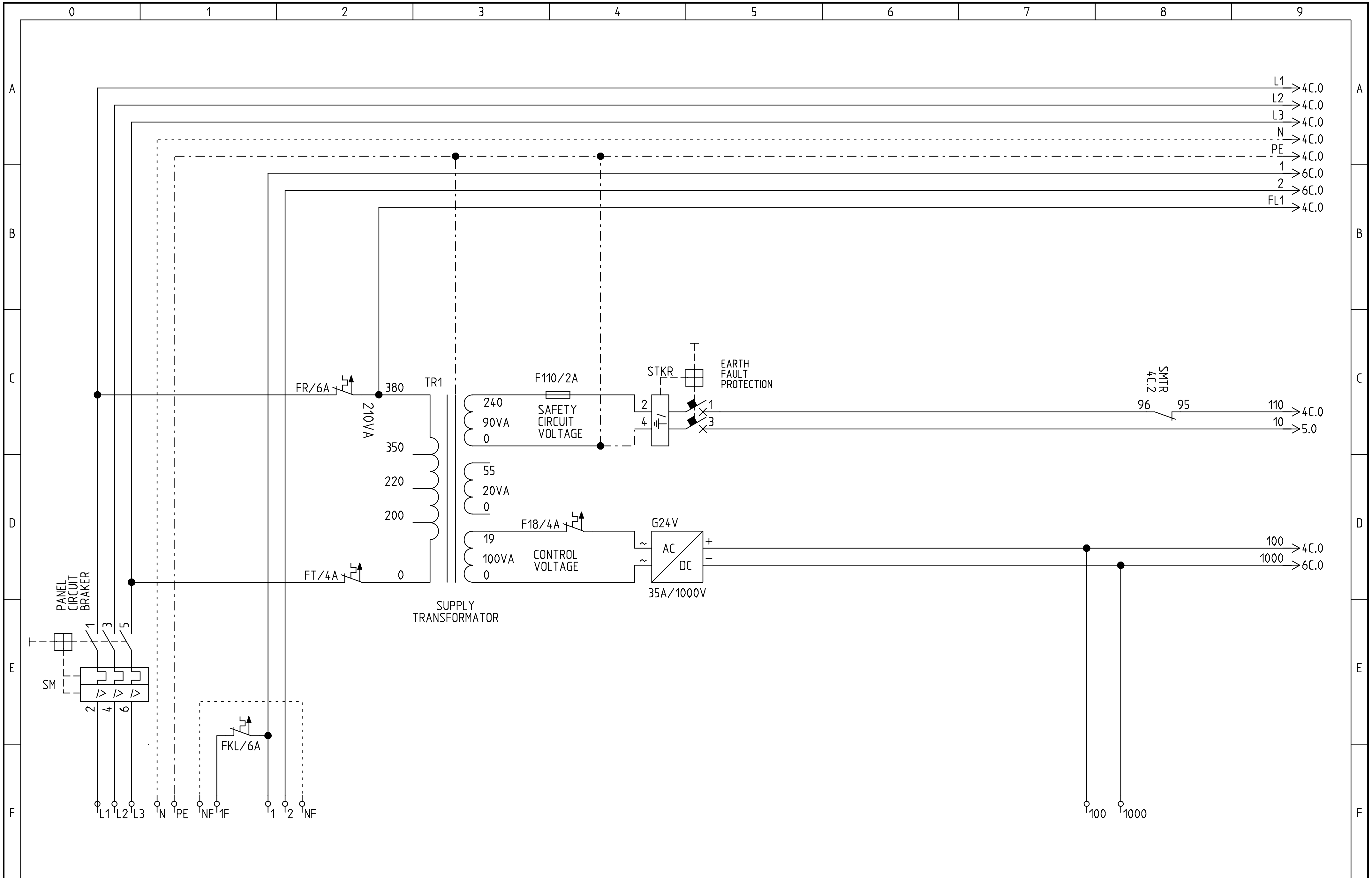
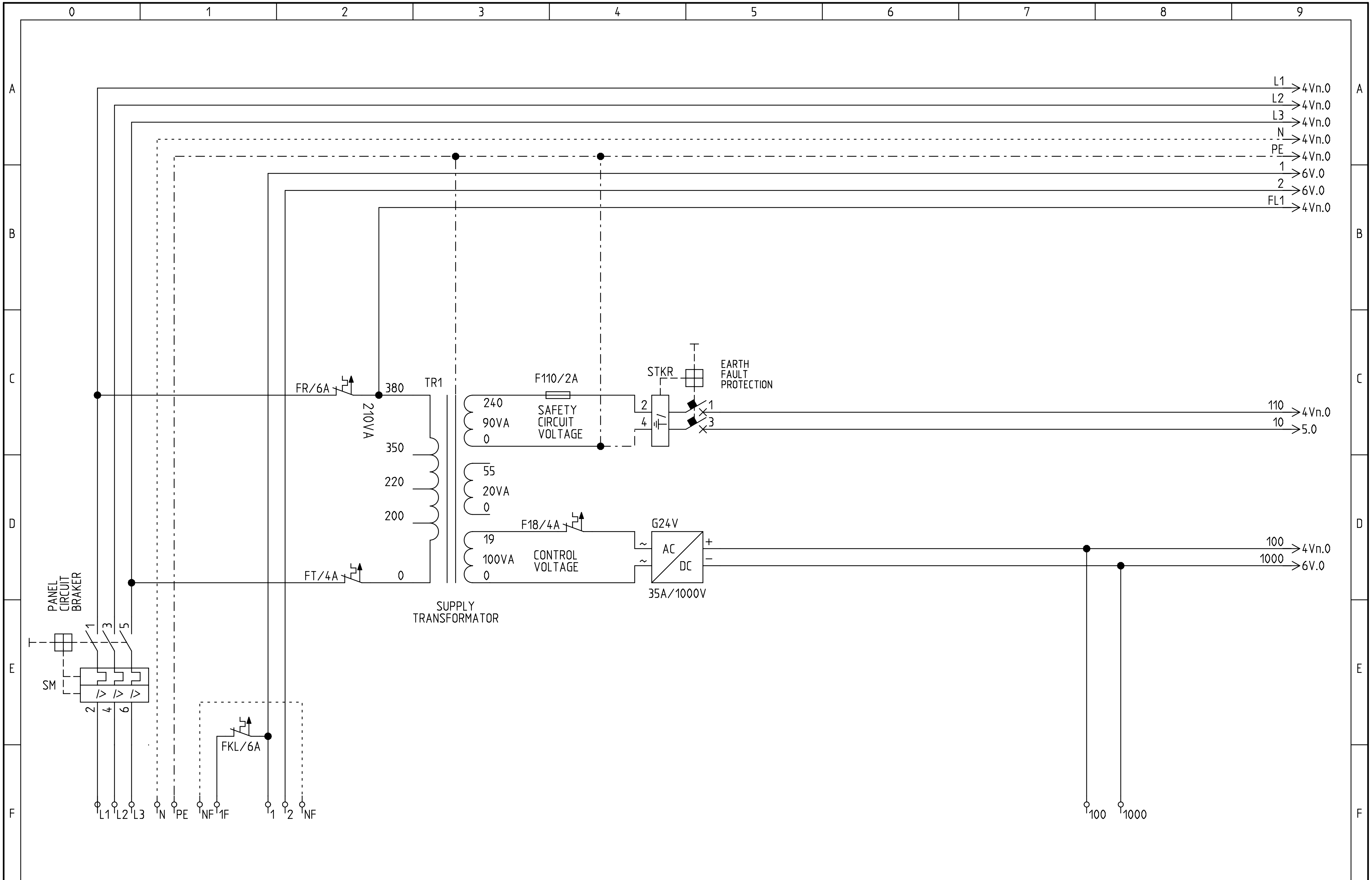
Document Version : **V2.8**
ARKEL 2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	MAINS POWER INCOMING WIRING	DRAWN BY: K.D.	Rev. No: V11	Sheet: 2
			CHECKED BY: C.A.	Rev. Date: 06.07.2009	Date: 11.04.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SUPPLY CIRCUITS DRIVE TYPE : TWO SPEED	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 17.02.2009	Sheet: 3C Date: 01.06.2006



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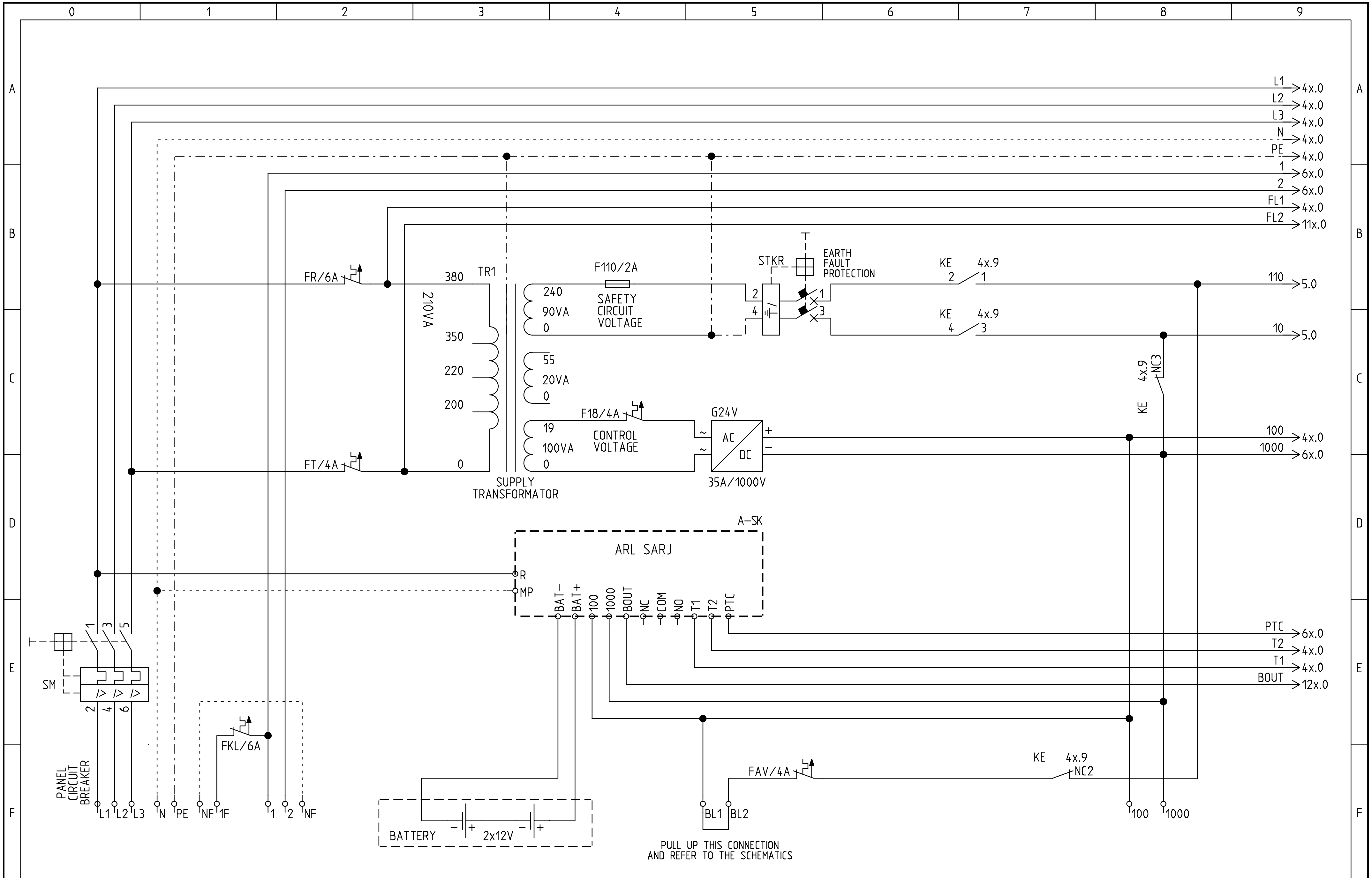
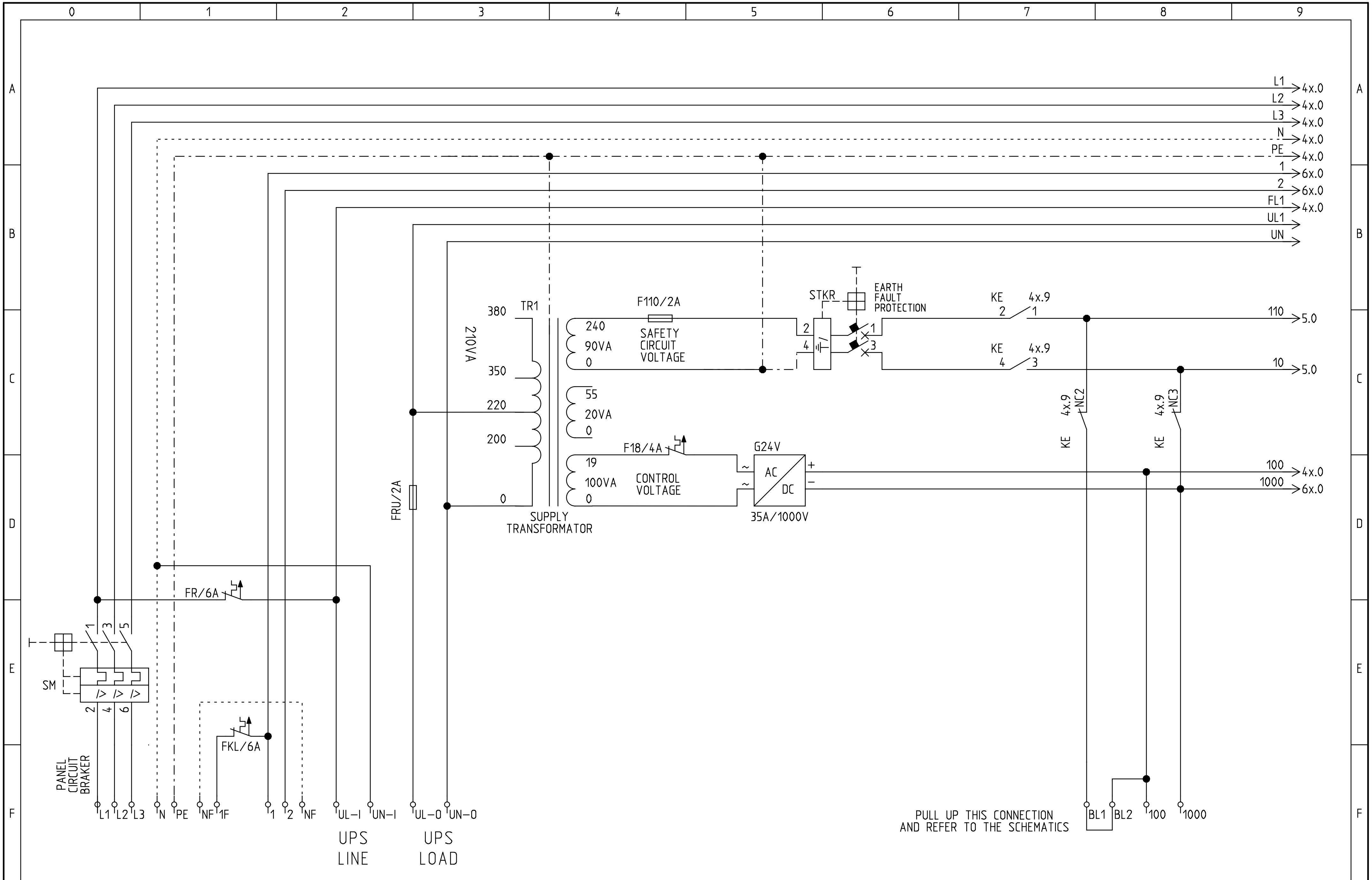
ARL-300 CONTROL PANEL

SUPPLY CIRCUITS
DRIVE TYPE : VVVF

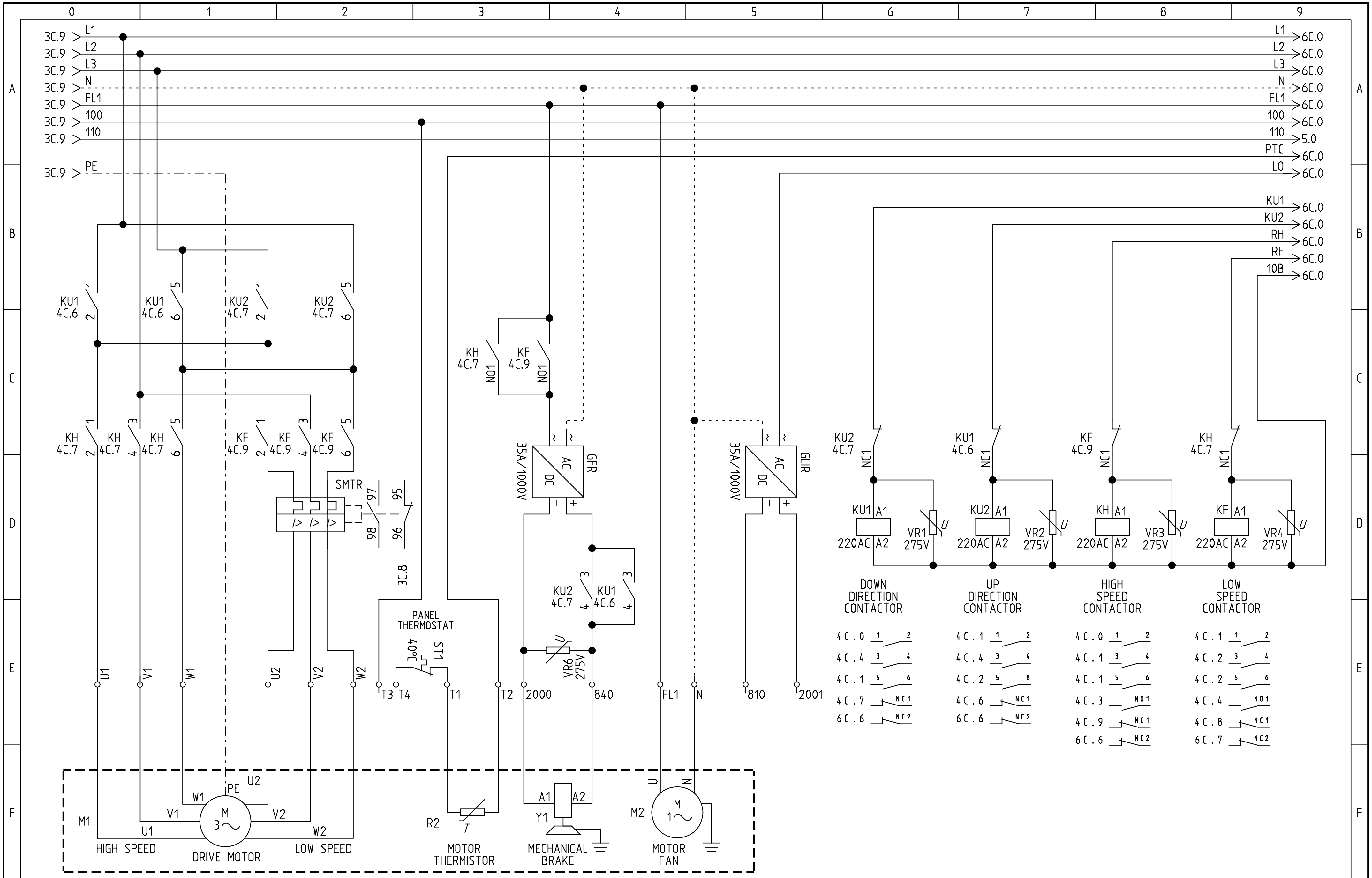
DRAWN BY: K.D.	Rev. No: V11	Sheet: 3 V
CHECKED BY: C.A.	Rev. Date: 17.02.2009	Date: 01.06.2006



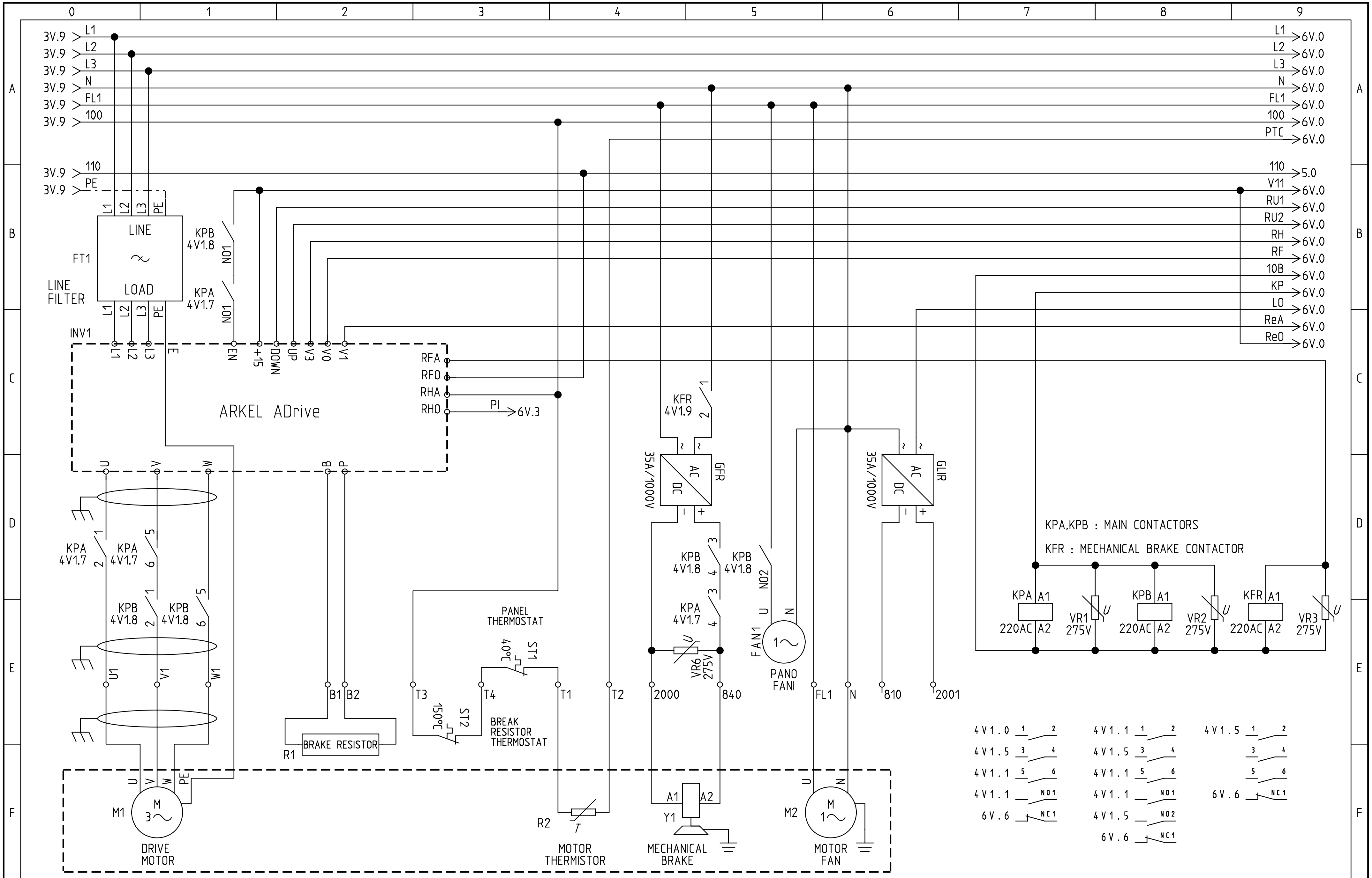
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SUPPLY CIRCUITS DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 17.02.2009	Sheet: 3H Date: 01.06.2006



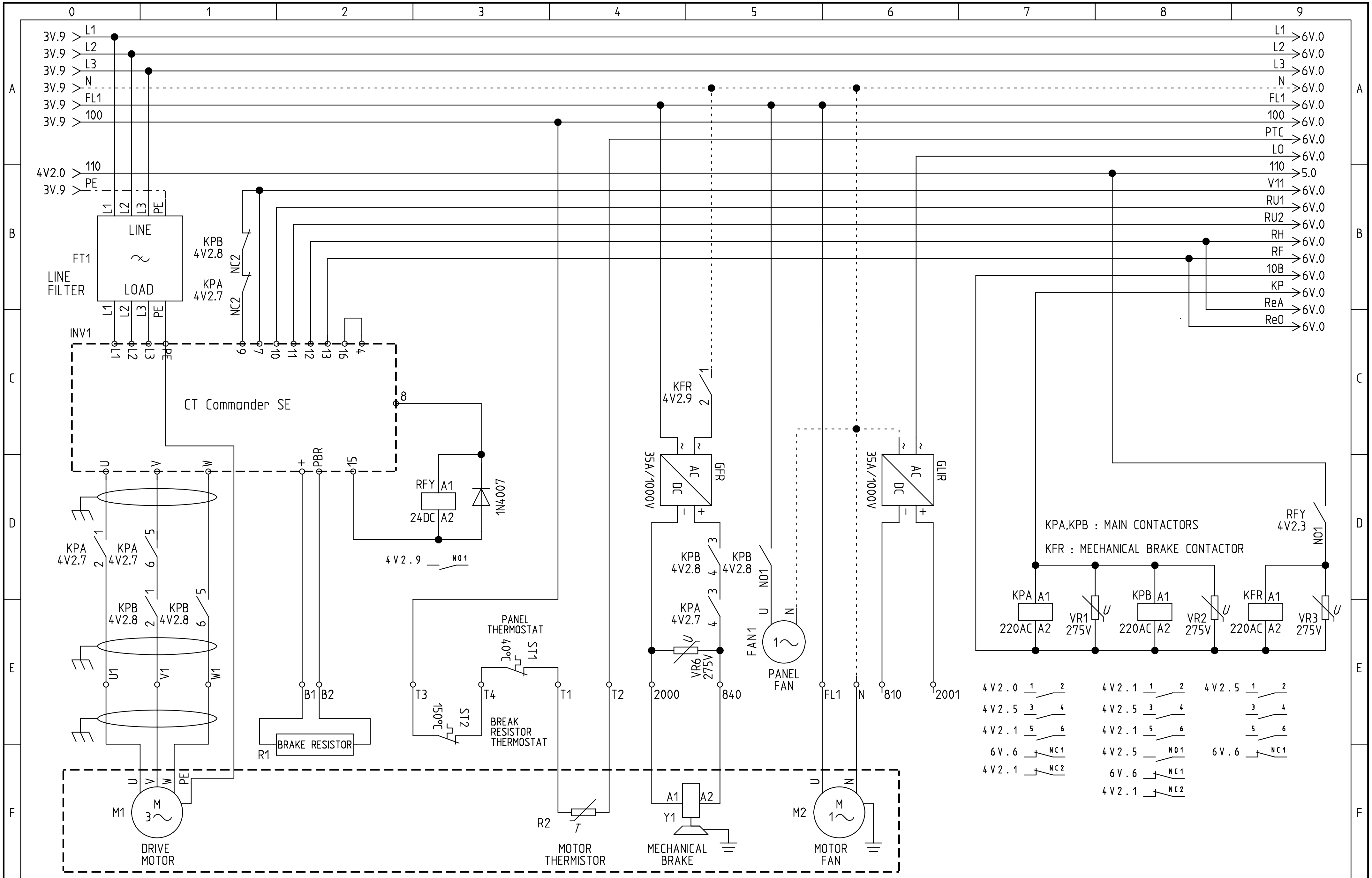
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SUPPLY CIRCUITS DRIVE TYPE : HYDRAULIC DOOR OPENING WITH UPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 17.02.2009	Sheet: 3 HU Date: 01.06.2006



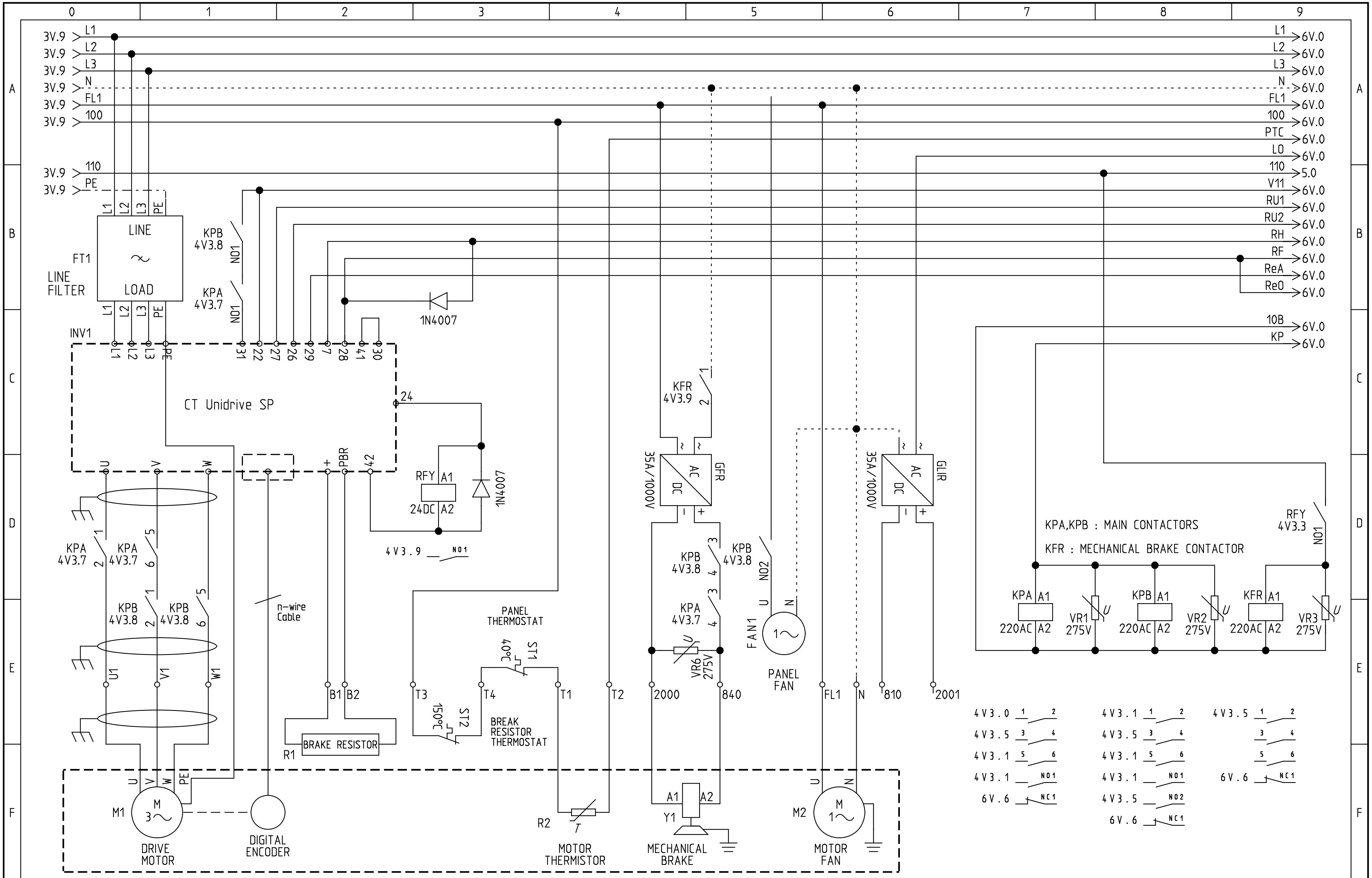
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : TWO SPEED	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 4C Date: 01.06.2006



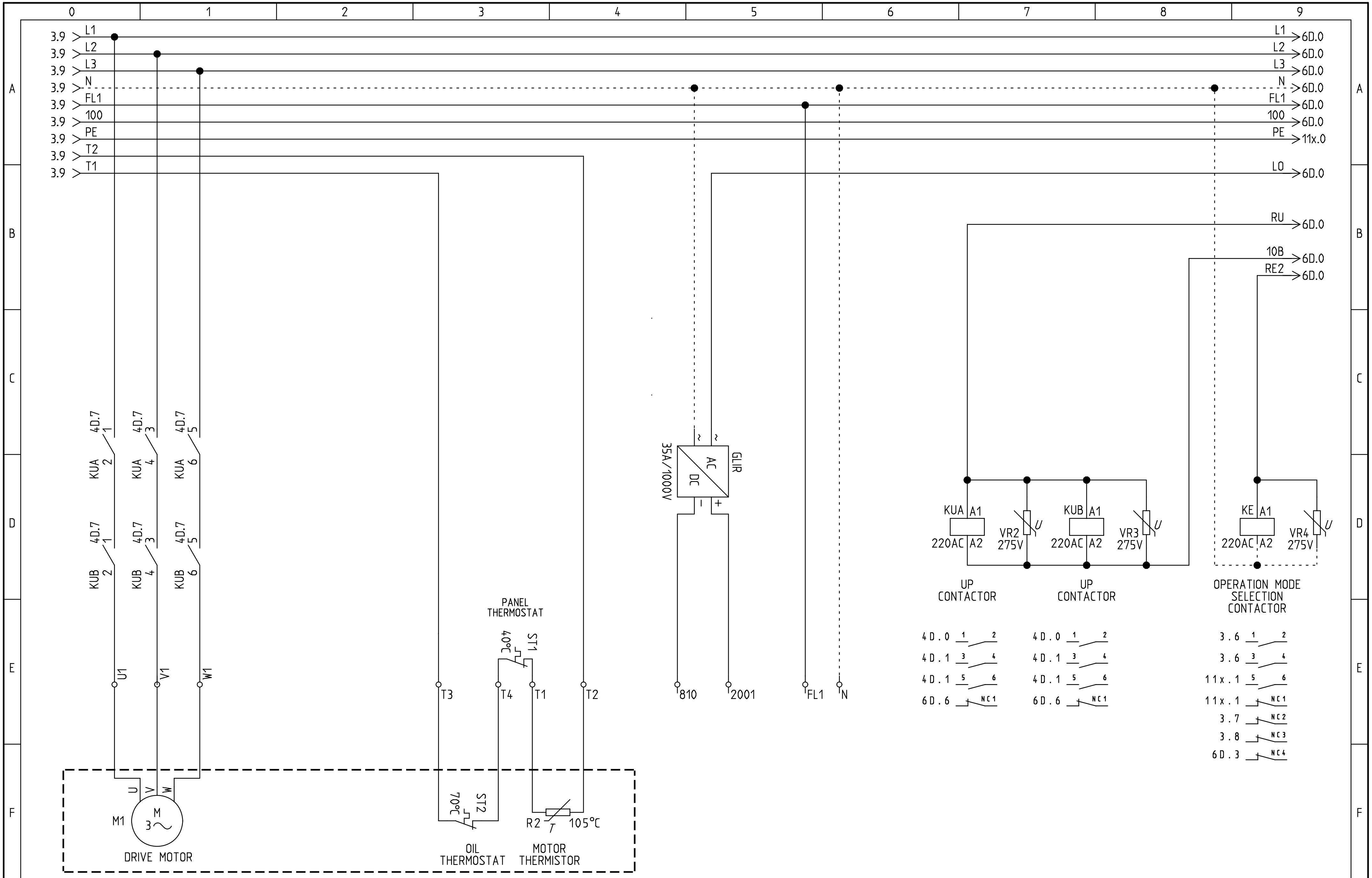
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF INVERTOR : ARKEL ADrive	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 4 V1 Date: 01.06.2006



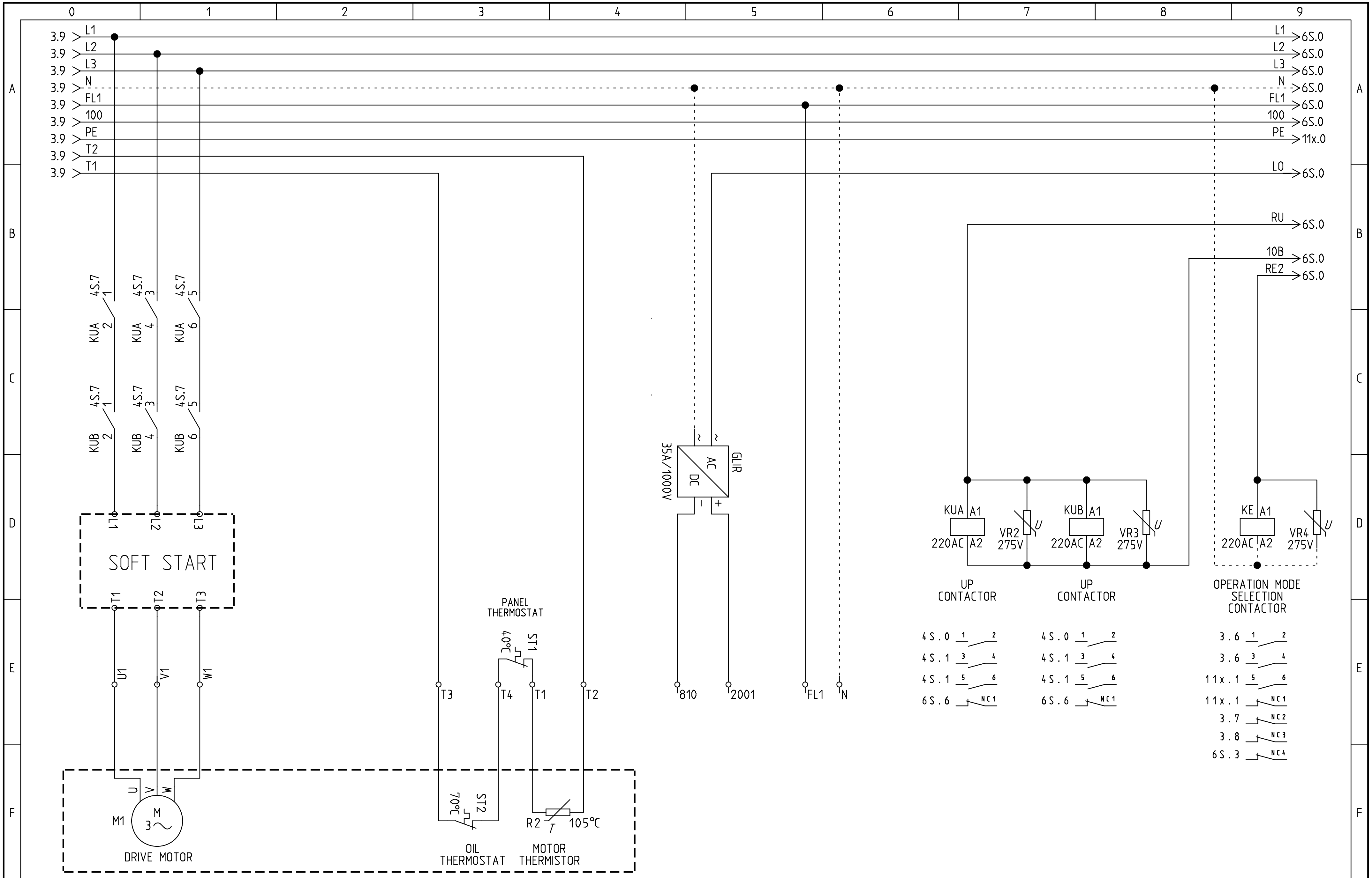
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF INVERTOR : CT COMMANDER SE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007
				Sheet: 4 V2 Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF INVERTOR : CT Unidrive SP	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 4 V3 Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : HYDRAULIC START-UP : DIRECT	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 4 D Date: 01.06.2006



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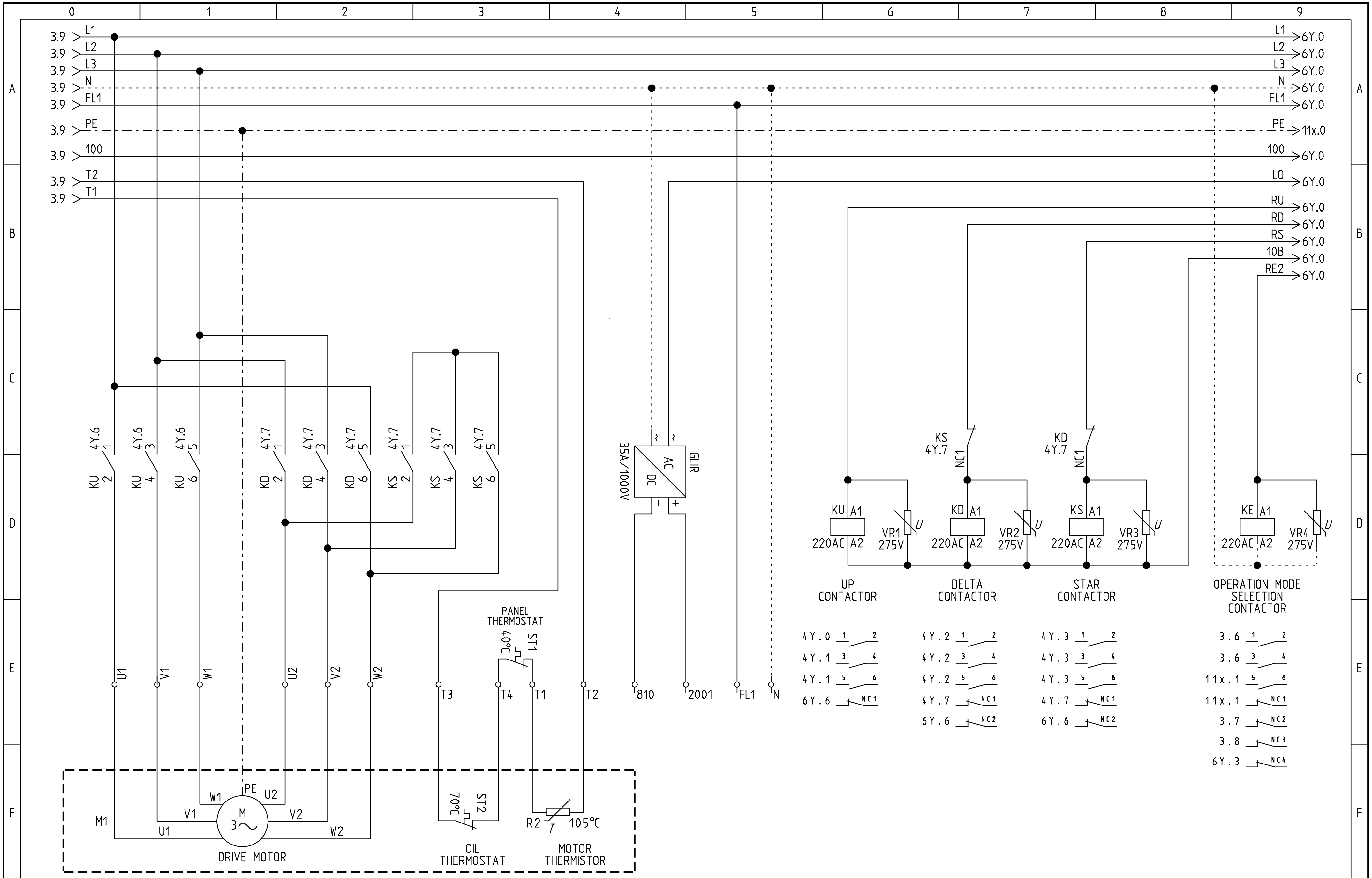
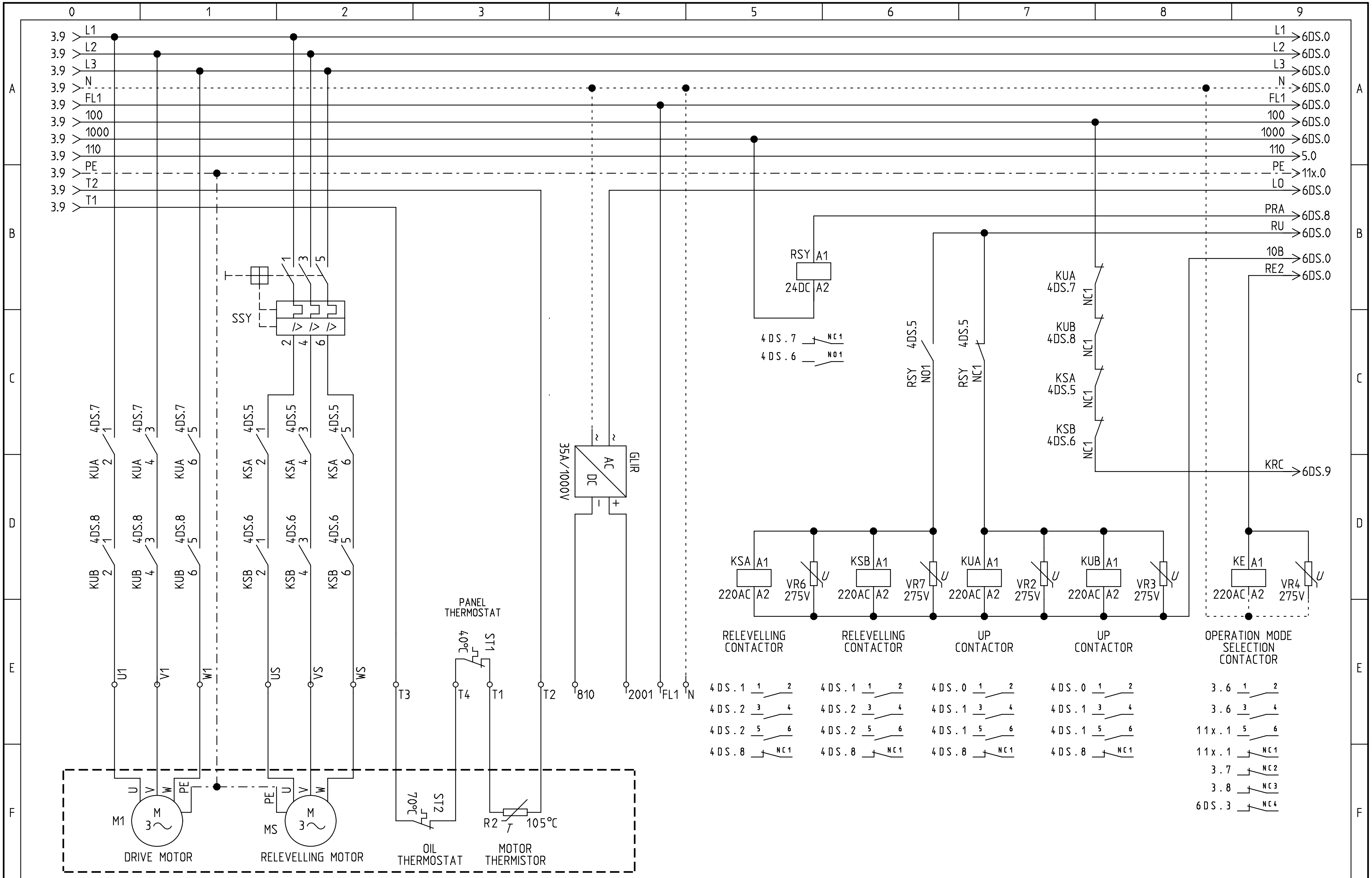
ARL-300 CONTROL PANEL

CONTROL CARD CONNECTIONS
DRIVE TYPE : HYDRAULIC
START-UP : SOFT START

DRAWN BY: K.D.	Rev. No:	Sheet: 4 S
CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : HYDRAULIC START-UP : STAR-DELTA	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 20.03.2009 Sheet: 4 Y Date: 01.06.2006



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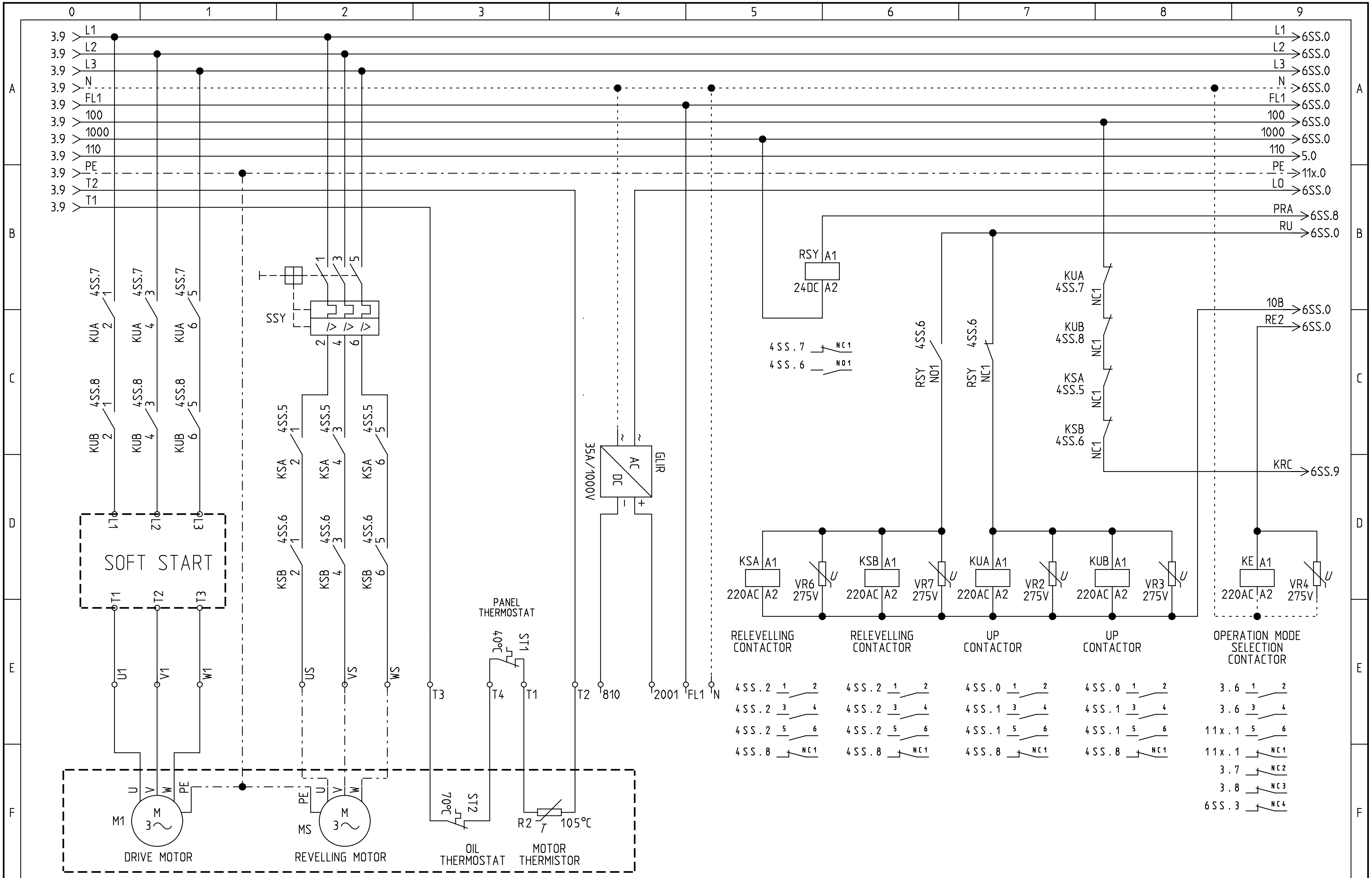
ARL-300 CONTROL PANEL

MOTOR & CONTACTORS CIRCUITS
DRIVE TYPE : HYDRAULIC / START-UP : DIRECT
WITH RELEVELLING MOTOR

DRAWN BY: K.D.	Rev. No:	Sheet: 4 DS
CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



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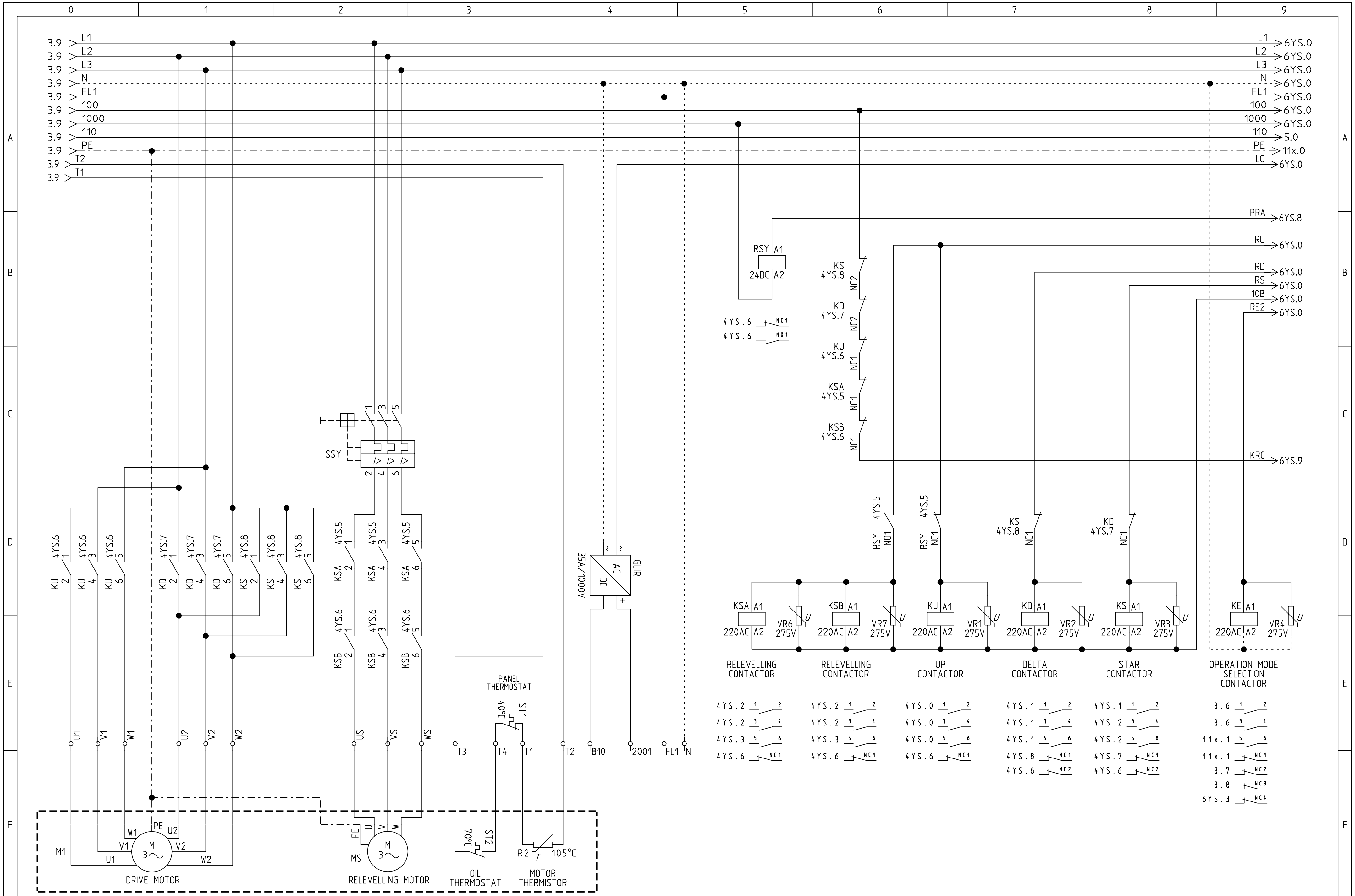
ARL-300 CONTROL PANEL

CONTROL CARD CONNECTIONS
DRIVE TYPE : HYDRAULIC / START-UP : SOFT START
WITH RELEVELLING MOTOR

DRAWN BY: K.D.	Rev. No:	Sheet: 4 SS
CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



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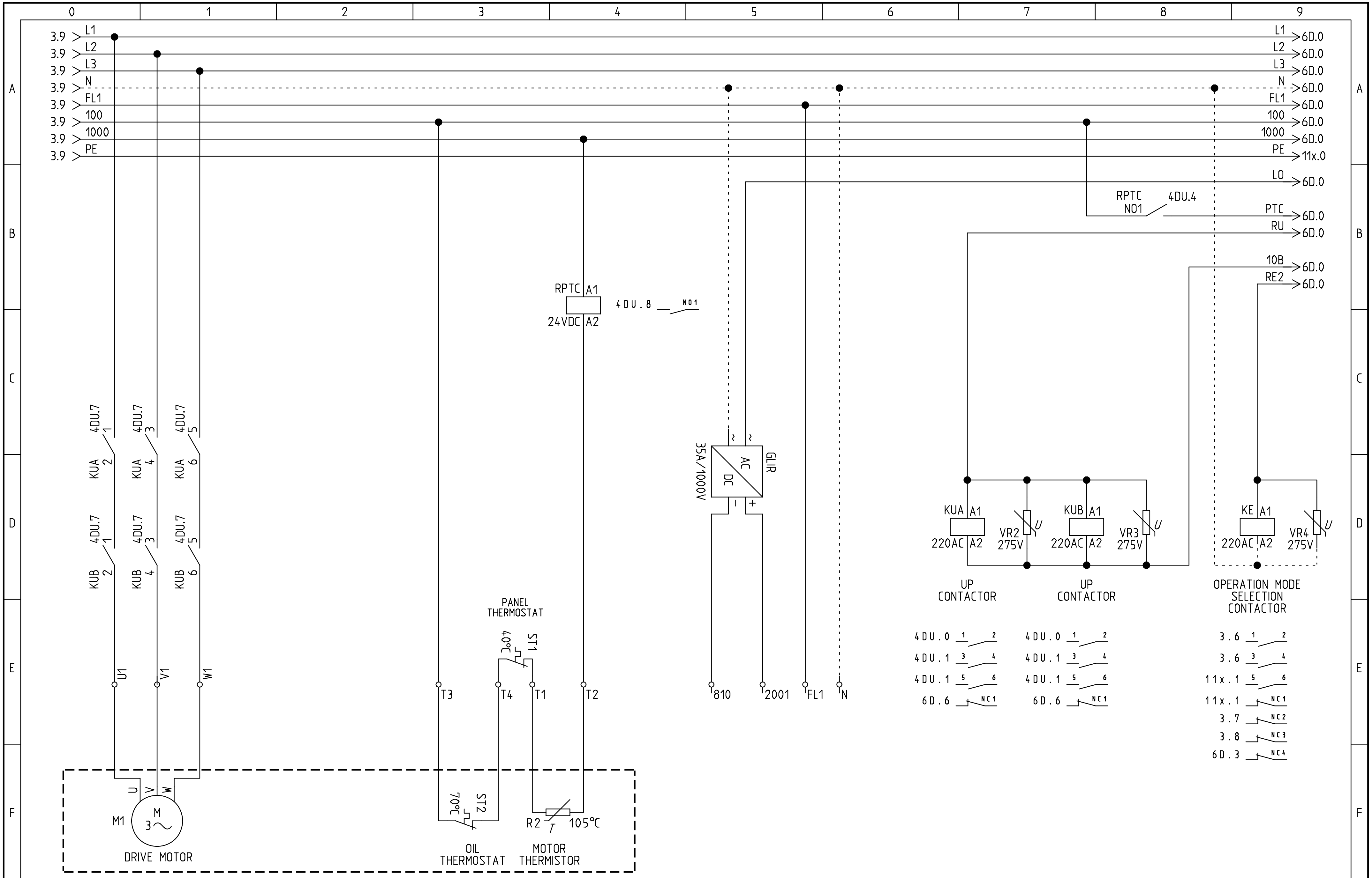
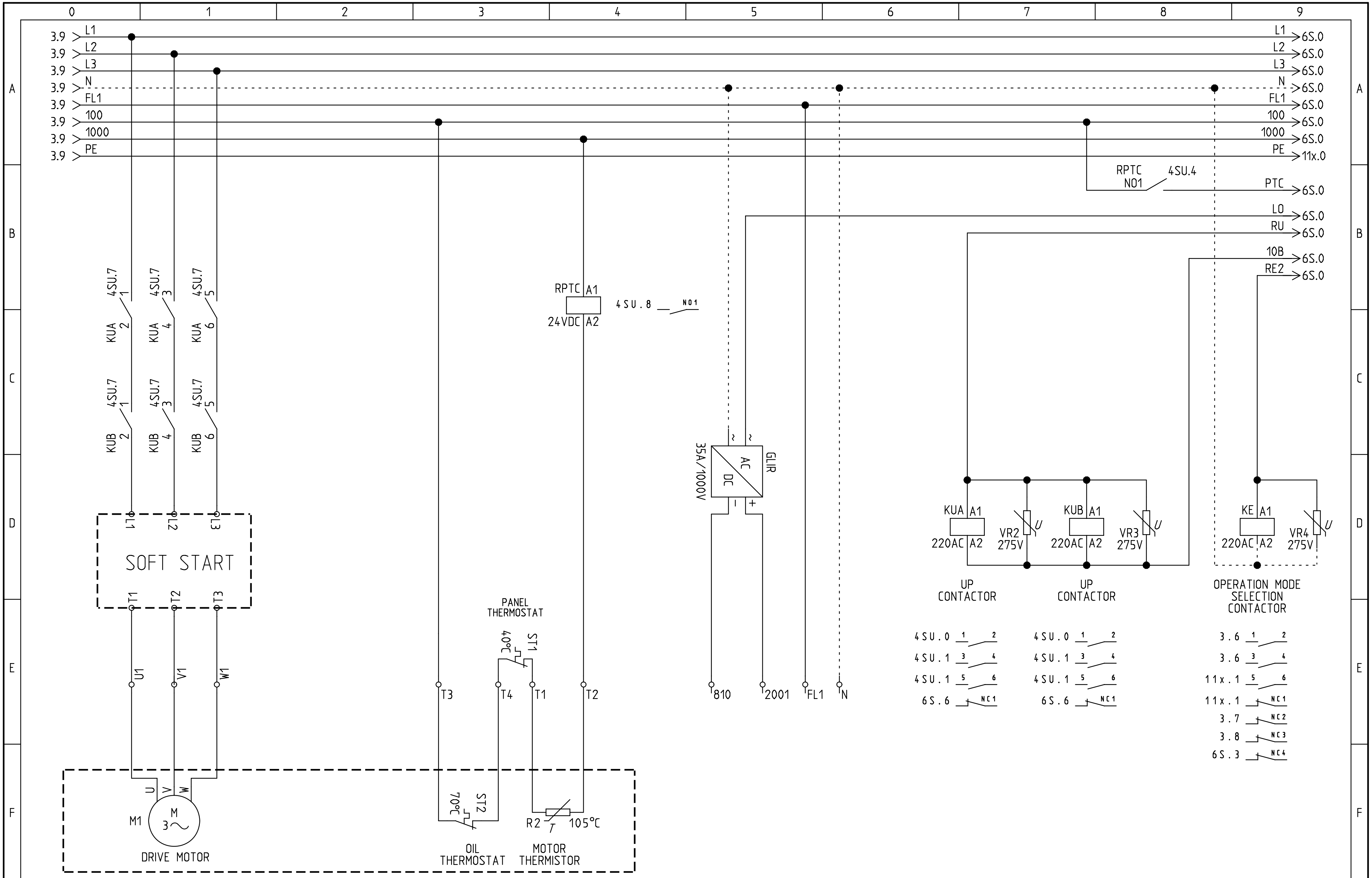
ARL-300 CONTROL PANEL

MOTOR & CONTACTORS CIRCUITS
DRIVE TYPE : HYDRAULIC / START-UP : STAR-DELTA
WITH RELEVELLING MOTOR

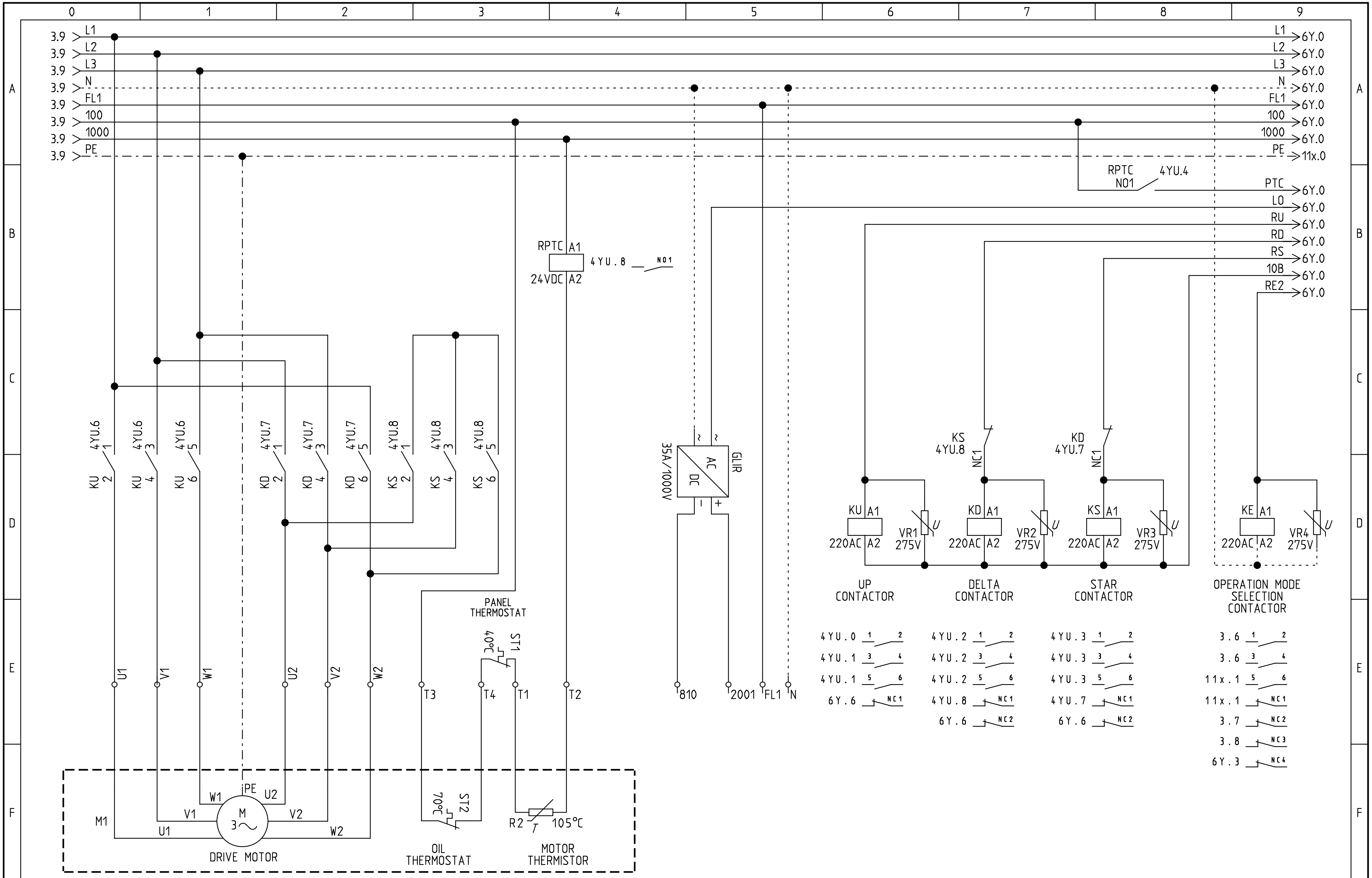
DRAWN BY: K.D.	Rev. No:	Sheet: 4 YS
CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



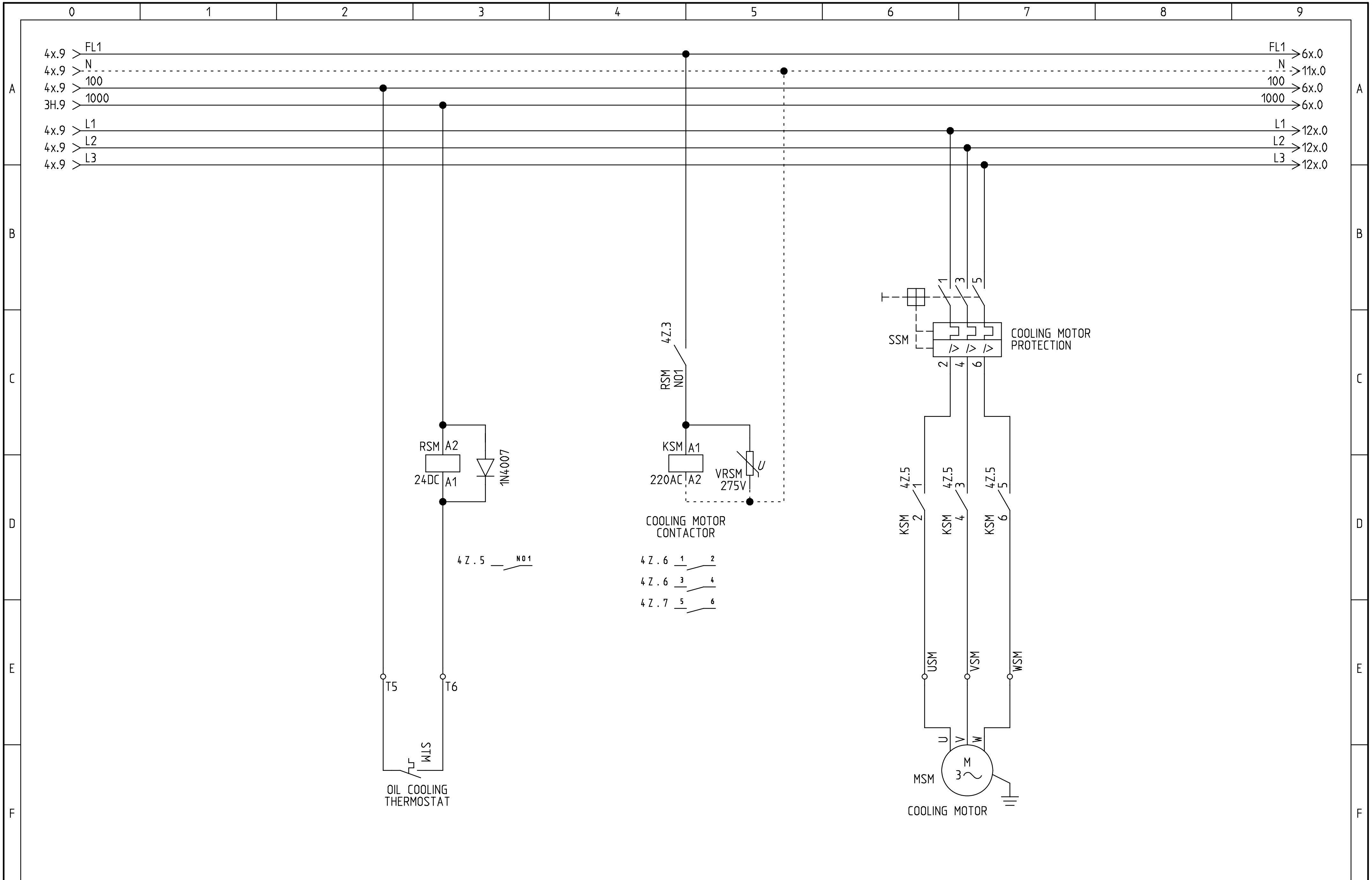
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : HYDRAULIC / UPS DOOR OPENING START-UP : DIRECT	DRAWN BY: K.D.	Rev. No:	Sheet: 4 DU
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



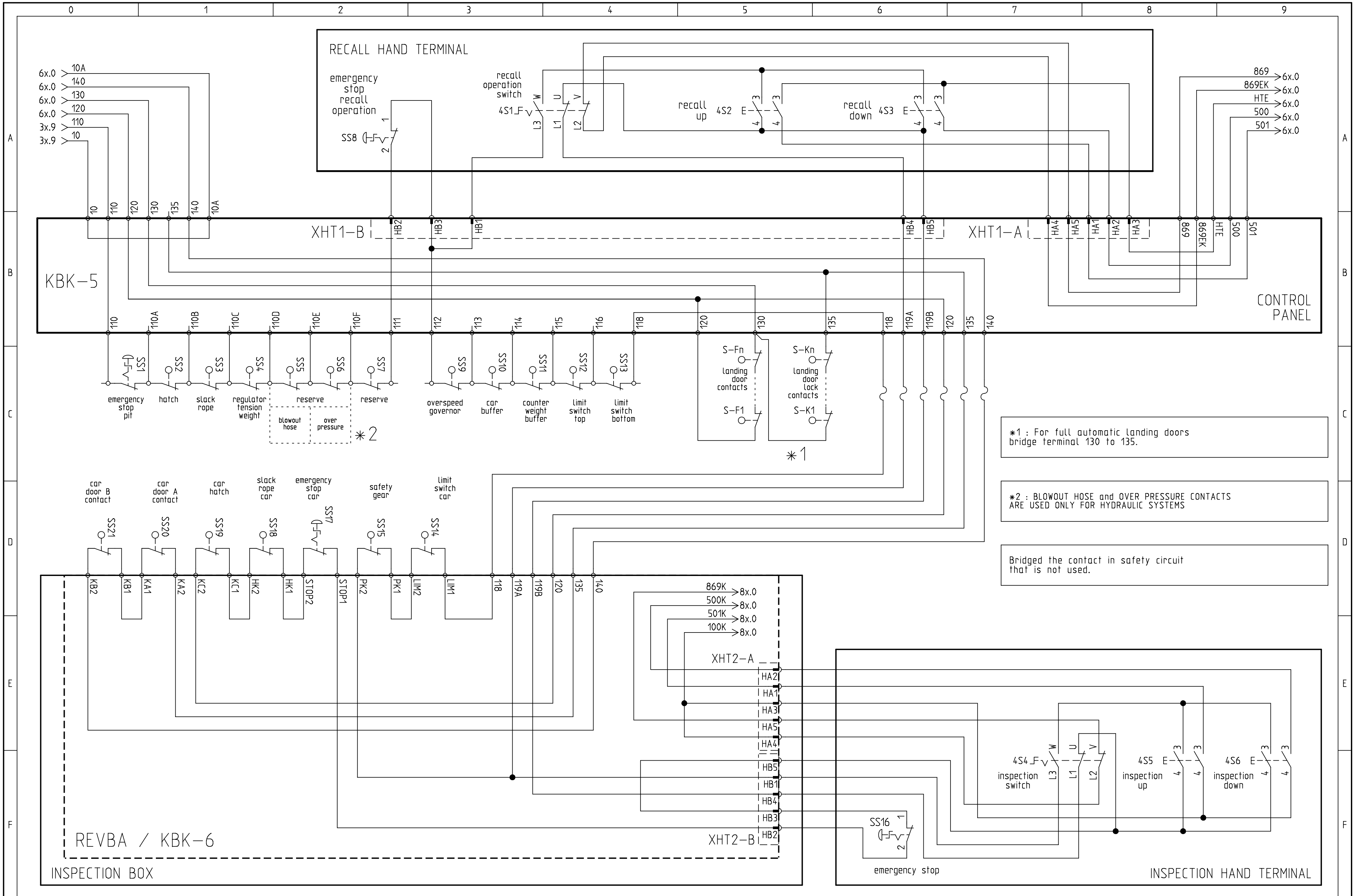
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CONTROL CARD CONNECTIONS DRIVE TYPE : HYDRAULIC / UPS DOOR OPENING START-UP : SOFT START	DRAWN BY: K.D.	Rev. No:	Sheet: 4 SU
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



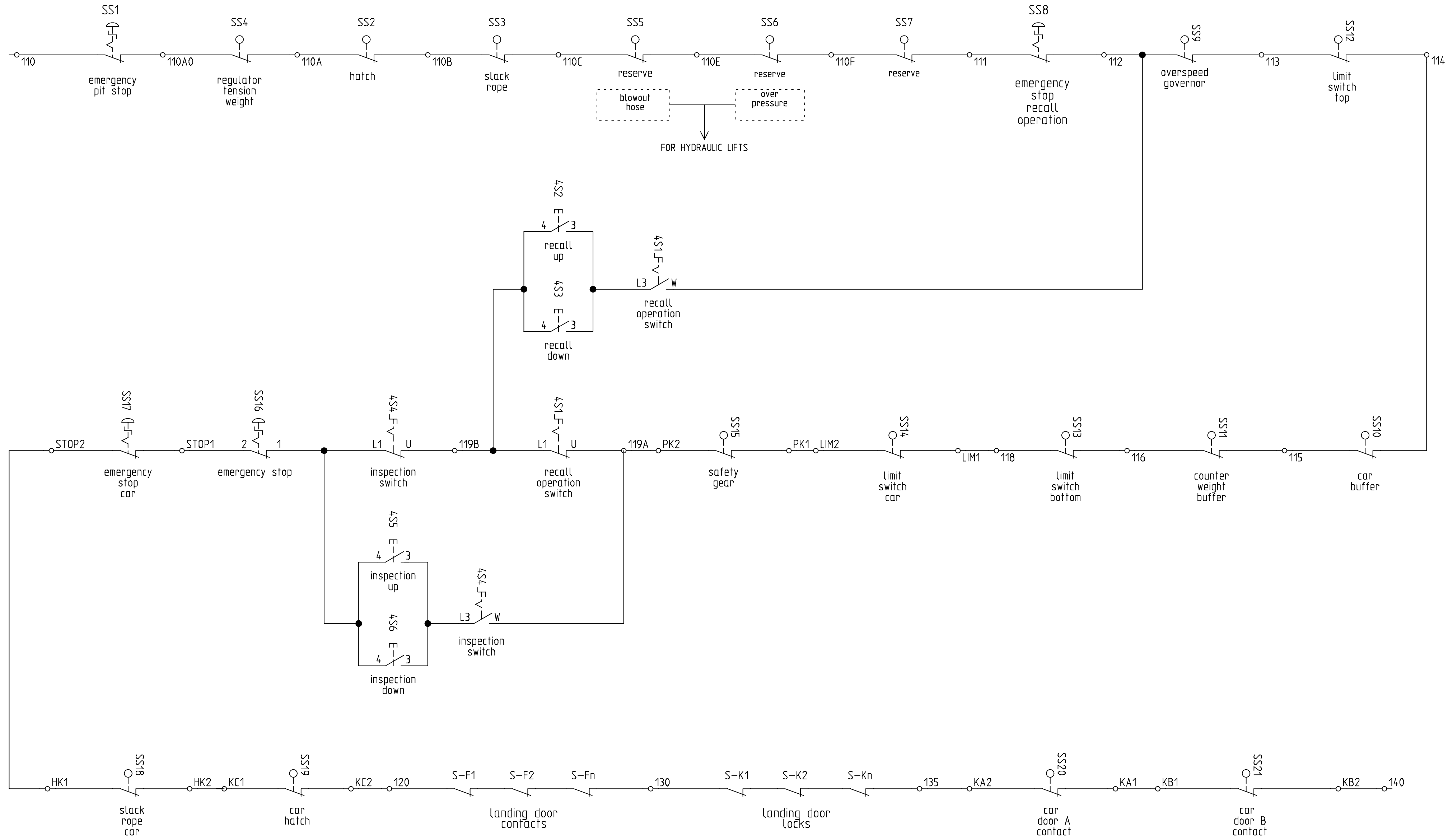
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE: HYDRAULIC / DOOR OPENING WITH UPS START-UP : STAR-DELTA	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 4 YU Date: 01.06.2006



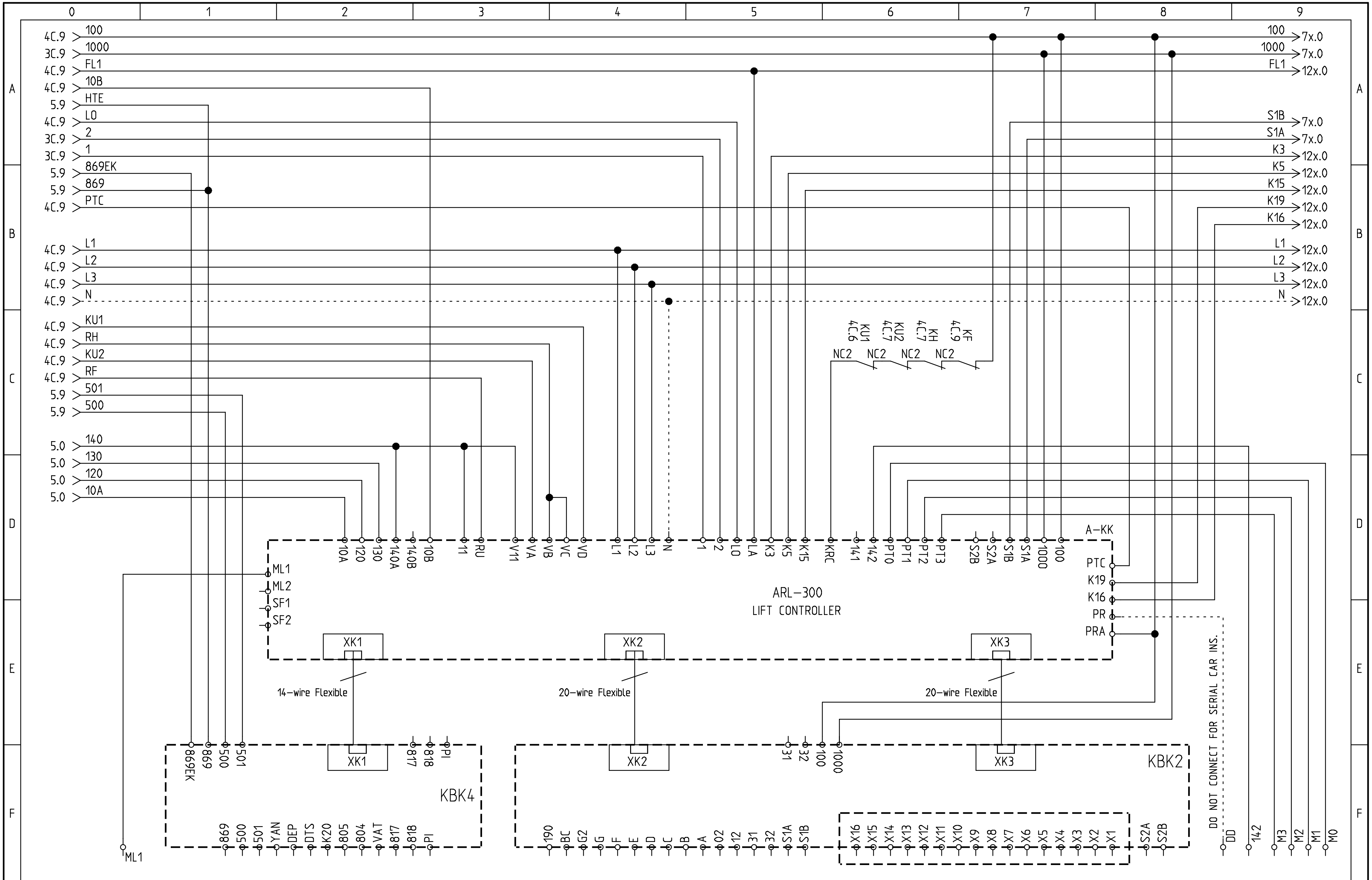
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	COOLING MOTOR FOR HYDRAULIC SYSTEMS	DRAWN BY: K.D.	Rev. No:	Sheet: 4 Z
			CHECKED BY: C.A.	Rev. Date:	Date: 28.12.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SAFETY CIRCUIT INSPECTION RECALL	DRAWN BY: K.D.	Rev. No:	Sheet: 5 R
			CHECKED BY: C.A.	Rev. Date:	Date: 19.10.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	SAFETY CIRCUIT	DRAWN BY: K.D.	Rev. No:	Sheet: 5 S
			CHECKED BY: C.A.	Rev. Date:	Date: 17.06.2008



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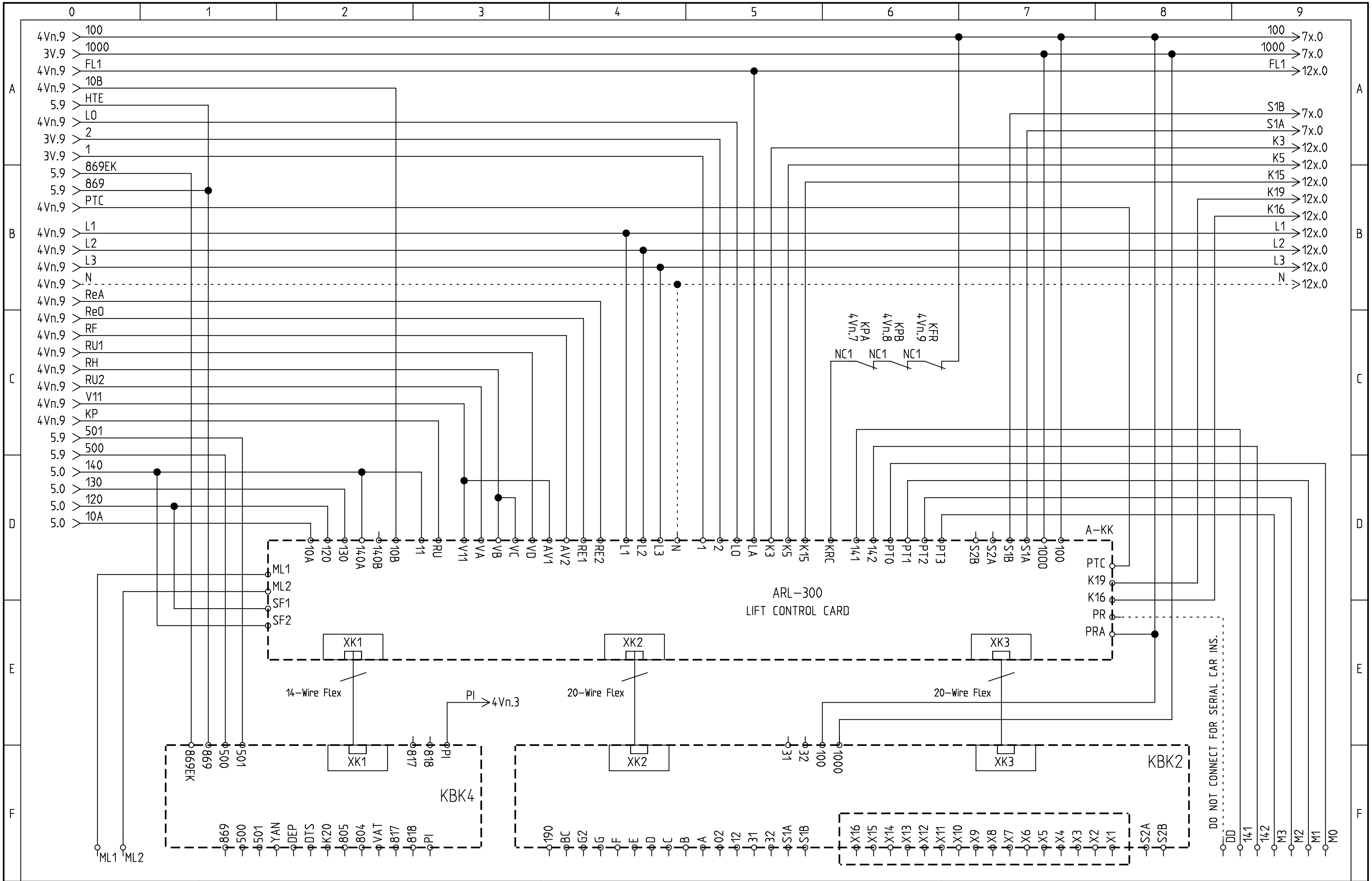
ARL-300 CONTROL PANEL	CONTROL CARD CONNECTIONS DRIVE TYPE : TWO SPEED	DRAWN BY: K.D.	Rev. No: V11	Sheet: 6C
		CHECKED BY: C.A.	Rev. Date: 05.02.2007	Date: 01.06.2006



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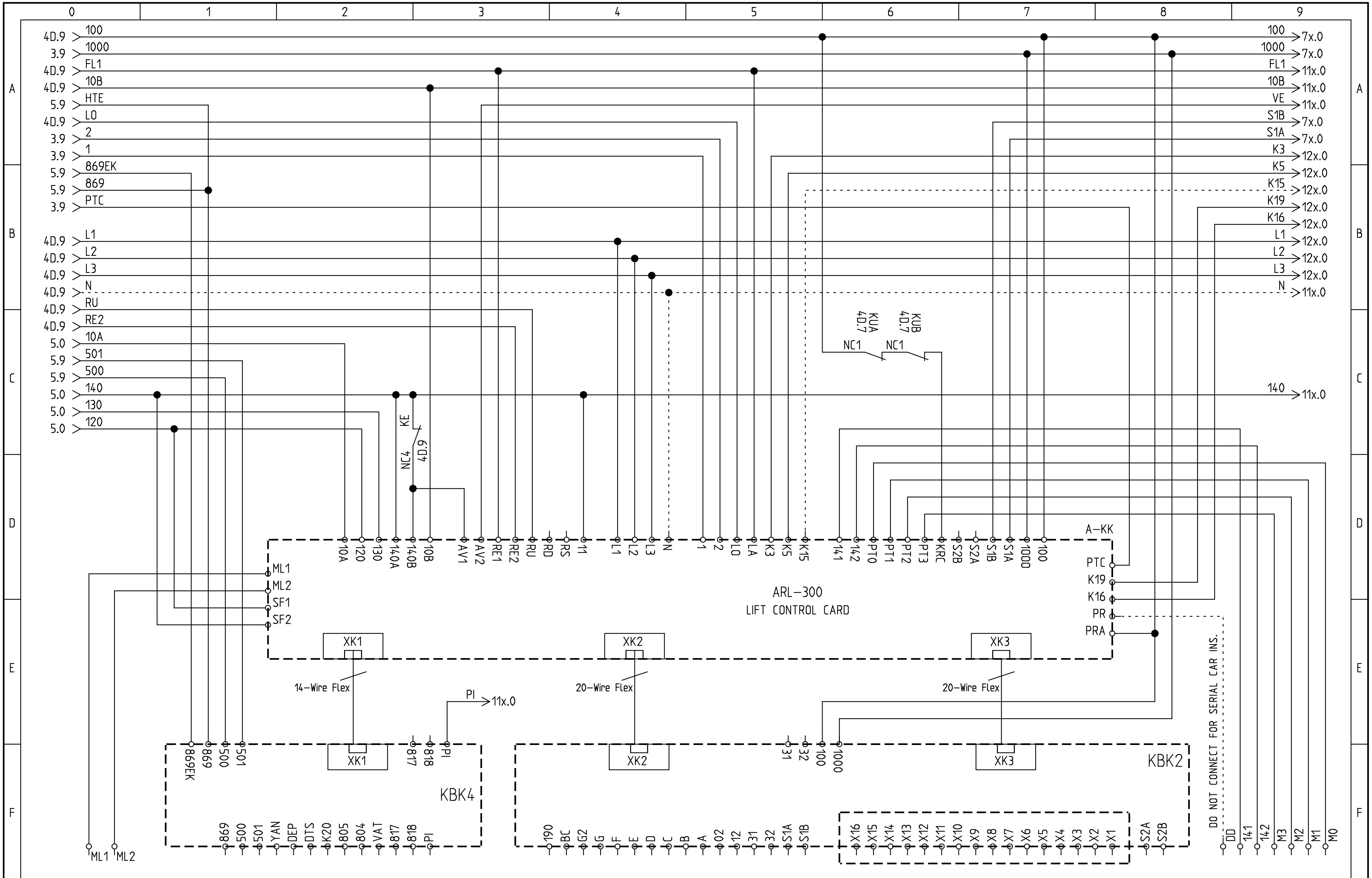
ARL-300 CONTROL PANEL

CONTROL CARD CONNECTIONS
DRIVE TYPE : VVVF

DRAWN BY: K.D.	Rev. No: V13	Sheet: 6 V
CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.06.2006



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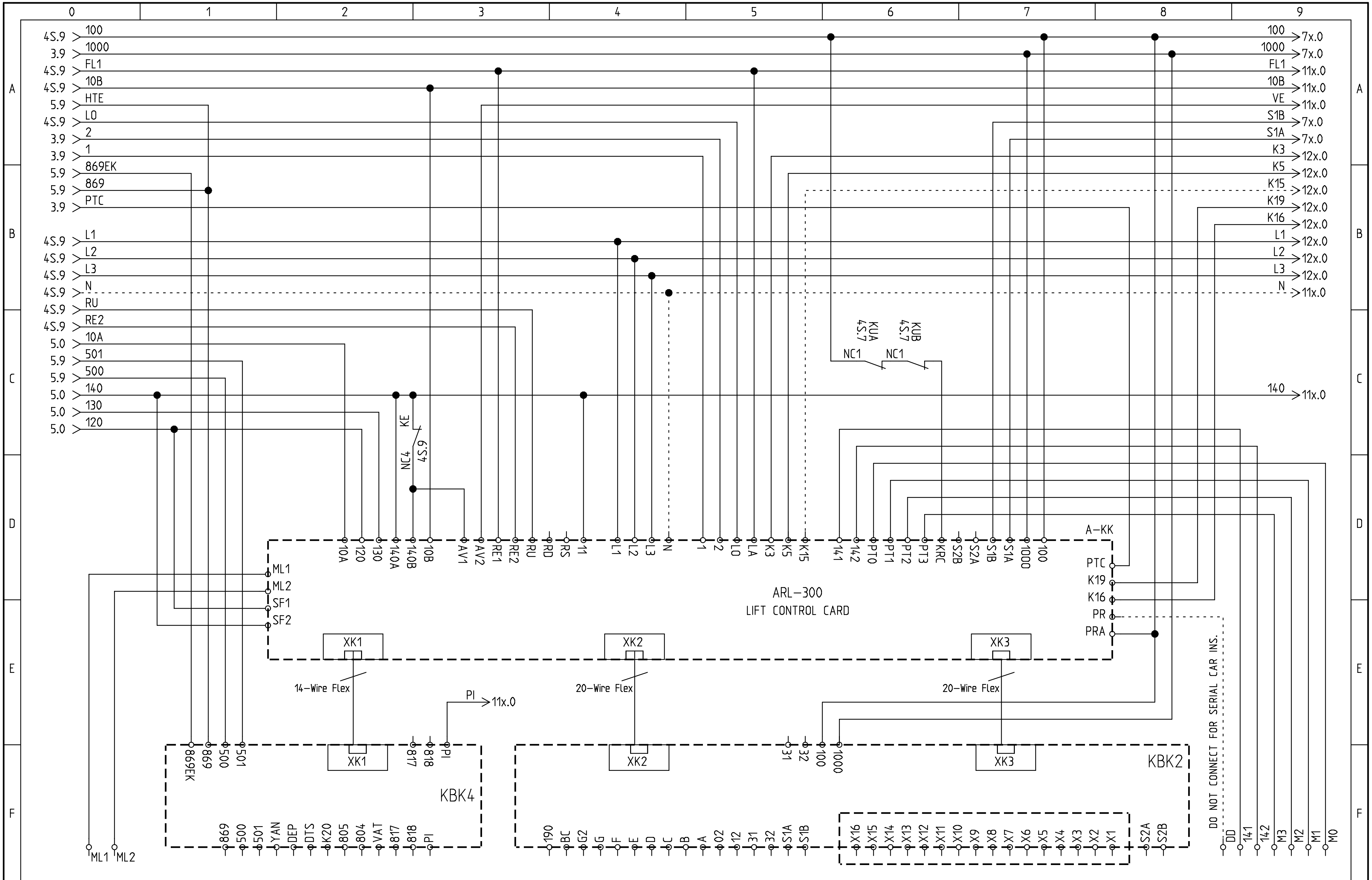
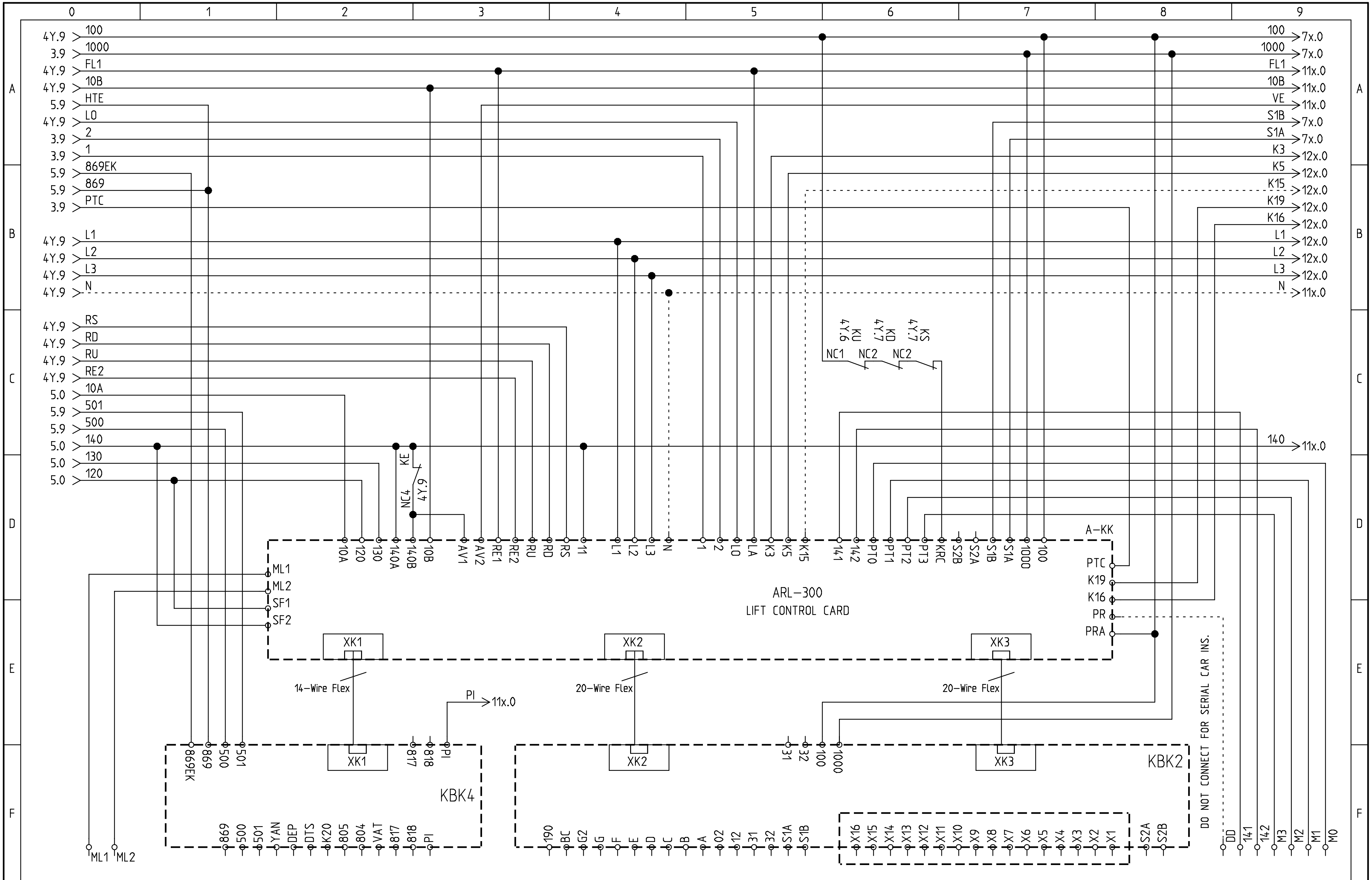
ARL-300 CONTROL PANEL

CONTROL CARD CONNECTIONS
DRIVE TYPE : HYDRAULIC
START-UP : DIRECT

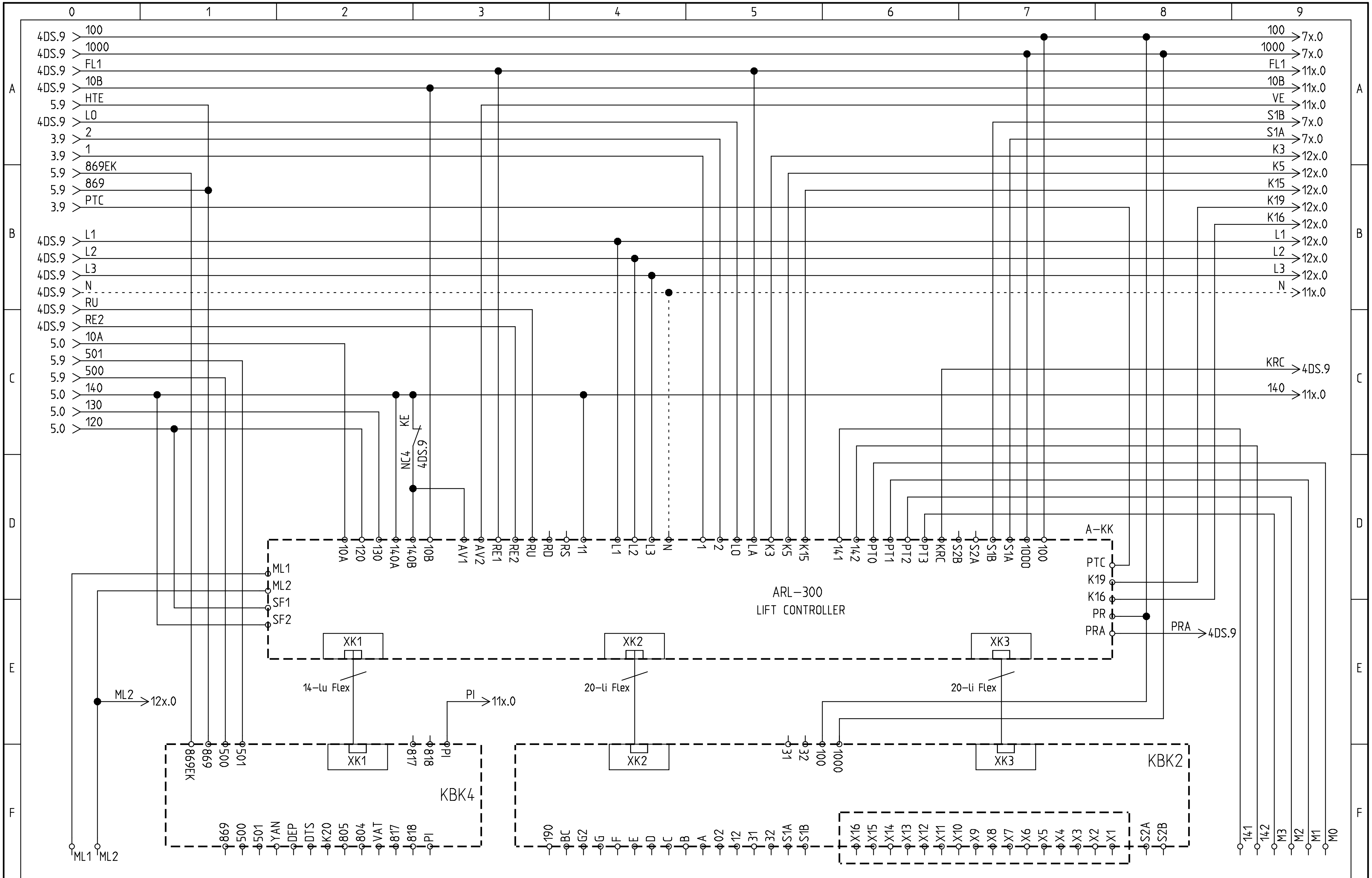
DRAWN BY: K.D.
CHECKED BY: C.A.
Rev. No:
Rev. Date:
Sheet: 6 D
Date: 01.06.2006



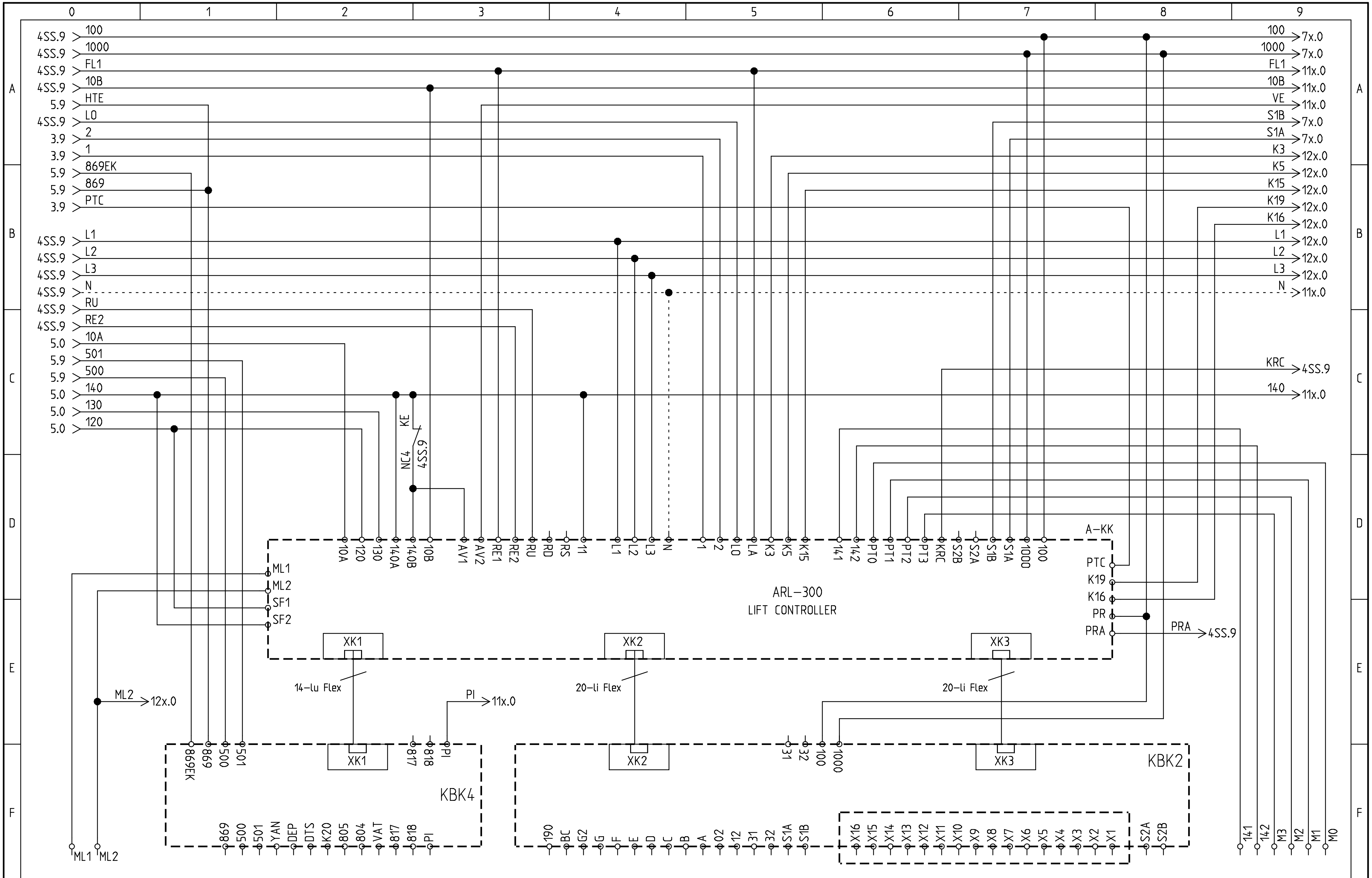
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : HYDRAULIC START-UP : SOFT START	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:
				Sheet: 6 S Date: 01.06.2006



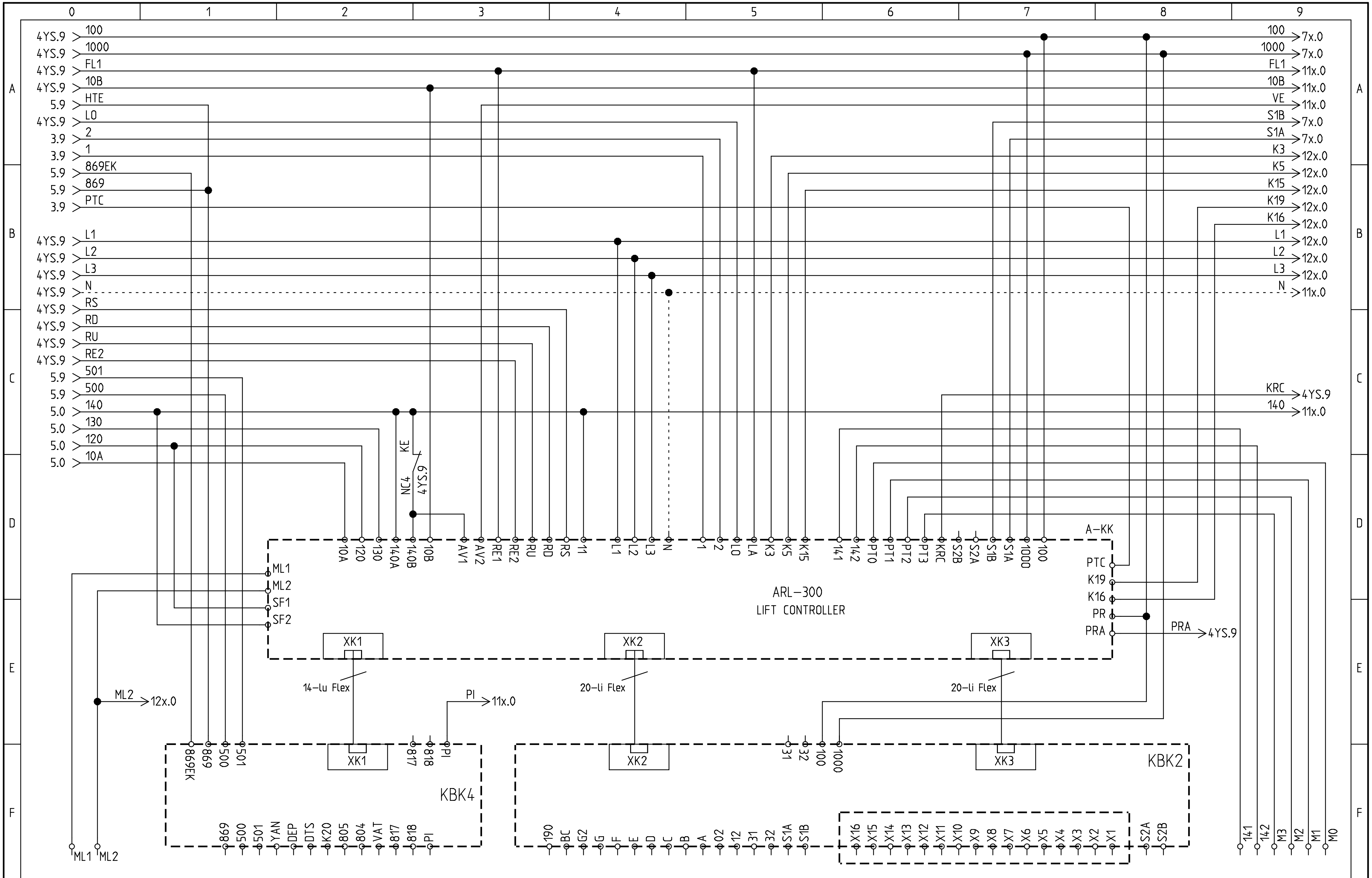
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CONTROL CARD CONNECTIONS DRIVE TYPE : HYDRAULIC START-UP : STAR-DELTA	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 24.02.2009
				Sheet: 6 Y Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CONTROL CARD CONNECTIONS DRIVE TYPE : HYDRAULIC / START-UP : DIRECT WITH RELEVELLING MOTOR	DRAWN BY: K.D.	Rev. No:	Sheet: 6 DS
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : HYDRAULIC / START-UP : SOFT START WITH RELEVELLING MOTOR	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 6 SS Date: 01.06.2006



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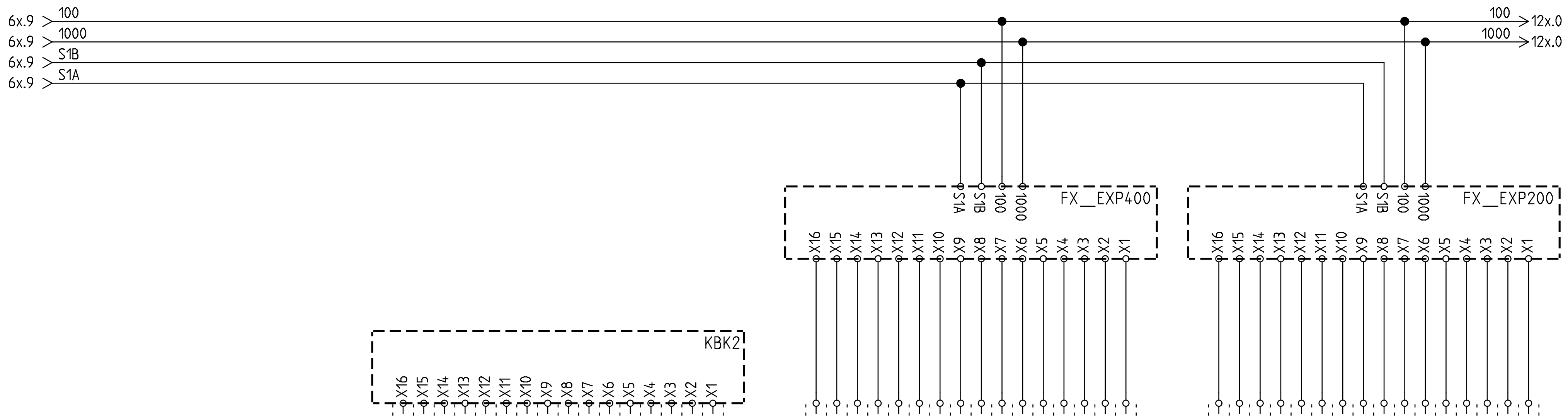
ARL-300 CONTROL PANEL

CONTROL CARD CONNECTIONS
DRIVE TYPE : HYDRAULIC / START-UP : STAR-DELTA
WITH RELEVELLING MOTOR

DRAWN BY: K.D.	Rev. No:	Sheet: 6 YS
CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



KBK2

	X16	X15	X14	X13	X12	X11	X10	X9	X8	X7	X6	X5	X4	X3	X2	X1
PARALLEL COMMAND SIMPLE PUSH BUTTON	416	415	414	413	412	411	410	409	408	407	406	405	404	403	402	401
DOWN COLLECTIVE(2–8 FLOORS)	208	207	206	205	204	203	202	201	408	407	406	405	404	403	402	401
DOWN COLLECTIVE(9–16 FLOORS)	216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	201
FULL COLLECTIVE(2–6 FLOORS)	206	205	204	203	202	305	304	303	302	301	406	405	404	403	402	401
FULL COLLECTIVE(7–9 FLOORS)	209	208	207	206	205	204	203	202	308	307	306	305	304	303	302	301
FULL COLLECTIVE(10–16 FLOORS)		315	314	313	312	311	310	309	308	307	306	305	304	303	302	301

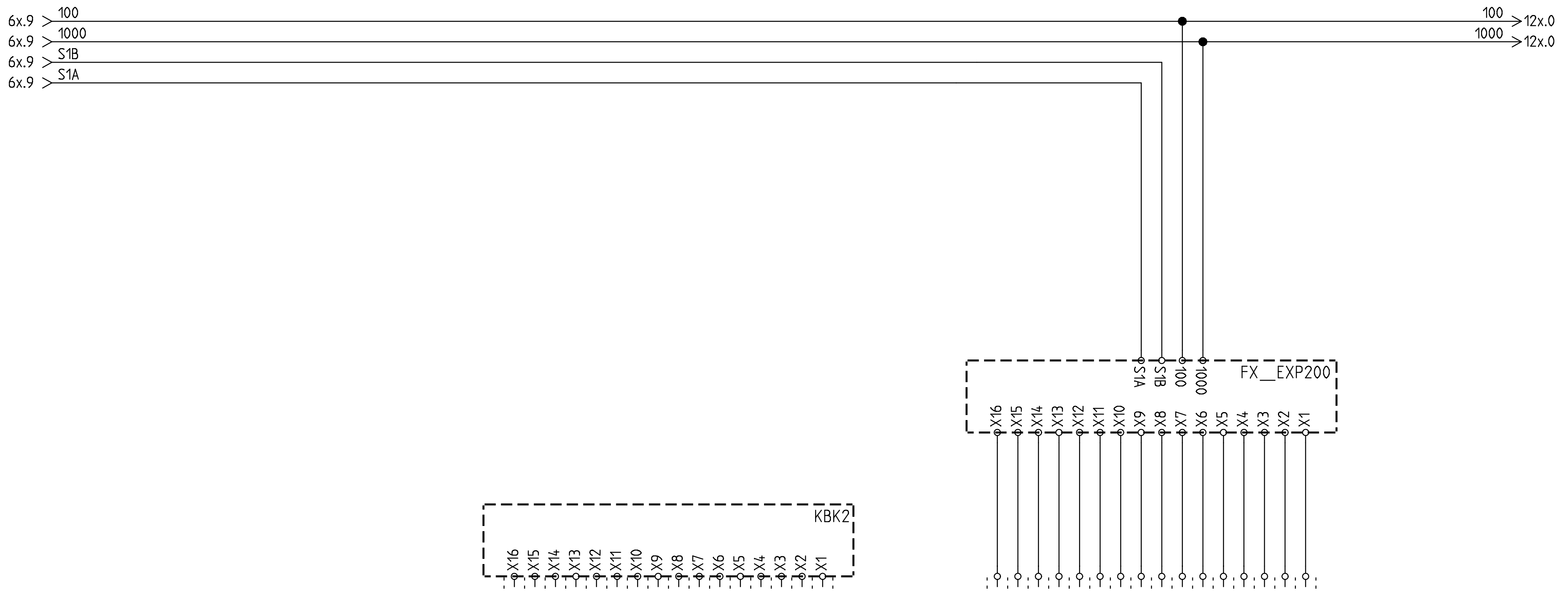
FX__EXP400

	X16	X15	X14	X13	X12	X11	X10	X9	X8	X7	X6	X5	X4	X3	X2	X1
PARALLEL COMMAND SIMPLE PUSH BUTTON																
DOWN COLLECTIVE(2–8 FLOORS)																
DOWN COLLECTIVE(9–16 FLOORS)	416	415	414	413	412	411	410	409	408	407	406	405	404	403	402	401
FULL COLLECTIVE(2–6 FLOORS)																
FULL COLLECTIVE(7–9 FLOORS)								409	408	407	406	405	404	403	402	401
FULL COLLECTIVE(10–16 FLOORS)	416	415	414	413	412	411	410	409	408	407	406	405	404	403	402	401

FX__EXP200

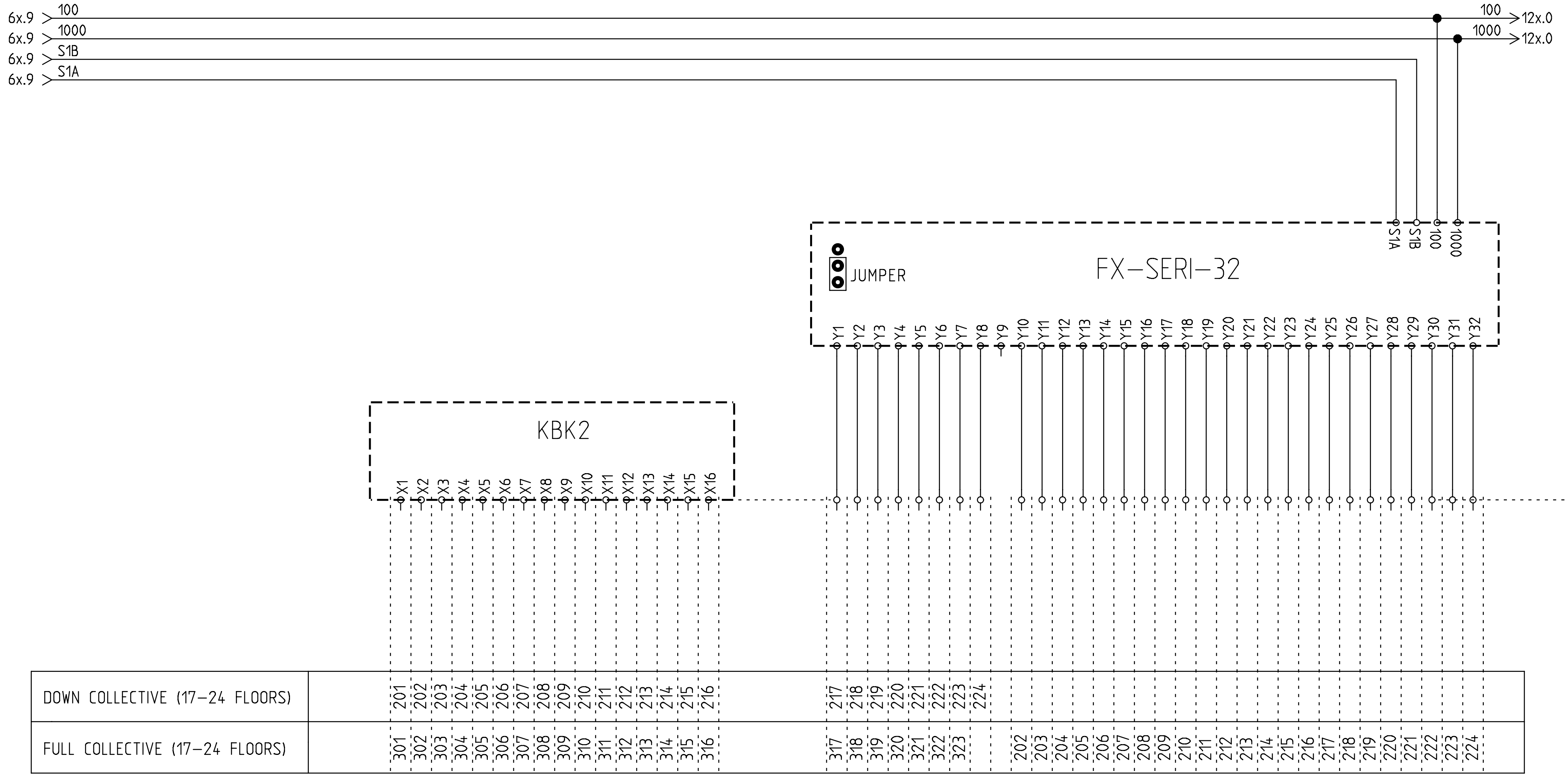
	X16	X15	X14	X13	X12	X11	X10	X9	X8	X7	X6	X5	X4	X3	X2	X1
PARALLEL COMMAND SIMPLE PUSH BUTTON																
DOWN COLLECTIVE(2–8 FLOORS)																
DOWN COLLECTIVE(9–16 FLOORS)																
FULL COLLECTIVE(2–6 FLOORS)																
FULL COLLECTIVE(7–9 FLOORS)																
FULL COLLECTIVE(10–16 FLOORS)	216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	

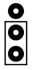
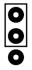
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	CALL INPUT CONNECTIONS CAR INSTALLATION : PARALLEL	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 01.06.2009 Sheet: 7 P Date: 01.06.2006

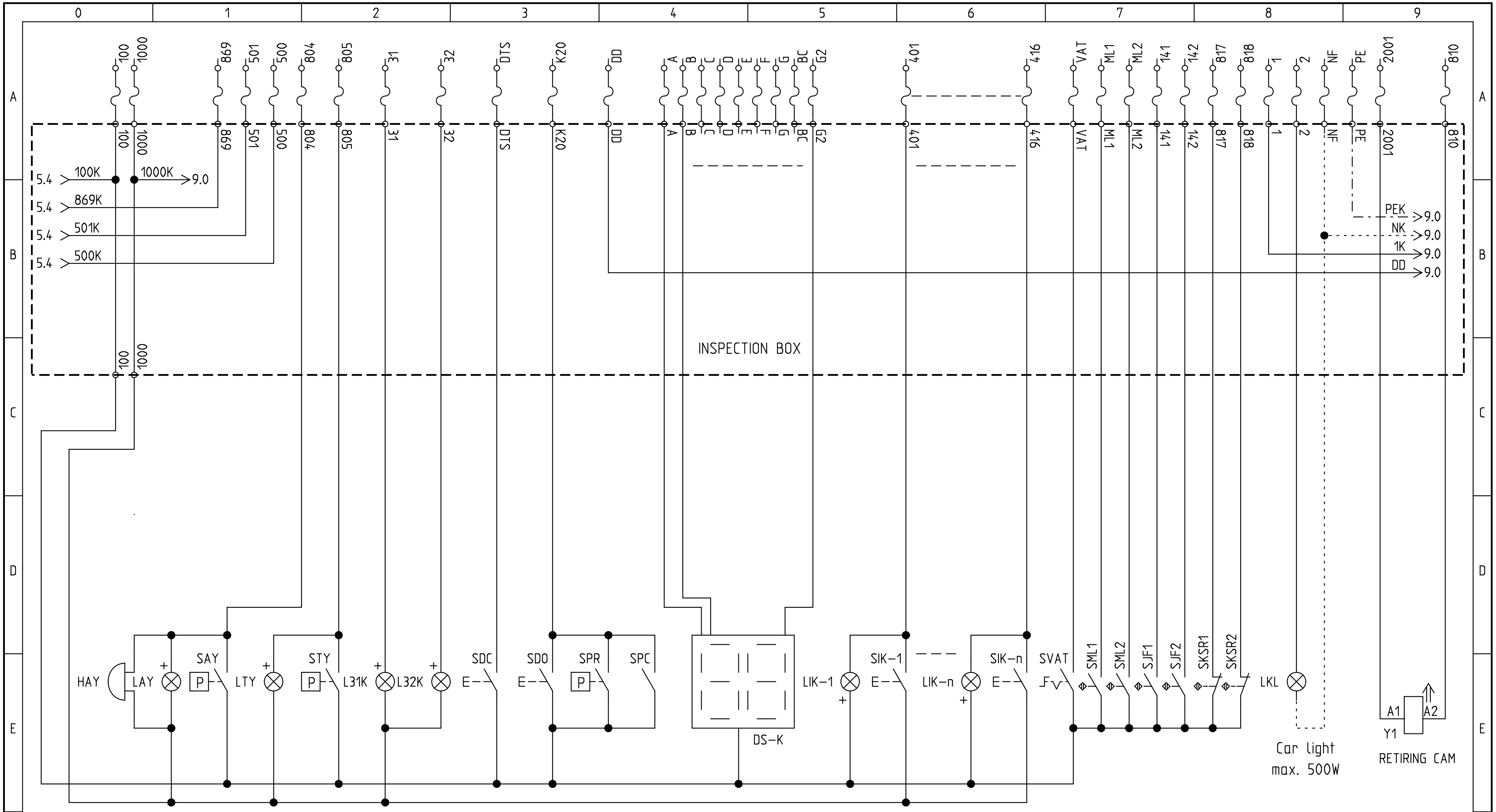


DOWN COLLECTIVE	216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	201																
FULL COLLECTIVE(2-9 FLOORS)	209	208	207	206	205	204	203	202	308	307	306	305	304	303	302	301																
FULL COLLECTIVE(10-16 FLOORS)		315	314	313	312	311	310	309	308	307	306	305	304	303	302	301	216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CALL INPUT CONNECTIONS CAR INSTALLATION : SERIAL	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 7 S Date: 01.06.2006



FX-SERI-32 JUMPER SETUP :	
	WHEN FX-SERI-32 BOARD IS USED ON CONTROL PANEL AS EXPENSION BOARD FOR LANDING CALLS
	WHEN FX-SERI-32 BOARD IS USED ON INSPECTION BOX AS SERIAL COMMUNICATION BOARD FOR CAR COMMANDS



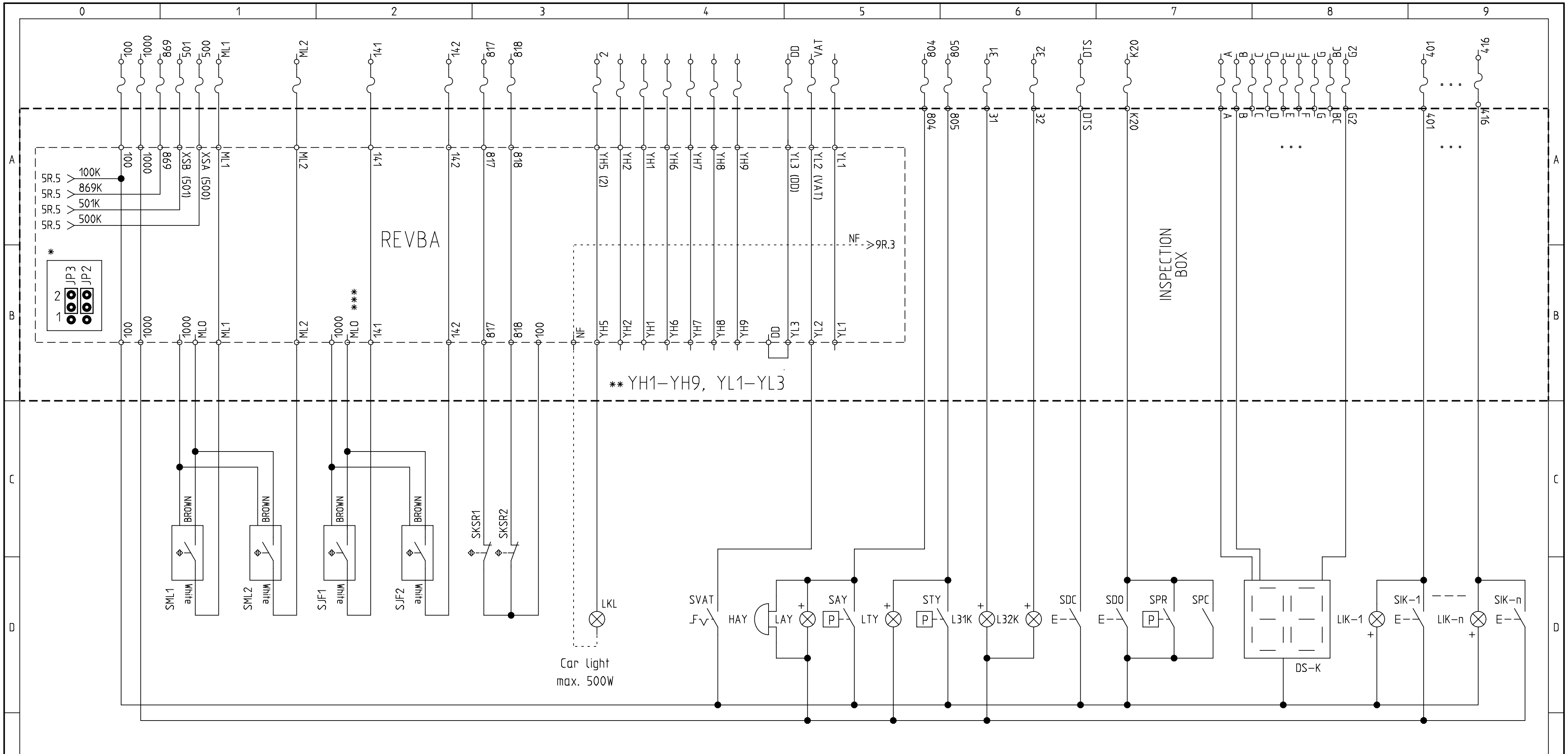
SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO-BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

SDC: DOOR CLOSE BUTTON
SDO: DOOR OPEN BUTTON
SPR: DOOR PRESSURE CONTACT
SPC: PHOTOCELL SENSOR CONTACT
L31K: DOWN DIRECTION INDICATOR (24V)
L32K: UP DIRECTION INDICATOR (24V)

LIK-1,...,LIK-n: CAR CALL INDICATOR (24V)
SIK-1,...,SIK-n: CAR CALL BUTTONS
LKL: CAR LIGHT
DS-K: FLOOR INDICATOR (COMMON ANODE)

SVAT: VATMAN SWITCH
SML1: DOWN LEVELLING MAGNETIC SWITCH (MONOSTABLE)
SML2: UP LEVELLING MAGNETIC SWITCH (MONOSTABLE)
SJF1: DOWN LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SJF2: UP LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : PARALLEL	DRAWN BY: K.D.	Rev. No: V11	Sheet: 8 P
			CHECKED BY: C.A.	Rev. Date: 04.05.2007	Date: 01.06.2006



*

REVBA JUMPER SETTINGS

JP2	1	2
XSA=	S1A	500

JP3	1	2
XSB=	S1B	501

**

(YH1–YH9): ADDITIONAL CAR HIGH VOLTAGE TERMINALS
CAN BE USED FOR CAR LIGHT, RETIRING CAM, DOOR PHASE, 220VAC DOOR SIGNALS,

(YL1–YL3): ADDITIONAL CAR LOW VOLTAGE TERMINALS
CAN BE USED FOR DING–DONG, VATMAN, 24VDC DOOR SIGNALS, 804, 805,

***

TERMINAL MLO IS THE COMMON SUPPLY OF THE MAGNETIC SWITCHES.
IF 100 (24VDC) IS PRESENT MLO PUTS OUT 24VDC,
IF NOT MLO PUTS OUT 12VDC FROM THE BATTERY.

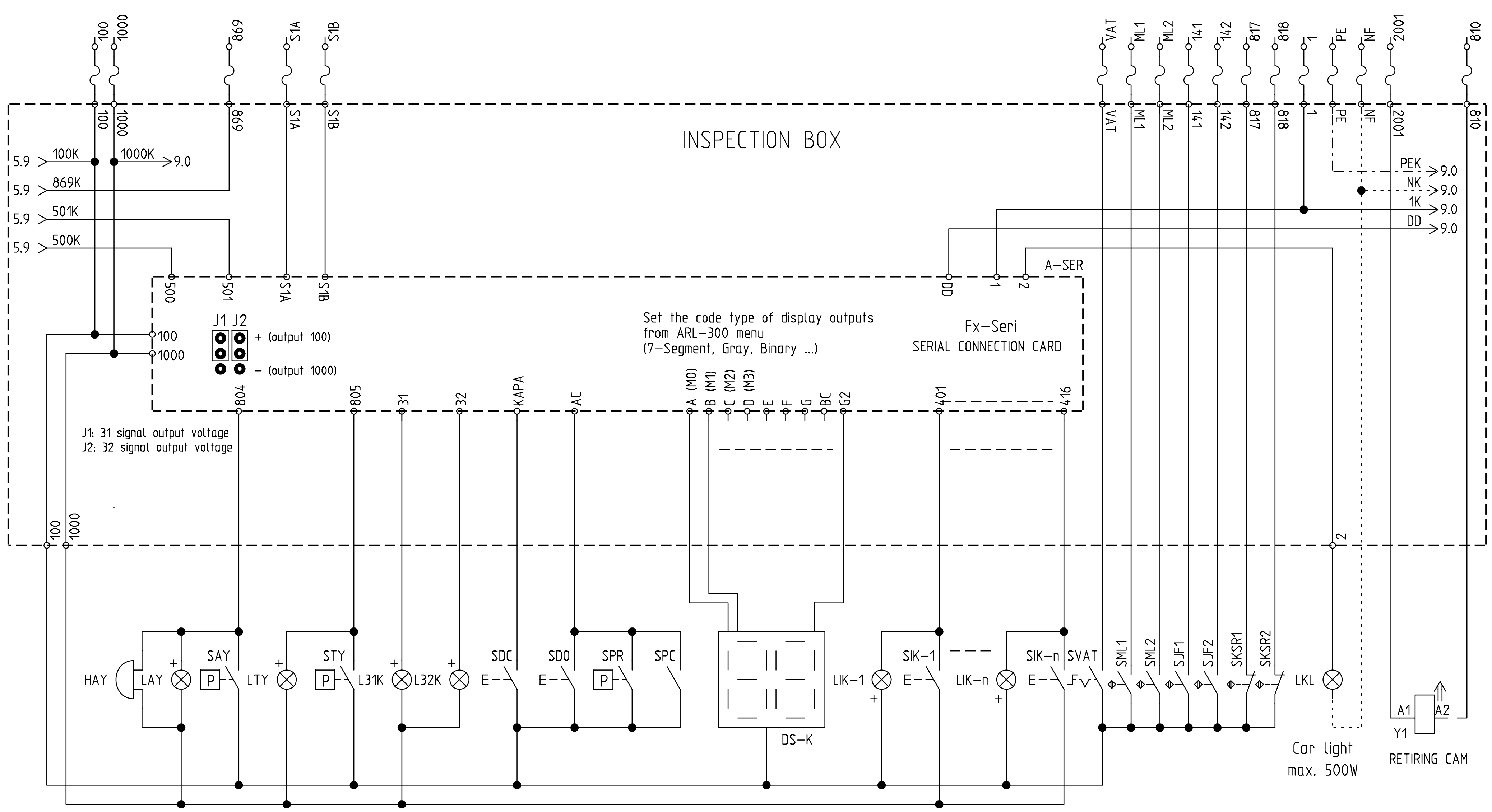
SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO–BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

SDC: DOOR CLOSE BUTTON
SDO: DOOR OPEN BUTTON
SPR: DOOR PRESSURE CONTACT
SPC: PHOTOCELL SENSOR CONTACT
L31K: DOWN DIRECTION INDICATOR (24V)
L32K: UP DIRECTION INDICATOR (24V)

LIK–1,...,LIK–n: CAR CALL INDICATOR (24V)
SIK–1,...,SIK–n: CAR CALL BUTTONS
LKL: CAR LIGHT
DS–K: FLOOR INDICATOR (COMMON ANODE)
SVAT: VATMAN SWITCH
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

SML1: DOOR ZONE MAGNETIC SWITCH–1 (MONOSTABLE)
SML2: DOOR ZONE MAGNETIC SWITCH–2 (MONOSTABLE)
SJF1: DOWN LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SJF2: UP LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	CAR CONNECTIONS–1 CAR INSTALLATION : PARALLEL	DRAWN BY : K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 8 PR Date: 19.10.2009



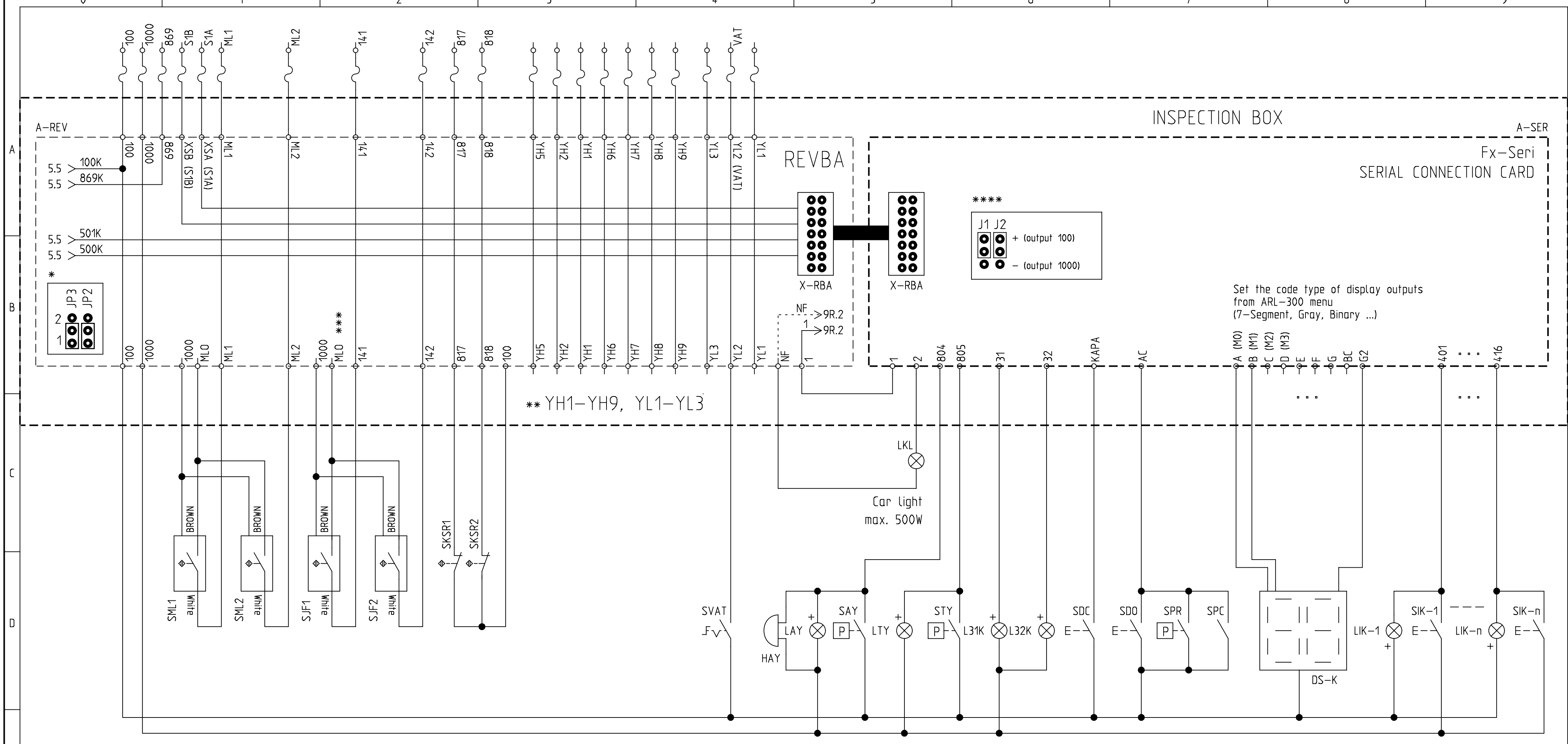
SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO-BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

SDC: DOOR CLOSE BUTTON
SDO: DOOR OPEN BUTTON
SPR: DOOR PRESSURE CONTACT
SPC: PHOTOCELL SENSOR CONTACT
L31K: DOWN DIRECTION INDICATOR (24V)
L32K: UP DIRECTION INDICATOR (24V)

LIK-1,...,LIK-n: CAR CALL INDICATOR (24V)
SIK-1,...,SIK-n: CAR CALL BUTTONS
LKL: CAR LIGHT
DS-K: FLOOR INDICATOR (COMMON ANODE)

SVAT: VATMAN SWITCH
SML1: DOWN LEVELLING MAGNETIC SWITCH (MONOSTABLE)
SML2: UP LEVELLING MAGNETIC SWITCH (MONOSTABLE)
SJF1: DOWN LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SJF2: UP LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : SERIAL	DRAWN BY: K.D.	Rev. No:	Sheet: 8 S
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



*

REVBA JUMPER SETTINGS

JP2	1	2
XSA=	S1A	500

JP3	1	2
XSB=	S1B	501

**

(YH1–YH9): ADDITIONAL CAR HIGH VOLTAGE TERMINALS
CAN BE USED FOR CAR LIGHT, RETIRING CAM, DOOR PHASE, 220VAC DOOR SIGNALS,

(YL1–YL3): ADDITIONAL CAR LOW VOLTAGE TERMINALS
CAN BE USED FOR DING–DONG, VATMAN, 24VDC DOOR SIGNALS, 804, 805,

***

TERMINAL MLO IS THE COMMON SUPPLY OF THE MAGNETIC SWITCHES.
IF 100 (24VDC) IS PRESENT MLO PUTS OUT 24VDC,
IF NOT MLO PUTS OUT 12VDC FROM THE BATTERY.

****

J1: 31 signal output voltage
J2: 32 signal output voltage

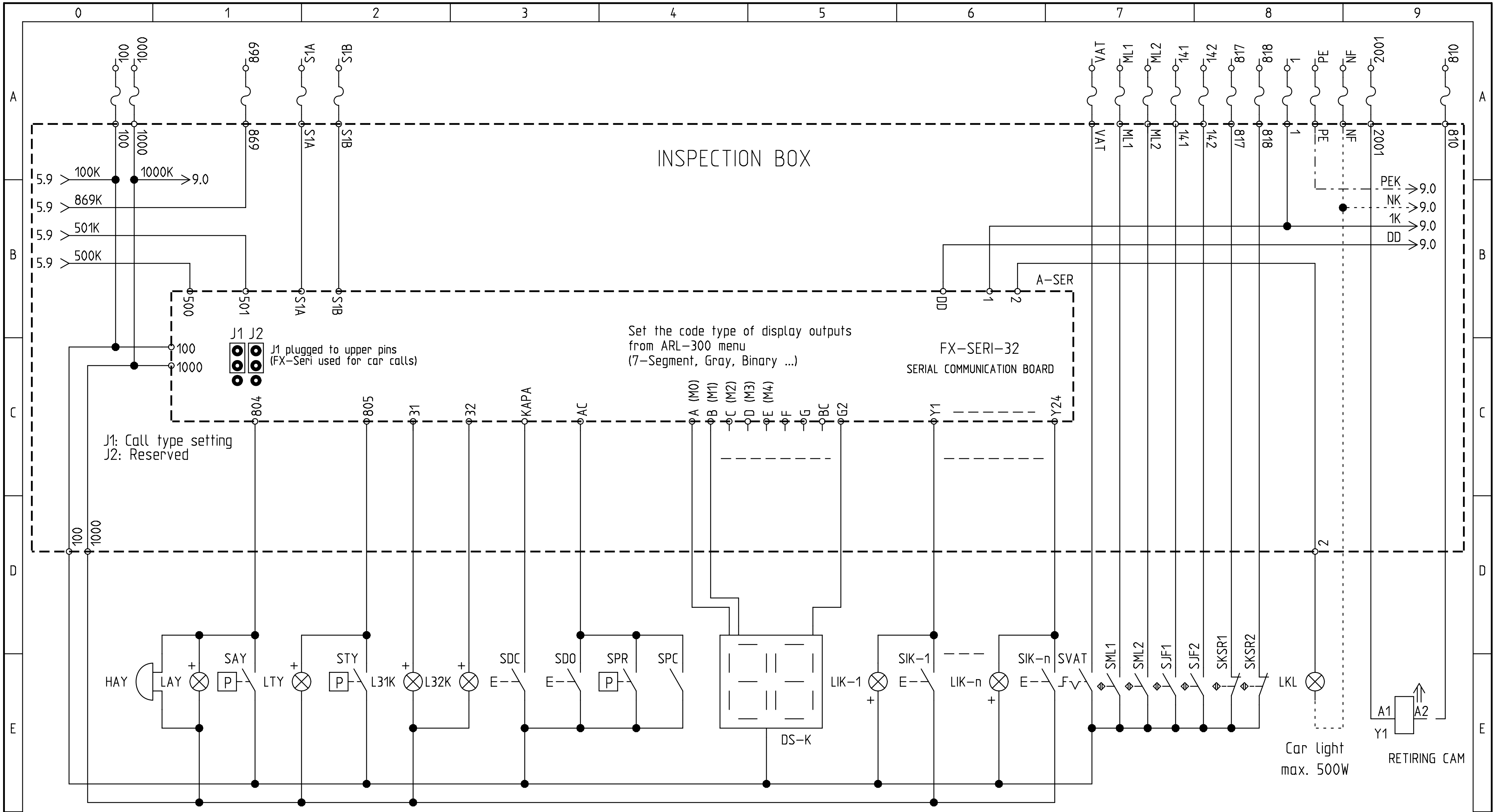
SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO–BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

SDC: DOOR CLOSE BUTTON
SDO: DOOR OPEN BUTTON
SPR: DOOR PRESSURE CONTACT
SPC: PHOTOCELL SENSOR CONTACT
L31K: DOWN DIRECTION INDICATOR (24V)
L32K: UP DIRECTION INDICATOR (24V)

LIK–1,...,LIK–n: CAR CALL INDICATOR (24V)
SIK–1,...,SIK–n: CAR CALL BUTTONS
LKL: CAR LIGHT
DS–K: FLOOR INDICATOR (COMMON ANODE)
SVAT: VATMAN SWITCH
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

SML1: DOOR ZONE MAGNETIC SWITCH–1 (MONOSTABLE)
SML2: DOOR ZONE MAGNETIC SWITCH–2 (MONOSTABLE)
SJF1: DOWN LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)

SJF2: UP LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)



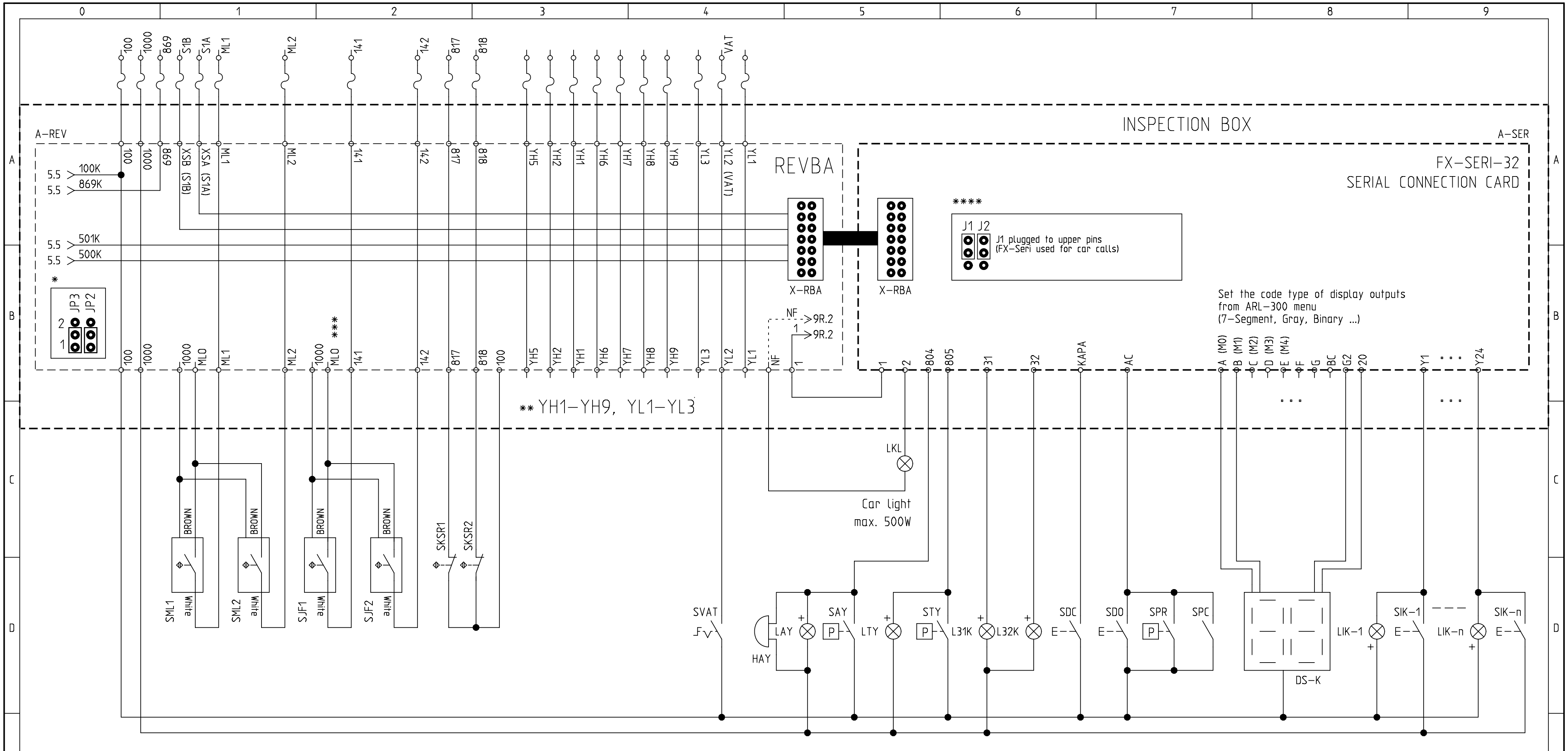
SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO-BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

SDC: DOOR CLOSE BUTTON
SDO: DOOR OPEN BUTTON
SPR: DOOR PRESSURE CONTACT
SPC: PHOTOCELL SENSOR CONTACT
L31K: DOWN DIRECTION INDICATOR (24V)
L32K: UP DIRECTION INDICATOR (24V)

LIK-1,...,LIK-n: CAR CALL INDICATOR (24V)
SIK-1,...,SIK-n: CAR CALL BUTTONS
LKL: CAR LIGHT
DS-K: FLOOR INDICATOR (COMMON ANODE)

SVAT: VATMAN SWITCH
SML1: DOWN LEVELLING MAGNETIC SWITCH (MONOSTABLE)
SML2: UP LEVELLING MAGNETIC SWITCH (MONOSTABLE)
SJF1: DOWN LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SJF2: UP LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : SERIAL	DRAWN BY: K.D.	Rev. No:	Sheet: 8 E
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



*

REVBA JUMPER SETTINGS		
JP2	1	2
XSA=	S1A	500

JP3	1	2
XSB=	S1B	501

JP3 JP2
2
1

**

(YH1-YH9): ADDITIONAL CAR HIGH VOLTAGE TERMINALS
CAN BE USED FOR CAR LIGHT, RETIRING CAM, DOOR PHASE, 220VAC DOOR SIGNALS,

(YL1-YL3): ADDITIONAL CAR LOW VOLTAGE TERMINALS
CAN BE USED FOR DING-DONG, VATMAN, 24VDC DOOR SIGNALS, 804, 805,

***

TERMINAL MLO IS THE COMMON SUPPLY OF THE MAGNETIC SWITCHES.
IF 100 (24VDC) IS PRESENT MLO PUTS OUT 24VDC,
IF NOT MLO PUTS OUT 12VDC FROM THE BATTERY.

****

J1: Call type setting
J2: Reserved

SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO-BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

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SPC: PHOTOCELL SENSOR CONTACT
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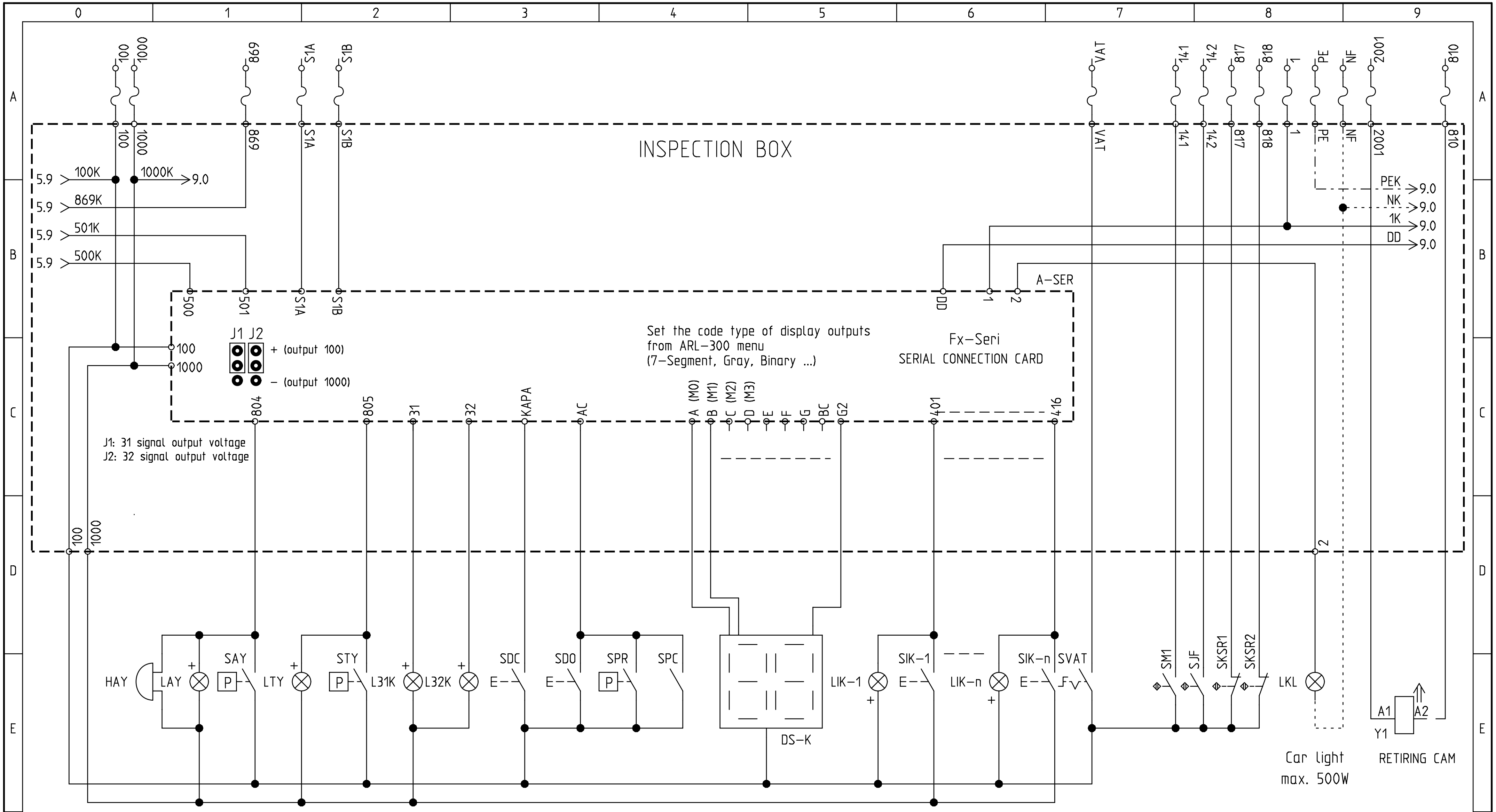
DS-K: FLOOR INDICATOR (COMMON ANODE)
SVAT: VATMAN SWITCH
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

SML1: DOOR ZONE MAGNETIC SWITCH-1 (MONOSTABLE)
SML2: DOOR ZONE MAGNETIC SWITCH-2 (MONOSTABLE)
SJF1: DOWN LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)

SJF2: UP LEVEL STOP MAGNETIC SWITCH (MONOSTABLE)

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : SERIAL	DRAWN BY : K.D.	Rev. No:	Sheet: 8 ER
			CHECKED BY: C.A.	Rev. Date:	Date: 19.10.2009



SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO-BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

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LIK-1,...,LIK-n: CAR CALL INDICATOR (24V)
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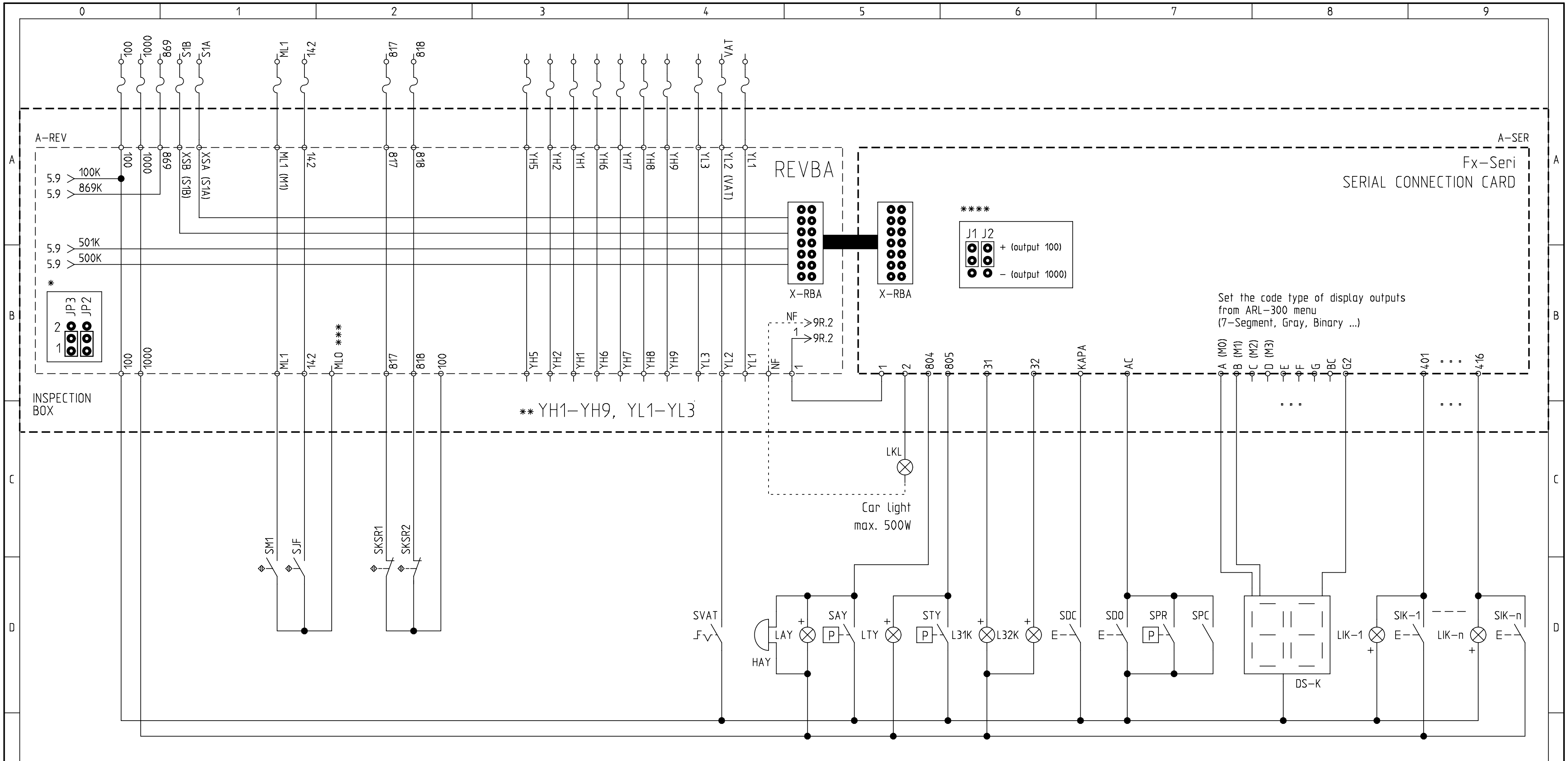
LKL: CAR LIGHT
DS-K: FLOOR INDICATOR (COMMON ANODE)

SVAT: VATMAN SWITCH
SM1: FLOOR COUNTING MAGNETIC SWITCH (BI-STABLE)
SJF: LEVEL STOP MAGNETIC SWITCH (BI-STABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : SERIAL	DRAWN BY: K.D.	Rev. No:	Sheet: 8 SC
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



*

REVBA JUMPER SETTINGS		
JP2	1	2
XSA=	S1A	500
JP3	1	2
XSB=	S1B	501

**

(YH1–YH9): ADDITIONAL CAR HIGH VOLTAGE TERMINALS
CAN BE USED FOR CAR LIGHT, RETIRING CAM, DOOR PHASE, 220VAC DOOR SIGNALS, ...

(YL1–YL3): ADDITIONAL CAR LOW VOLTAGE TERMINALS
CAN BE USED FOR DING-DONG, VATMAN, 24VDC DOOR SIGNALS, 804, 805, ...

***

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****

J1: 31 signal output voltage
J2: 32 signal output voltage

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LAY: OVERLOAD INDICATOR (24V)
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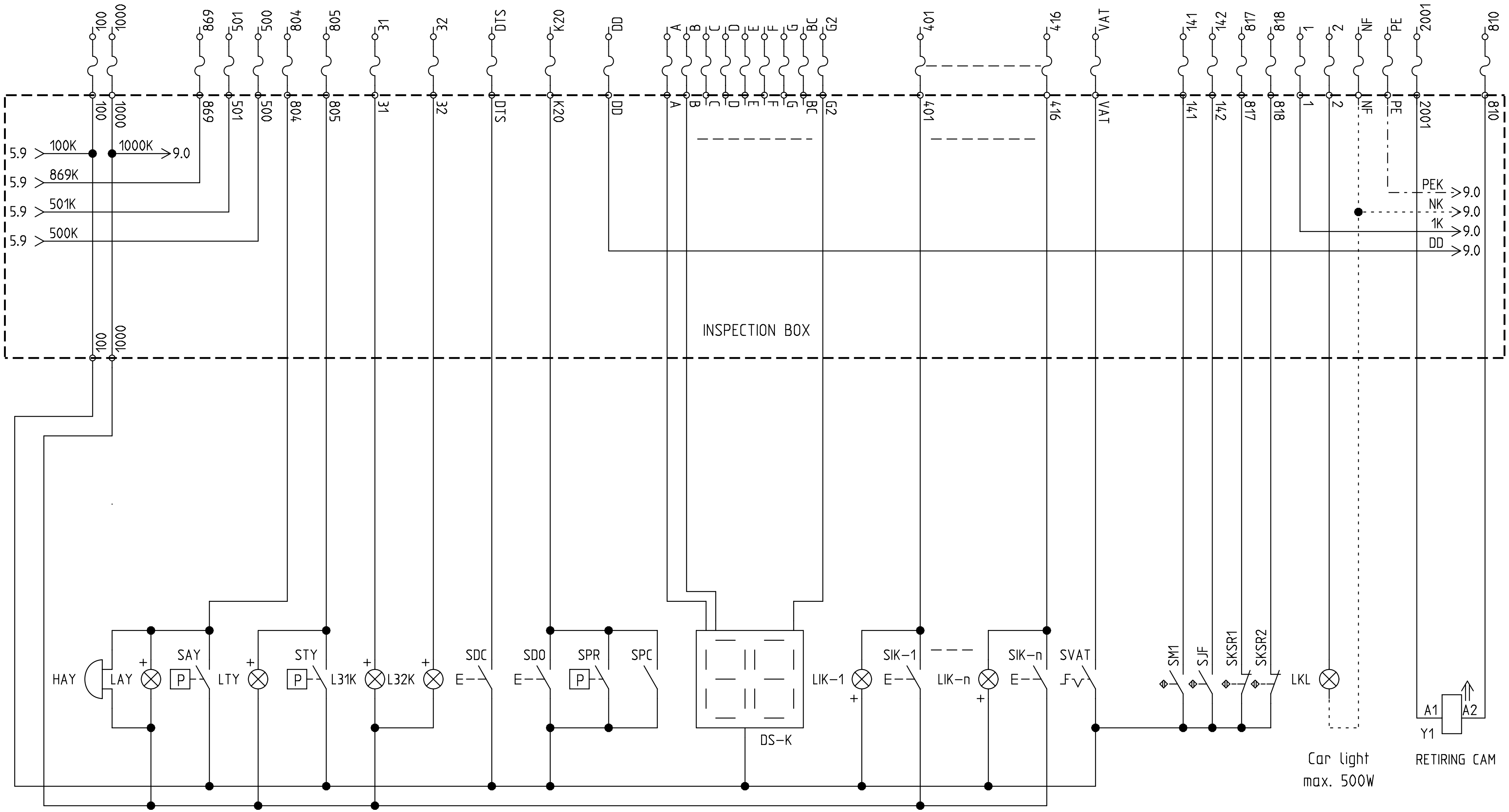
LKL: CAR LIGHT
DS-K: FLOOR INDICATOR (COMMON ANODE)
SVAT: VATMAN SWITCH

SM1: FLOOR COUNTING MAGNETIC SWITCH (BI-STABLE)
SJF: LEVEL STOP MAGNETIC SWITCH (BI-STABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : SERIAL	DRAWN BY : K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 8 SCR Date: 19.10.2009



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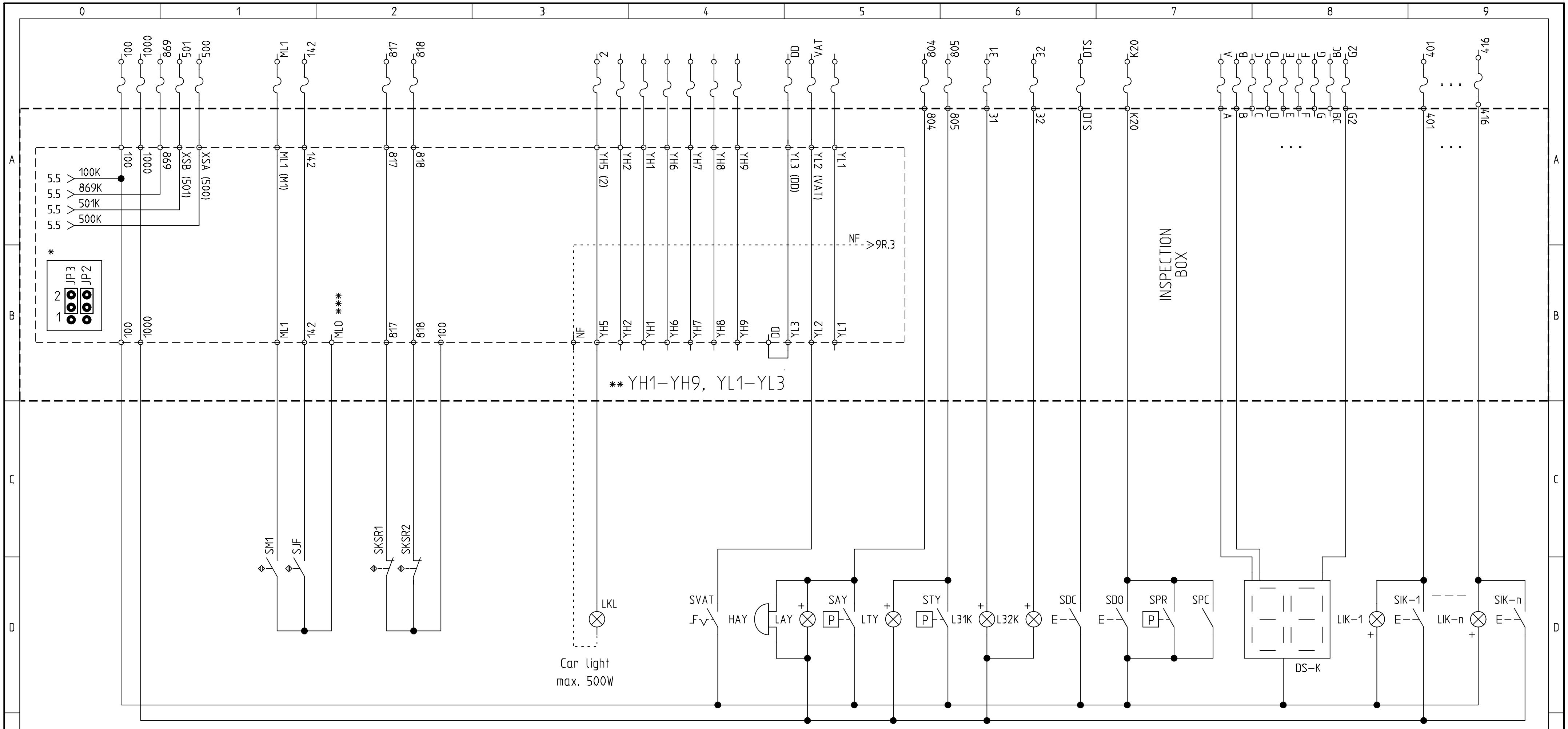
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : PARALLEL	DRAWN BY: K.D.	Rev. No: V11	Sheet: 8 PC
			CHECKED BY: C.A.	Rev. Date: 04.05.2007	Date: 01.06.2006



*

REVBA JUMPER SETTINGS

JP2	1	2
XSA=	S1A	500

JP3	1	2
XSB=	S1B	501

JP3 JP2

**

(YH1–YH9): ADDITIONAL CAR HIGH VOLTAGE TERMINALS
CAN BE USED FOR CAR LIGHT, RETIRING CAM, DOOR PHASE, 220VAC DOOR SIGNALS, ...

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***

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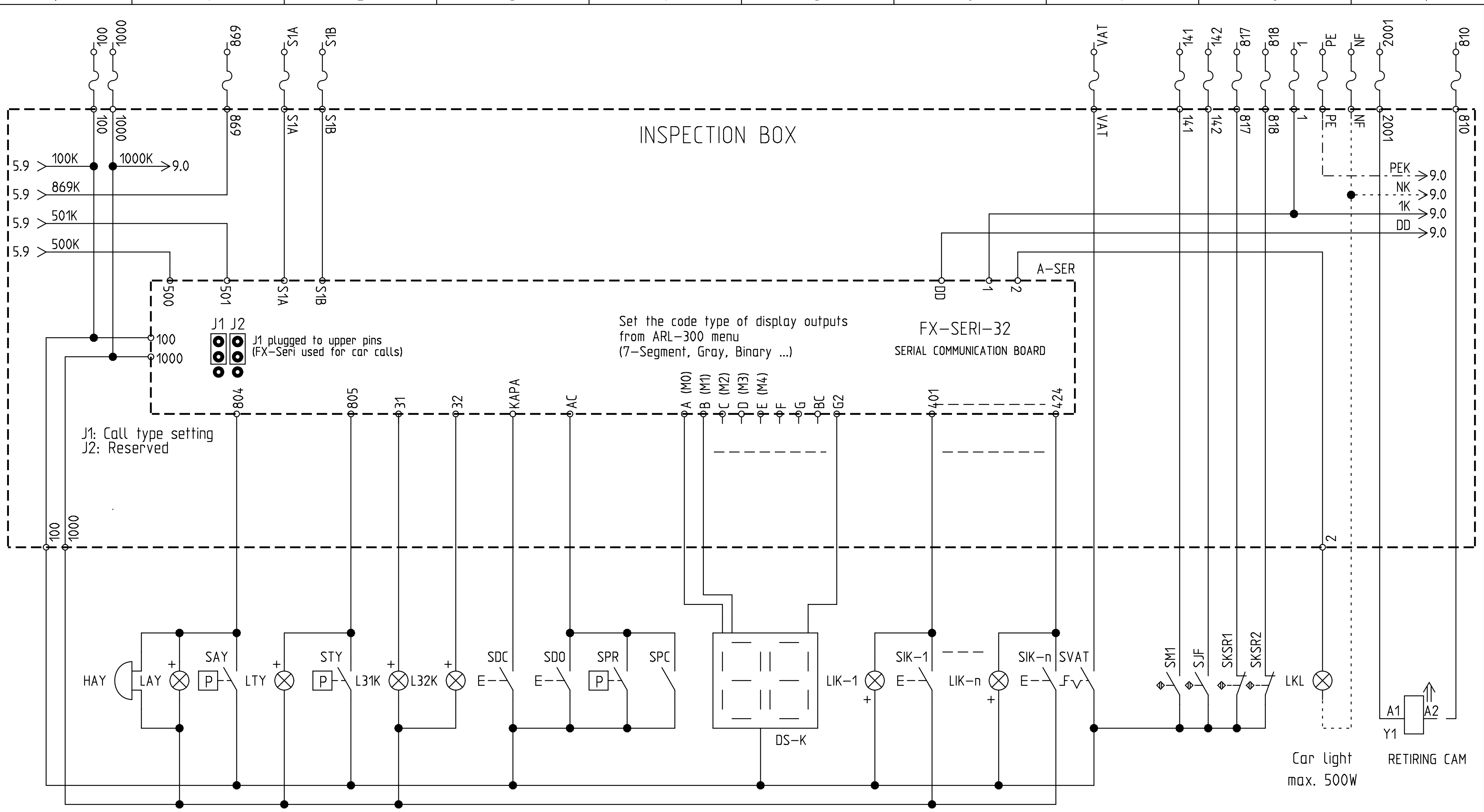
LKL: CAR LIGHT
DS–K: FLOOR INDICATOR (COMMON ANODE)
SVAT: VATMAN SWITCH

SM1: FLOOR COUNTING MAGNETIC SWITCH (BI–STABLE)
SJF: LEVEL STOP MAGNETIC SWITCH (BI–STABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH



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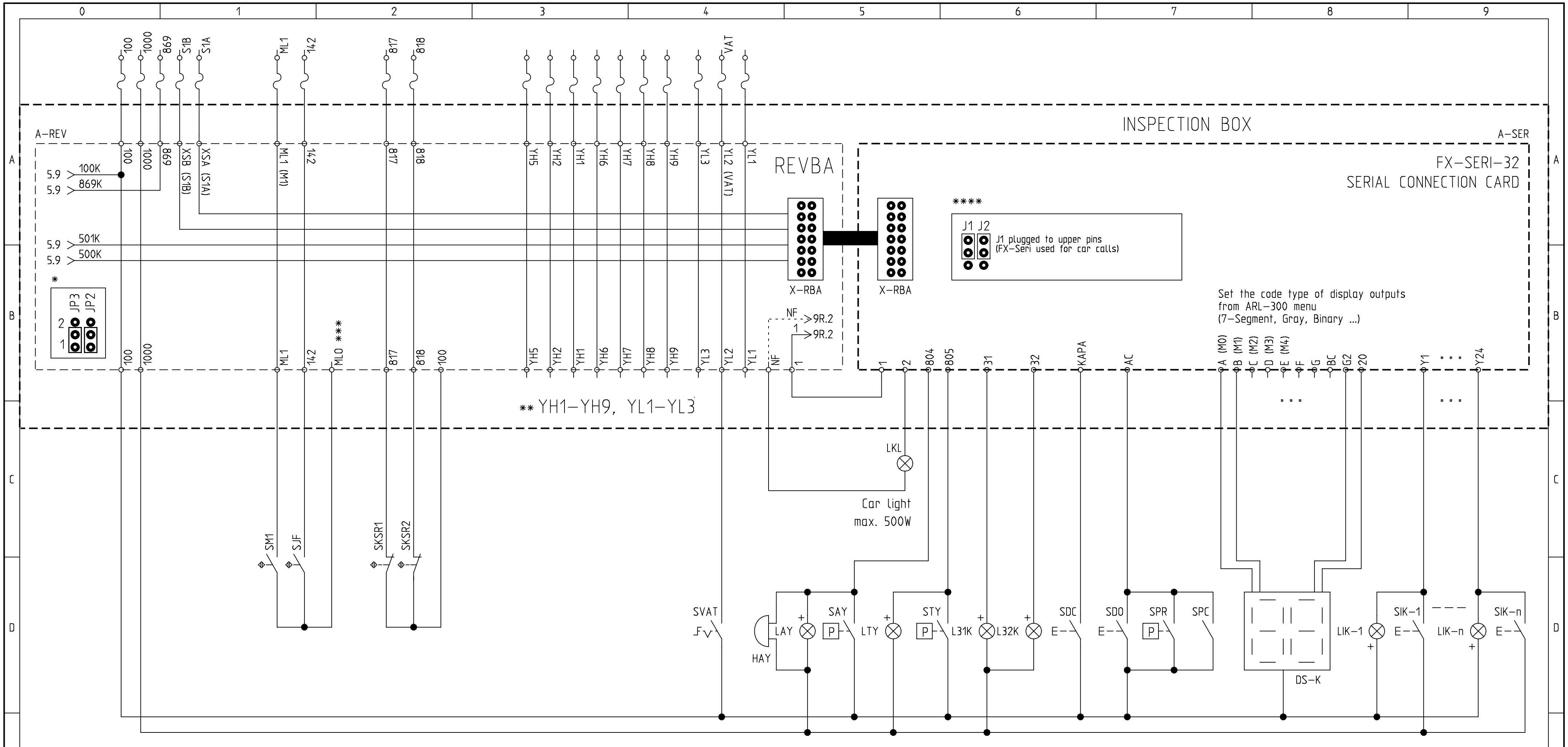
SVAT: VATMAN SWITCH
SM1: FLOOR COUNTING MAGNETIC SWITCH (BI-STABLE)
SJF: LEVEL STOP MAGNETIC SWITCH (BI-STABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 NUMBER OF STOP : 17 -24 STOPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 8 EC Date: 01.06.2006



*

REVBA JUMPER SETTINGS		
JP2	1	2
XSA=	S1A	500
JP3	1	2
XSB=	S1B	501

**

(YH1-YH9): ADDITIONAL CAR HIGH VOLTAGE TERMINALS
CAN BE USED FOR CAR LIGHT, RETIRING CAM, DOOR PHASE, 220VAC DOOR SIGNALS, ...

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CAN BE USED FOR DING-DONG, VATMAN, 24VDC DOOR SIGNALS, 804, 805, ...

***

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IF 100 (24VDC) IS PRESENT MLO PUTS OUT 24VDC,
IF NOT MLO PUTS OUT 12VDC FROM THE BATTERY.

****

J1: Call type setting
J2: Reserved

SAY: OVERLOAD CONTACT
LAY: OVERLOAD INDICATOR (24V)
HAY: OVERLOAD PIEZO-BUZZER
STY: FULLLOAD CONTACT
LTY: FULLLOAD INDICATOR (24V)

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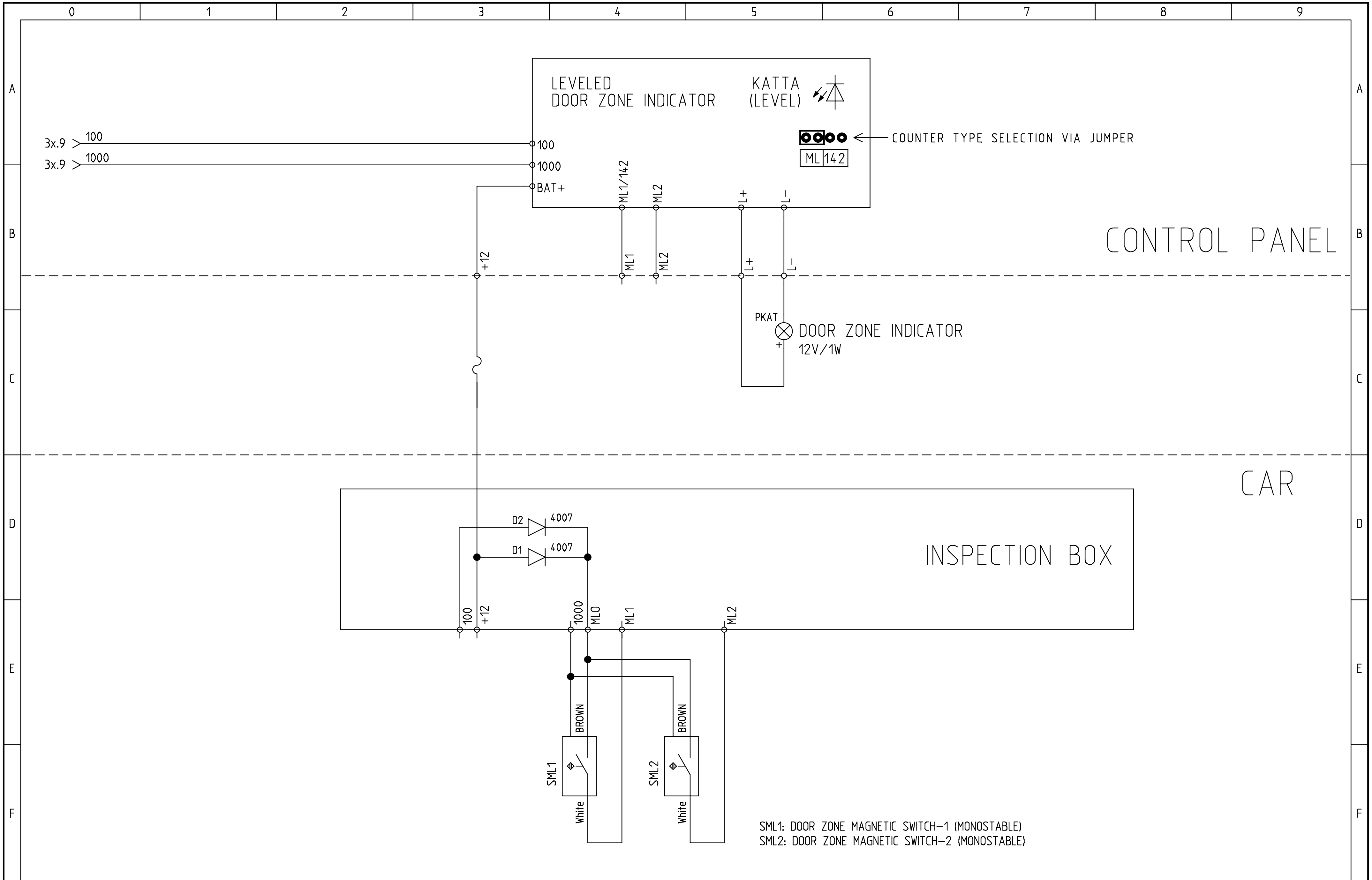
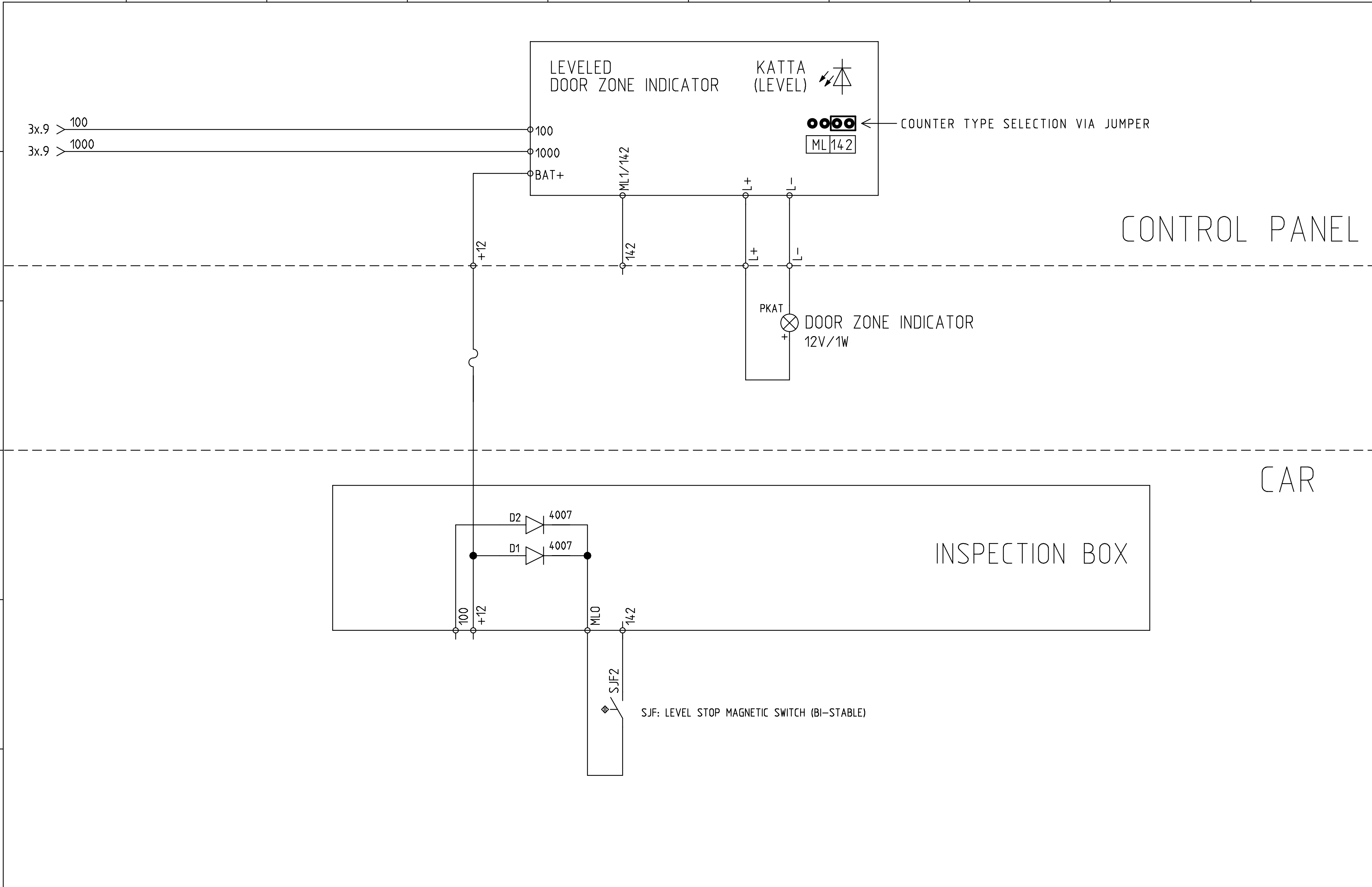
SJF: LEVEL STOP MAGNETIC SWITCH (BI-STABLE)
SKSR1: DOWN LIMIT MECHANICAL SWITCH
SKSR2: UP LIMIT MECHANICAL SWITCH

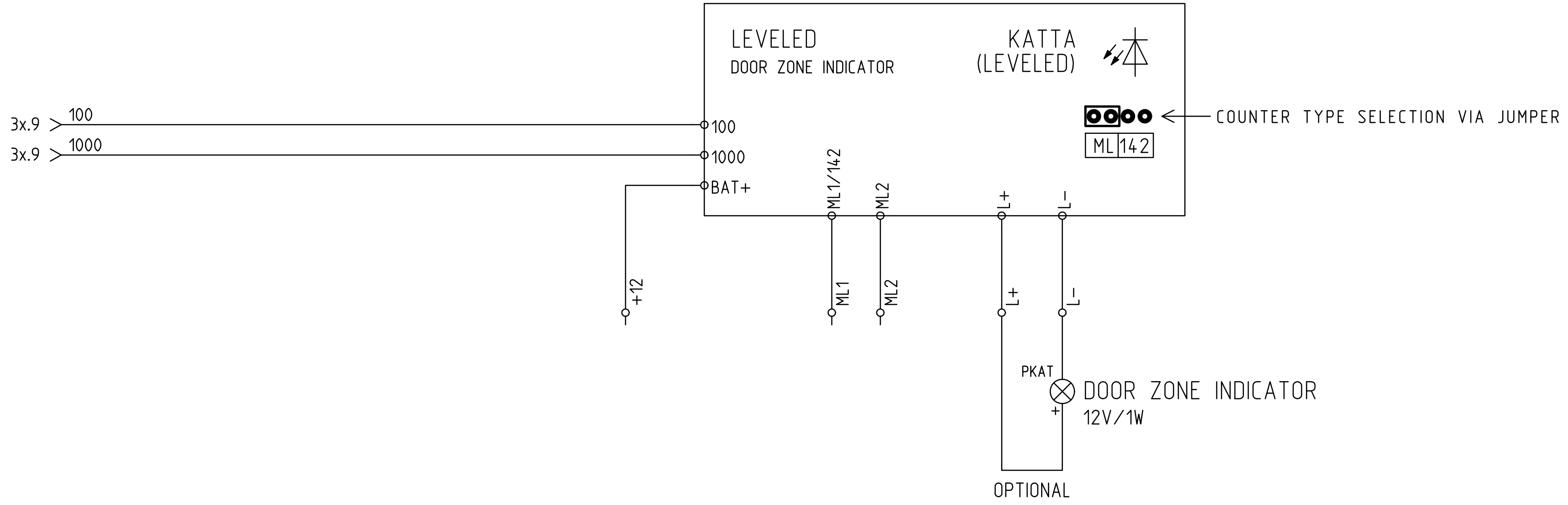
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-1 CAR INSTALLATION : SERIAL	DRAWN BY : K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 8 ECR Date: 19.10.2009



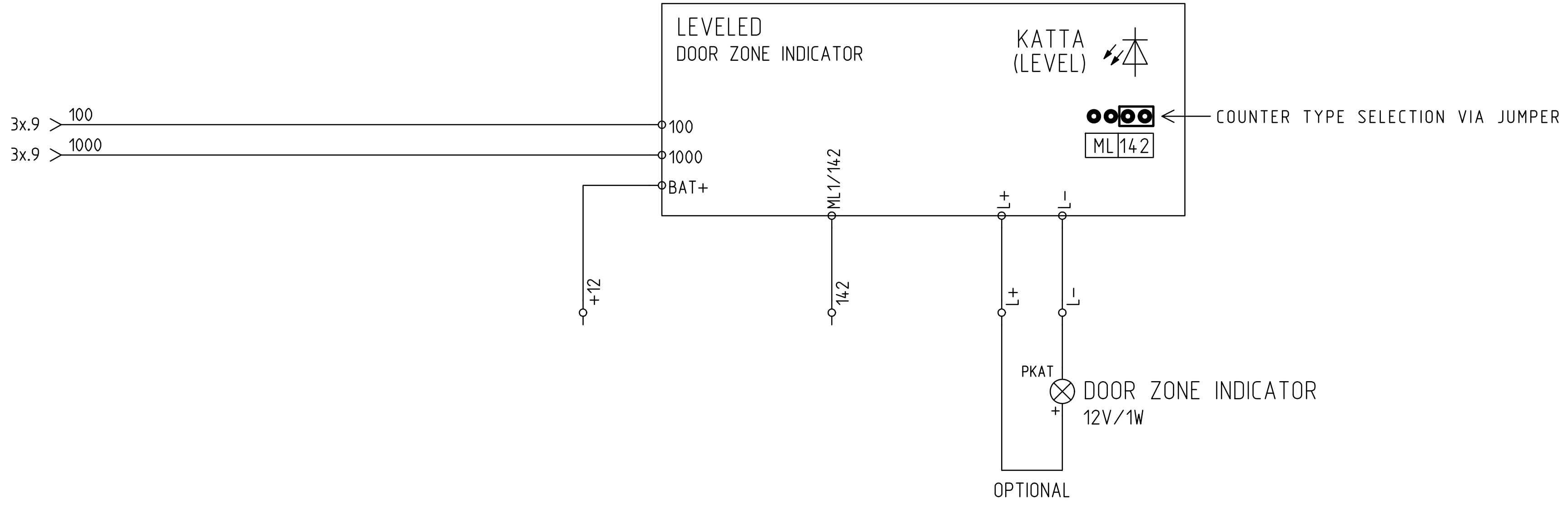
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	SML1-SML2 CONNECTION DOOR ZONE INDICATOR	DRAWN BY: K.D.	Rev. No:	Sheet: 8LM
			CHECKED BY: C.A.	Rev. Date:	Date: 10.08.2008



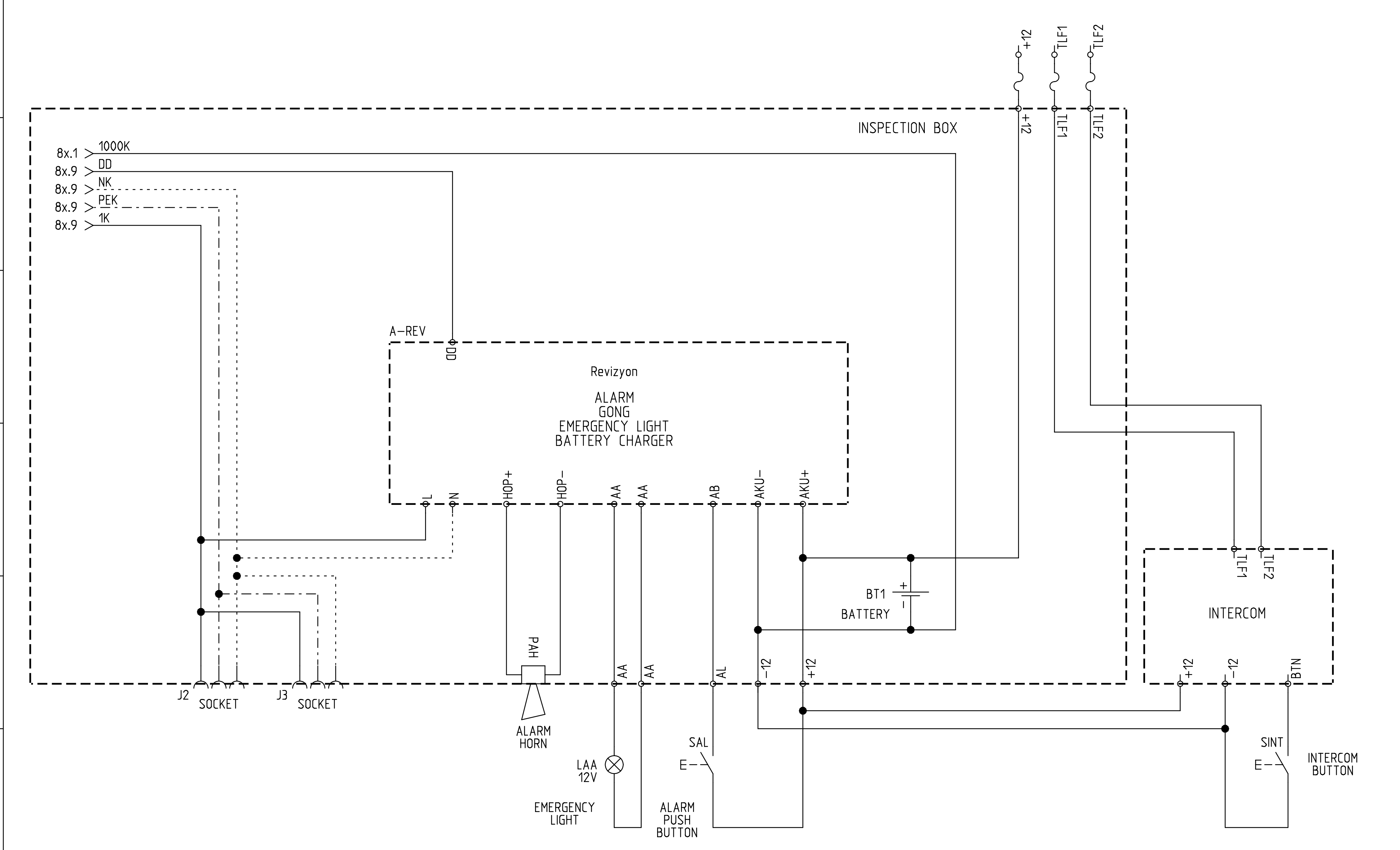
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	SJF (142) CONNECTION DOOR ZONE INDICATOR	DRAWN BY: K.D.	Rev. No:	Sheet: 8LJ
			CHECKED BY: C.A.	Rev. Date:	Date: 10.08.2008



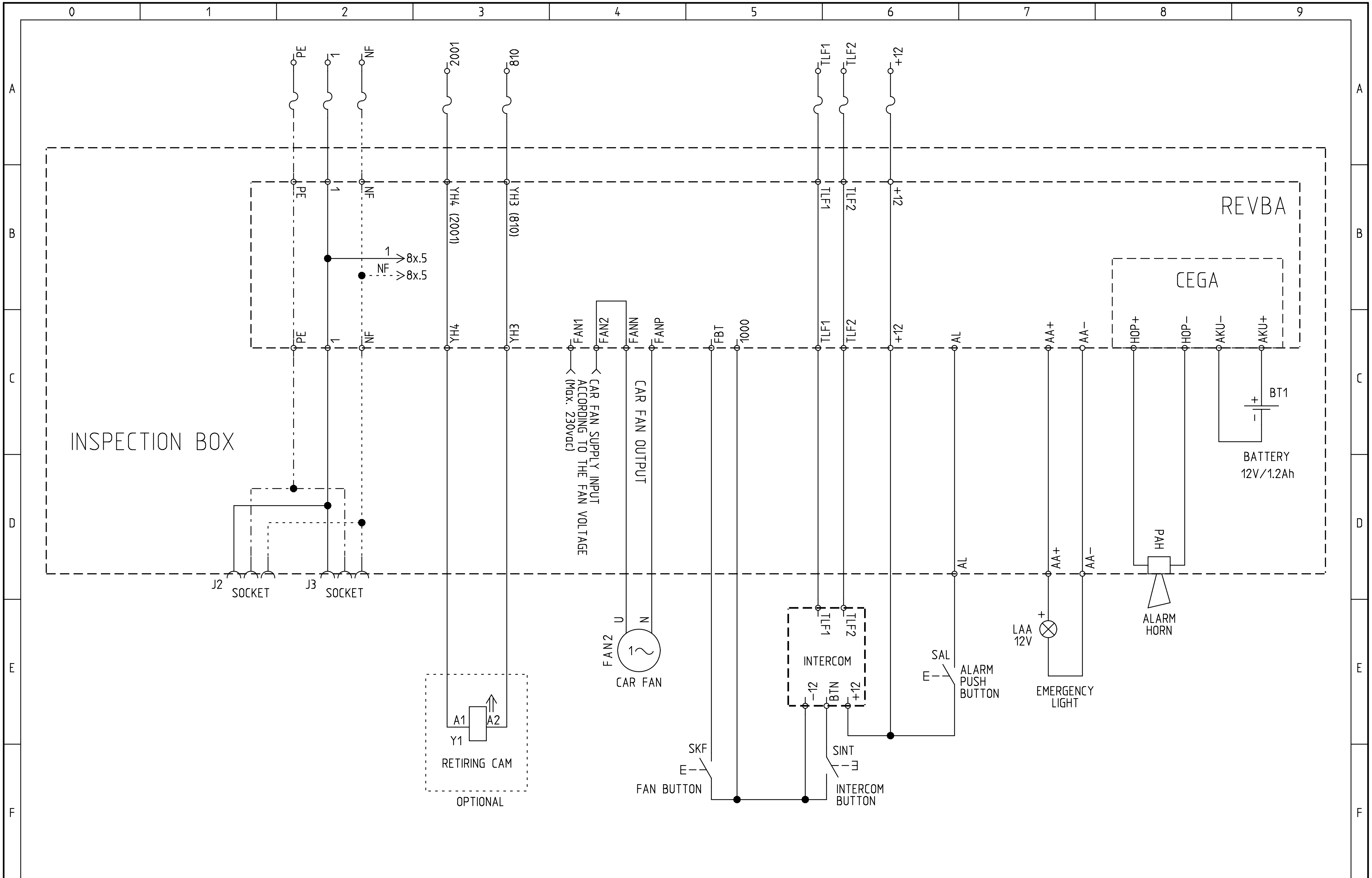
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	SML1-SML2 CONNECTION DOOR ZONE INDICATOR	DRAWN BY: K.D.	Rev. No: V11	Sheet: 8LM
			CHECKED BY: C.A.	Rev. Date: 10.03.2010	Date: 22.06.2009



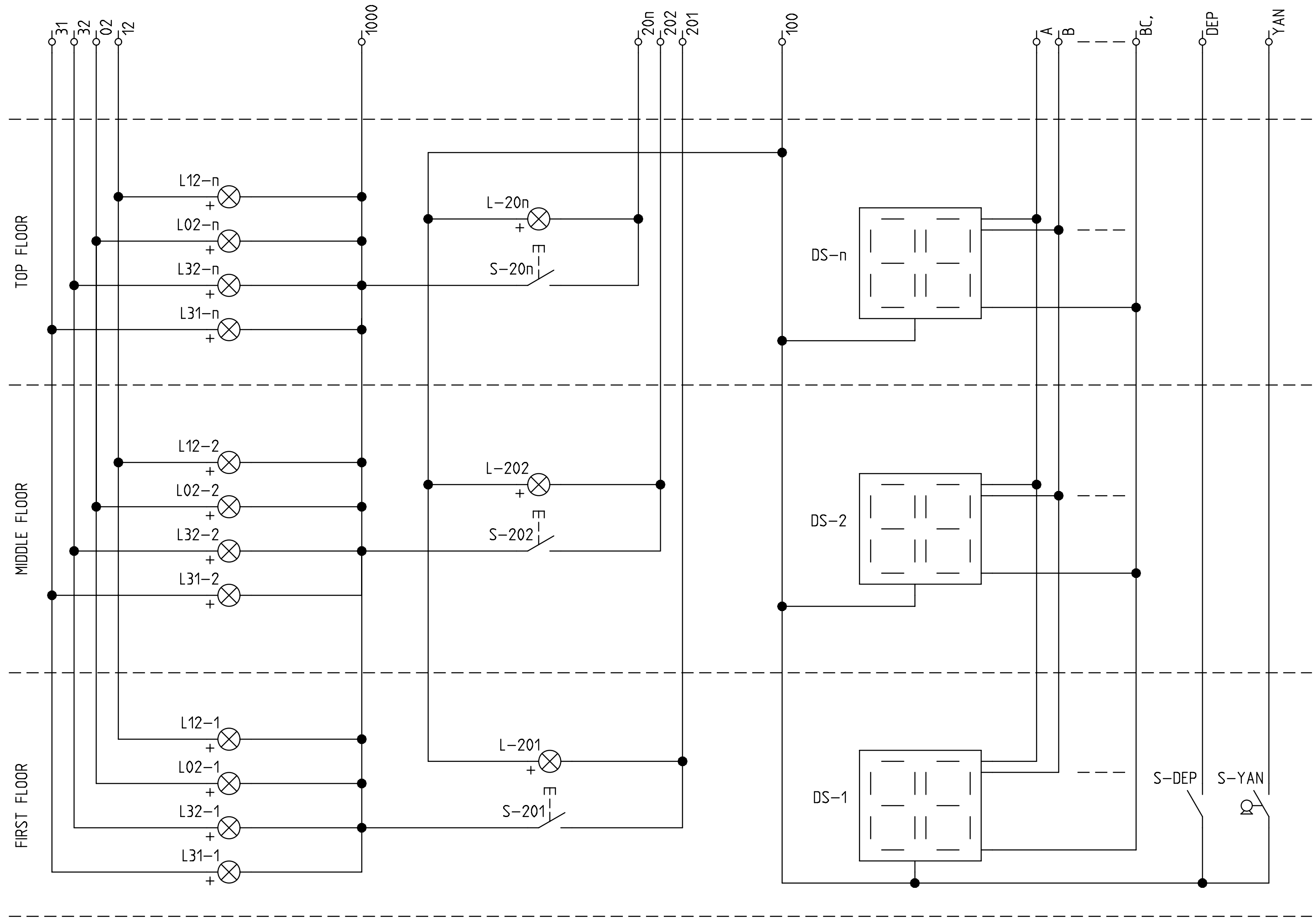
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	SJF (142) CONNECTION DOOR ZONE INDICATOR	DRAWN BY: K.D.	Rev. No: V11	Sheet: 8LJ
			CHECKED BY: C.A.	Rev. Date: 10.03.2010	Date: 22.06.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-2	DRAWN BY: K.D.	Rev. No: V11	Sheet: 9
			CHECKED BY: C.A.	Rev. Date: 20.03.2009	Date: 01.06.2006

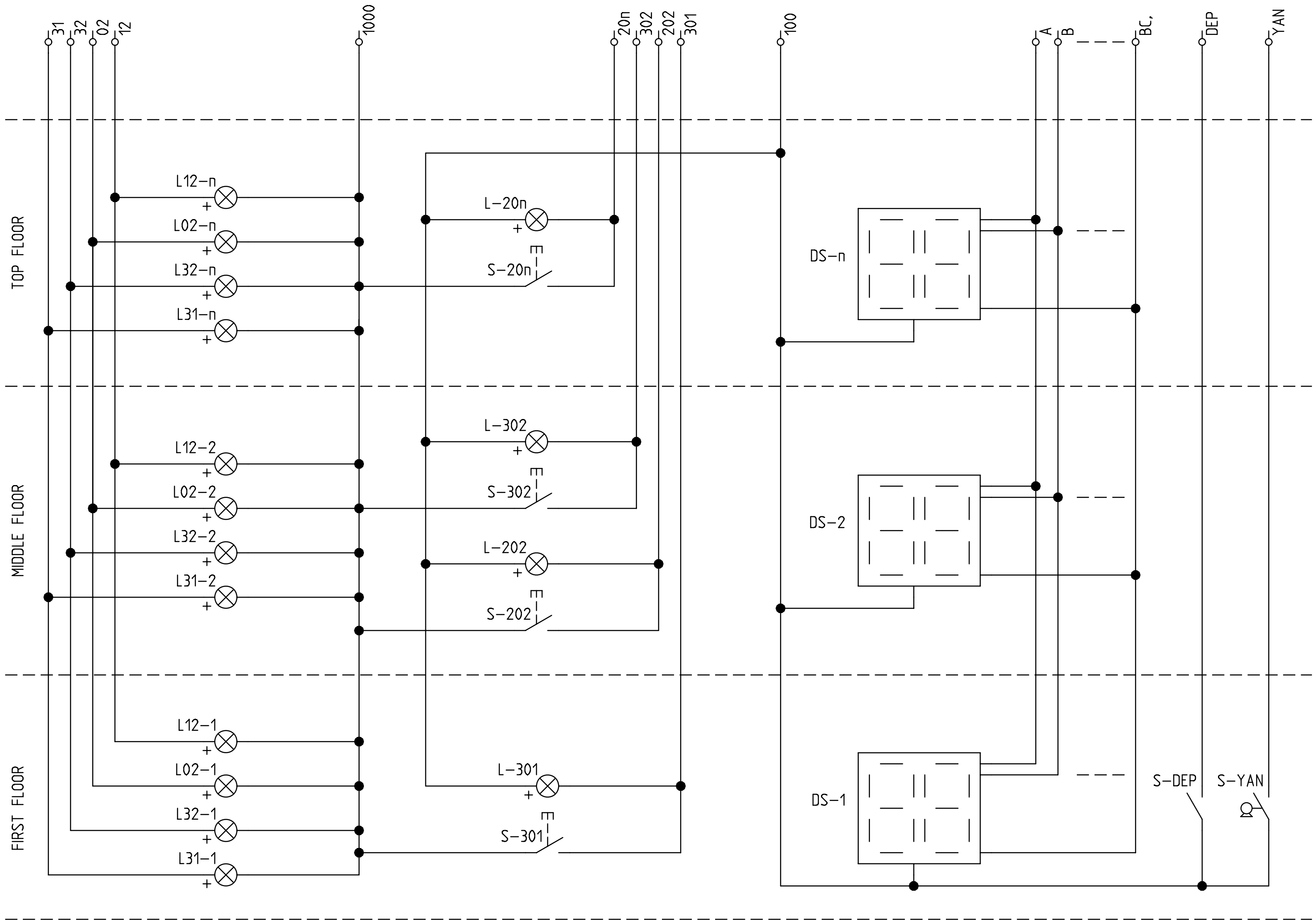


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CAR CONNECTIONS-2	DRAWN BY: K.D.	Rev. No:	Sheet: 9 R
			CHECKED BY: C.A.	Rev. Date:	Date: 06.10.2009



L12–1,...,L12–n: BUSY INDICATORS (24V)	S–201,...,S–20n: DOWN CALL BUTTONS	S–DEP: EARTHQUAKE SENSOR CONTACT
L02–1,...,L02–n: OUT OF SERVICE INDICATORS (24V)	L–201,...,L–20n: DOWN CALL INDICATORS (24V)	S–YAN: FIRE ALARM SWITCH
L32–1,...,L32–n: UP DIRECTION INDICATORS (24V)		DS–1,...,DS–n: FLOOR INDICATORS (COMMON ANODE)
L31–1,...,L31–n: DOWN DIRECTION INDICATORS (24V)		

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	SHAFT & FLOOR SIGNALS COMMAND TYPE : DOWN COLLECTIVE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 10 D Date: 01.06.2006

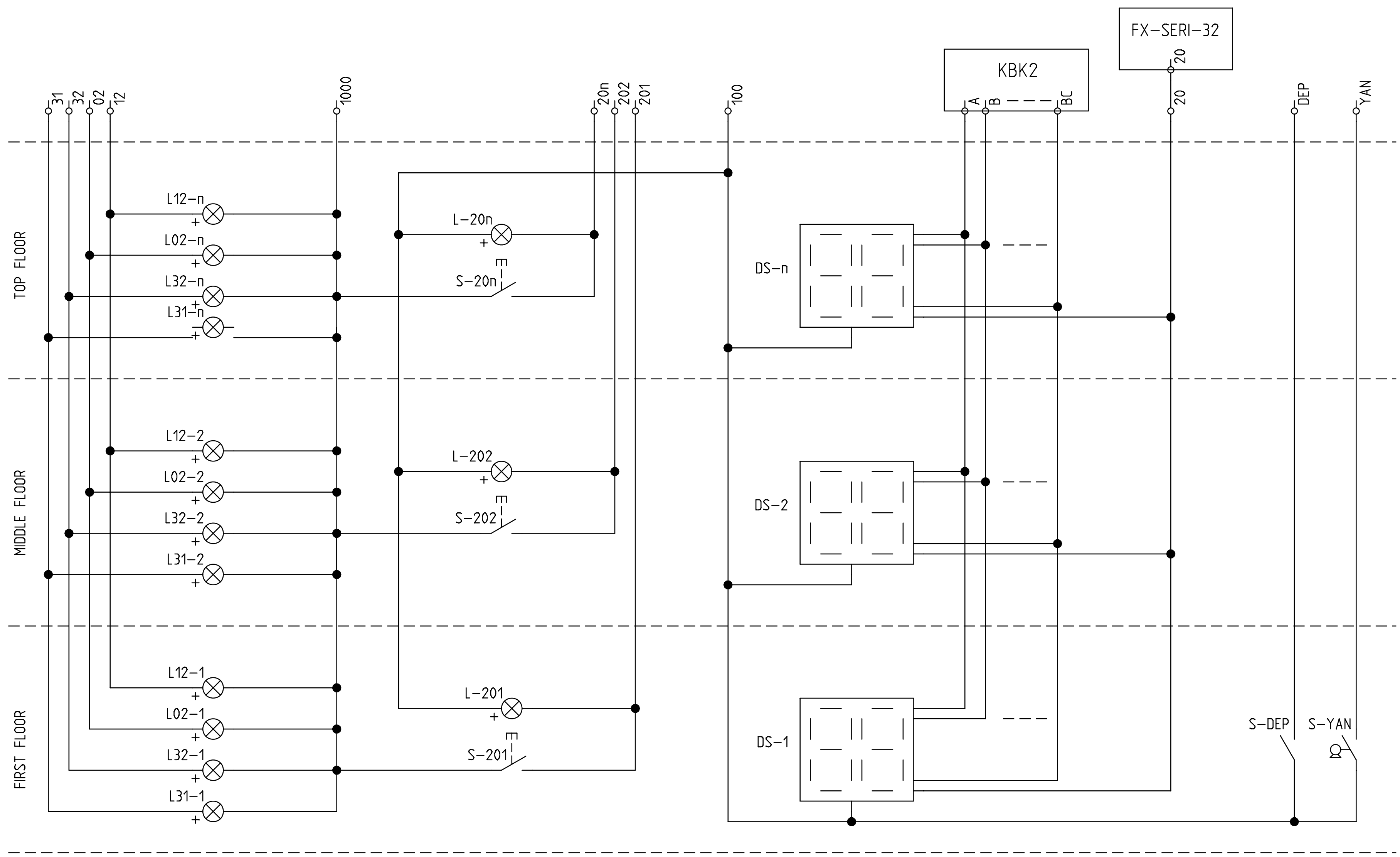


L12–1,...,L12–n: BUSY INDICATORS (24V)
L02–1,...,L02–n: OUT OF SERVICE INDICATORS (24V)
L32–1,...,L32–n: UP DIRECTION INDICATORS (24V)
L31–1,...,L31–n: DOWN DIRECTION INDICATORS (24V)

S–202,...,S–20n: DOWN CALL BUTTONS
L–202,...,L–20n: DOWN CALL INDICATORS (24V)
S–301, S–302: UP CALL BUTTONS
L–301, L–302: UP CALL INDICATORS (24V)

S–DEP: EARTHQUAKE SENSOR CONTACT
S–YAN: FIRE ALARM SWITCH
DS–1,...,DS–n: FLOOR INDICATORS (COMMON ANODE)

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	SHAFT & FLOOR SIGNALS COMMAND TYPE : FULL COLLECTIVE	DRAWN BY: K.D.	Rev. No:	Sheet: 10 F
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006

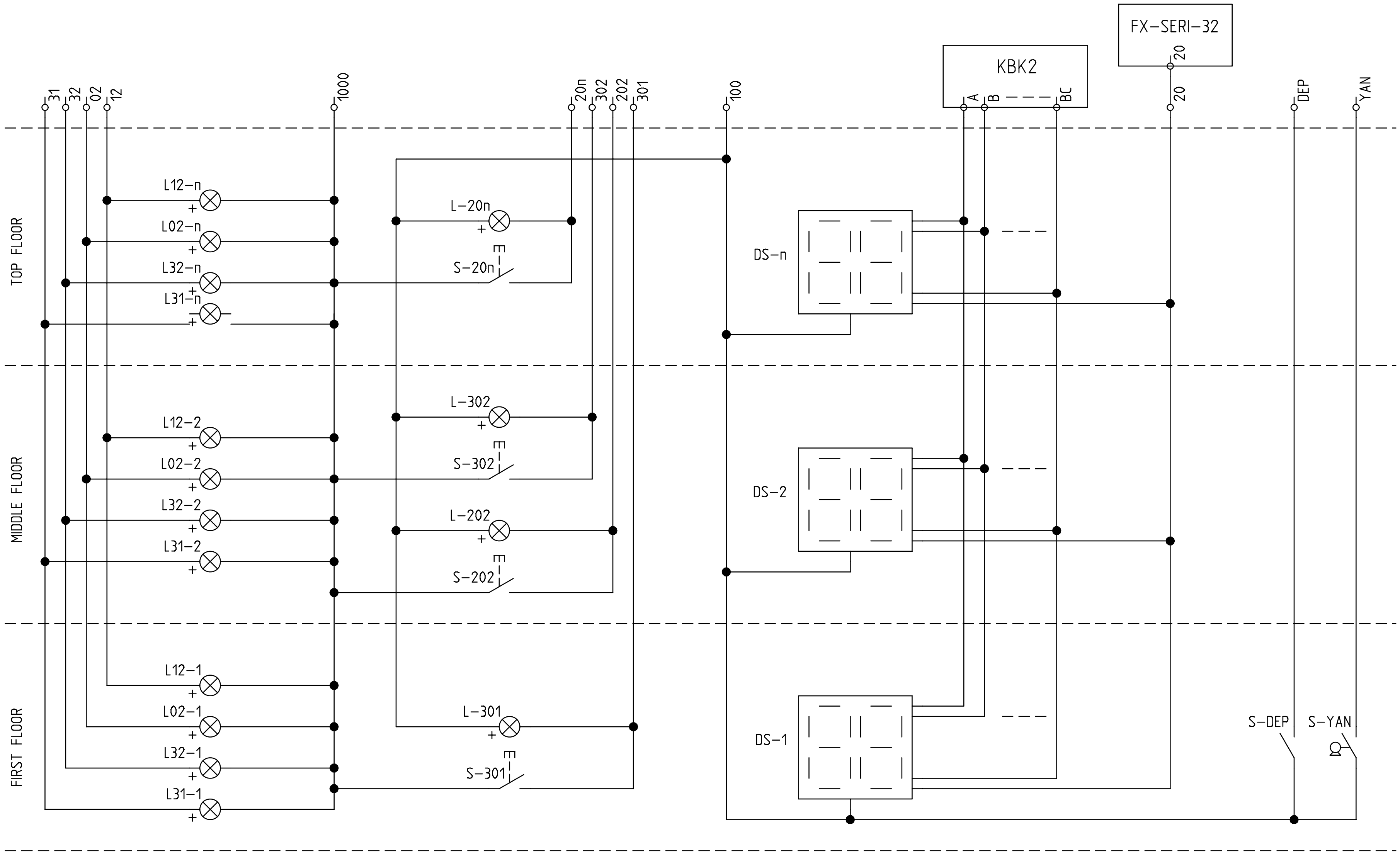


L12-1,...,L12-n: BUSY INDICATORS (24V)
L02-1,...,L02-n: OUT OF SERVICE INDICATORS (24V)
L32-1,...,L32-n: UP DIRECTION INDICATORS (24V)
L31-1,...,L31-n: DOWN DIRECTION INDICATORS (24V)

S-201,...,S-20n: DOWN CALL BUTTONS
L-201,...,L-20n: DOWN CALL INDICATORS (24V)

S-DEP: EARTHQUAKE SENSOR CONTACT
S-YAN: FIRE ALARM SWITCH
DS-1,...,DS-n: FLOOR INDICATORS (COMMON ANODE)

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SHAFT & FLOOR SIGNALS COMMAND TYPE : DOWN COLLECTIVE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 17.02.2009	Sheet: 10 DE Date: 09.02.2009

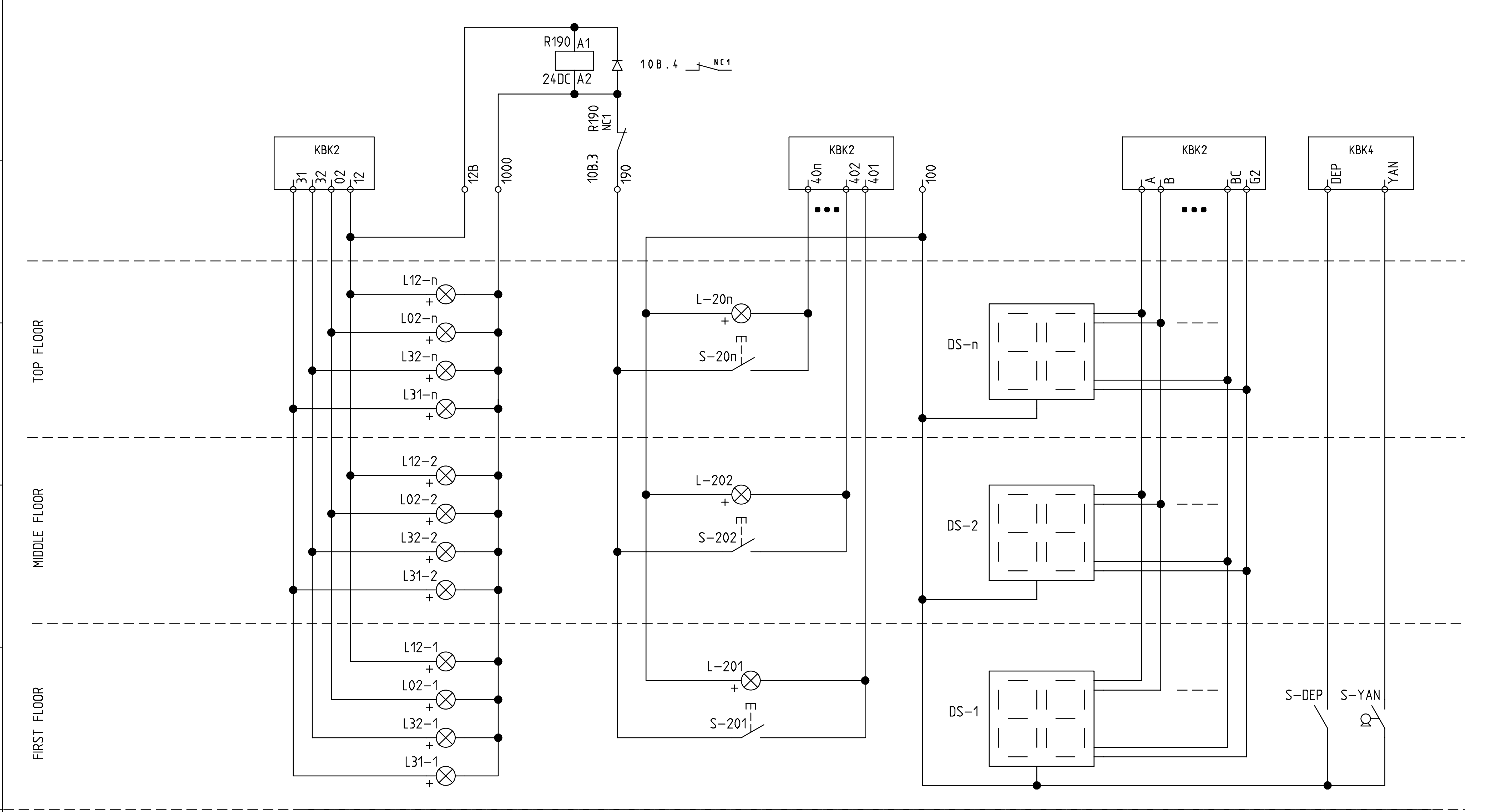


L12-1,...,L12-n: BUSY INDICATORS (24V)
L02-1,...,L02-n: OUT OF SERVICE INDICATORS (24V)
L32-1,...,L32-n: UP DIRECTION INDICATORS (24V)
L31-1,...,L31-n: DOWN DIRECTION INDICATORS (24V)

S-202,...,S-20n: DOWN CALL BUTTONS
L-202,...,L-20n: DOWN CALL INDICATORS (24V)
S-301, S-302: UP CALL BUTTONS
L-301, L-302: UP CALL INDICATORS (24V)

S-DEP: EARTHQUAKE SENSOR CONTACT
S-YAN: FIRE ALARM SWITCH
DS-1,...,DS-n: FLOOR INDICATORS (COMMON ANODE)

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SHAFT & FLOOR SIGNALS COMMAND TYPE : FULL COLLECTIVE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 17.02.2009	Sheet: 10 FE Date: 09.02.2009



L12–1,...,L12–n: BUSY INDICATORS (24V)

L02–1,...,L02–n: OUT OF SERVICE INDICATORS (24V)

L32–1,...,L32–n: UP DIRECTION INDICATORS (24V)

L31–1,...,L31–n: DOWN DIRECTION INDICATORS (24V)

S–201,...,S–20n: DOWN CALL BUTTONS

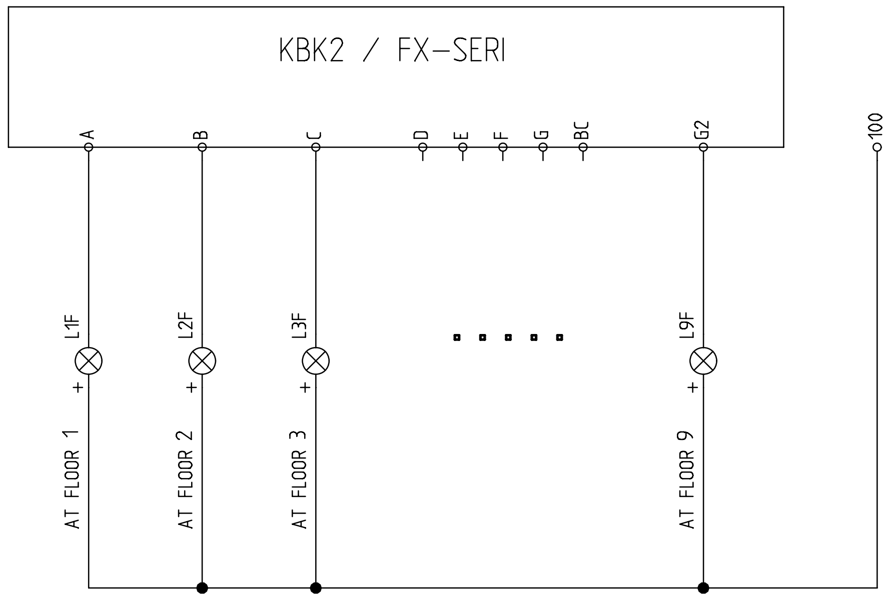
L–201,...,L–20n: DOWN CALL INDICATORS (24V)

S–DEP: EARTHQUAKE SENSOR CONTACT

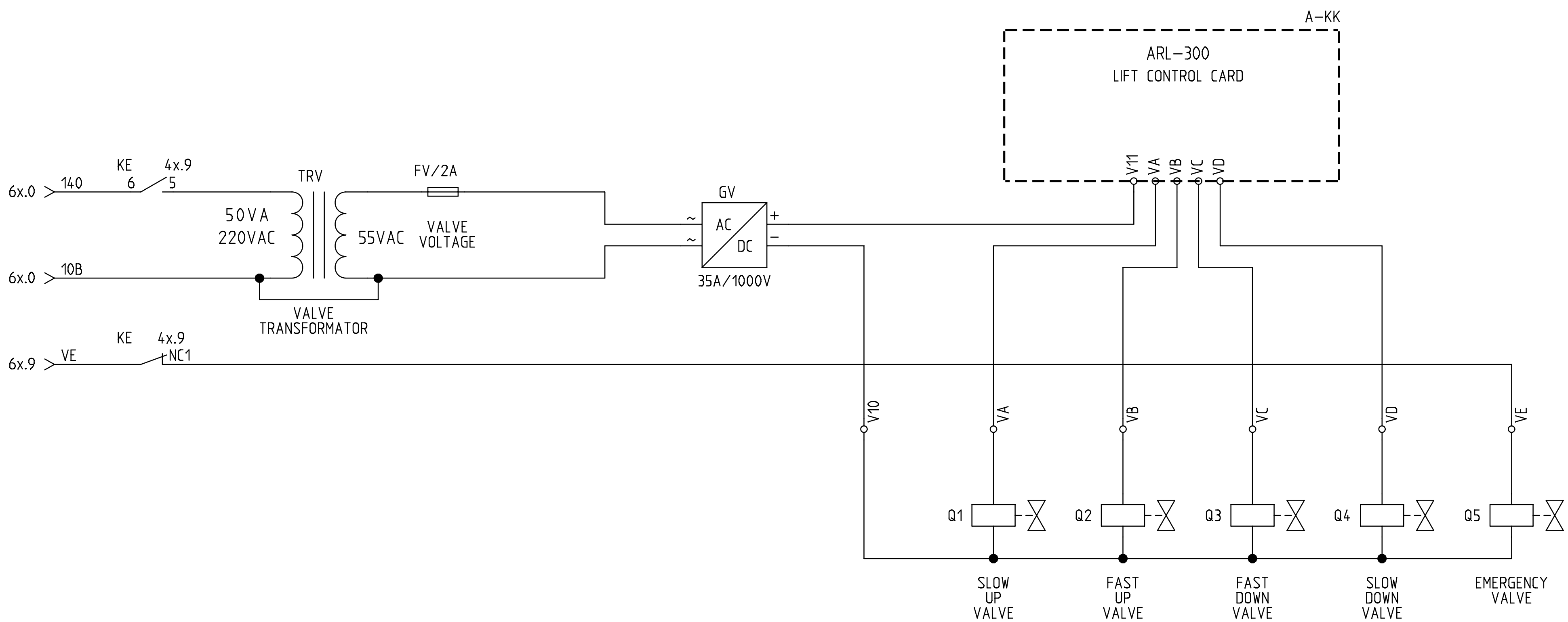
S–YAN: FIRE ALARM SWITCH

DS–1,...,DS–n: FLOOR INDICATORS (COMMON ANODE)

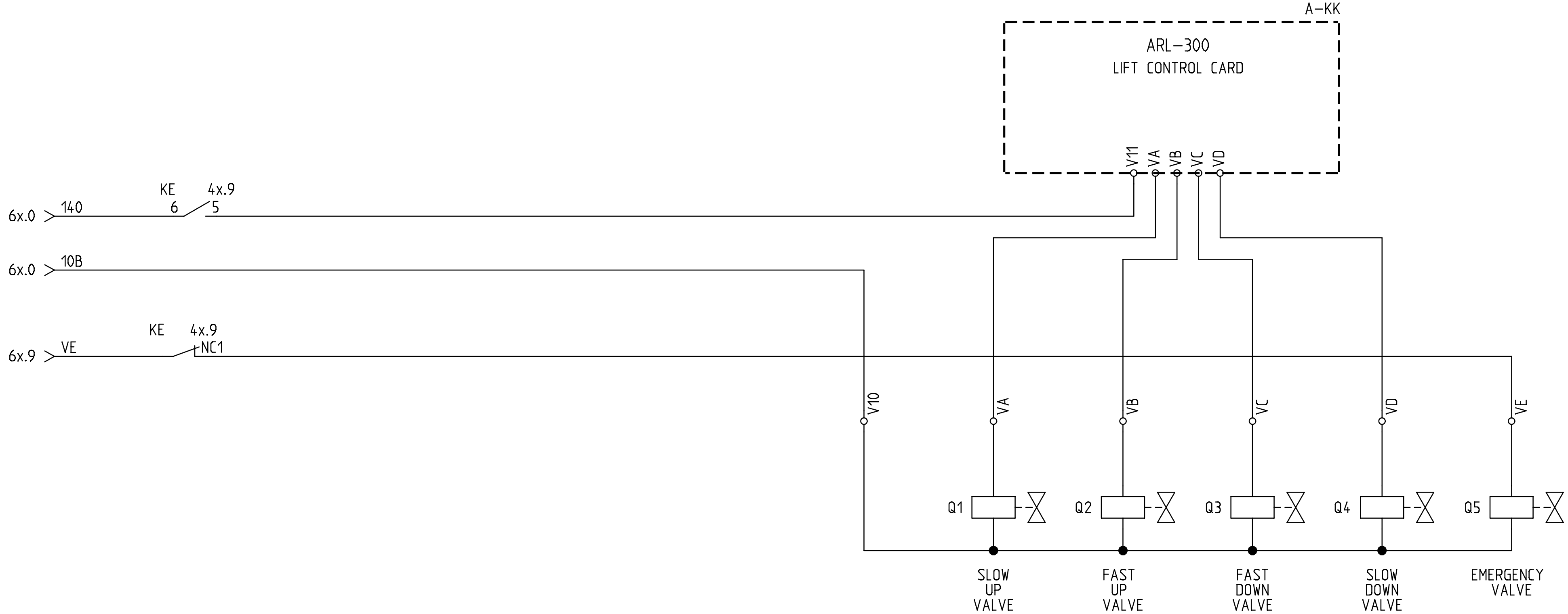
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	SHAFT & FLOOR SIGNALS COMMAND TYPE : SIMPLE PUSH BUTTON	DRAWN BY: K.D.	Rev. No:	Sheet: 10 B
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SIMPLE FLOOR INDICATORS UP TO 9 FLOORS	DRAWN BY: K.D.	Rev. No:	Sheet: 10 K
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : KLEEMANN 48Vdc	DRAWN BY: K.D.	Rev. No: V11	Sheet: 11K1
			CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.06.2006

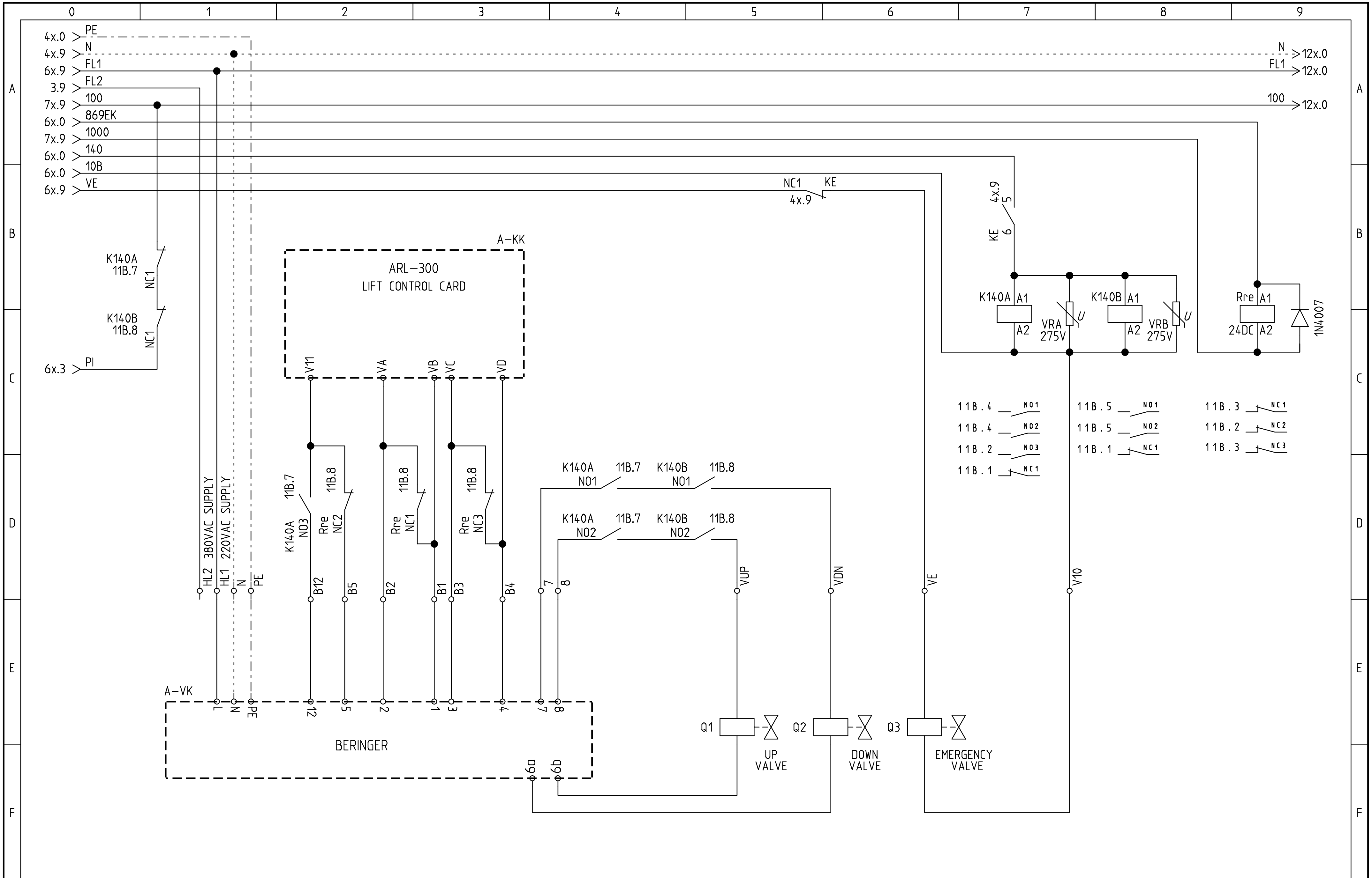


ARKEL www.arkel.com.tr (+90 216) 540 03 10

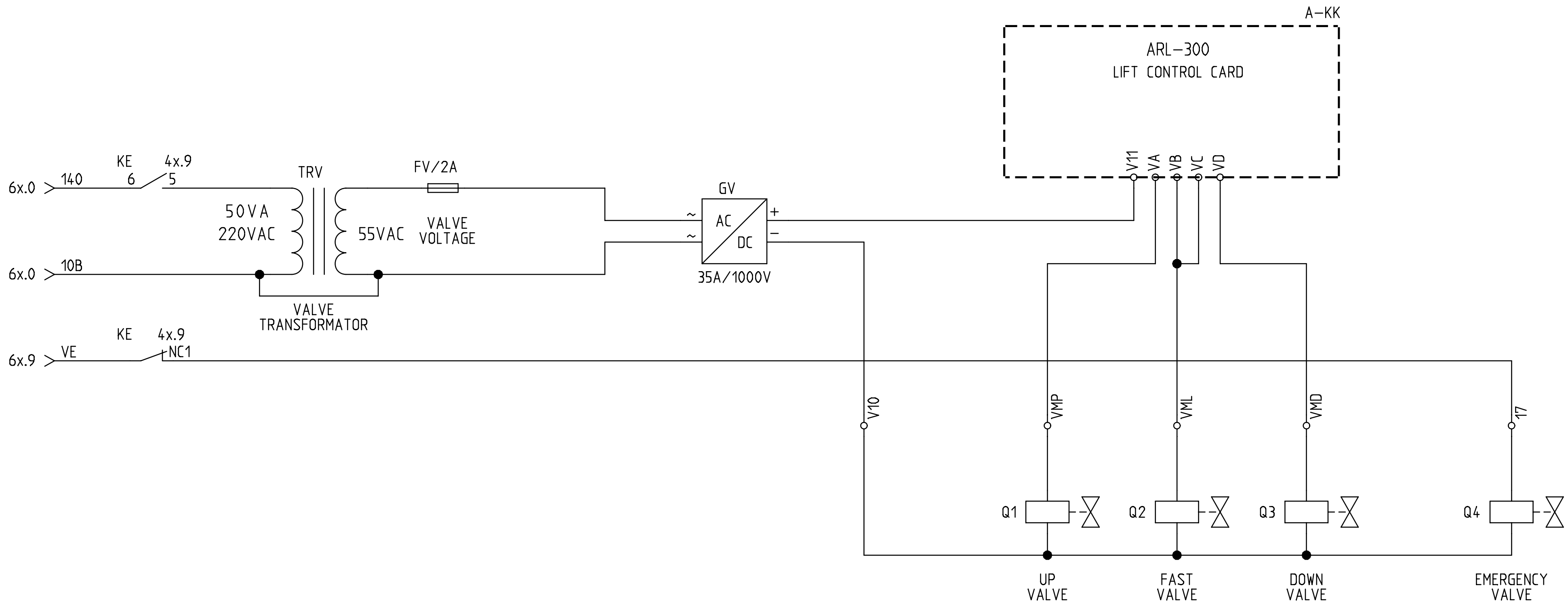
ARL-300 CONTROL PANEL

VALVE CONNECTIONS
VALVE GROUP TYPE : KLEEMANN 230VAC

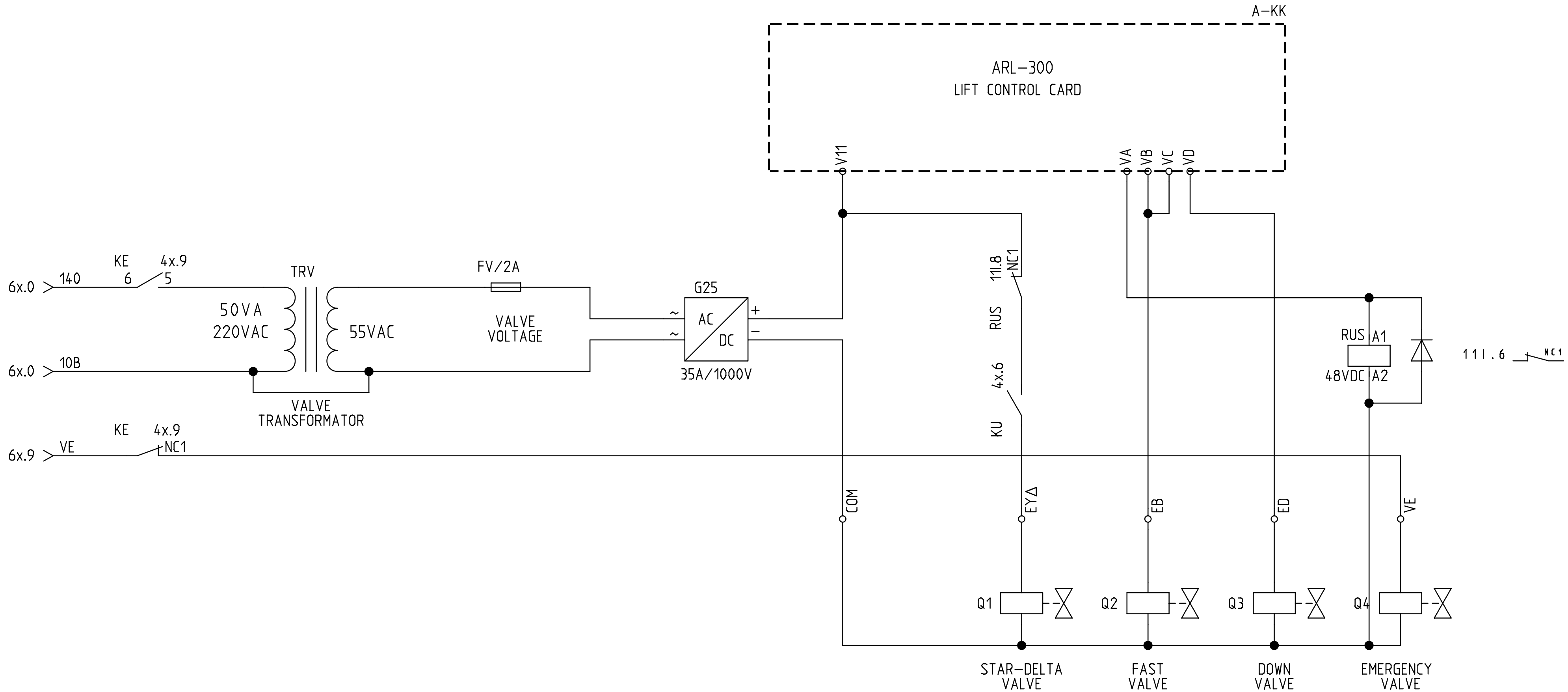
DRAWN BY: K.D.	Rev. No: V11	Sheet: 11K2
CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.06.2006



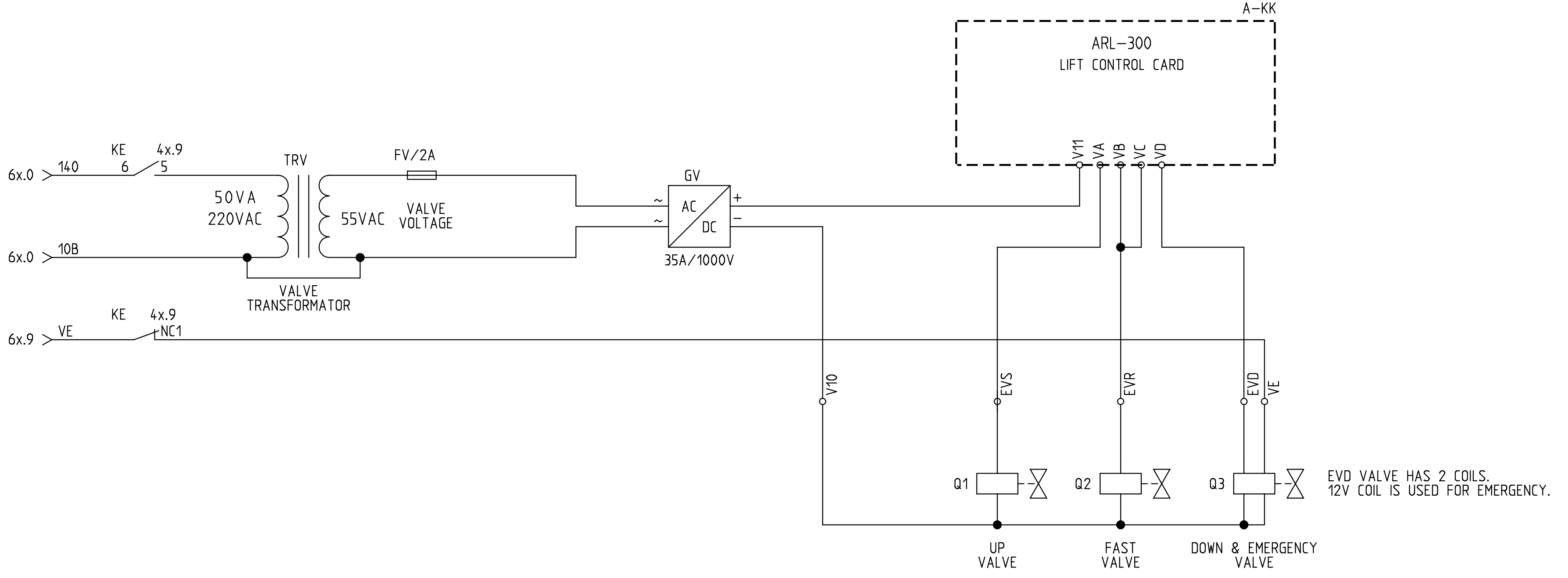
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : BERINGER	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 29.12.2006
				Sheet: 11B Date: 01.06.2006



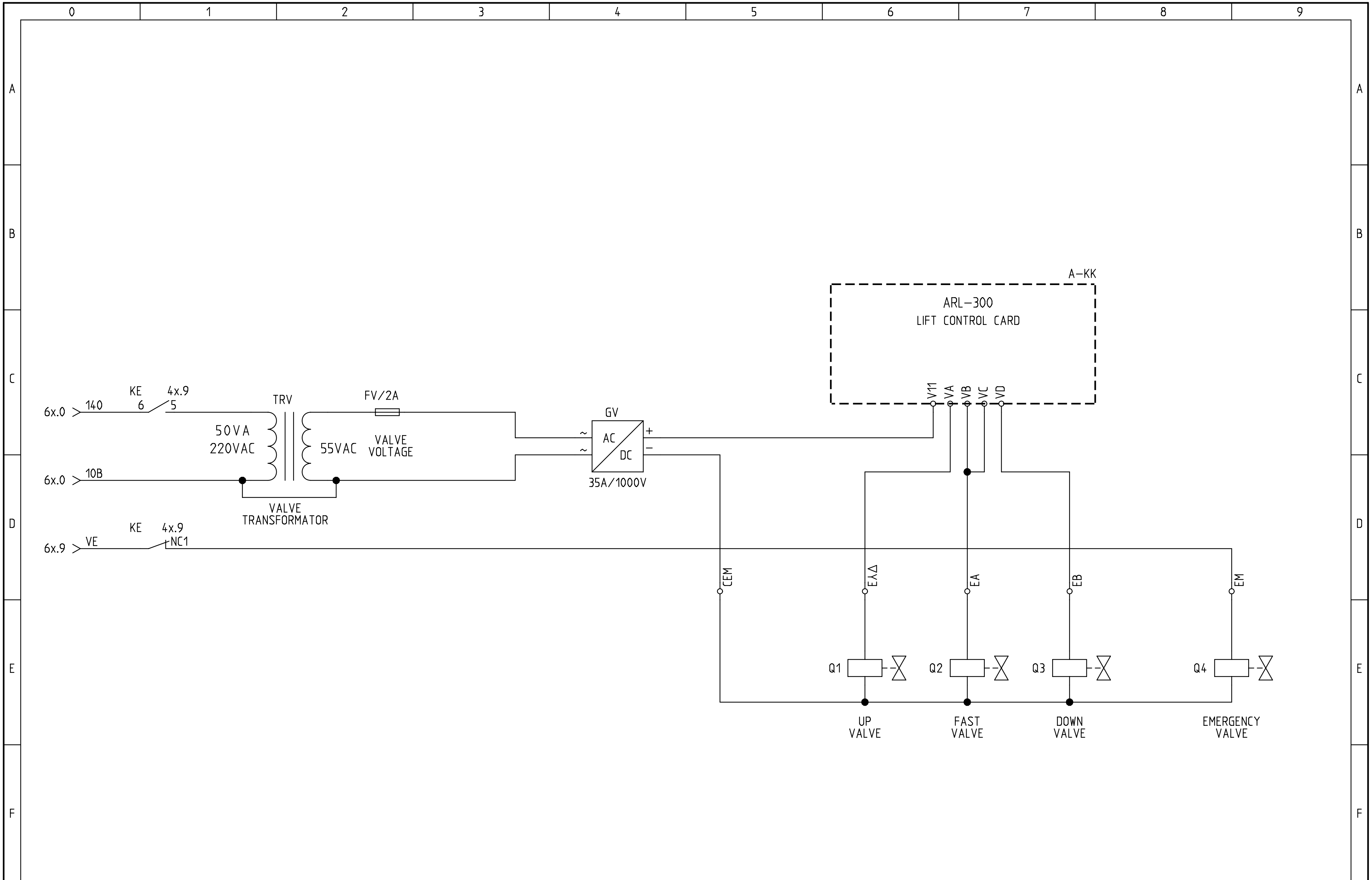
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : G.M.V.	DRAWN BY: K.D.	Rev. No: V11	Sheet: 11G
			CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.06.2006



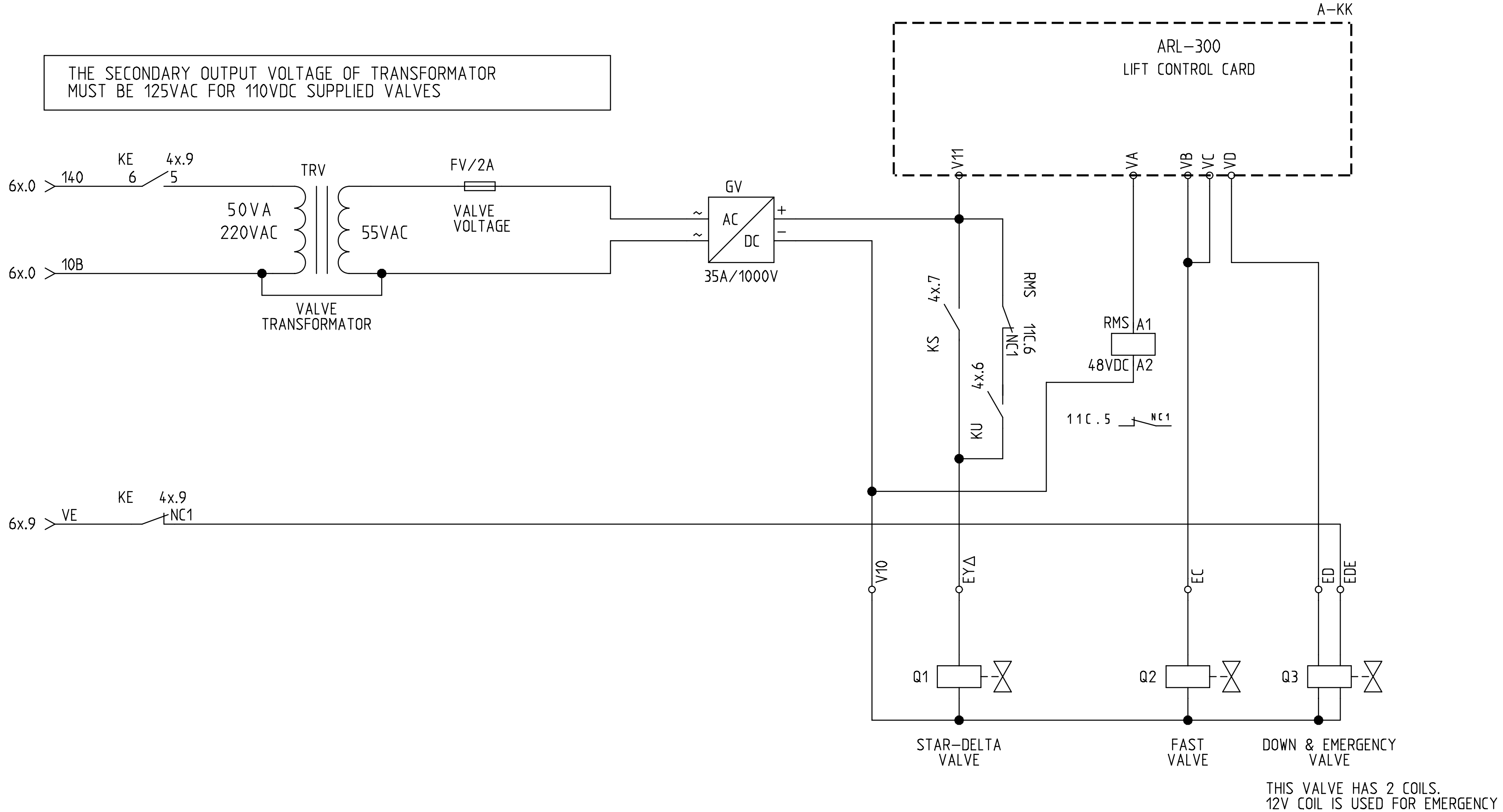
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : I.G.V.	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 06.02.2007	Sheet: 11 Date: 01.06.2006



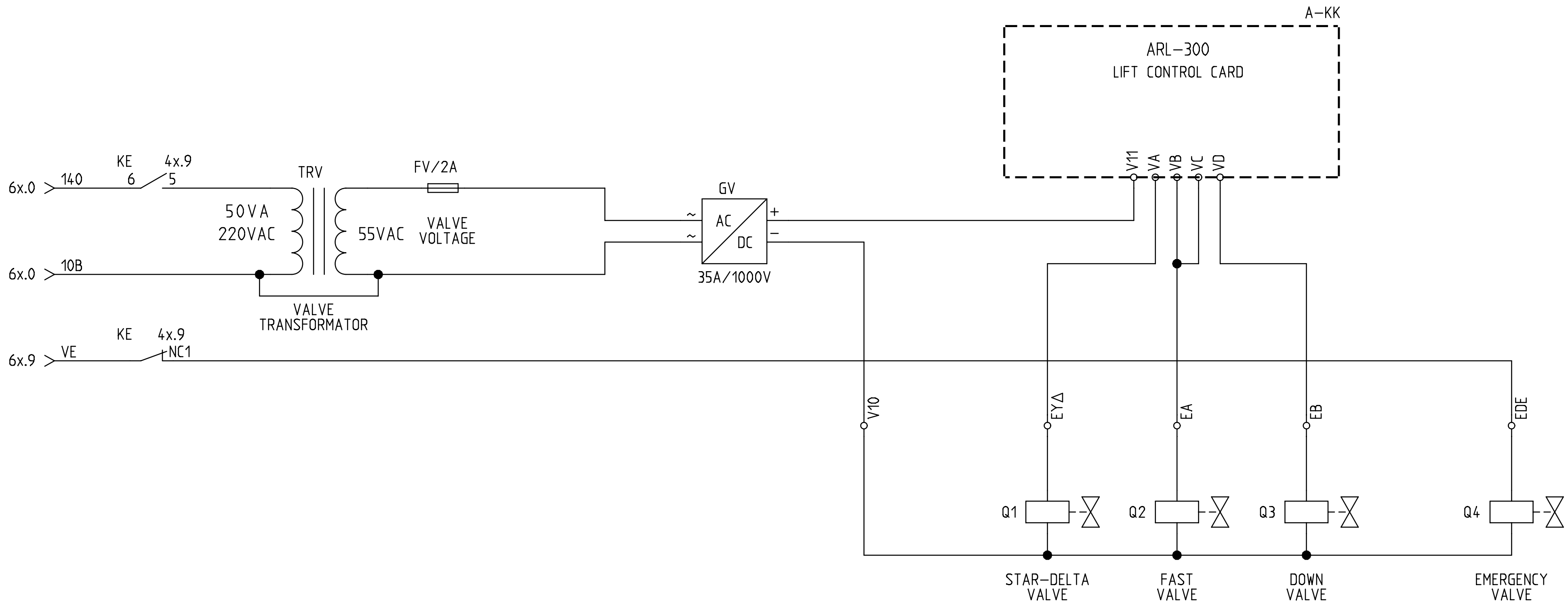
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : OMAR	DRAWN BY: K.D.	Rev. No: V11	Sheet: 110
			CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.06.2006



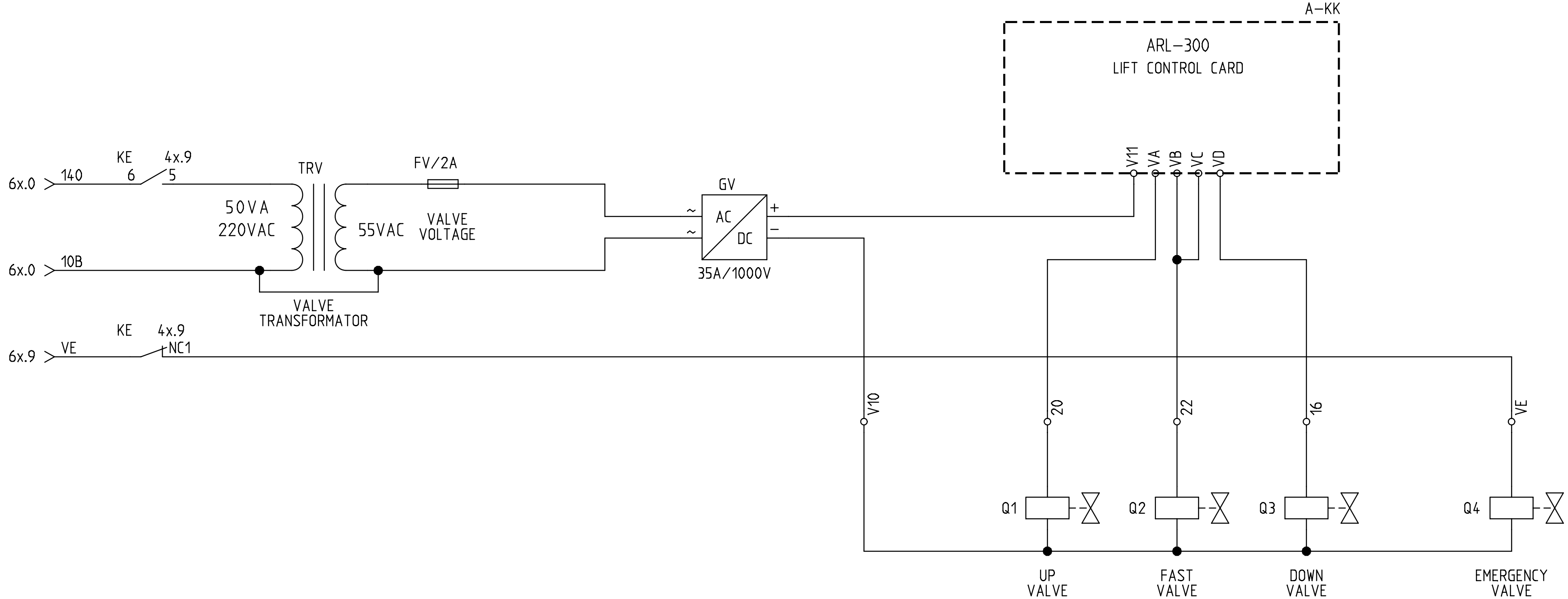
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : MORIS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 11M Date: 01.06.2006



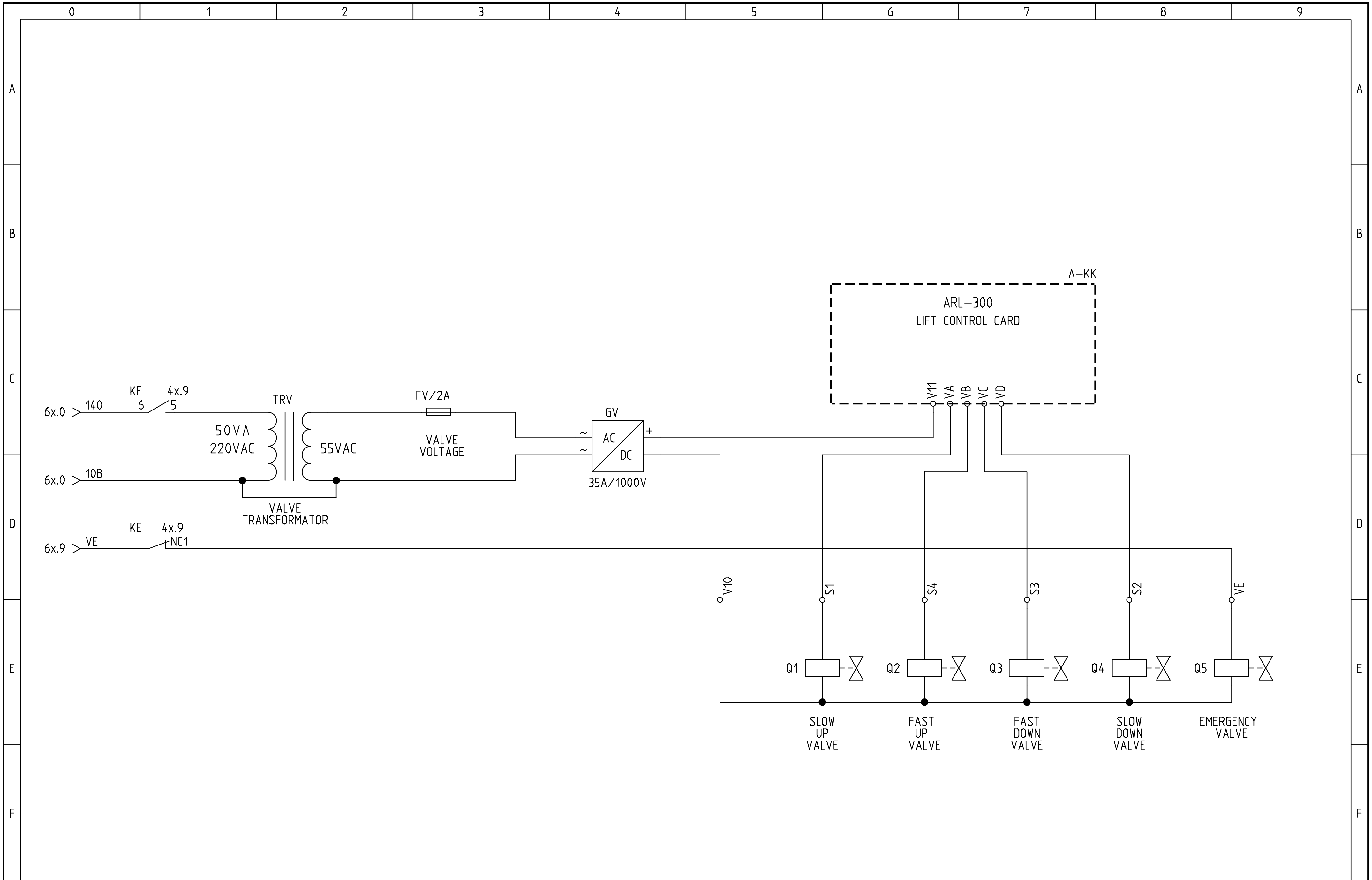
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : MACPUARSA	DRAWN BY: K.D.	Rev. No: V12	Sheet: 11C
			CHECKED BY: C.A.	Rev. Date: 29.11.2007	Date: 01.06.2006



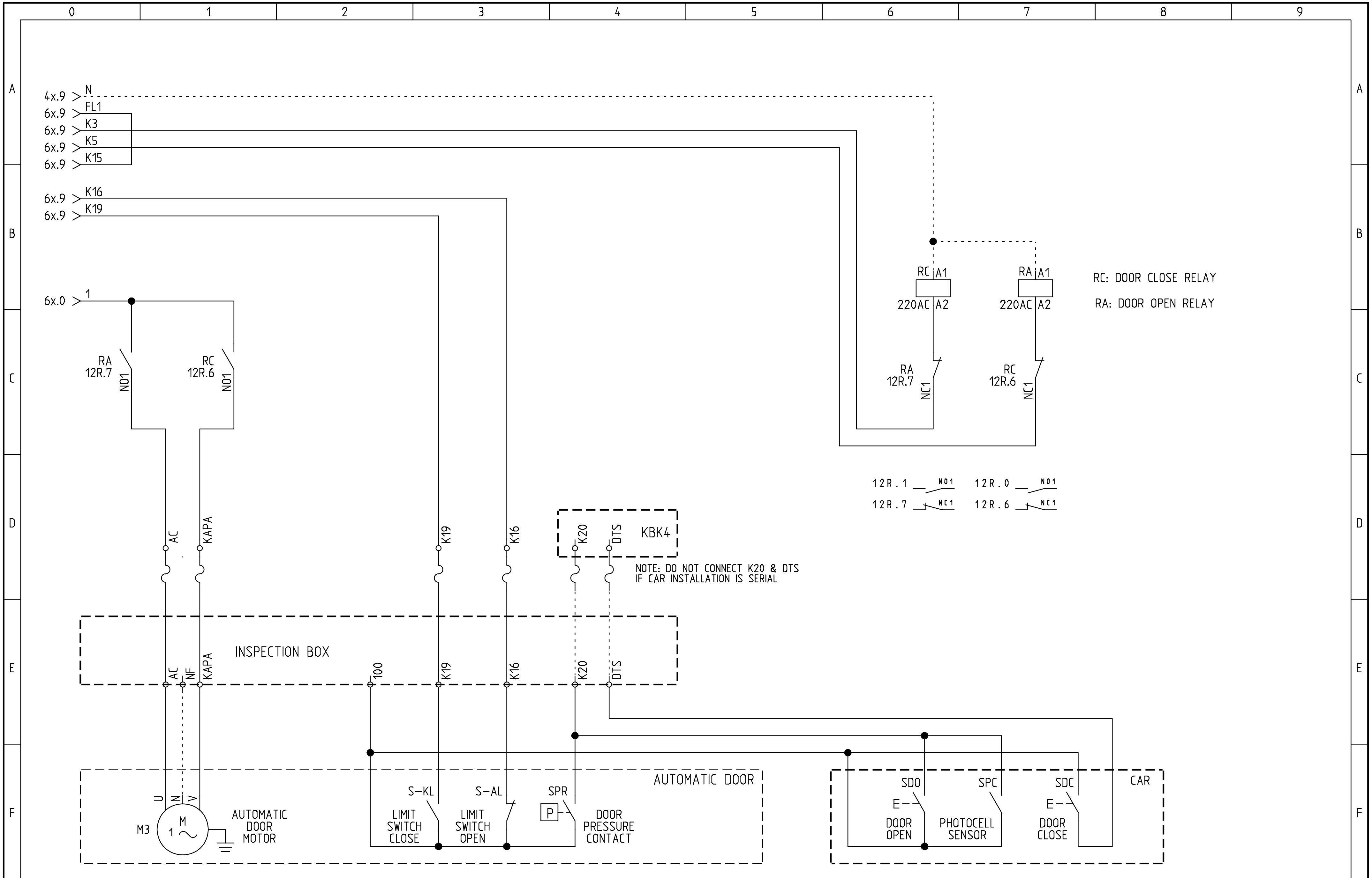
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : SODIMAS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 11S Date: 04.01.2007



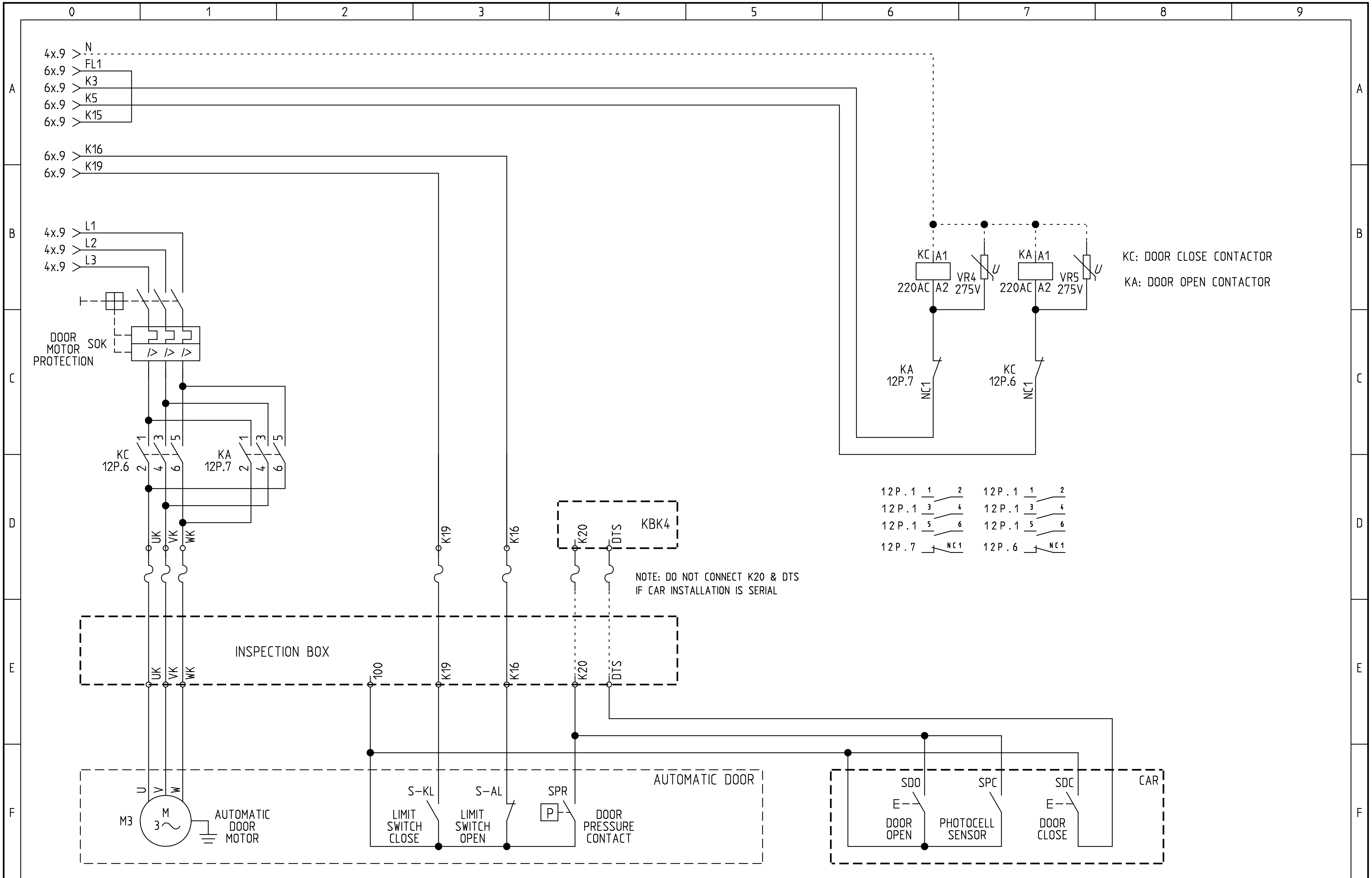
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : START	DRAWN BY: K.D.	Rev. No:	Sheet: 11 T
			CHECKED BY: C.A.	Rev. Date:	Date: 01.10.2007



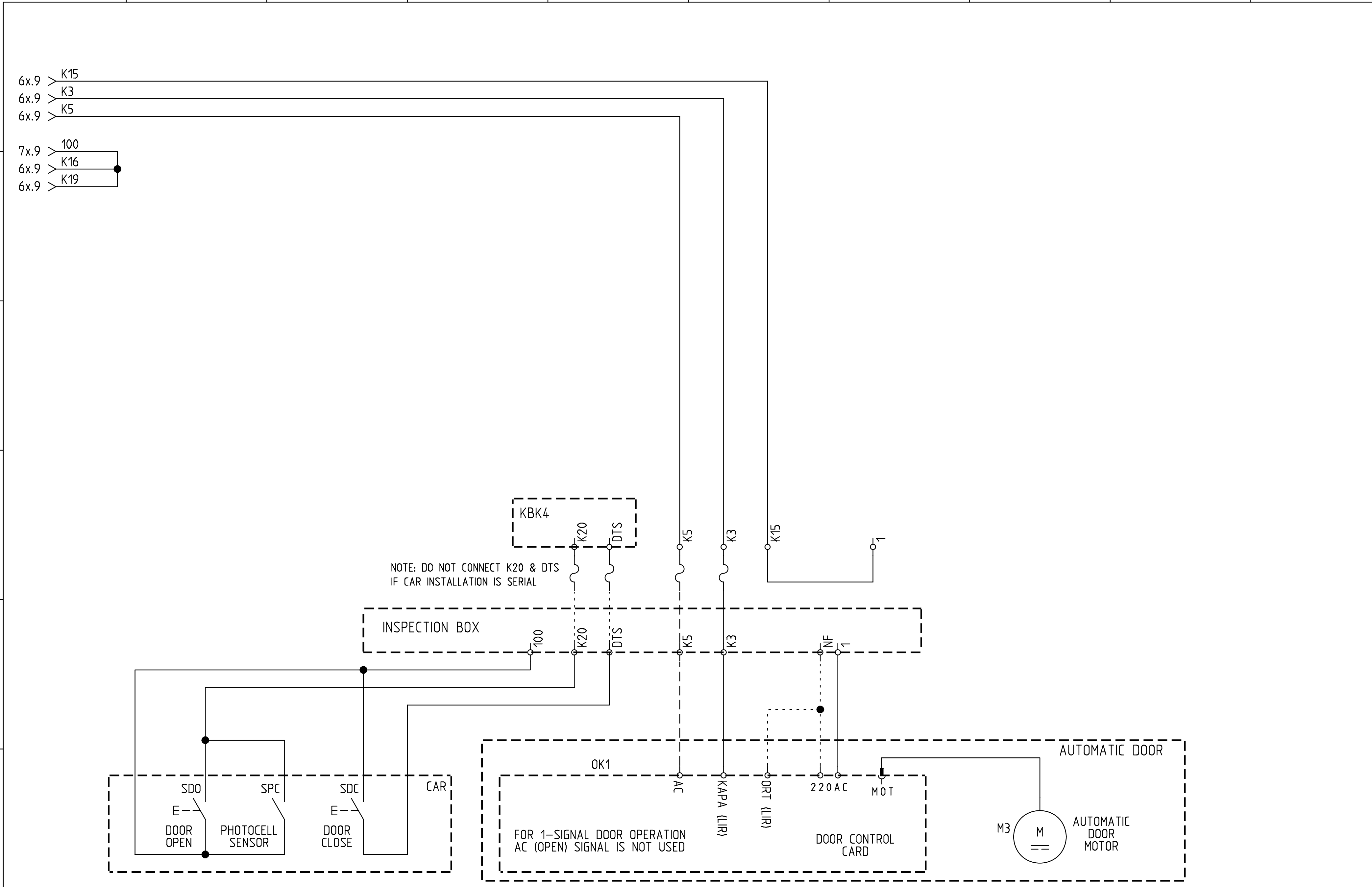
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	VALVE CONNECTIONS VALVE GROUP TYPE : ALGI 48Vdc	DRAWN BY: K.D.	Rev. No: V10	Sheet: 11 L
			CHECKED BY: C.A.	Rev. Date: 06.02.2008	Date: 01.06.2006



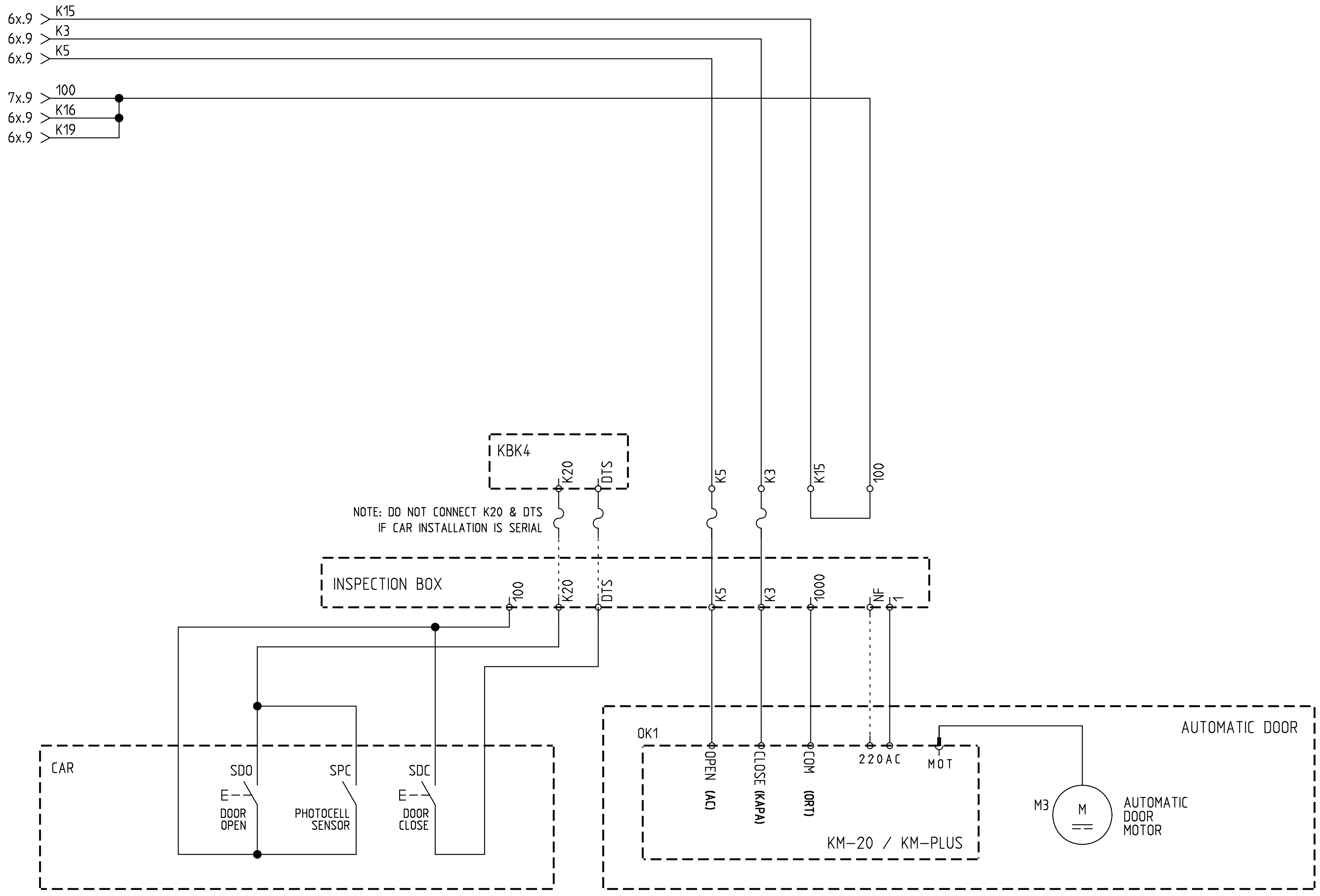
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 1-PHASE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 27.11.2006	Sheet: 12 R Date: 27.04.2006



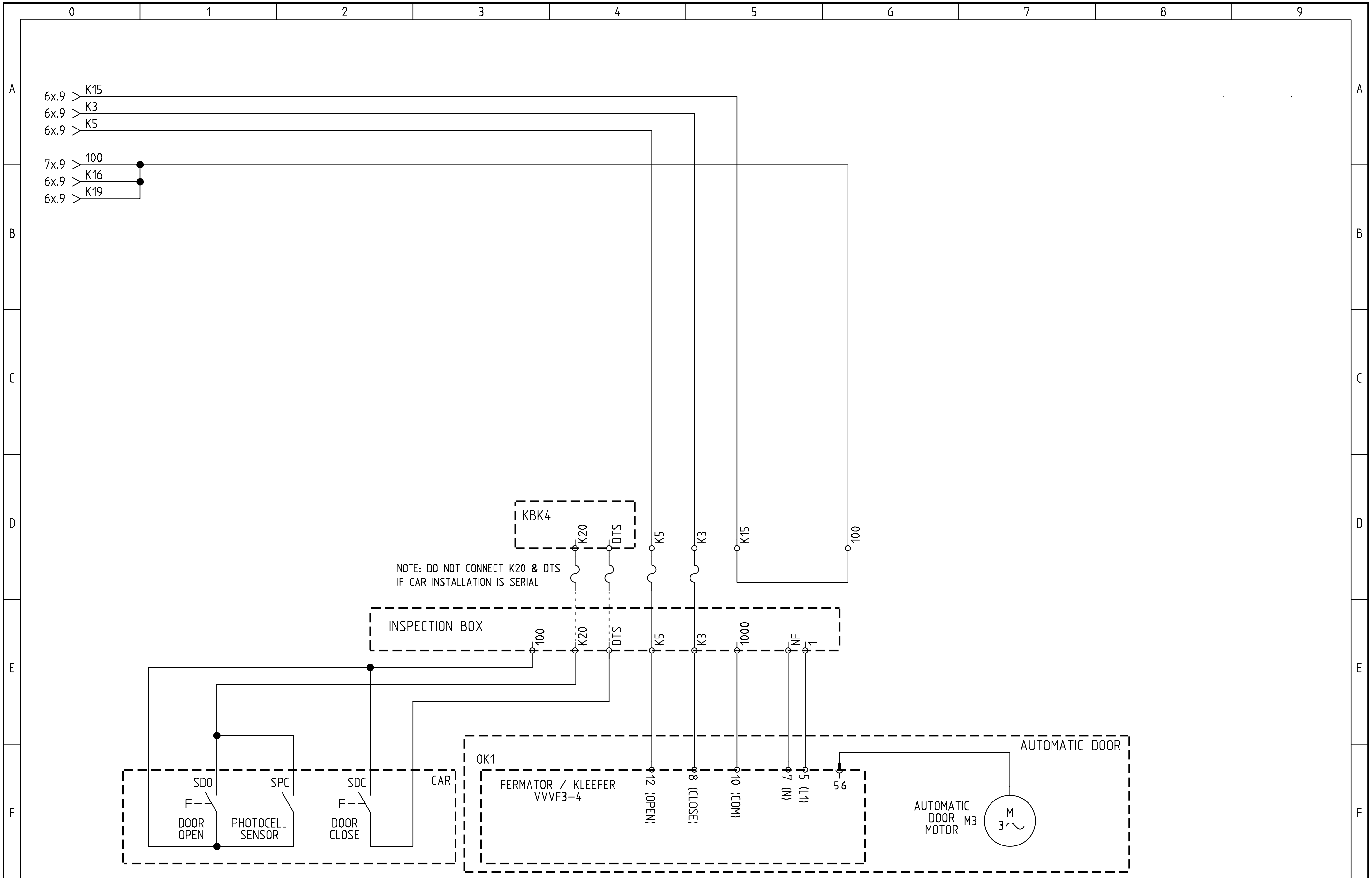
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 3-PHASE	DRAWN BY: K.D.	Rev. No: V11	Sheet: 12 P
			CHECKED BY: C.A.	Rev. Date: 27.11.2006	Date: 01.06.2006



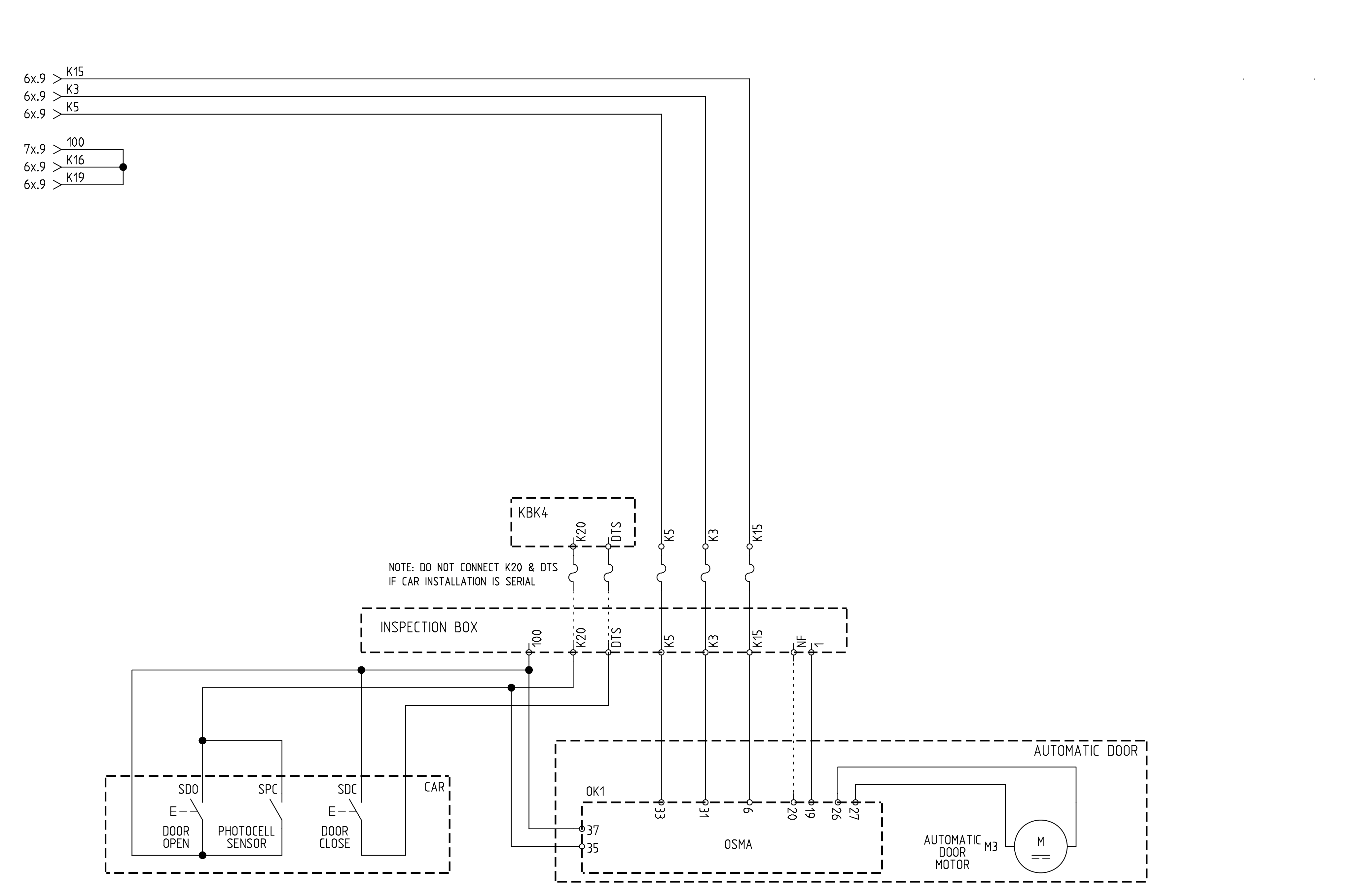
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMI AUTOMATIC WITH DC DOOR CONTROLLER	DRAWN BY: K.D.	Rev. No:	Sheet: 12 M
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



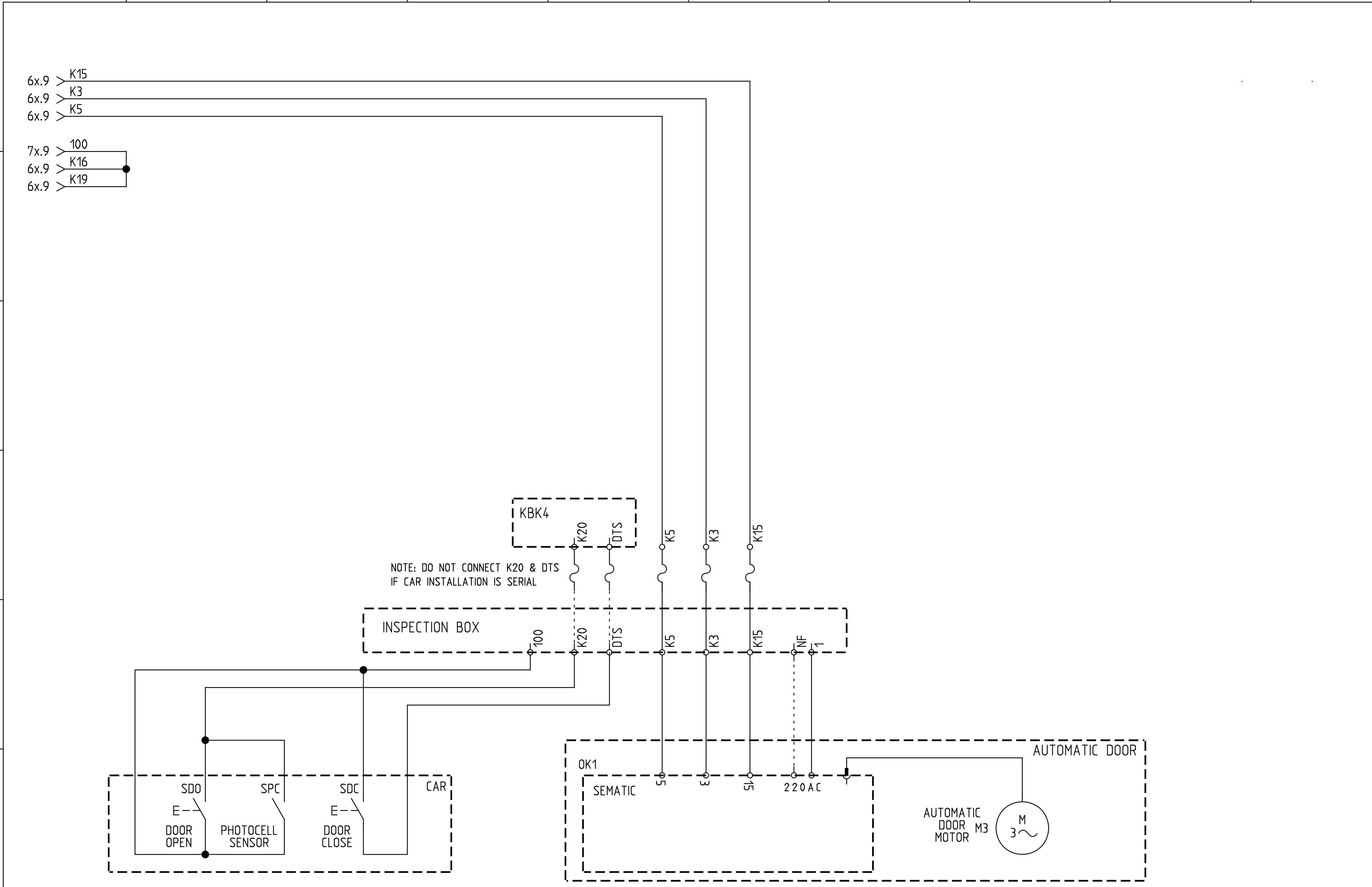
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : KM-20 / KM-PLUS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 K
			CHECKED BY: C.A.	Rev. Date:	Date: 28.12.2009



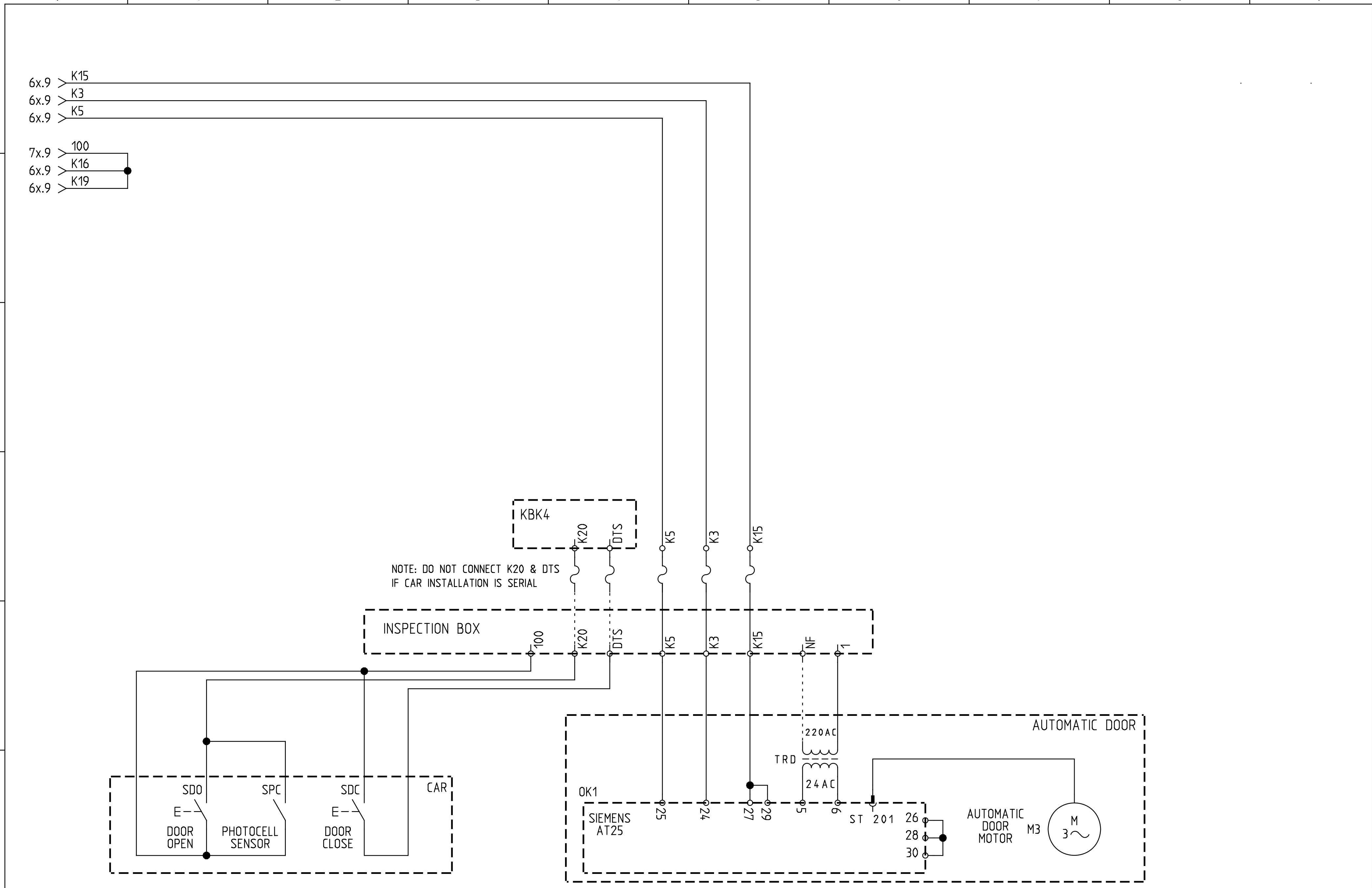
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : FERMATOR / KLEEFER VVVF 3-4	DRAWN BY: K.D.	Rev. No:	Sheet: 12 F
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : OSMA	DRAWN BY: K.D.	Rev. No:	Sheet: 12 0
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMATIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 S Date: 27.04.2006



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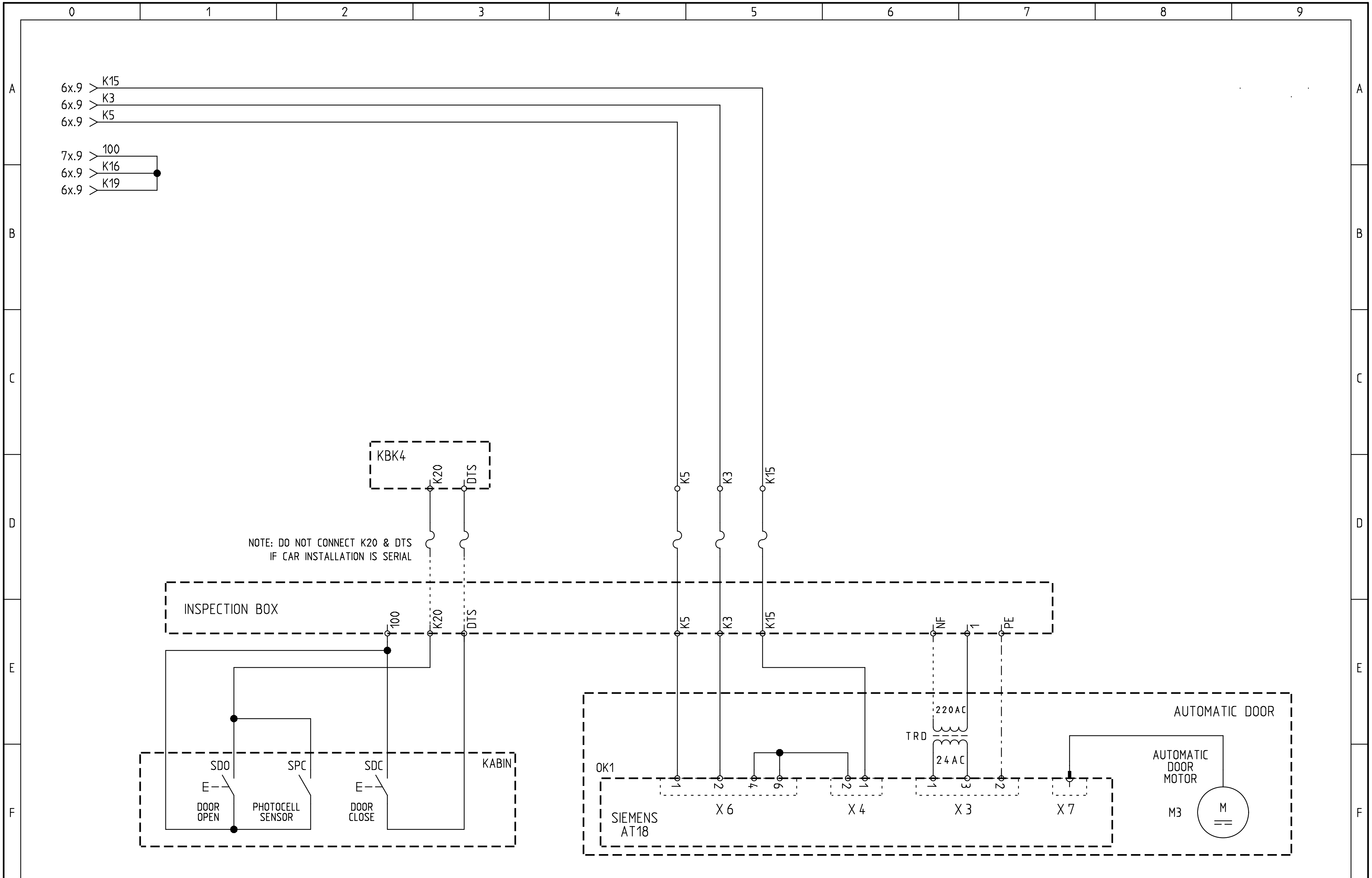
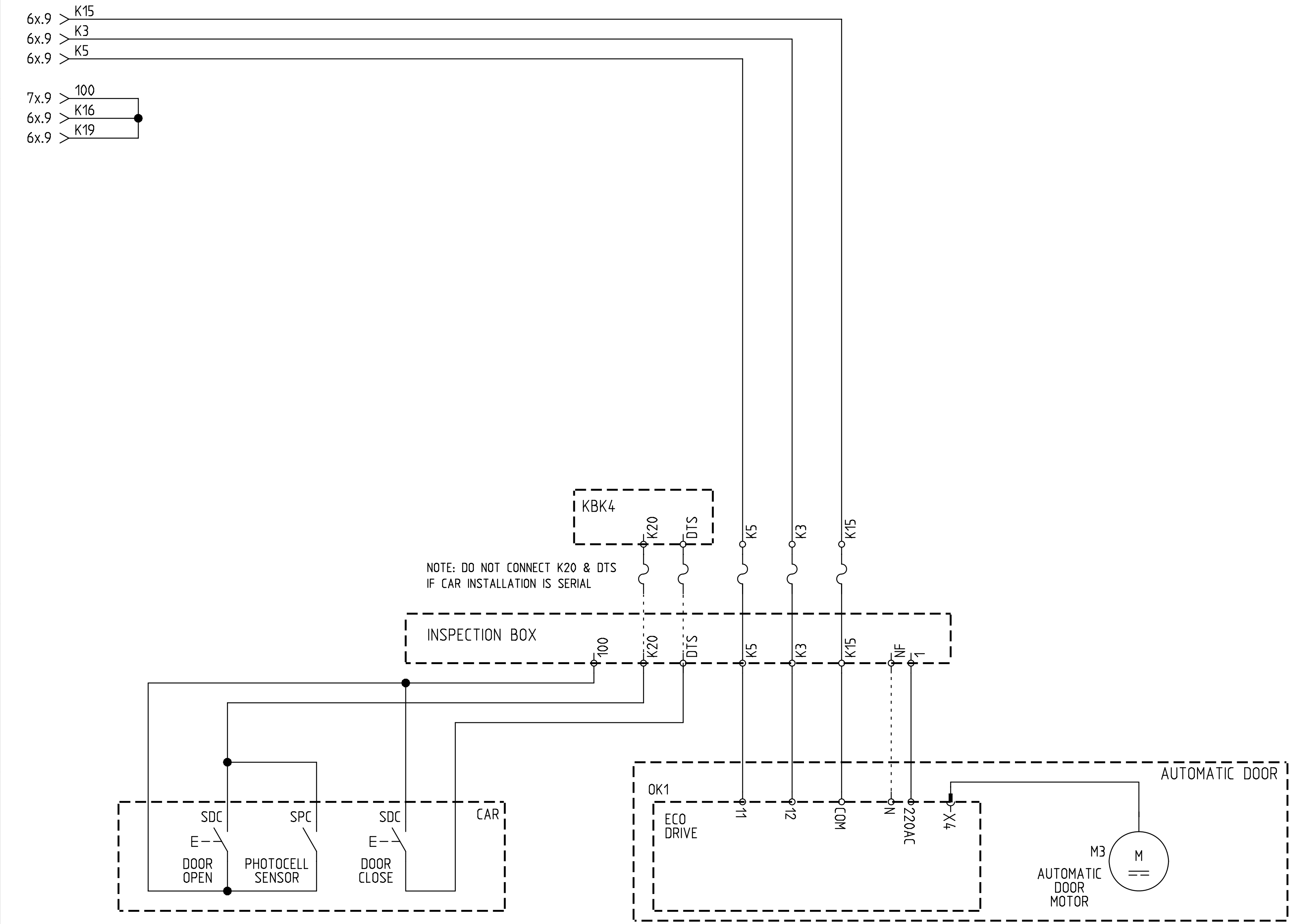
ARL-300 CONTROL PANEL

AUTOMATIC DOOR CONNECTION
DOOR TYPE : WITH SIEMENS AT25 CONTROLLER

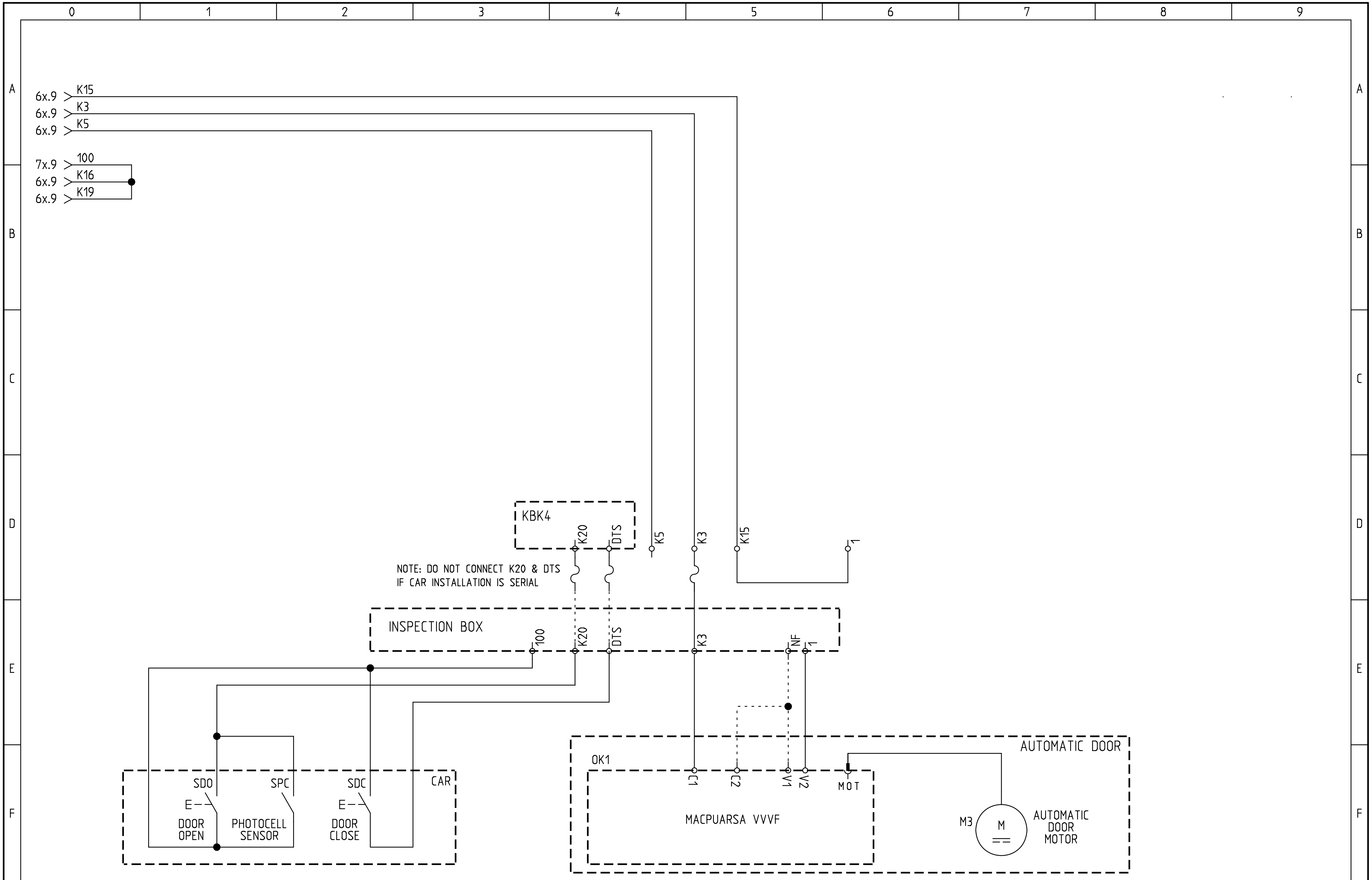
DRAWN BY: K.D.
CHECKED BY: C.A.
Rev. No:
Rev. Date:
Sheet: 12 A
Date: 27.04.2006



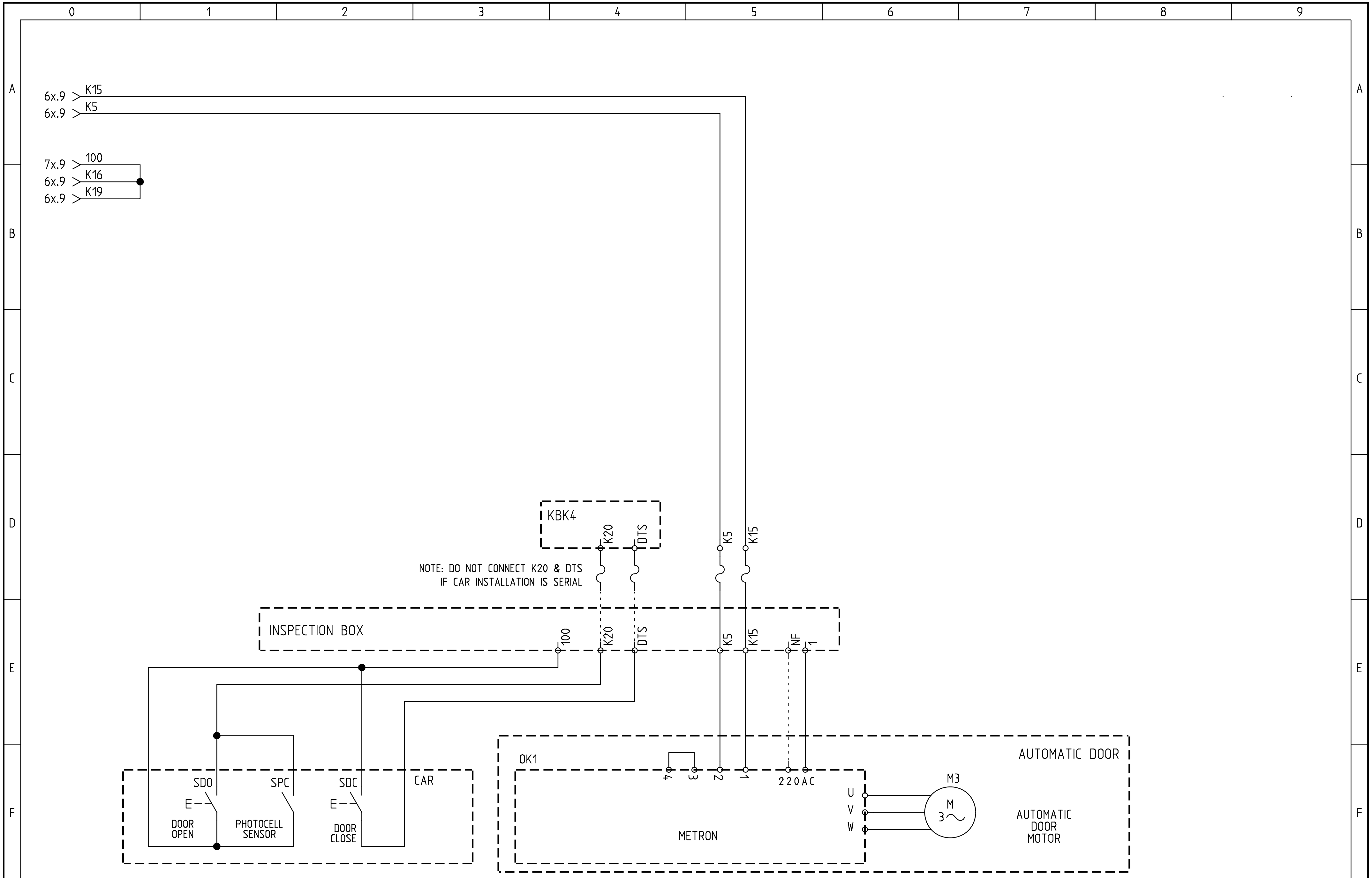
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : WITH SIEMENS AT18 CONTROLLER	DRAWN BY: K.D.	Rev. No:	Sheet: 12 G
			CHECKED BY: C.A.	Rev. Date:	Date: 24.12.2008



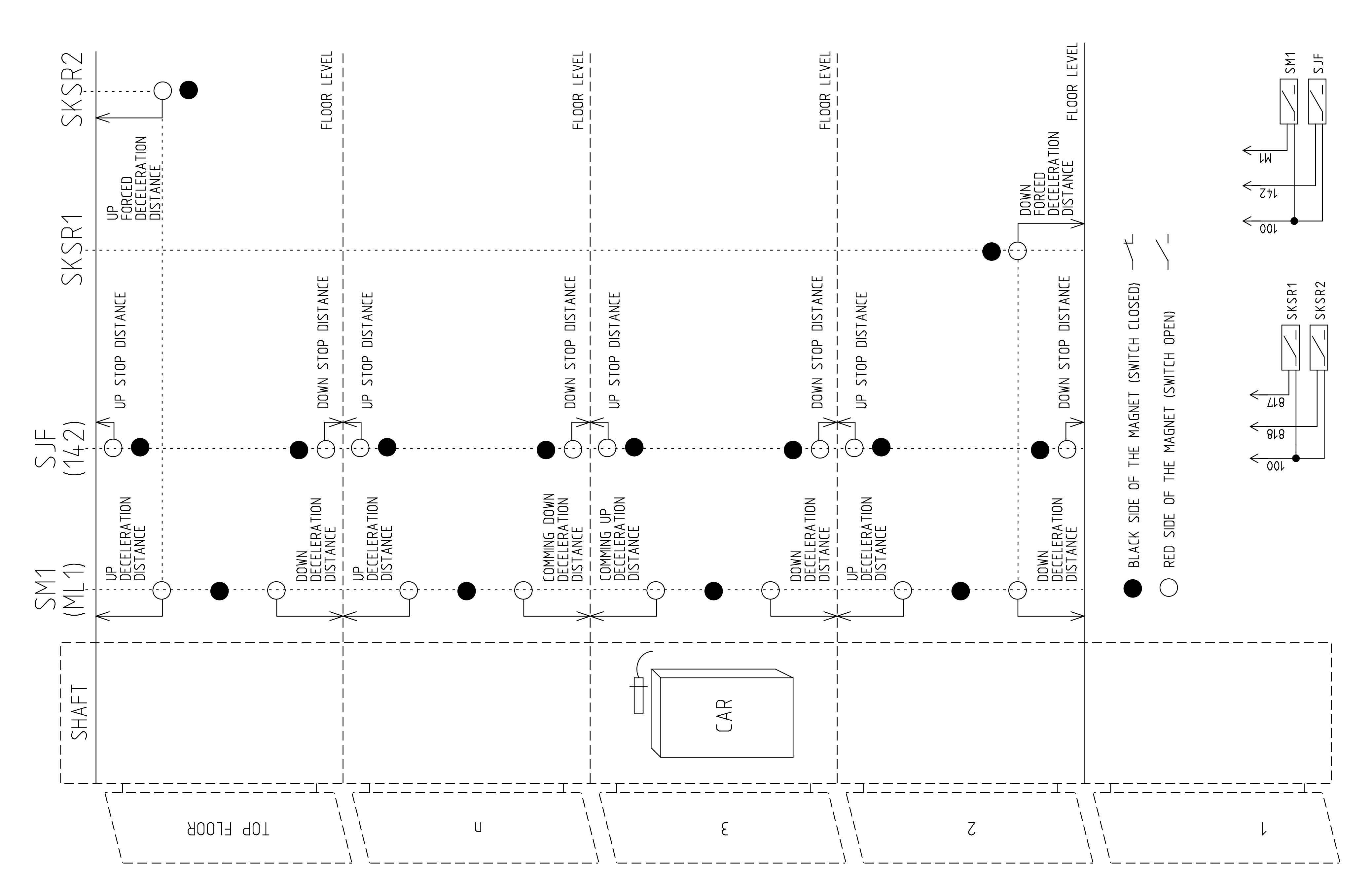
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : WITTUR HYDRA PLUS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 W
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : MACPUARSA VVVF	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 C Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : METRON	DRAWN BY: K.D.	Rev. No:	Sheet: 12 E
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



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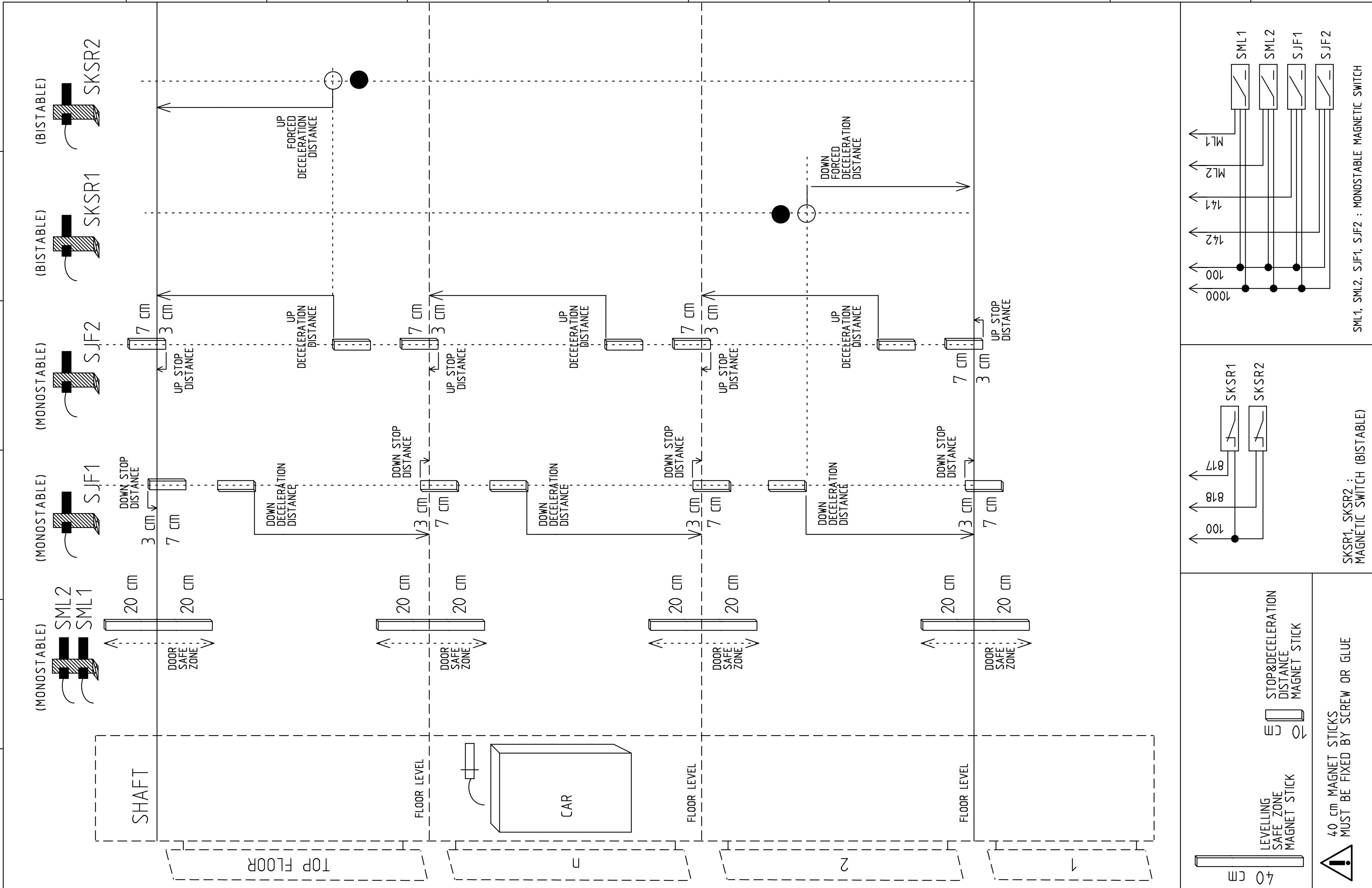
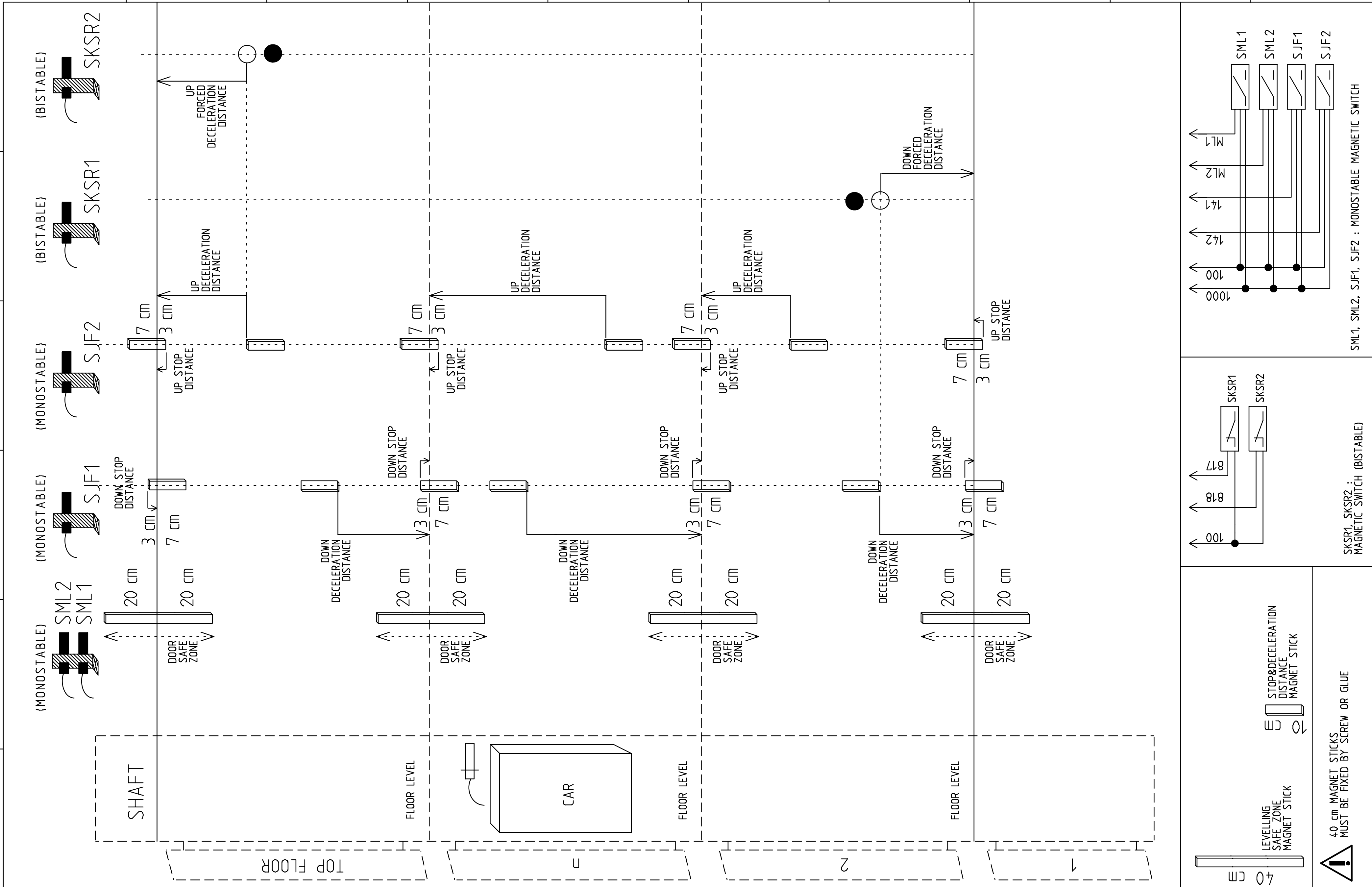
ARL-300 CONTROL PANEL

MAGNET CONFIGURATION
DRIVE TYPE : TWO SPEED

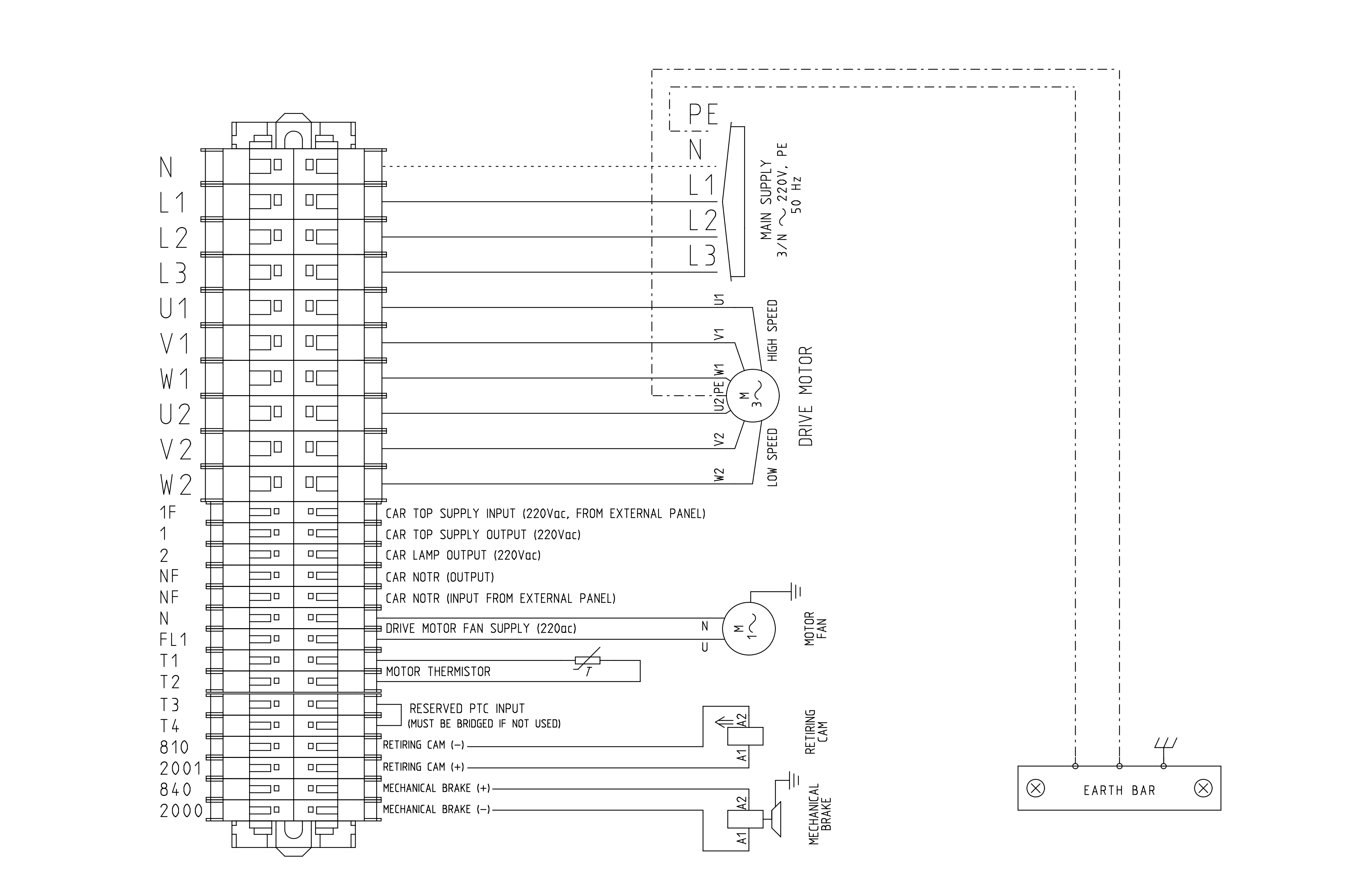
DRAWN BY: K.D.	Rev. No: V11	Sheet: 13 C
CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.06.2006



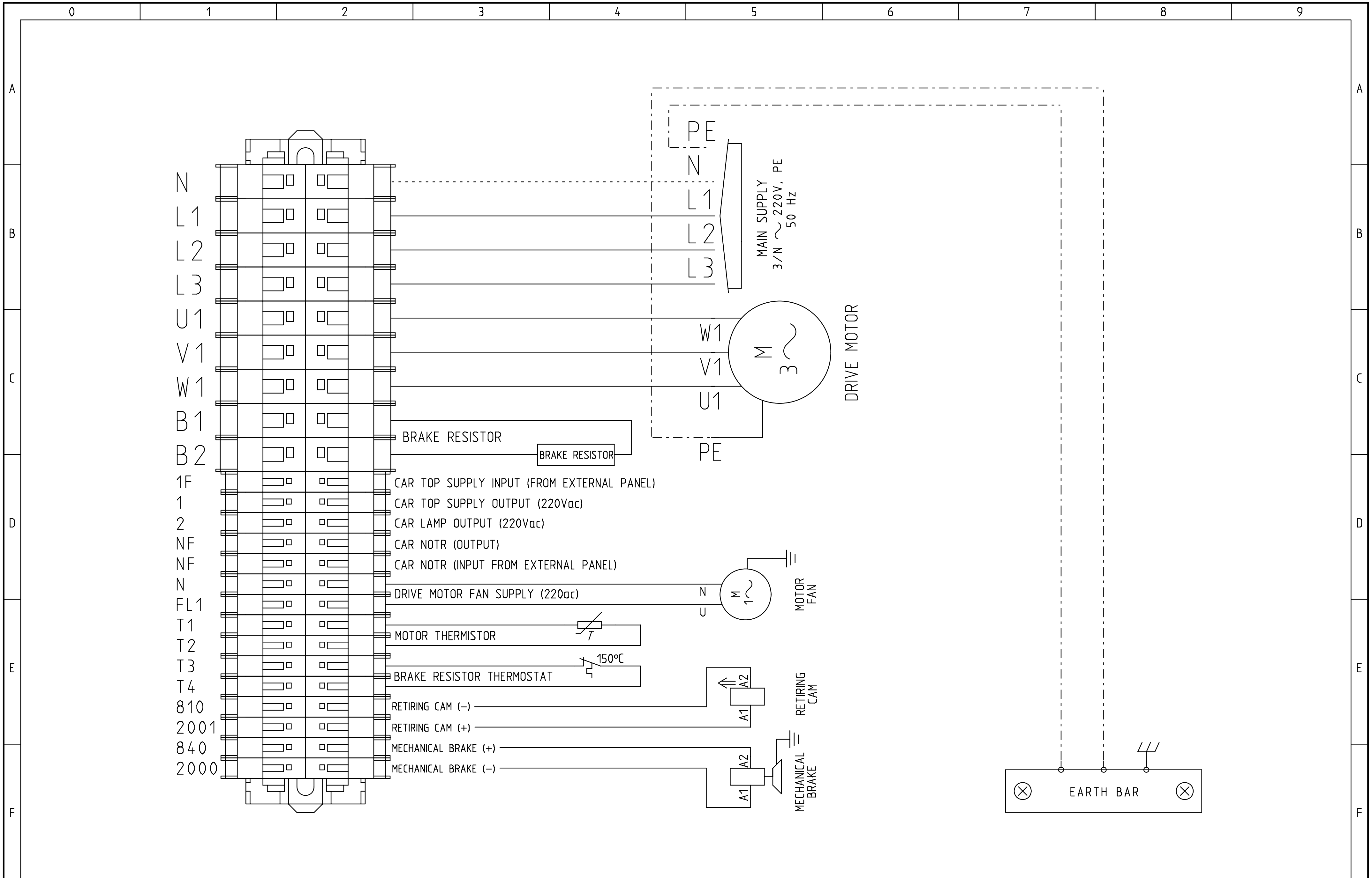
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MAGNET CONFIGURATION DRIVE TYPE : VVVF	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 13 V Date: 01.12.2006



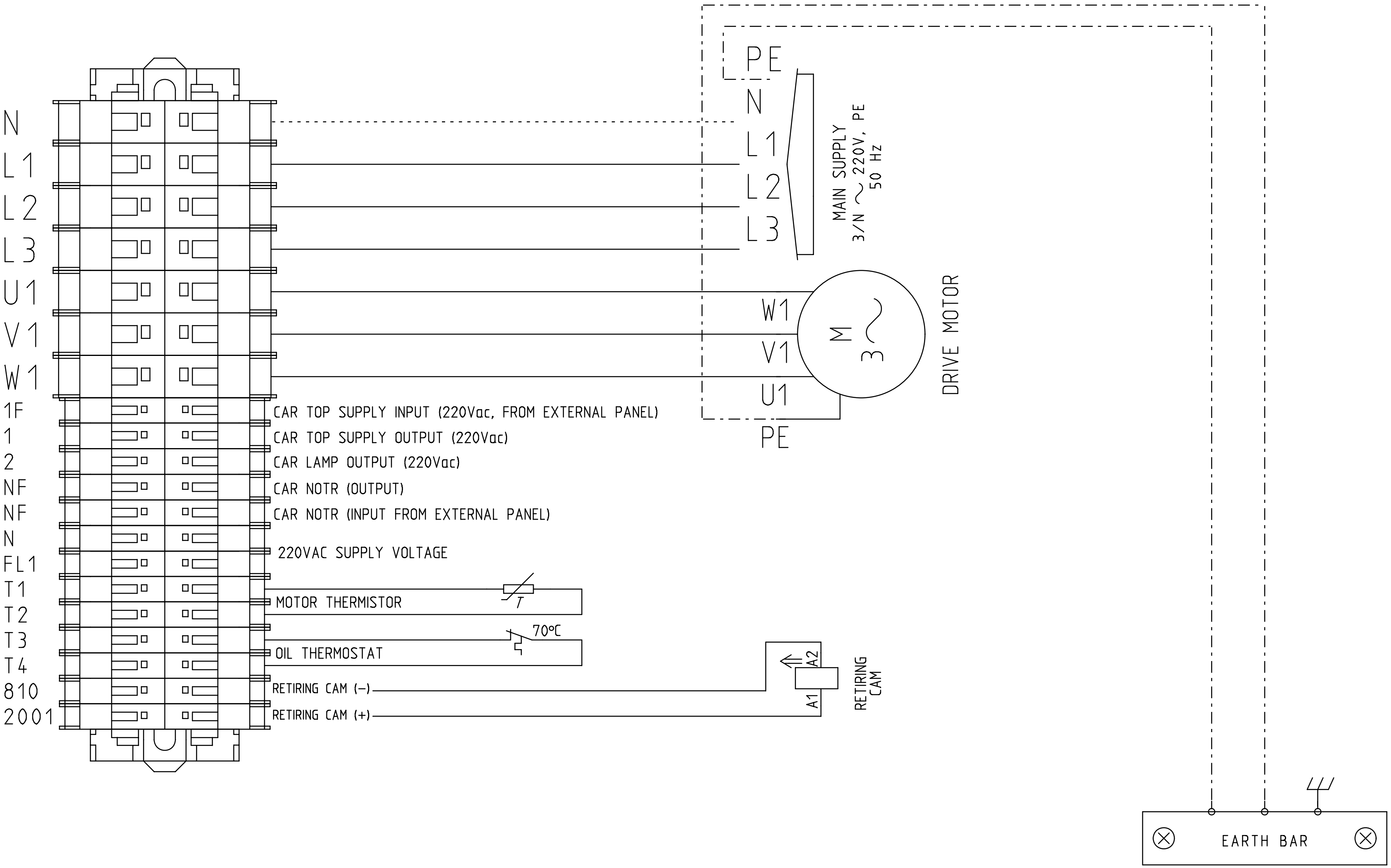
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MAGNET CONFIGURATION LIFT TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No: V11	Sheet: 13 H
			CHECKED BY: C.A.	Rev. Date: 13.01.2010	Date: 01.06.2006



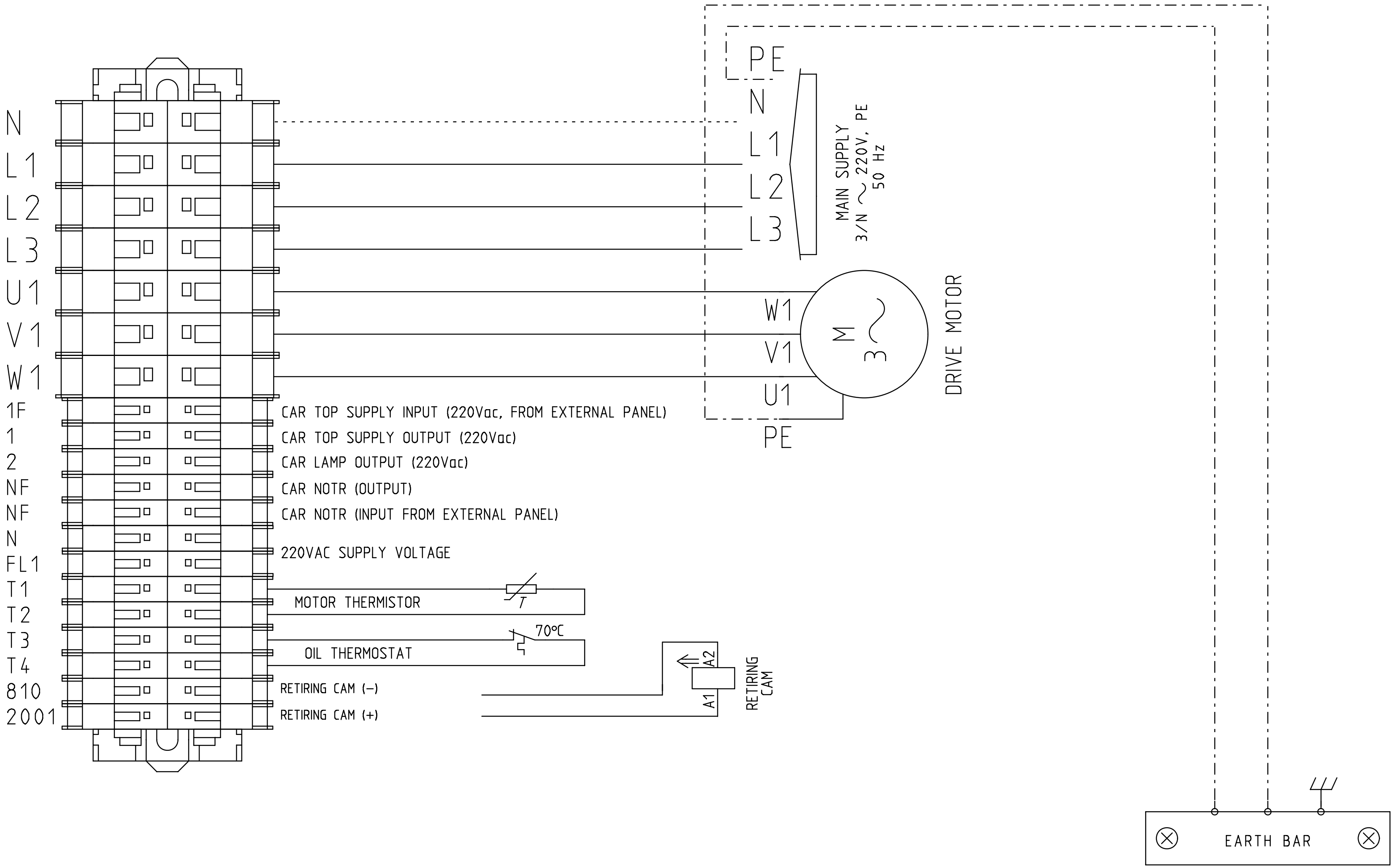
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : TWO SPEED MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D.	Rev. No:	Sheet: EK–K1
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



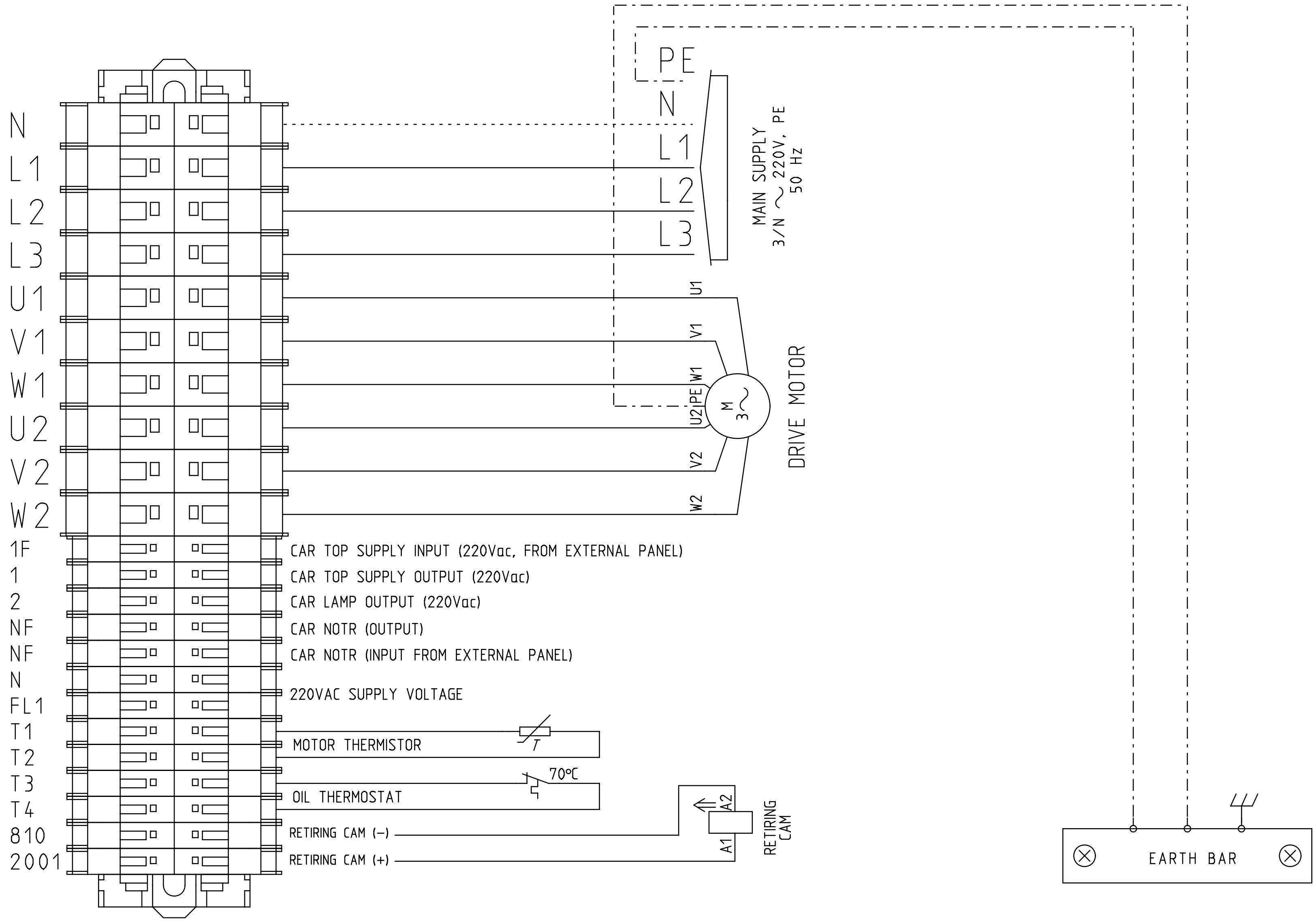
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : VVVF MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D.	Rev. No:	Sheet: EK–K1
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



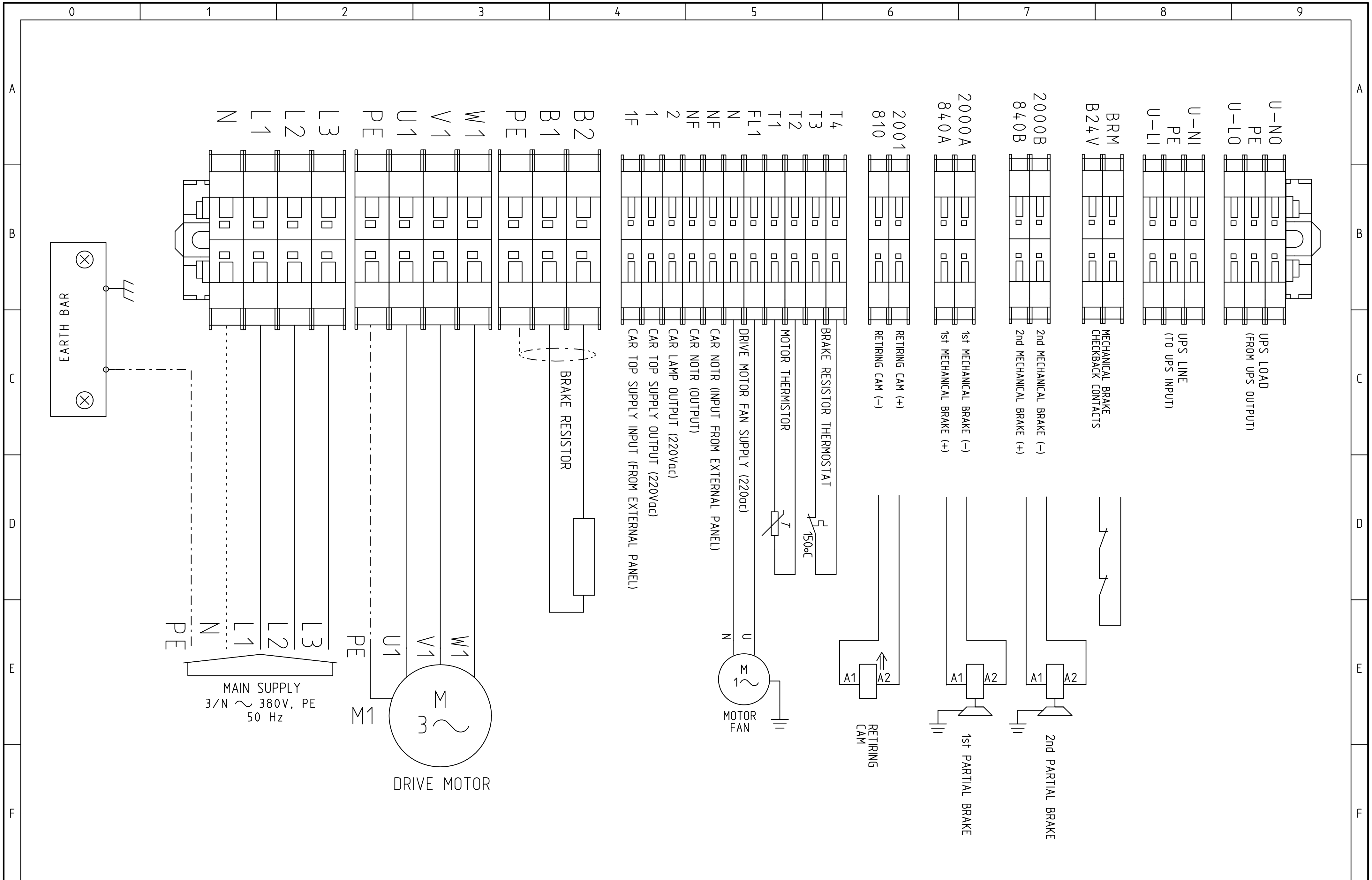
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : HYDRAULIC / STARTUP TYPE : DIRECT MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK–K1 Date: 01.06.2006



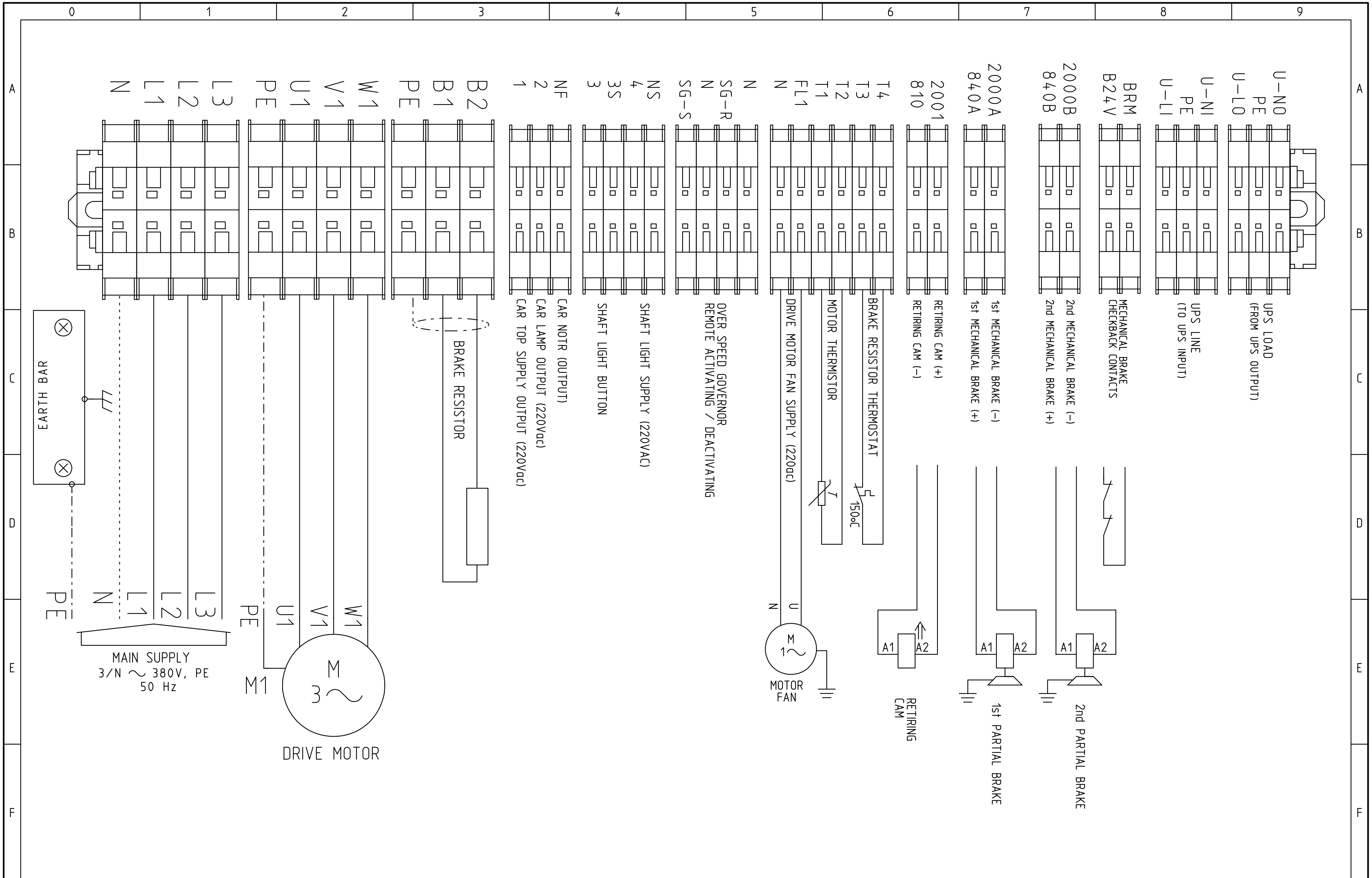
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : HYDRAULIC / STARTUP TYPE : SOFT START MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K1 Date: 01.06.2006



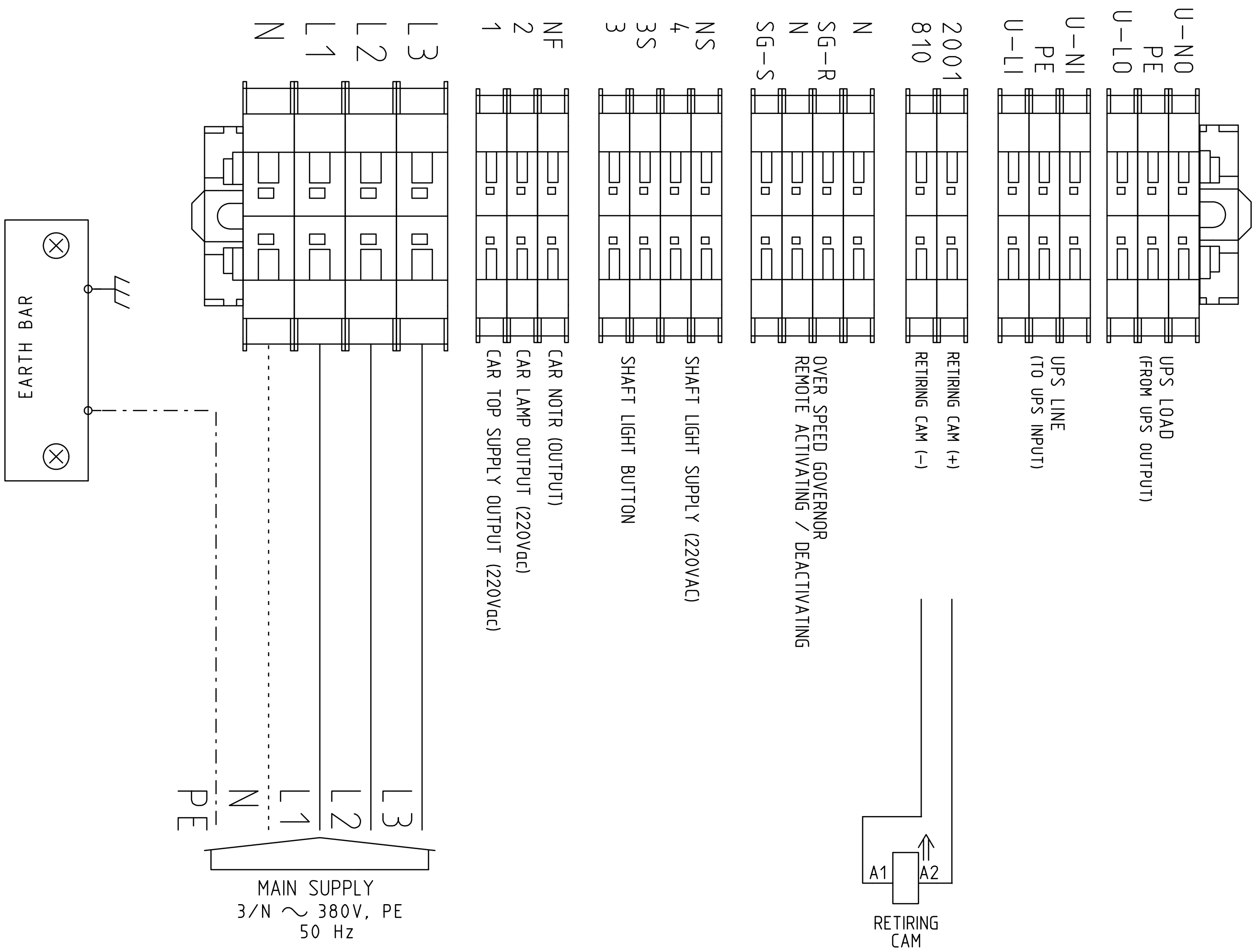
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : HYDRAULIC / STARTUP TYPE : STAR-DELTA MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K1
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : VVVF MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K1 Date: 10.03.2009

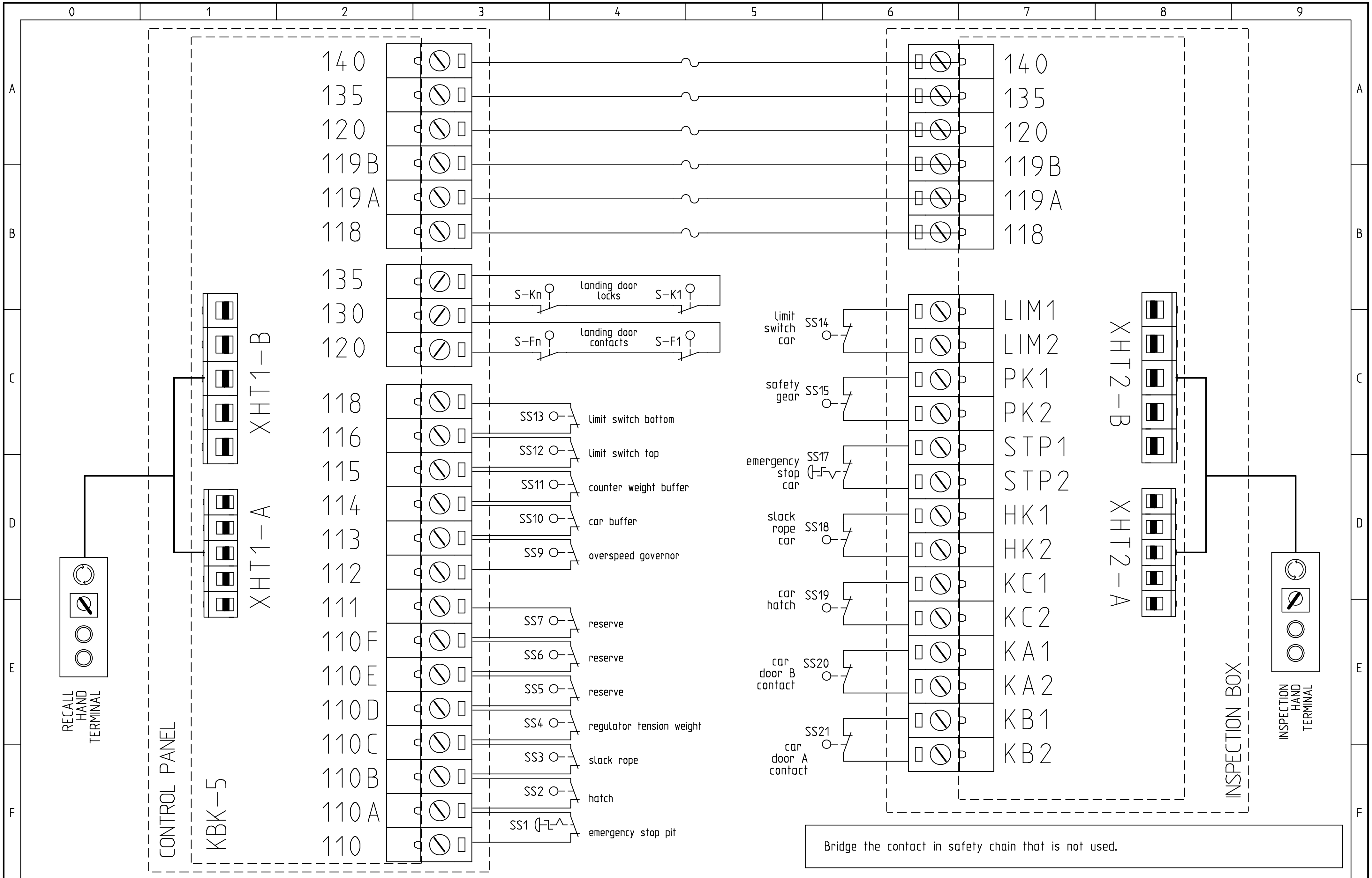


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : VVVF MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK–K1 Date: 19.06.2009

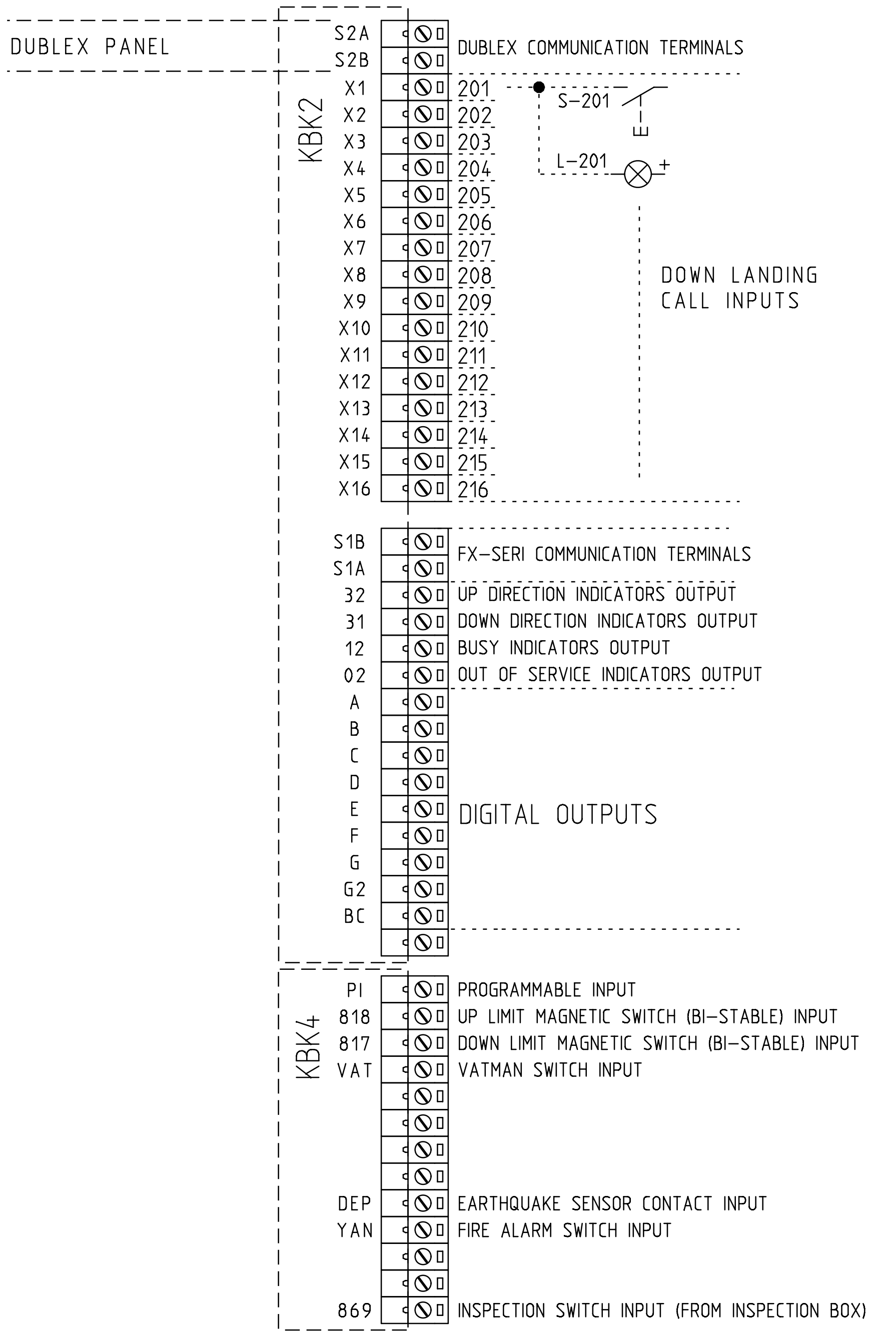


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION DRIVE TYPE : VVVF MAIN SUPPLY & MOTOR & MECHANICAL BRAKE & RETIRING CAM	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 12.05.2010

Sheet:	EK-K1
Date:	19.06.2009

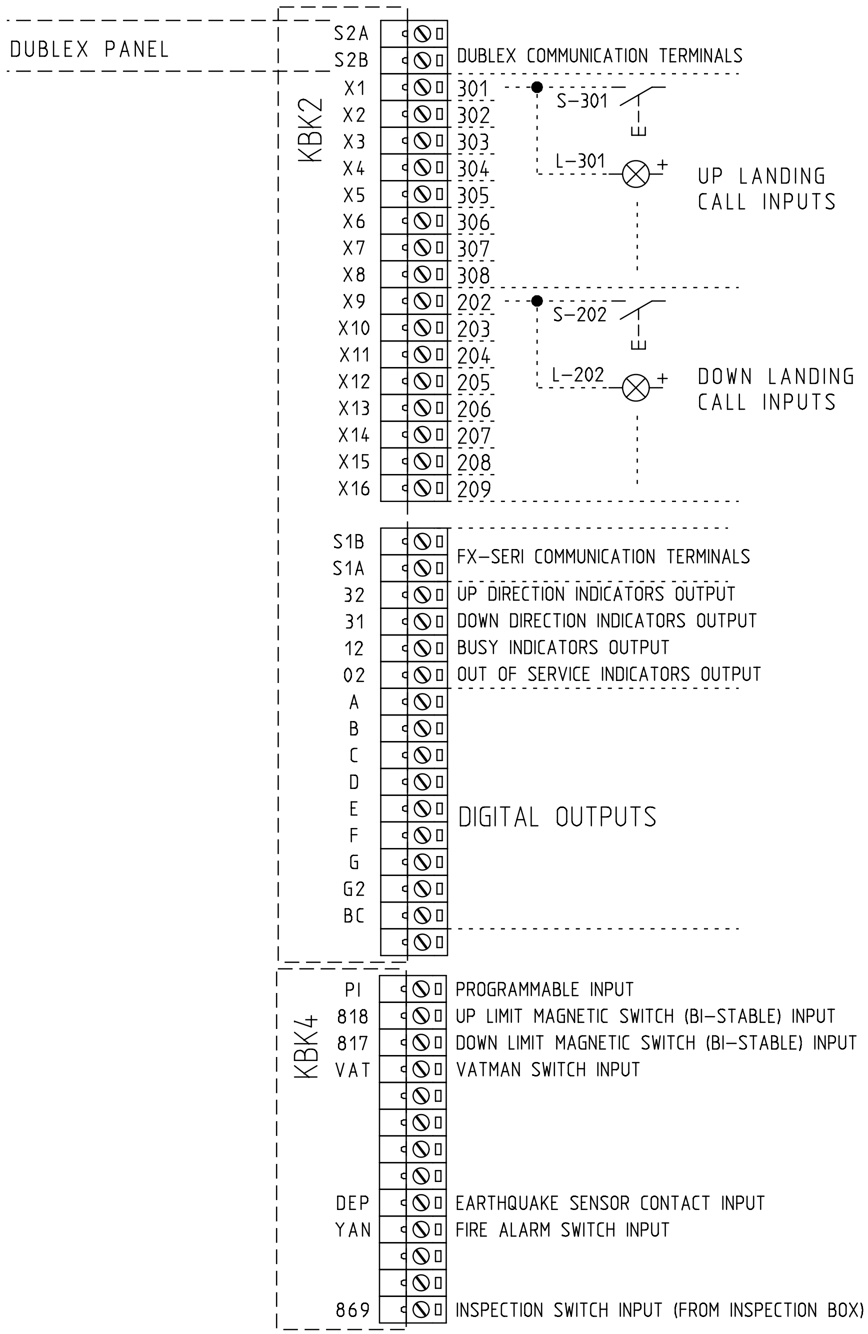


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION SAFETY CIRCUIT	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K2
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



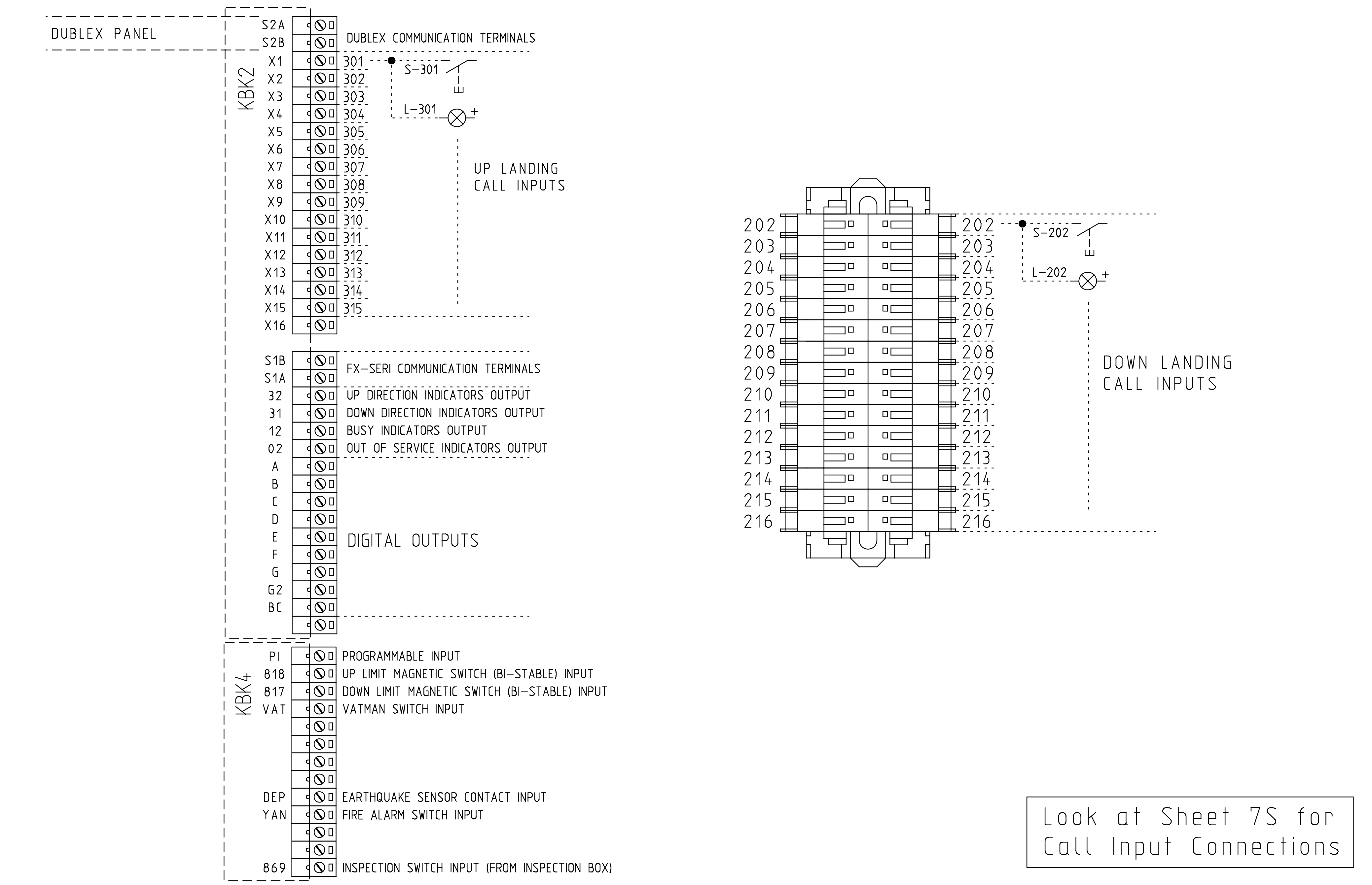
Look at Sheet 7S for
Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : SERIAL COMMAND TYPE : DOWN COLLECTIVE CALL INPUTS & CAR & FLOOR TERMINALS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K3 Date: 01.06.2006



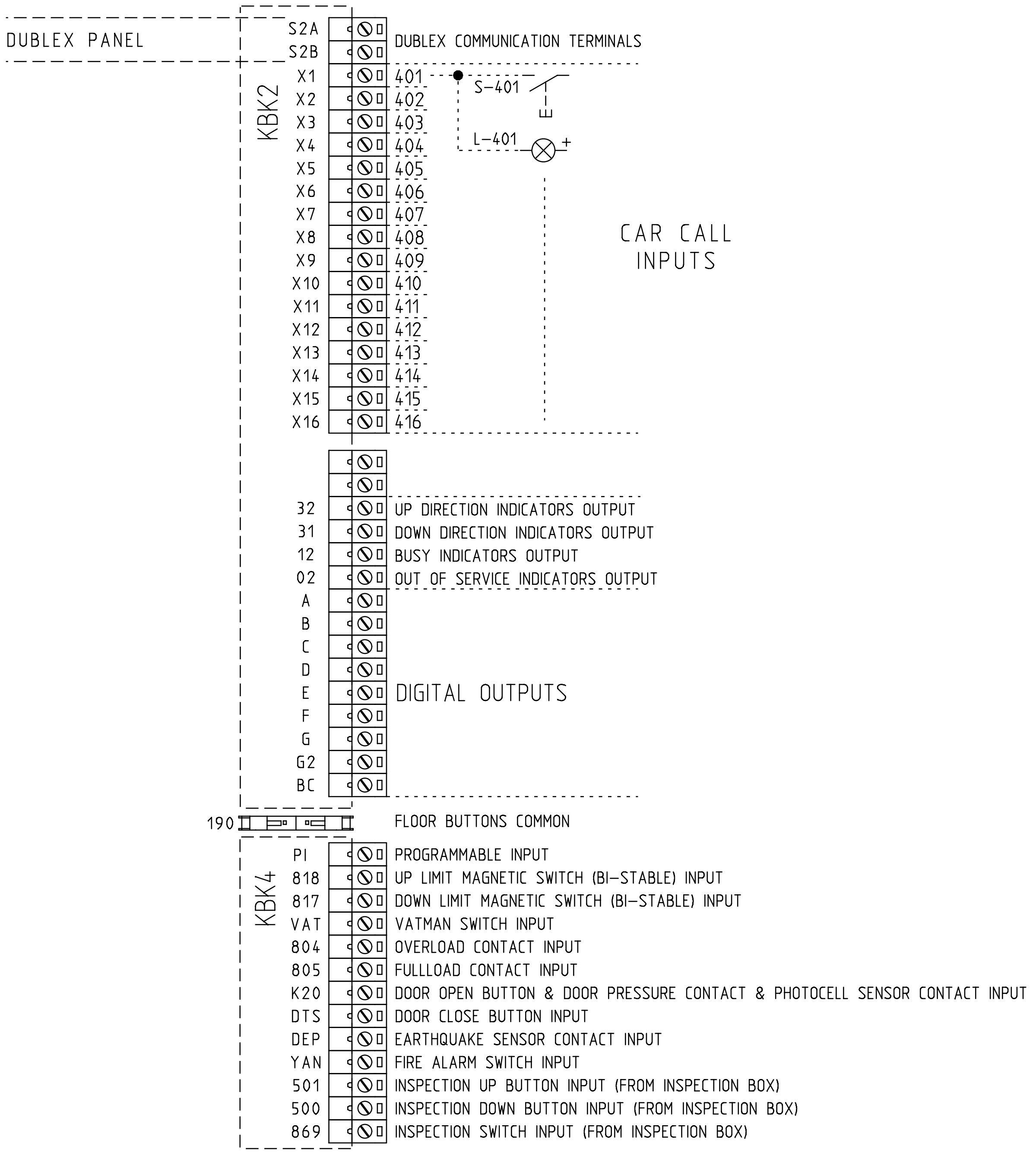
Look at Sheet 7S for
Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : SERIAL COMMAND TYPE : FULL COLLECTIVE (2-9 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K3
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



Look at Sheet 7S for
Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : SERIAL COMMAND TYPE : FULL COLLECTIVE (10-16 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K3
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



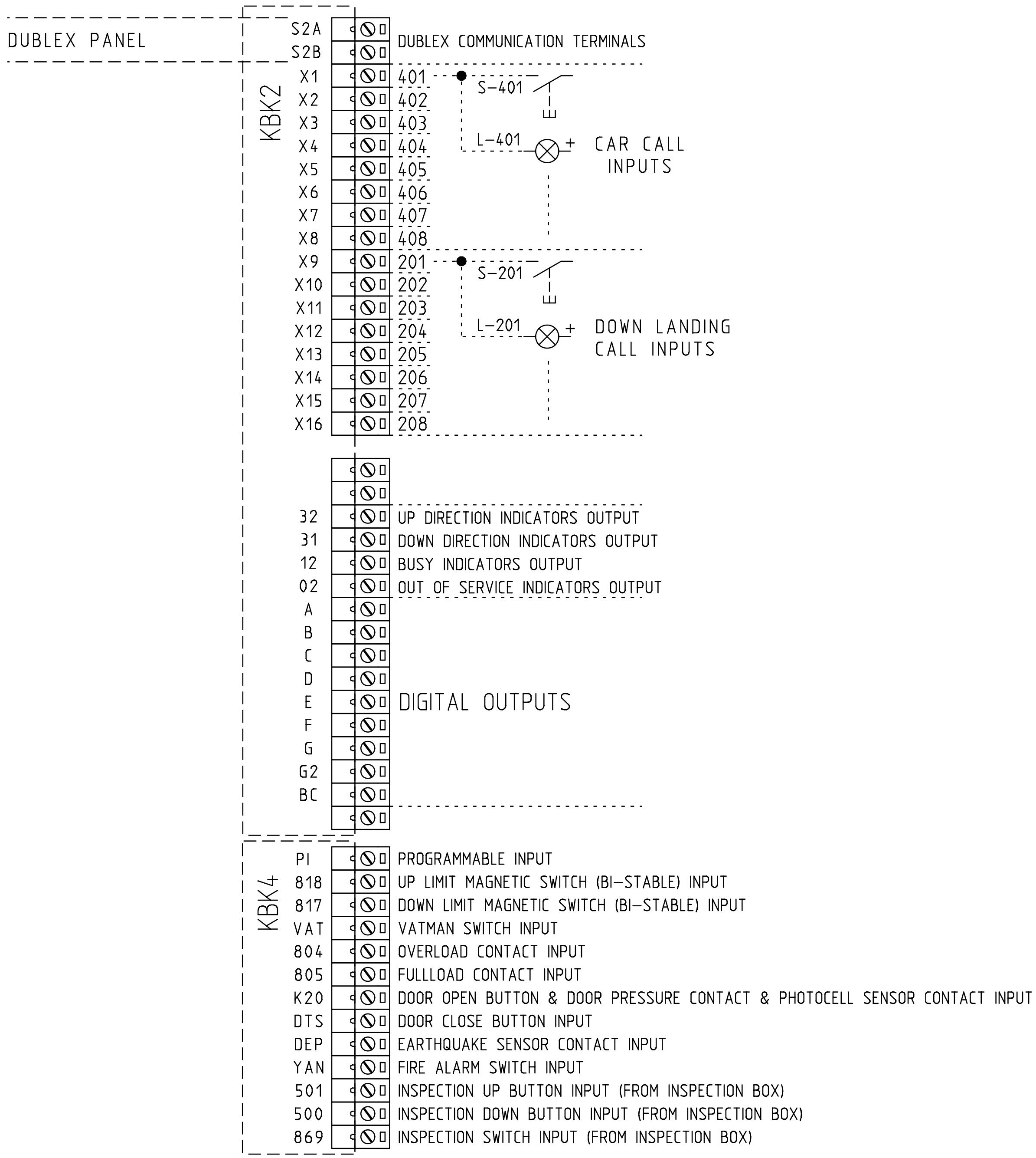
Look at Sheet 7P for Call Input Connections

ARKEL
www.arkel.com.tr
(+90 216) 540 03 10

ARL-300 CONTROL PANEL

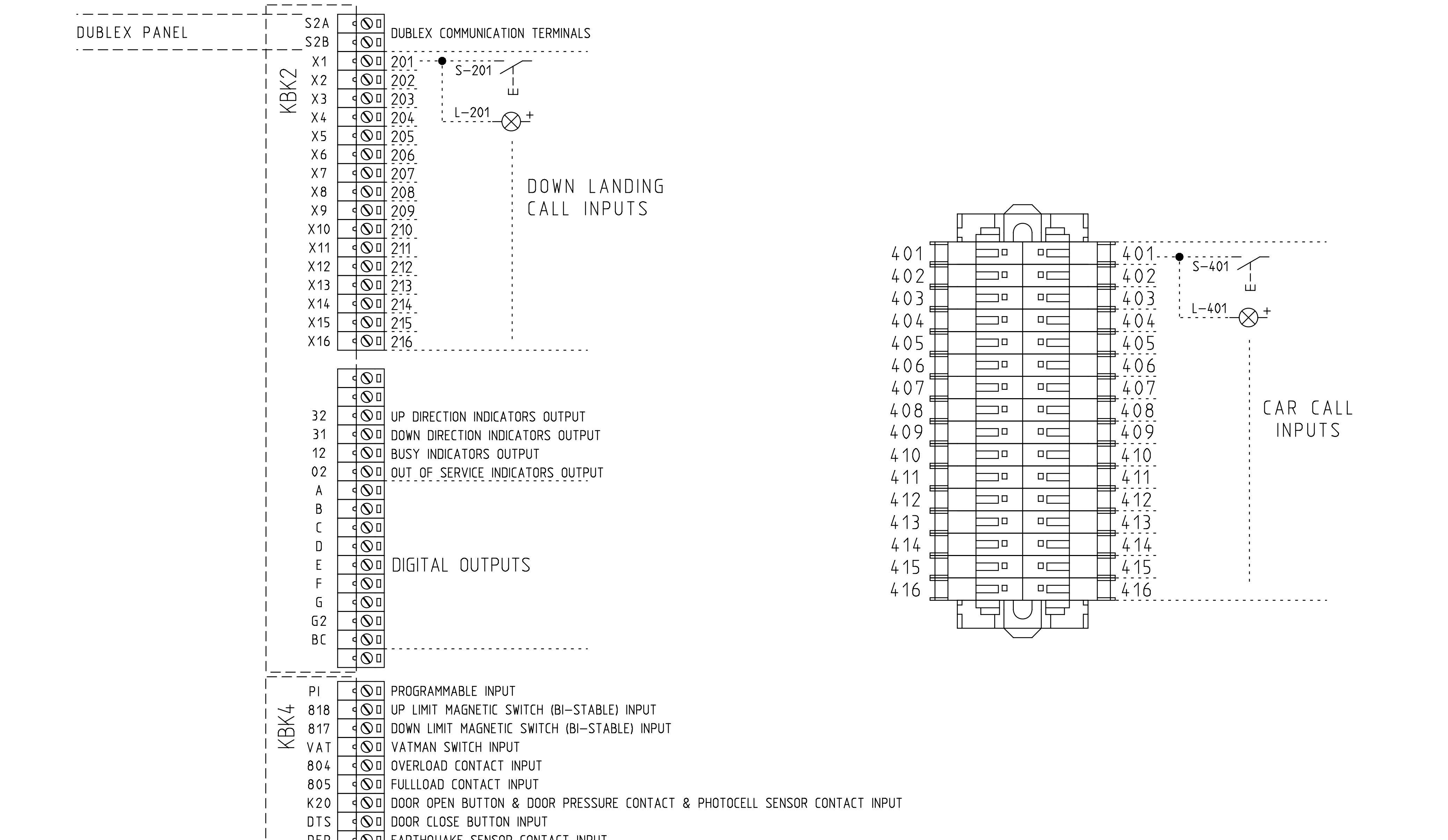
PANEL TERMINAL CONNECTION / PARALLEL
COMMAND TYPE : PARALLEL COMMAND
CALL INPUTS & CAR & FLOOR TERMINALS

DRAWN BY: K.D.	Rev. No: V11	Sheet: EK-K3
CHECKED BY: C.A.	Rev. Date: 01.06.2009	Date: 01.06.2006



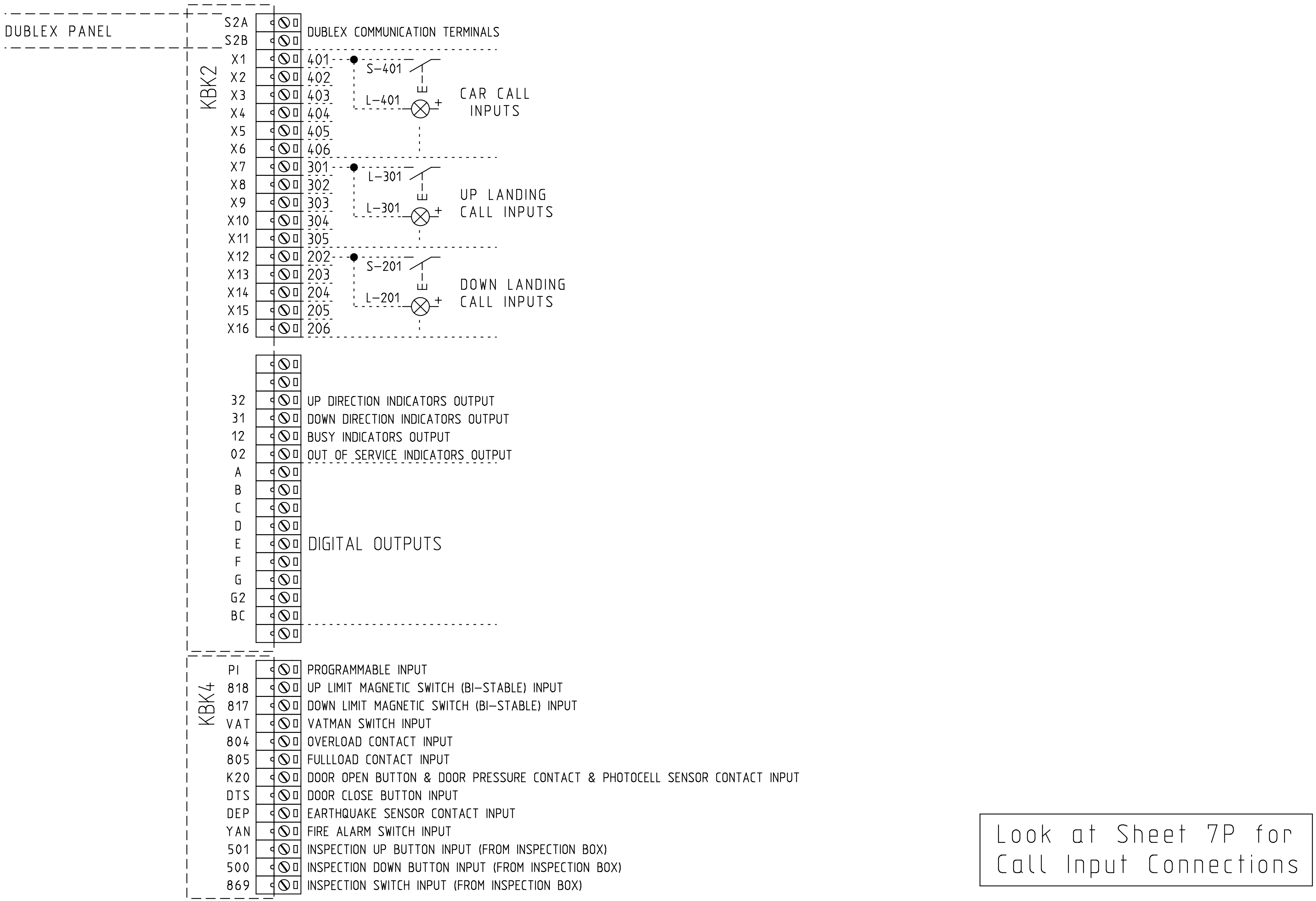
Look at Sheet 7P for
Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : PARALLEL COMMAND TYPE : DOWN COLLECTIVE (2-8 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K3 Date: 01.06.2006

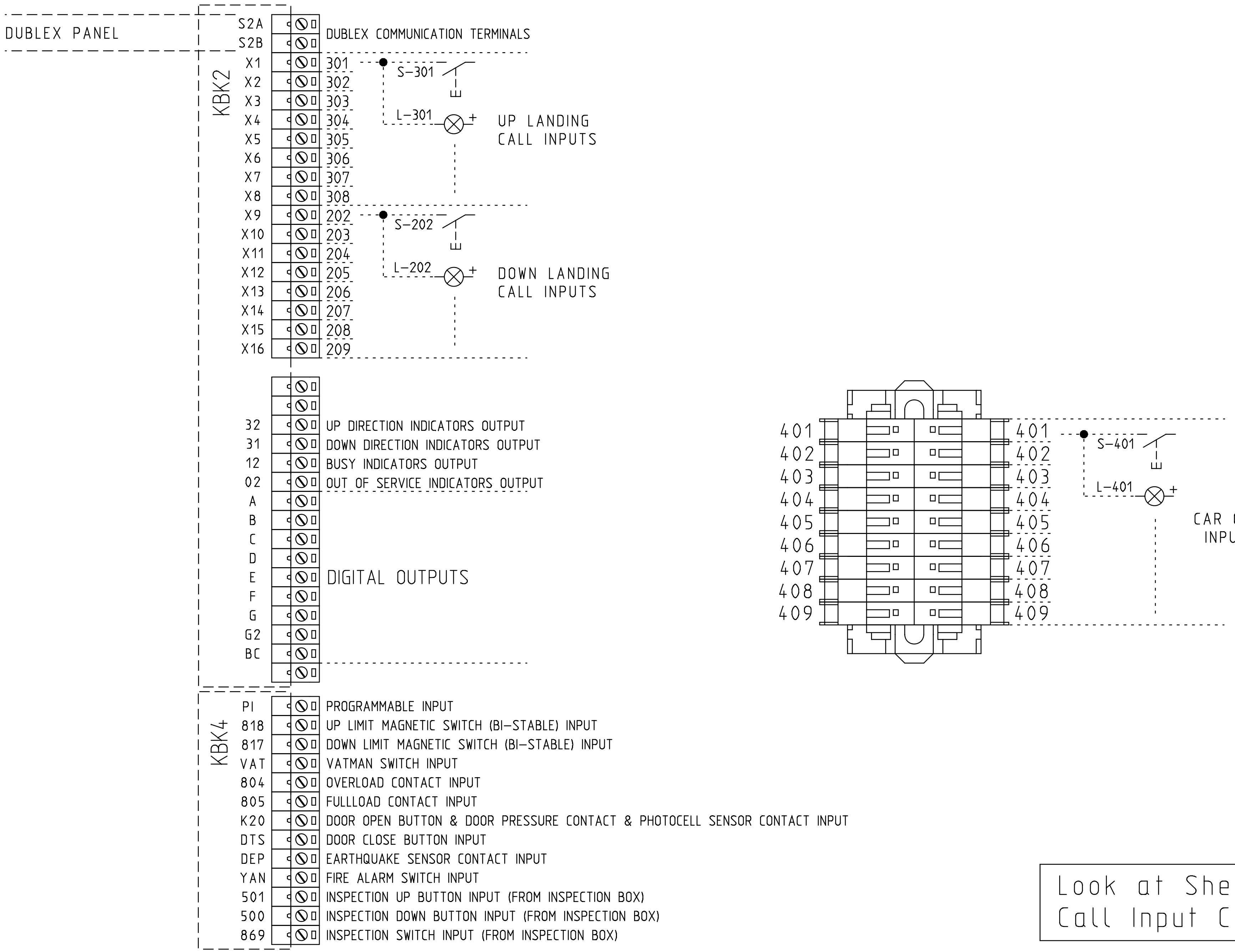


Look at Sheet 7P for Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : PARALLEL COMMAND TYPE : DOWN COLLECTIVE (9-16 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: EK-K3 Tarih: 01.06.2006

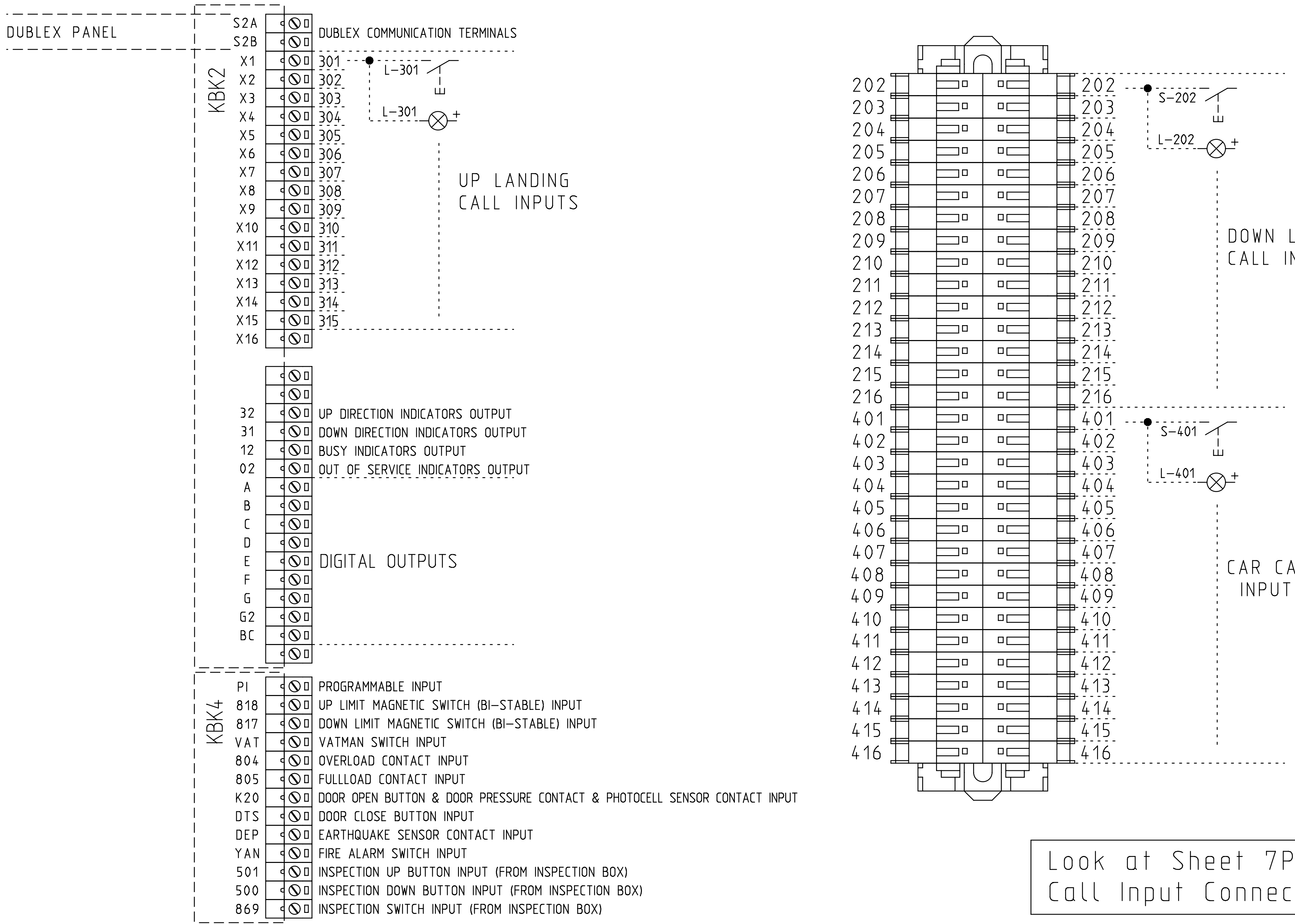


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : PARALLEL COMMAND TYPE : FULL COLLECTIVE (2-6 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: EK-K3 Tarih: 01.06.2006



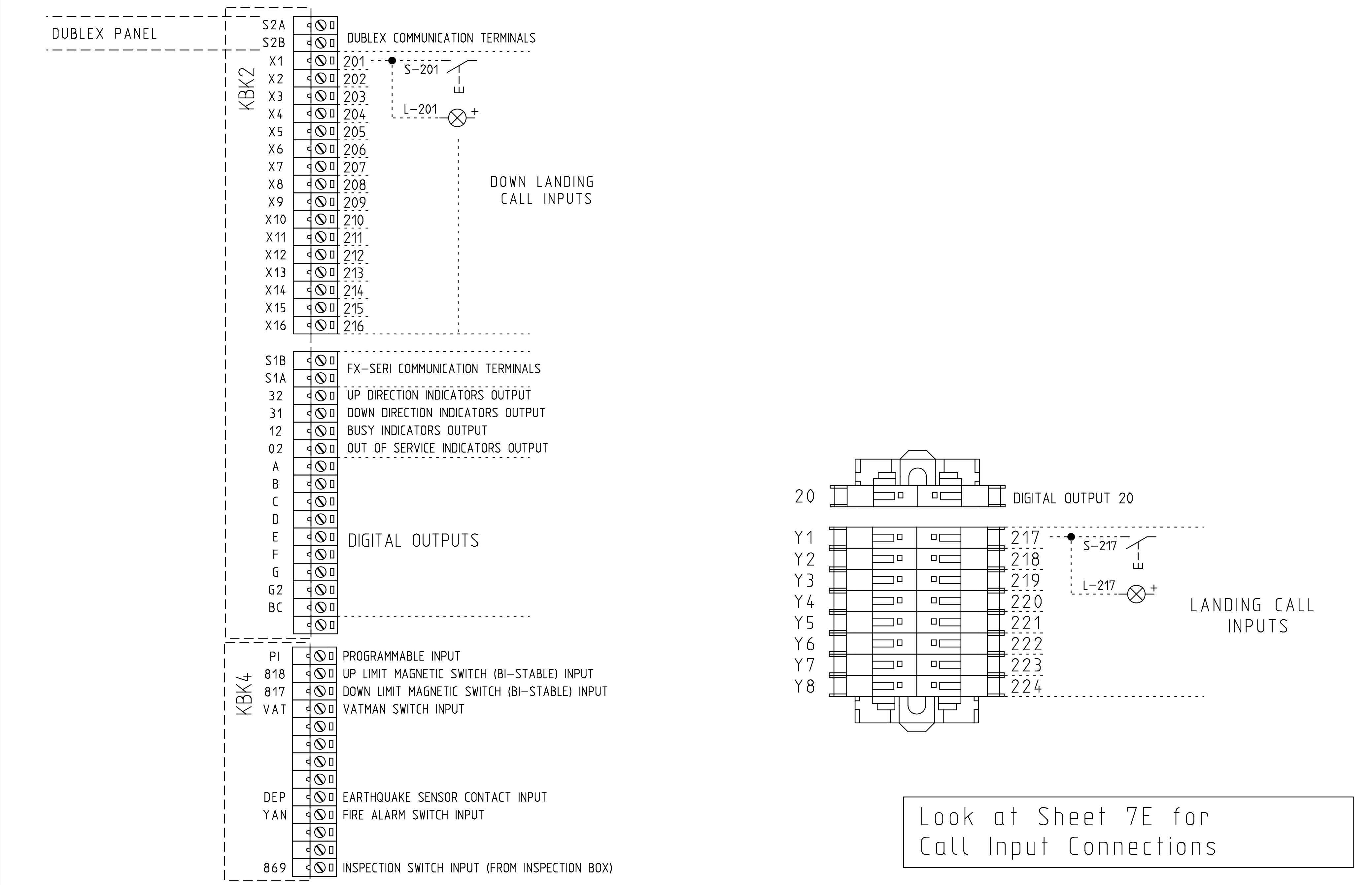
Look at Sheet 7P for
Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : PARALLEL COMMAND TYPE : FULL COLLECTIVE (7-9 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	CIZIM: K.D.	Rev. No:	Sayfa: EK-K3
			ONAY: C.A.	Rev. Tarih:	Tarih: 01.06.2006

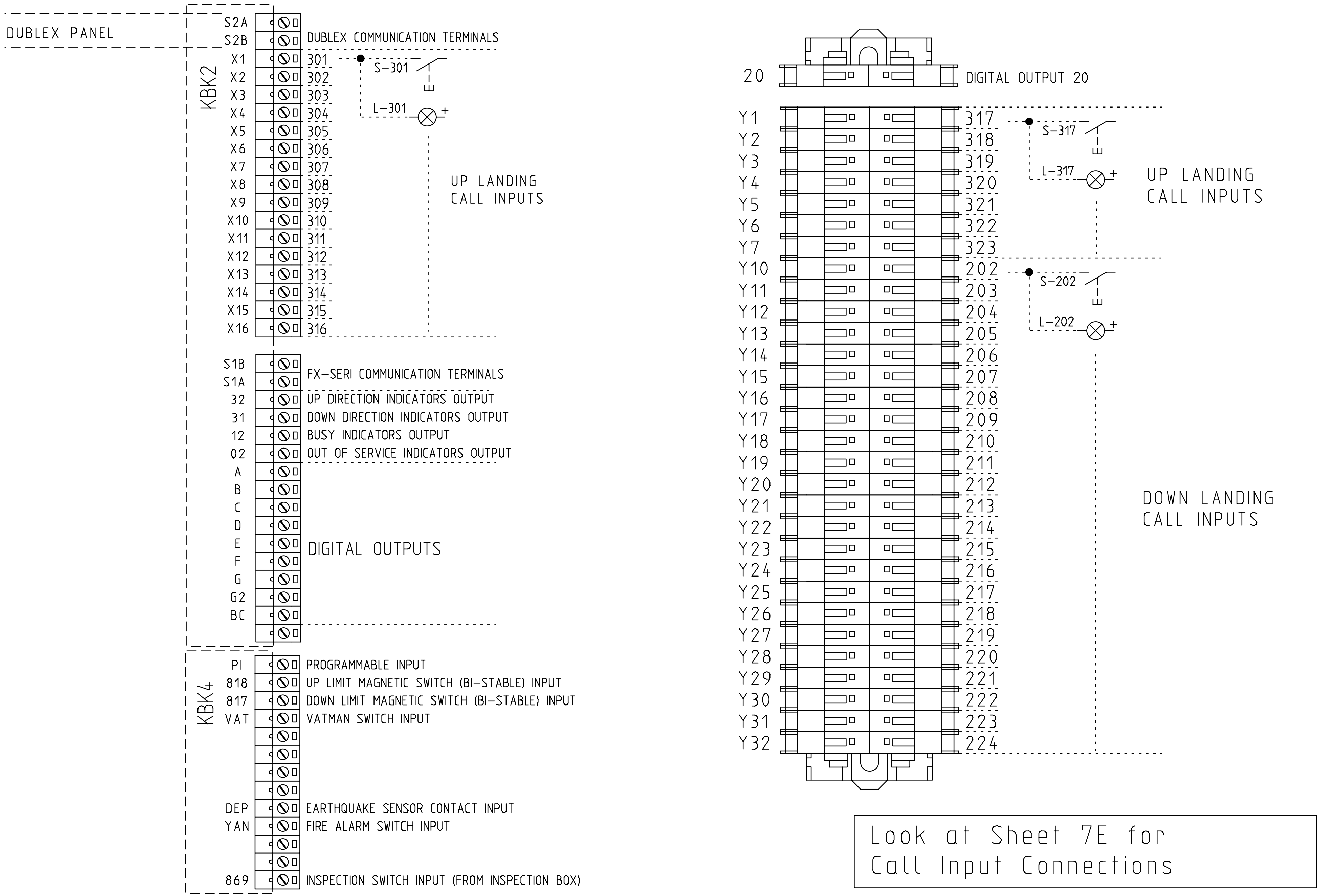


Look at Sheet 7P for
Call Input Connections

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION / CAR INSTALLATION : PARALLEL COMMAND TYPE : FULL COLLECTIVE (10-16 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: EK-K3 Tarih: 01.06.2006

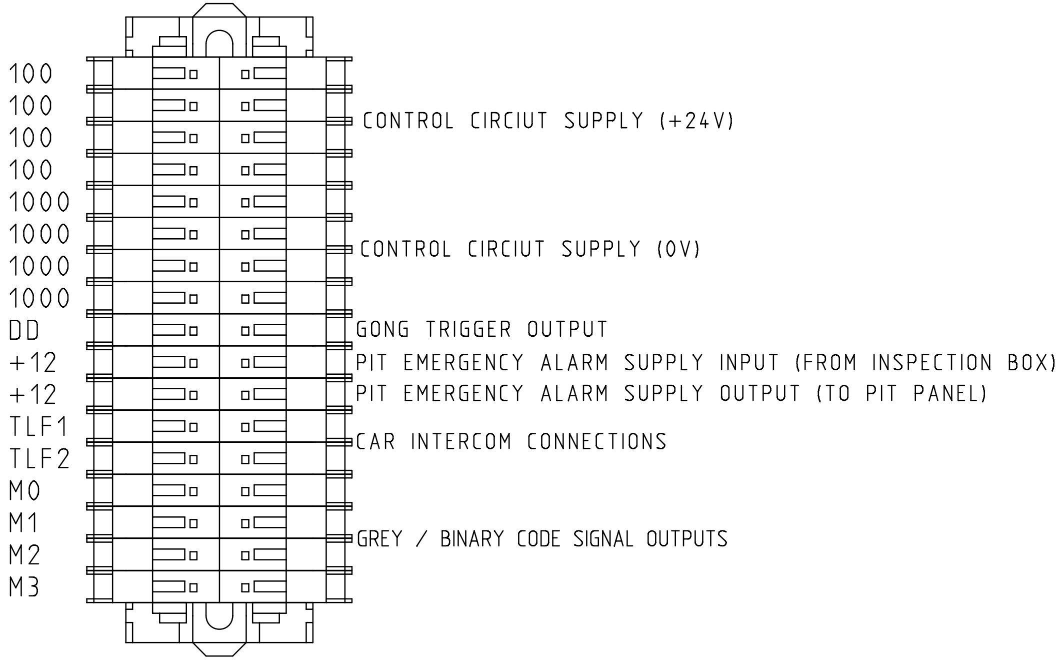


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION COMMAND TYPE : DOWN COLLECTIVE (17-24 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 11.02.2009
				Sheet: EK-K3 Date: 01.06.2006

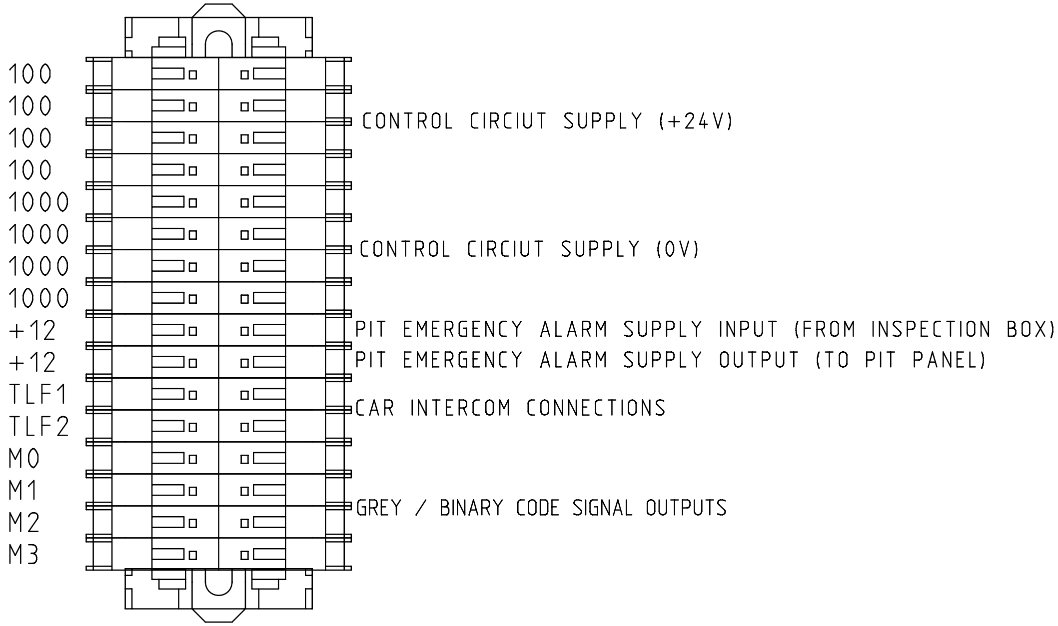


Look at Sheet 7E for
Call Input Connections

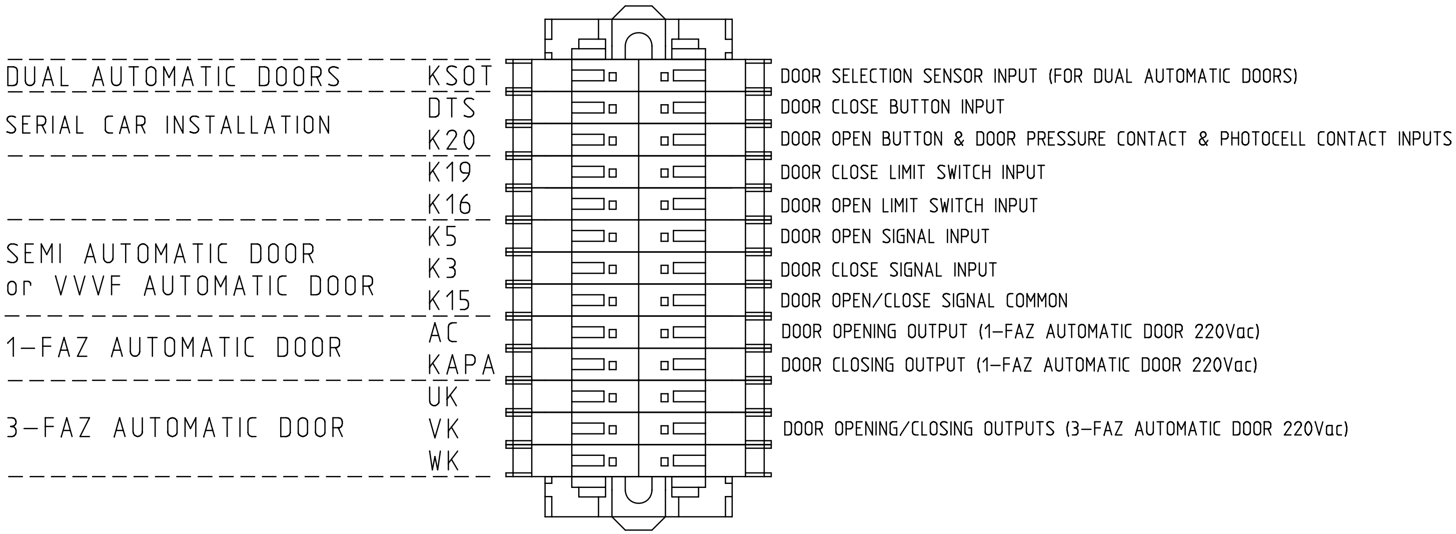
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION COMMAND TYPE : FULL COLLECTIVE (17-24 FLOORS) CALL INPUTS & CAR & FLOOR TERMINALS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 11.02.2009	Sheet: EK-K3 Date: 01.06.2006



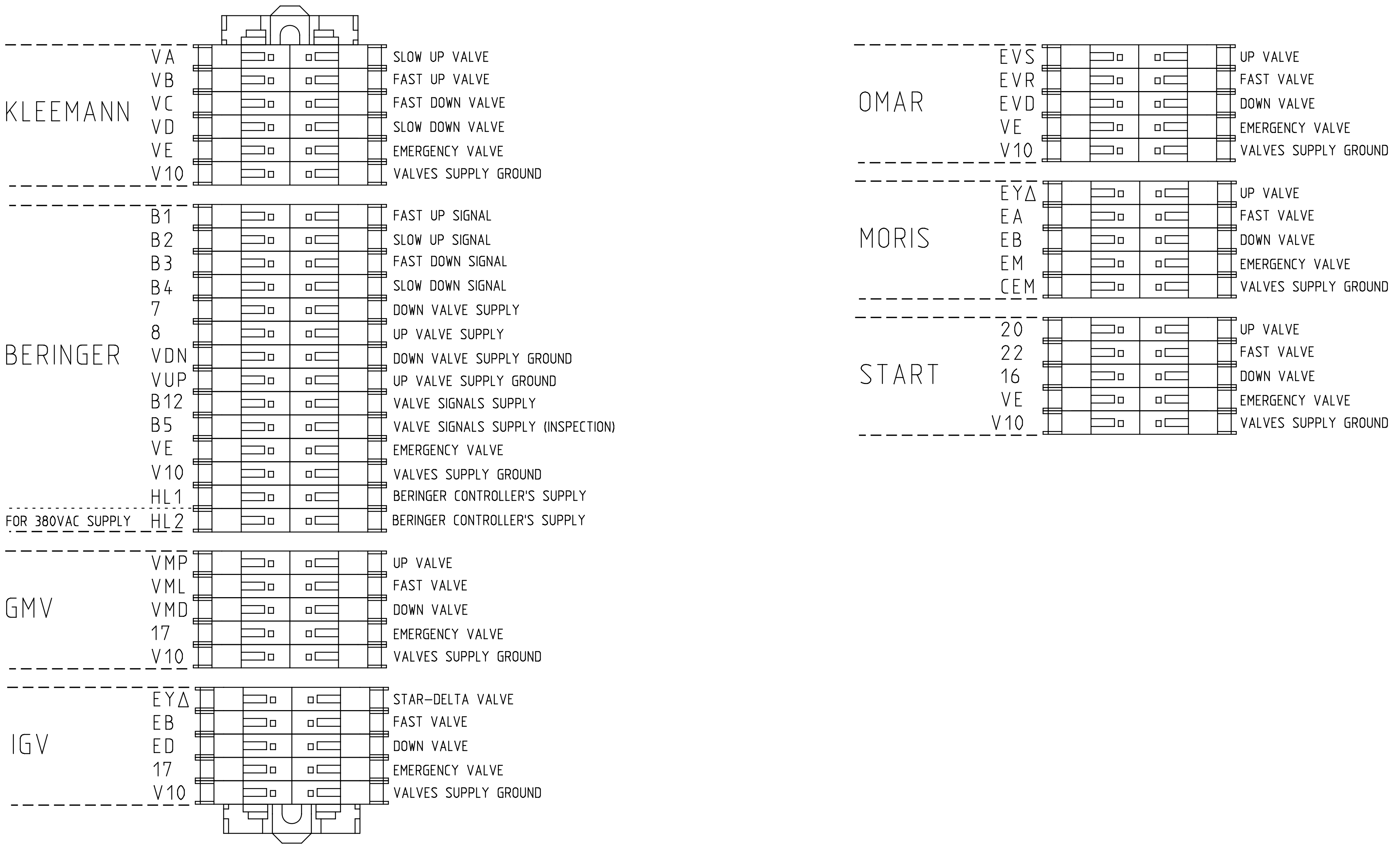
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATIONI : PARALLEL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K4 Date: 01.06.2006



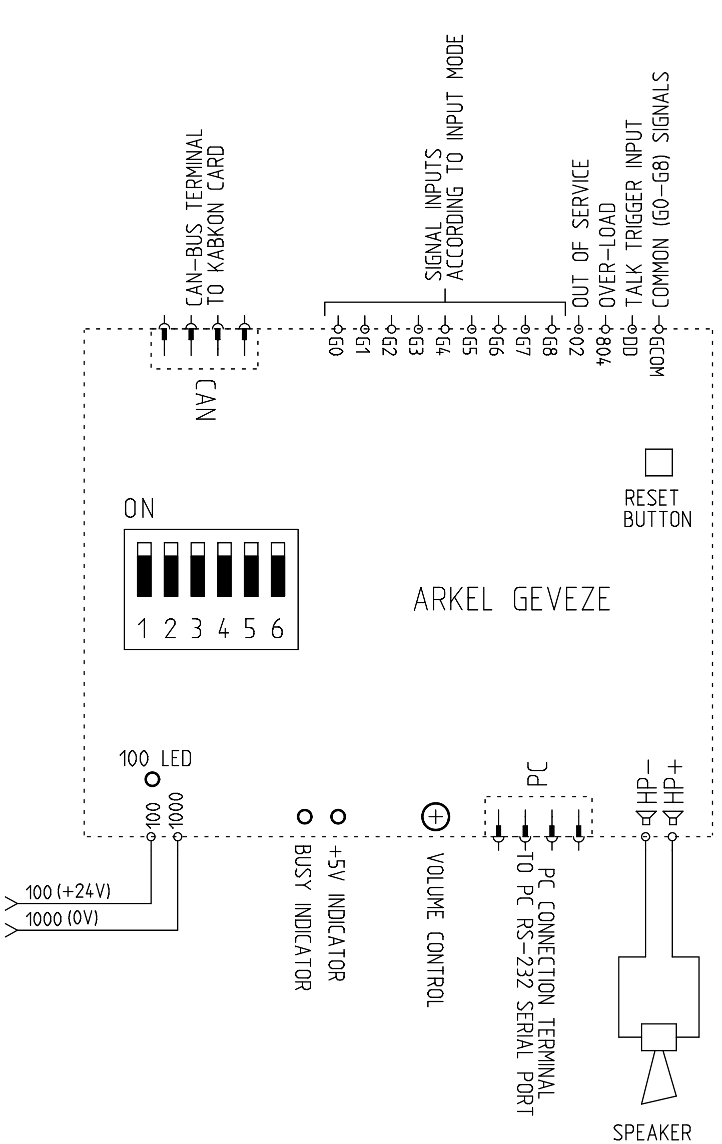
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATIONI : SERIAL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K4
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006

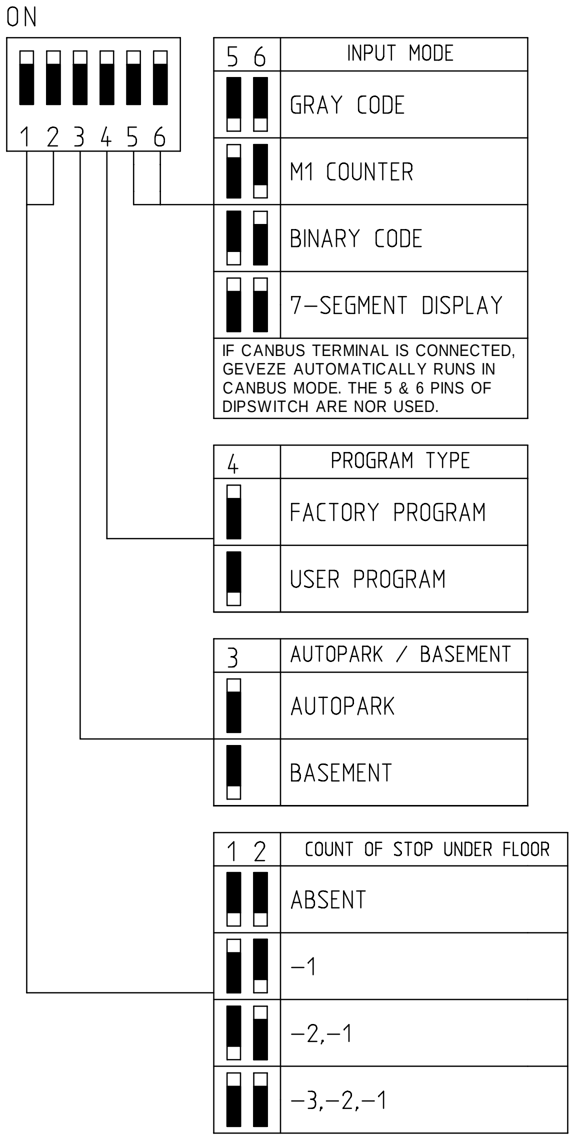


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION AUTOMATIC DOOR TERMINALS	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K5
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION VALVES TERMINALS	DRAWN BY: K.D.	Rev. No:	Sheet: EK-6
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006

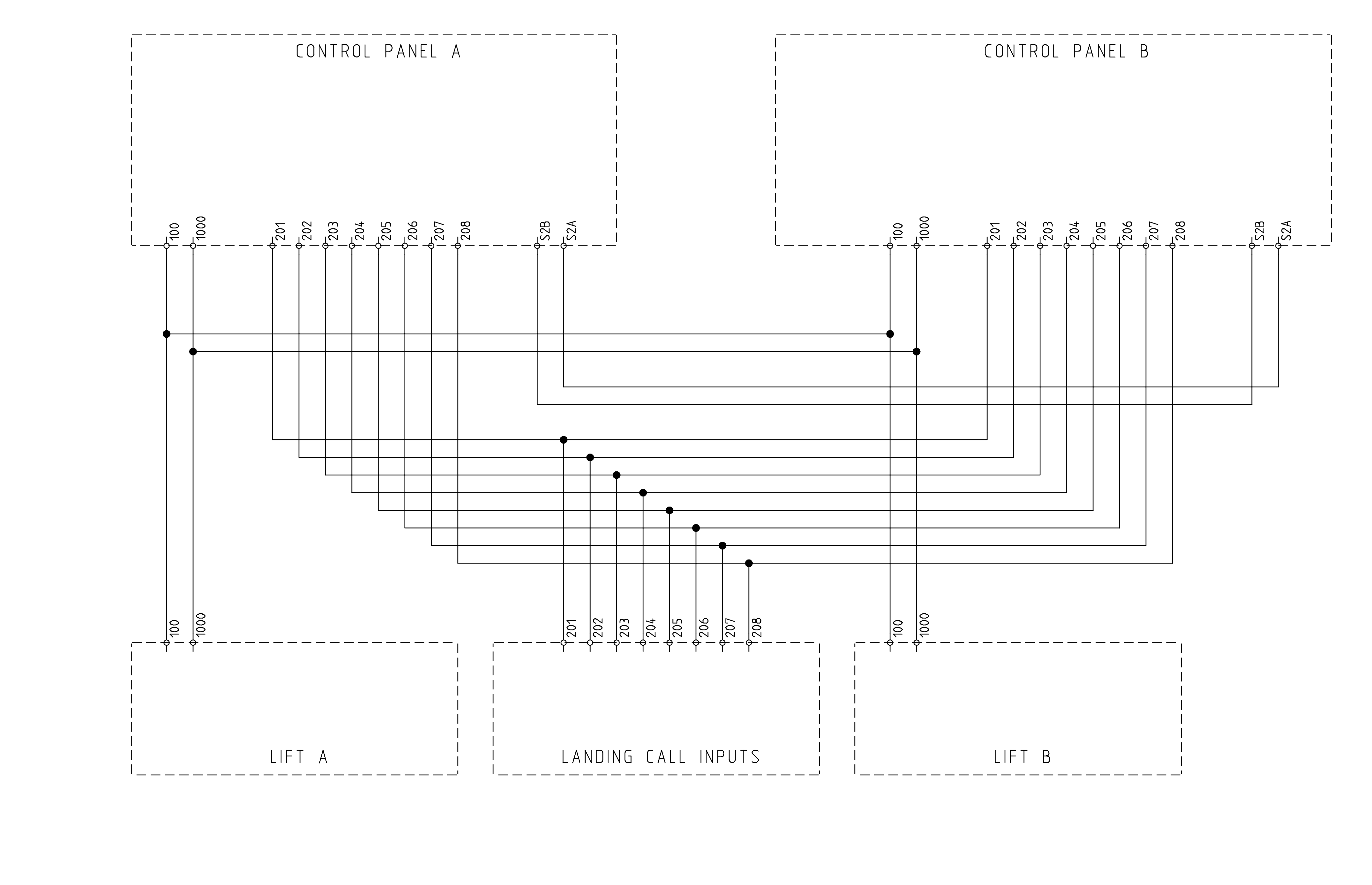




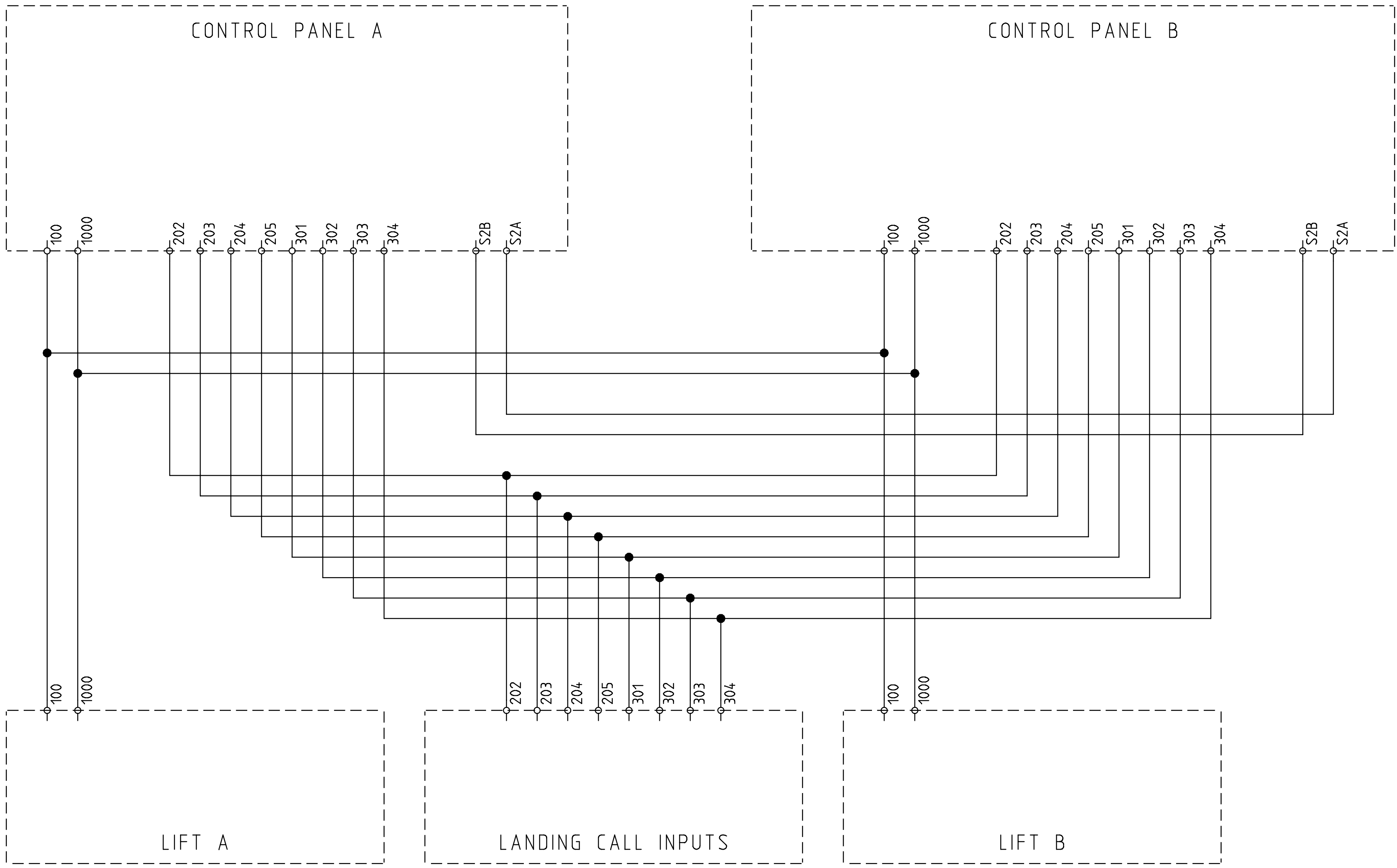
INPUT MODE	INPUT SIGNALS												
	G0	G1	G2	G3	G4	G5	G6	G7	G8	02	804	DD	GCOM
GRAY CODE	M0	M1	M2	M3	M4					02	804	DD	1000
M1 COUNTER	32	M1	817							02	804	DD	1000
BINARY CODE	M0	M1	M2	M3	M4					02	804	DD	1000
7-SEGMENT DISPLAY	A	B	C	D	E	F	G	BC	G2	02	804	DD	100
CANBUS													

- AT M1 COUNTER MODE GEVEZE NEVER SOUNDS UNTIL THE ELEVATOR REACHES 817 (DOWN LIMIT SIGNAL).
- THE COUNT OF STOP UNDER FLOOR MUST BE SET TO ANNOUNCE "BASEMENT" or "AUTOPARK".
- AT 7-SEGMENT INPUT MODE GEVEZE ANNOUNCE: "BASEMENT" for 'B', "AUTOPARK" for 'P' on DISPLAY.

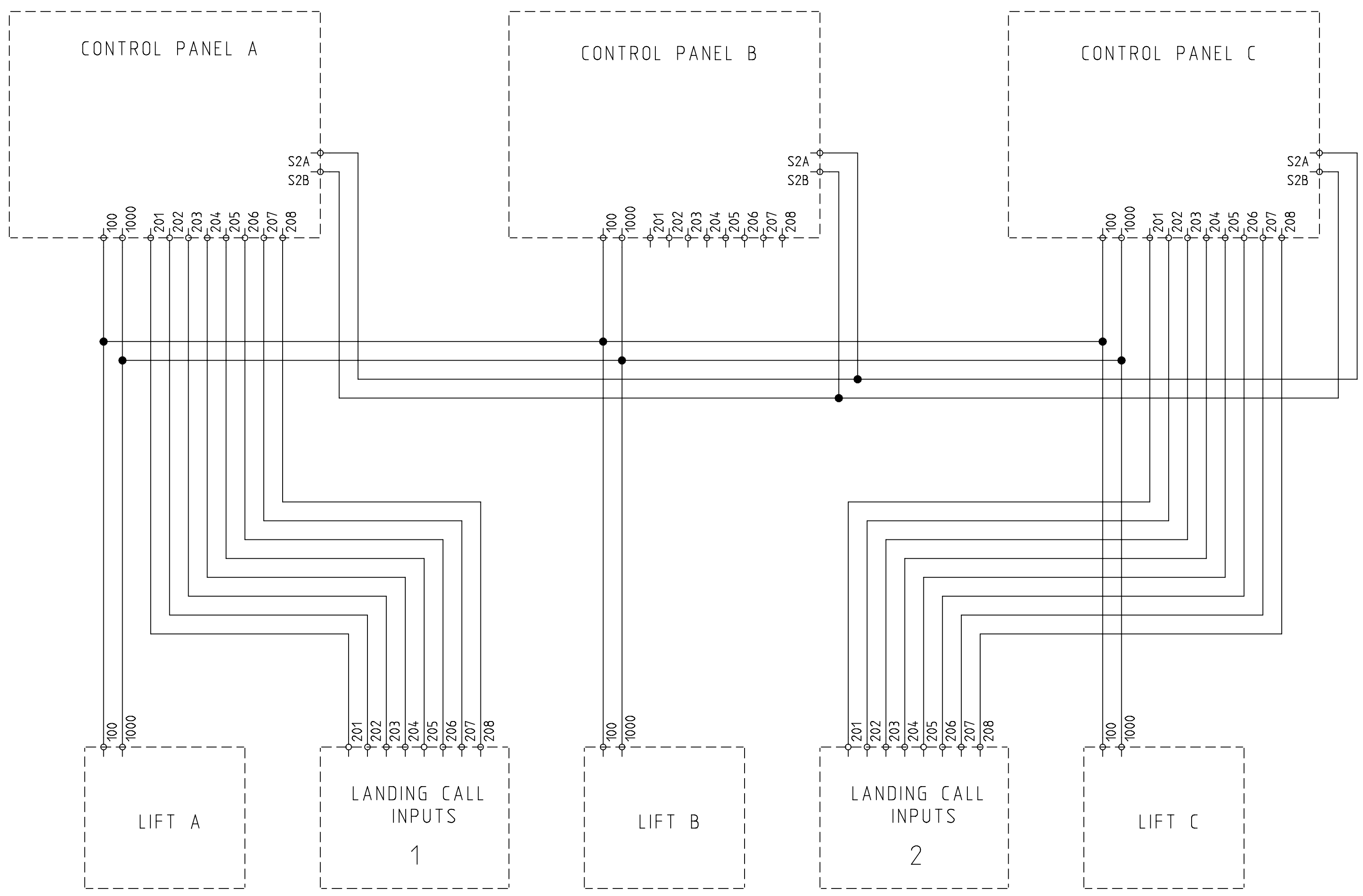
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CHATTERBOX CONNECTION	DRAWN BY: K.D.	Rev. No:	Sheet: 15
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



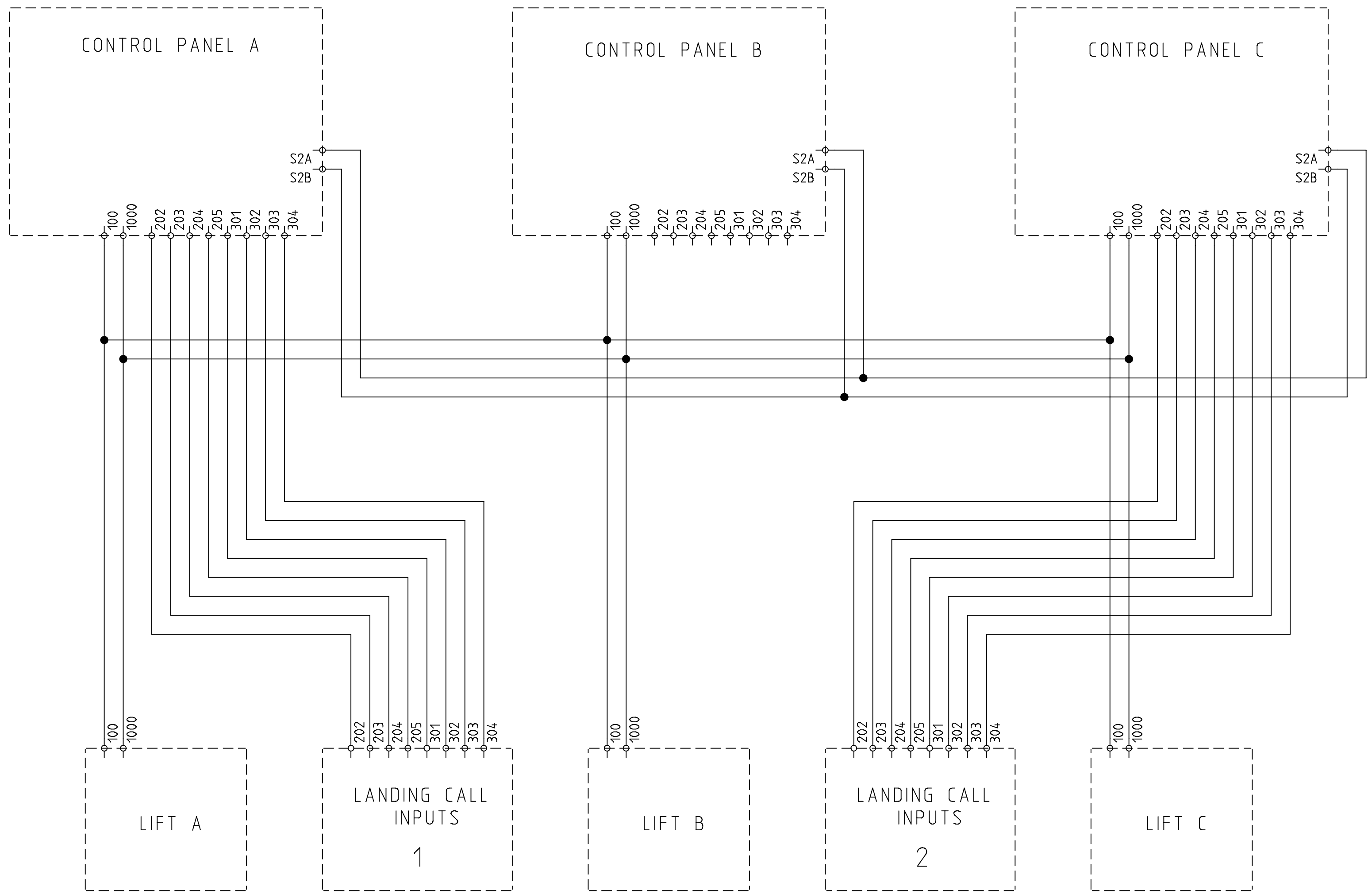
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUBLEX PANEL CONNECTIONS COMMAND TYPE : DOWN COLLECTIVE	DRAWN BY: K.D.	Rev. No:	Sheet: EK-D1
			CHECKED BY: C.A.	Rev. Date: 01.11.2007	Date: 01.06.2006



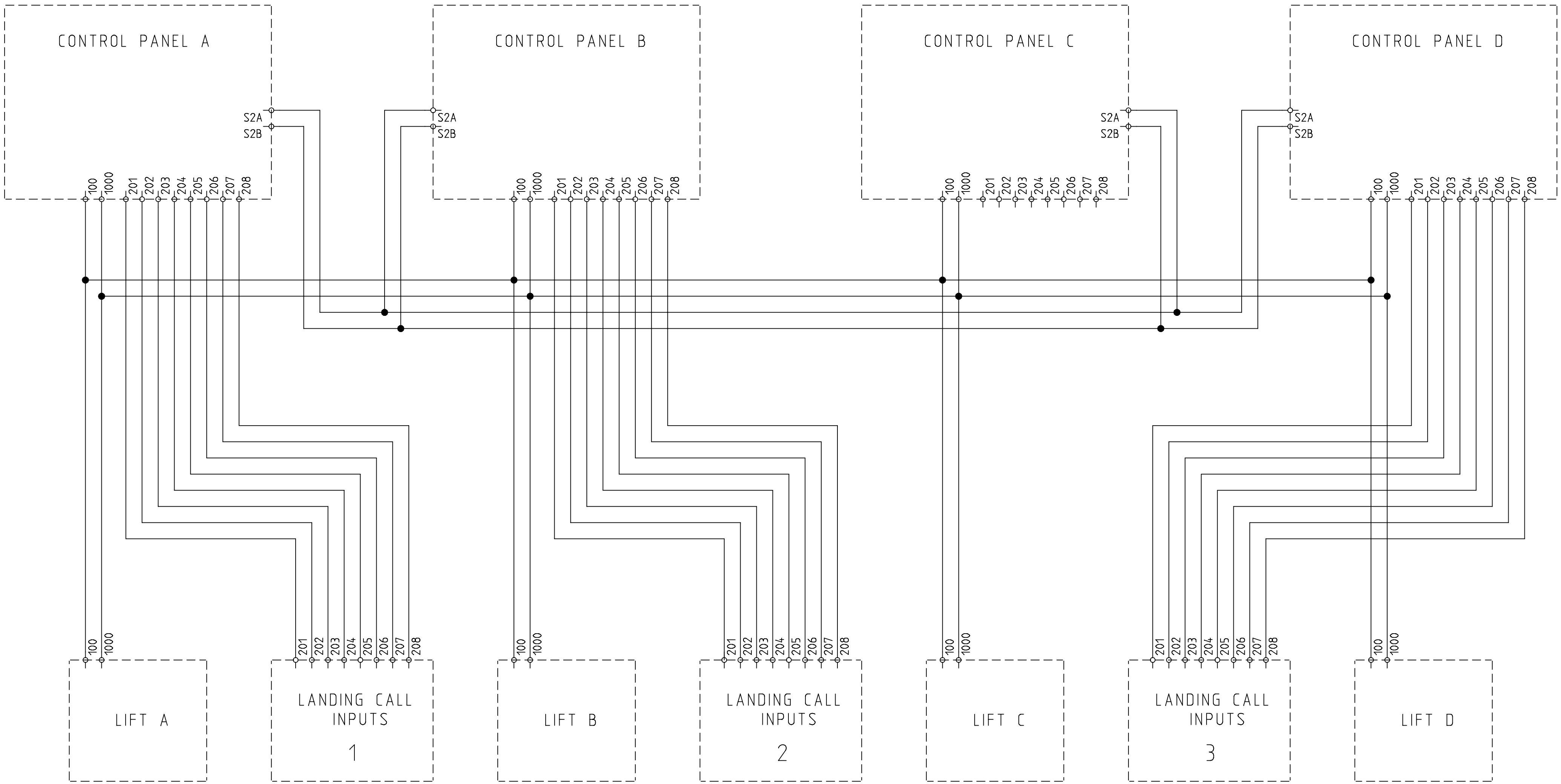
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUBLEX PANEL CONNECTIONS COMMAND TYPE : FULL COLLECTIVE	DRAWN BY: K.D.	Rev. No:	Sheet: EK-D2
			CHECKED BY: C.A.	Rev. Date: 01.11.2007	Date: 01.06.2006



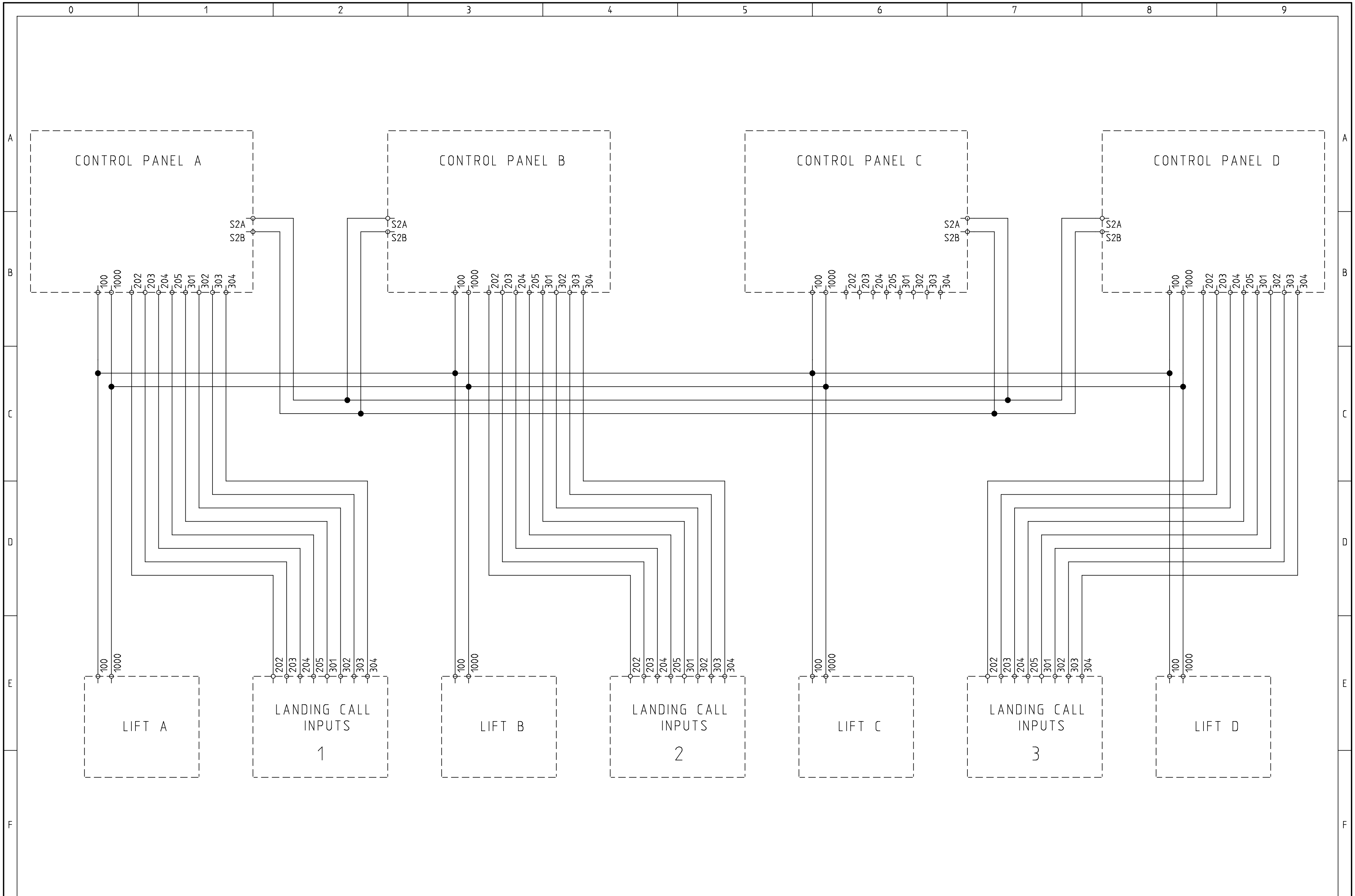
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	3 LIFTS GROUP CONNECTION COMMAND TYPE : DOWN COLLECTIVE	DRAWN BY : K.D.	Rev. No: V12	Sheet: EK-3D
			CHECKED BY: C.A.	Rev. Date: 25.08.2009	Date: 21.02.2007



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	3 LIFTS GROUP CONNECTION COMMAND TYPE : FULL COLLECTIVE	DRAWN BY : K.D.	Rev. No: V12	Sheet: EK-3F
			CHECKED BY: C.A.	Rev. Date: 25.08.2009	Date: 21.02.2007



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	4 LIFTS GROUP CONNECTION COMMAND TYPE : DOWN COLLECTIVE	DRAWN BY : K.D.	Rev. No: V12	Sheet: EK-4D
			CHECKED BY: C.A.	Rev. Date: 25.08.2009	Date: 21.02.2007



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	4 LIFTS GROUP CONNECTION COMMAND TYPE : FULL COLLECTIVE	DRAWN BY : K.D.	Rev. No: V12	Sheet: EK-4F
			CHECKED BY: C.A.	Rev. Date: 25.08.2009	Date: 21.02.2007

TYPE : WACHENDORFF

DRIVE MOTOR : SCHINDLER

POWER SUPPLY : 4.75 – 5.5 VDC

NUMBER OF LINES : 1024

CODE : WDG 58B –1024–AB–I05–S3–C30

Function:	Colour:
Negative	White
Positive	Brown
A	Green
B	Yellow
A–	Grey
B–	Blue
Control Output	Pink
Shield	Flex wire

TYPE : NIDEC NEMICON

DRIVE MOTOR : –

POWER SUPPLY : 4.5 – 5.5 VDC

NUMBER OF LINES : 1024

CODE : NOC–S –1024–2MD

Function:	Colour:
Negative	Black
Positive	Red
A	Green
B	White
Z	Yellow
A–	Blue
B–	Grey
Z–	Orange
Shield	Flex wire

TYPE : –

DRIVE MOTOR : MONTANARI

POWER SUPPLY : 5 – 30 VDC

NUMBER OF LINES : 1024

Function:	Colour:
Negative	Black
Positive	Red
A	Yellow
B	Green
Z	White
A–	Blue
B–	Orange
Z–	Grey
Shield	Flex wire

TYPE : WACHENDORFF

DRIVE MOTOR : –

POWER SUPPLY : 10–30 VDC

NUMBER OF LINES : 1024

CODE : WDG 100H –38–1024–ABN–I24–K3–050

Function:	Colour:
Negative	White
Positive	Brown
A	Green
B	Yellow
Z	Grey
A–	Red
B–	Black
Z–	Violet
Control Output	Pembe
Shield	Flex wire

TYPE : METRONIX

DRIVE MOTOR : –

POWER SUPPLY : 5 – 24 VDC

NUMBER OF LINES : 1024

CODE : S48 –8–1024–ZT(TK1)

Function:	Colour:
Negative	Black
Positive	Red
A	Green
B	White
Z	Yellow
Shield	Flex wire

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–Series CONTROL PANELS	ENCODER CABLE LEGEND	DRAWN BY: K.D.	Rev. No:	Sheet: EK–E
			CHECKED BY: C.A.	Rev. Date:	Date: 18.10.2006

Renk	Türkçe	İngilizce	Almanca	İtalyanca	Rusça	Lehçe	Fransızca	Hollandaca
Colour	Turkish	English	German	Italian	Russian	Polish	French	Dutch
Färbung	Türkisch	Englisch	Deutsch	Italienisch	Russisch	Polnisch	Französisch	Niederländisch
colorito	Turco	Inglese	Tedesco	Italiano	Russo	Polacco	Francese	Olandese
краски	турецкий	английский	немецкий	итальянский	русский	Польский	Французский	Голландский
Kolor	Turecki	Angielski	Niemiecki	Wloski	Польский	Rosyjski	Francuski	Niderlandzki
Couleur	Turc	Anglais	Allemand	Italien	Russe	Polonais	Français	Néerlandais
Kleur	Turks	Engels	Duits	Italiaan	Russisch	Pools	Frans	Nederlands
Färg	Turkiska	Engelska	Tyska	Italienska	Ryska	Polska	Franska	Nederländska
	BEYAZ	WHITE	WEIβ	BIANCO	белый цвет	BIALY	BLANC	Wit
	SİYAH	BLACK	SHCWARZ	NERO	чёрный	CZARNY	NOIR	Zwart
	YEŞİL	GREEN	GRÜN	VERDE	зелёный	Zielony	VERT	Groen
	SARI	YELLOW	GELB	GIALLO	жёлтый цвет	ZOLTY	JAUNE	Geel
	MAVİ	BLUE	BLAU	BLU	синева	NIEBIESKI	BLEU	Blauw
	KAHVE	BROWN	BRAUN	MARRONE	коричневый цвет	BRAZOWY	MARRON	Bruin
	PEMBE	PINK	ROSA	ROSA	розовый цвет	Rozowy	ROSE	Roze
	KIRMIZI	RED	ROT	ROSSO	красный цвет	CZERWONY	ROUGE	Rood
	TURUNCU	ORANGE	ORANGE	ARANCIONE	оранжевый	POMARANCZOWY	ORANGE	Oranje
	GRİ	GREY	GRAU	GRIGIO	серый цвет	Szary	GRIS	Grijs
	MOR	VIOLET	VIOLETT	VIOLETTA	Фиолетовая	Violet	VIOLETTE	Violet

Terminals On ARL-300 Controller:

L1,L2,L3	Main Phase	
N	Neutral	
1	Car Supply Output (220Vac)	
2	Car Lamp Output (220Vac)	
LO	Relay Output of Retiring Cam (Common Contact)	
LA	Relay Output of Retiring Cam (Normaly Open Contact)	
K3	Door Close Signal Output	
K5	Door Open Signal Output	
K15	Door Open/Close Signal Common	
10A	Safety Circuit Supply Ground Input	
120	Stop Circuit Monitoring Input	Max. 230Vac
130	Landing Door Contacts Monitoring Input	
140A	Landing Door Lock Contacts Monitoring Input	
140B	Landing Door Lock Contacts Monitoring Input (During evacuation operation for rope lifts with AKUS-SD or hydraulic systems)	Max. 28Vdc
10B	Common of Main Contactors Output	
SF1	Door Bridging Relay Contact Common (120 circuit)	Only for VVVF and Hydraulic systems for door pre-opening and relevelling.
SF2	Door Bridging Relay Contact Output (140 circuit)	
ML1 (M1)	Door Zone Magnetic Switch-1 Input	These connections depend on the drive type of the elevator.
ML2	Door Zone Magnetic Switch-2 Input	
141	Down Stop & Deceleration Magnetic Switch Input	
142	Up Stop & Deceleration Magnetic Switch Input	
PT0	Programmable Output (M0: Gray/Binary Code Output)	The functions of programmable outputs are assigned from the menu.
PT1	Programmable Output (M1: Gray/Binary Code Output)	
PT2	Programmable Output (M2: Gray/Binary Code Output)	
PT3	Programmable Output (M3: Gray/Binary Code Output)	
KRC	Contactors Feed-back Input	
S2A-S2B	Group Operation Communication Terminals	
S1A-S1B	Car Communication Terminals (for comm. with FX-SERI boards)	
1000	Signal Circuit Ground	
100	Signal Circuit Supply (+24Vdc)	
PTC	Motor Thermistor & Panel Thermostat Oil Thermostat Input (Hydraulic) & Brake Resistor Thermostat (VVVF)	
K19	Door Close Limit Switch Input	These inputs must be bridged to terminal 100 when door limit switches are not checked by ARL-300 controller (excluding 1-phase and 3-phase automatic lift doors)
K16	Door Open Limit Switch Input	
PR	Programmable Relay Common Input	The function of this output is assigned from the menu.
PRA	Programmable Relay Output	
XK1	To XK1 plug on KBK4 Connection Board with 14-wire flat cable	
XK2	To XK2 plug on KBK2 Connection Board with 20-wire flat cable	
XK3	To XK3 plug on KBK2 Connection Board with 20-wire flat cable	

Relay Outputs for Two Speed Systems:	
V11	KU1, KU2, KH Contactors Supply Common
VA	Up Direction Contactor (KU2) Output
VB, VC	High Speed Contactor (KH) Output
VD	Down Direction Contactor (KU1) Output
RU	Low Speed Contactor (KF) Output
11	Low Speed Contactor (KF) Supply Common

Relay Outputs for VVVF Systems (*):			
	Geared drive (Asynchronous machine)	Gearless drive (Asynchronous machine)	
		Evacuation with Brake Releasing	Evacuation with Active Motor Driving
V11	VVVF Signals Supply Common	VVVF Signals Supply Common	VVVF Signals Supply Common
VA	Up Direction Signal Output	Up Direction Signal Output	Up Direction Signal Output
VB, VC	High Speed Signal Output	High Speed Signal Output	High Speed Signal Output
VD	Down Direction Signal Output	Down Direction Signal Output	Down Direction Signal Output
AV1	Low Speed Signal Common	Automatic Evacuation Signal Common	Evacuation Active Contactor Supply Common
AV2	Low Speed Signal Output (**)	Automatic Evacuation Signal Output	Evacuation Active Contactor Output
RE1	Inspection Speed Signal Common	Inspection Speed Signal Common	Mains Active Contactor Supply Common
RE2	Inspection Speed Signal Output (***)	Inspection Speed Signal Output	Mains Active Contactor Output
RU	Main Contactors Output	Main Contactors Output	Main Contactors Output
11	Main Contactors Supply Common	Main Contactors Supply Common	Main Contactors Supply Common

*: The type of VVVF system (geared or gearless) is determined by the paramater “**RESCUE TYPE**”.
**: For gearless drive with ADrive Inverter, the low-speed signal should be given from up and down signals in parallel with diodes.
***: For gearless drive uses active motor driving as evacuation method, the inspection speed signal should be given from a normally closed contact of an additional relay which should be activated from the terminal 869EK on KBK-4 board.

Relay Outputs for Hydraulic Systems:	
V11	Valve Group Supply Common
VA	Slow-Up Valve Output
VB	Fast-Up Valve Output
VC	Slow-Down Valve Output
VD	Fast-Down Valve Output
AV1	Emergency Valve Supply Common
AV2	Emergency Valve Output
RE1	Operation Mode Selection Contactor Supply Common
RE2	Operation Mode Selection Contactor Output
RU	Up Contactor Output
RD	Delta Contactor Output
RS	Star Contactor Output
11	Contactor Supply Common

Terminals on KBK4 Connection Board:

869	Inspection Switch Input (From Inspection Box)		
500	Parallel car installation	Inspection Down Button Input	
	Serial car installation	Call Cancel Button Input (The common of signal must be taken from inspection signal 869)	
501	Inspection Up Button Input		
YAN	Fire Alarm Switch Input		
DEP	Earthquake Sensor Contact Input		
DTS	Parallel car installation	Door Close Button Input	
	Serial car installation	Door Fully Closed Limit Switch Input (for fireman operation)	
K20	Parallel car installation	Door Open Button & Door Pressure Contact & Photocell Contact Input	
	Serial car installation	Door Fully Open Limit Switch Input (for fireman operation)	
804	Parallel car installation	Over-load Contact Input	
	Serial car installation	Fireman Switch (in car operation panel) Input (for fireman operation)	
805	Parallel car installation	Full-load Contact Input	
	Serial car installation	Panic (Evacuation) Button Input (for panic function)	
VAT	Car Priority Switch Input		
817	Down Limit Mechanical Switch Input		
818	Up Limit Mechanical Switch Input		
PI	Programmable Input	For VVVF systems	Inverter Error Signal Input
		For Hydaulic systems	External Contactor Checback Signal (when external contactors are used for hydraulic valve blocks like Beringer, GMV, etc.)
869EK	The End of Inspection Singal Input (Inspection operation + Recall operation > To Control Card)		
XK1	To XK1 plug on ARL-300 Controller Board with 14-wire flat cable		

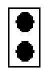
If EK* is not connected to panel (Use jumper)	If EK* is connected to panel (Do not use jumper)
	

Figure-1 : KBK4 board jumper selection (two pins)

* : Recall Hand Terminal

Terminals on KBK2 Connection Board :

190	Not used
A-G2	7-Segment Display Output
X1-X16	Car Call / Landing Call Inputs
02	Out of Service Indicator Output
12	Busy Indicator Output
31	Down Arrow Indicator Output
32	Up Arrow Indicator Output
S1A-S1B	Car Communication (FX-SERI) Terminals
S2A-S2B	Group Operation Communication Terminals
XK2	To XK2 plug on ARL-300 Controller Board with 20-wire flat cable
XK3	To XK2 plug on ARL-300 Controller Board with 20-wire flat cable

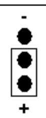
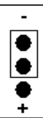
If outputs of 31,32,02 and 12 signals are connected to terminal **100**:	If outputs of 31,32,02 and 12 signals are connected to terminal **1000**:
	

Figure-2 : KBK2 board jumper selection (three pins)

Terminals on KBK-5 Control Panel Connection Board :		
869	Inspection Switch Input	
869EK	Recall Switch Output	
HTE	Recall Push Buttons Supply Voltage	
500	Recall Down Push Button Output	
501	Recall Up Push Button Output	
XHT1-A	Recall Hand Terminal Connector (5-pin)	
XHT1-B	Recall Hand Terminal Connector (5-pin)	
110	Safety Circuit Supply Voltage Input	
10	Safety Circuit Supply Ground Input	
10A	Safety Circuit Supply Ground Output	
120	Stop Circuit Monitoring	
130	Landing Door Contacts Monitoring	
135	Landing Door Lock Contacts Monitoring	
140	Car Door Lock Contacts Monitoring (Safety Circuit Supply Voltage Monitoring)	
110-110A	Emergency Stop Pit	SS1
110A-110B	Hatch	SS2
110B-110C	Slack Rope	SS3
110C-110D	Regulator Tension Weight	SS4
110D-110E	Reserve (Blowout Hose)	SS5
110E-110F	Reserve (Over Pressure)	SS6
110F-111	Reserve	SS7
	(Recall Emergency Stop : SS8)	
112-113	Overspeed Governor	SS9
113-114	Car Buffer	SS10
114-115	Counter Weight Buffer	SS11
115-116	Limit Switch Top	SS12
116-118	Limit Switch Bottom	SS13
120-130	Landing Door Contacts Monitoring Input	
130-135	Landing Door Lock Contacts Monitoring Input (For full automatic doors bridge 130 terminal to 135)	
118		
119A		
119B	Car Safety Chain Terminals (To KBK-6 on Inspection Box via trailing ribbon cable.)	
120		
135		
140		
Look at Sheet 5 of ARL-300 electrical diagrams		

Terminals on KBK-6 Inspection Box Connection Board :		
869	Inspection Switch Input	
500	Inspection Down Push Button Output	
501	Inspection Up Push Button Output	
100	Inspection Signals Supply (+24Vdc)	
XHT2-A	Inspection Hand Terminal Connector (5-pin)	
XHT2-B	Inspection Hand Terminal Connector (5-pin)	
118	Car Safety Chain Terminals (To KBK-5 on Control Panel via trailing ribbon cable.)	
119A		
119B		
120		
135		
140		
LIM1-LIM2	Limit Switch Car	SS14
PK1-PK2	Safety Gear	SS15
	(Inspection Emergency Stop : SS16)	
STP1- STP2	Emergency Stop Car	SS17
HK1-HK2	Slack Rope Car	SS18
KC1-KC2	Car Hatch	SS19
KA1-KA2	Car Door A Contact	SS20
KB1-KB2	Car Door B Contact	SS21
Look at Sheet 5 of ARL-300 electrical diagrams		

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PANO KABLO RENKLERİ / CABLE LEGEND

ADI/SIGN	İŞLEVİ/FUNC.	RENK	COLOR	mm²		
N	Nötr / Neutral	MAVİ	BLUE	4 (6)		0,8
L1	220-1	KAHVE	BROWN	4 (6)		0,8
L2	220-2	GRİ	GRAY	4 (6)		0,8
L3	220-3	SİYAH	BLACK	4 (6)		0,8
U1	220	SİYAH	BLACK	4 (6)		
V1	220	SİYAH	BLACK	4 (6)		
W1	220	SİYAH	BLACK	4 (6)		
U2	220	KAHVE	BROWN	4 (6)		
V2	220	KAHVE	BROWN	4 (6)		
W2	220	KAHVE	BROWN	4 (6)		
PE	Toprak / Ground	SARI-YEŞİL	YELLOW/GREEN		2,5	
B1	Fren direnci / Brake resistor	SİYAH	BLACK	4 (6)		
B2	Fren direnci / Brake resistor	SİYAH	BLACK	4 (6)		
1F		GRİ	GRAY			0,8
NF		MAVİ	BLUE			0,8
3		GRİ	GRAY			0,8
3S		GRİ	GRAY			0,8
4		GRİ	GRAY			0,8
NS		MAVİ	BLUE			0,8
FL1		KAHVE	BROWN			0,8
2001	Lir-pompa /Retiring cam +	MOR	VIOLET			0,8
810	Lir-pompa /Retiring cam -	MOR	VIOLET			0,8
840	Mekanik Fren/Mech. Brake +	MOR	VIOLET			0,8
2000	Mekanik Fren/Mech. Brake -	MOR	VIOLET			0,8
SG-S (220Vac)	Hız Regülatörü/Speed Governor	KAHVE	BROWN			0,8
SG-N (220Vac)	Hız Regülatörü/Speed Governor	MAVİ	BLUE			0,8
SG-S (24Vdc)	Hız Regülatörü/Speed Governor +	KIRMIZI	RED			0,8
SG-N (24Vdc)	Hız Regülatörü/Speed Governor -	BEYAZ	WHITE			0,8
1		GRİ	GRAY			0,8
2		GRİ	GRAY			0,8
10, 10A, 10B		SİYAH	BLACK			0,8
110		TURUNCU	ORANGE			0,8
120		TURUNCU	ORANGE			0,8
130		TURUNCU	ORANGE			0,8
140		TURUNCU	ORANGE			0,8
SF1, SF2		TURUNCU	ORANGE			0,8
TRF 0	18VAC ÇIKIŞ 18VAC OUTPUT	KAHVE	BROWN			0,8
TRF 18						0,8
TRF 0	46VAC ÇIKIŞ 46VAC OUTPUT	KAHVE	BROWN			0,8
TRF 46						0,8
TRF 0	55VAC ÇIKIŞ 55VAC OUTPUT	KAHVE	BROWN			0,8
TRF 55						0,8
TRF 0	70VAC/125VAC ÇIKIŞ 70VAC/125VAC OUTPUT	KAHVE	BROWN			
TRF 70/125						
TRF 0	220VAC ÇIKIŞ 220VAC OUTPUT	SARI-YEŞİL	YELLOW/GREEN			0,8
TRF 220		TURUNCU	ORANGE			0,8

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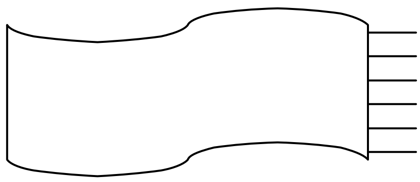
PANO KABLO RENKLERİ / CABLE LEGEND

100	+24VDC	KIRMIZI	RED			0,8
1000		BEYAZ	WHITE			0,8
Dijitaller/Digitals		BEYAZ	WHITE			0,8
Kayıt uçları / Call Inputs		BEYAZ	WHITE			0,8
T1	PTC	BEYAZ	WHITE			0,8
T2	PTC	BEYAZ	WHITE			0,8
T3	PTC	BEYAZ	WHITE			0,8
T4	PTC	BEYAZ	WHITE			0,8
PTC	PTC	KIRMIZI	RED			0,8
31		KIRMIZI-BEYAZ	RED-WHITE			0,8
32		KIRMIZI-BEYAZ	RED-WHITE			0,8
02		KIRMIZI-BEYAZ	RED-WHITE			0,8
12		KIRMIZI-BEYAZ	RED-WHITE			0,8
ML1/ML2		KIRMIZI-BEYAZ	RED-WHITE			0,8
141/142		KIRMIZI-BEYAZ	RED-WHITE			0,8
M1		KIRMIZI-BEYAZ	RED-WHITE			0,8
817		KIRMIZI-BEYAZ	RED-WHITE			0,8
818		KIRMIZI-BEYAZ	RED-WHITE			0,8
500		KIRMIZI-BEYAZ	RED-WHITE			0,8
501		KIRMIZI-BEYAZ	RED-WHITE			0,8
502		KIRMIZI-BEYAZ	RED-WHITE			0,8
503		KIRMIZI-BEYAZ	RED-WHITE			0,8
869		KIRMIZI-BEYAZ	RED-WHITE			0,8
869EK/870		KIRMIZI-BEYAZ	RED-WHITE			0,8
804		KIRMIZI-BEYAZ	RED-WHITE			0,8
805		KIRMIZI-BEYAZ	RED-WHITE			0,8
190		BEYAZ	WHITE			0,8
VAT		KIRMIZI-BEYAZ	RED-WHITE			0,8
YAN		KIRMIZI-BEYAZ	RED-WHITE			0,8
DEP		KIRMIZI-BEYAZ	RED-WHITE			0,8
M0,M1,M2,M3		KIRMIZI-BEYAZ	RED-WHITE			0,8
DD		KIRMIZI	RED			0,8
HOP+, HOP-		BEYAZ	WHITE			0,8
AL		MOR	VIOLET			0,8
KRC		KIRMIZI	RED			0,8
+15, V0, V1, V2, V3	+15V	KIRMIZI-BEYAZ	RED-WHITE			0,8
EN, UP, DOWN		KIRMIZI-BEYAZ	RED-WHITE			
AKU+		MOR	VIOLET	4	2,5	0,8
AKU-		BEYAZ	WHITE	4	2,5	0,8
AKU (+24)		KIRMIZI	RED			0,8
+12		MOR	VIOLET			0,8
KAPI+ / DOOR+		KIRMIZI	RED			0,8
KAPI- / DOOR-		BEYAZ	WHITE			0,8
K24		KIRMIZI	RED			0,8
AUTO		BEYAZ	WHITE			0,8
RU		KIRMIZI	RED			0,8
TLF1, TLF2		BEYAZ	WHITE			0,8
BUT		KIRMIZI-BEYAZ	RED-WHITE			0,8

PANO KABLO RENKLERİ / CABLE LEGEND

DTS		BEYAZ	WHITE		0,8
S1A, S1B		PEMBE	PINK		0,8
S2A, S2B		PEMBE	PINK		0,8
CAN1L, CAN1H		PEMBE	PINK		0,8
CAN2L, CAN2H		PEMBE	PINK		0,8
UK		GRİ	GRAY		0,8
VK		GRİ	GRAY		0,8
WK		GRİ	GRAY		0,8
AC		KAHVE	BROWN		0,8
KAPA		KAHVE	BROWN		0,8
KSOT		KIRMIZI	RED		0,8
K20		KIRMIZI	RED		0,8
K19		KIRMIZI	RED		0,8
K16		KIRMIZI	RED		0,8
K5		KIRMIZI	RED		0,8
K3		KIRMIZI	RED		0,8
K15		KIRMIZI	RED		0,8
RK		MOR	VIOLET		0,8
RM		MOR	VIOLET		0,8
AKUS-U		SİYAH	BLACK	2,5	
AKUS-V		SİYAH	BLACK	2,5	
AKUS-W		SİYAH	BLACK	2,5	
K220		KAHVE	BROWN		0,8
KKAK		KAHVE	BROWN		0,8
KSAK		KAHVE	BROWN		0,8
V11		PEMBE	PINK		0,8
V10		BEYAZ	WHITE		0,8
VA	Valfler / Valves	PEMBE	PINK		0,8
VB	Valfler / Valves	PEMBE	PINK		0,8
VC	Valfler / Valves	PEMBE	PINK		0,8
VD	Valfler / Valves	PEMBE	PINK		0,8
VE		KIRMIZI	RED		0,8



ATTENTION!
Take care while connecting your flexible cable

There are small points to take care while connecting your flexible cable. Arrange your cable order according to their electrical signal level. Although the cables have enough insulation, long parallel cables have transformer effect. The signals can joint between each neighbors. If there is two or more flexible cables it is better to separate low an high voltage signals.

<u>Here is an example of faulty connection.</u>

Cable No:	Signal		Signal level
1	100	(24 Source)	24Vdc
2	A	(Digital segment)	24Vdc
3	B	(Digital segment)	24Vdc
…	...	…	…
10	817	(UP limit Switch)	24Vdc
11	818	(Down limit switch)	24Vdc
12	810	(Magnetic Cam Power-)	180Vdc
13	2001	(Magnetic Cam Power+)	180Vdc
14	804	(Over load)	24Vdc
15	401	(Car Call 1)	24Vdc
16	402	(Car Call 2)	24Vdc
…	…	...	…
20	406	(Car Call 6)	24Vdc
21	2	(Car Lamp)	220Vac
22	1	(Car Power source)	220Vac

In this example ever car lamp on/off operation makes high voltage peaks on line and it can leak to 406 (car call signal). In long term this cause a fault on 406 output transistor. Also there is risk because of Magnetic cam power lines. 818 and 804 signal may have faulty operation in long term.

<u>Here is an example of correct connection order.</u>

100 , A , B , C , D , E , F , G, 804 , 805 , 401 , 402 , 403 .. , → All 24V signals ,
1000 → Small signal 0V ,
PE, N → Ground , Line Neutral ,
810 , 2001 , 1 ,2 …. → All high voltage signals

HOW TO USE DIAGRAMS?

0 NUMBERED COLUMN

8 NUMBERED COLUMN

9 NUMBERED COLUMN

SAMPLE REFERENCE CODE : $\xrightarrow{100}$ 4CA.0

- THE TARGET REFERENCE IS IN A COLUMN THAT IS NUMBERED AS 0
- THE TARGET REFERENCE IS IN A PAGE THAT IS CODED AS 4CA
- THE LABEL OF THE REFERENCE IS 100 (+24V)

SAMPLE CONTACT DEFINITION : KA A1 A2

KA (RA) : THE NAME OF THE CONTACTOR OR RELAY
A1, A2 : THE NAME OF THE CONTACTOR'S OR RELAY'S COIL PINS.

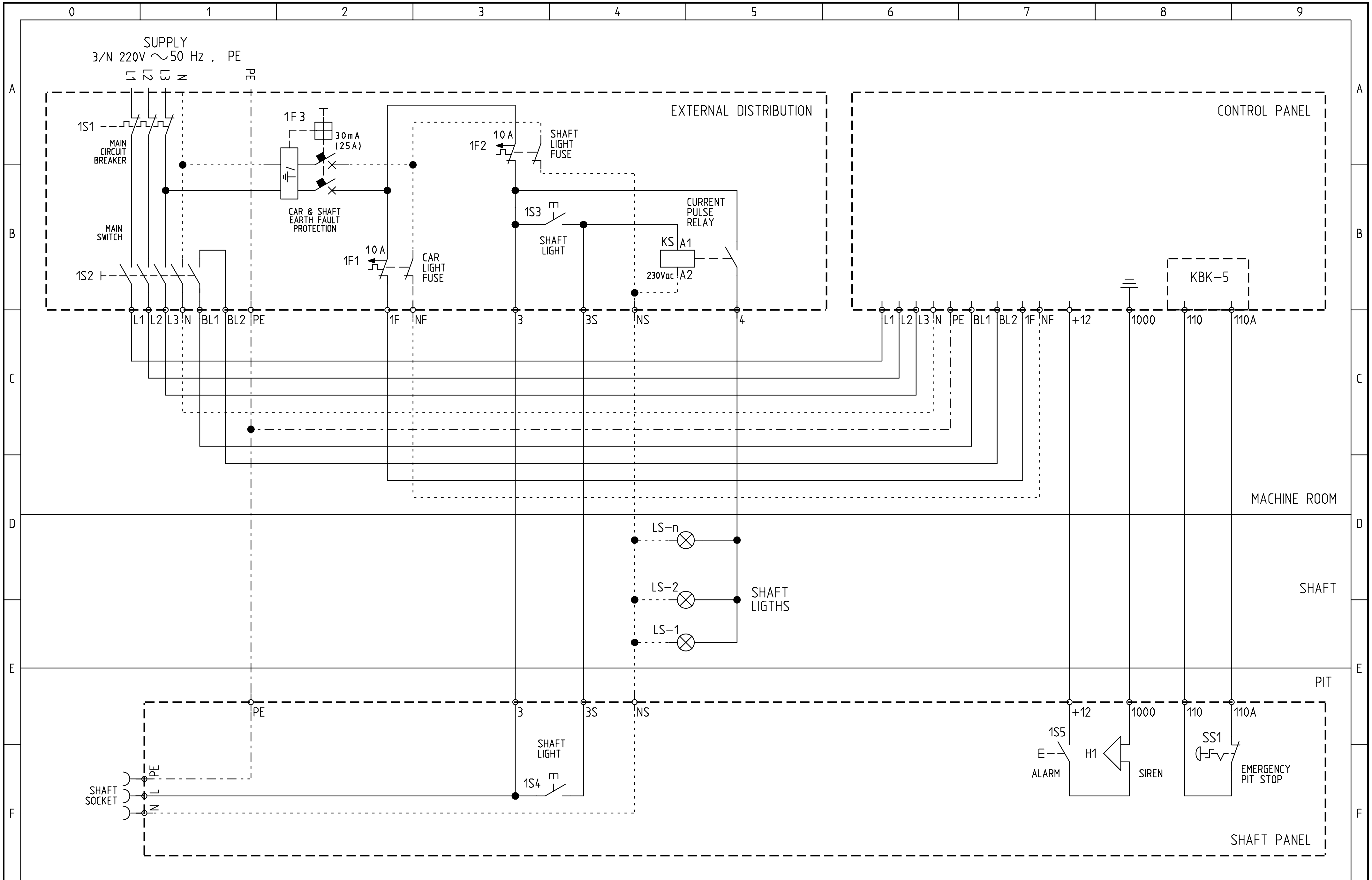
4V2.8 1 2
4V2.8 3 4
4V2.8 5 6

THE NAMES OF THE CONTAC'S PINS ARE 1 AND 2
THE CONTACT IS IN A COLUMN NUMBERED AS 8
AND IN A PAGE THAT IS CODED AS 4V2

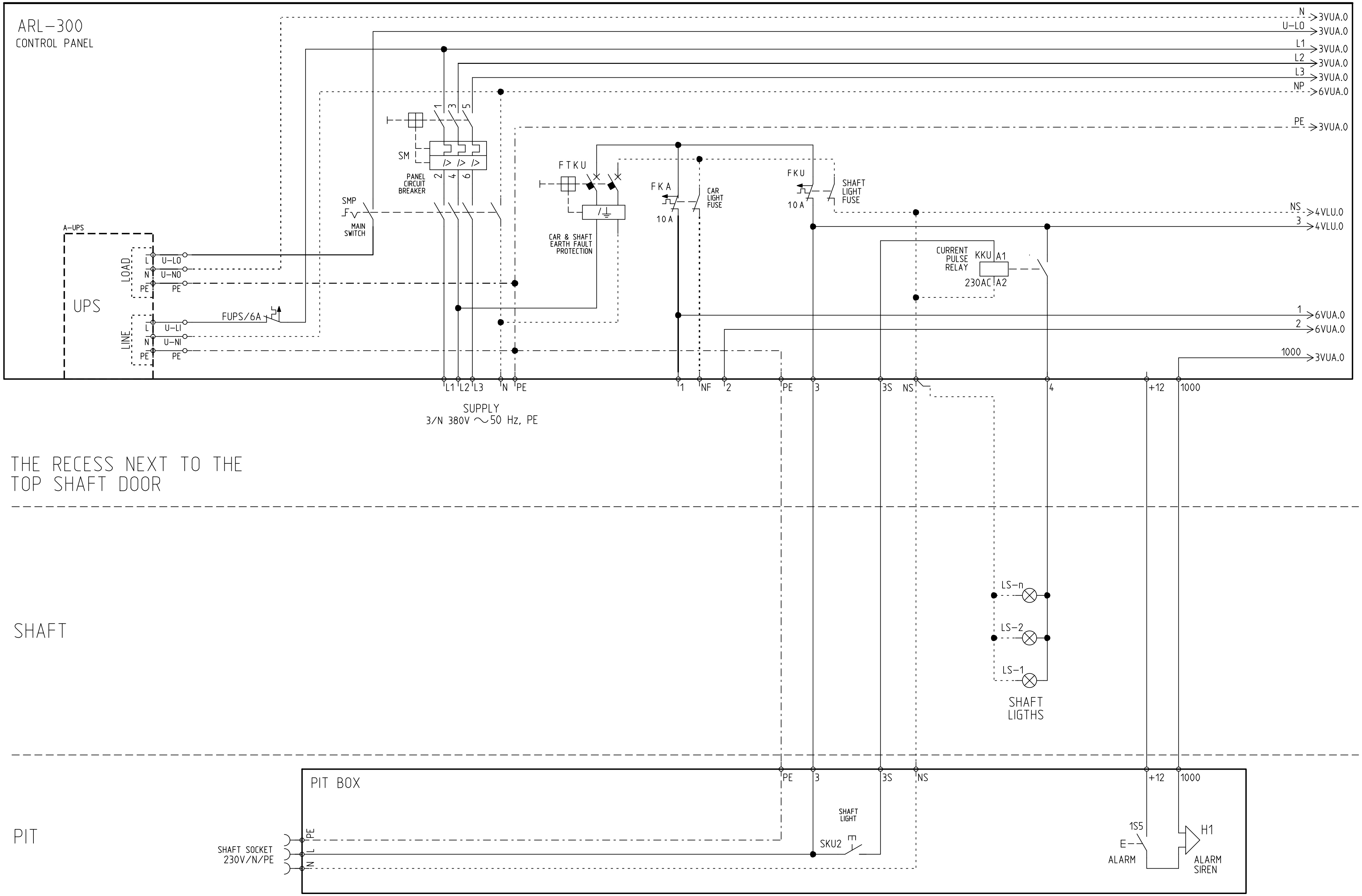
6V.1 NC1
6V.1 NO1

THE NAMES OF THE AUXILIARY CONTAC'S PINS ARE DEFINED
AS NC1 (1. NORMALLY OPEN CONTACT)
THE CONTACT IS IN A COLUMN NUMBERED AS 1
AND IN A PAGE THAT IS CODED AS 6V

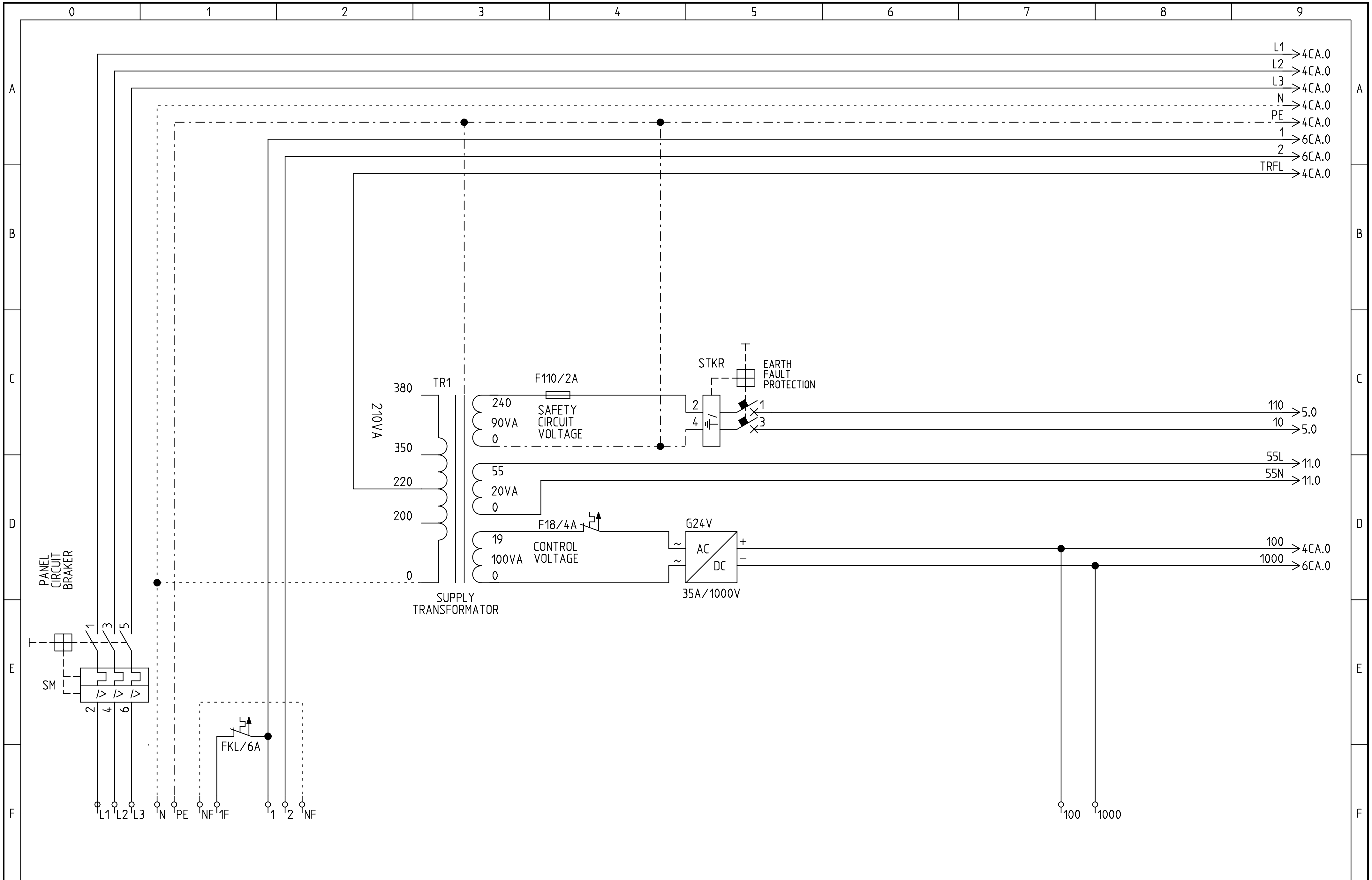
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL CONTROL PANELS	DIAGRAM USAGE	DRAWN BY: K.D.	Rev. No:	Sheet: EK-S
			CHECKED BY: C.A.	Rev. Date:	Date: 18.10.2006



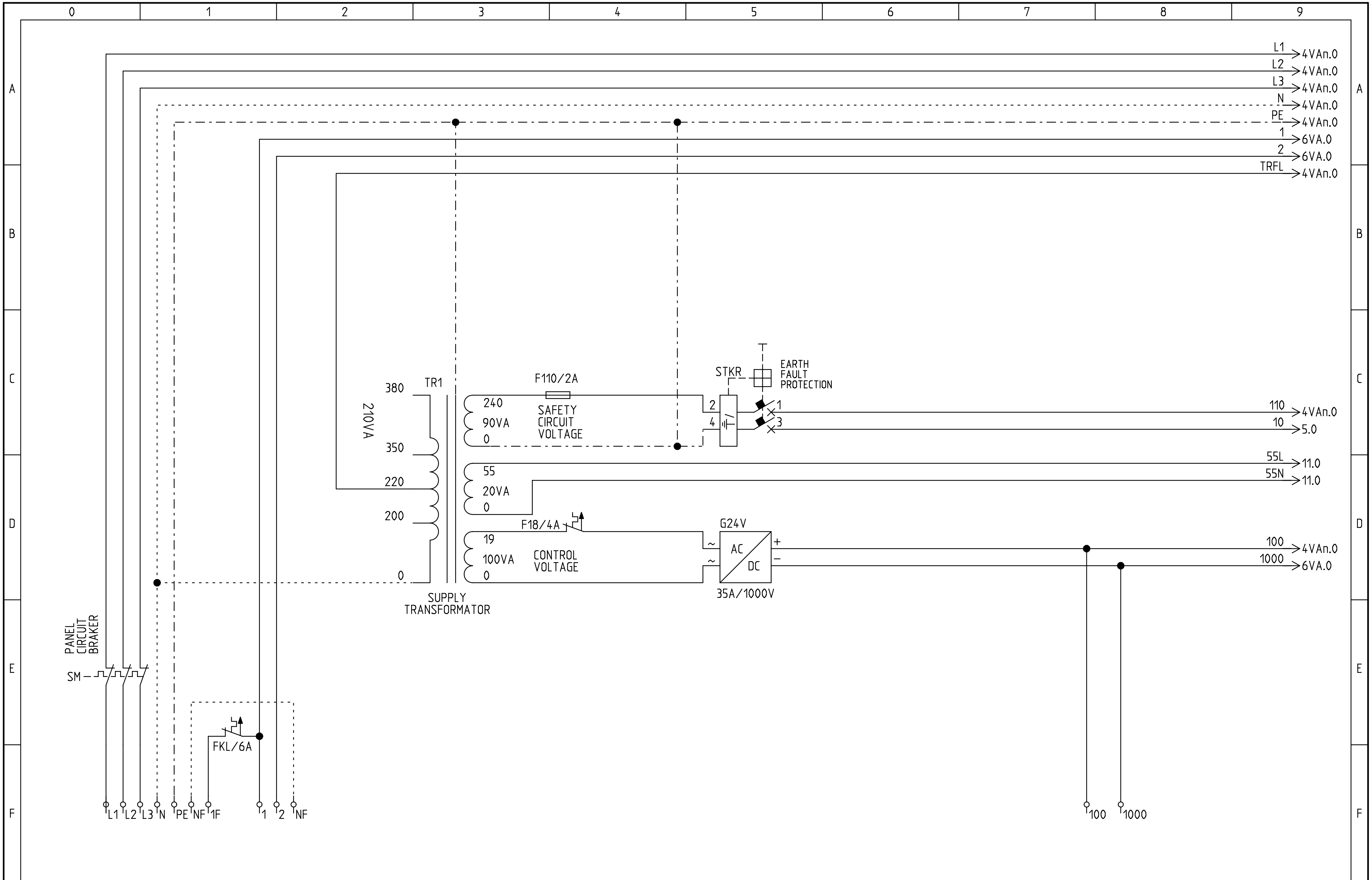
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	MAINS POWER INCOMING WIRING	DRAWN BY: K.D.	Rev. No: V11	Sheet: 2 A
			CHECKED BY: C.A.	Rev. Date: 06.07.2009	Date: 06.07.2009



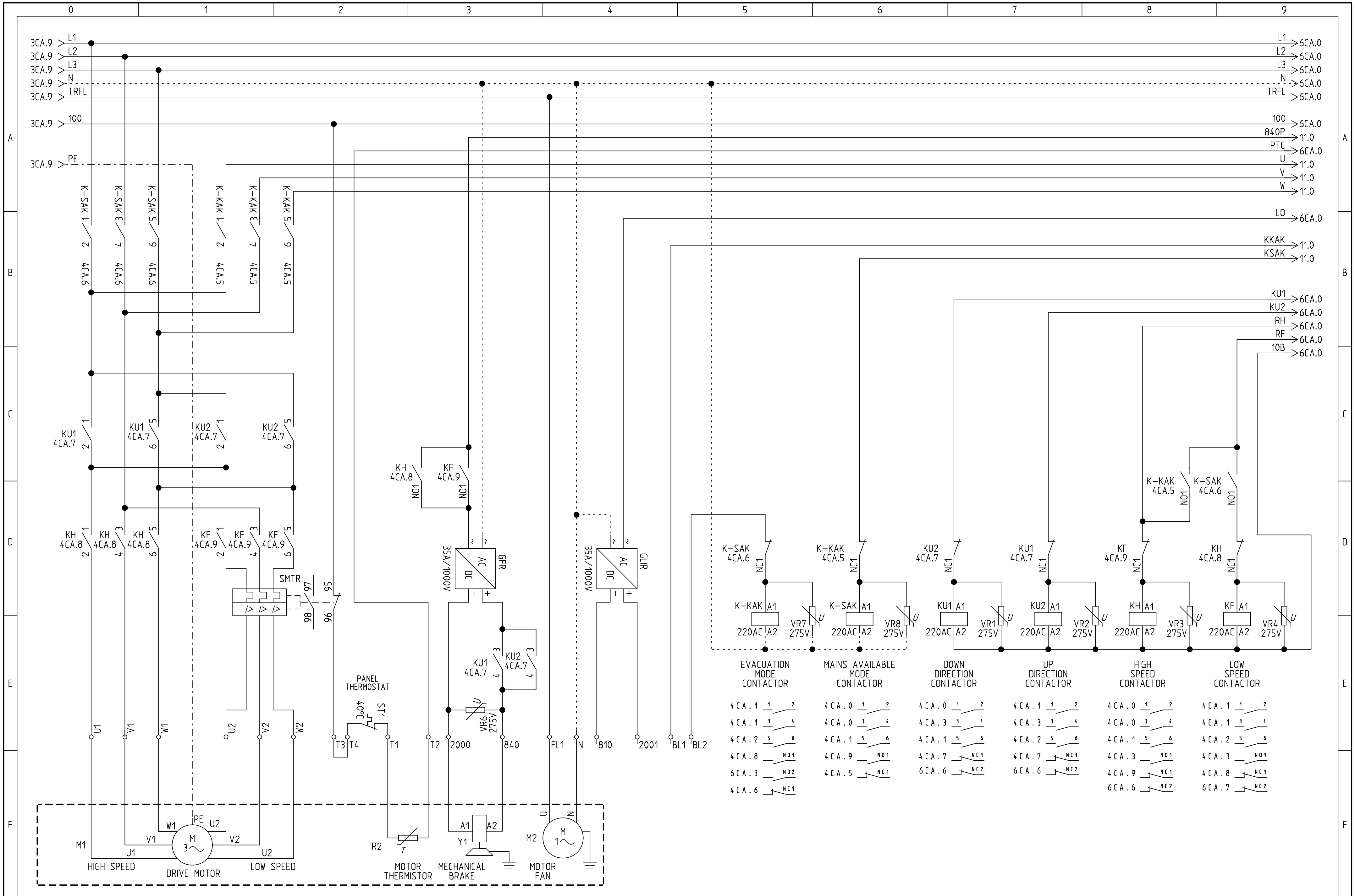
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MAINS POWER INCOMING WIRING CAR LIGHT & SHAFT LIGHT & ALARM CONNECTIONS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 14.12.2009	Sheet: 2 U Date: 18.06.2009



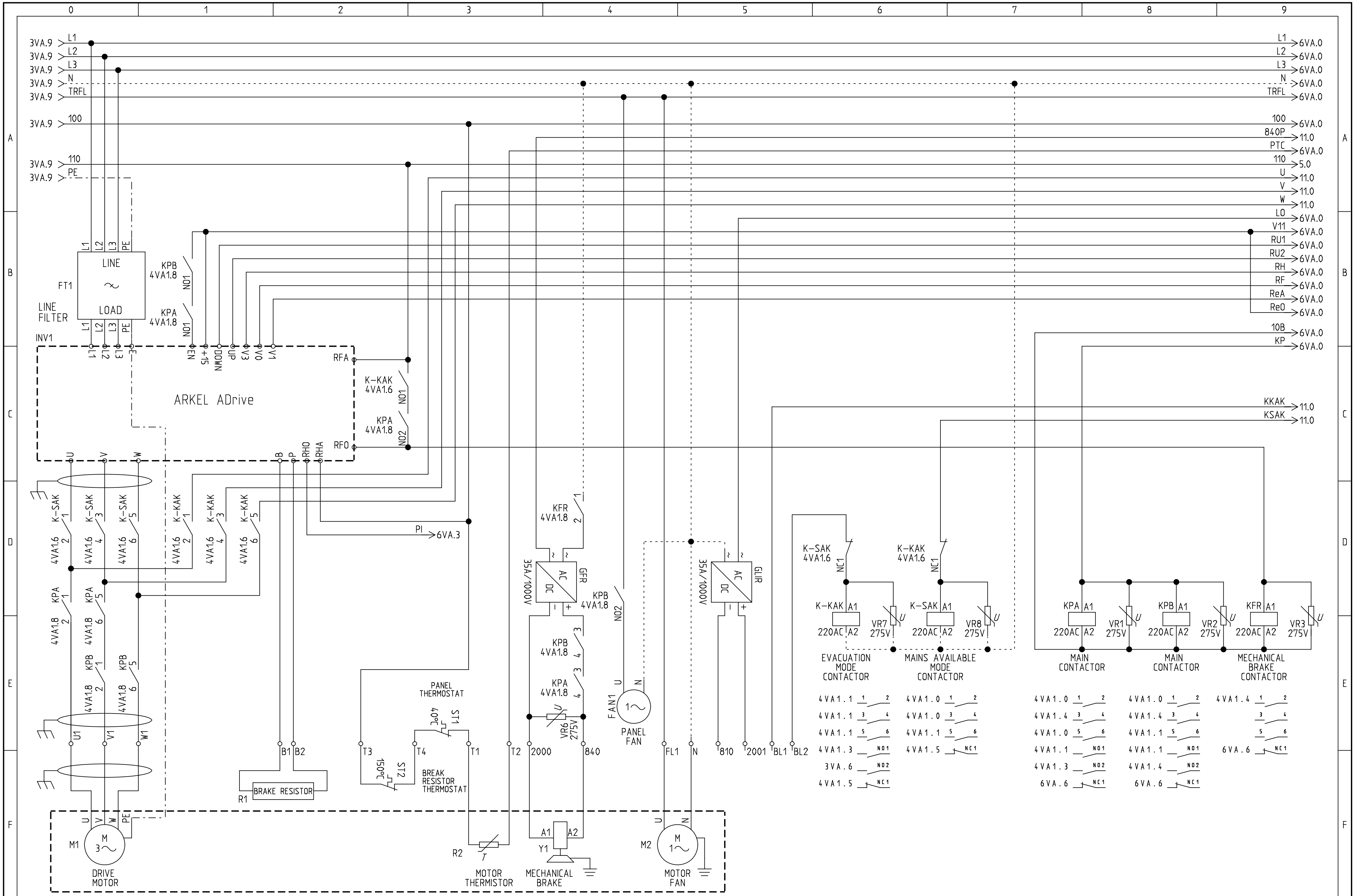
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SUPPLY CIRCUITS DRIVE TYPE : TWO SPEED EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 17.02.2009	Sheet: 3CA Date: 01.12.2006



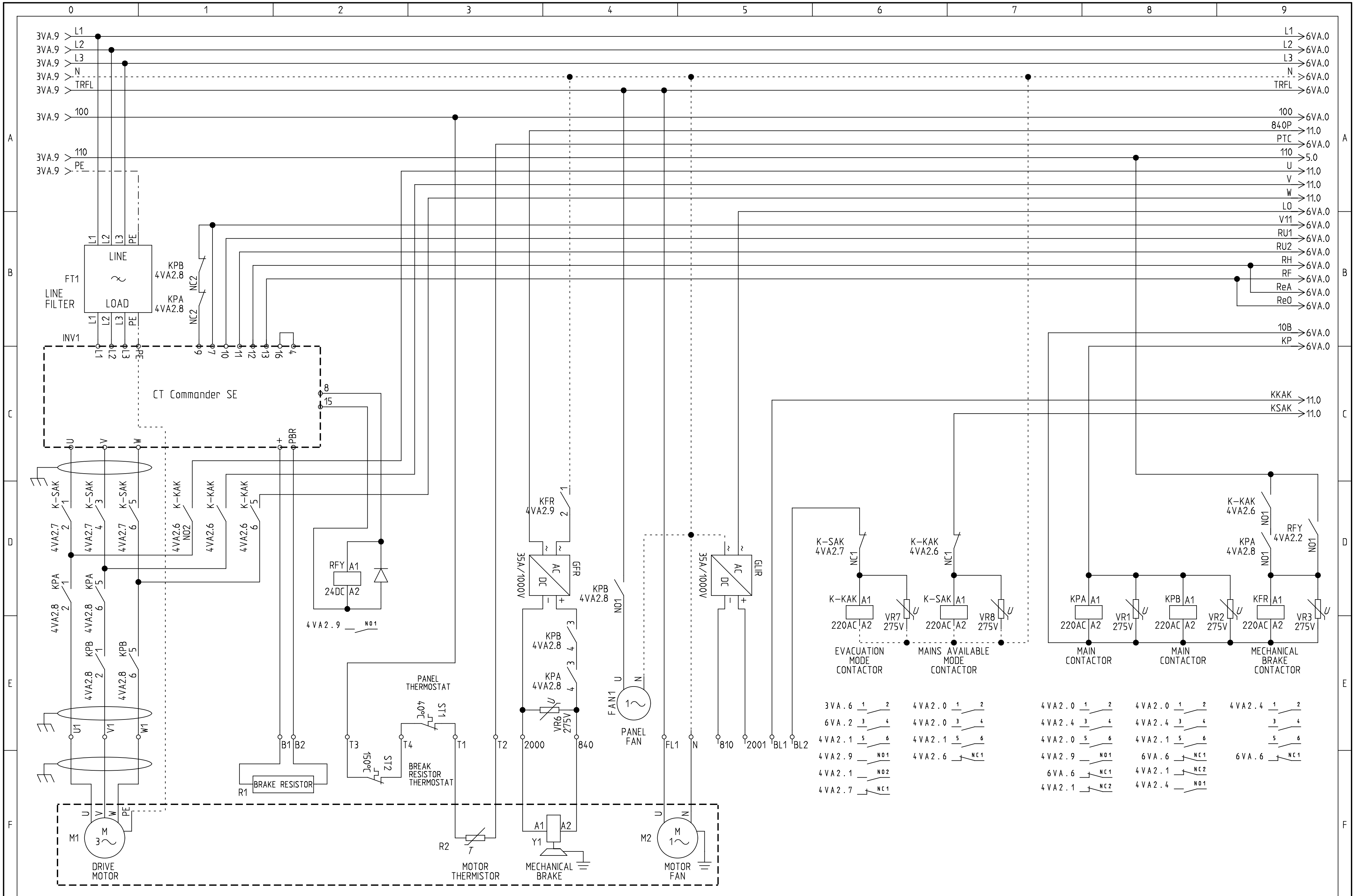
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	SUPPLY CIRCUITS DRIVE TYPE : VVVF EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 17.02.2009	Sheet: 3VA Date: 01.12.2006



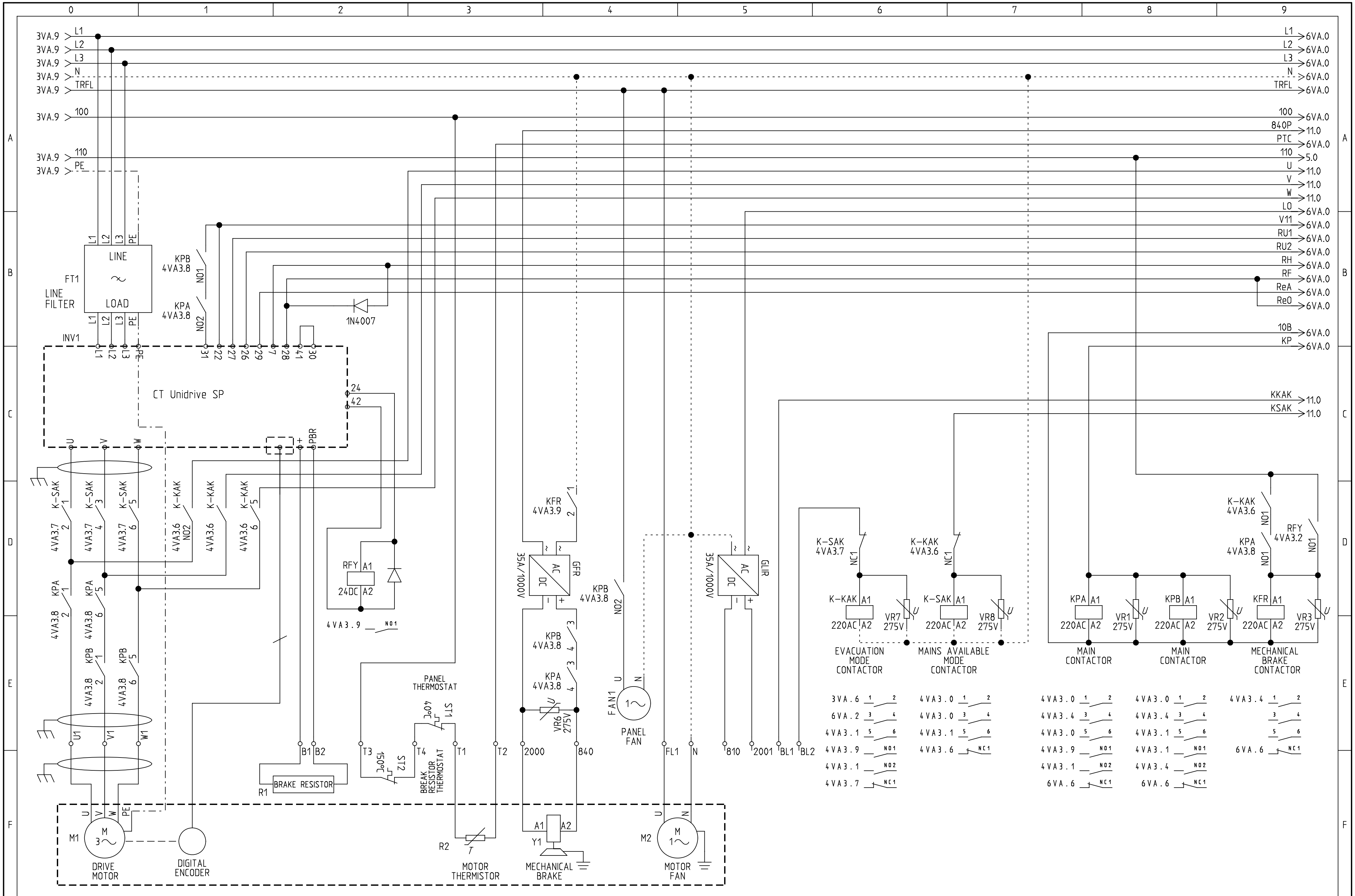
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : TWO SPEED EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 12.02.2007
				Sheet: 4 CA Date: 01.12.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF – ARKEL ADrive EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 4 VA1 Date: 01.12.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF – CT COMMANDER SE EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 4 VA2 Date: 01.12.2006



ARKEL
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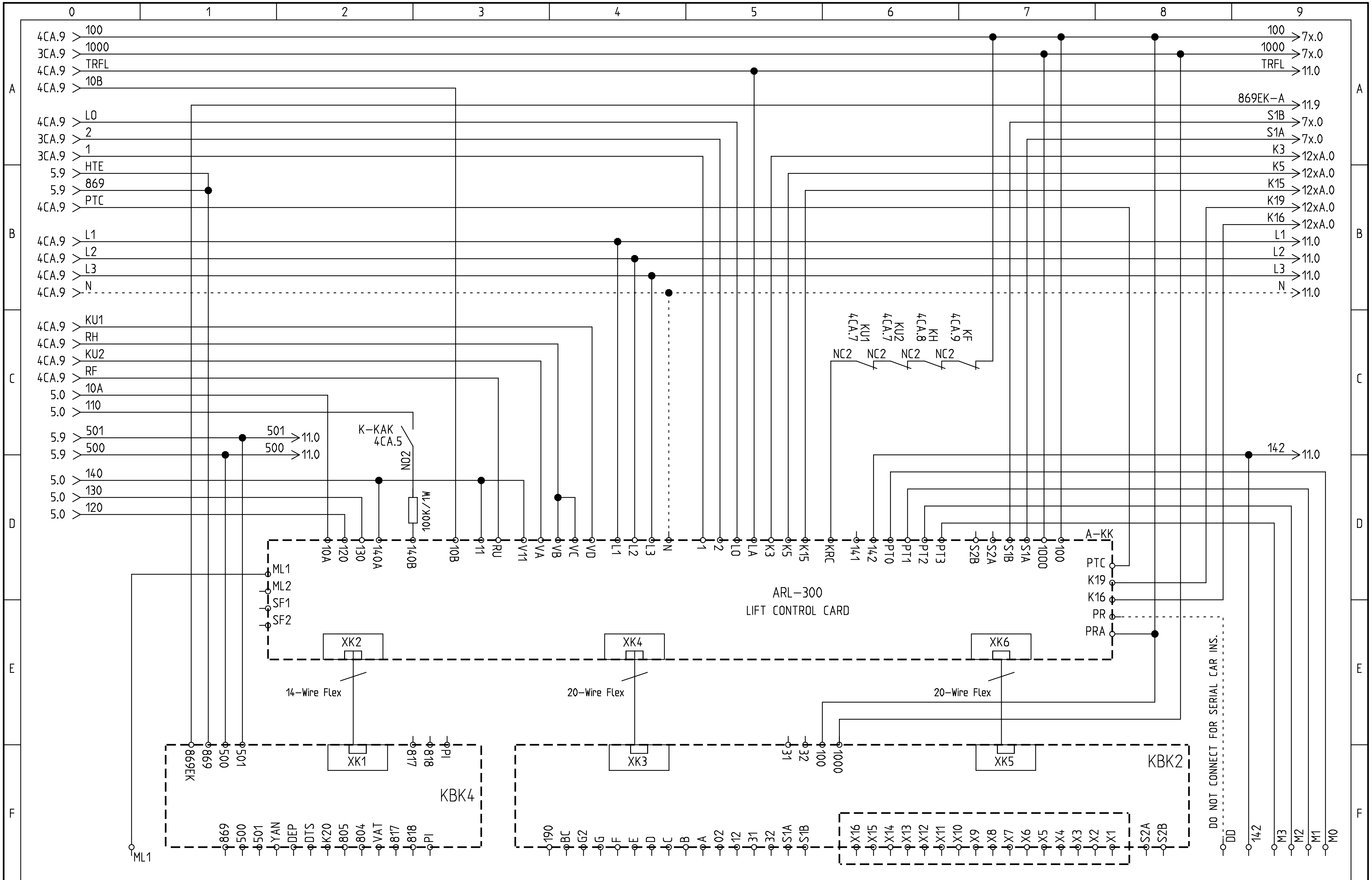
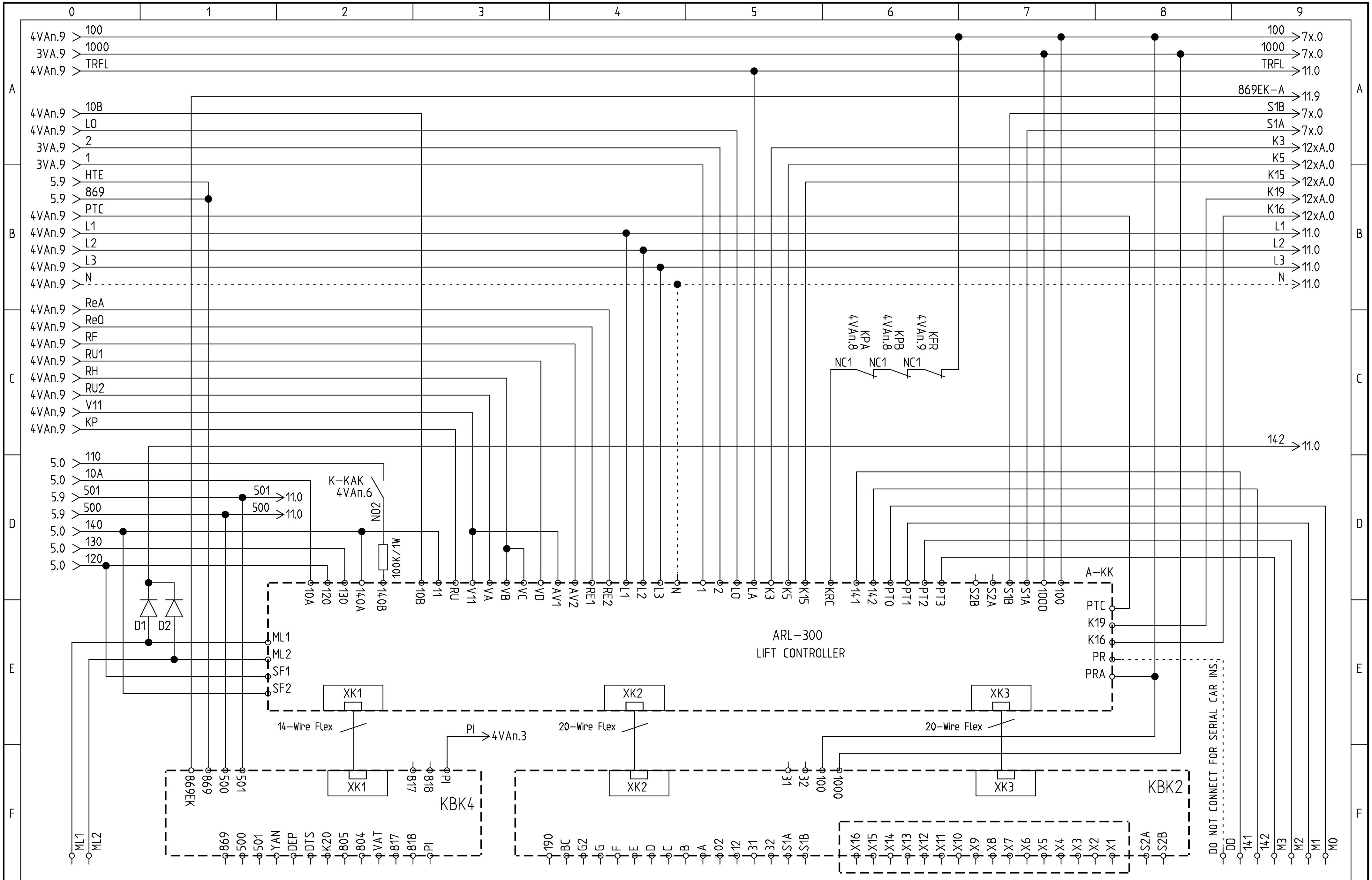
ARL-300 CONTROL PANEL

MOTOR & CONTACTORS CIRCUITS
DRIVE TYPE : VVVF – CT Unidrive SP
EVACUATION SYSTEM : AKUS-SD

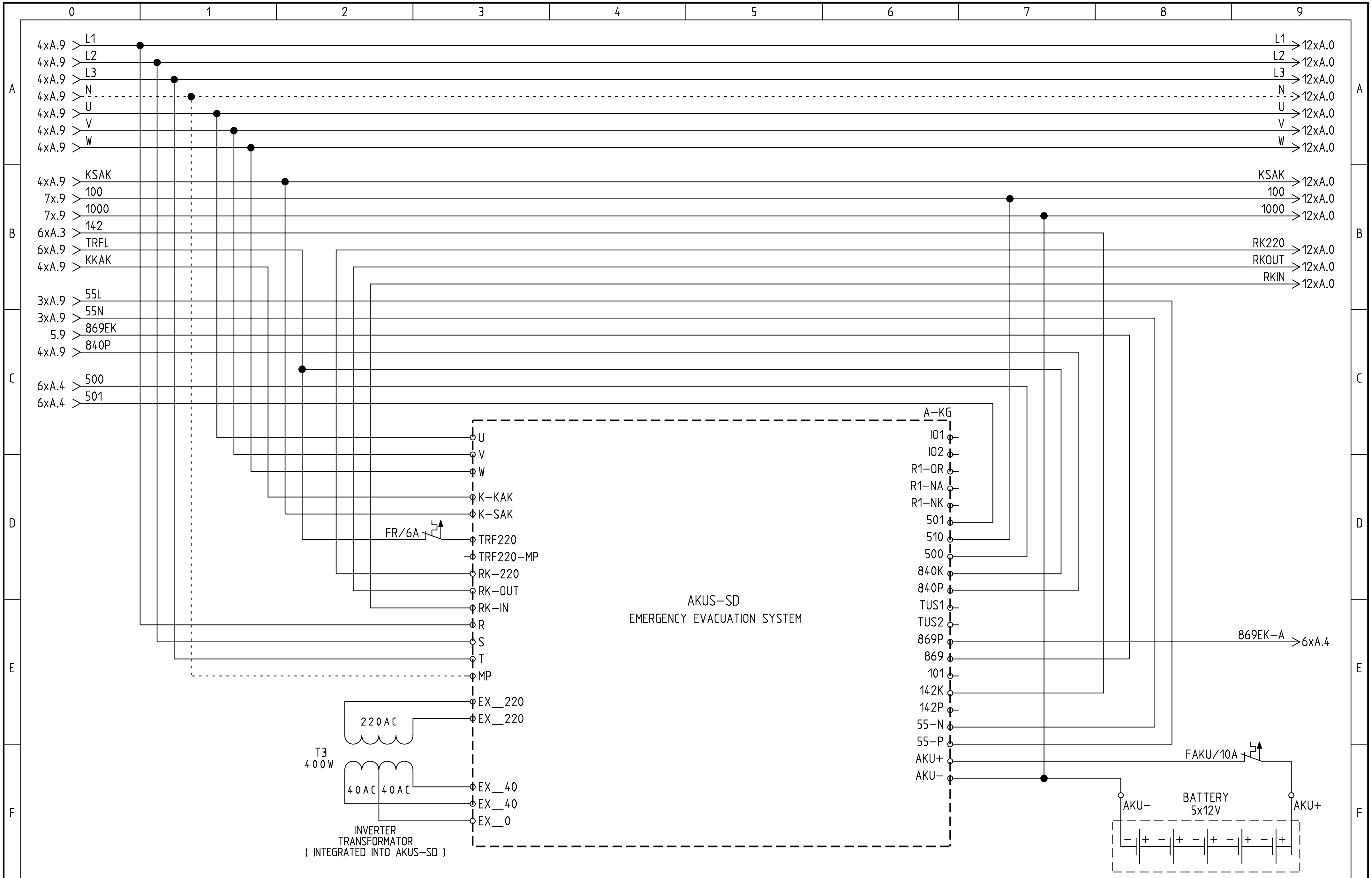
DRAWN BY: K.D.	Rev. No: V11	Sheet: 4 VA3
CHECKED BY: C.A.	Rev. Date: 06.02.2007	Date: 01.12.2006



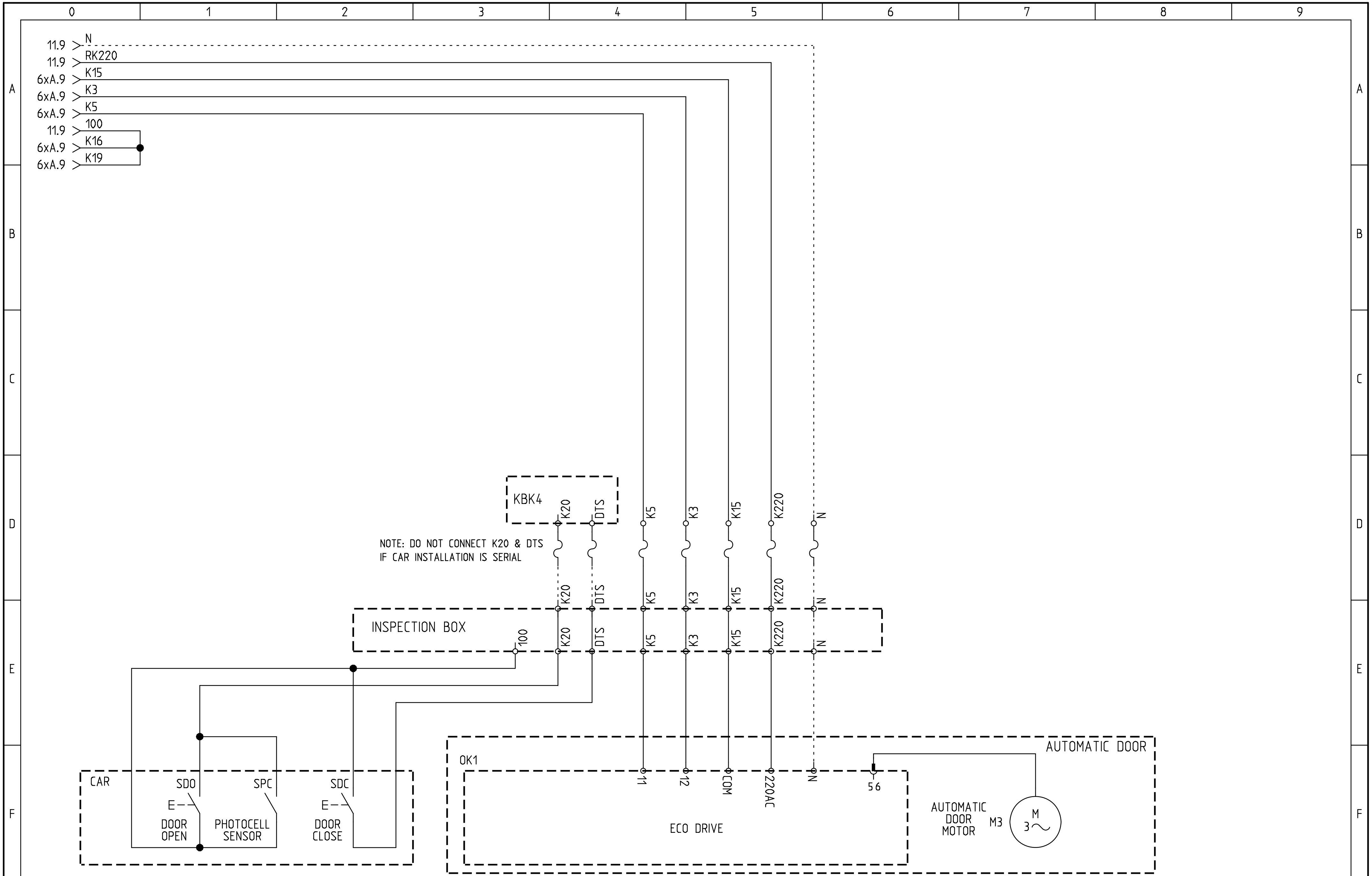
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	CONTROL CARD CONNECTIONS DRIVE TYPE : TWO SPEED EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 05.02.2007	Sheet: 6 CA Date: 01.12.2006



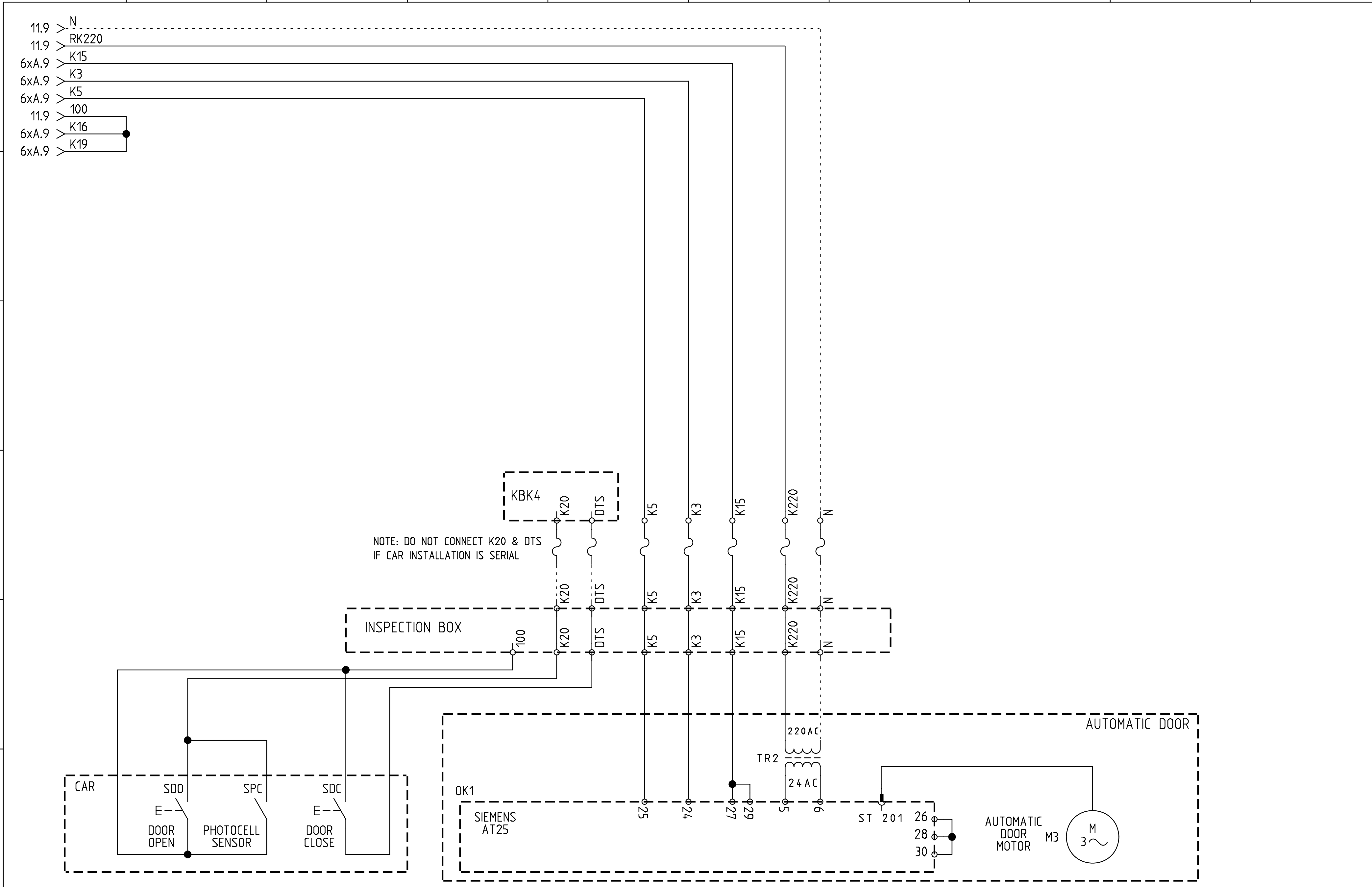
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 06.02.2007	Sheet: 6 VA Date: 12.01.2006



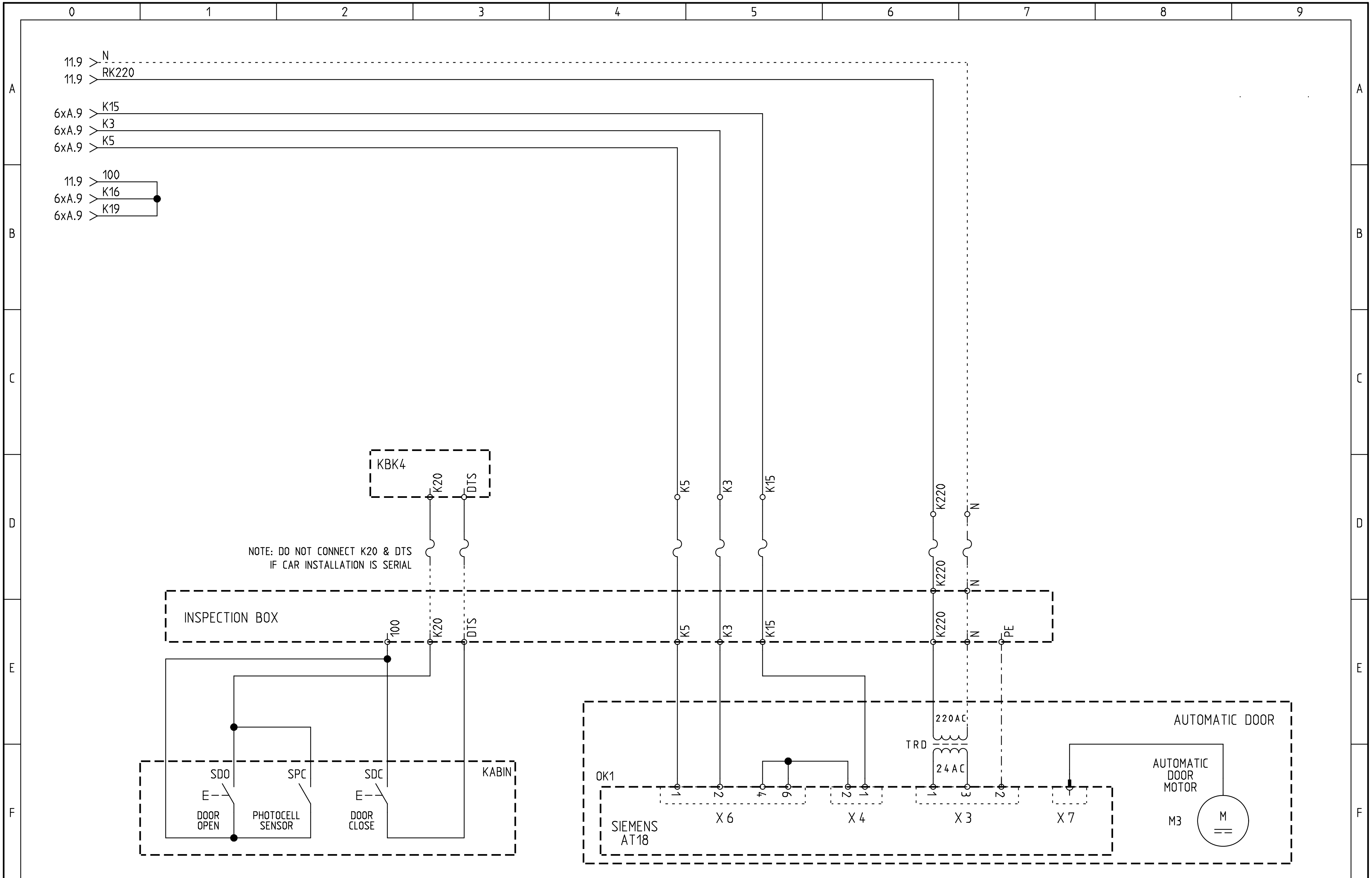
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AKUS-SD CONNECTIONS	DRAWN BY: K.D.	Rev. No: V11	Sheet: 11
			CHECKED BY: C.A.	Rev. Date: 17.02.2009	Date: 01.12.2006



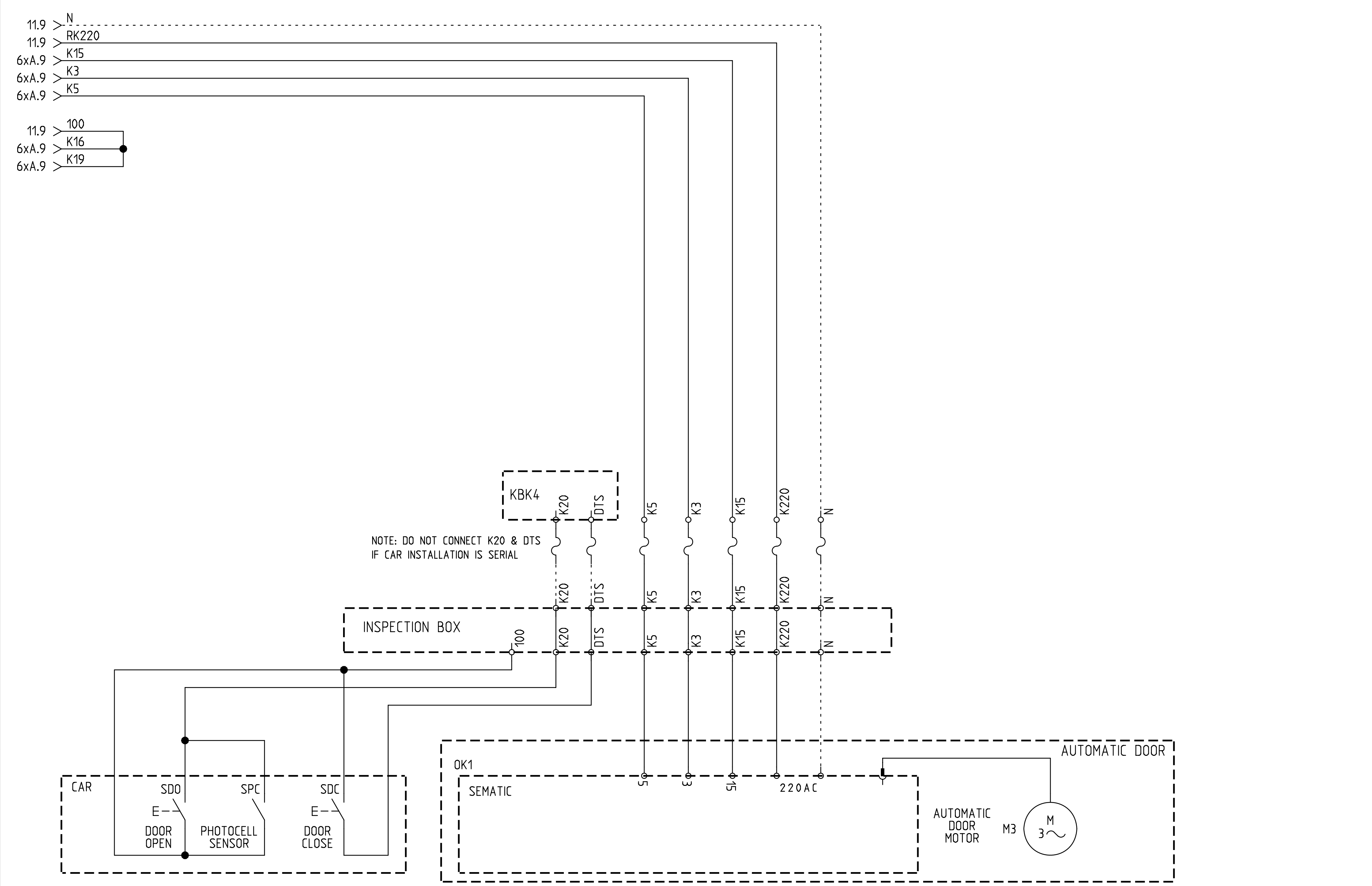
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	OTOMATIK KAPI BAGLANTILARI KAPI TIPI : WITTUR HYDRA PLUS KURTARICI : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 WA Date: 01.12.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SIEMENS AT25 EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D.	Rev. No:	Sheet: 12 AA
			CHECKED BY: C.A.	Rev. Date:	Date: 01.12.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SIEMENS AT18 EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 GA Date: 24.12.2008



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMATIC EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D.	Rev. No:	Sheet: 12 SA
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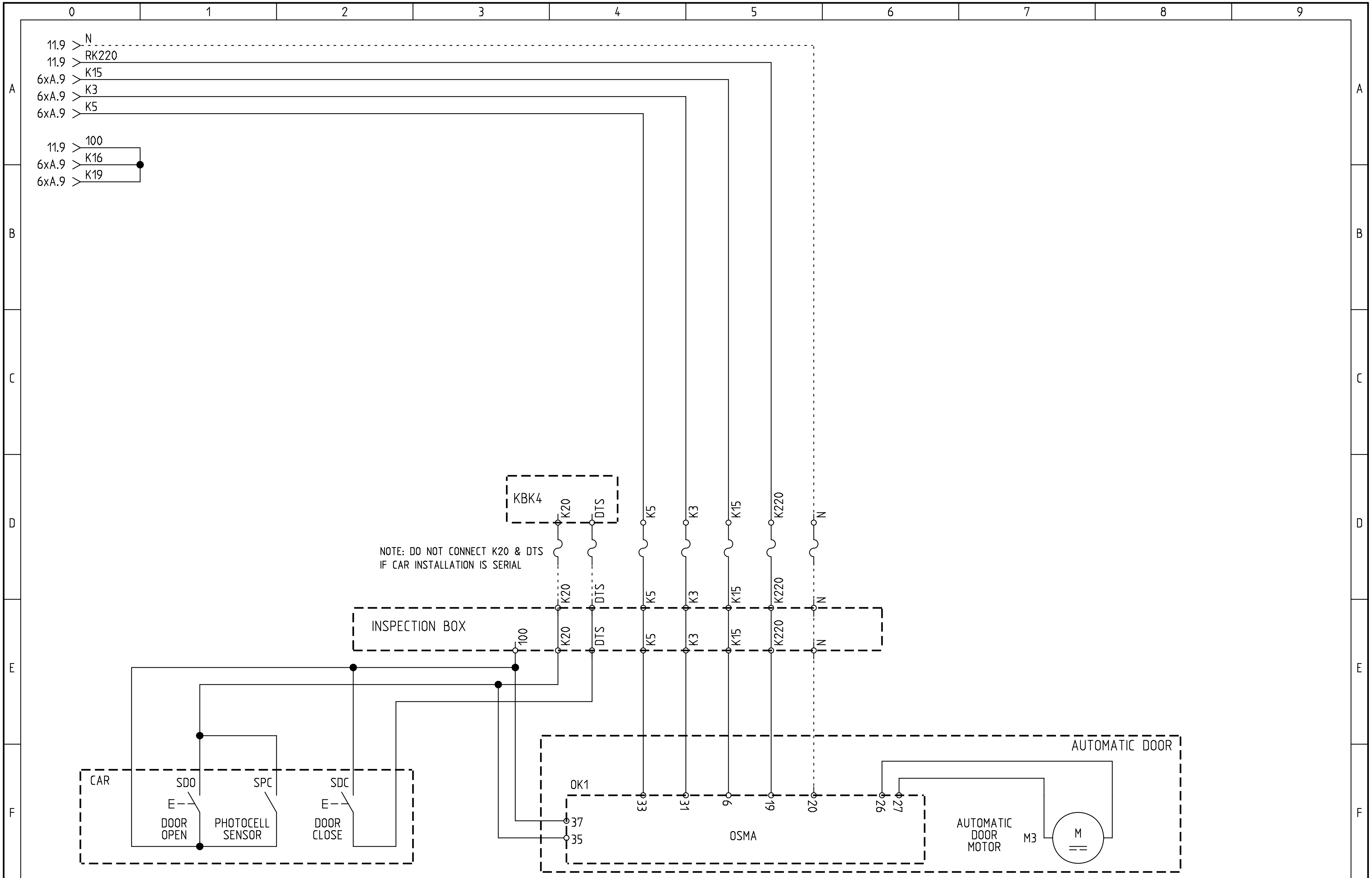
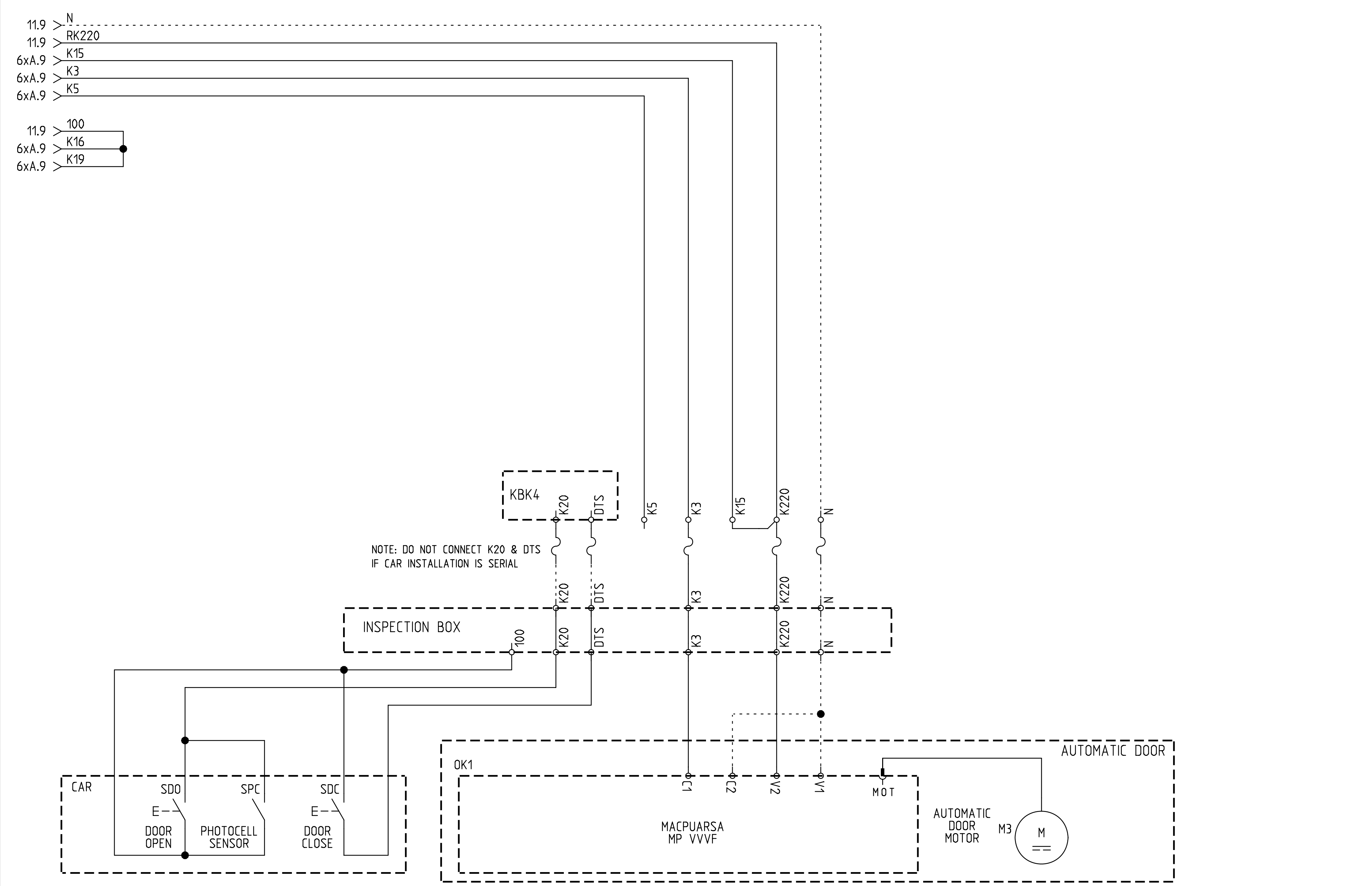


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : OSMA EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D.	Rev. No:	Sheet: 12 OA
			CHECKED BY: C.A.	Rev. Date:	Date: 01.12.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : MACPUARSA VVVF EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D.	Rev. No:	Sheet: 12 CA
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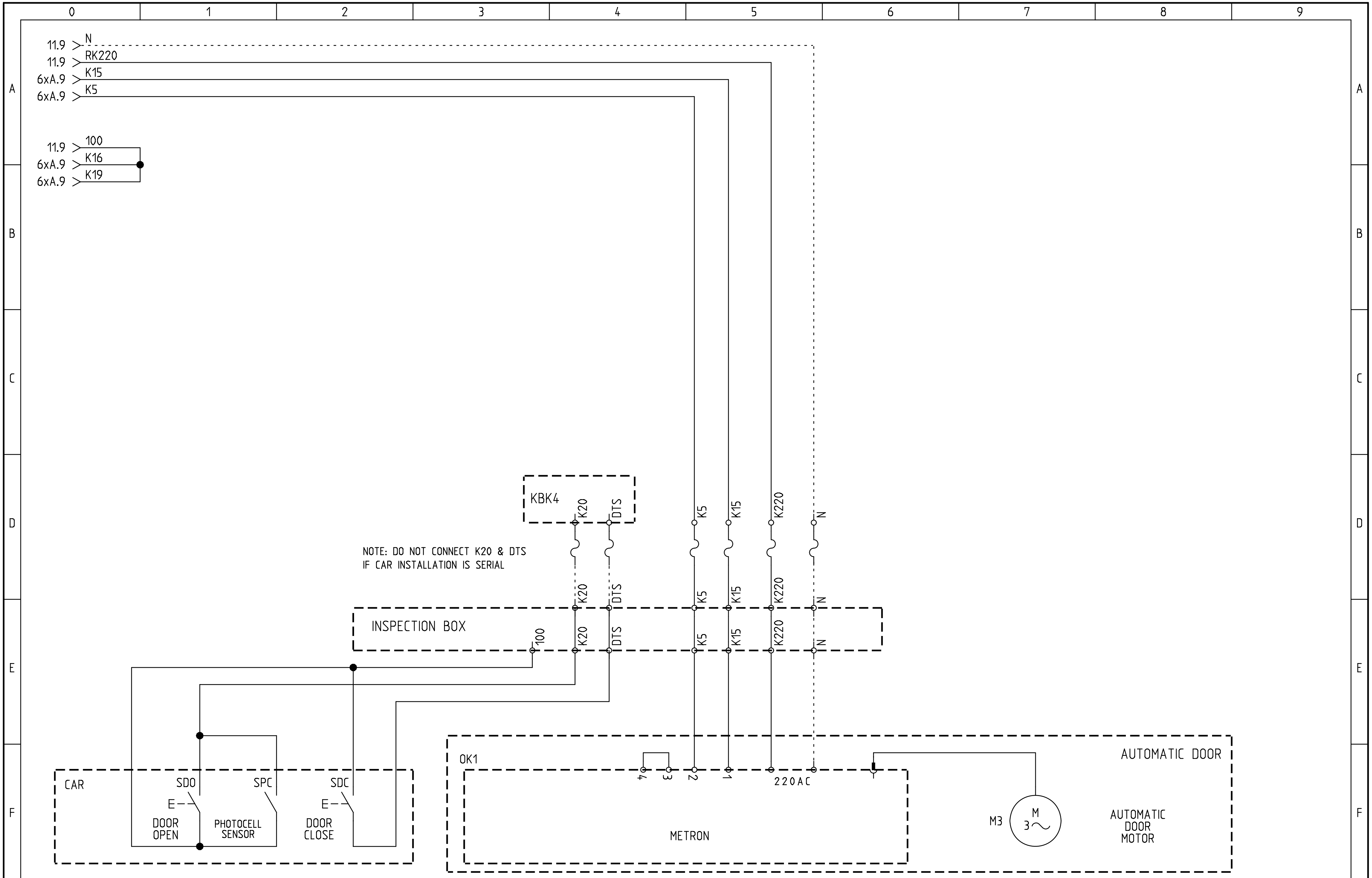
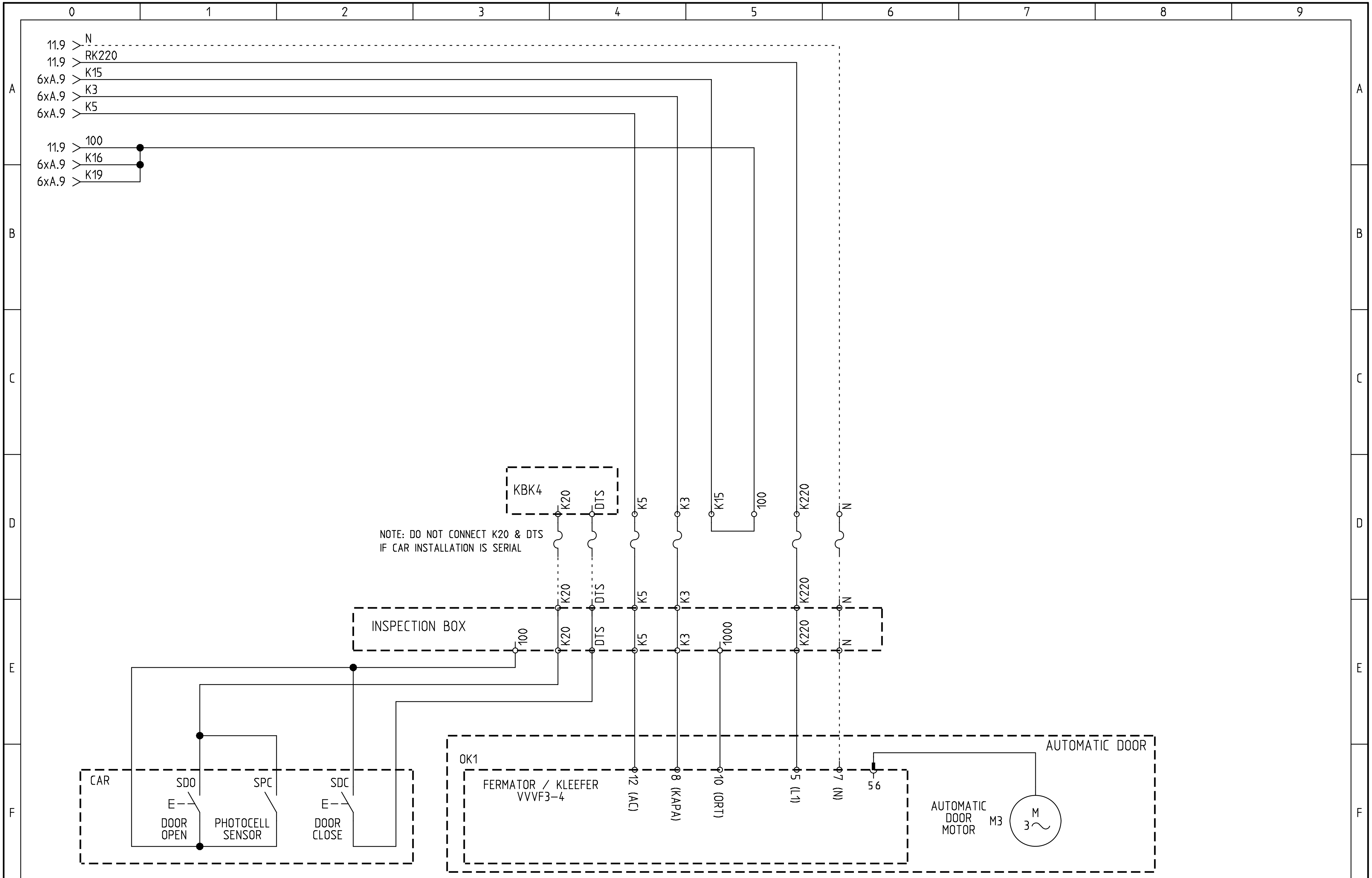
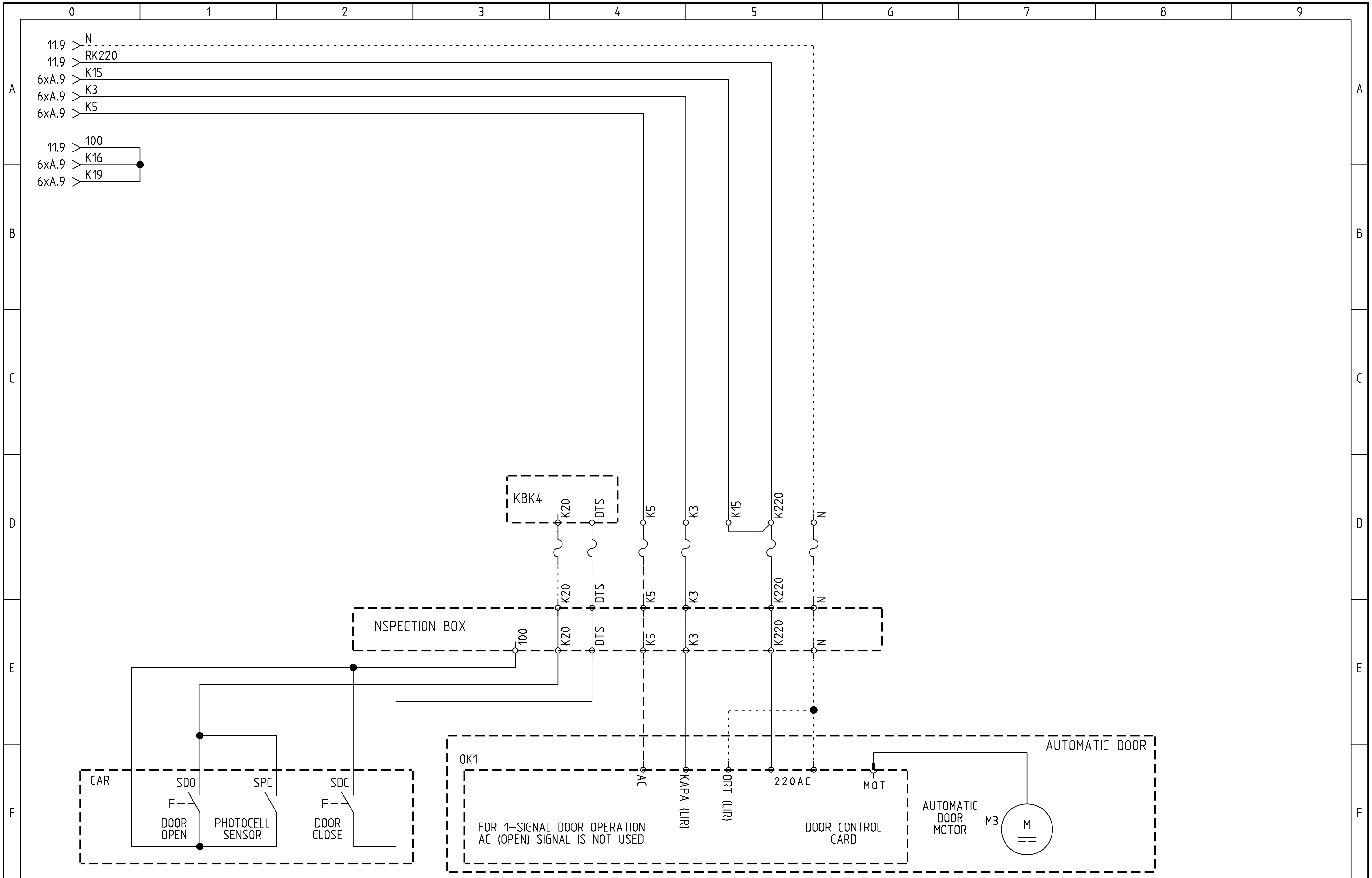


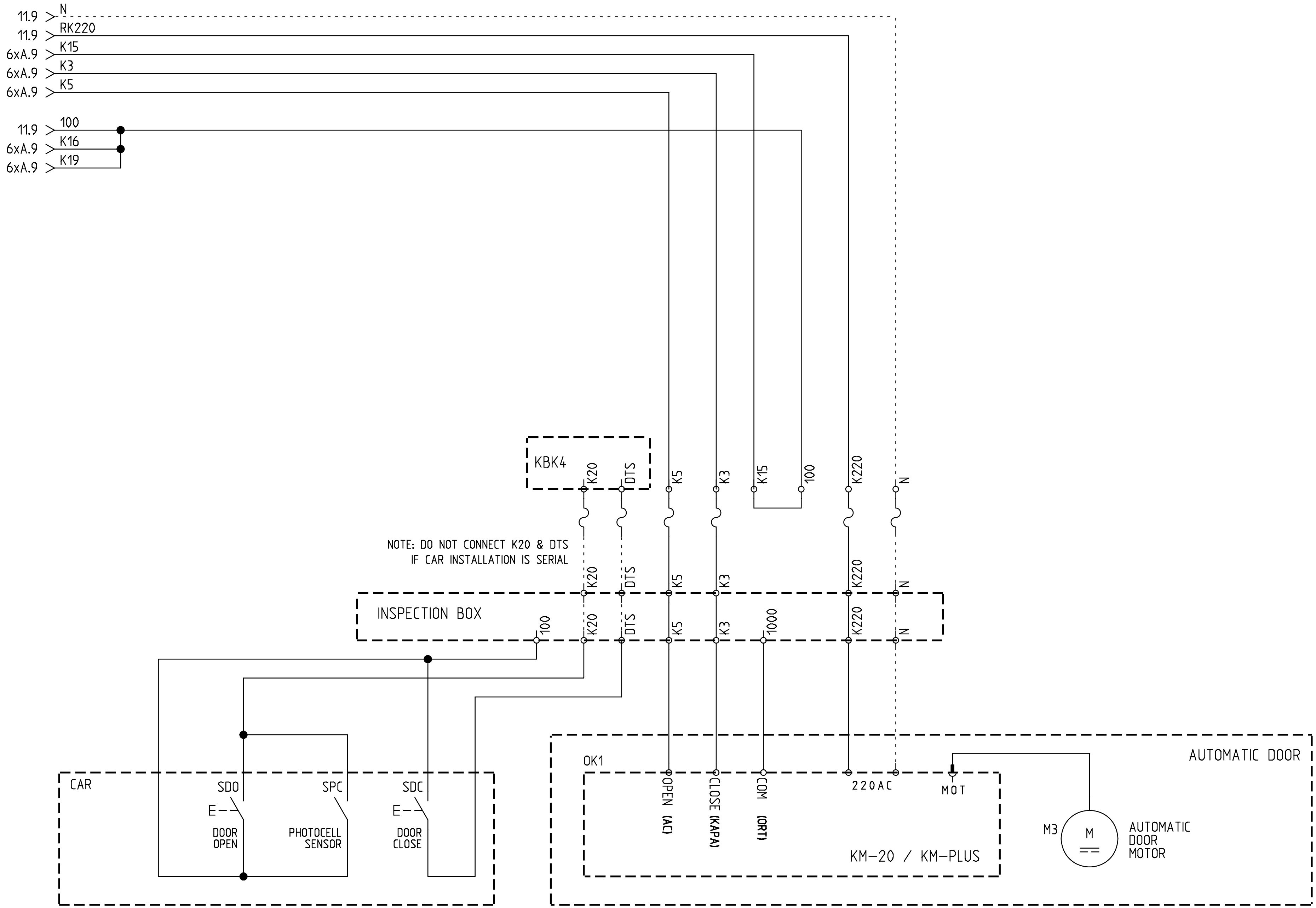
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : METRON EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 EA Date: 01.12.2006



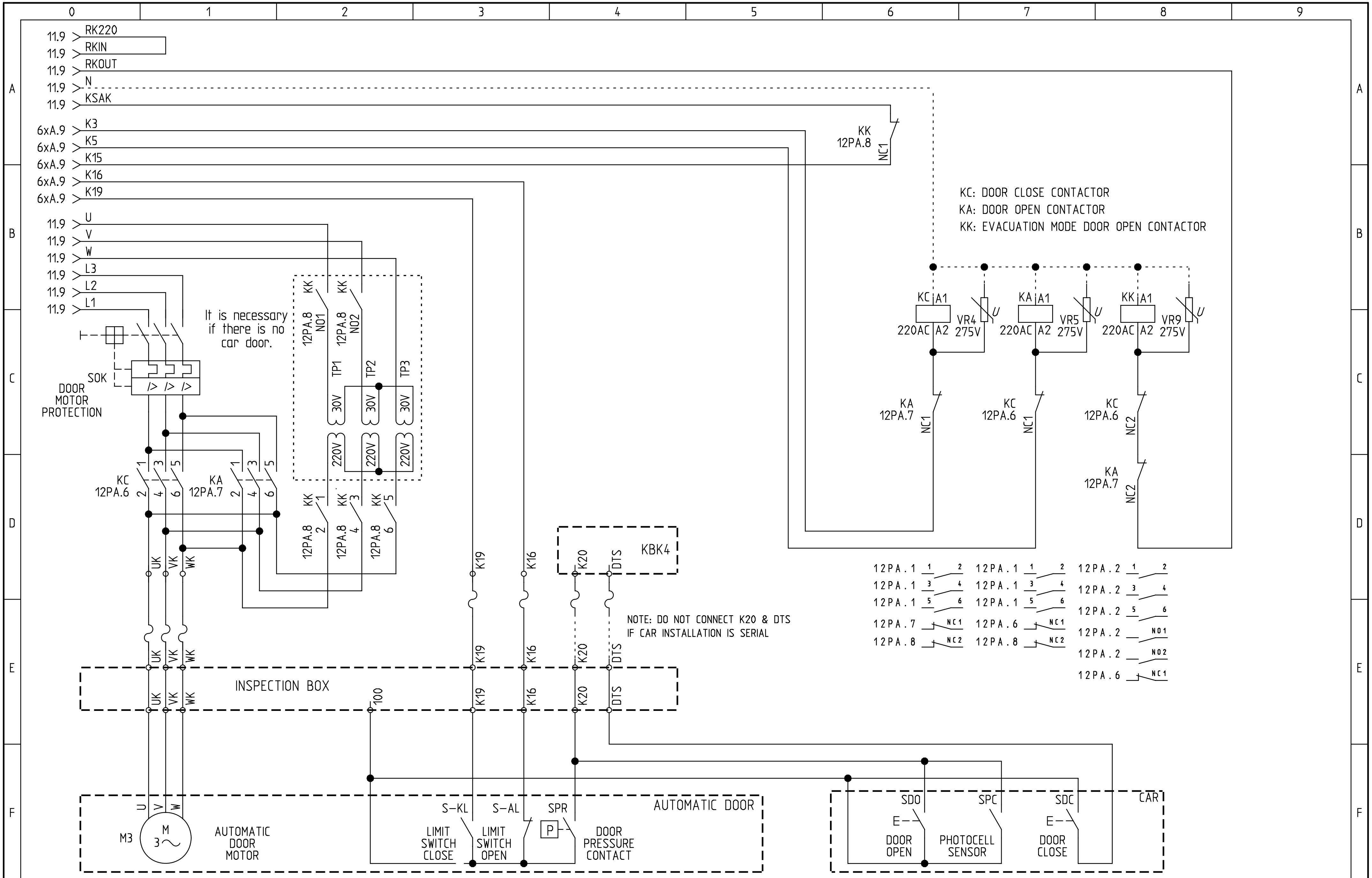
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : FERMATOR / KLEEFER VVVF 3-4 EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 FA Date: 01.12.2006



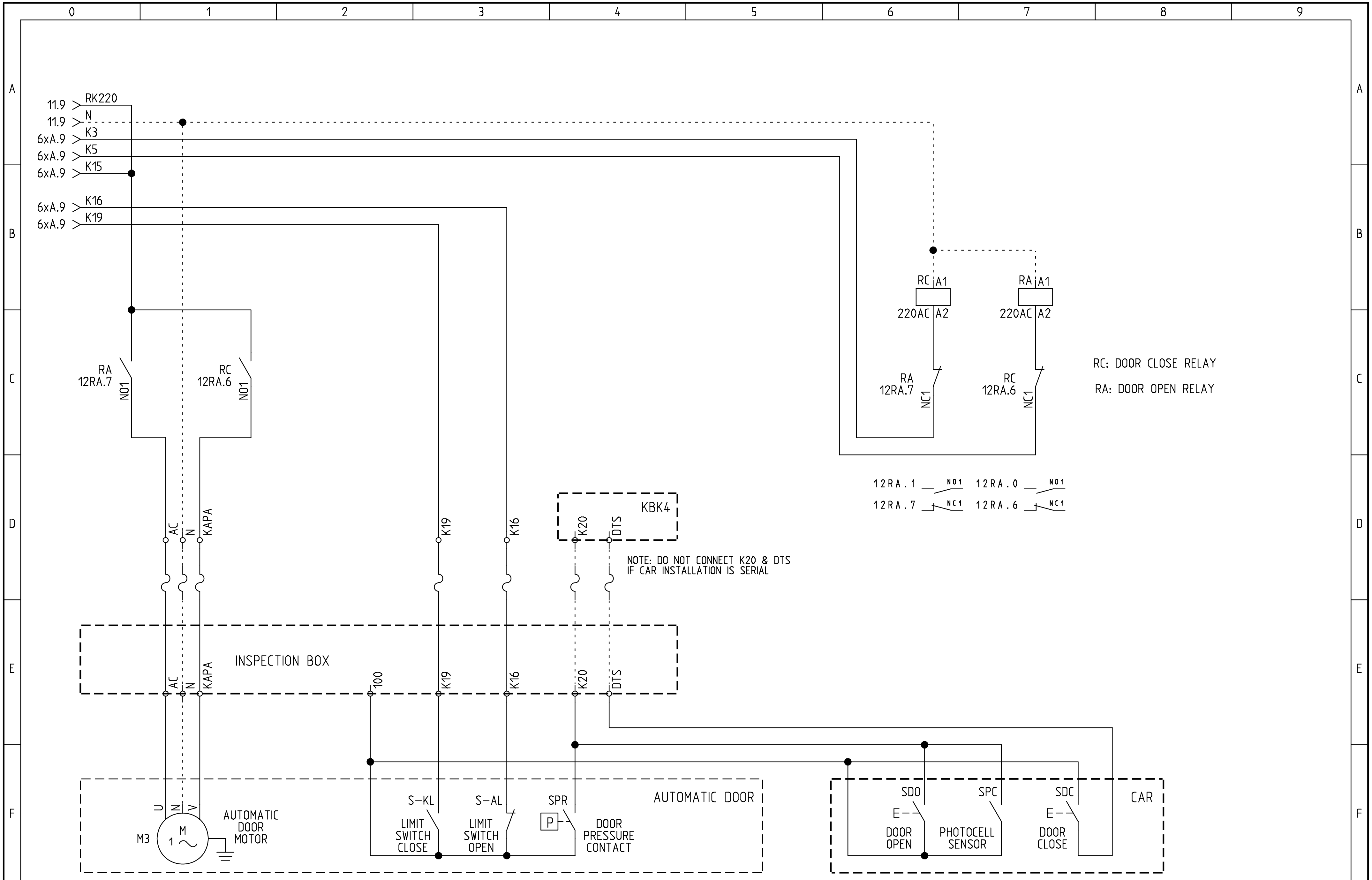
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMI AUTOMATIC WITH DC DOOR CONTROLLER EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 MA Date: 01.12.2006



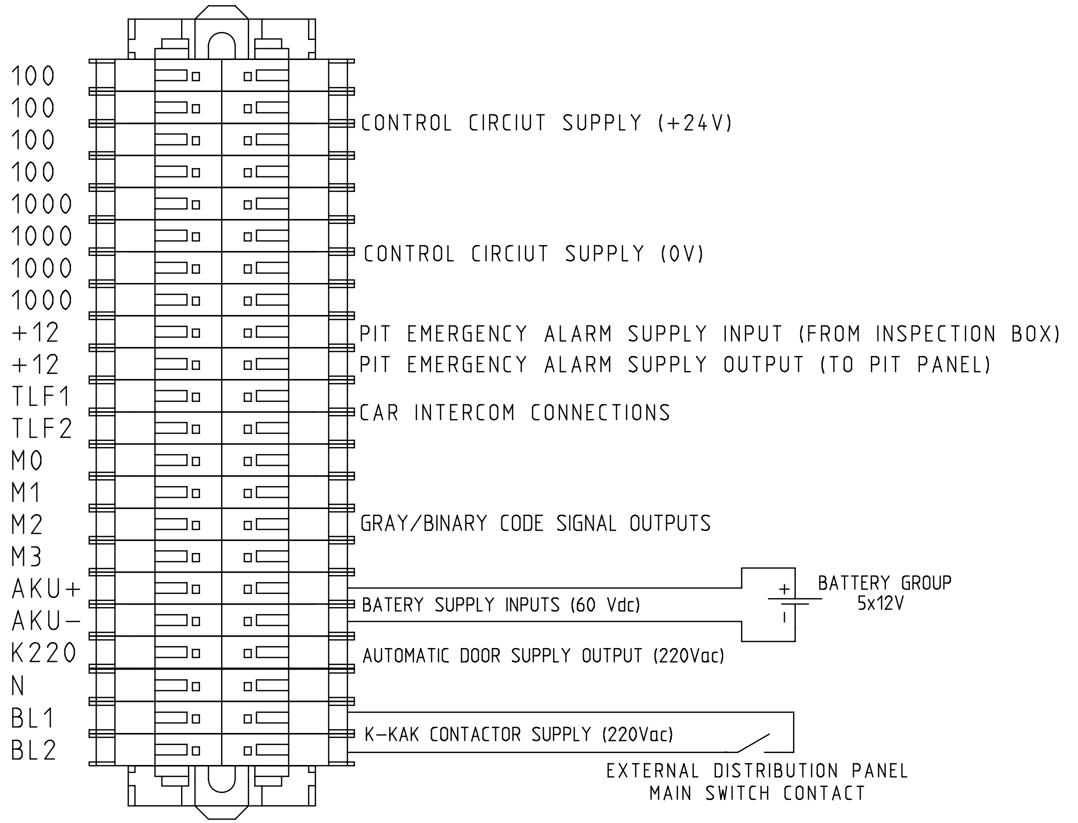
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : KM-20 / KM-PLUS EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:
				Sheet: 12 KA Date: 28.12.2009



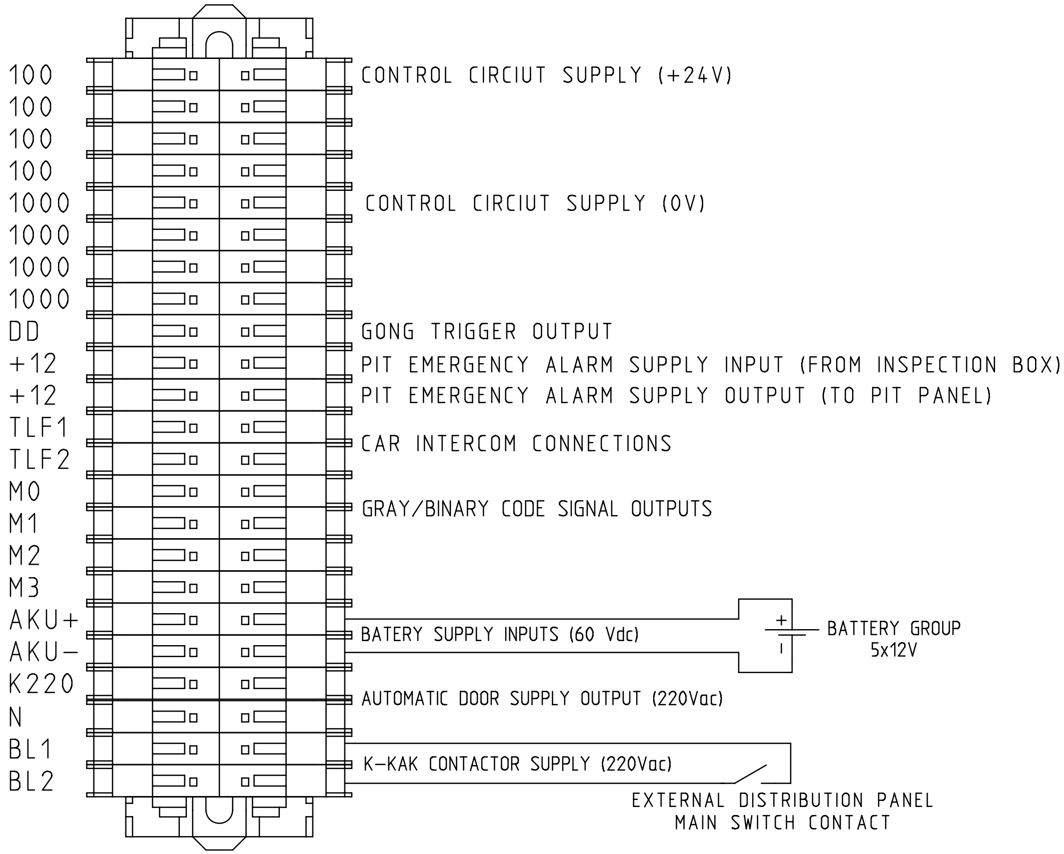
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 3-PHASE EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 PA Date: 01.12.2006



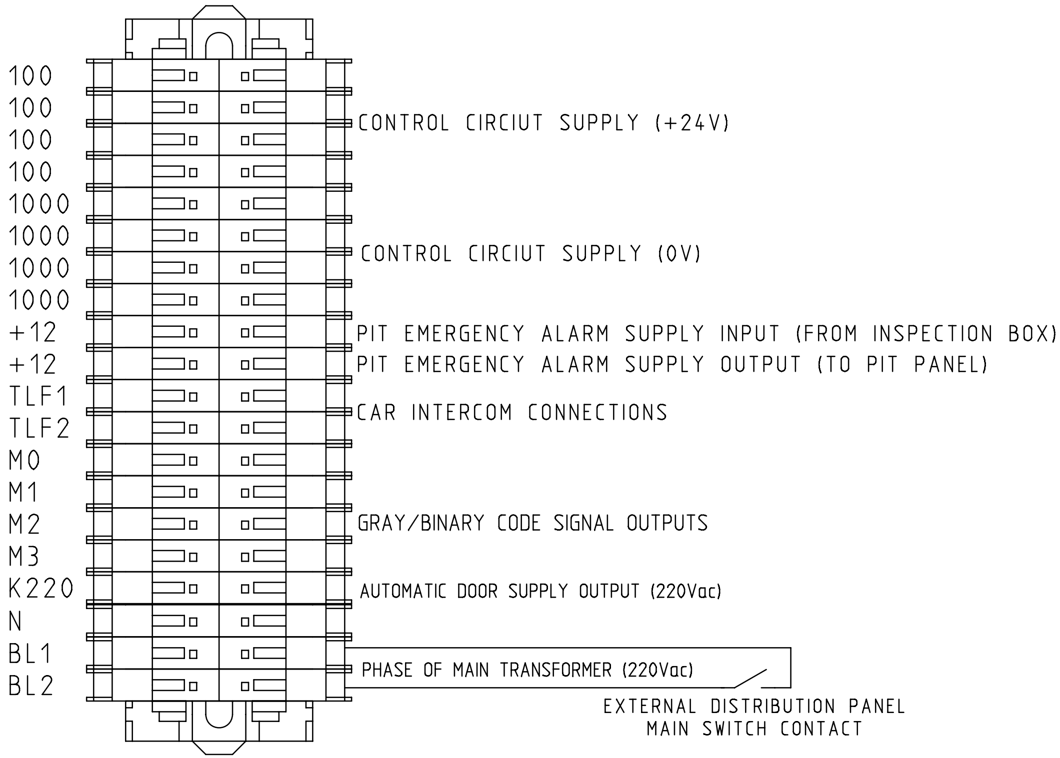
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 1-PHASE EVACUATION SYSTEM : AKUS-SD	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 RA Date: 01.12.2006



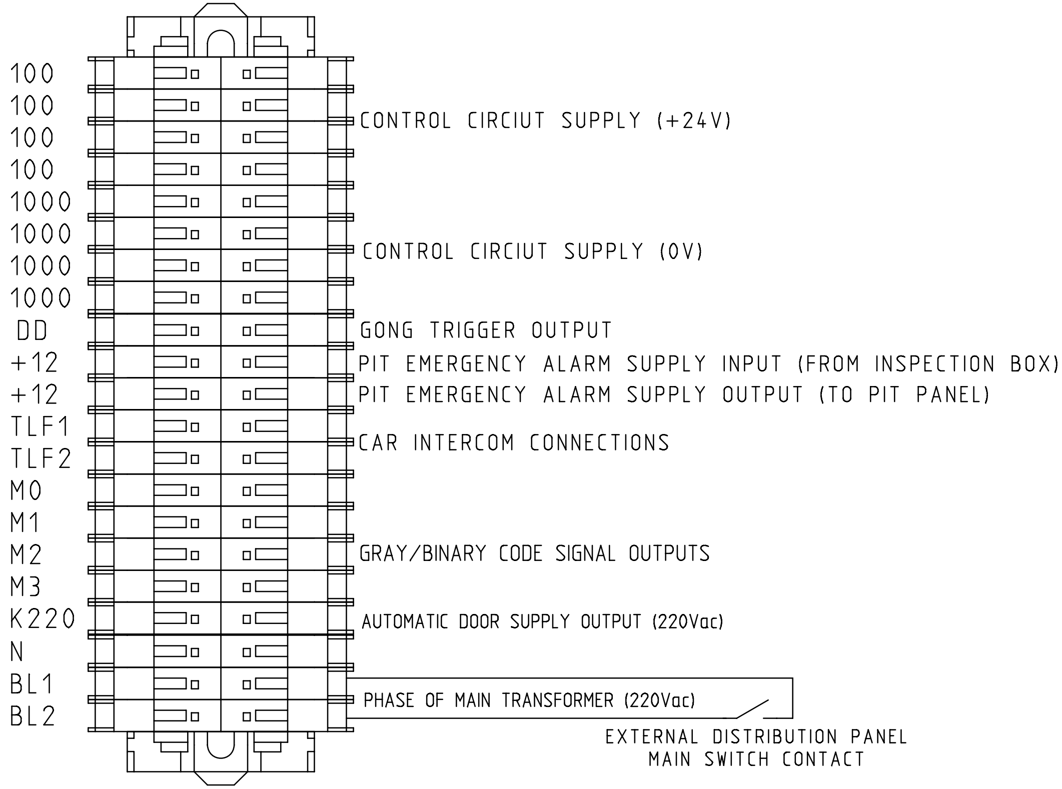
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : SERIAL AKUS-SD & CONTROL CIRCUITS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K4 Date: 01.12.2006



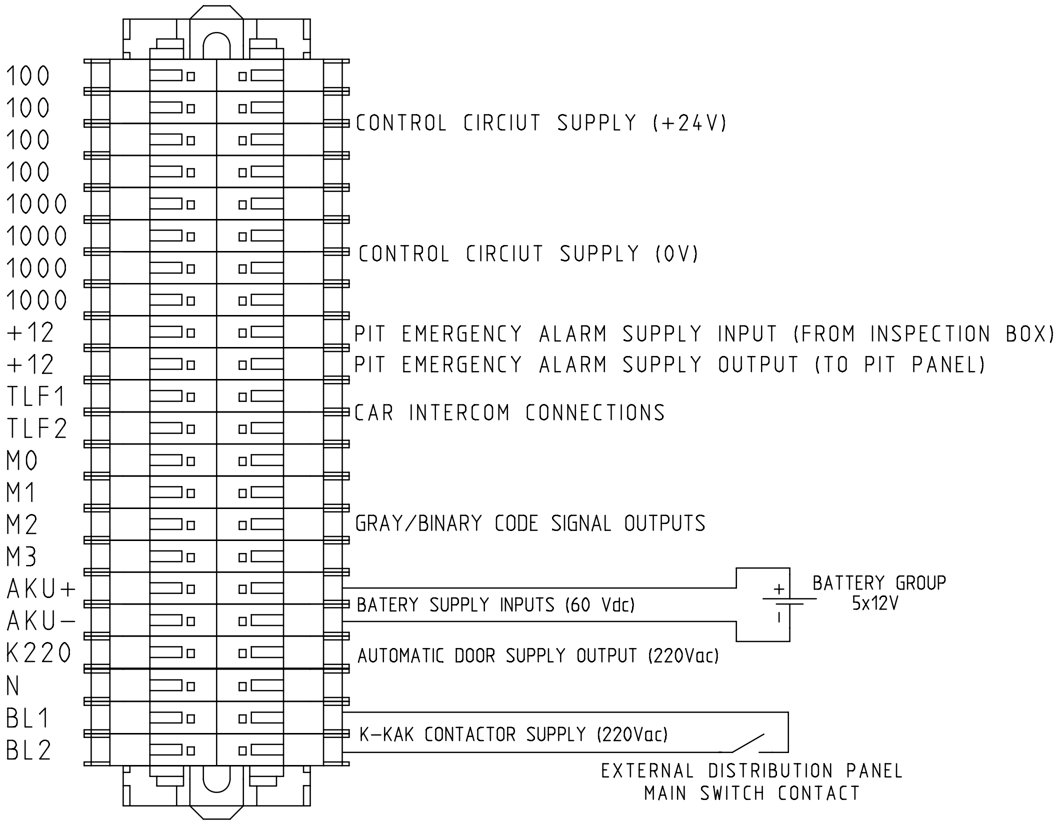
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : PARALLEL AKUS-SD & CONTROL CIRCUITS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K4 Date: 01.12.2006



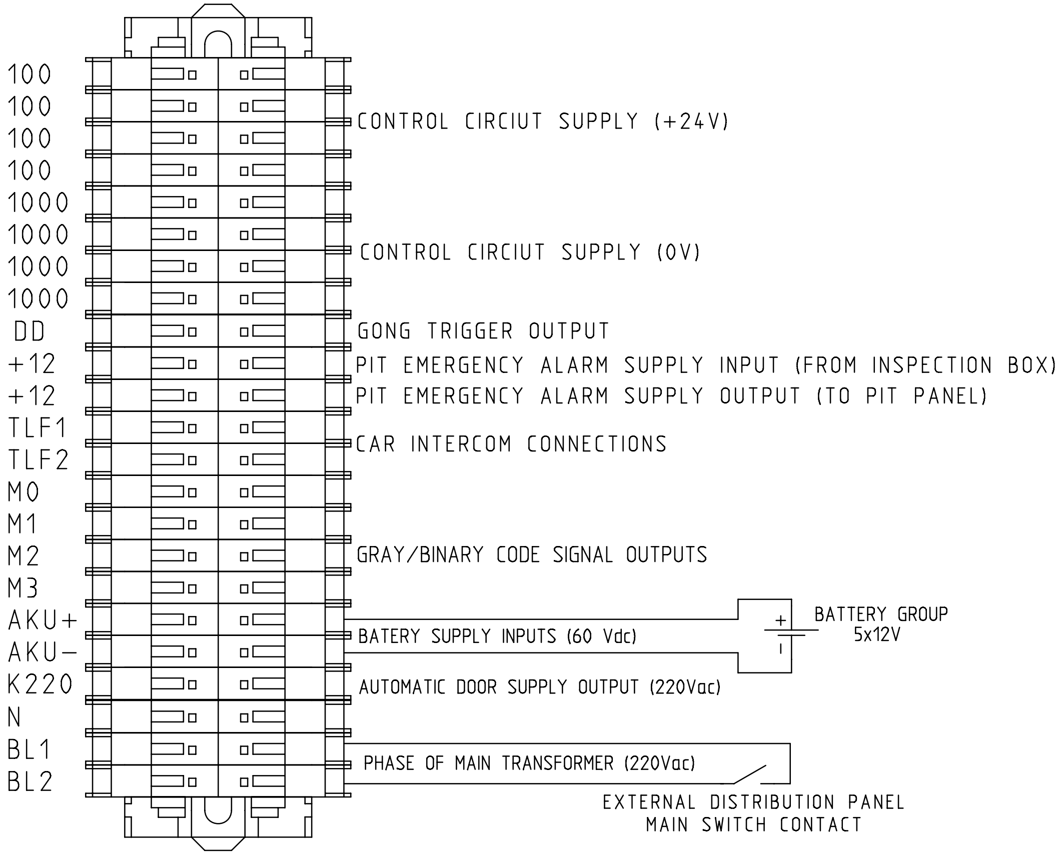
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : SERIAL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K4 Date: 27.07.2009



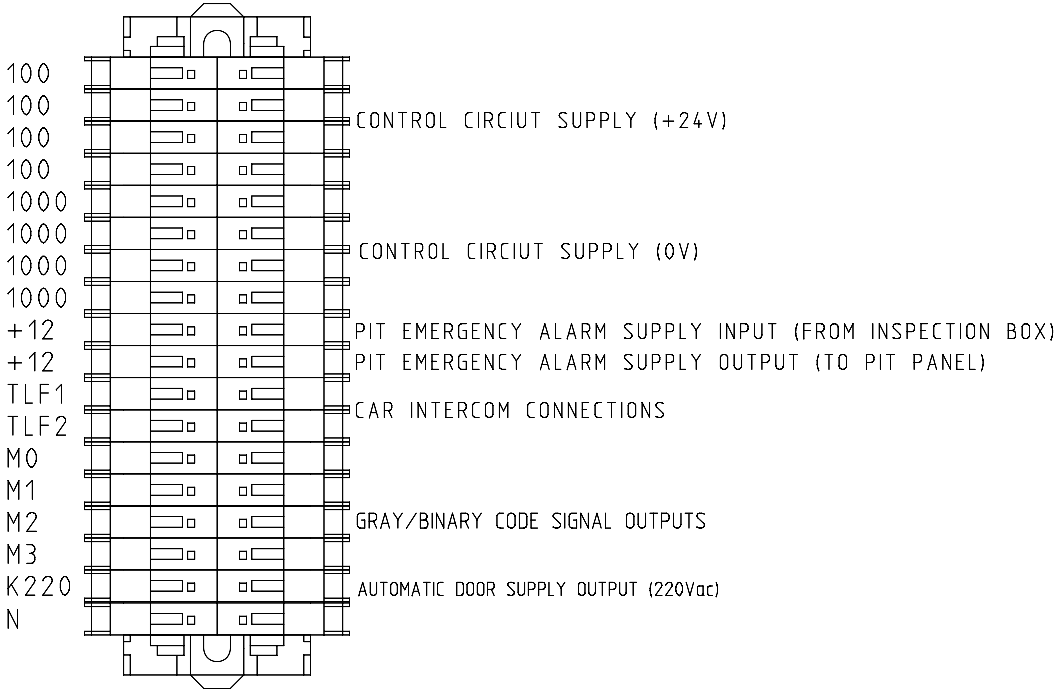
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : PARALLEL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K4 Date: 31.08.2009



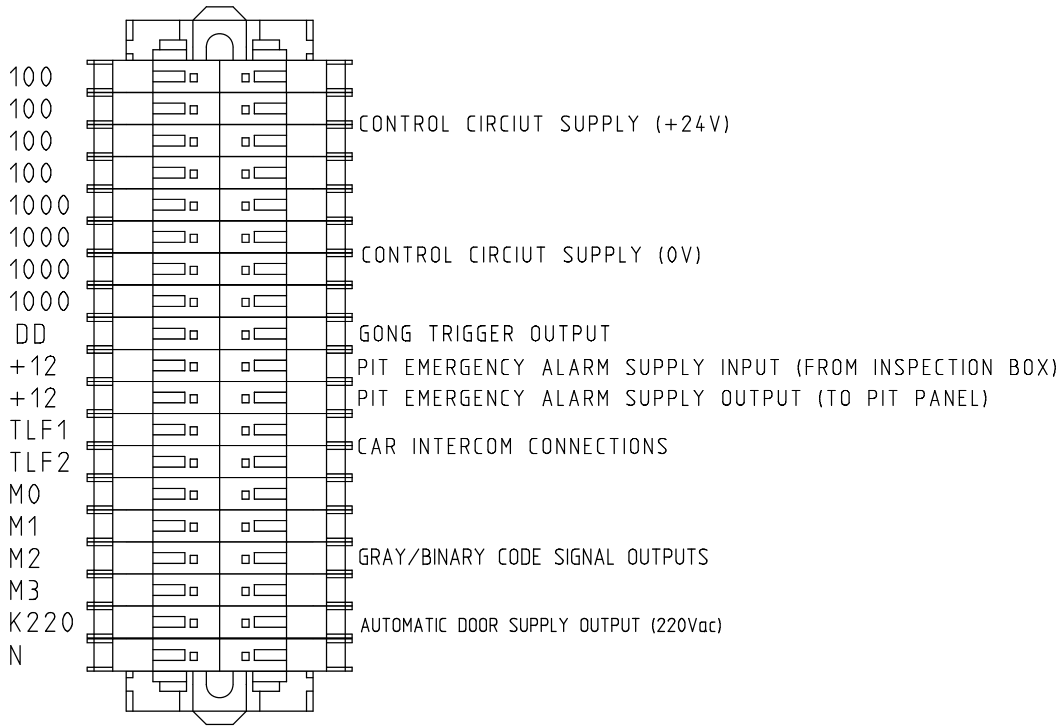
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : SERIAL AKUS-SD & CONTROL CIRCUITS	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K4
			CHECKED BY: C.A.	Rev. Date:	Date: 01.12.2006



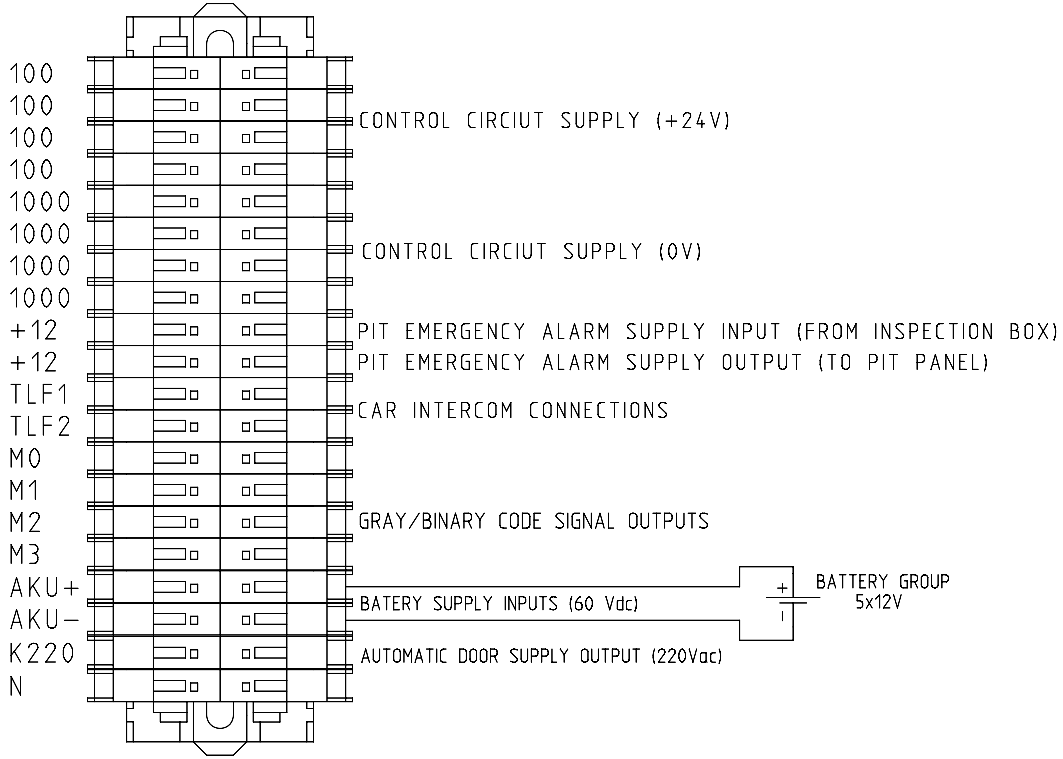
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : PARALLEL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK-K4 Date: 01.09.2009



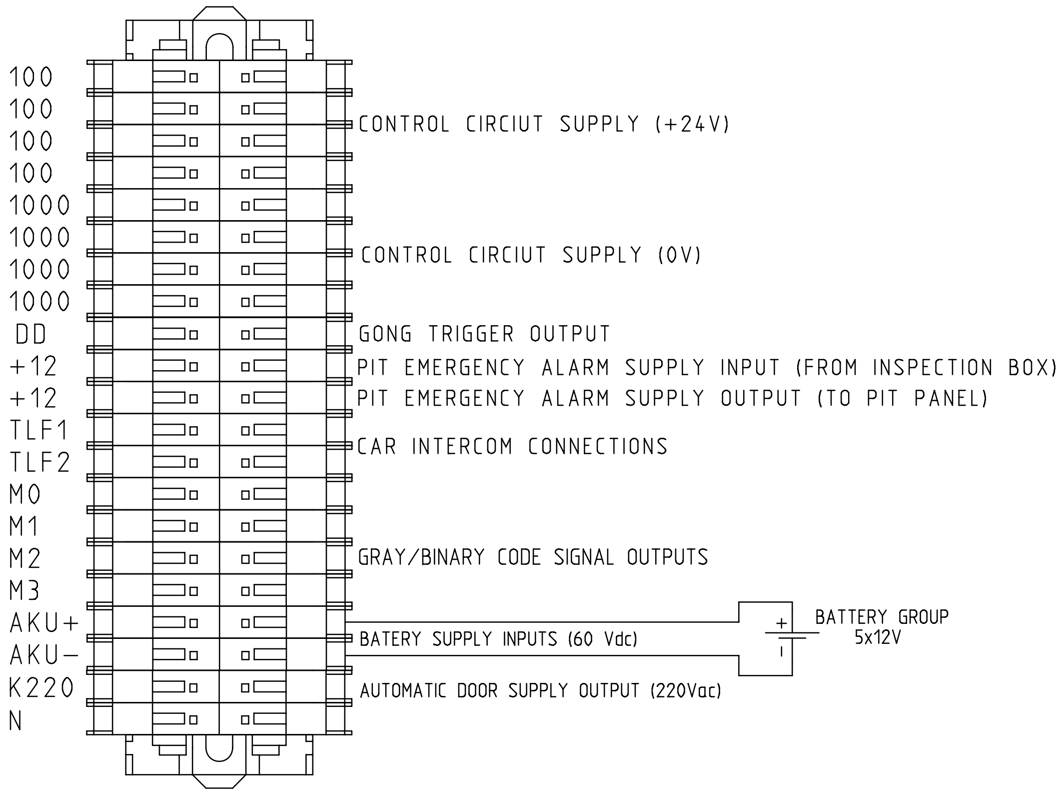
ARKEL www.arkel.com.tr (+90 216) 540 03 10 ARKEL	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : SERIAL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K4
			CHECKED BY: C.A.	Rev. Date:	Date: 01.09.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10 ARKEL	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : PARALLEL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K4
			CHECKED BY: C.A.	Rev. Date:	Date: 01.09.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	PANEL TERMINAL CONNECTION CAR INSTALLATION : SERIAL CONTROL CIRCUIT SUPPLY	DRAWN BY: K.D.	Rev. No:	Sheet: EK-K4
			CHECKED BY: C.A.	Rev. Date:	Date: 01.09.2009



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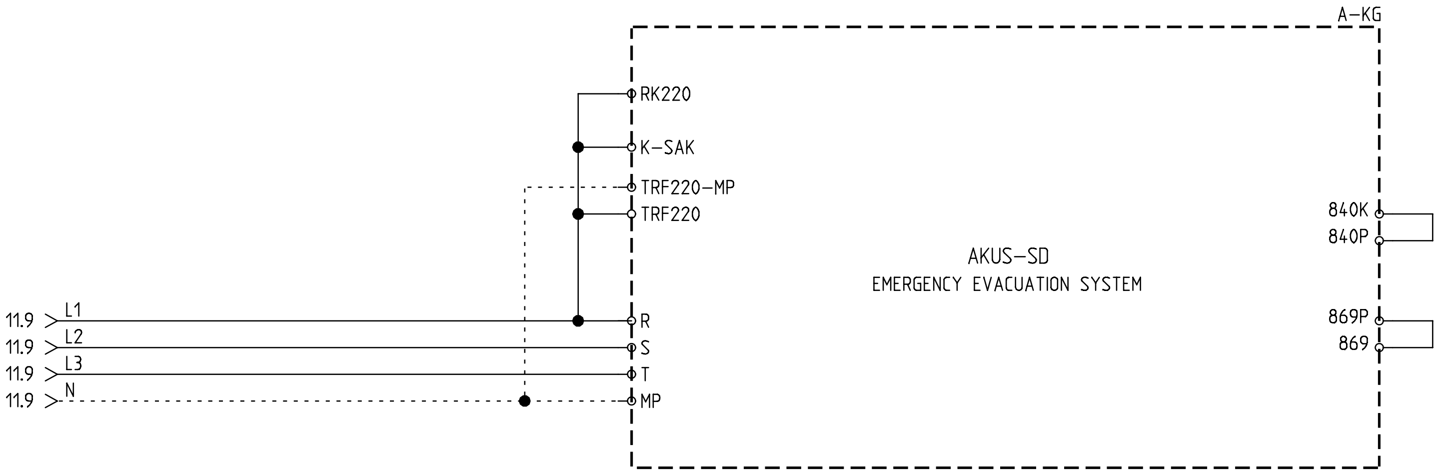
ARL−300 CONTROL PANEL

PANEL TERMINAL CONNECTION
CAR INSTALLATION : PARALLEL
CONTROL CIRCUIT SUPPLY

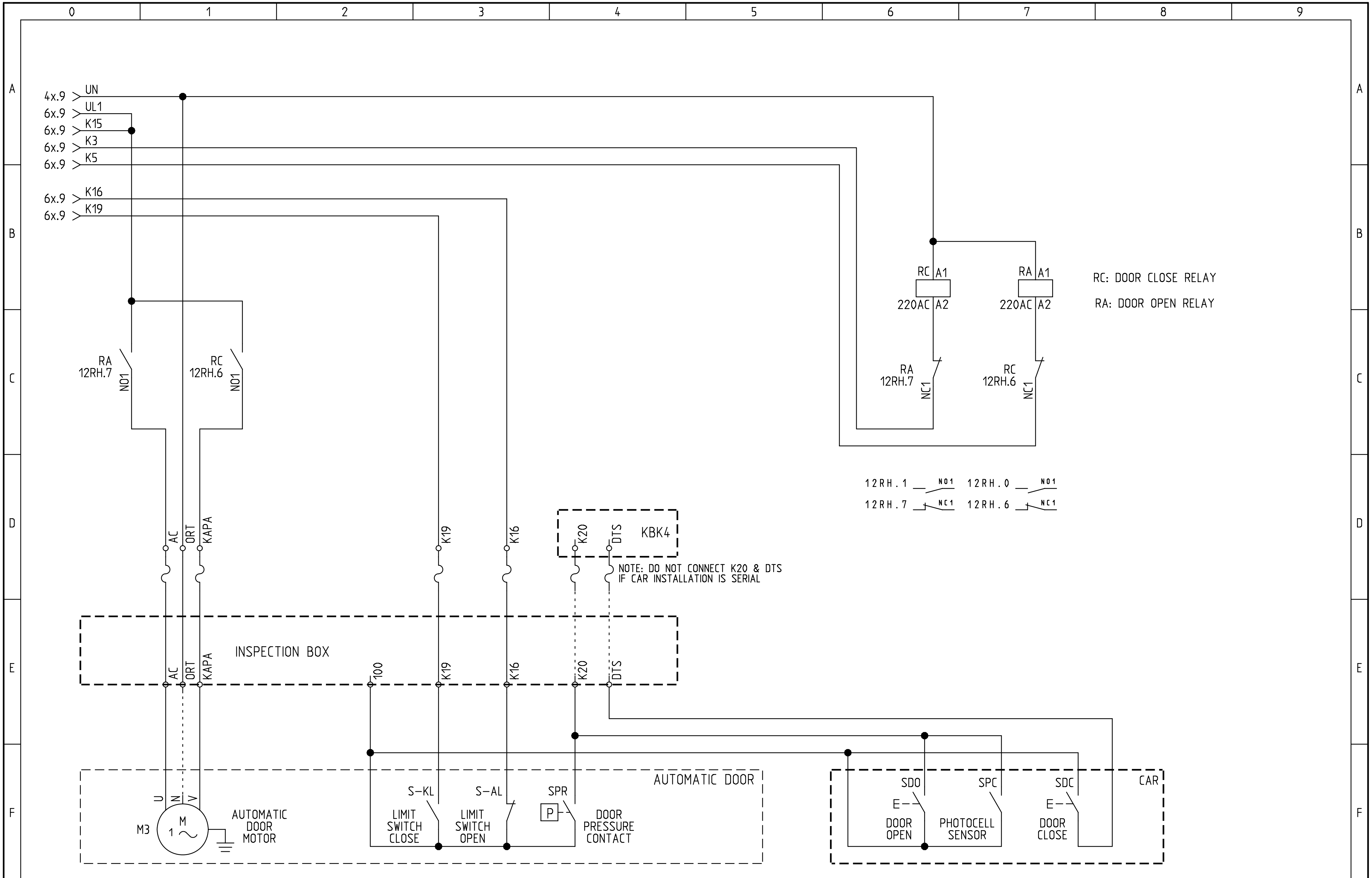
DRAWN BY: K.D.	Rev. No:	Sheet: EK−K4
CHECKED BY: C.A.	Rev. Date:	Date: 01.09.2009



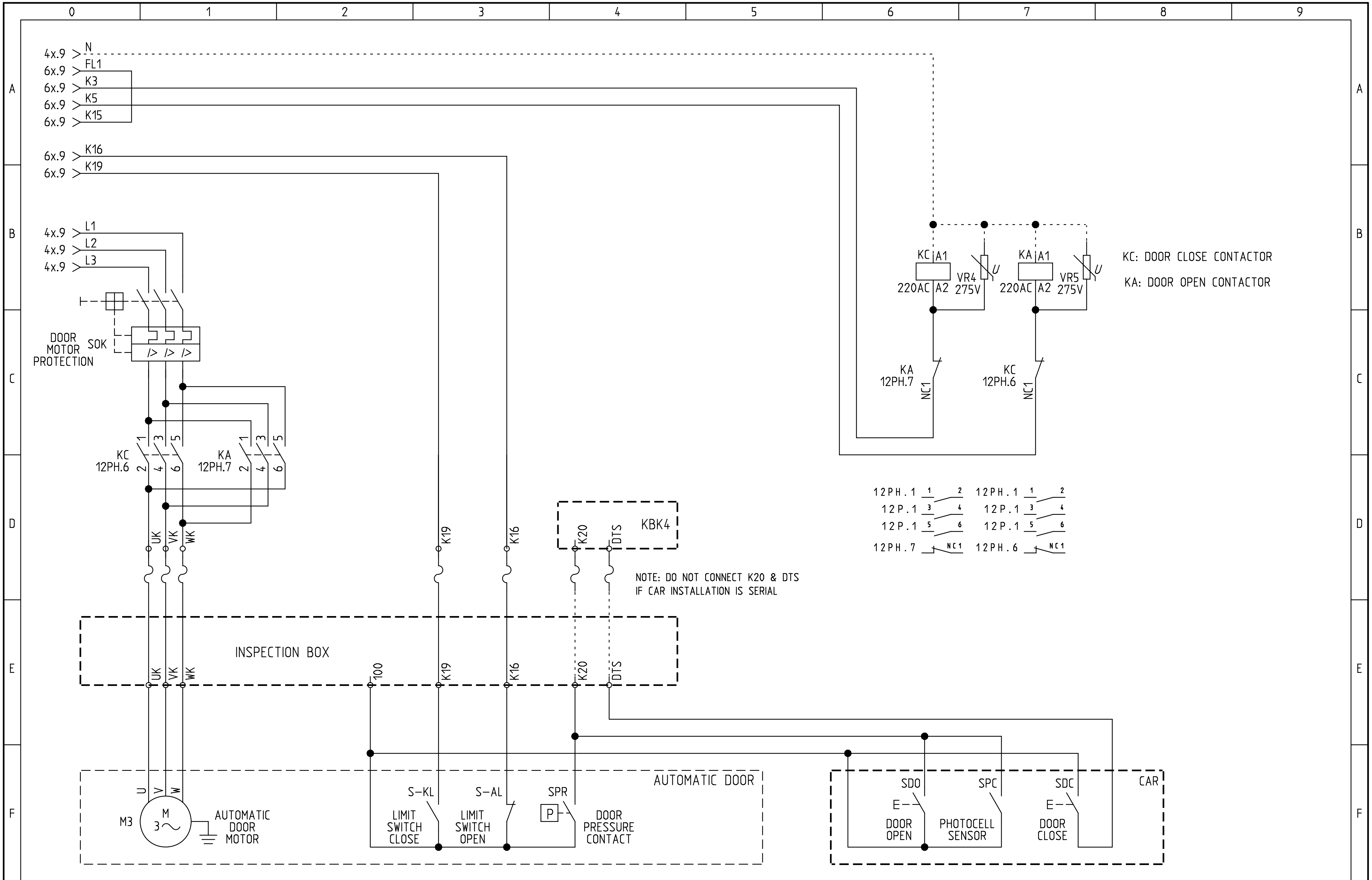
FOR OPERATING LIFT AS NORMAL, DO BRIDGING THAT IS SHOWED ABOVE, AFTER DISPLACING FAULTY AKUS-SD.

BEFORE PLACING THE AKUS-SD WHICH IS REPAIRED BY ARKEL, REMOVE THIS BRIDGING AND CONTROL THE INSTALLATION.
IF THERE IS NO PROBLEM WITH INSTALLATION, THEN PLACE AKUS-SD.

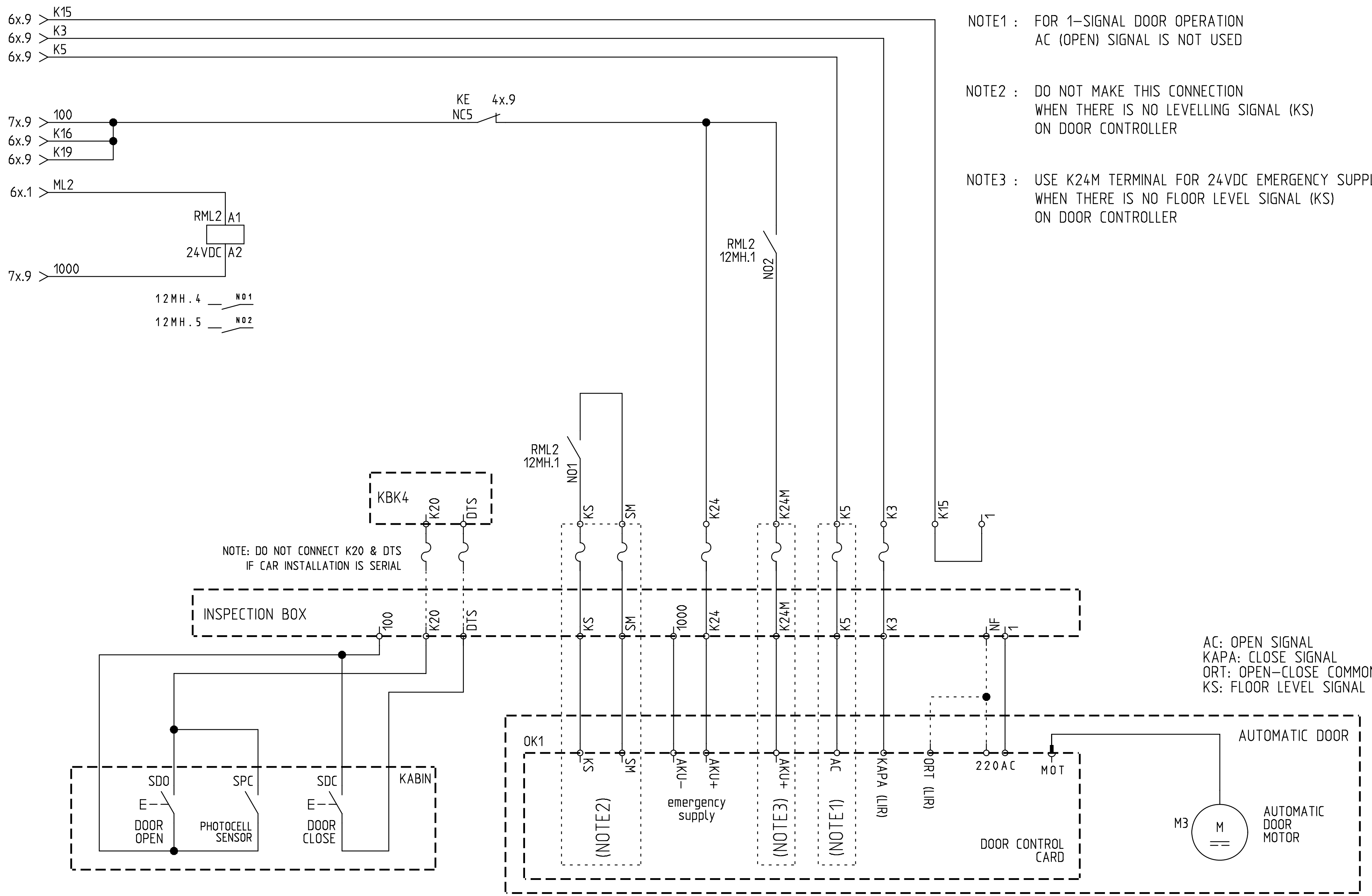
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL SERIES CONTROL PANELS	AKUS-SD FAILURE BRIDGING	DRAWN BY: K.D.	Rev. No: V11	Sheet: 11U
			CHECKED BY: C.A.	Rev. Date: 28.11.2008	Date: 01.12.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 1-PHASE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 27.11.2006
				Sheet: 12 RH Date: 27.04.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 3-PHASE	DRAWN BY: K.D.	Rev. No: V11	Sheet: 12 PH
			CHECKED BY: C.A.	Rev. Date: 27.11.2006	Date: 01.06.2006

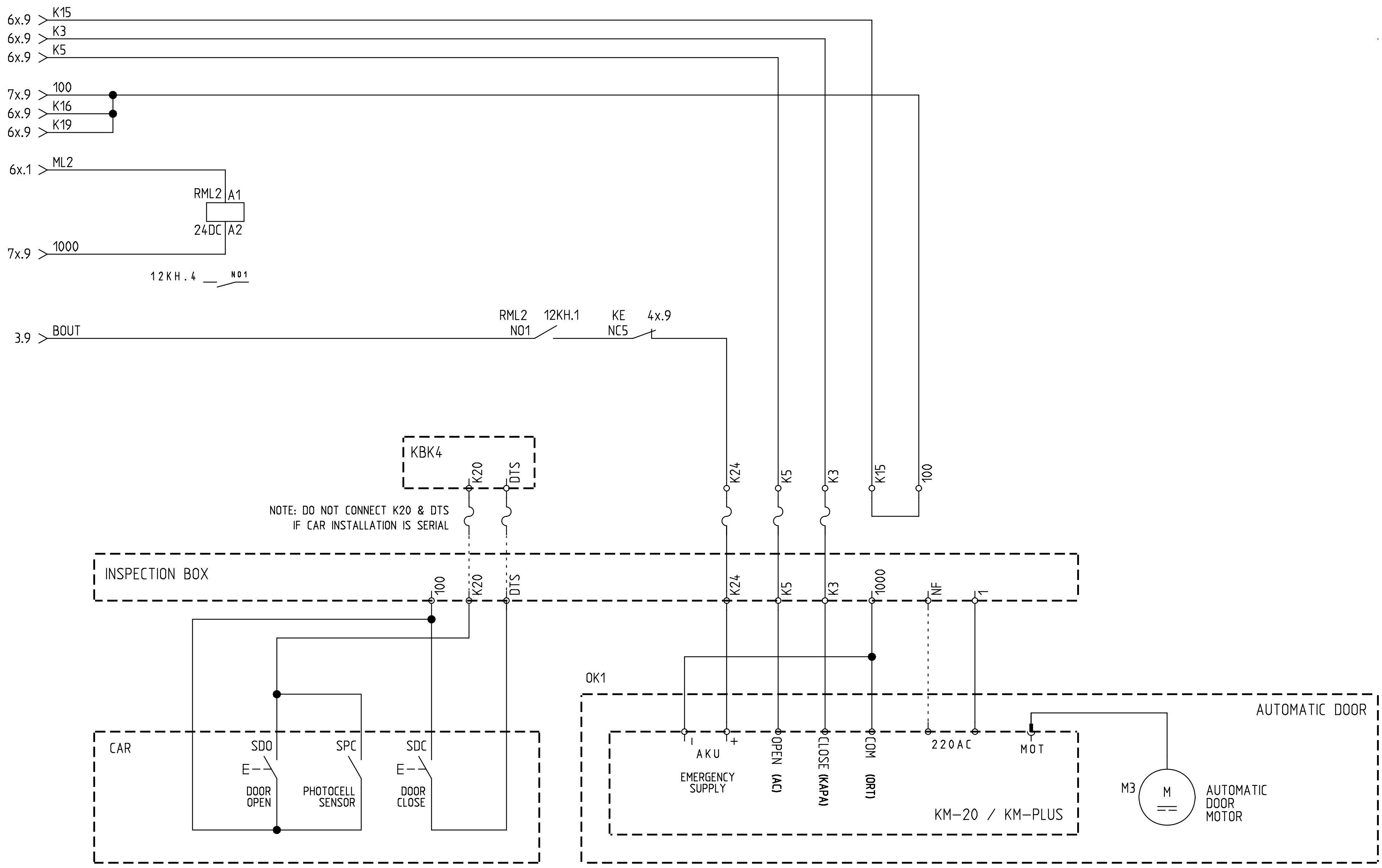


NOTE1 : FOR 1-SIGNAL DOOR OPERATION
AC (OPEN) SIGNAL IS NOT USED

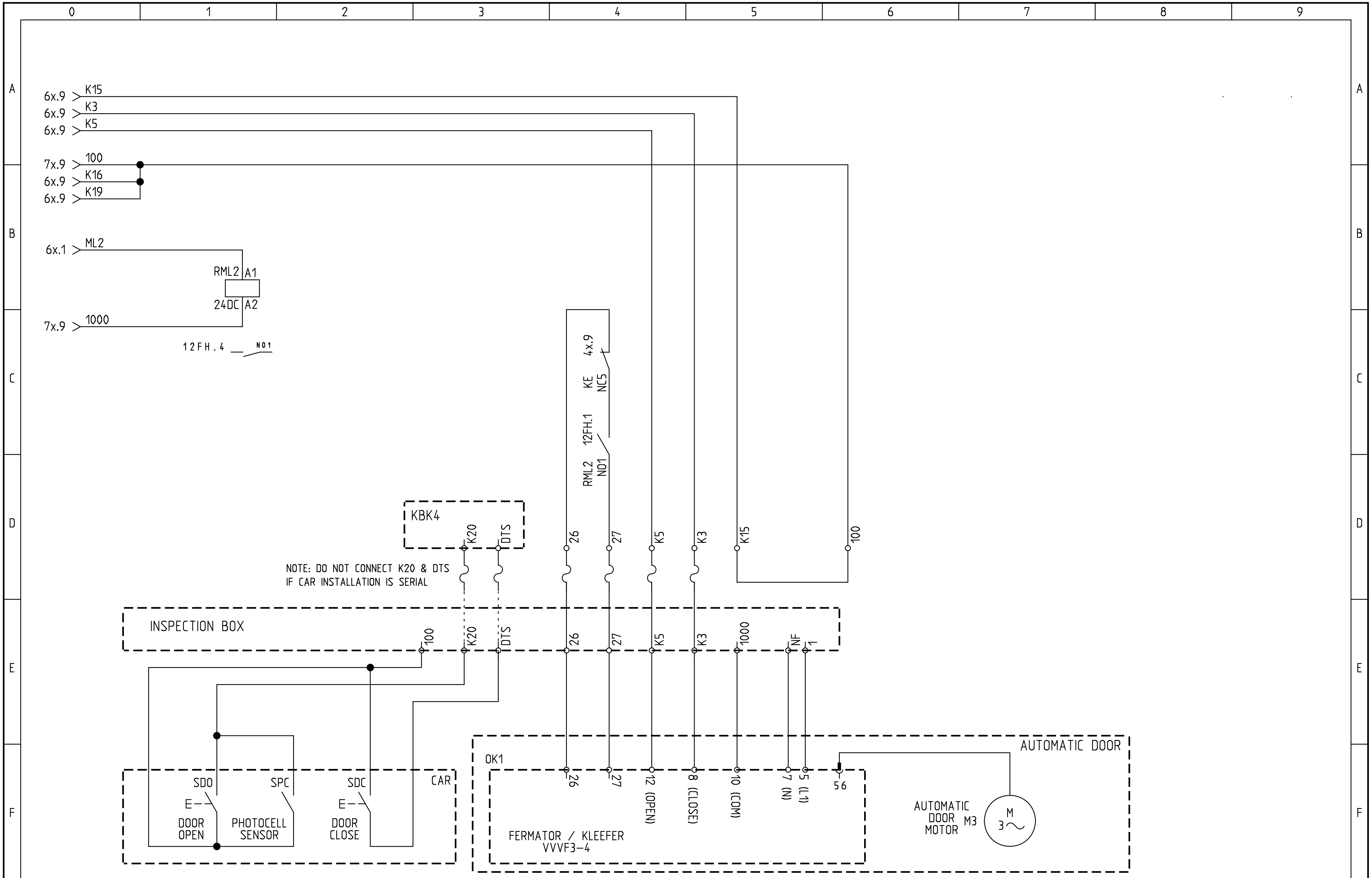
NOTE2 : DO NOT MAKE THIS CONNECTION
WHEN THERE IS NO LEVELLING SIGNAL (KS)
ON DOOR CONTROLLER

NOTE3 : USE K24M TERMINAL FOR 24VDC EMERGENCY SUPPLY
WHEN THERE IS NO FLOOR LEVEL SIGNAL (KS)
ON DOOR CONTROLLER

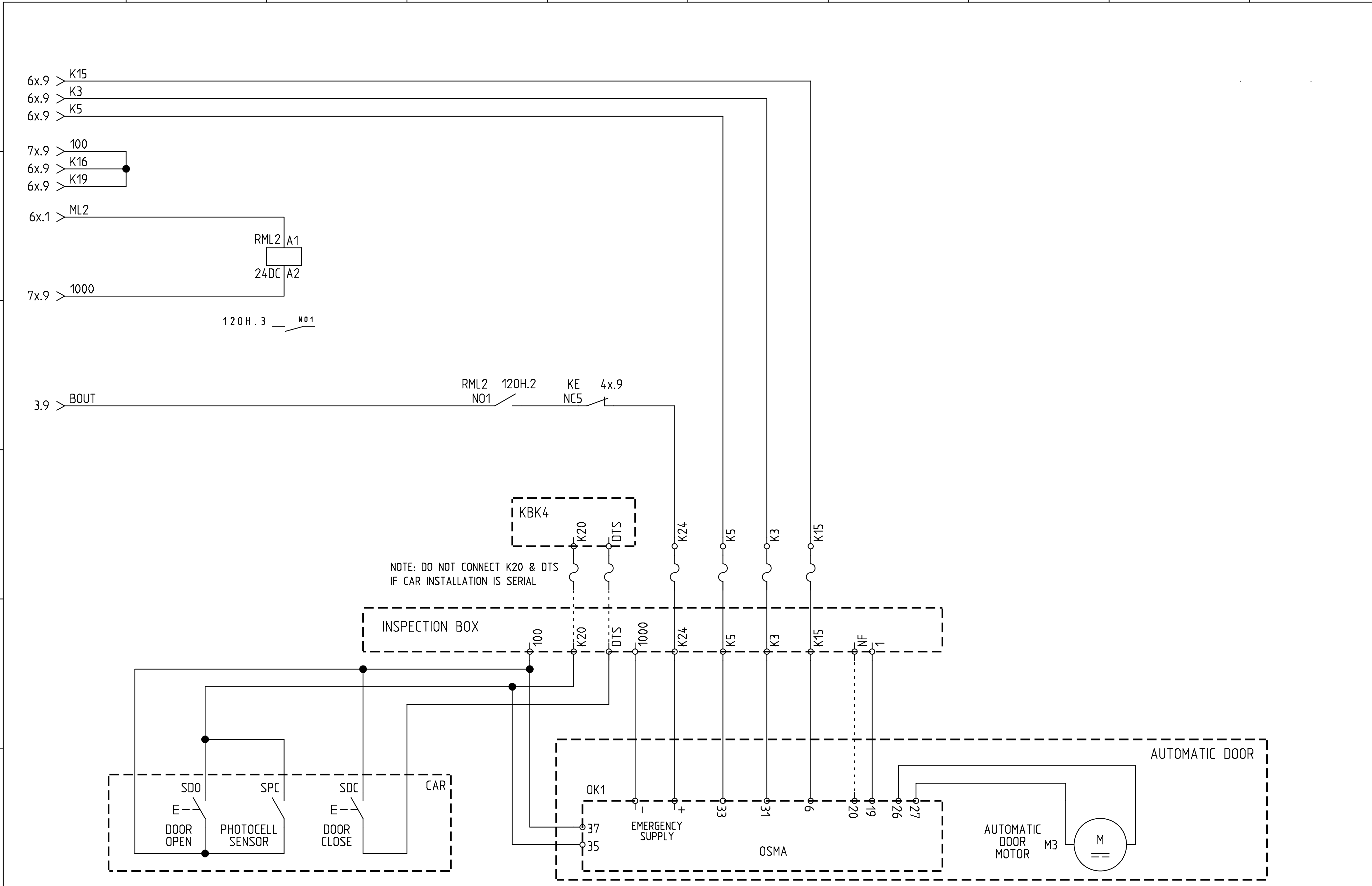
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMI AUTOMATIC WITH DC DOOR CONTROLLER DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 17.02.2009	Sheet: 12 MH Date: 27.04.2007



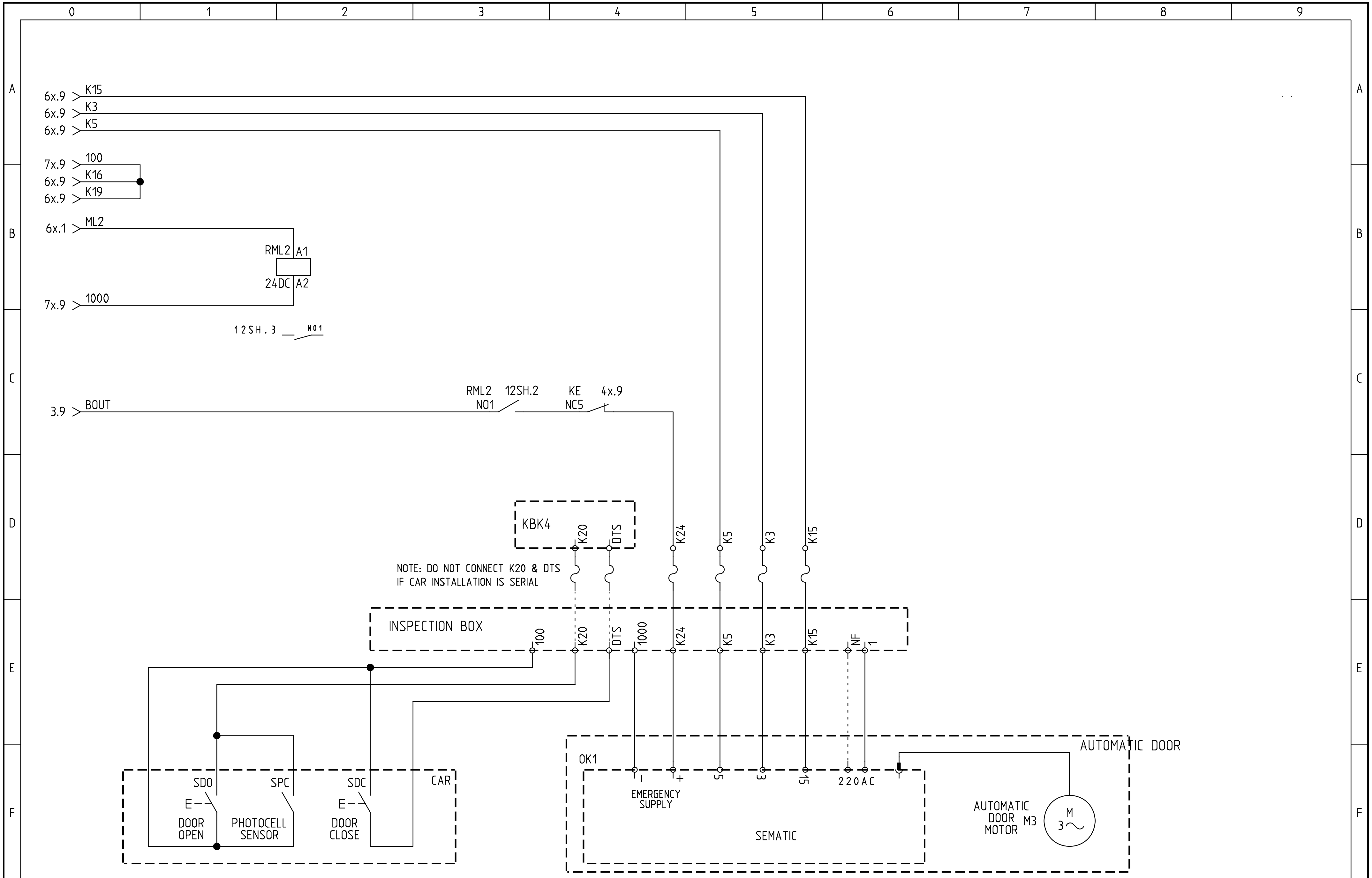
ARKEL www.arkel.com.tr (+90 216) 540 03 10 ARKEL	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : KM-20 / KM-PLUS DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 KH
			CHECKED BY: C.A.	Rev. Date:	Date: 28.12.2009



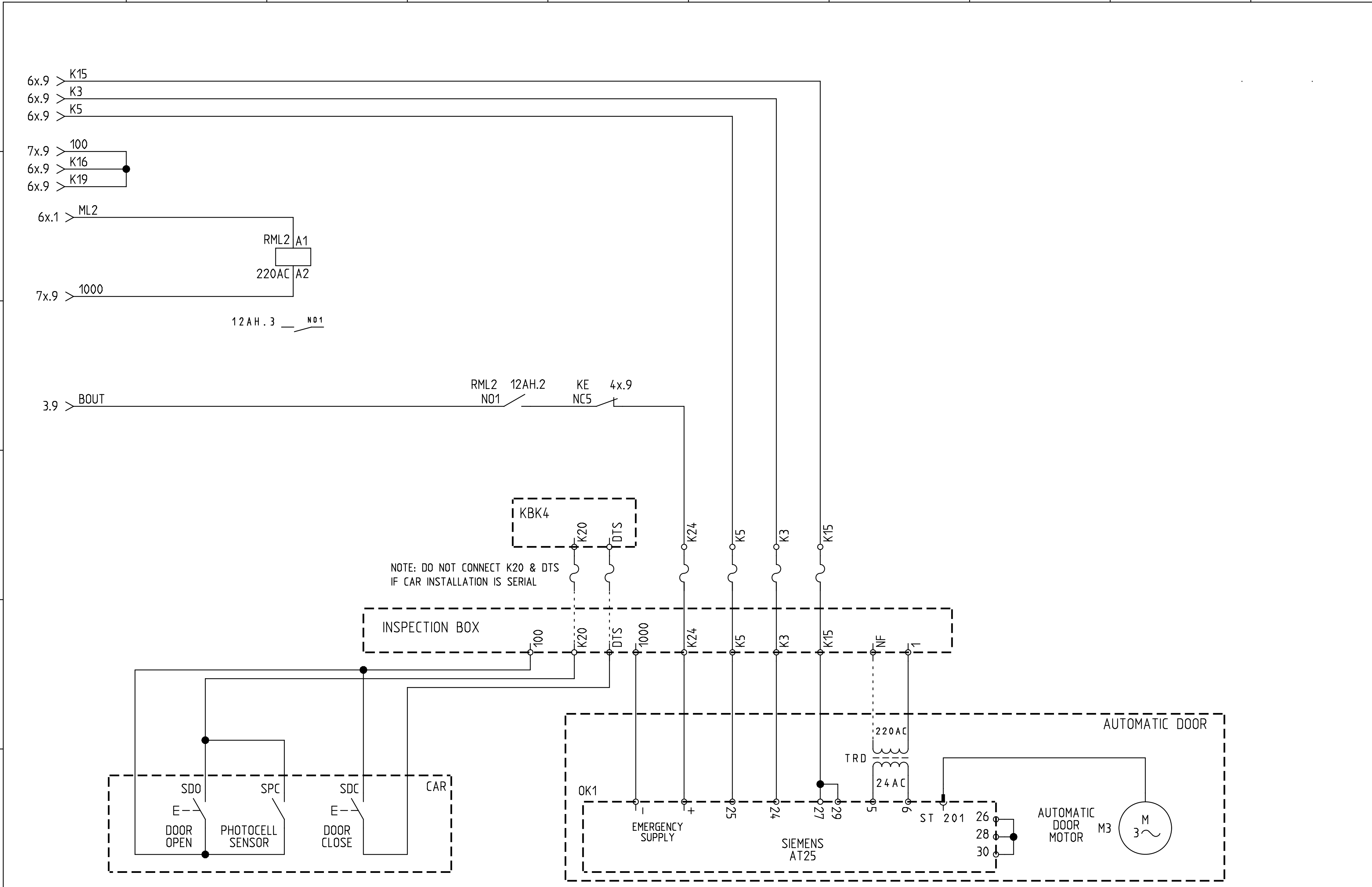
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : FERMATOR / KLEEFER VVVF 3-4 DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 FH
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2007



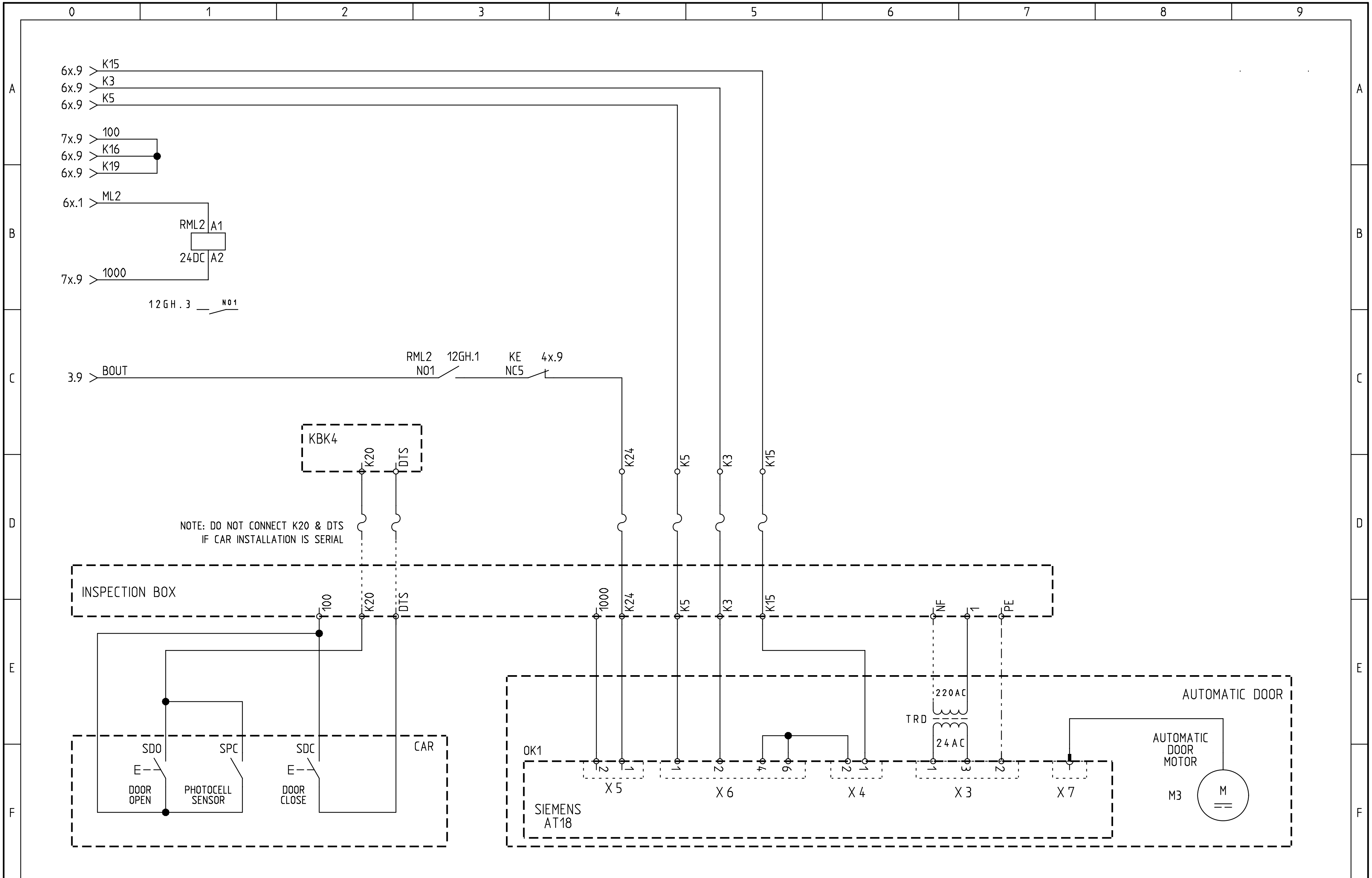
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : OSMA DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 OH Date: 27.04.2007



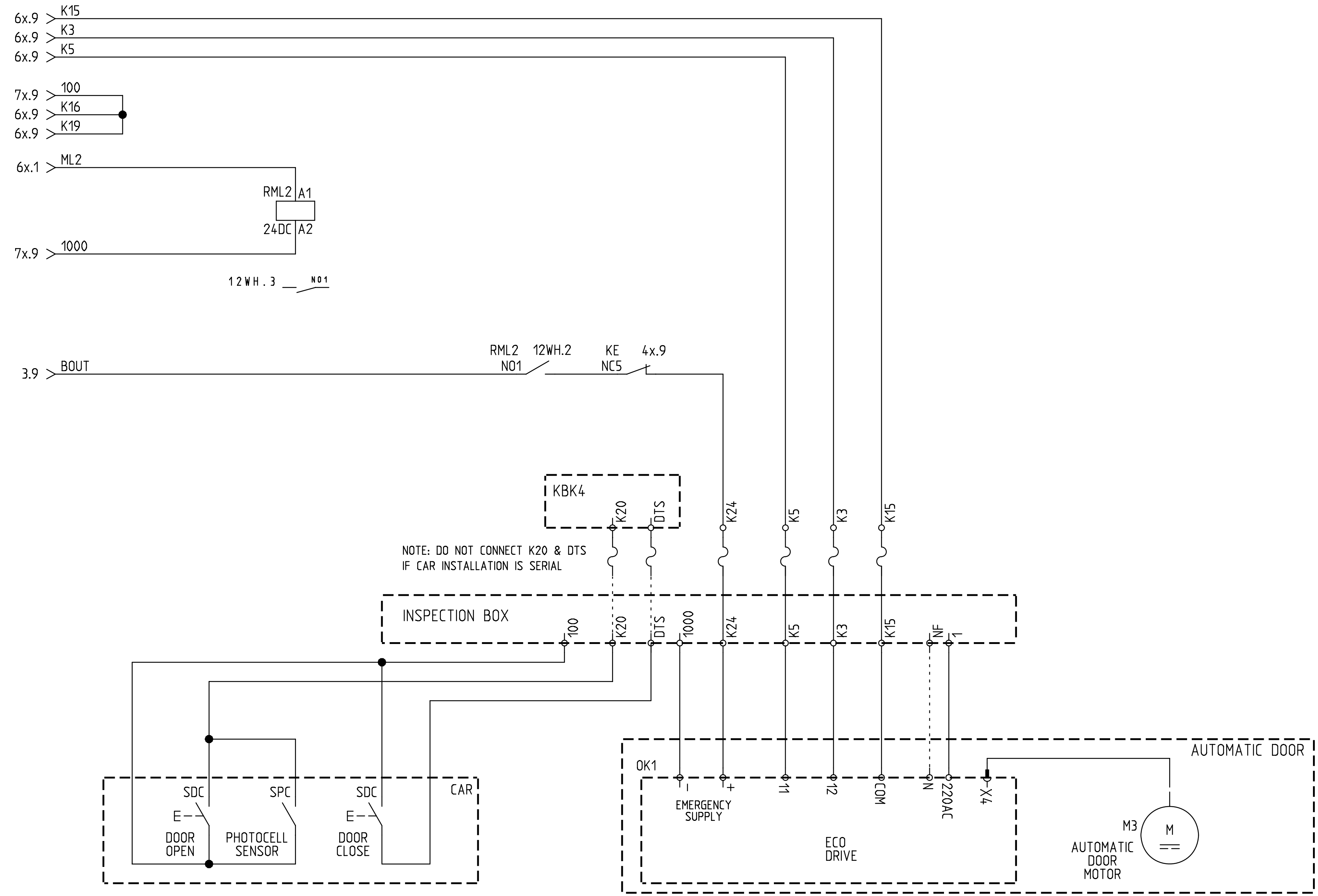
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMATIC DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 SH
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2007



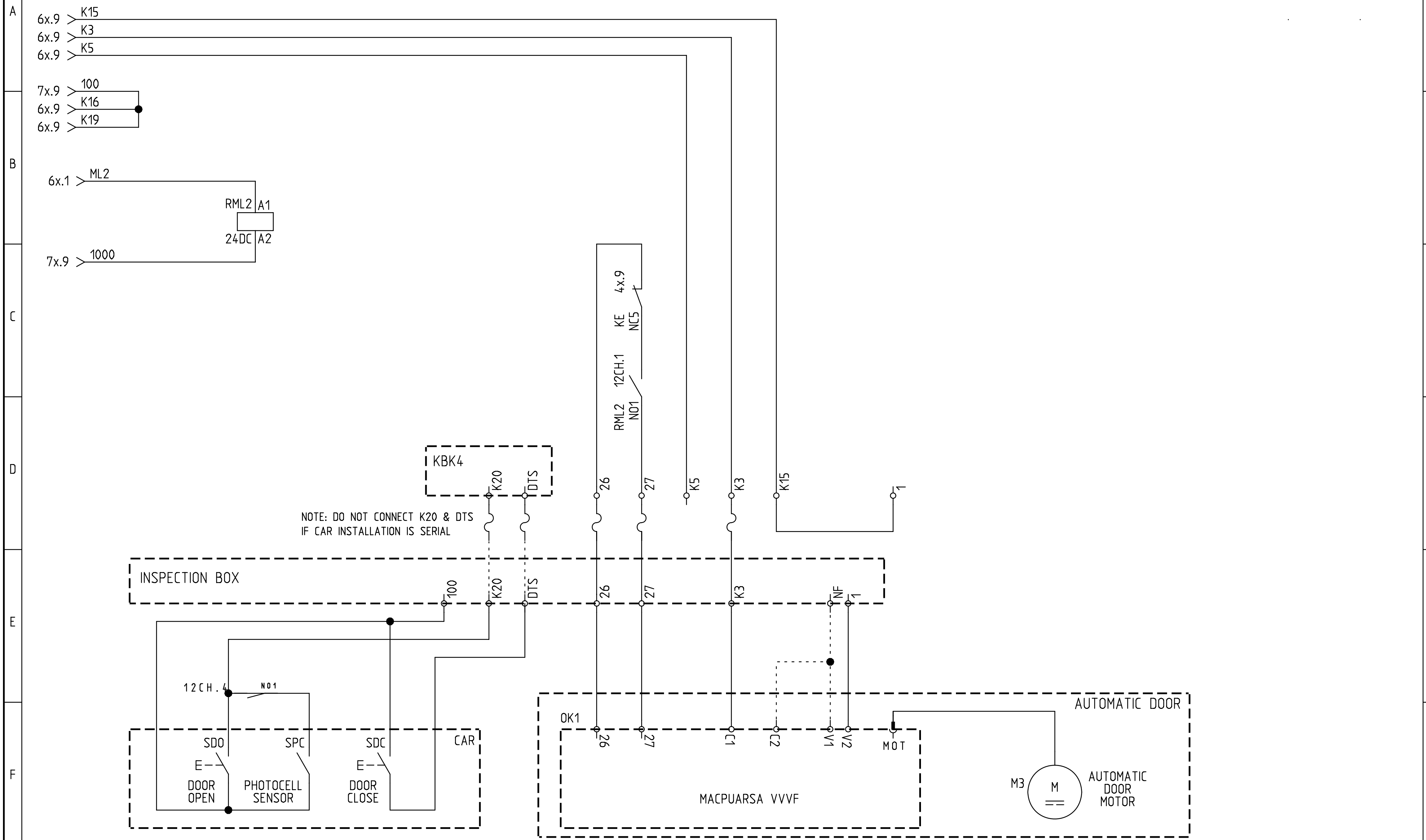
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : WITH SIEMENS AT25 CONTROLLER DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 AH Date: 27.04.2007



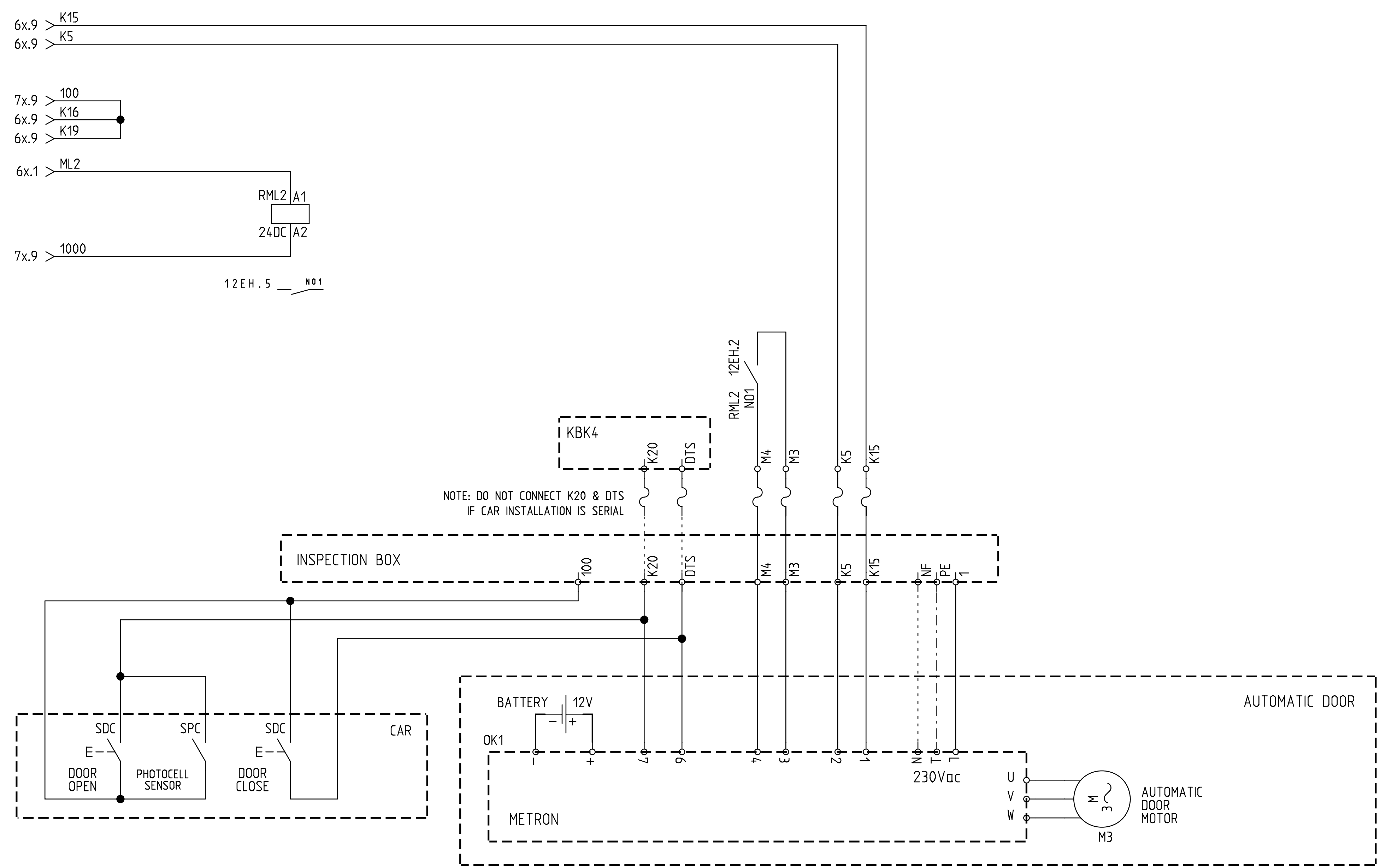
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : WITH SIEMENS AT18 CONTROLLER DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 GH Date: 24.12.2008



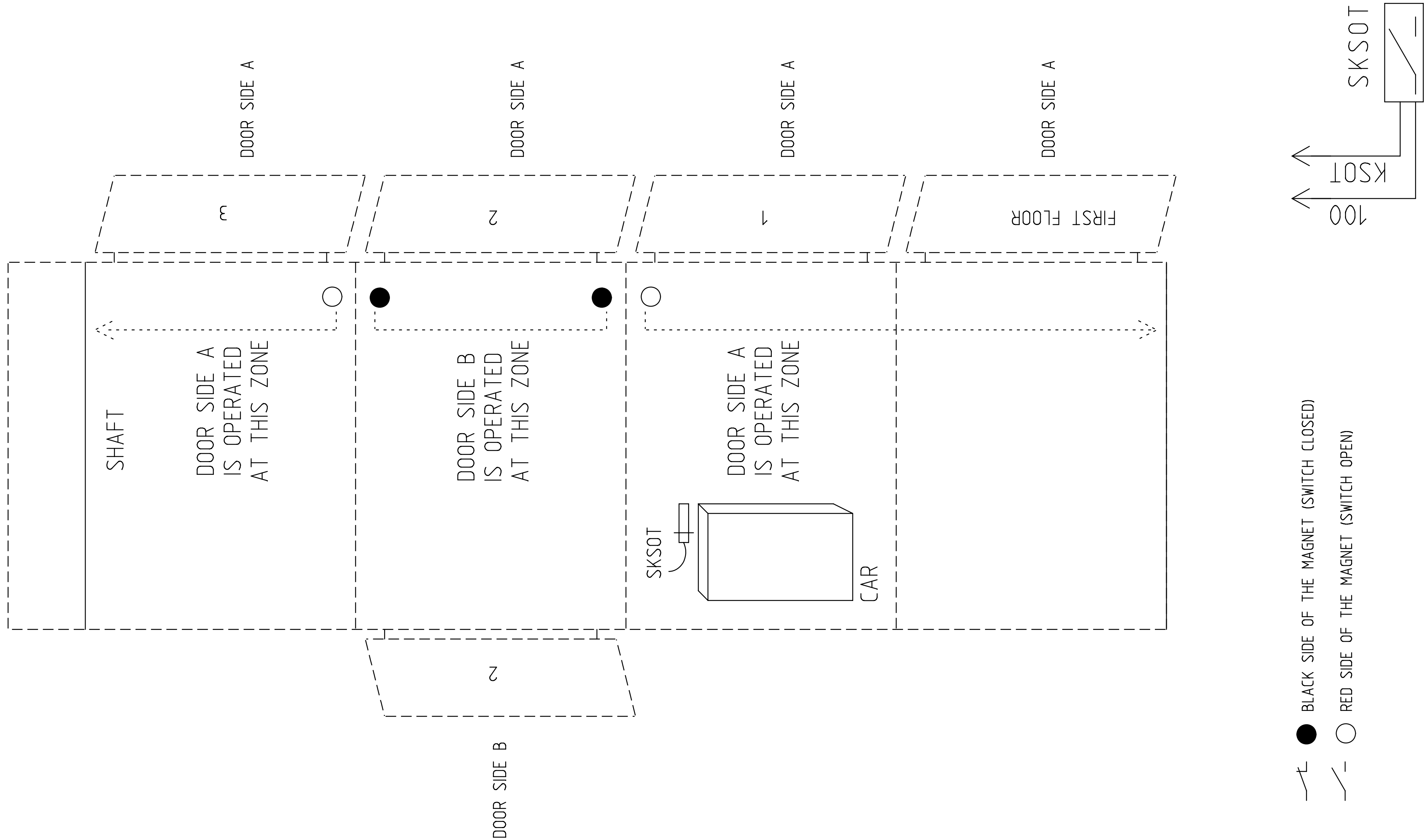
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : WITTUR HYDRA PLUS TAHRIK TIPI : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 WH
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2007



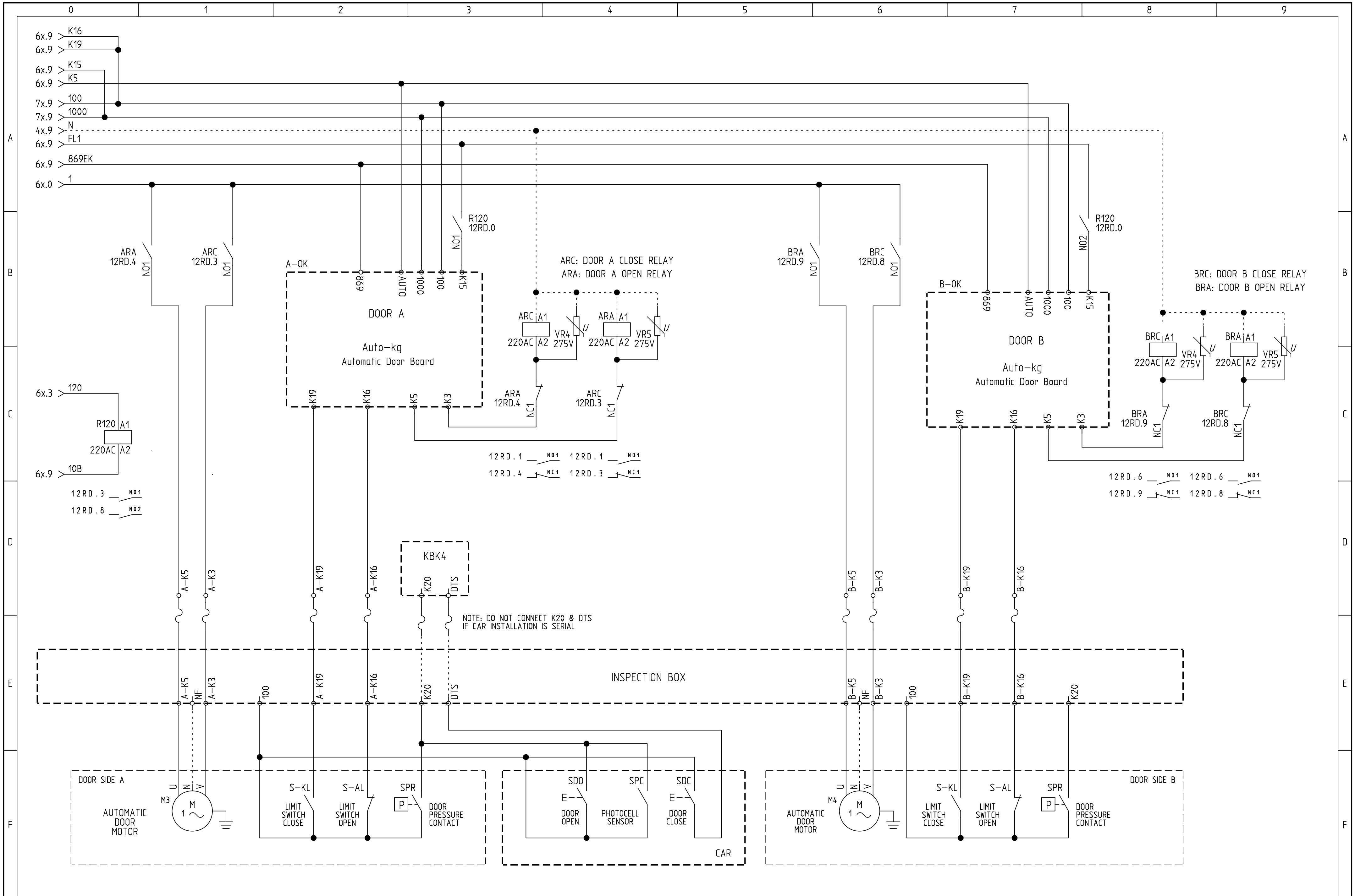
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : MACPUARSA VVVF DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 CH
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2007



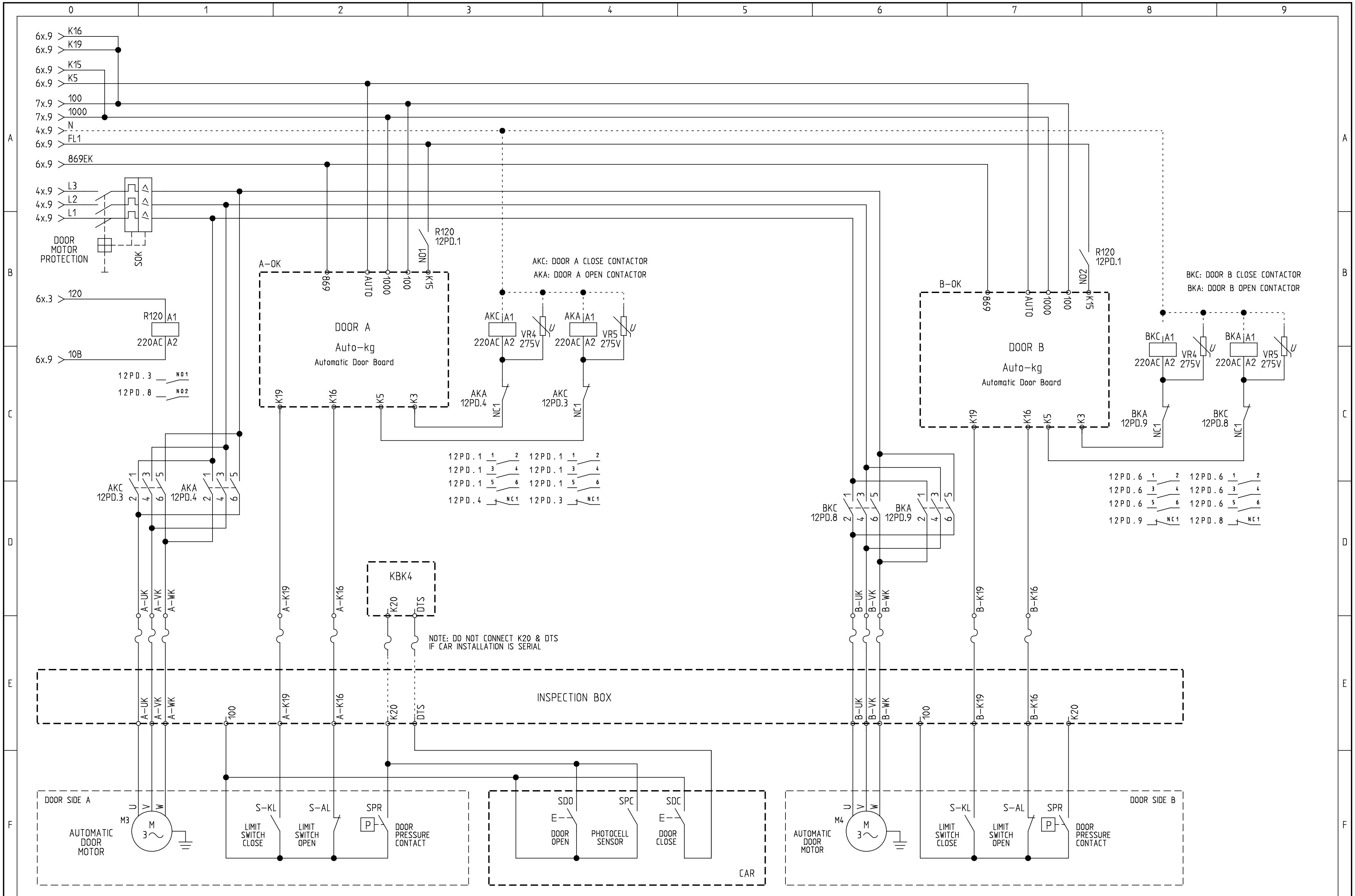
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : METRON DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 08.07.2009	Sheet: 12 EH Date: 27.04.2007



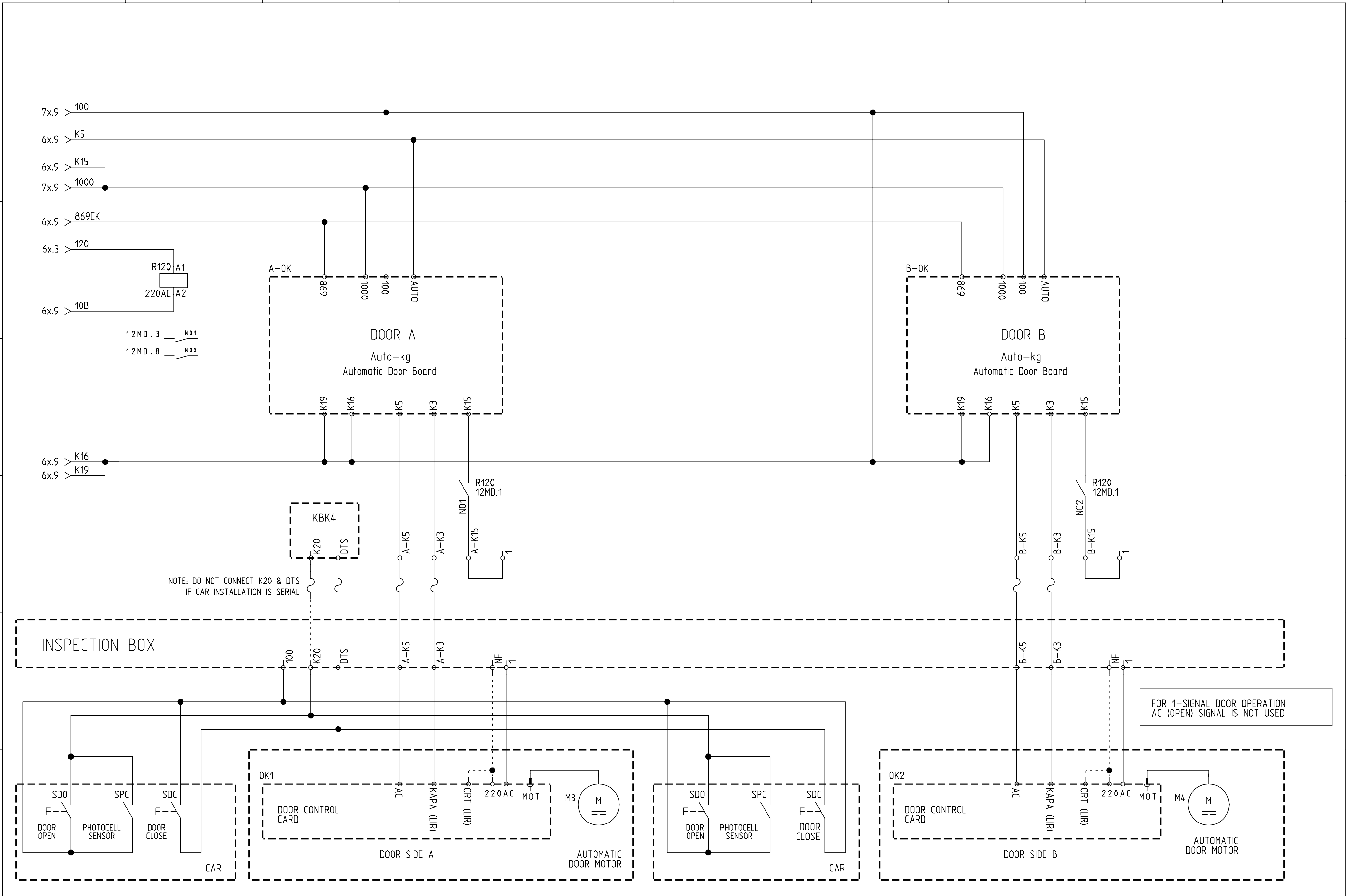
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL–300 CONTROL PANEL	MAGNET CONFIGURATION DUAL AUTOMATIC DOOR WITH KSOT MAGNETIC SWITCH	DRAWN BY: K.D.	Rev. No:	Sheet: 13 K
			CHECKED BY: C.A.	Rev. Date:	Date: 29.06.2007



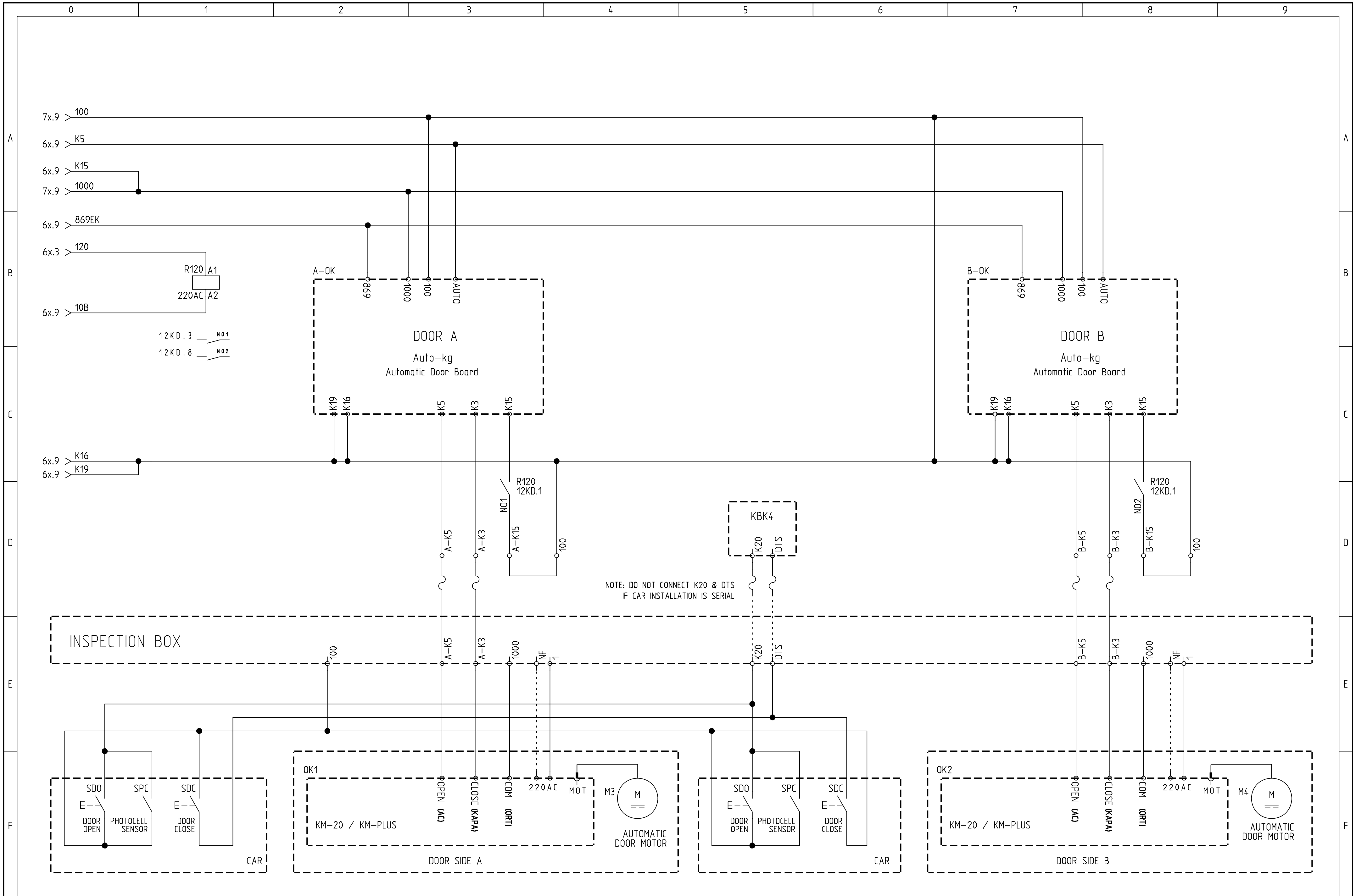
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : 1-PHASE	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V11 Rev. Date: 20.03.2009 Sheet: 12 RD Date: 27.04.2006



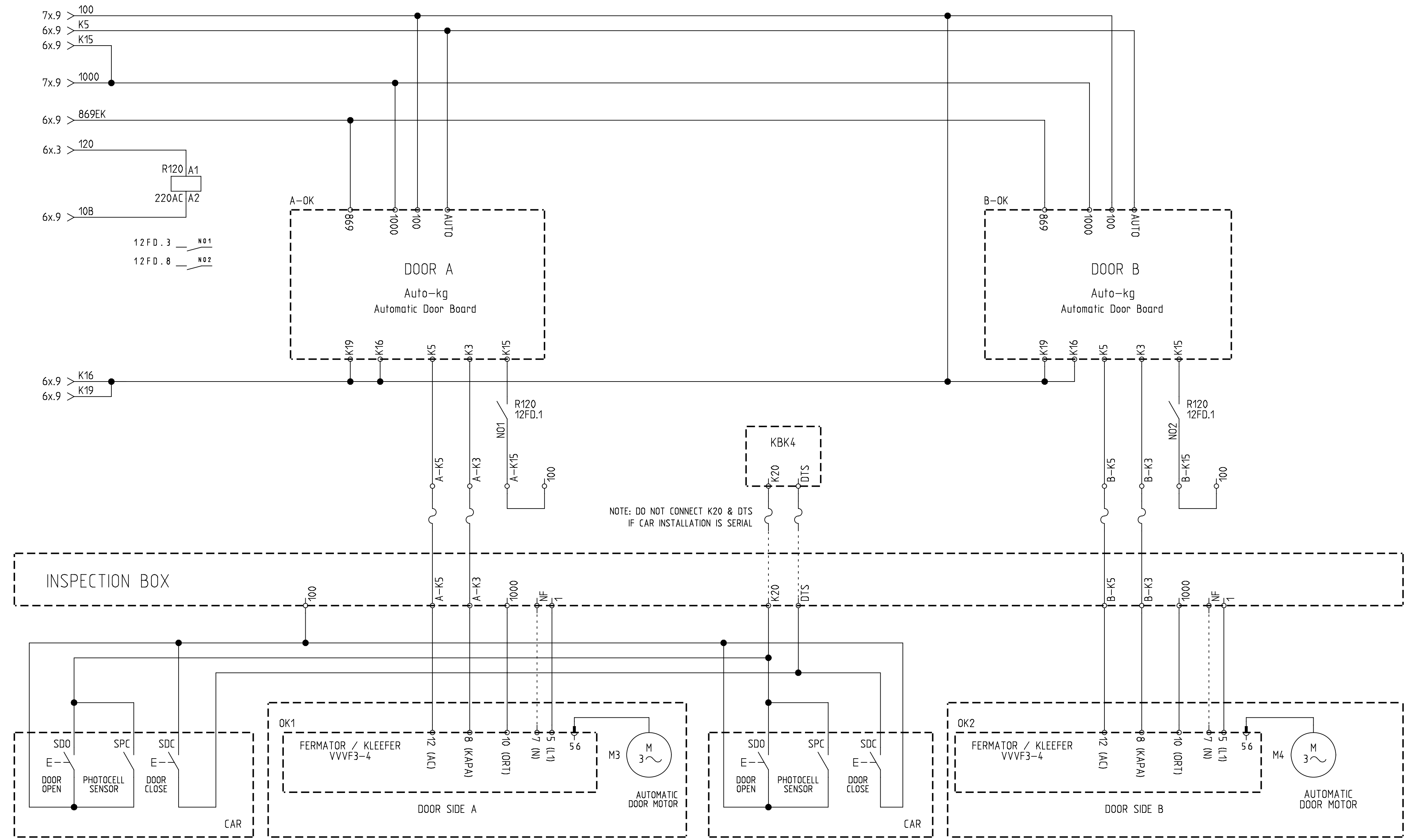
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : 3-PHASE	DRAWN BY: K.D. / CHECKED BY: C.A.	Rev. No: V11 / Rev. Date: 20.03.2009 / Sheet: 12 PD / Date: 27.04.2006



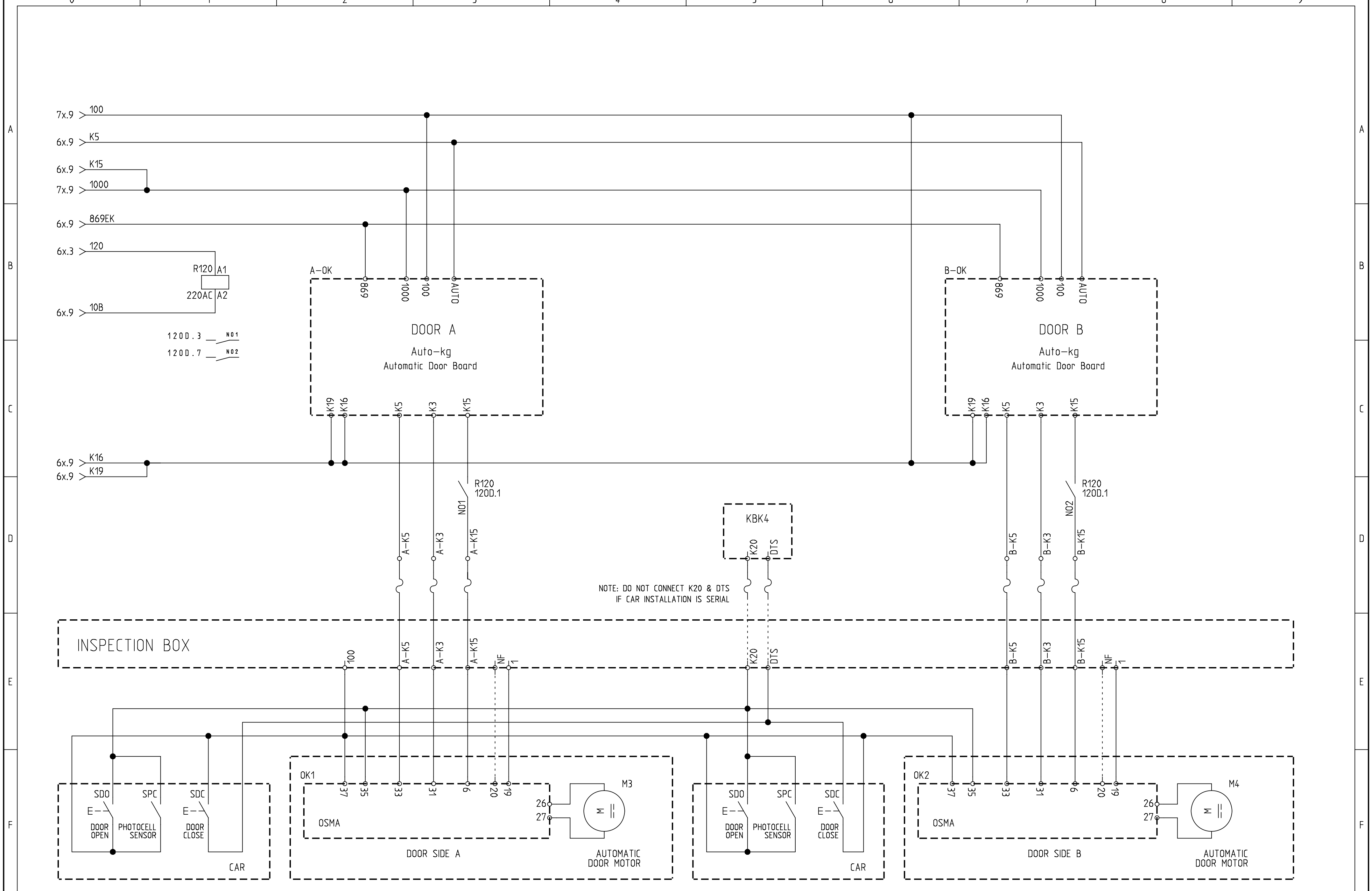
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMI AUTOMATIC WITH DC DOOR CONTROLLER	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 MD Date: 10.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : KM-20 / KM-PLUS	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: 12 KD Tarih: 10.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : FERMATOR / KLEEFER VVVF 3-4	DRAWN BY: K.D.	Rev. No:	Sheet: 12 FD
			CHECKED BY: C.A.	Rev. Date:	Date: 10.01.2010



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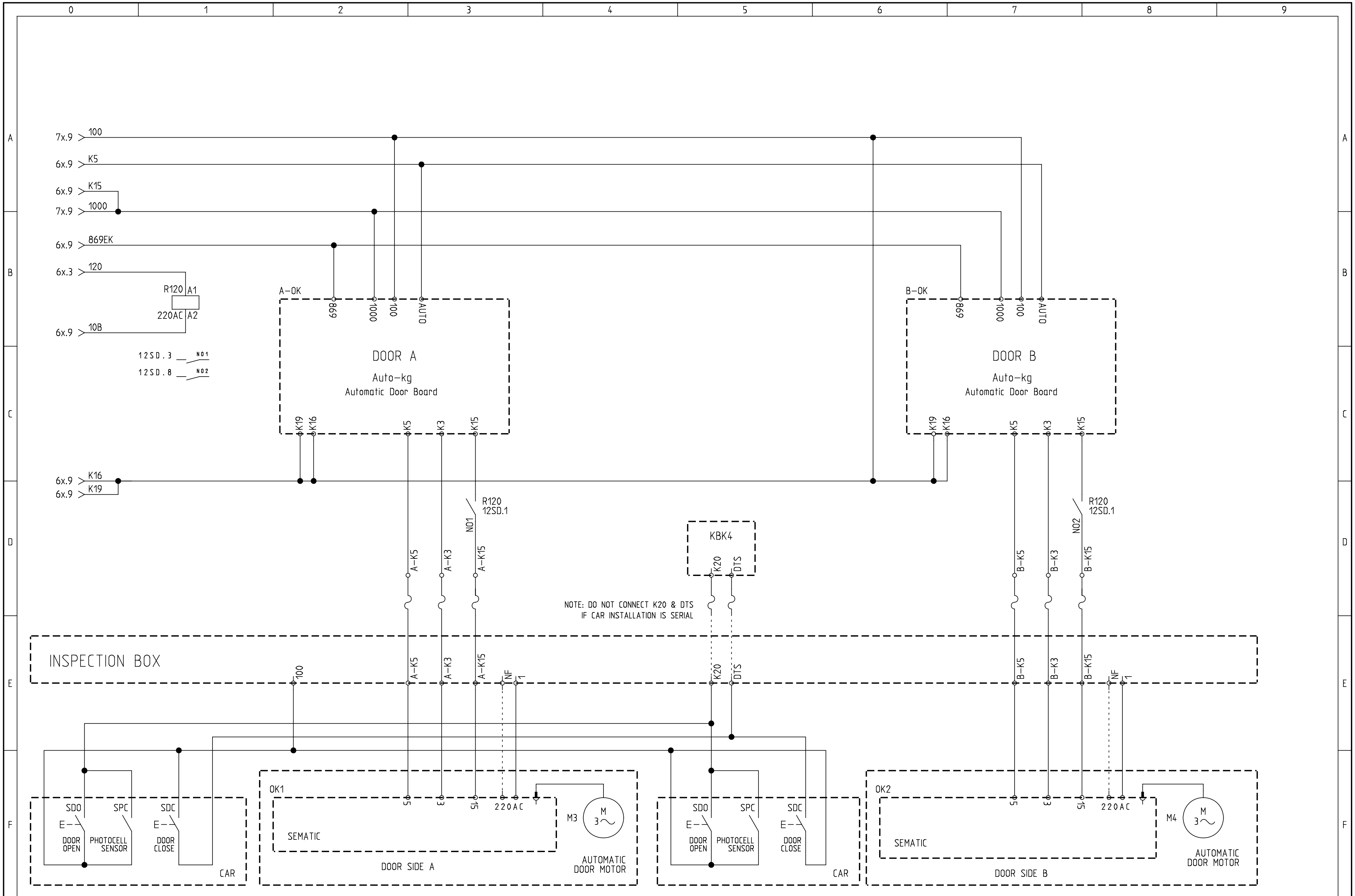
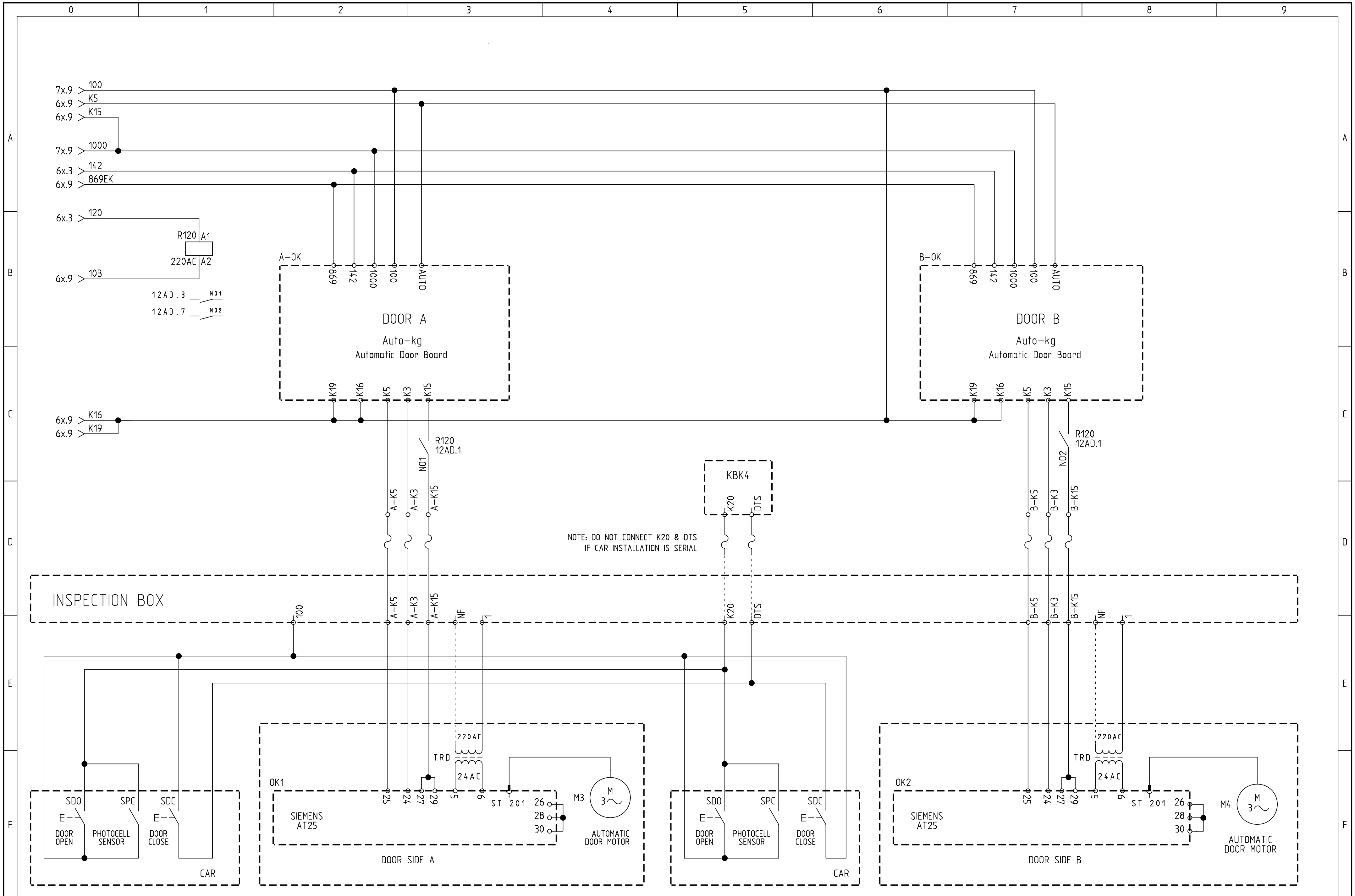
ARL-300 CONTROL PANEL

DUAL AUTOMATIC DOOR CONNECTION
DOOR TYPE : OSMA

CIZIM: K.D.	Rev. No:	Sayfa: 12 0D
ONAY: C.A.	Rev. Tarih:	Tarih: 10.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMATIC	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: 12 SD Tarih: 10.01.2010

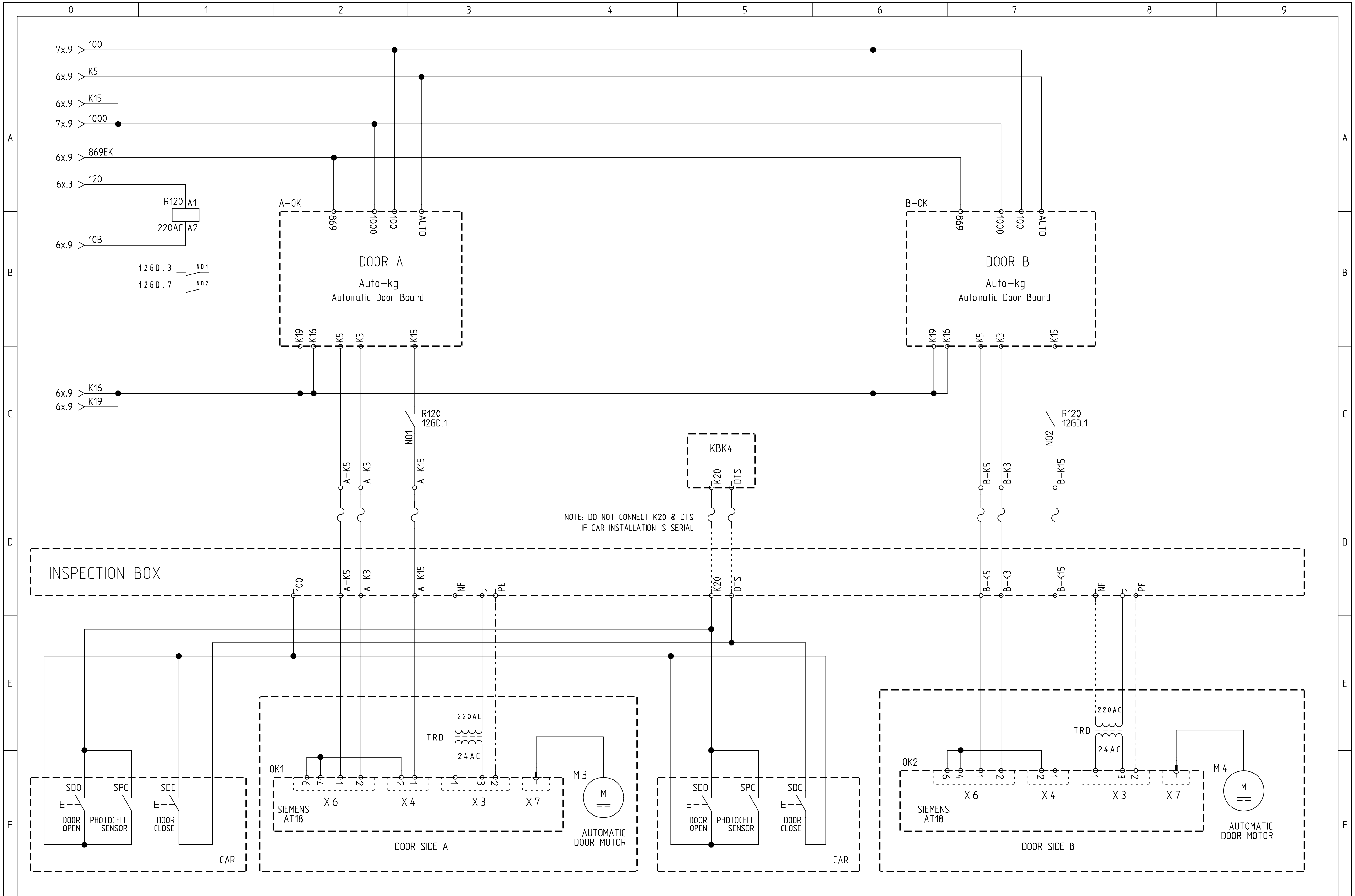


ARKEL
www.arkel.com.tr
(+90 216) 540 03 10

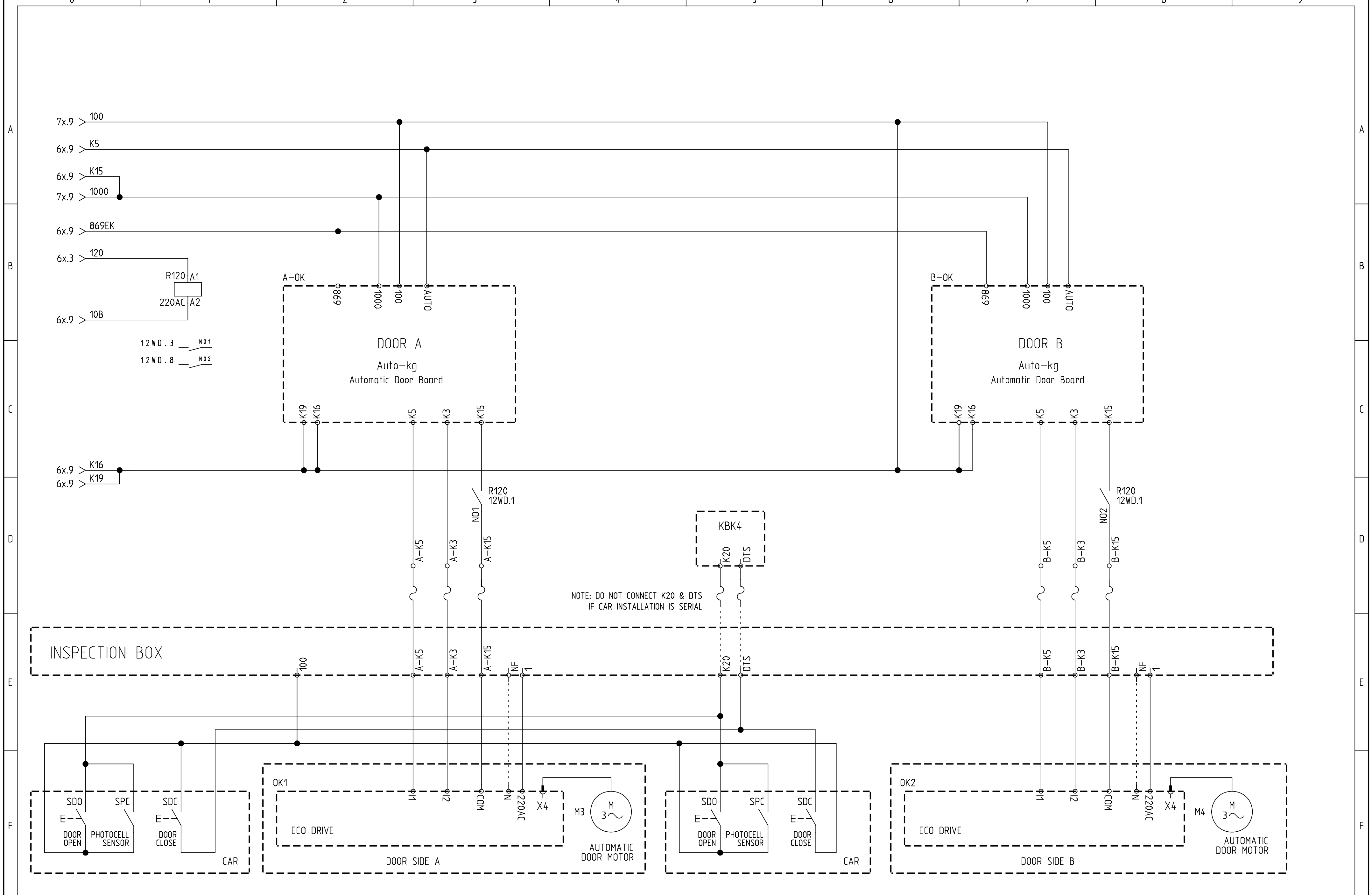
ARL-300 CONTROL PANEL

DUAL AUTOMATIC DOOR CONNECTION
DOOR TYPE : SIEMENS AT25

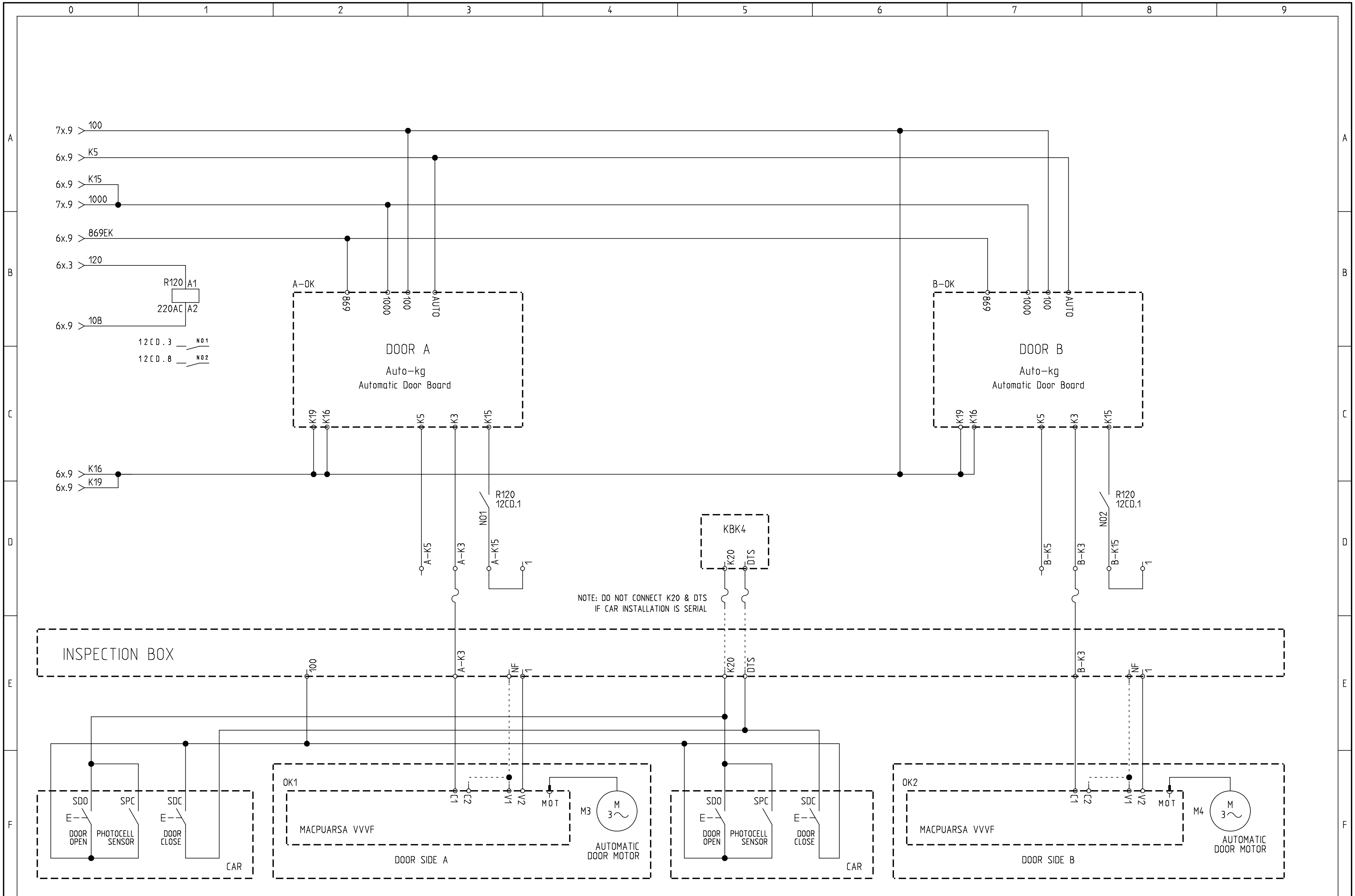
DRAWN BY: K.D.	Rev. No:	Sheet: 12 AD
CHECKED BY: C.A.	Rev. Date:	Date: 10.01.2010



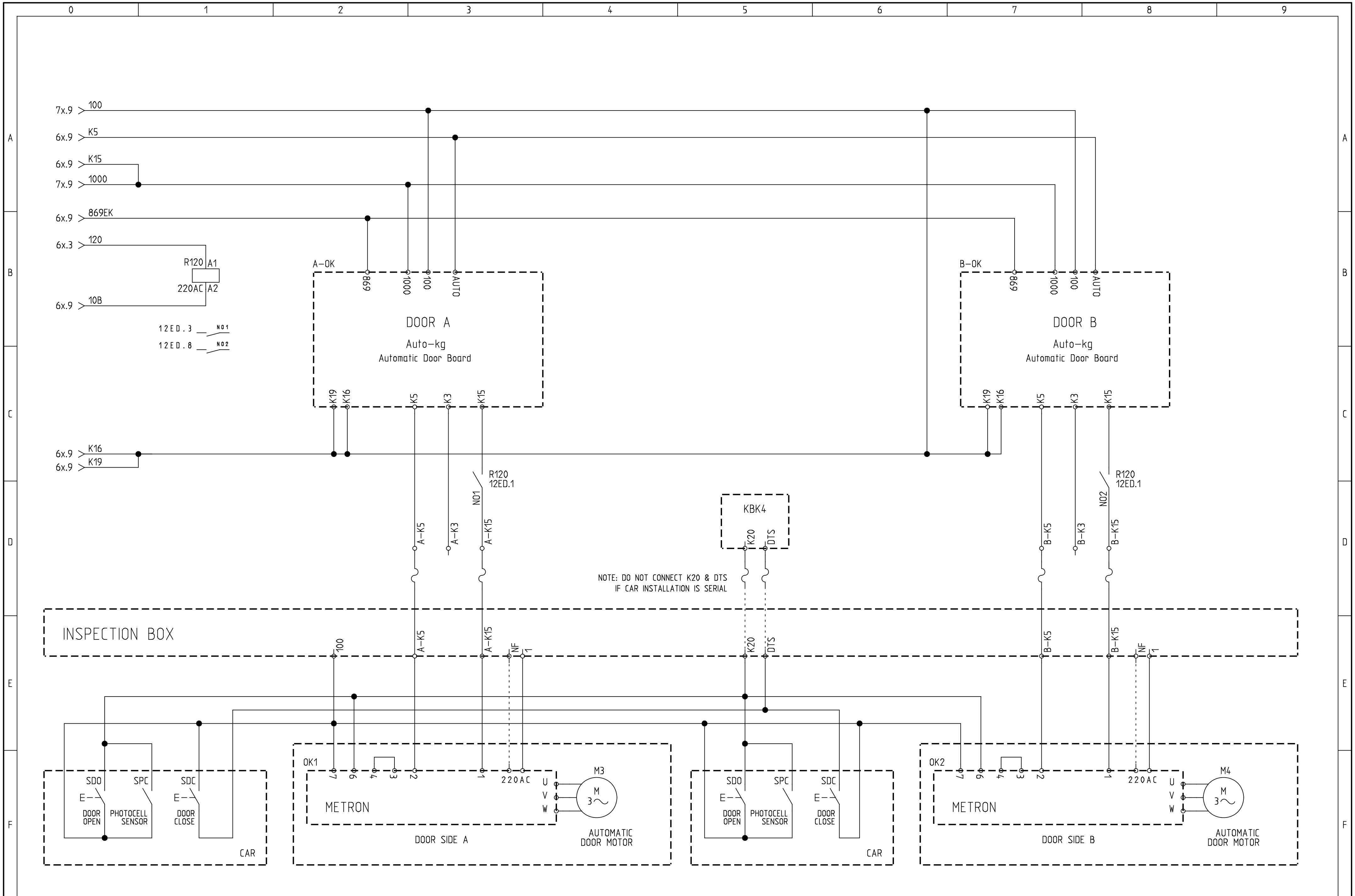
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : WITH SIEMENS AT18 CONTROLLER	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: 12 GD Tarih: 10.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : WITTUR HYDRA PLUS	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: 12 WD Tarih: 10.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : MACPUARSA VVVF	CIZIM: K.D. ONAY: C.A.	Rev. No: Rev. Tarih:	Sayfa: 12 CD Tarih: 10.01.2010



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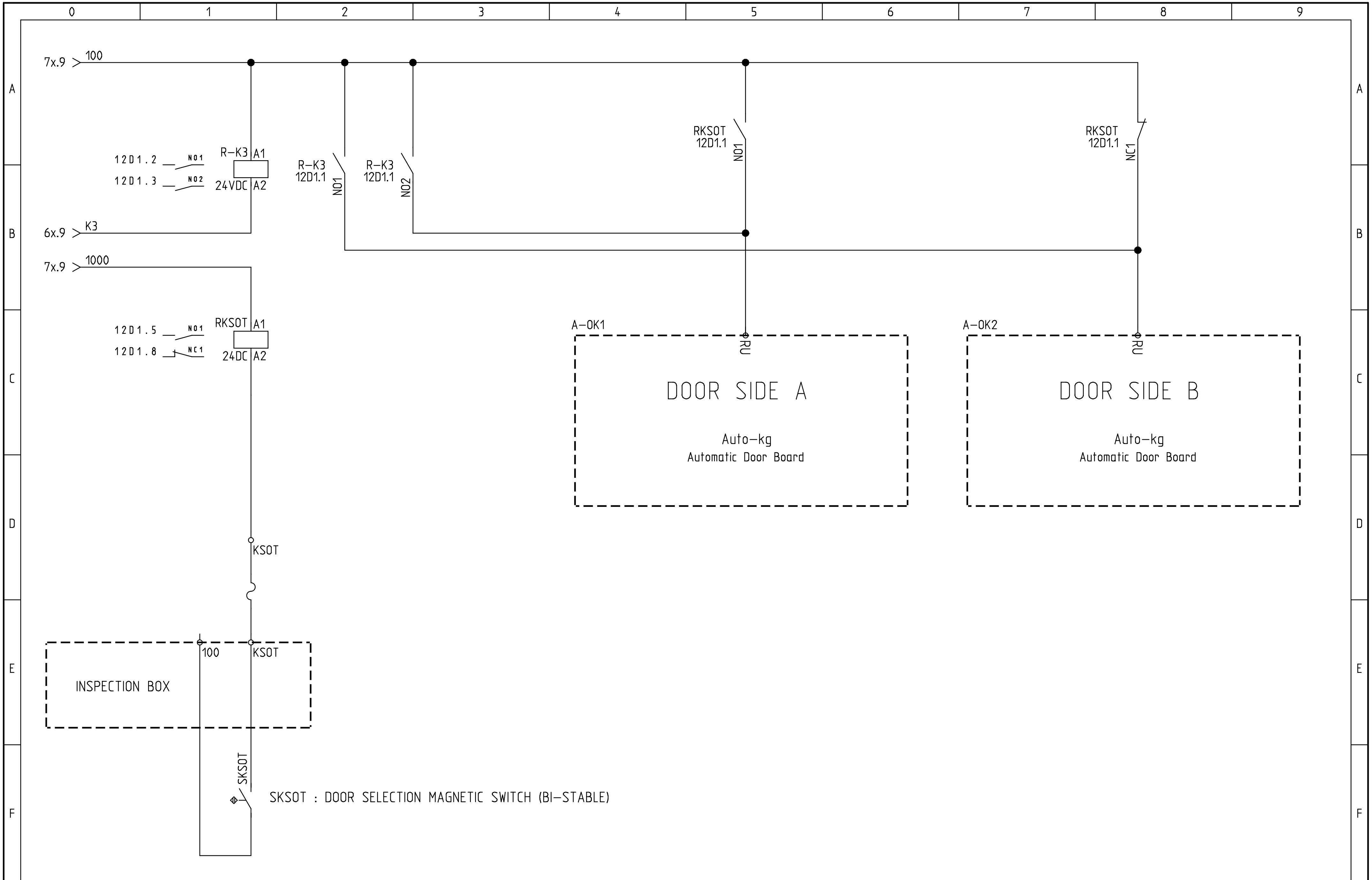
(+90 216) 540 03 10

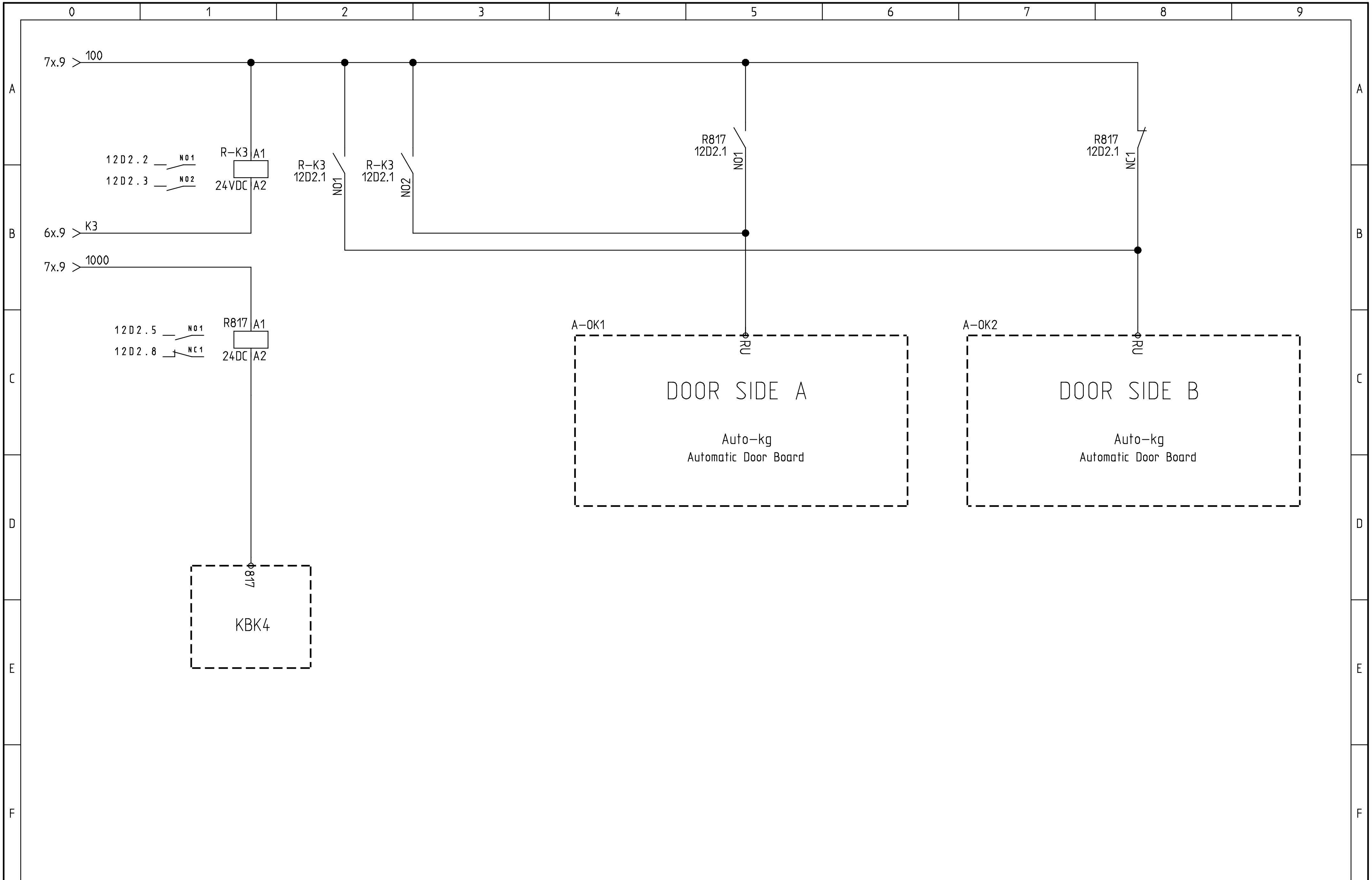
ARL-300 CONTROL PANEL

DUAL AUTOMATIC DOOR CONNECTION
DOOR TYPE : METRON

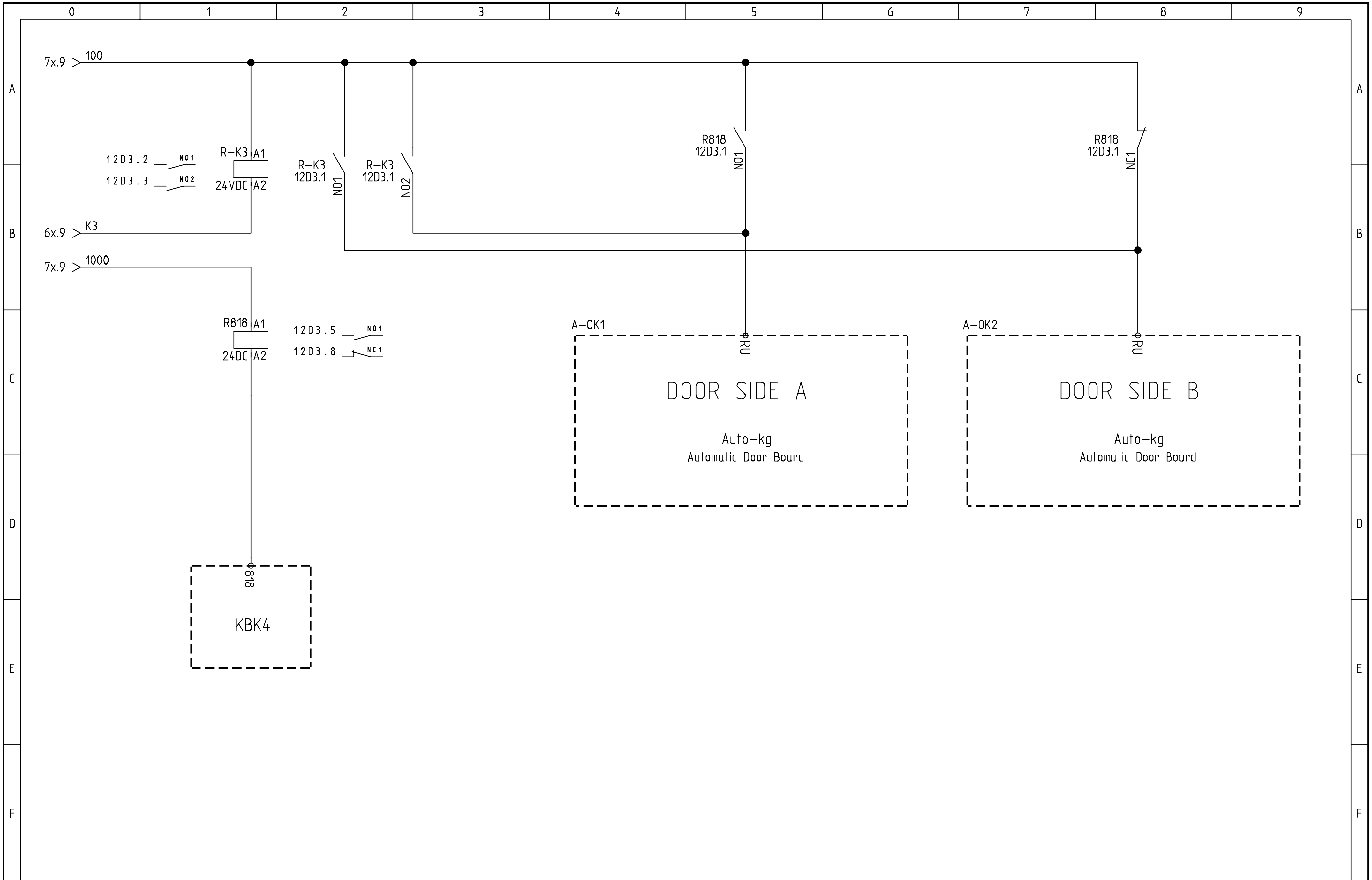
CIZIM: K.D.	Rev. No:	Sayfa: 12 ED
ONAY: C.A.	Rev. Tarih:	Tarih: 10.01.2010



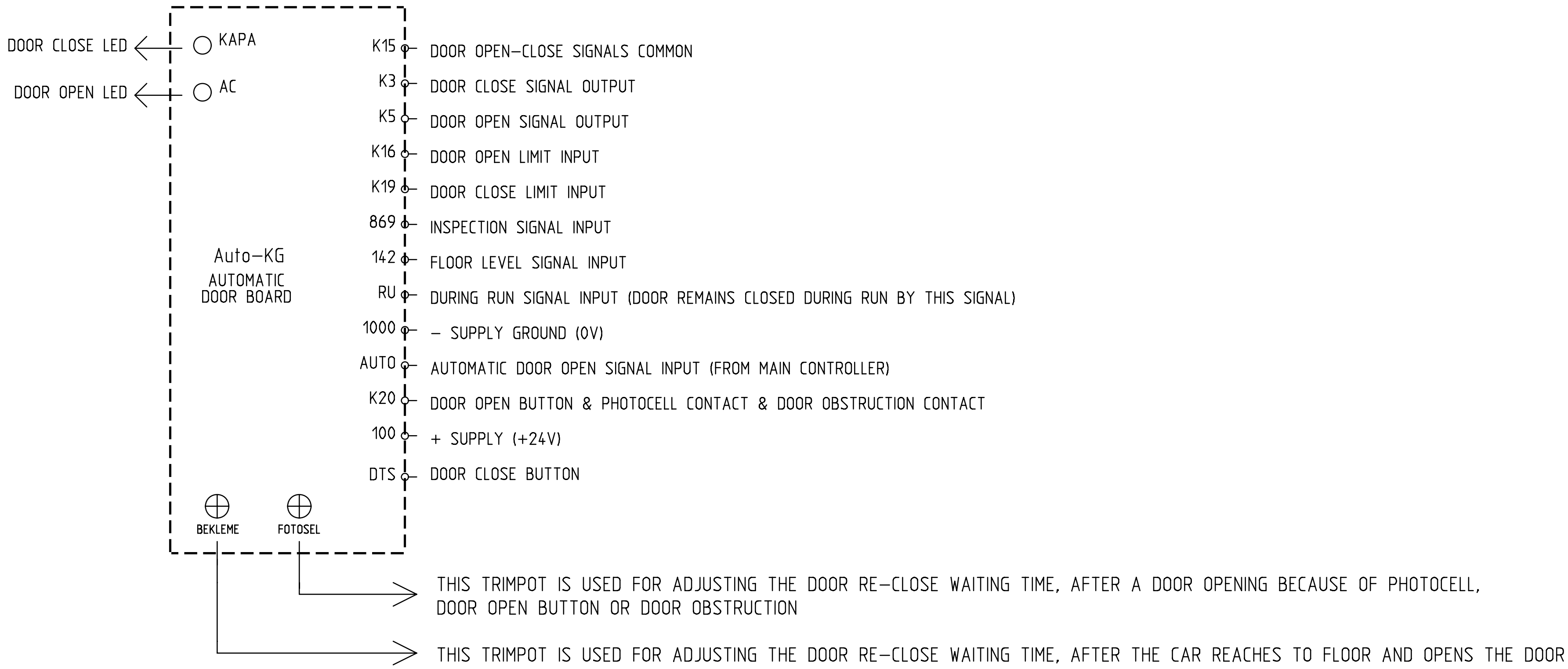
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION	DRAWN BY: K.D.	Rev. No: V11	Sheet: 12 D1
			CHECKED BY: C.A.	Rev. Date: 18.11.2009	Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION	DRAWN BY: K.D.	Rev. No:	Sheet: 12 D2
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION	DRAWN BY: K.D.	Rev. No:	Sheet: 12 D3
			CHECKED BY: C.A.	Rev. Date:	Date: 01.06.2006

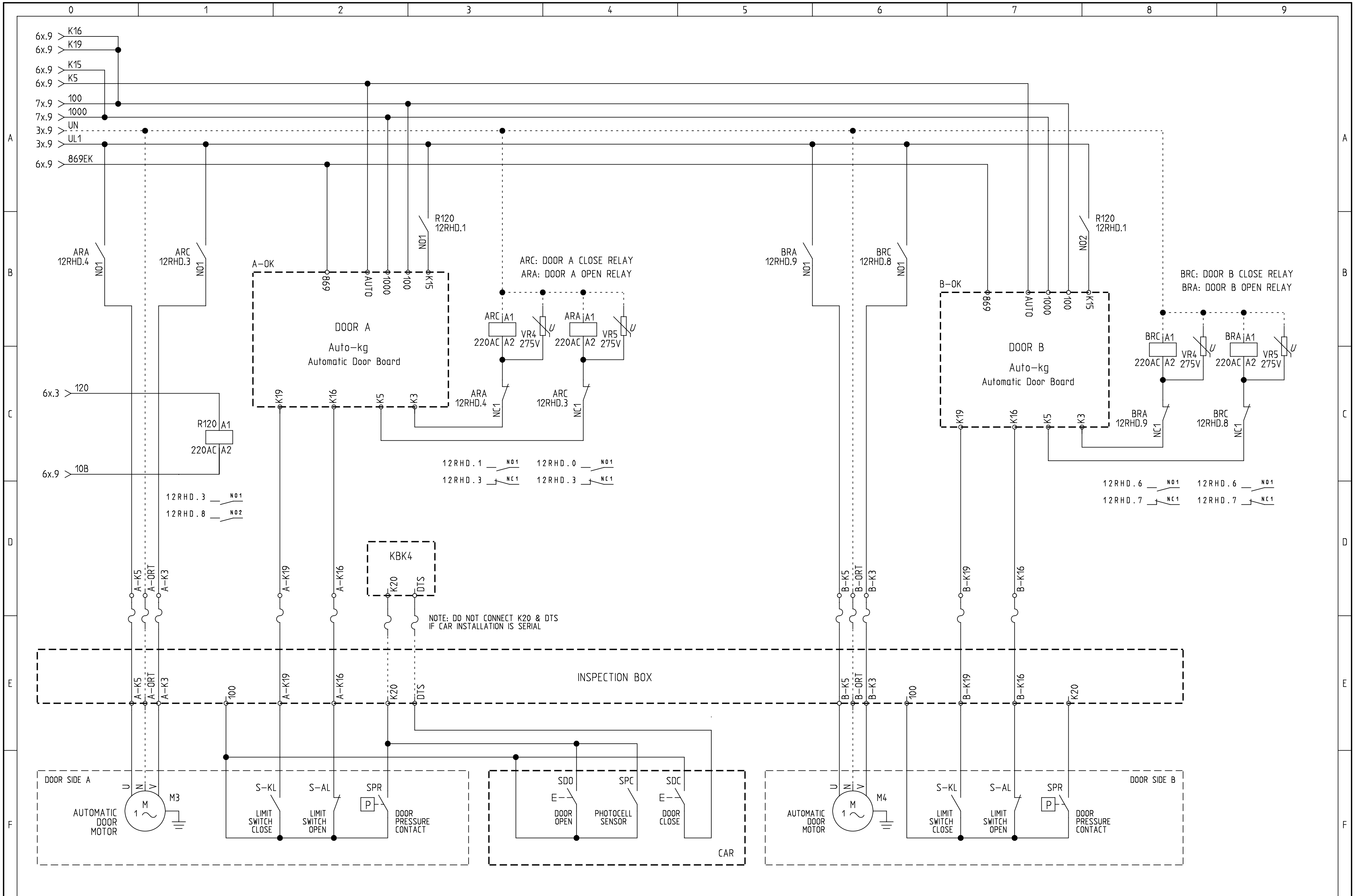


IF INSPECTION BOX USES SERIAL INSTALLATION AND DOOR OPEN-CLOSE BUTTONS AND PHOTOCELL
ARE CONNECTED TO FX-SERI BOARD: ADJUST THESE TRIMPOTS TO MINIMUM.
INCREASE THE PARAMETER VALUE AT MAINBOARD FOR TIME SETTING.
THIS PARAMETER IS "WAIT AT FLOOR" FOR ARL-200 CONTROLLER.

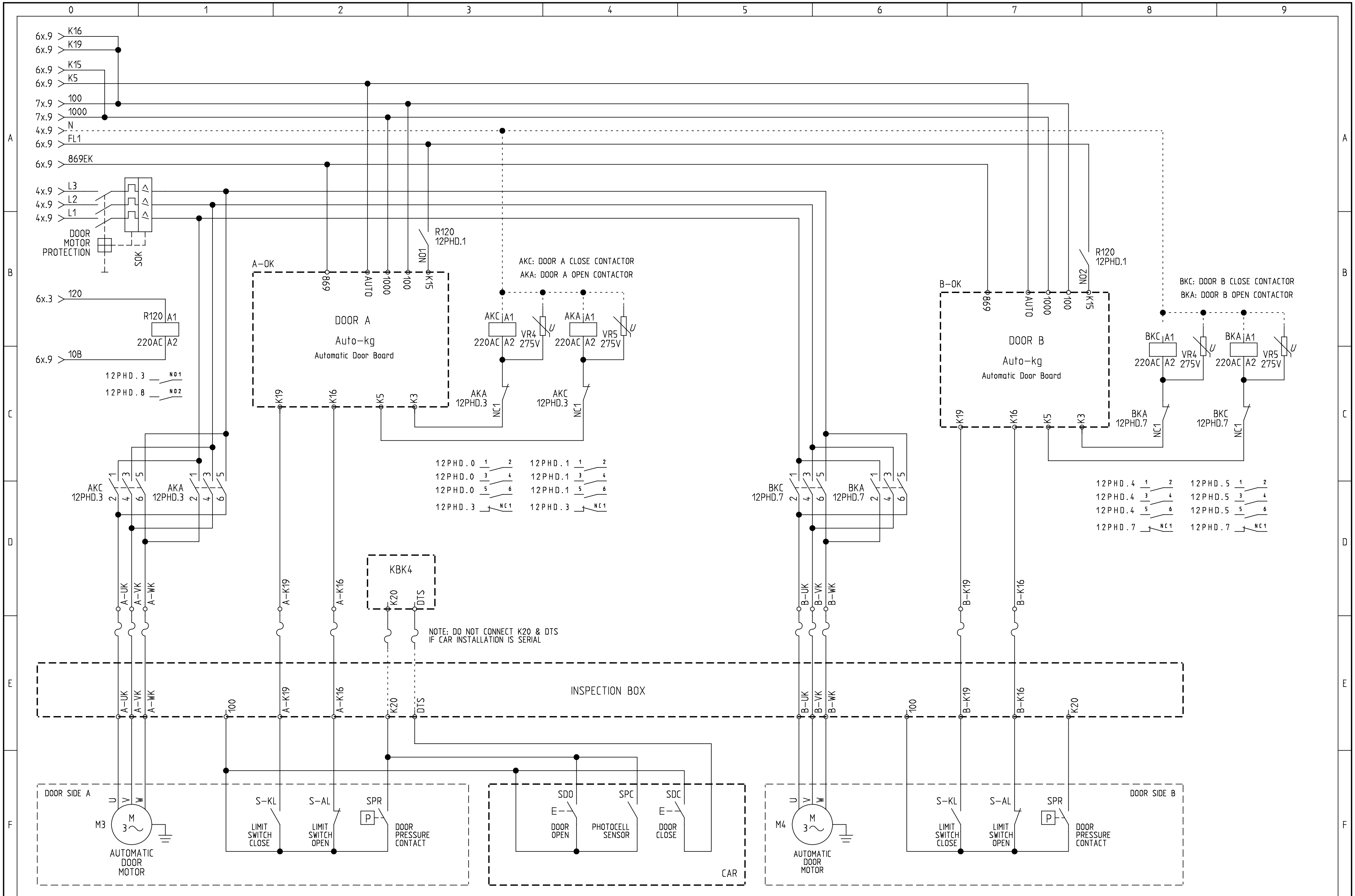
IF INSPECTION BOX USES PARALLEL INSTALLATION AND DOOR OPEN-CLOSE BUTTONS AND PHOTOCELL
ARE CONNECTED TO AUTO-KGI BOARD: SET THE PARAMETER VALUE TO 2 SECONDS AT MAINBOARD
AND ADJUST THESE TRIMPOTS FOR TIME SETTING. THIS PARAMETER IS "WAIT AT FLOOR" FOR ARL-200 CONTROLLER.

ARL-300 INCLUDES SINGLE AUTOMATIC DOOR SUPPORT AND AUTO-KG BOARD IS NOT USED FOR SINGLE DOORS.
FOR 2 AUTOMATIC DOORS 2 AUTO-KG BOARDS ARE USED AND DOOR TIME SETTING IS MADE AS DESCRIBED ABOVE.
THIS PARAMETERS ARE "WAITS AT FLOOR" AND "PHOTOCELL TIME" FOR ARL-300 CONTROLLER.

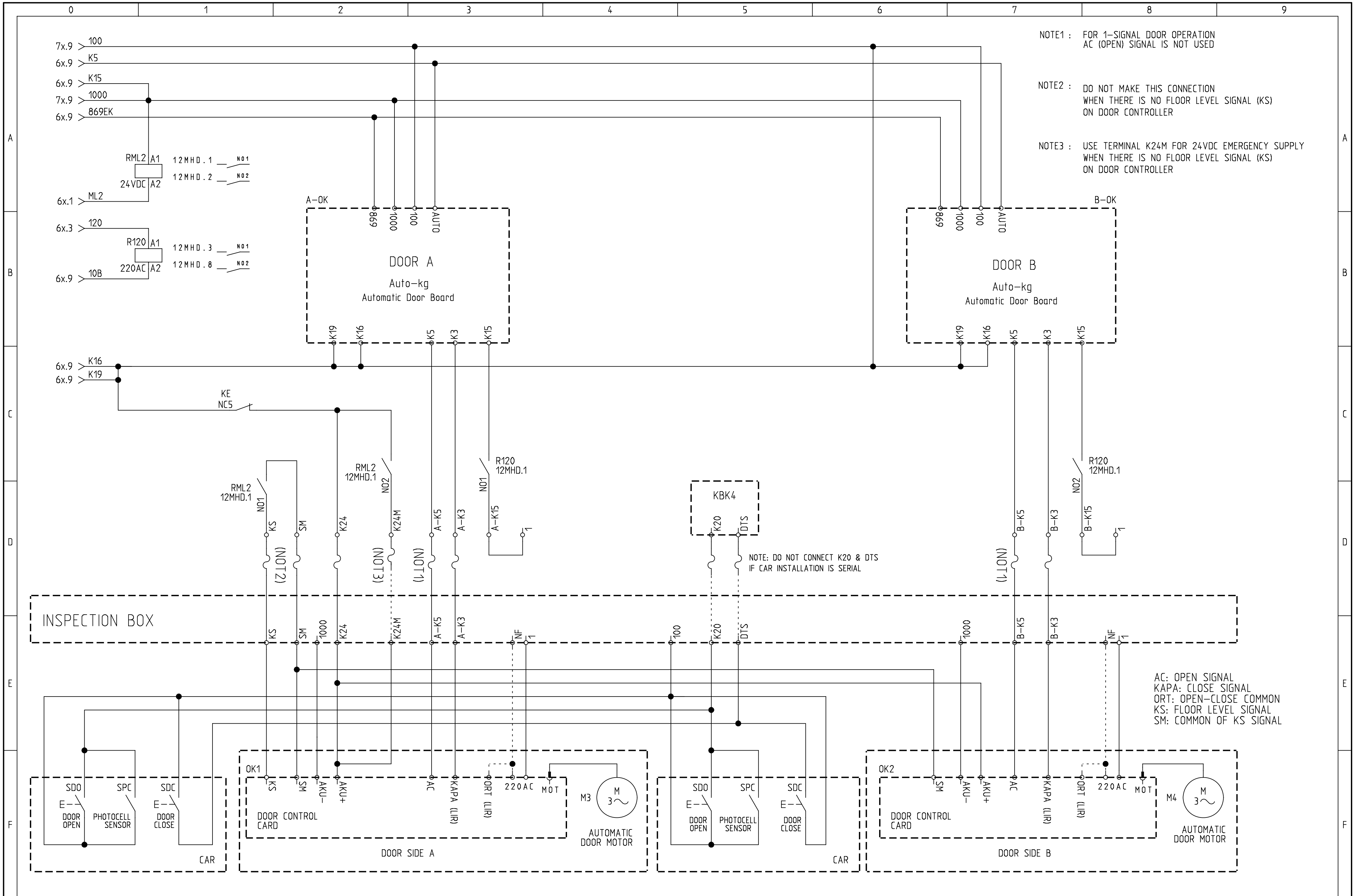
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-SERIES CONTROL PANELS	AUTO__KG DOOR CONTROLLER	DRAWN BY: K.D.	Rev. No:	Sheet: 12 U
			CHECKED BY: C.A.	Rev. Date:	Date: 27.04.2006



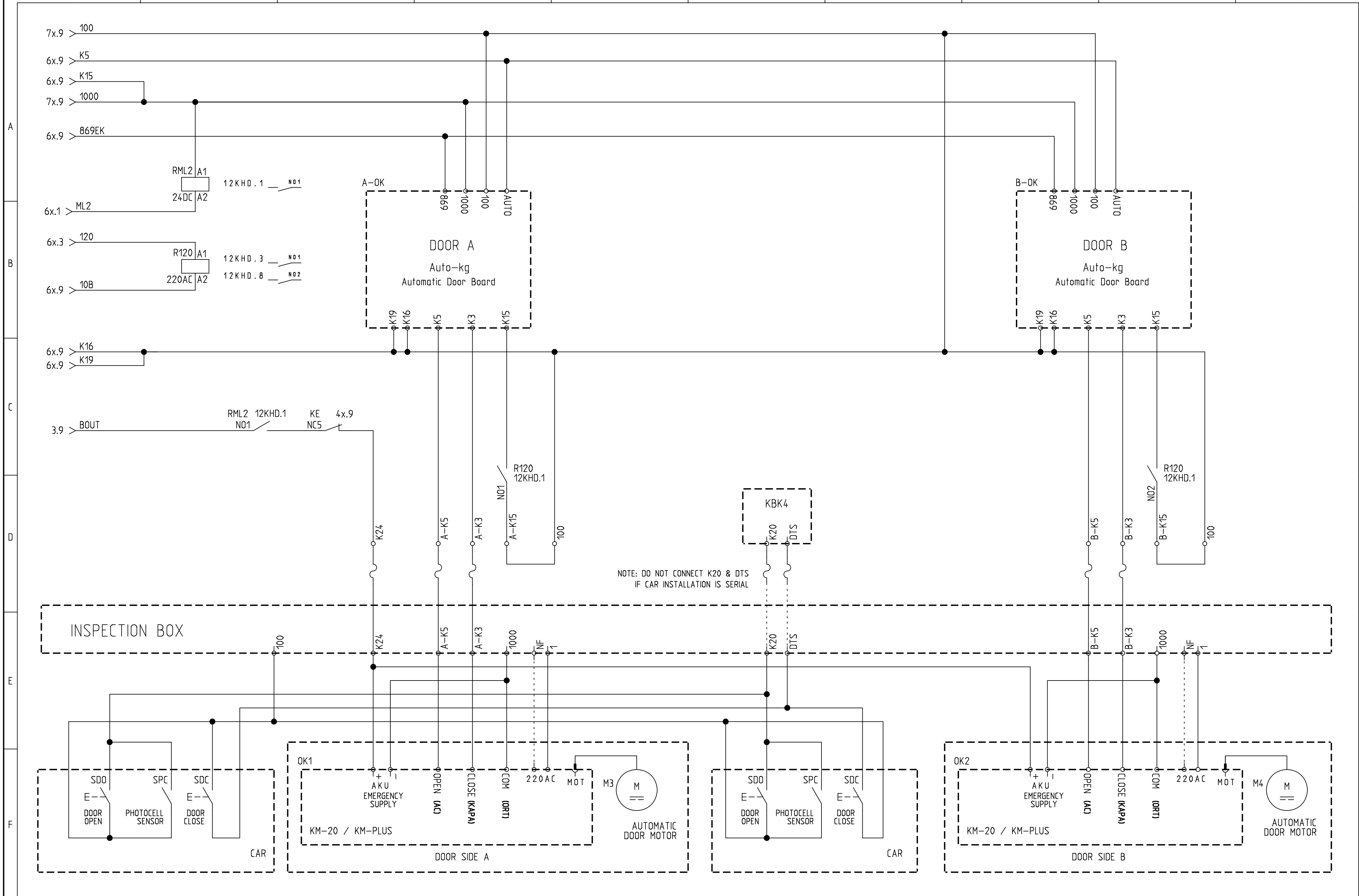
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : 1-PHASE DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 RHD
			CHECKED BY: C.A.	Rev. Date:	Date: 20.01.2010



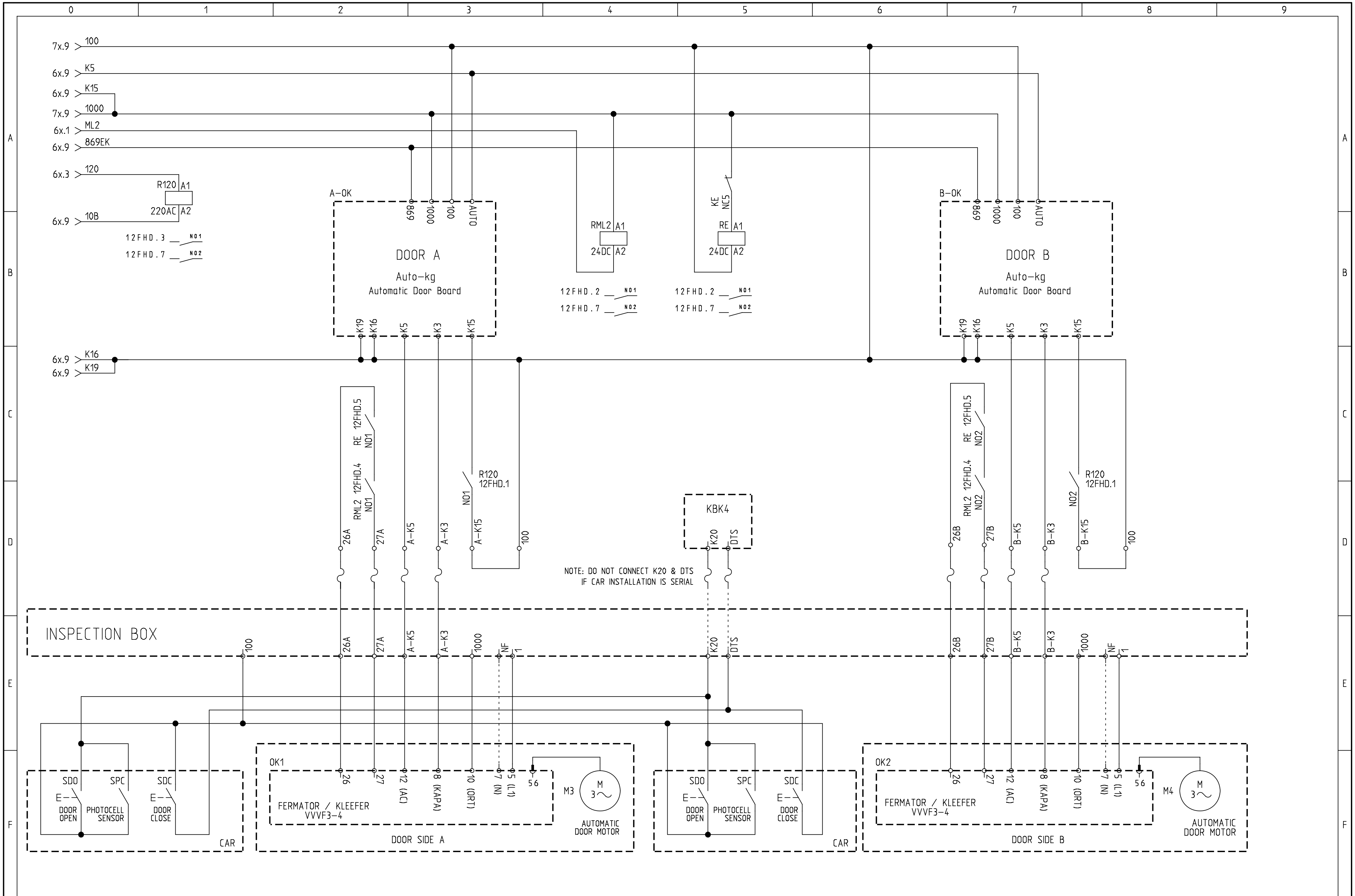
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : 3-PHASE DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 PHD Date: 20.01.2010



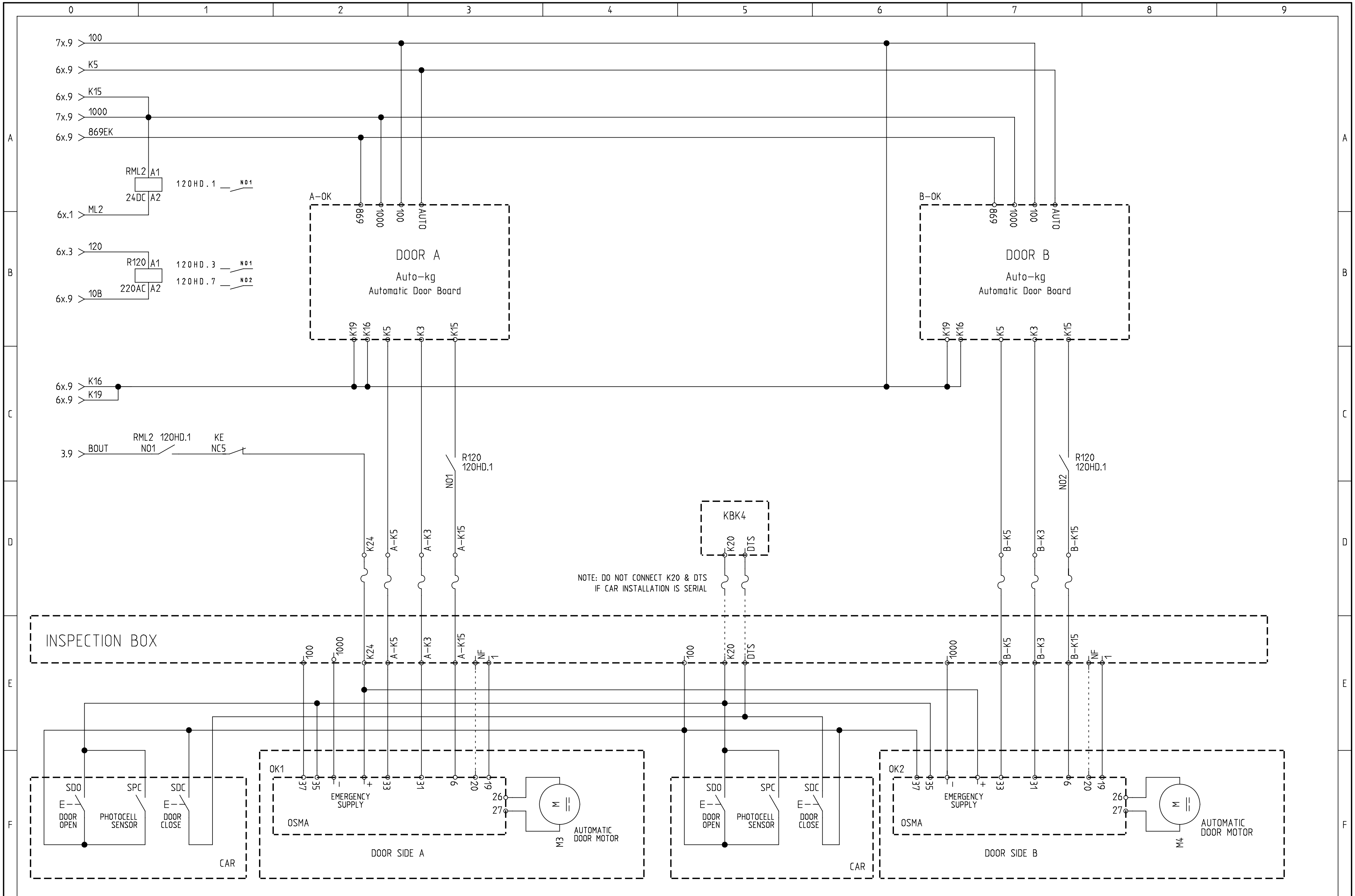
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMI AUTOMATIC WITH DC DOOR CONTROLLER DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 MHD Date: 20.01.2010



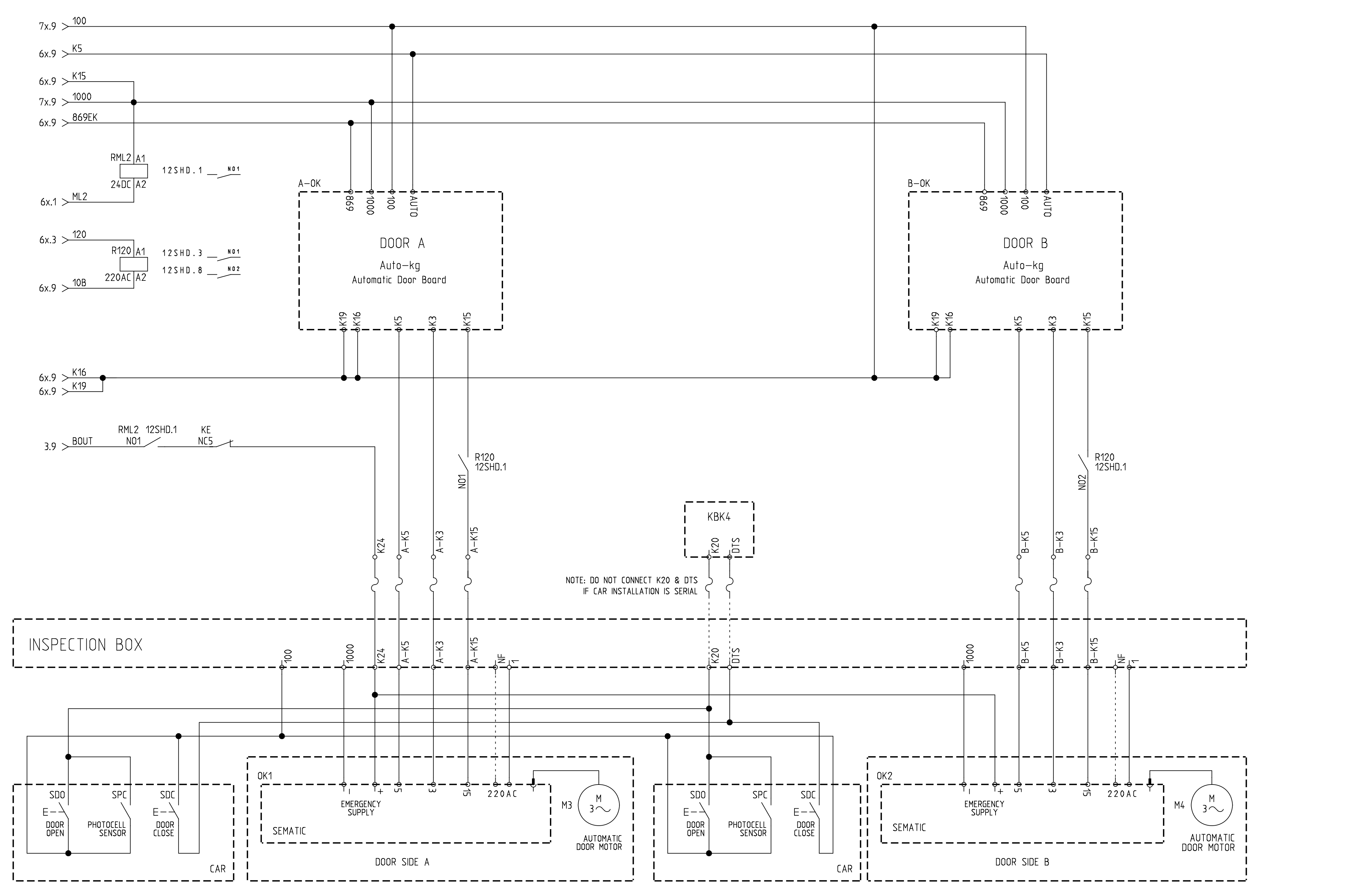
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : KM-20 / KM-PLUS DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 KHD Date: 20.01.2010



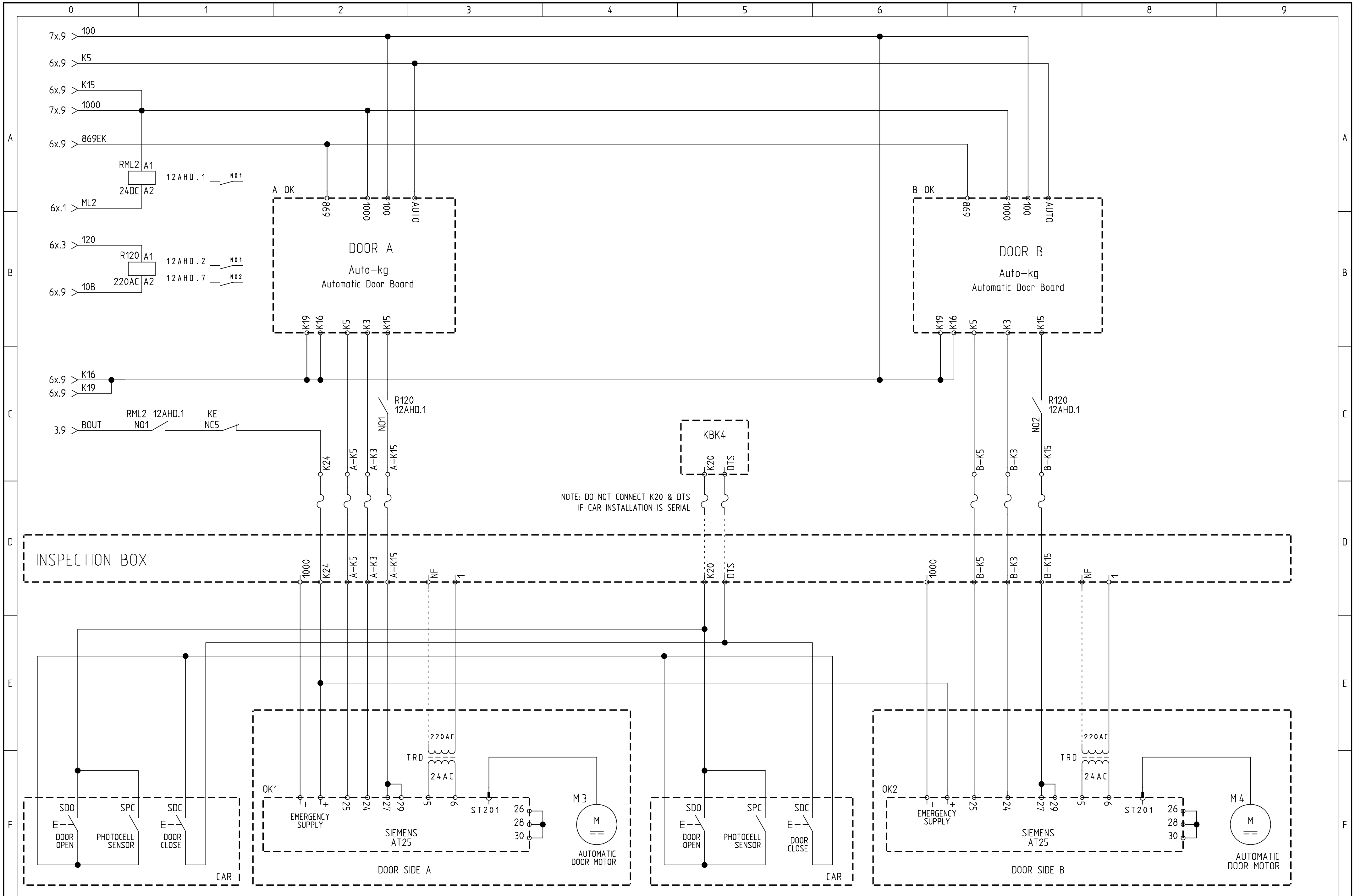
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : FERMATOR / KLEEFER VVVF 3-4 DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 FHD Date: 20.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : OSMA DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:
				Sheet: 12 OHD Date: 20.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION	DRAWN BY: K.D.	Rev. No:	Sheet: 12 SHD
	ARL-300 CONTROL PANEL	DOOR TYPE : SEMATIC DRIVE TYPE : HYDRAULIC	CHECKED BY: C.A.	Rev. Date:	Date: 20.01.2010



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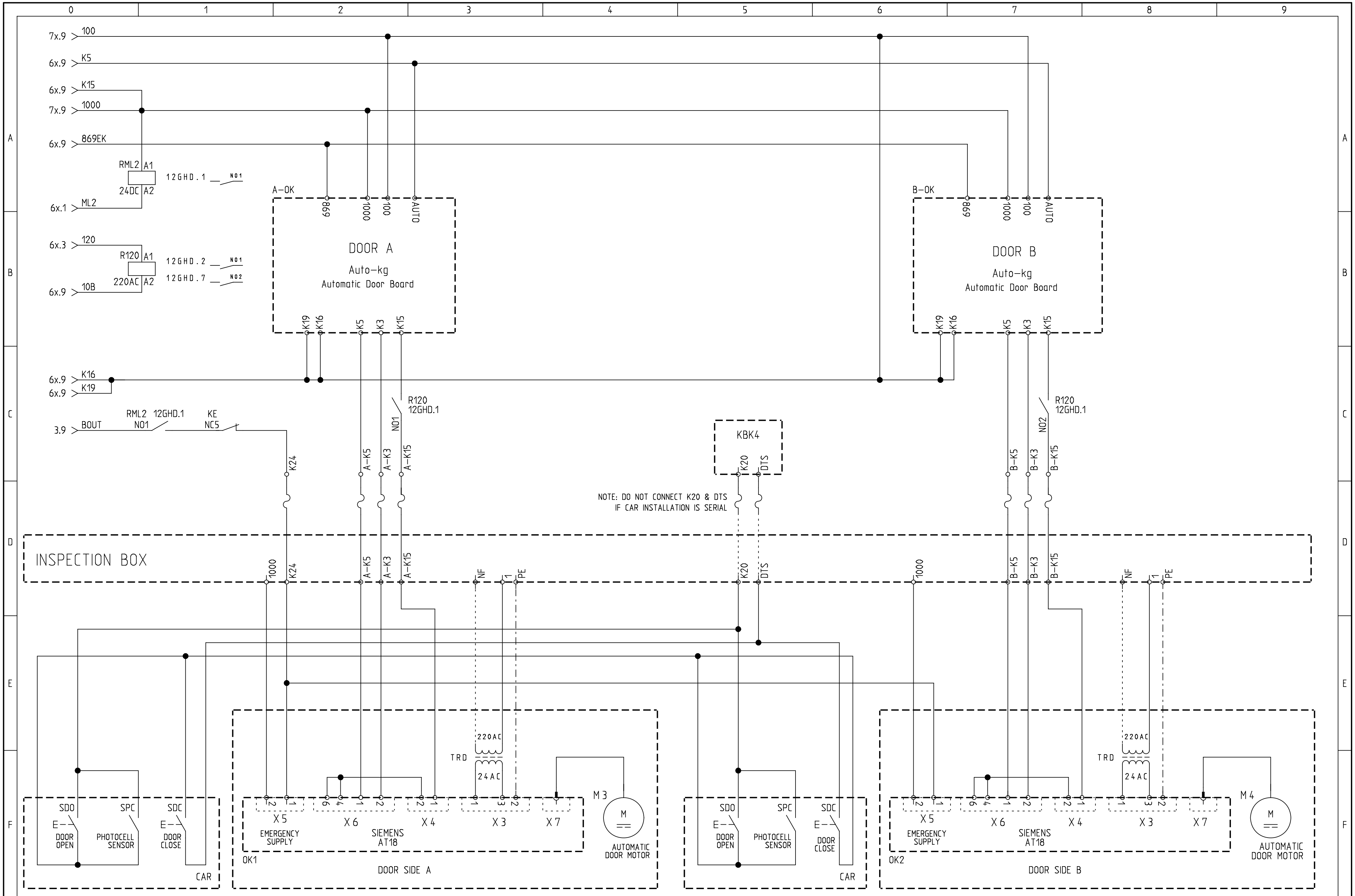
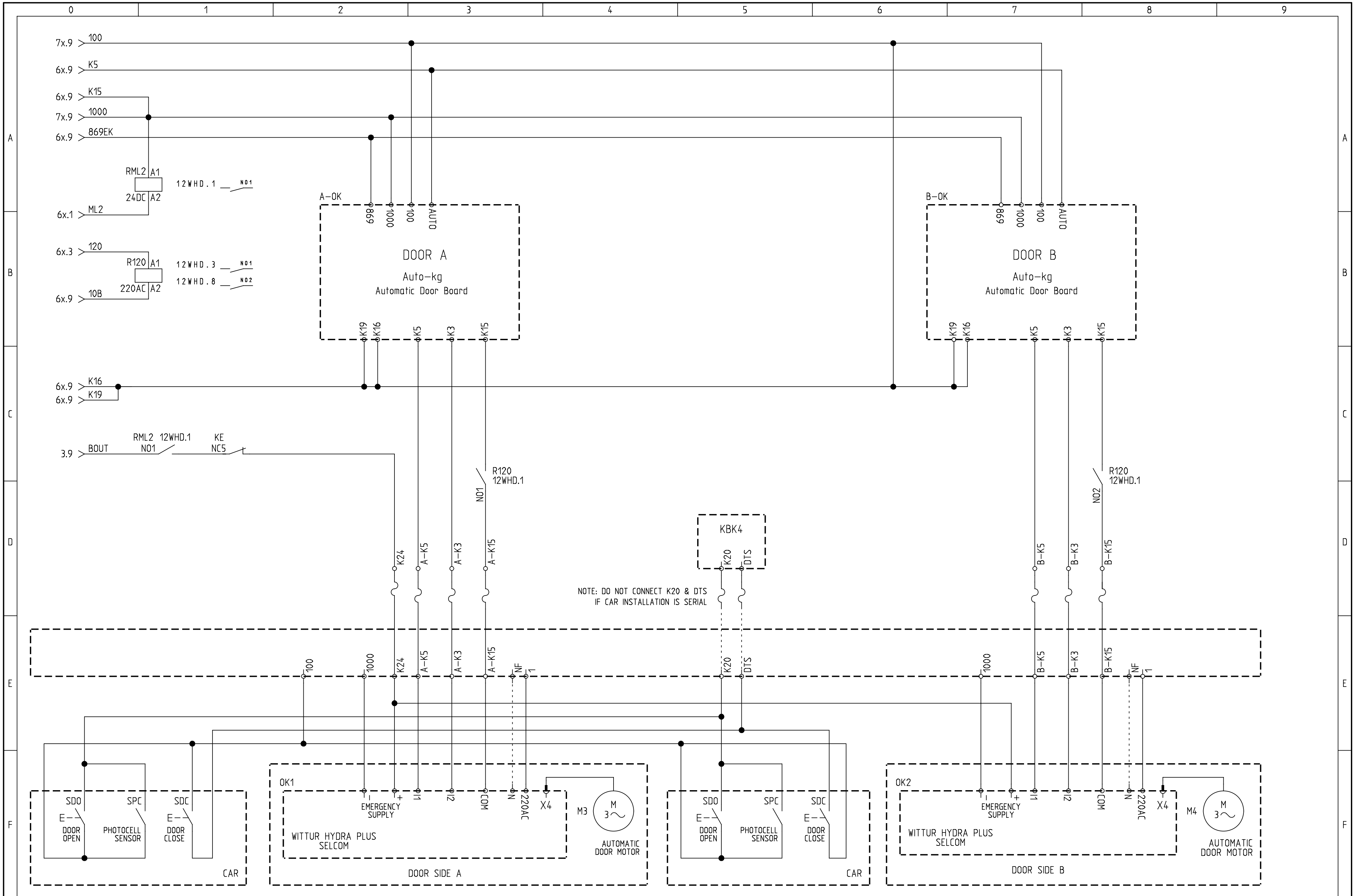
ARL-300 CONTROL PANEL

DUAL AUTOMATIC DOOR CONNECTION
DOOR TYPE : WITH SIEMENS AT25 CONTROLLER
DRIVE TYPE : HYDRAULIC

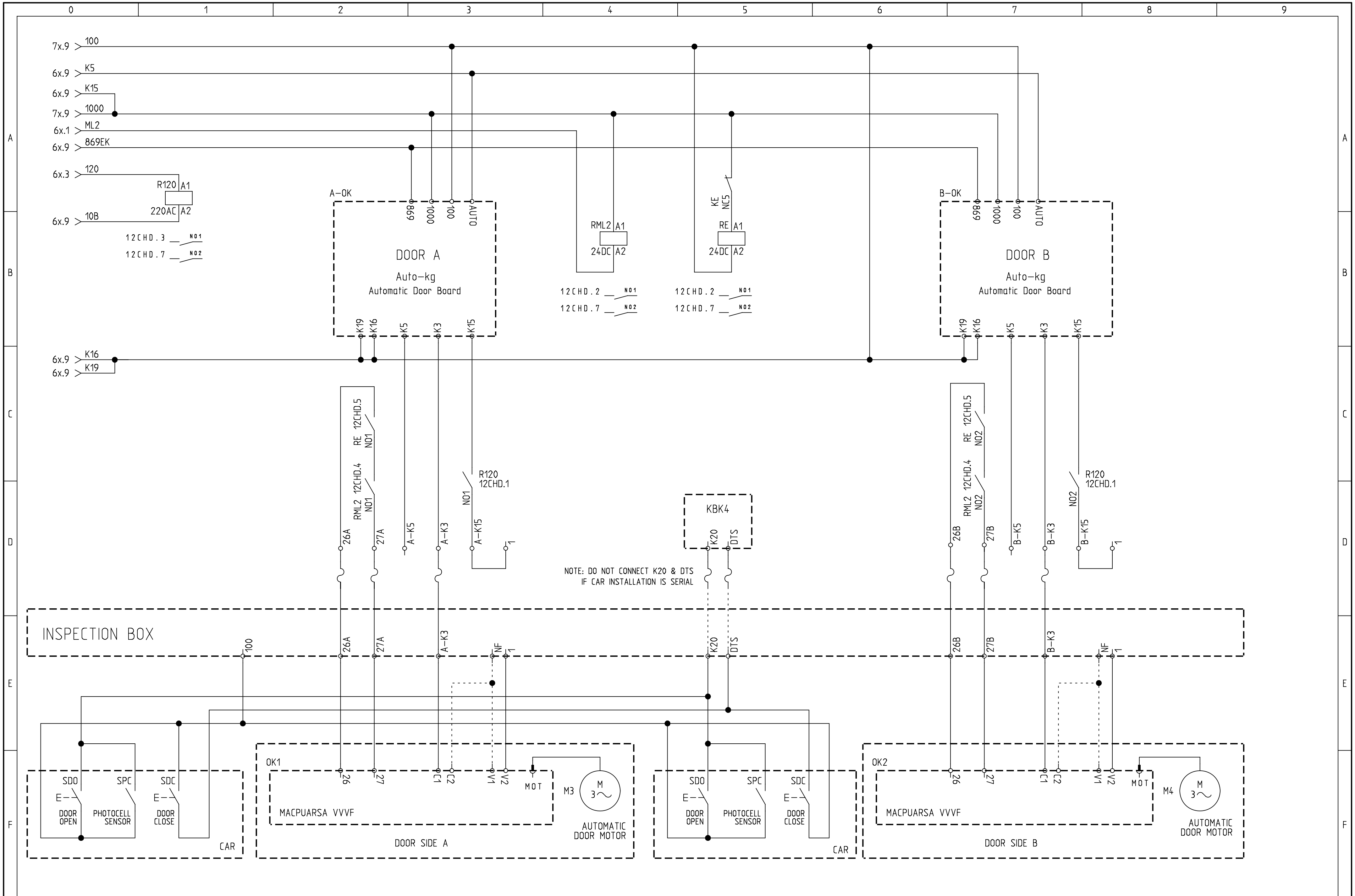
DRAWN BY: K.D.
CHECKED BY: C.A.
Rev. No:
Rev. Date:
Sheet: 12 AHD
Date: 20.01.2010



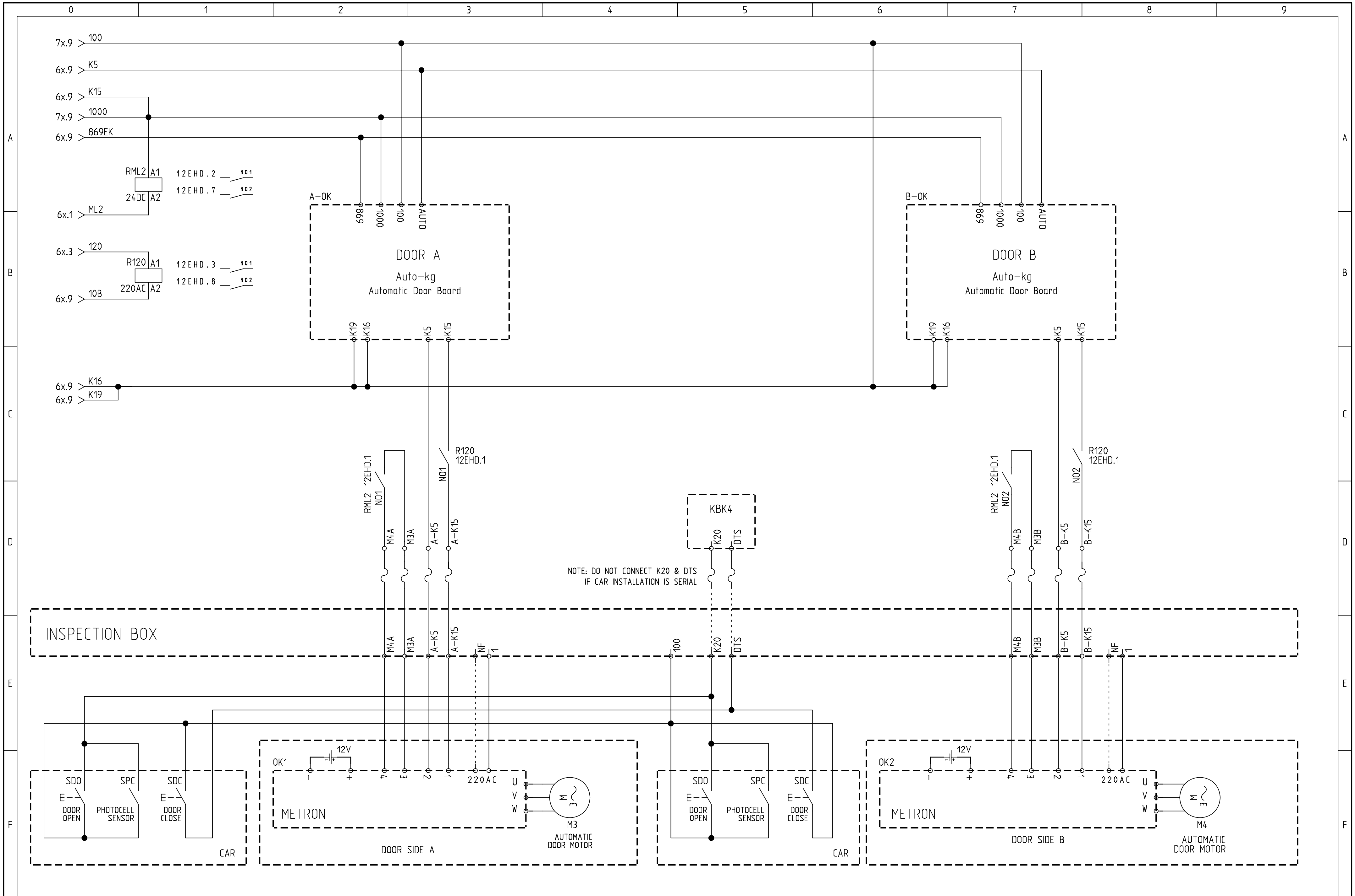
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : WITH SIEMENS AT18 CONTROLLER DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 GHD Date: 20.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : WITTUR HYDRA PLUS DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D.	Rev. No:	Sheet: 12 WHD
			CHECKED BY: C.A.	Rev. Date:	Date: 20.01.2010



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : MACPUARSA VVVF DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 CHD Date: 20.01.2010



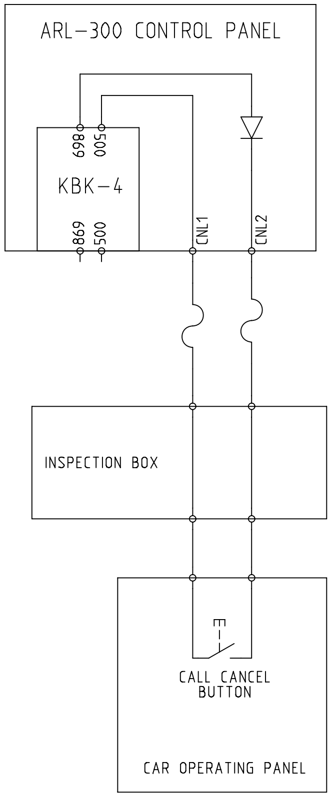
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	DUAL AUTOMATIC DOOR CONNECTION DOOR TYPE : METRON DRIVE TYPE : HYDRAULIC	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 EHD Date: 20.01.2010

Connections & settings for special functions

⚠ These functions are available only with serial car installation (when FX__Seri or FX__Seri__32 board is used in inspection box)

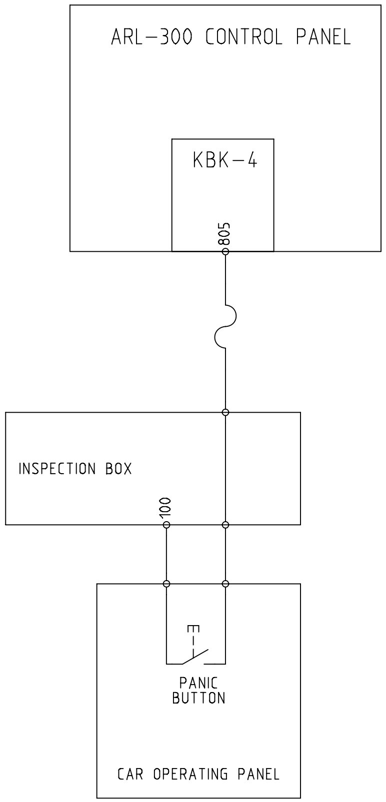
CALL CANCEL BUTTON

No parameter setting is required



EVACUATION (PANIC) OPERATION

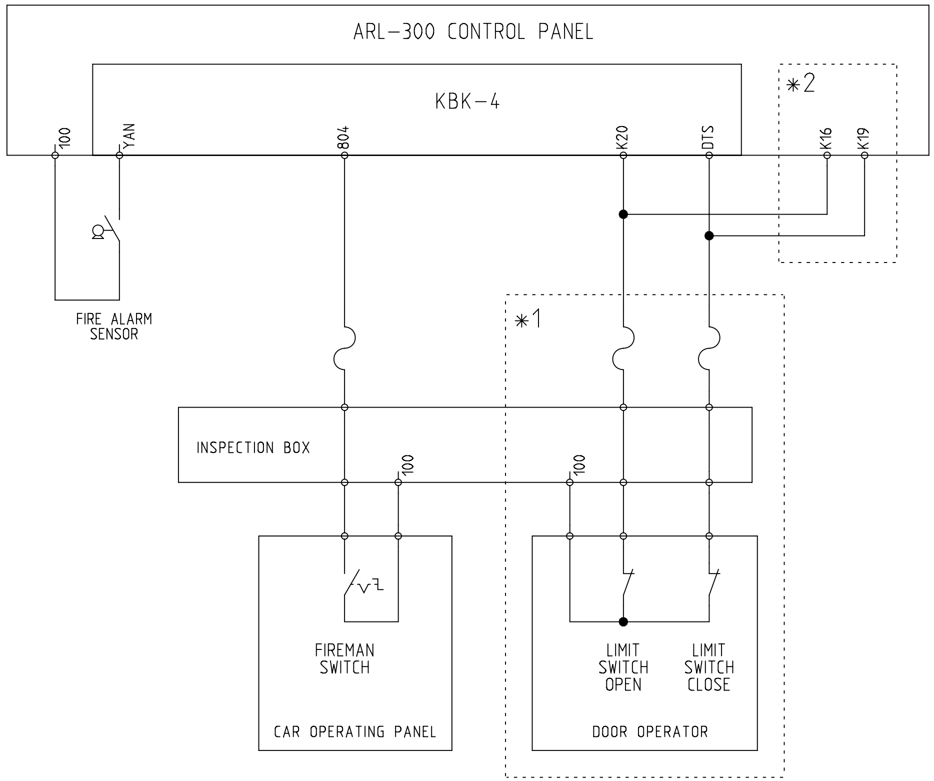
"EVACUATION FLOOR" parameter must be set in the menu (1–24)



FIREMAN OPERATION

"FIRE PARK FLOOR" parameter must be set in the menu (1–24)

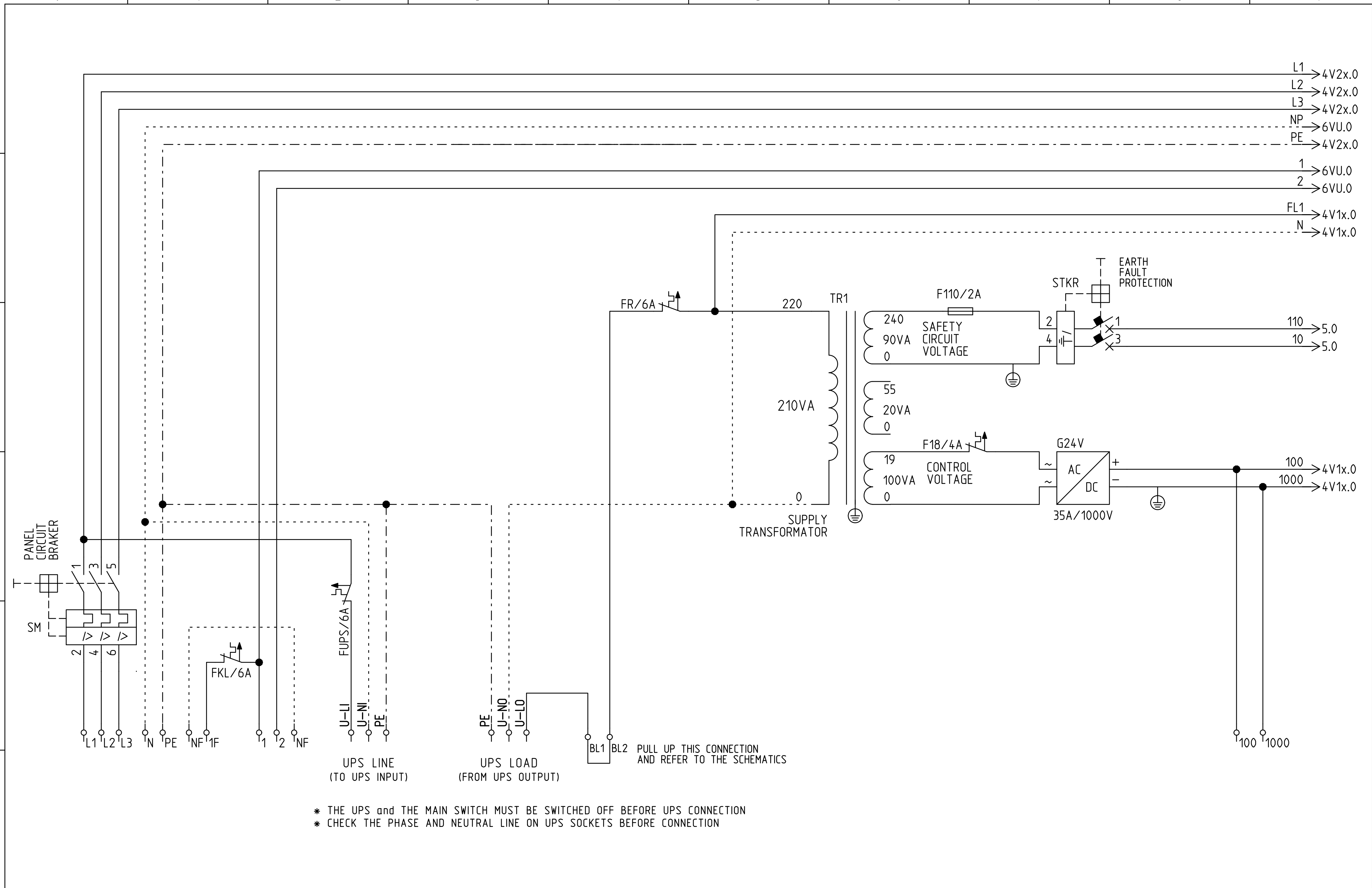
"FIREMAN MODE" parameter must be ENABLED in the menu.



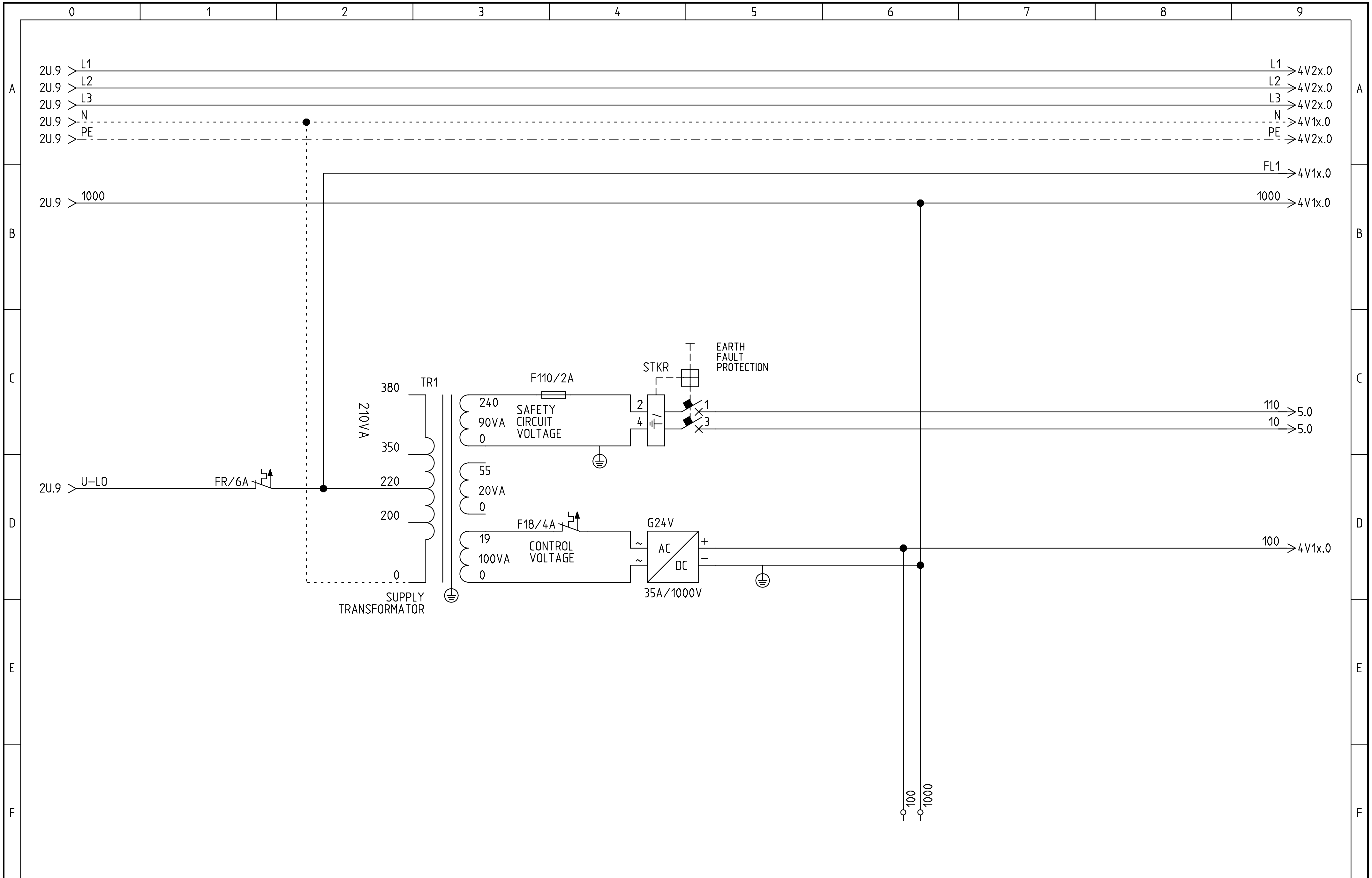
∗1: CONNECTION FOR DOORS HAVE A CONTROL UNIT (FOR DC or VVVF DOOR OPERATORS).

∗2: CONNECTION FOR 1–PHASE or 3–PHASE DOORS HAVE NO CONTROL UNIT. REFER TO DOOR CONNECTION DIAGRAM.

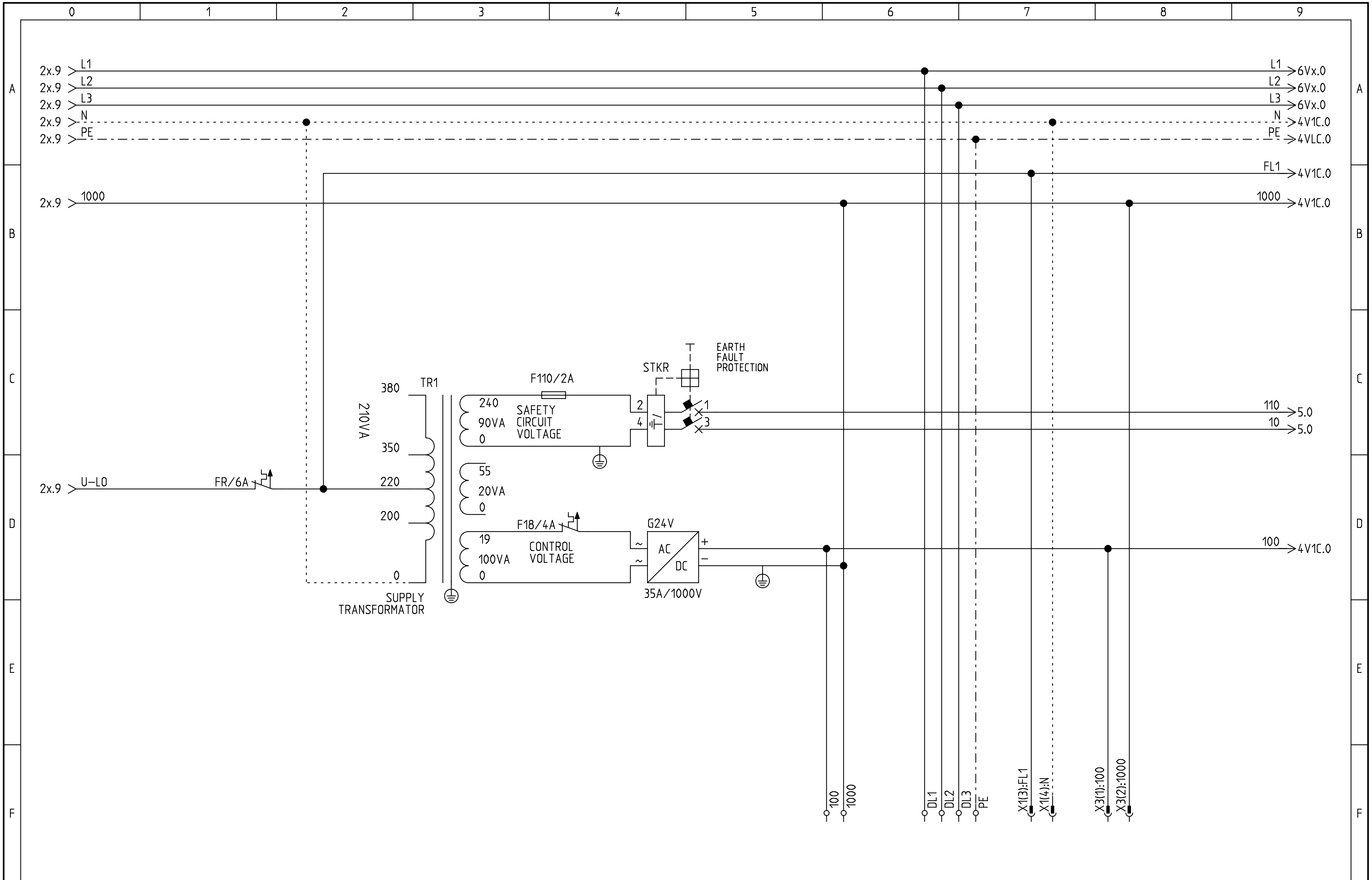
⚠ DOOR LIMIT SWITCHES MUST BE NORMALLY CLOSE CONTACT.
DOOR LIMIT SIGNALS MUST BE CUT OFF WHEN DOOR IS FULLY OPEN or CLOSED.



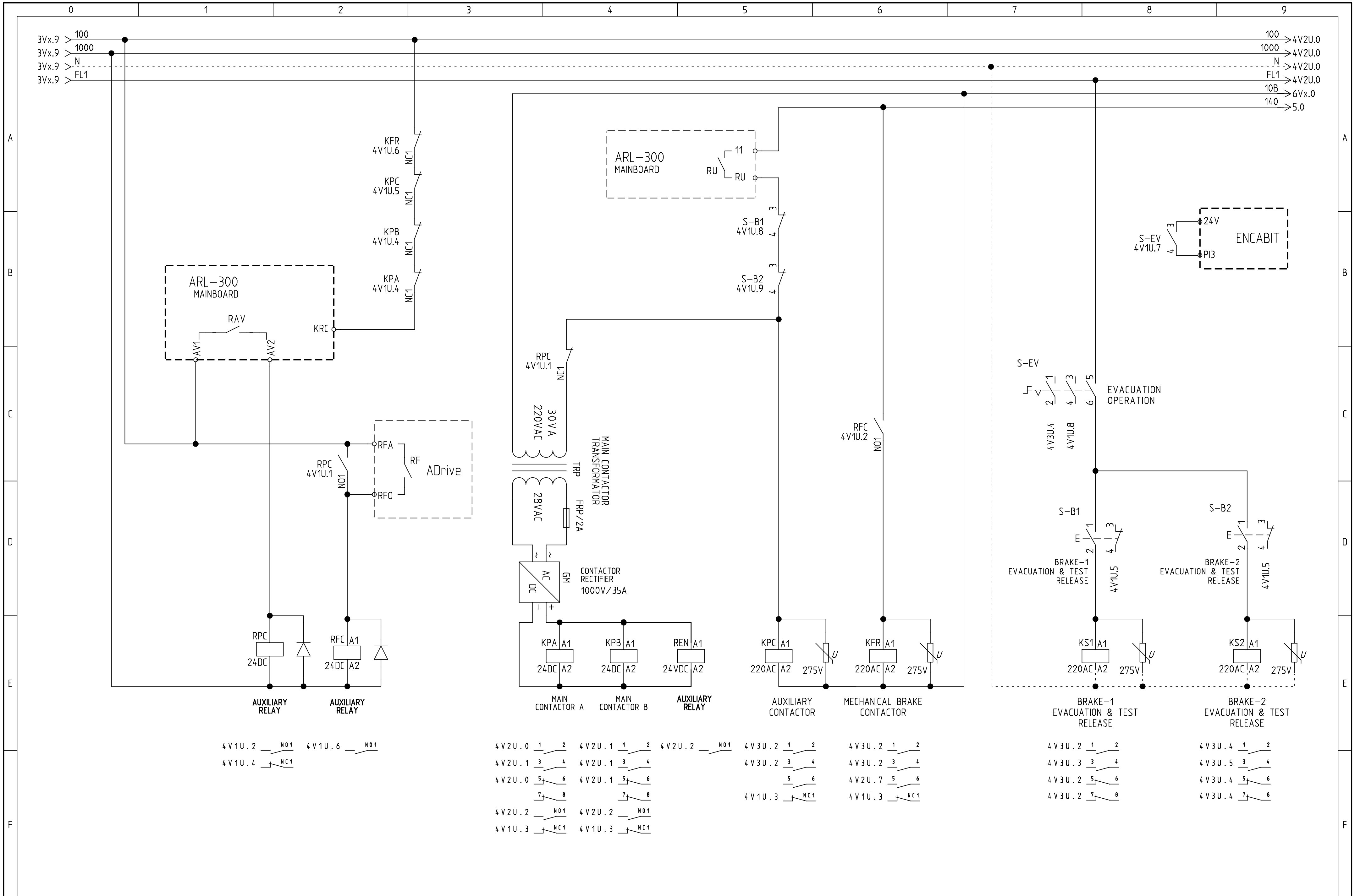
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	SUPPLY CIRCUITS DRIVE TYPE : VVVF	DRAWN BY: K.D.	Rev. No: V12	Sheet: 3 VU
			CHECKED BY: C.A.	Rev. Date: 14.07.2009	Date: 01.03.2009



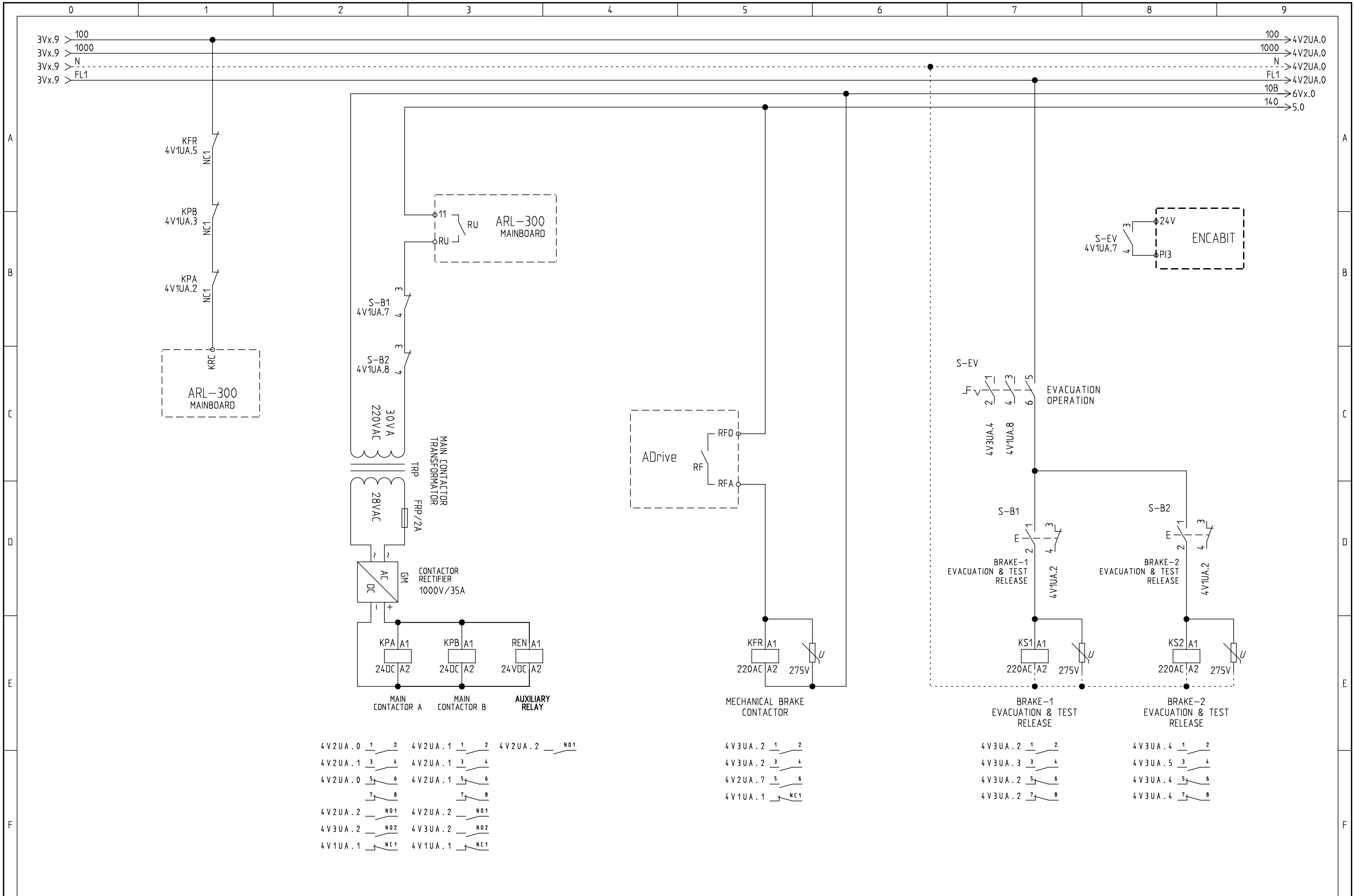
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	SUPPLY CIRCUITS	DRAWN BY: K.D.	Rev. No:	Sheet: 3 VUA
			CHECKED BY: C.A.	Rev. Date:	Date: 01.03.2009



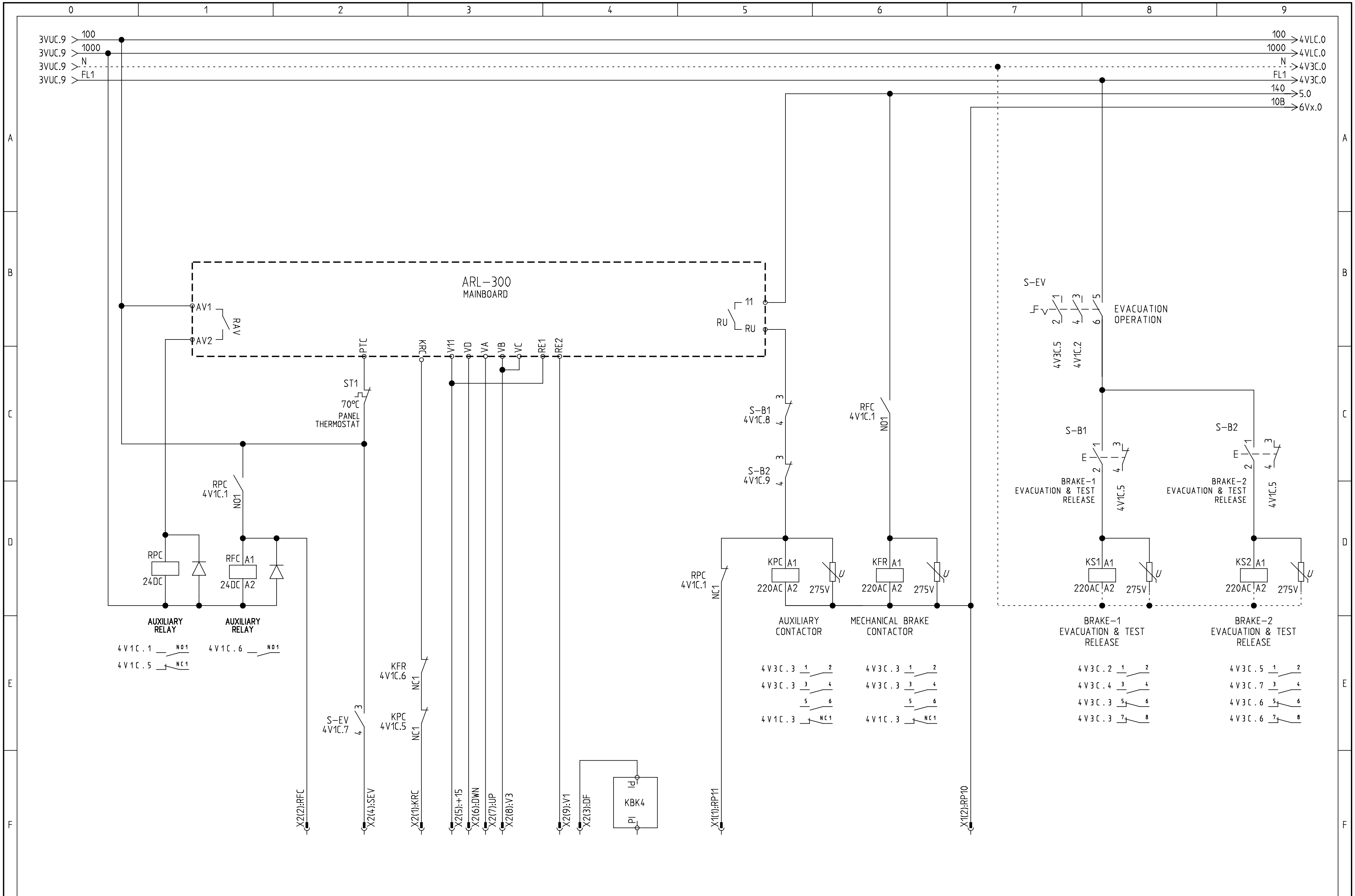
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	SUPPLY CIRCUITS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 3 VUC Date: 01.03.2009



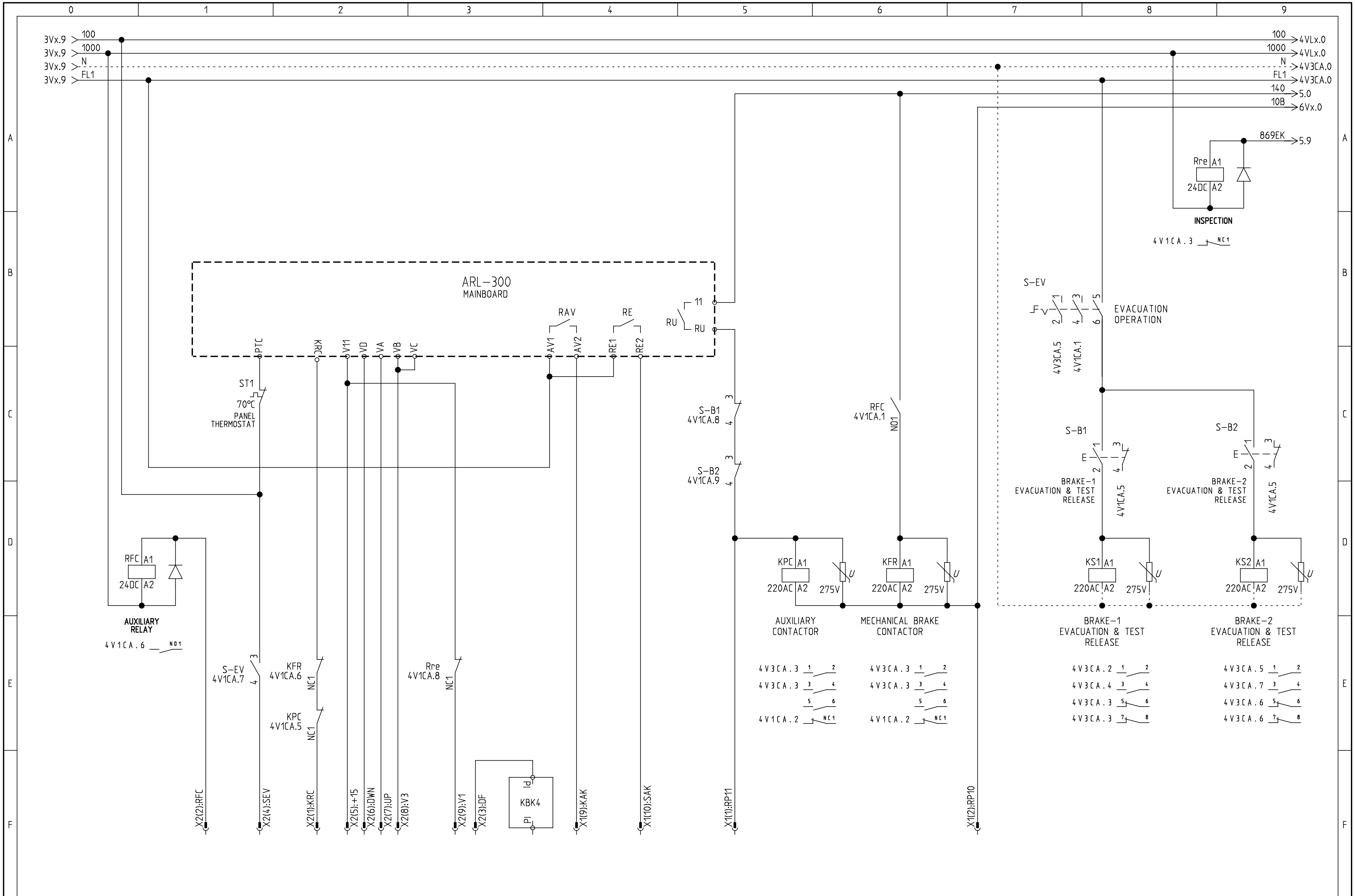
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	CONTACTOR CIRCUITS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 14.07.2009	Sheet: 4 V1U Date: 01.03.2009



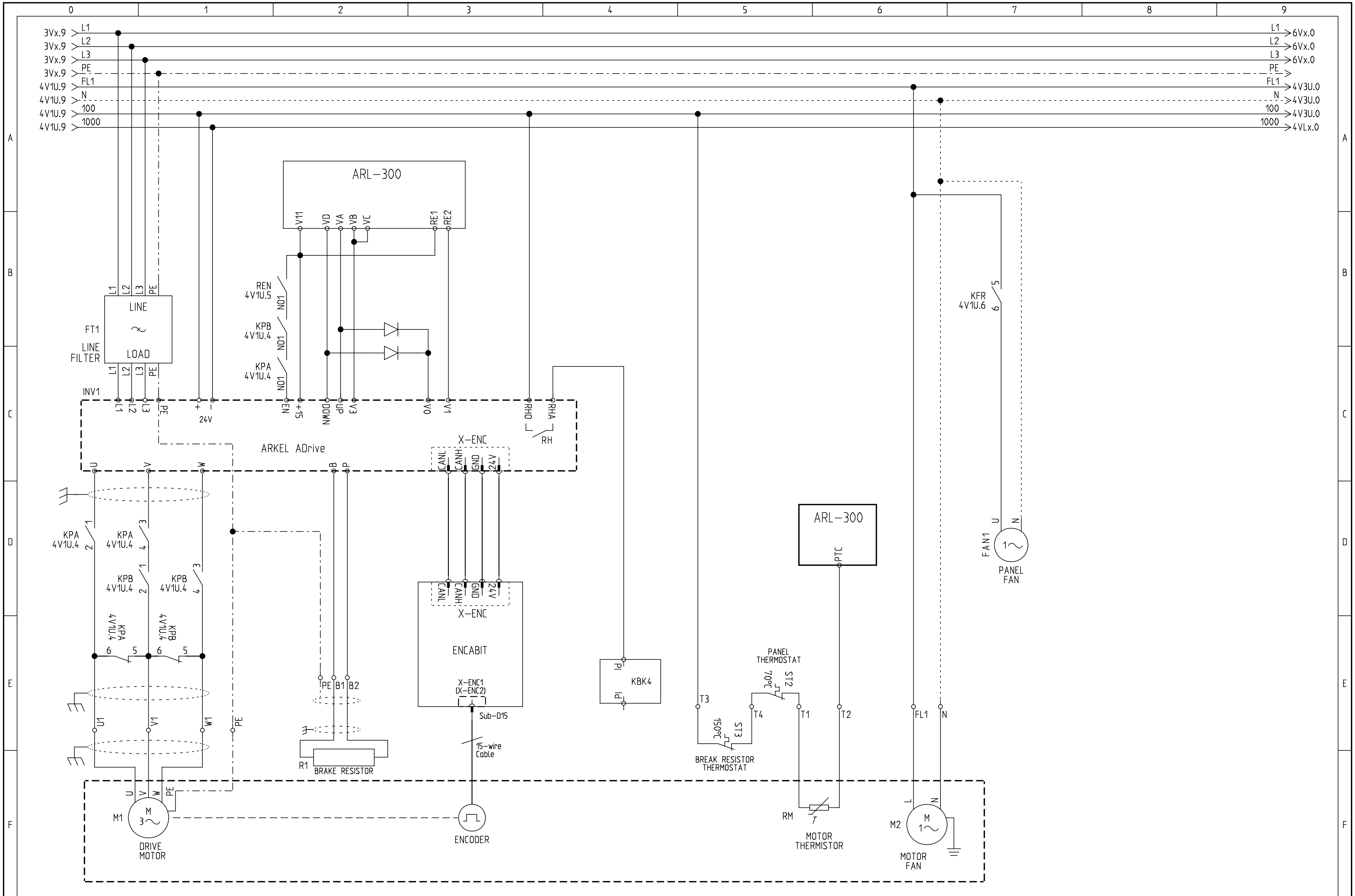
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	CONTACTOR CIRCUITS	DRAWN BY: K.D.	Rev. No:	Sheet: 4 V1UA
			CHECKED BY: C.A.	Rev. Date:	Date: 18.08.2009



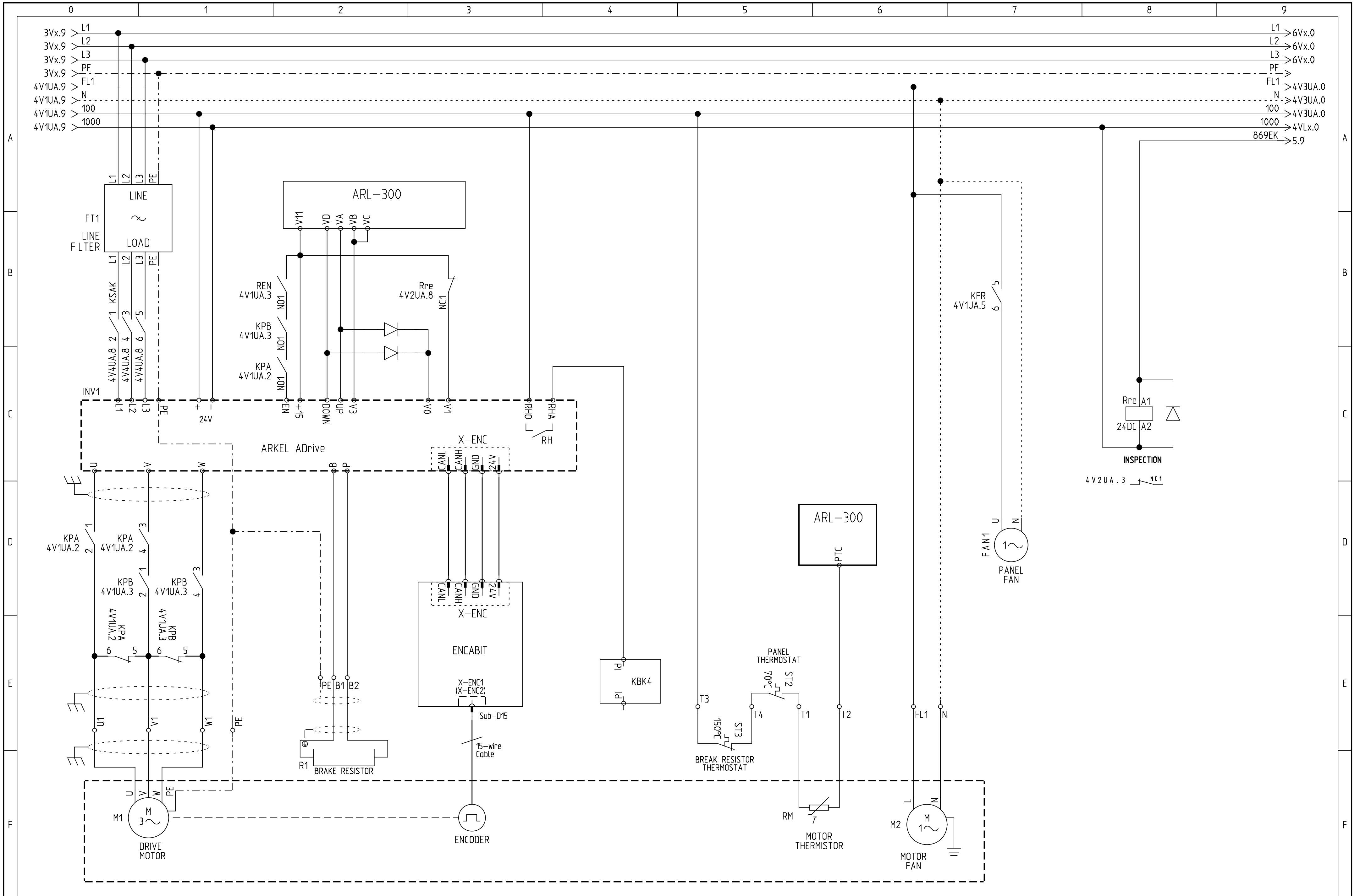
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	CONTACTOR CIRCUITS DRIVE TYPE : VVVF GEARLESS	DRAWN BY: K.D.	Rev. No: V12	Sheet: 4 V1C
			CHECKED BY: C.A.	Rev. Date: 13.05.2009	Date: 01.03.2009



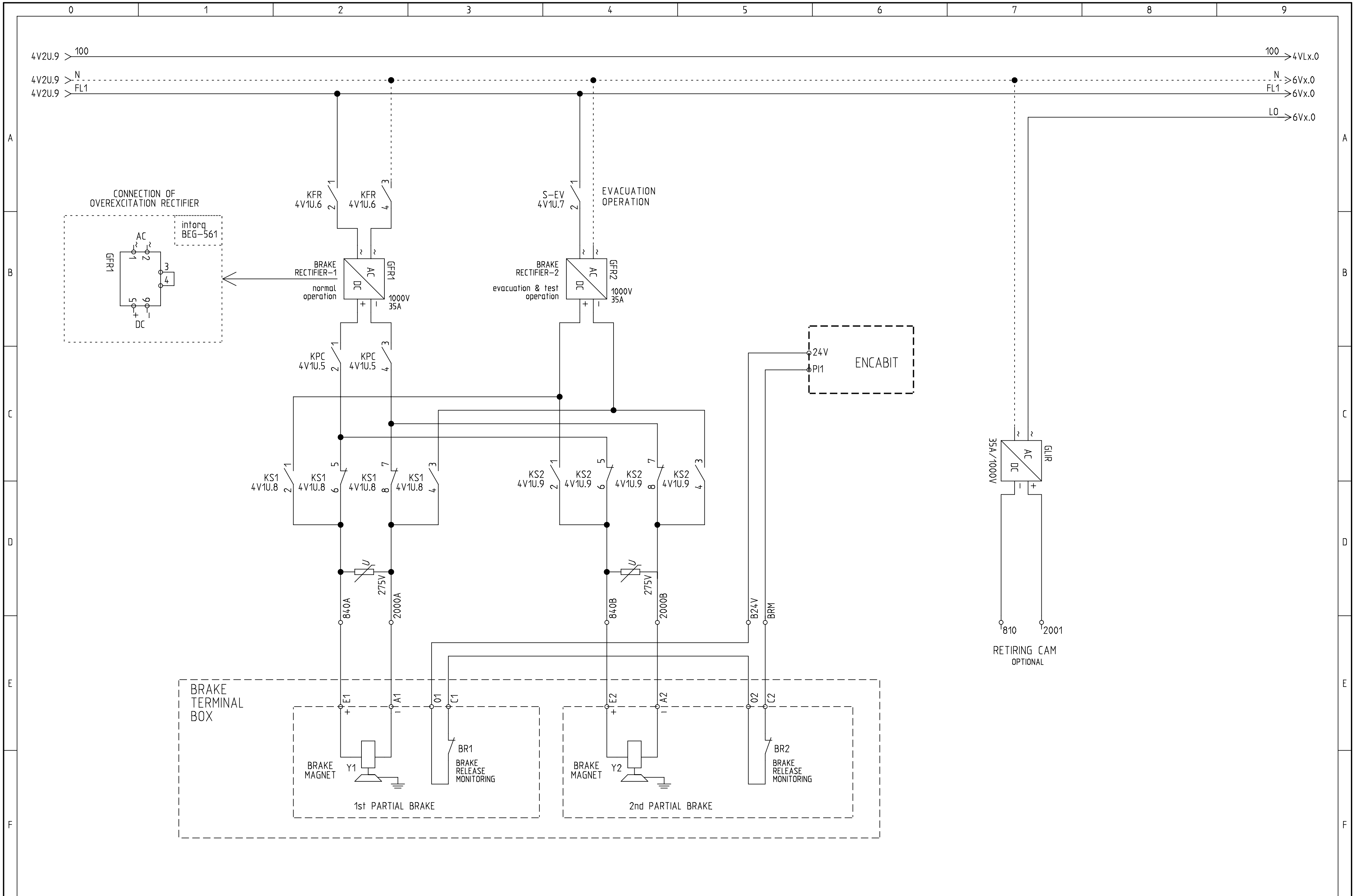
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	CONTACTOR CIRCUITS DRIVE TYPE : VVVF GEARLESS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 4 V1CA Date: 01.09.2009



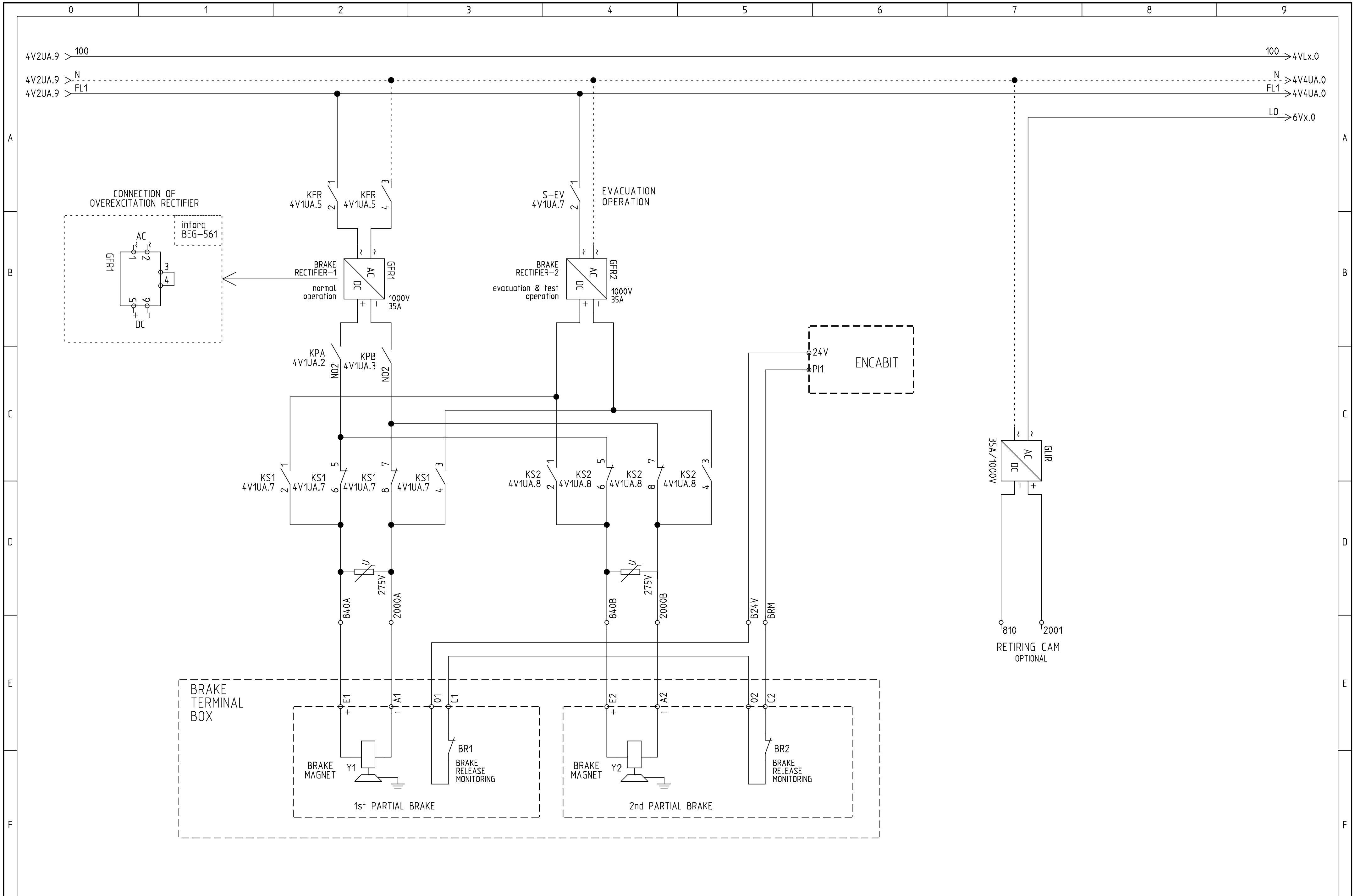
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MOTOR CIRCUITS DRIVE TYPE : VVVF GEARLESS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V13 Rev. Date: 18.06.2009	Sheet: 4 V2U Date: 01.03.2009



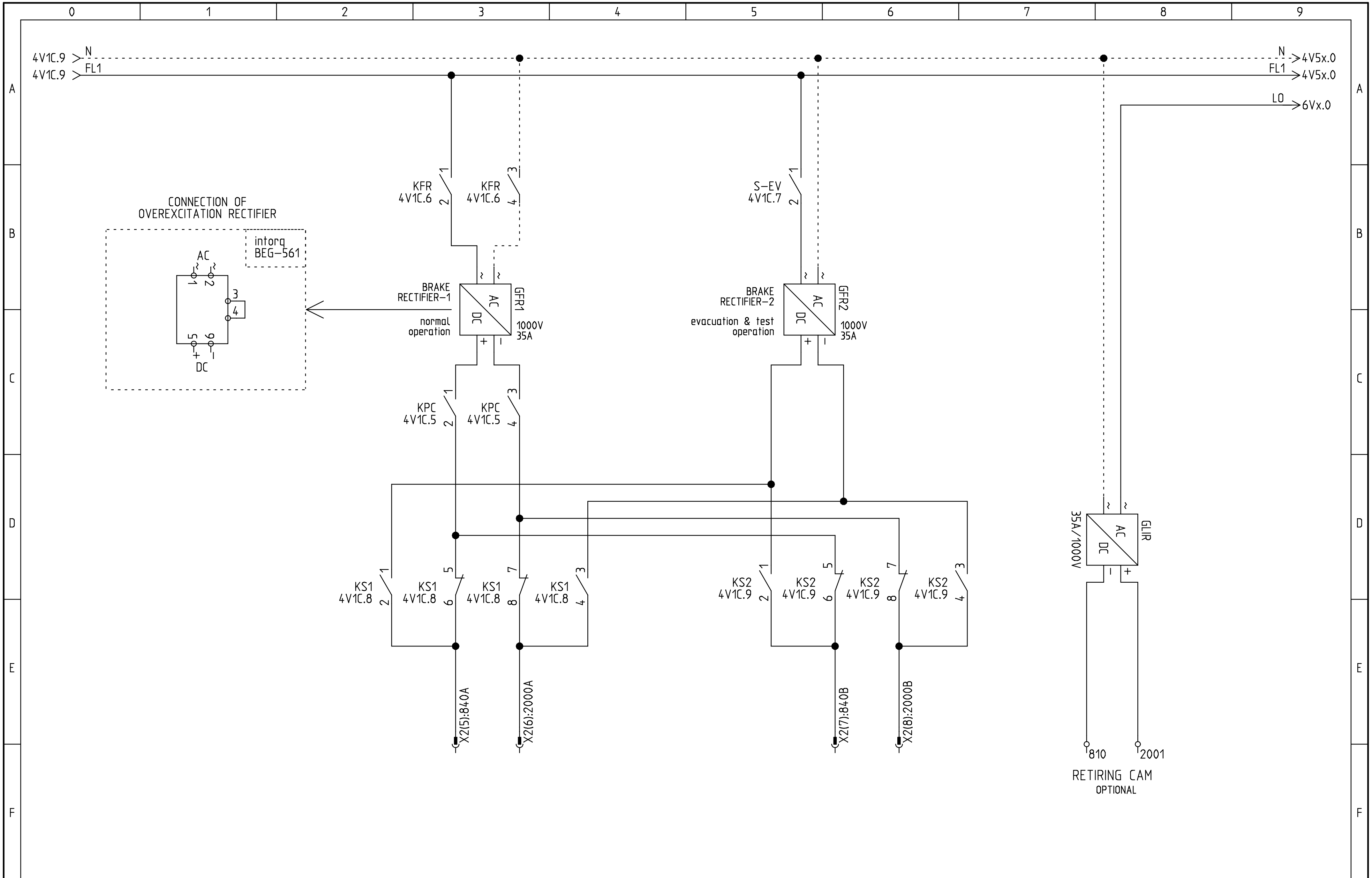
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MOTOR CIRCUITS DRIVE TYPE : VVVF GEARLESS	DRAWN BY: K.D.	Rev. No:	Sheet: 4 V2UA
			CHECKED BY: C.A.	Rev. Date:	Date: 18.08.2009



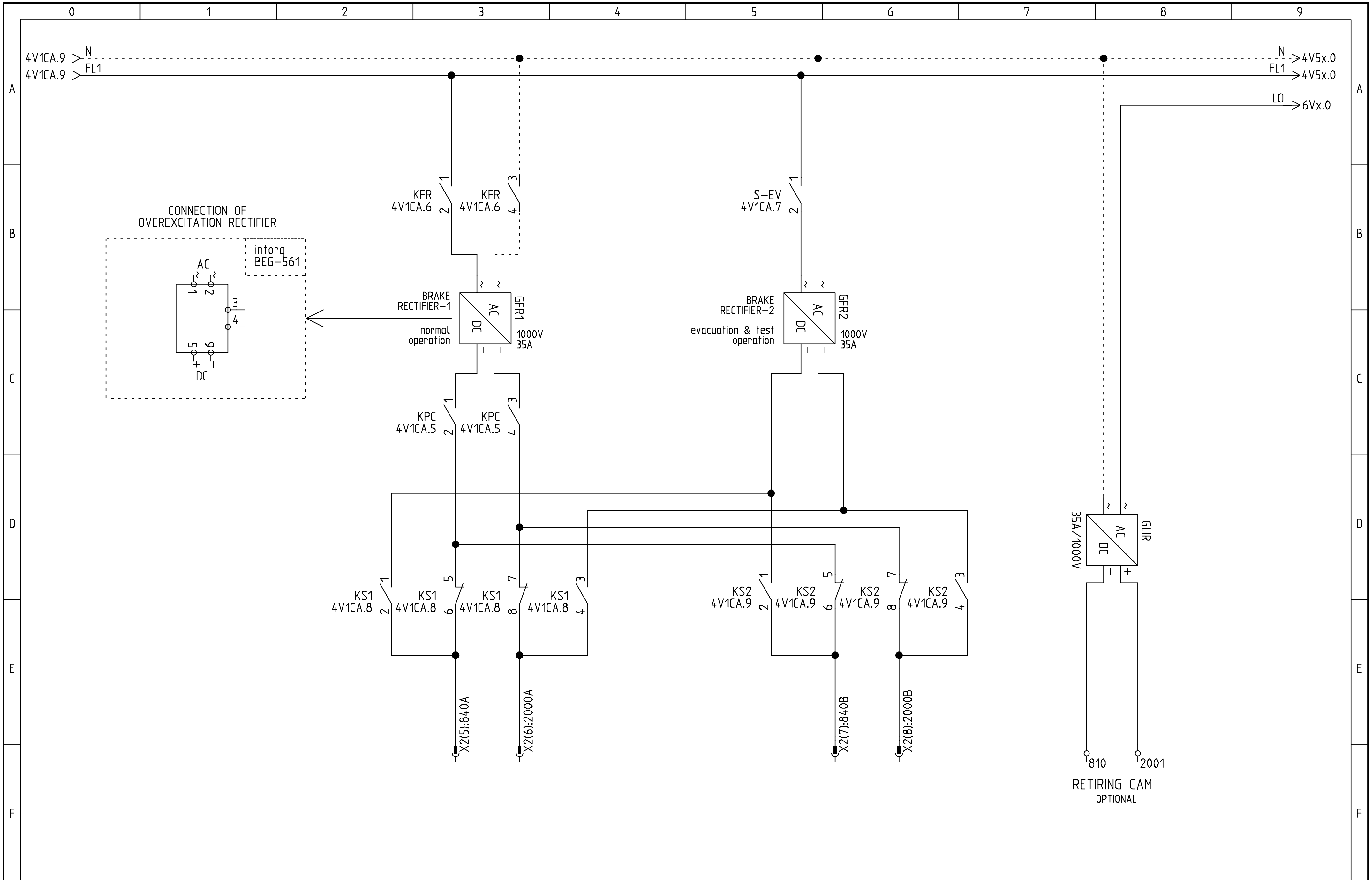
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MECHANICAL BRAKE WIRING	DRAWN BY: K.D.	Rev. No:	Sheet: 4 V3U
			CHECKED BY: C.A.	Rev. Date:	Date: 01.03.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MECHANICAL BRAKE WIRING	DRAWN BY: K.D. / CHECKED BY: C.A.	Rev. No: / Rev. Date:	Sheet: 4 V3UA / Date: 18.08.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MECHANICAL BRAKE WIRING	CIZIM: K.D.	Rev. No:	Sayfa: 4 V3C
			ONAY: C.A.	Rev. Tarih:	Tarih: 01.03.2009



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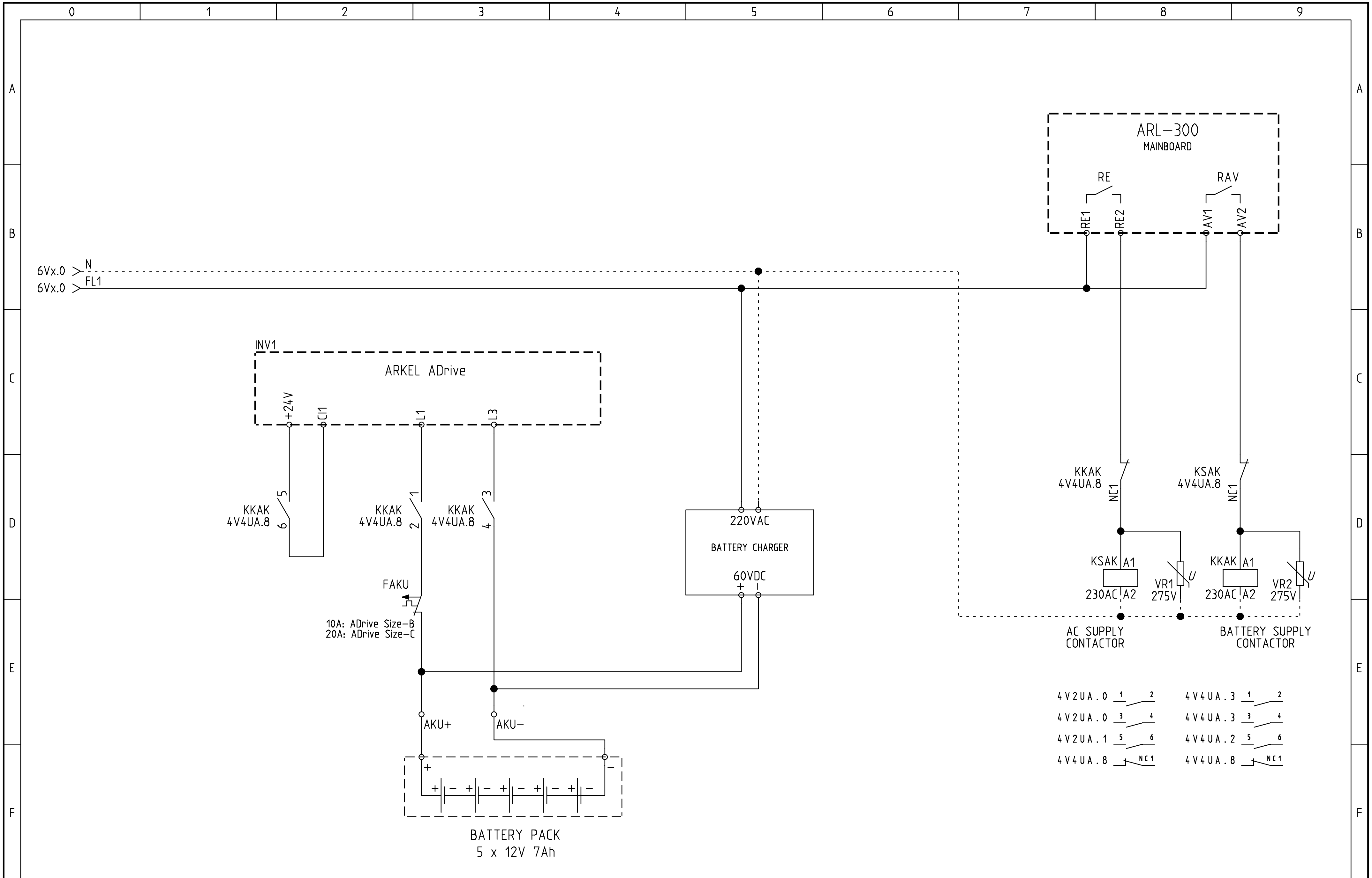
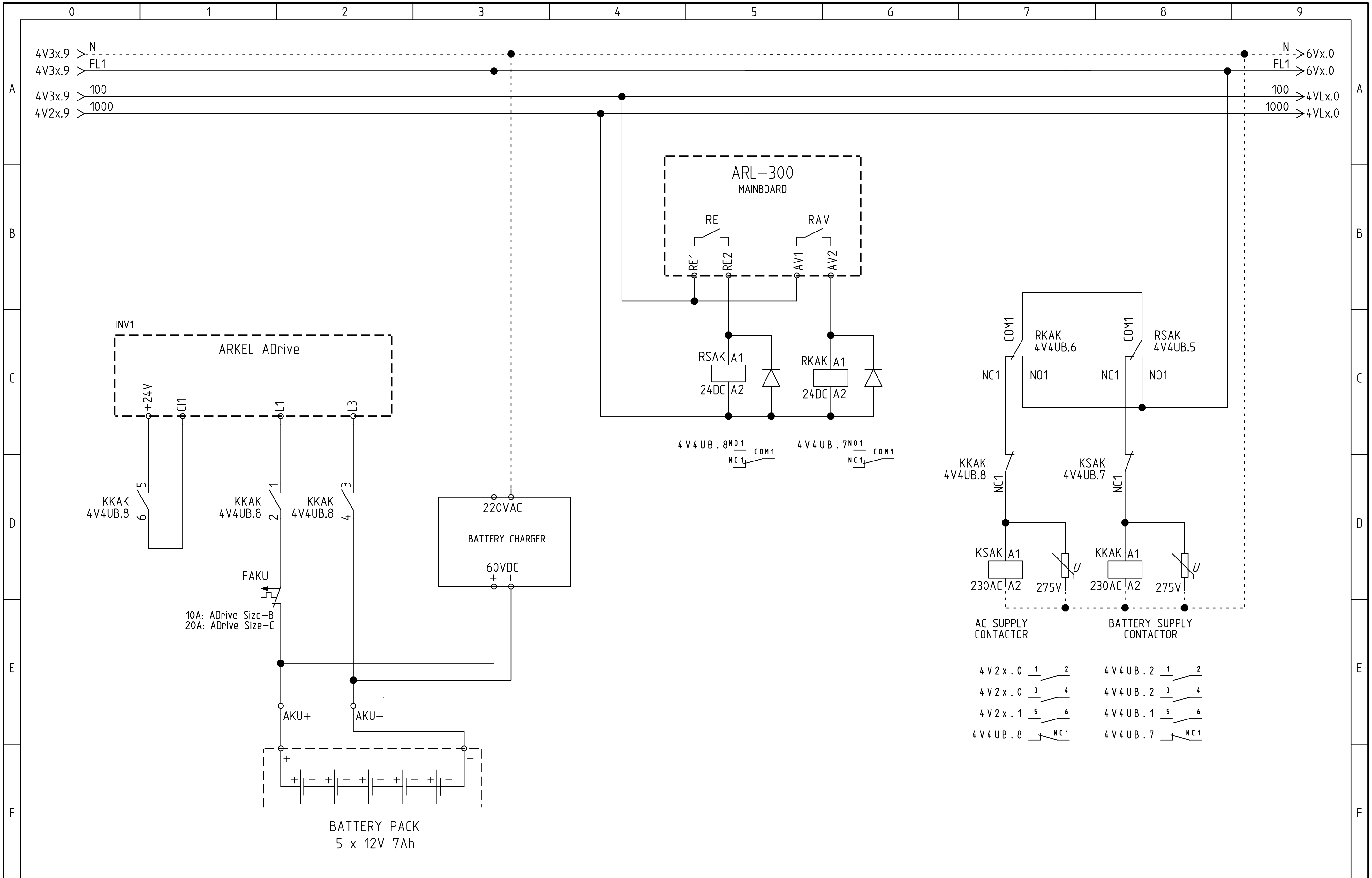
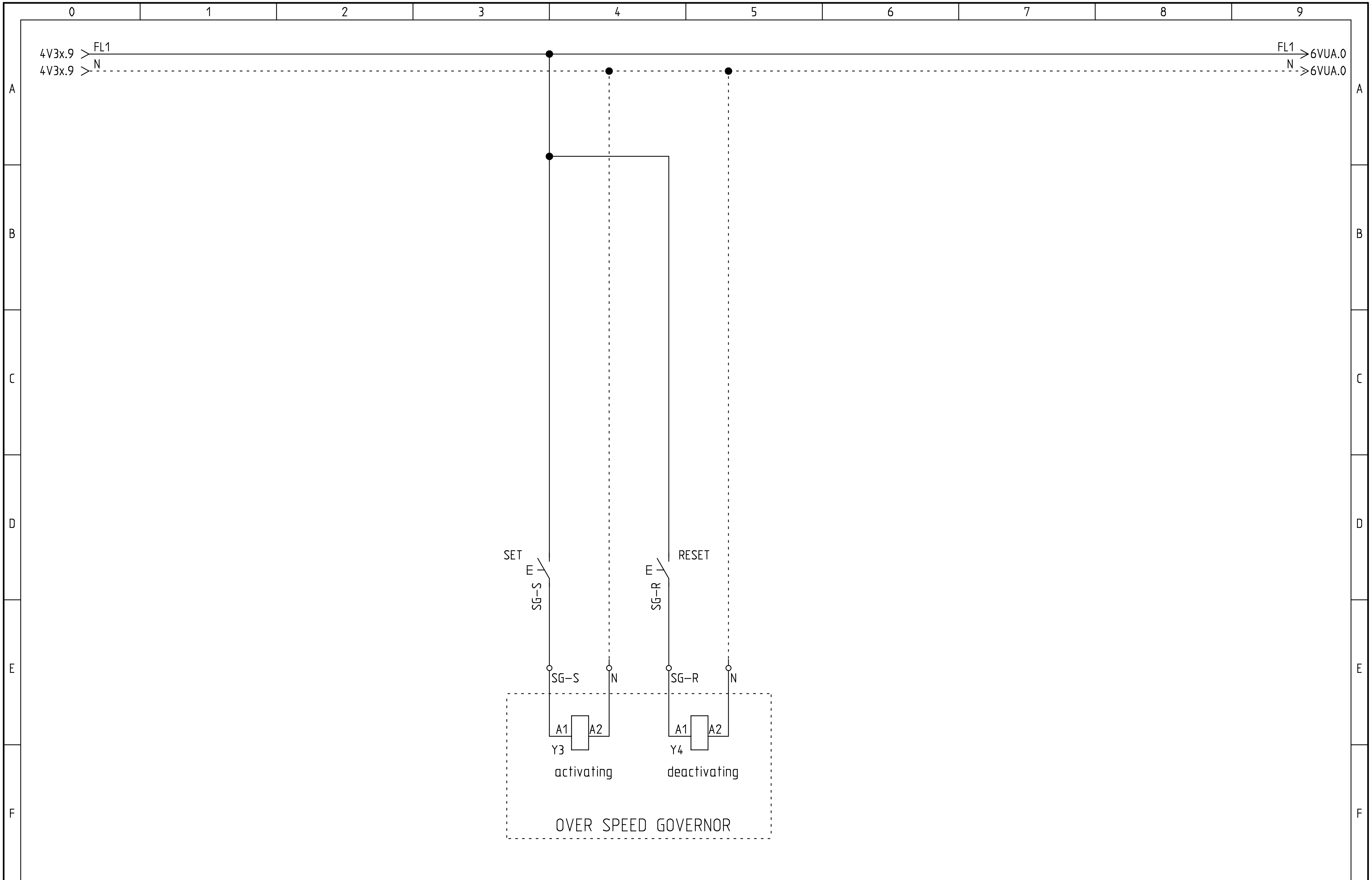
ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	MECHANICAL BRAKE WIRING	CIZIM: K.D.	Rev. No:	Sayfa: 4 V3CA
		ONAY: C.A.	Rev. Tarih:	Tarih: 01.03.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	AUTOMATIC EVACUATION with BATTERY SUPPLY	DRAWN BY: K.D.	Rev. No:	Sheet: 4 V4UA
			CHECKED BY: C.A.	Rev. Date:	Date: 18.08.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	AUTOMATIC EVACUATION with BATTERY SUPPLY	DRAWN BY: K.D.	Rev. No:	Sheet: 4 V4UB
			CHECKED BY: C.A.	Rev. Date:	Date: 05.05.2010



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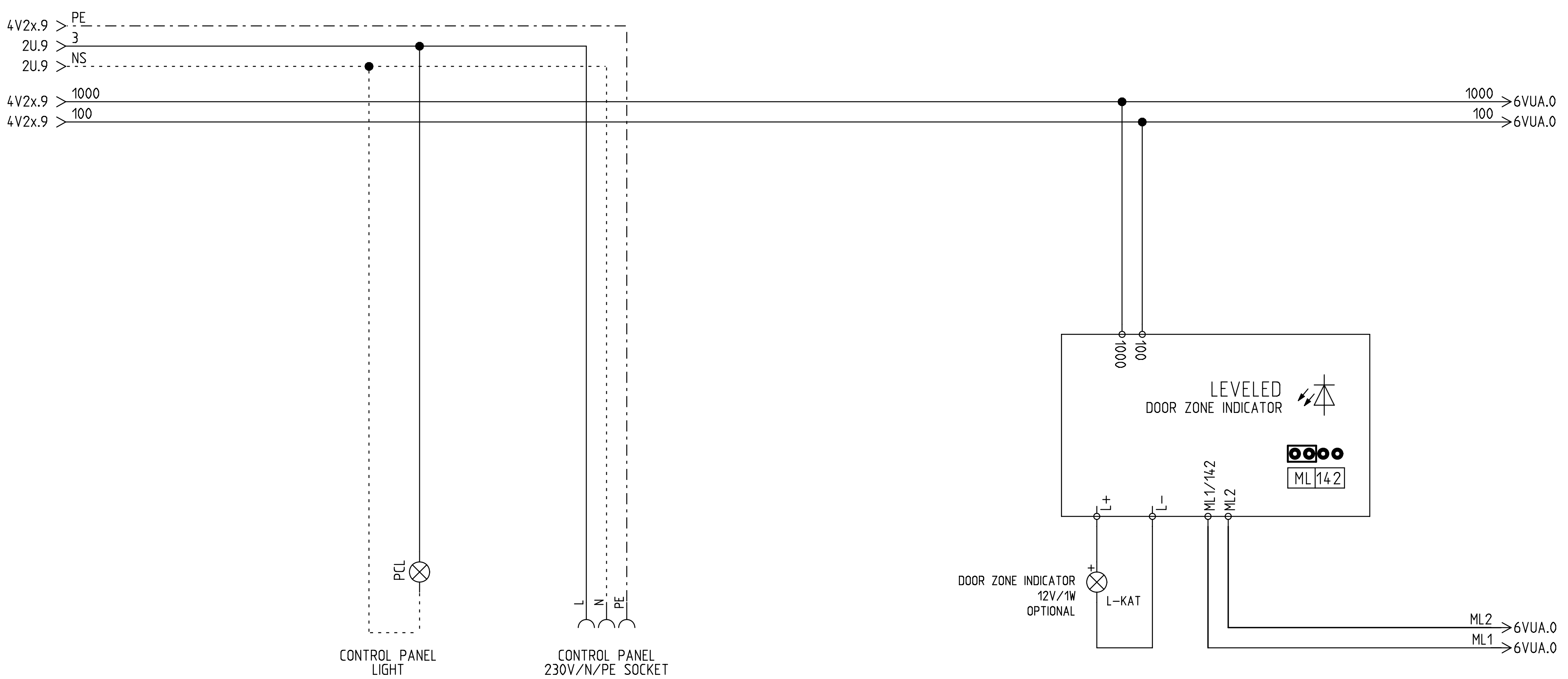
ARL-300 CONTROL PANEL
CONTROL SYSTEM for GEARLESS DRIVE

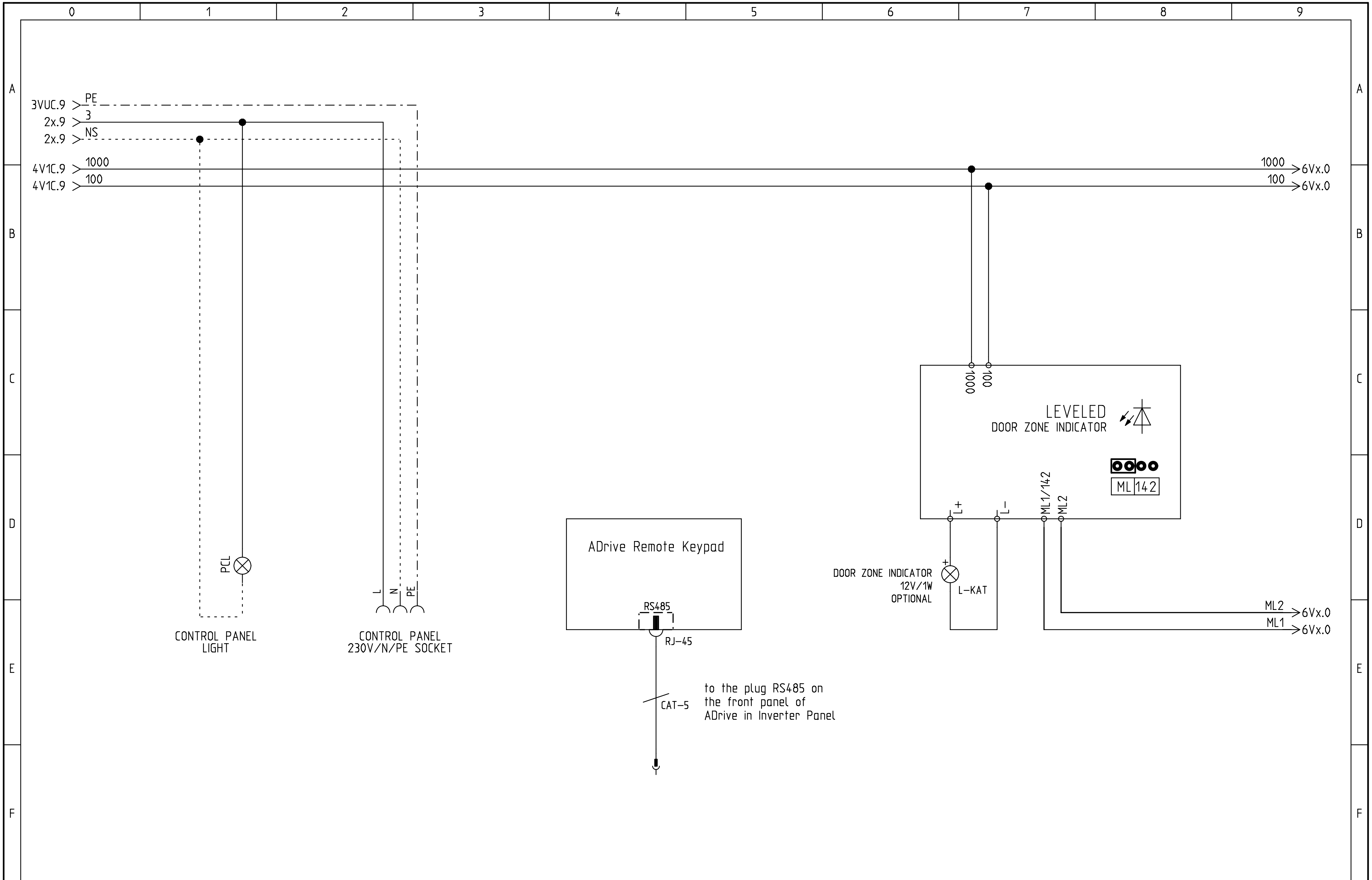
OVER SPEED GOVERNOR
REMOTE ACTIVATION

DRAWN BY: K.D.	Rev. No:	Sheet: 4 V5U
CHECKED BY: C.A.	Rev. Date:	Date: 19.06.2009

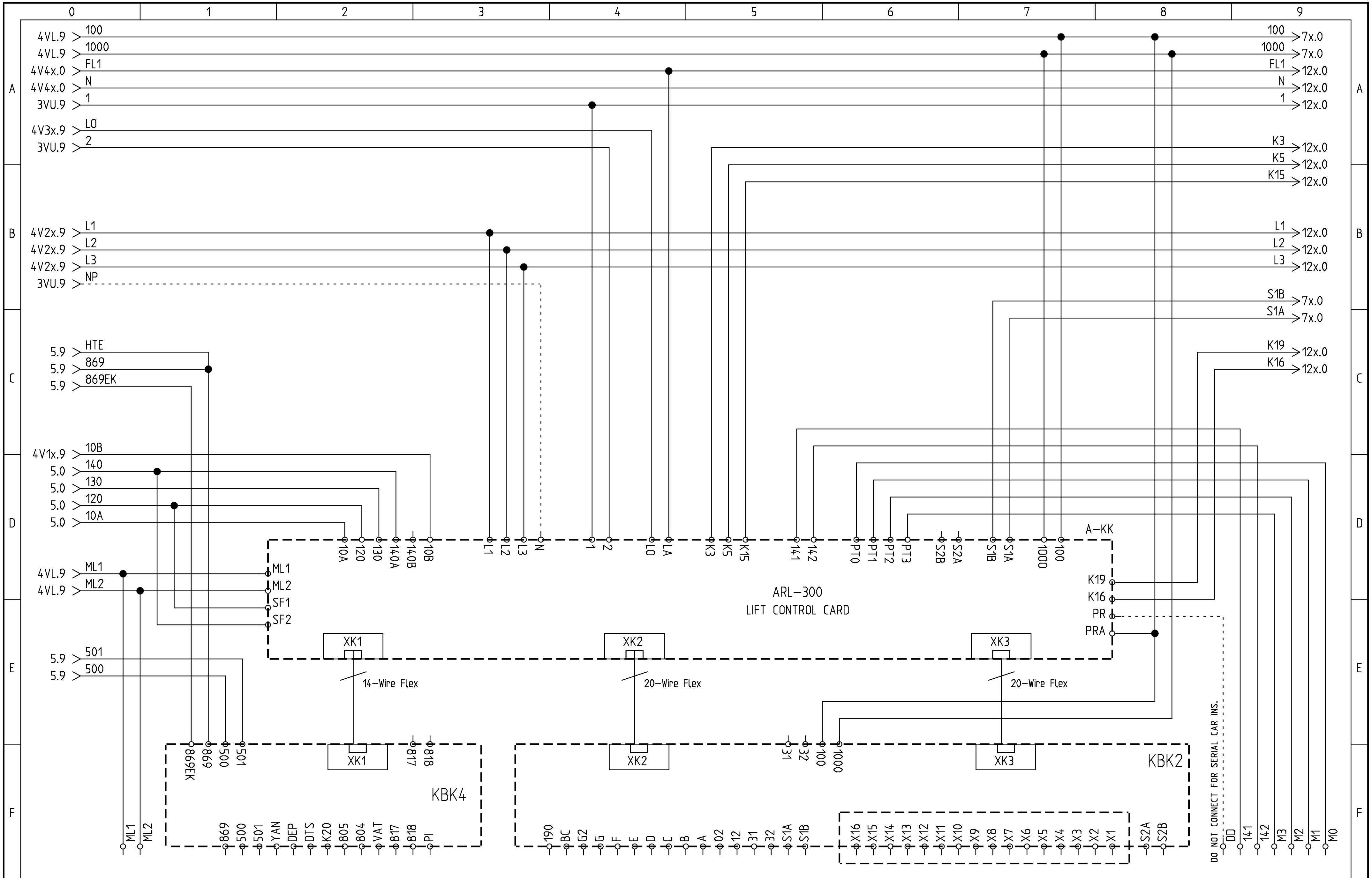
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	INDICATORS / SOCKETS	DRAWN BY: K.D.	Rev. No:	Sheet: 4 VL
			CHECKED BY: C.A.	Rev. Date:	Date: 19.06.2009



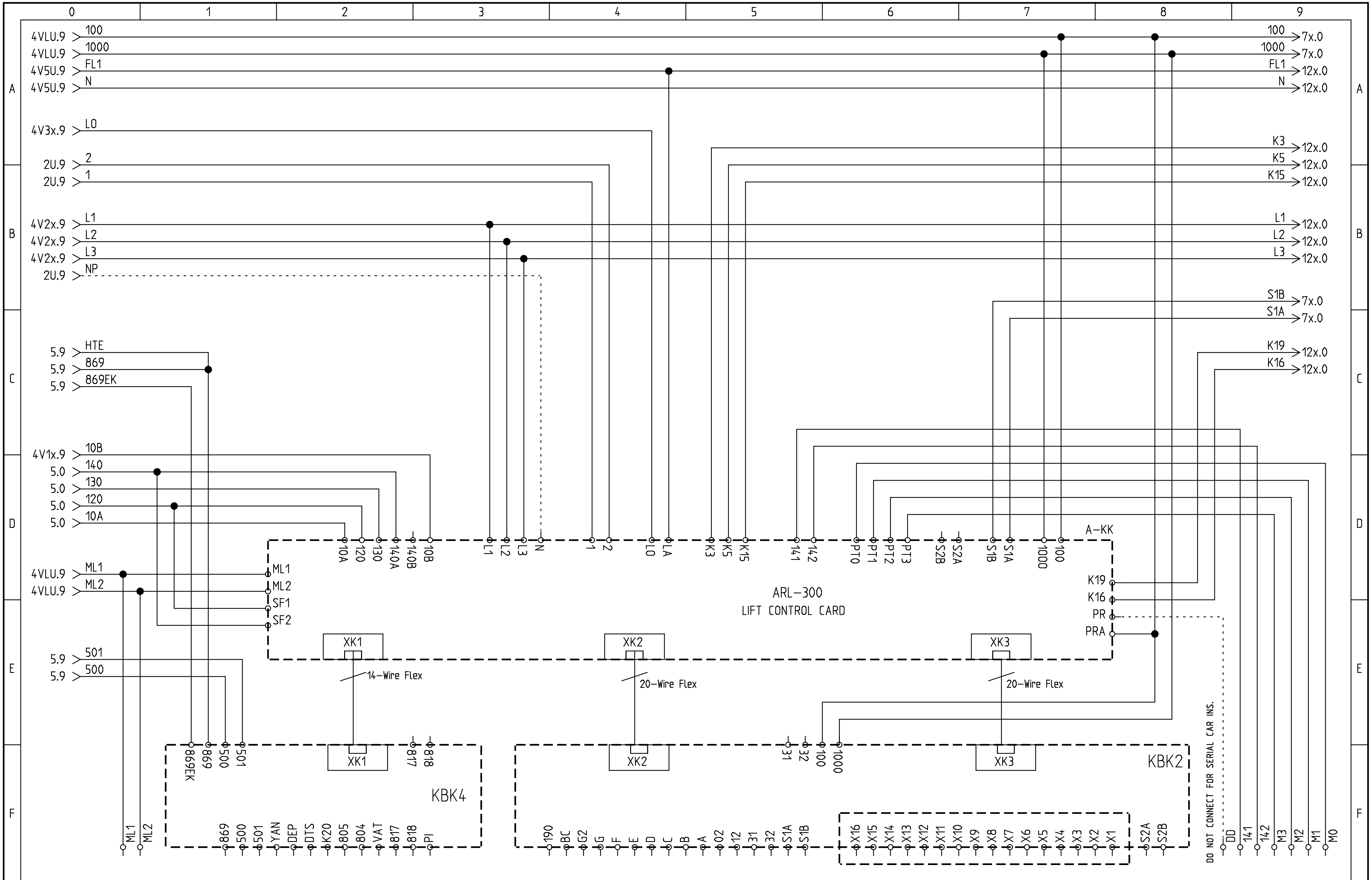
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	INDICATORS / SOCKETS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 4 VLU Date: 19.06.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	INDICATORS / SOCKETS	DRAWN BY: K.D.	Rev. No:	Sheet: 4 VLC
			CHECKED BY: C.A.	Rev. Date:	Date: 19.06.2009

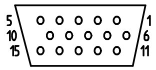
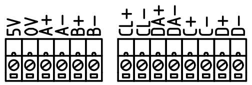


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	CONTROL CARD CONNECTIONS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 6 VU Date: 01.06.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL CONTROL SYSTEM for GEARLESS DRIVE	CONTROL CARD CONNECTIONS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 6 VUA Date: 01.06.2009

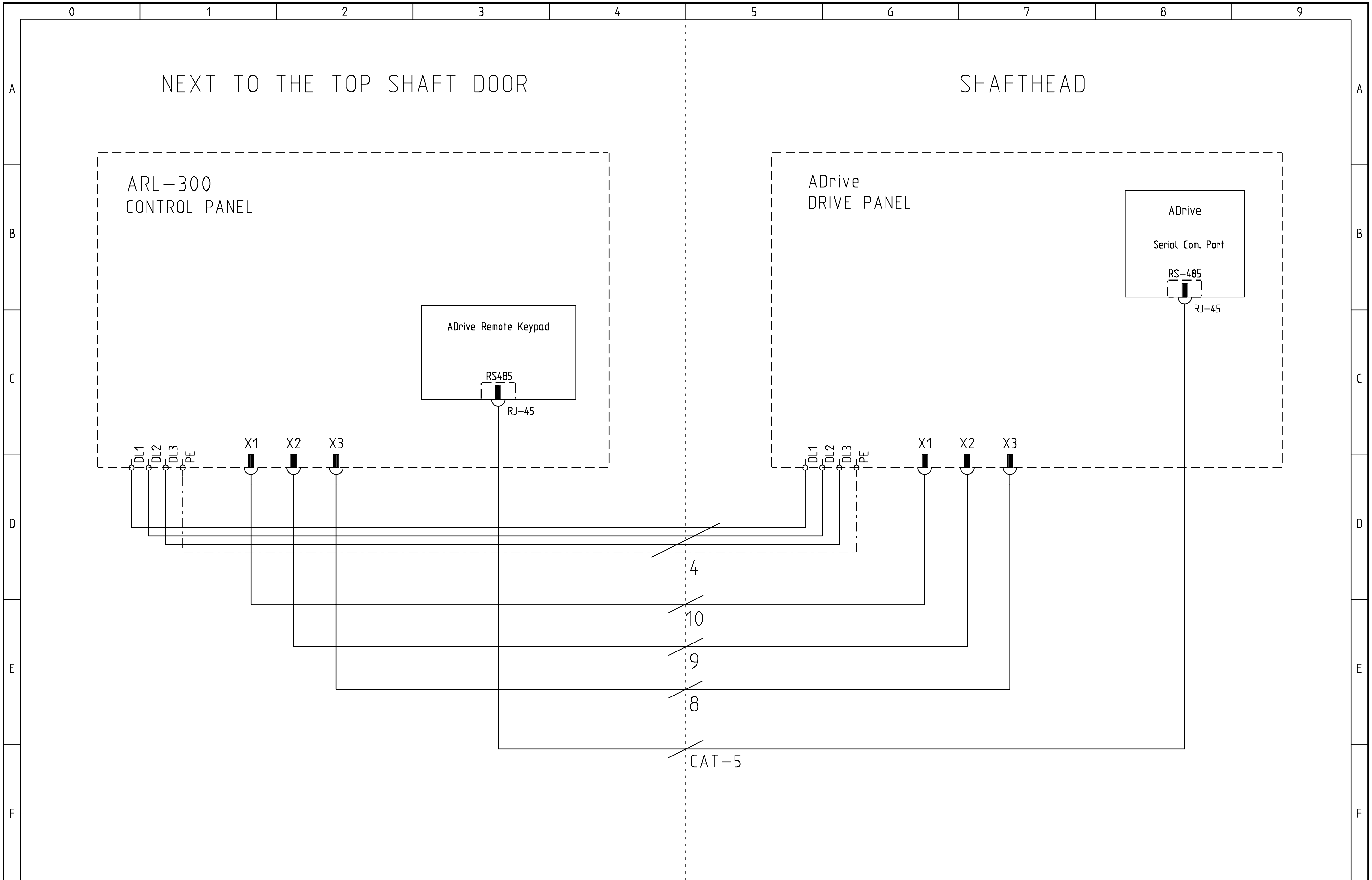
Pin assignment for connecting an absolute value encoder to ADrive Inverter by using ENCABIT–Plus

ENCABIT–Plus		Absolute encoder pin assignment	
X–ENC1 (3–row socket) 	Encoder terminal strips 	EnDat encoder (EnDat.SC) SSI encoder (SSI.SC)	SinCos encoder (SC.SC)
1	A+	A+ green/black	A+ green/black
2	A–	A– yellow/black	A– yellow/black
3	B+	B+ blue/black	B+ blue/black
4	B–	B– red/black	B– red/black
5	DA+	Data + gray	
6	DA–	Data – pink	
11	CL+	Clock + violet	
12	CL–	Clock – yellow	
∗1	D+		D+ violet
	D–		D– yellow
	C+		C+ gray
	C–		C– pink
13	5V	5V (Up) brown/green 5V (Sensor) black	5V (Up) brown/green 5V (Sensor) black
14	0V	0V (U_N) white/green 0V (Sensor) white	0V (U_N) white/green 0V (Sensor) white

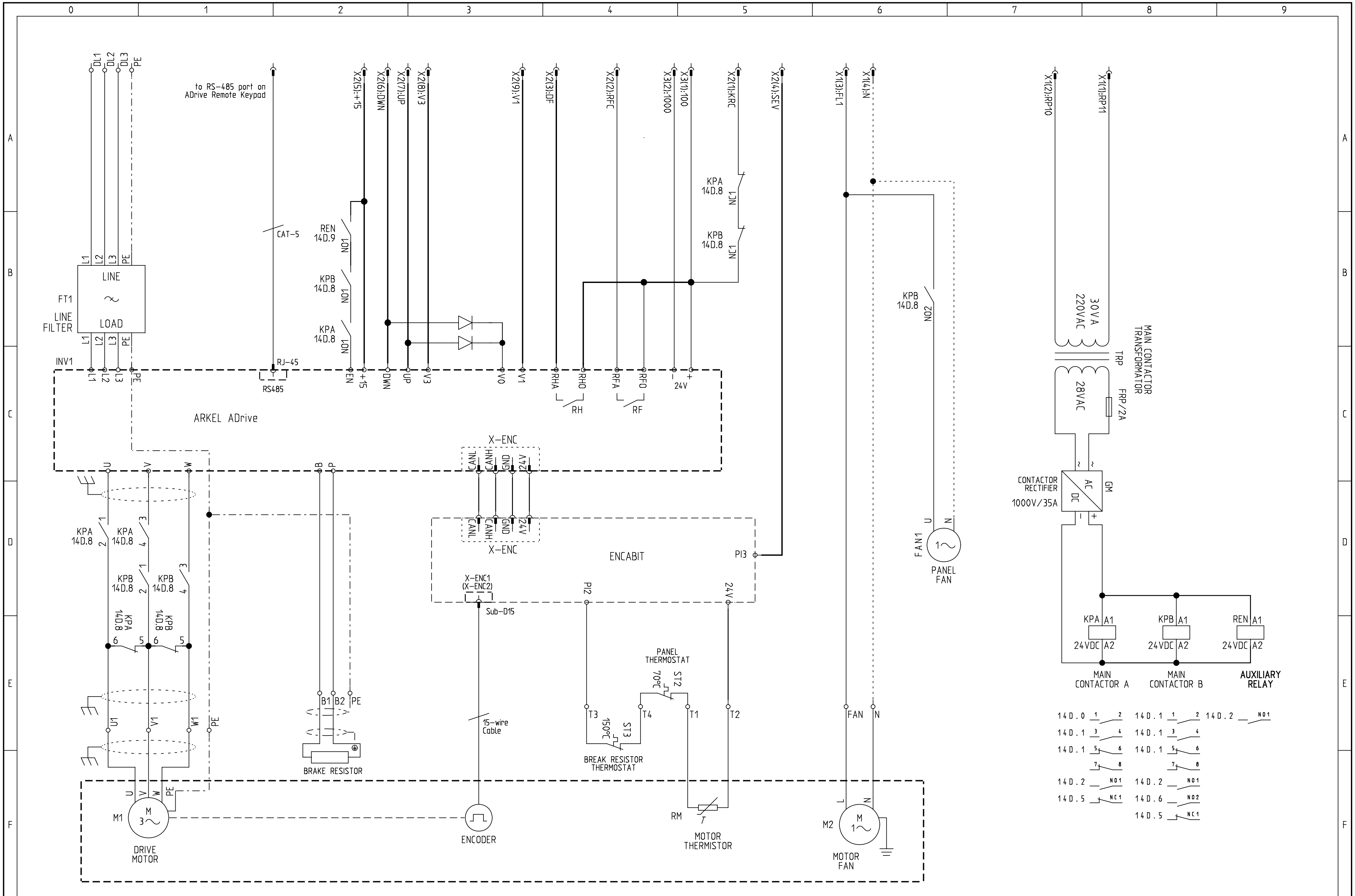
∗1: **X–ENC1 socket can be used only for EnDat / SSI value encoders.**

Note: Cable colors are given for Heindenhain absolute encoders!

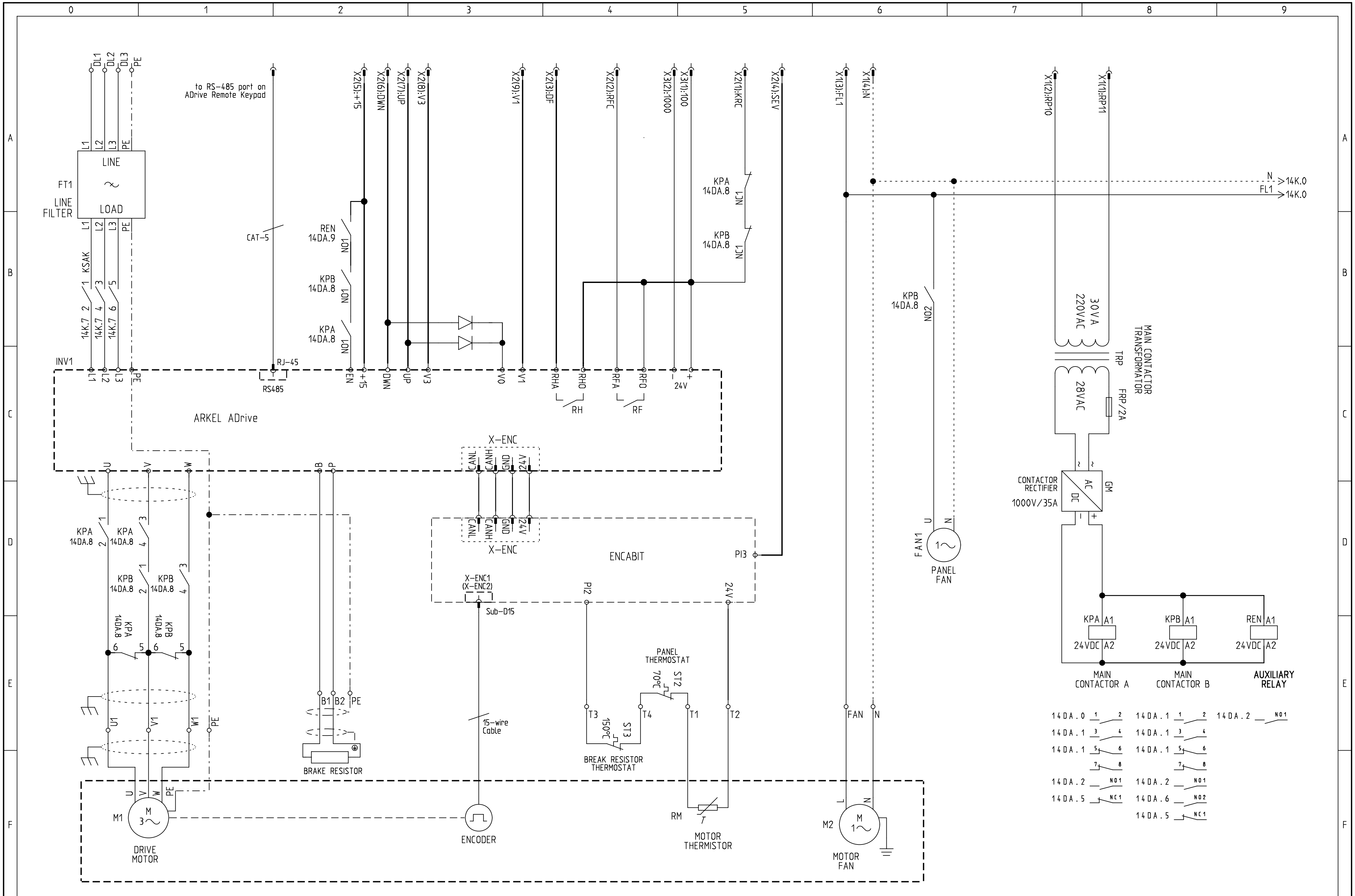
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive	ENCABIT–Plus ABSOLUTE ENCODER CONNECTION	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: EK–EU Date: 11.02.2010



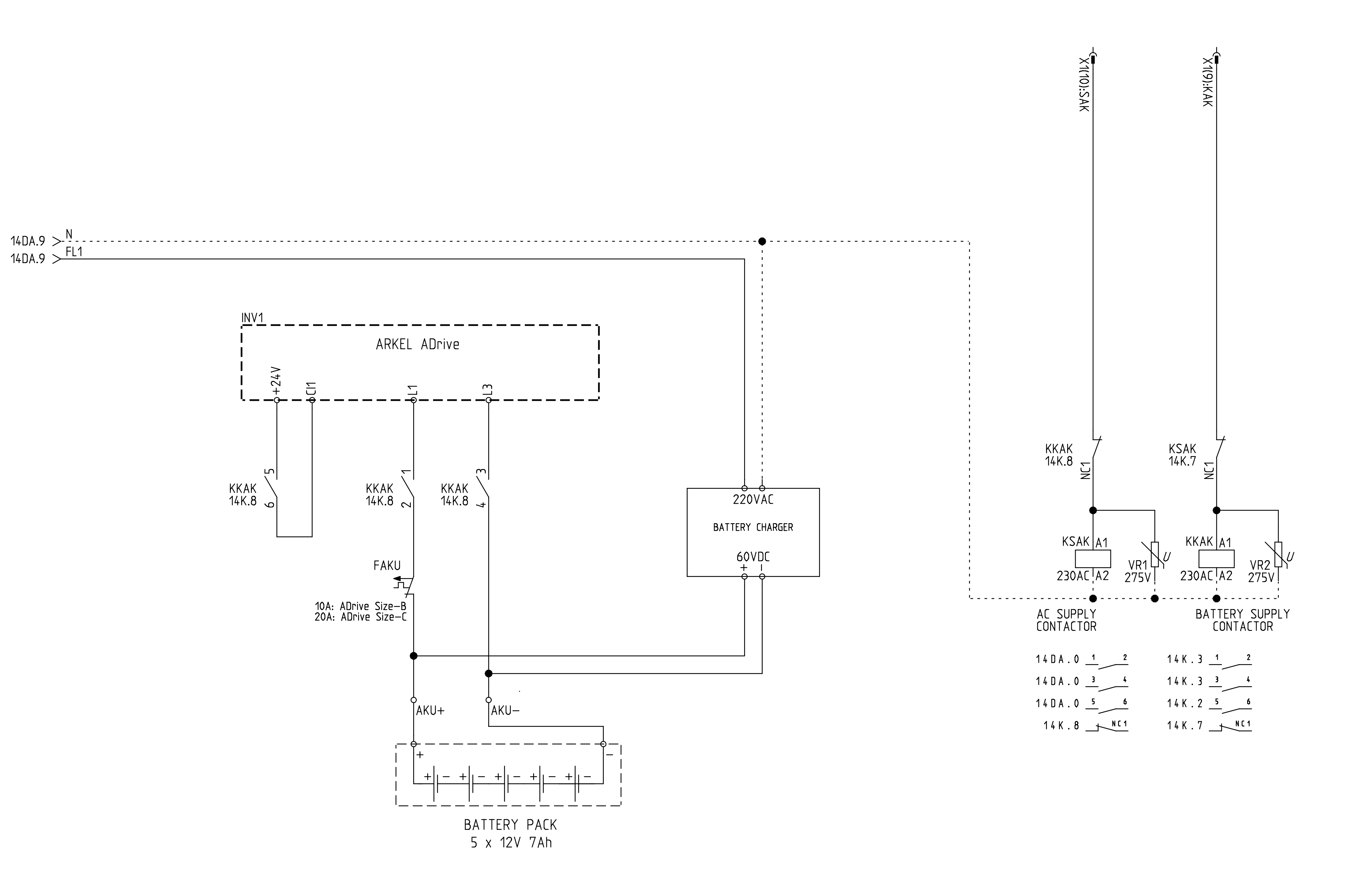
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive Inverter PANEL CONTROL SYSTEM for GEARLESS DRIVE	CABLING BETWEEN PANELS	DRAWN BY: K.D.	Rev. No:	Sheet: 14 T
			CHECKED BY: C.A.	Rev. Date:	Date: 28.05.2009



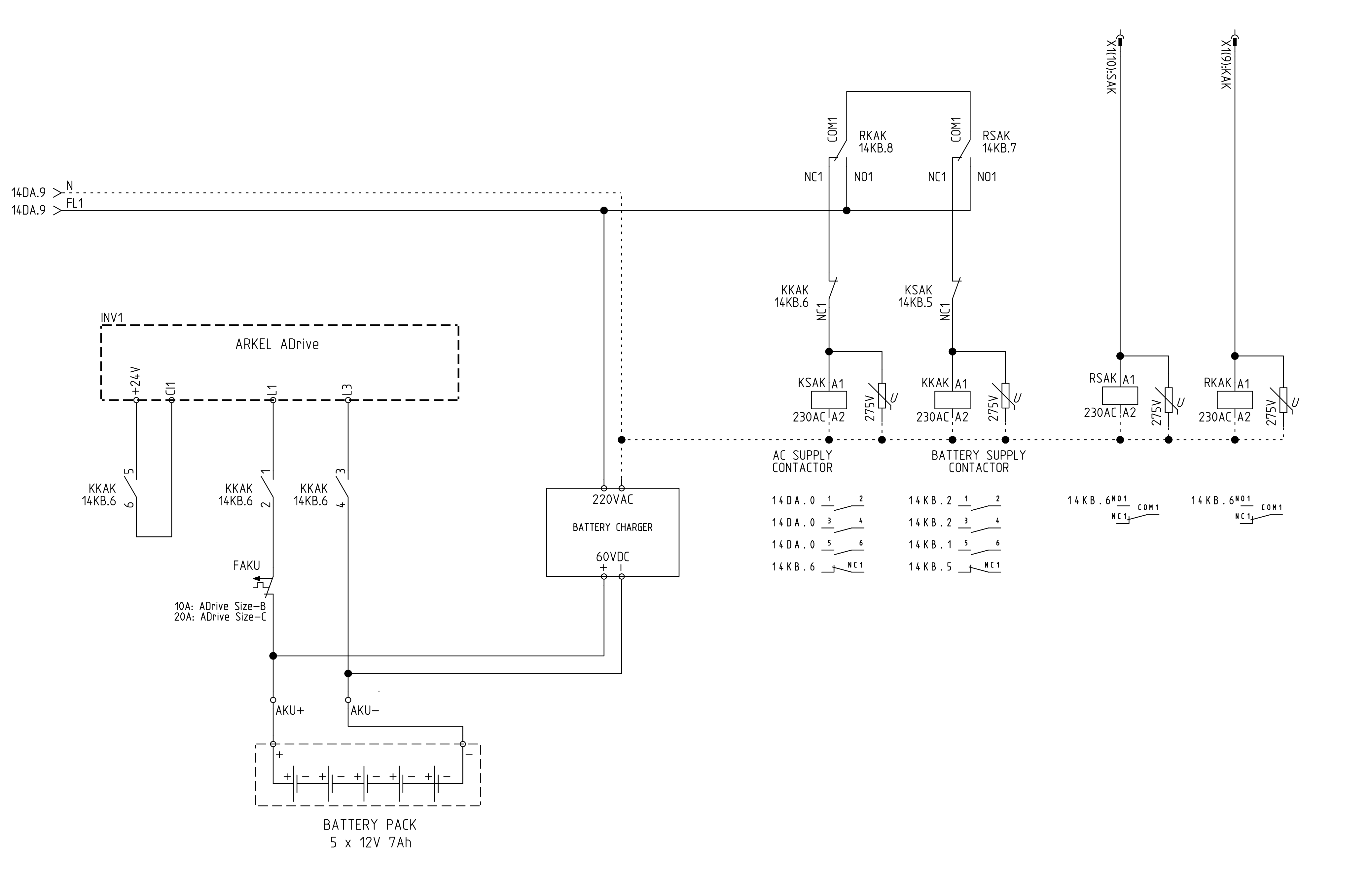
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive Inverter PANEL CONTROL SYSTEM for GEARLESS DRIVE	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF GEARLESS INVERTOR : ARKEL ADrive	DRAWN BY: K.D. CHECKED BY: C.A. Rev. No: Rev. Date: Sheet: 14 D Date: 28.05.2009



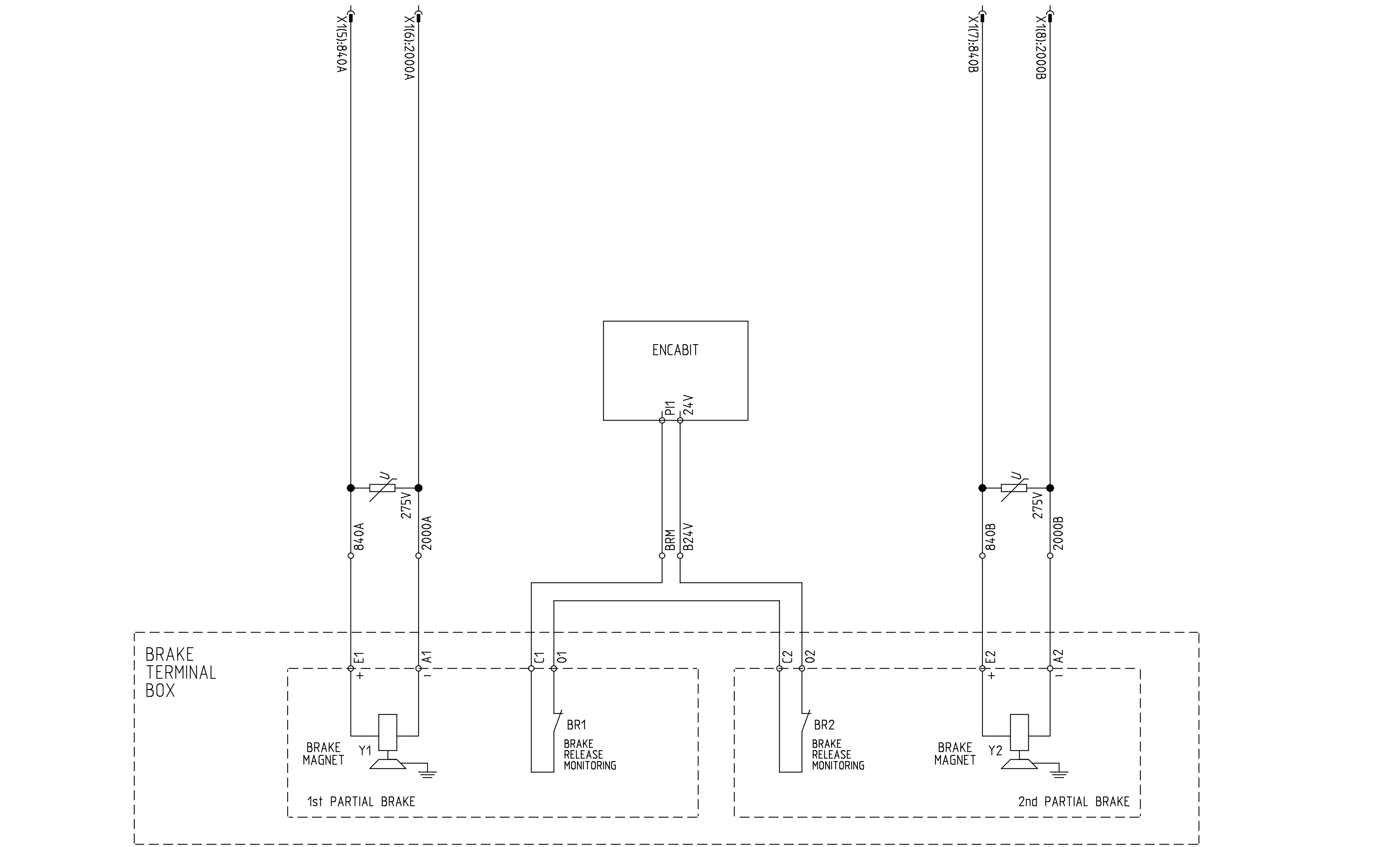
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive Inverter PANEL CONTROL SYSTEM for GEARLESS DRIVE	MOTOR & CONTACTORS CIRCUITS DRIVE TYPE : VVVF GEARLESS INVERTOR : ARKEL ADrive	DRAWN BY: K.D. / CHECKED BY: C.A. / Rev. No: / Rev. Date: / Sheet: 14 DA / Date: 28.05.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive Inverter PANEL CONTROL SYSTEM for GEARLESS DRIVE	AUTOMATIC EVACUATION with BATTERY SUPPLY	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 14 K Date: 03.09.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive Inverter PANEL CONTROL SYSTEM for GEARLESS DRIVE	AUTOMATIC EVACUATION with BATTERY SUPPLY	DRAWN BY: K.D.	Rev. No: V11	Sheet: 14 KB
			CHECKED BY: C.A.	Rev. Date: 05.05.2010	Date: 03.09.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARKEL ADrive Inverter PANEL CONTROL SYSTEM for GEARLESS DRIVE	MECHANICAL BRAKE WIRING	DRAWN BY: K.D.	Rev. No:	Sheet: 14 M
			CHECKED BY: C.A.	Rev. Date:	Date: 28.05.2009

ARKEL ADrive inverter panel terminals

Motor Connection Terminals	
U1	Motor output line 1
V1	Motor output line 2
W1	Motor output line 3
PE	Earth line

Brake Resistor Terminals	
B1	Brake resistor
B2	Brake resistor
PE	Earth line

Motor Fan Supply Terminals	
FAN	220VAC supply phase
N	Neutral

PTC Terminals	
T1 T2	Motor Thermistor (Panel thermostat is connected between terminals T1 and T4 inside the panel)
T3 T4	Brake Resistor Thermostat

Terminals of Mechanical Brakes	
840A	+ Mechanical Brake 1
2000A	- Mechanical Brake 1
840B	+ Mechanical Brake 2
2000B	- Mechanical Brake 2

Brake Monitoring Terminals	
BRM	Brake monitoring signal return
B24V	Signal supply (+24VDC)

Control Circuit Terminals	
100	Control Circuits Supply (+24Vdc)
1000	Control Circuits Supply Ground (0V)

Terminal strips between ARL-300 control panel & ADrive inverter panel

Main Supply Terminals	
PE	Protective Earth
DL1	Main Phase 1
DL2	Main Phase 2
DL3	Main Phase 3

X1: Control Panel & Drive Panel Connection Terminals (10-pin cable)	
X1(1): RP11	Supply voltage for transformator of main contactors (220VAC)
X1(2): RP10	
X1(3): FL1	220VAC supply voltage for drive panel (from UPS)
X1(4): N	
X1(5): 840A	1st Mechanical brake voltage +
X1(6): 2000A	1st Mechanical brake voltage -
X1(7): 840B	2nd Mechanical brake voltage +
X1(8): 2000B	2nd Mechanical brake voltage -
X1(9):	Reserve
X1(10):	Reserve

X2: Control Panel & Drive Panel Connection Terminals (9-pin cable)	
X2(1): KRC	Feed-back signal of drive contactors
X2(2): RFC	Brake relay activating voltage controlled by driver
X2(3): DF	Control circuits voltage for drive panel (+24VDC)
X2(4): SEV	Control circuits voltage ground for drive panel (0VDC)
X2(5): +15	Inverter signal supply (15VDC)
X2(6): DWN	DOWN direction signal (15VDC)
X2(7): UP	UP direction signal (15VDC)
X2(8): V3	High speed signal (15VDC)
X2(9): V1	Inspection speed signal (15VDC)

X3: Control Panel & Drive Panel Connection Terminals (8-pin cable)	
X3(1): 100	24VDC supply voltage for drive panel control circuit (from UPS)
X3(2): 1000	
X3(3):	Reserve
X3(4):	Reserve
X3(5):	Reserve
X3(6):	Reserve
X3(7):	Reserve
X3(8):	Reserve

X-SCR: ADrive Remote Access Terminal (CAT-5 cable)
Between ADrive Remote Keypad in the control panel and ADrive in the inverter panel

ARKEL ADrive inverter panel terminals

Motor Connection Terminals	
U1	Motor output line 1
V1	Motor output line 2
W1	Motor output line 3
PE	Earth line

Brake Resistor Terminals	
B1	Brake resistor
B2	Brake resistor
PE	Earth line

Motor Fan Supply Terminals	
FAN	220VAC supply phase
N	Neutral

PTC Terminals	
T1	Motor Thermistor (Panel thermostat is connected between terminals T1 and T4 inside the panel)
T2	
T3	Brake Resistor Thermostat
T4	

Terminals of Mechanical Brakes	
840A	+ Mechanical Brake 1
2000A	- Mechanical Brake 1
840B	+ Mechanical Brake 2
2000B	- Mechanical Brake 2

Brake Monitoring Terminals	
BRM	Brake monitoring signal return
B24V	Signal supply (+24VDC)

60V Battery Supply Terminals	
AKU+	+60VDC supply (accumulator + input)
AKU-	0VDC (accumulator - input)

Control Circuit Terminals	
100	Control Circuits Supply (+24Vdc)
1000	Control Circuits Supply Ground (0V)

Terminal strips between ARL-300 control panel & ADrive inverter panel

Main Supply Terminals	
PE	Protective Earth
DL1	Main Phase 1
DL2	Main Phase 2
DL3	Main Phase 3

Control Panel & Drive Panel Connection Terminals (10-pin cable)	
X1(1): RP11	Supply voltage for transformator of main contactors (220VAC)
X1(2): RP10	
X1(3): FL1	220VAC supply voltage for drive panel (from UPS)
X1(4): N	
X1(5): 840A	1st Mechanical brake voltage +
X1(6): 2000A	1st Mechanical brake voltage -
X1(7): 840B	2nd Mechanical brake voltage +
X1(8): 2000B	2nd Mechanical brake voltage -
X1(9): KAK	Evacuation operation contactor coil supply (220VAC)
X1(10): SAK	Mains contactor coil supply (220VAC)

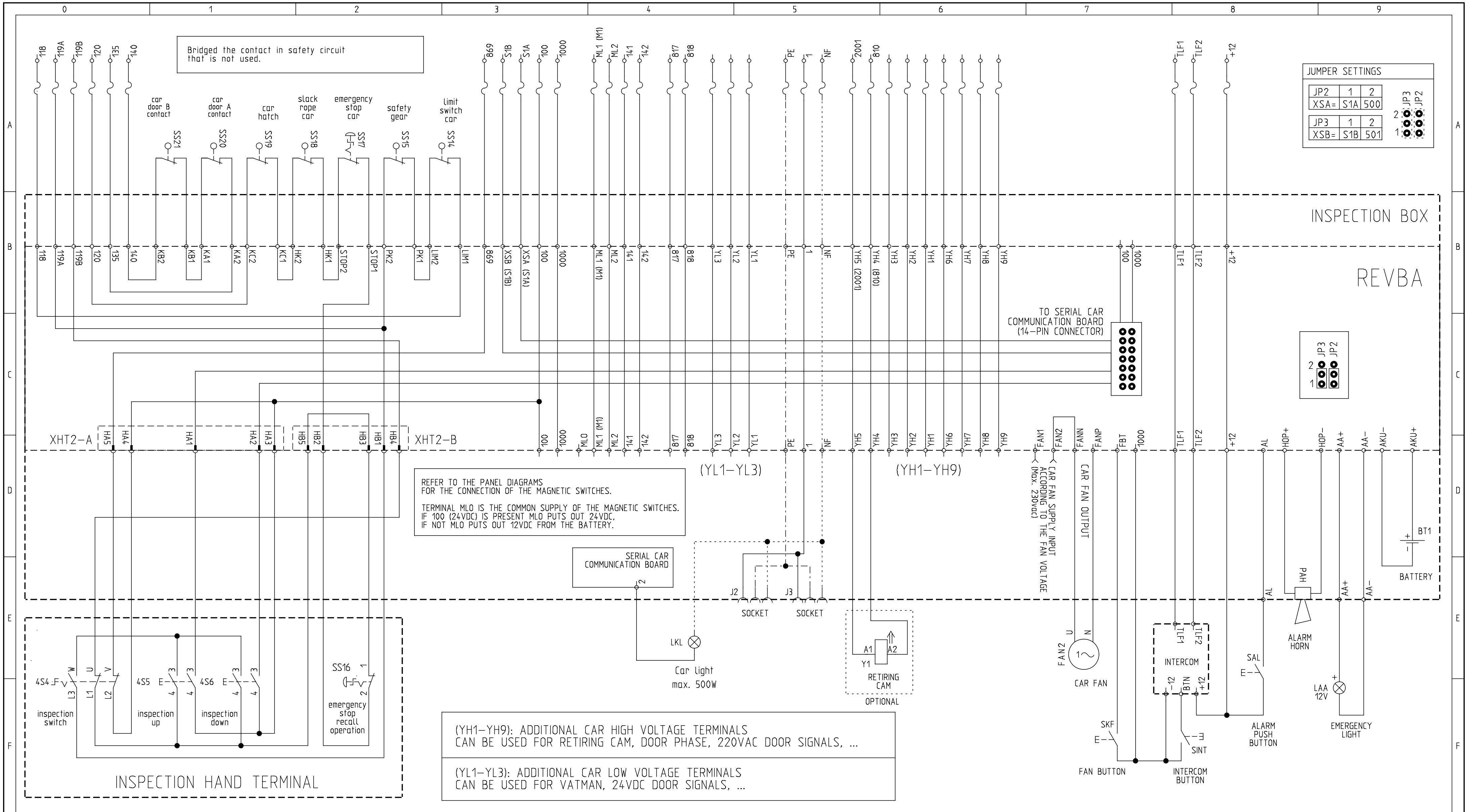
Control Panel & Drive Panel Connection Terminals (9-pin cable)	
X2(1): KRC	Feed-back signal of drive contactors (24VDC)
X2(2): RFC	Mechanical brake control relay supply (24VDC)
X2(3): DF	Inverter error signal (24VDC)
X2(4): SEV	Manual evacuation activation switch (24VDC)
X2(5): +15	Inverter signal supply (15VDC)
X2(6): DWN	DOWN direction signal (15VDC)
X2(7): UP	UP direction signal (15VDC)
X2(8): V3	High speed signal (15VDC)
X2(9): V1	Inspection speed signal (15VDC)

Control Panel & Drive Panel Connection Terminals (8-pin cable)	
X3(1): 100	24VDC supply voltage for drive panel control circuit (from UPS)
X3(2): 1000	
X3(3):	Reserve
X3(4):	Reserve
X3(5):	Reserve
X3(6):	Reserve
X3(7):	Reserve
X3(8):	Reserve

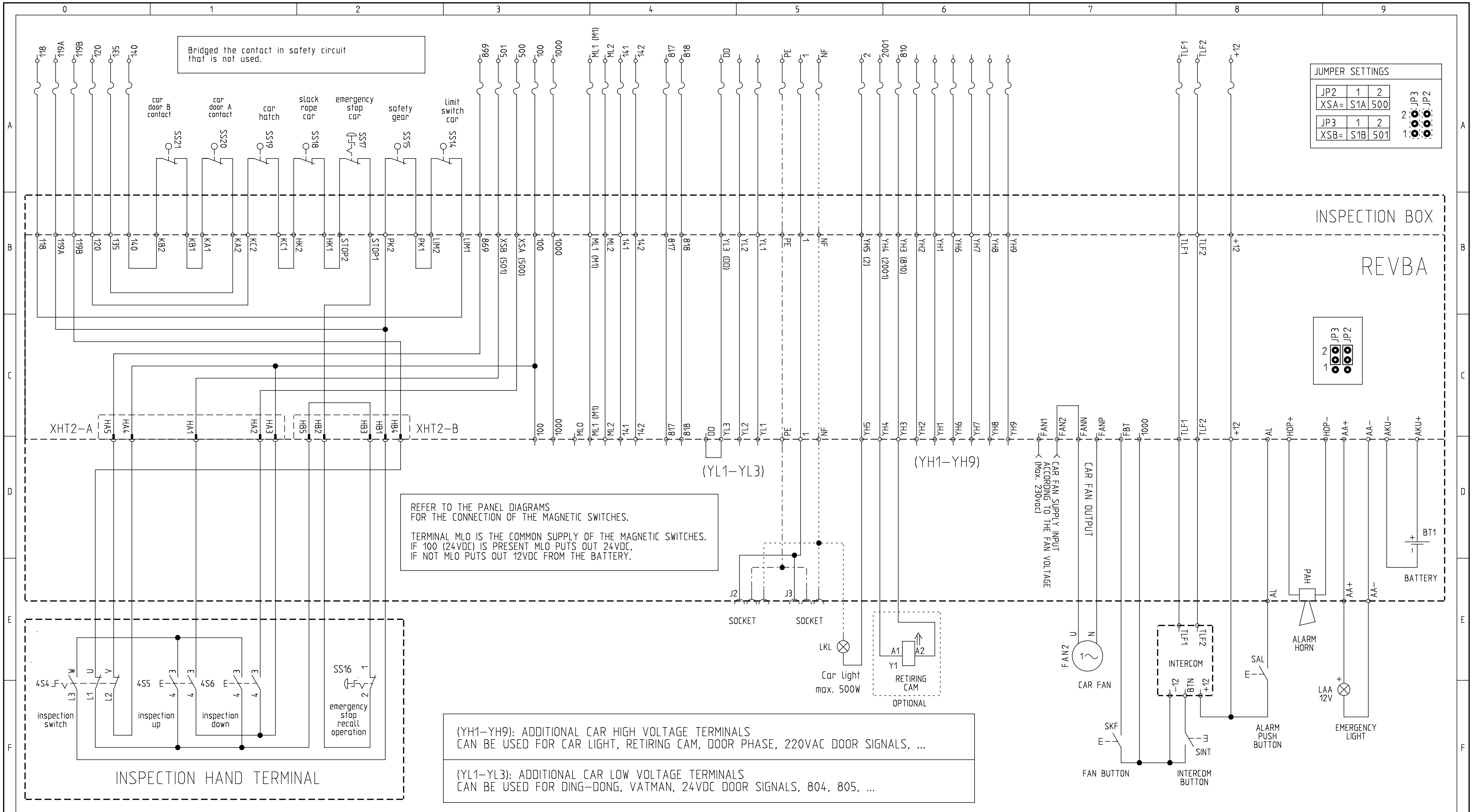
X-SCR: ADrive Remote Access Terminal (CAT-5 cable)
Between ADrive Remote Keypad in the control panel and ADrive in the inverter panel

REVISION HISTORY OF ARL-300 ELECTRICAL DIAGRAMS

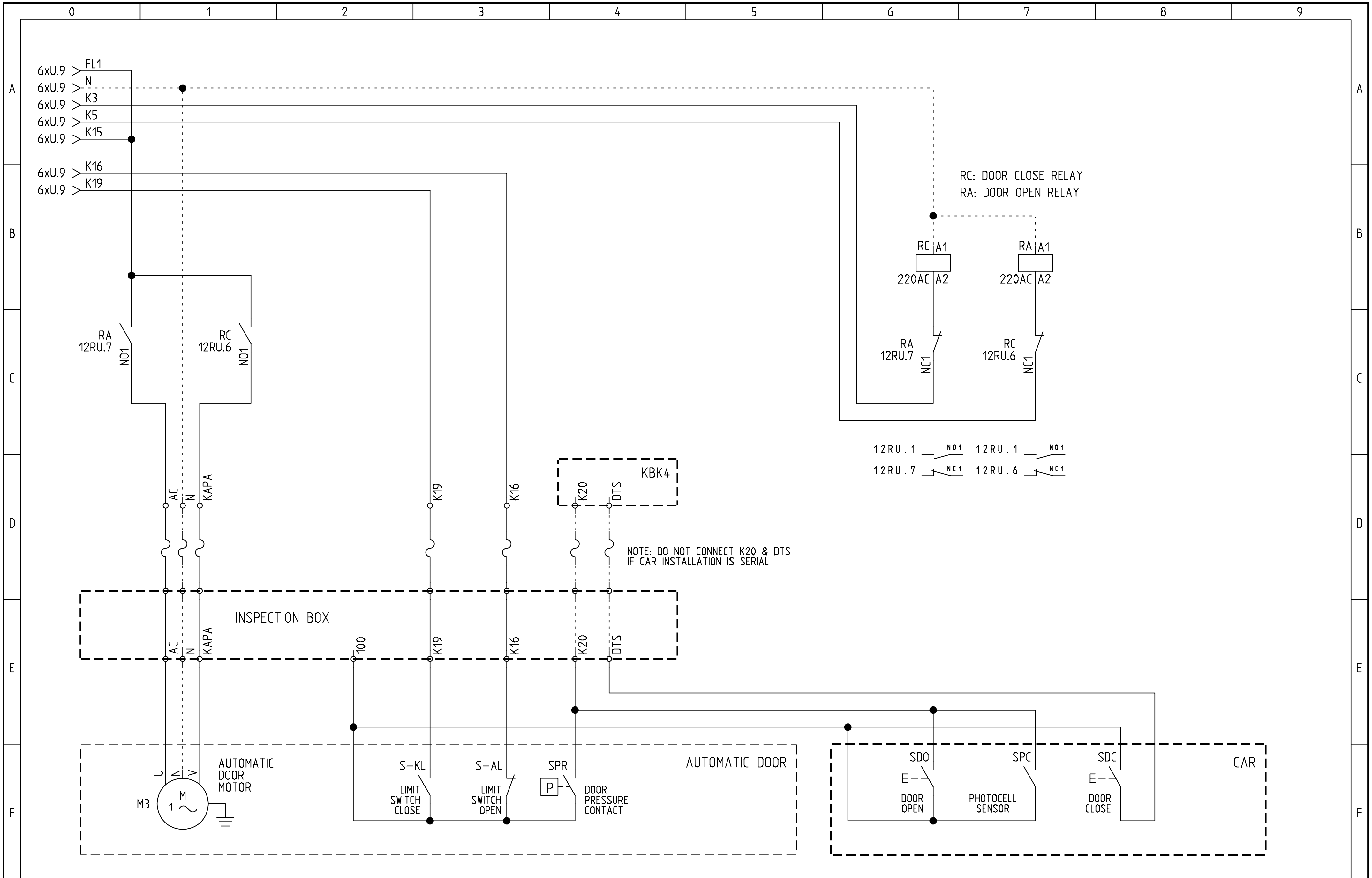
Diagram version	Changes made	Related systems	Pages changed/added	Revision date
V2.8	2 pcs. of relay added to the circuit to prevent contactors KSAK and KKAK to be activated at the same time.	Synchronous (gearless) system evacuation with backup battery. For ARL-300 pcboard version 2.1A and previous.	4V4UA 14K	10.05.2010



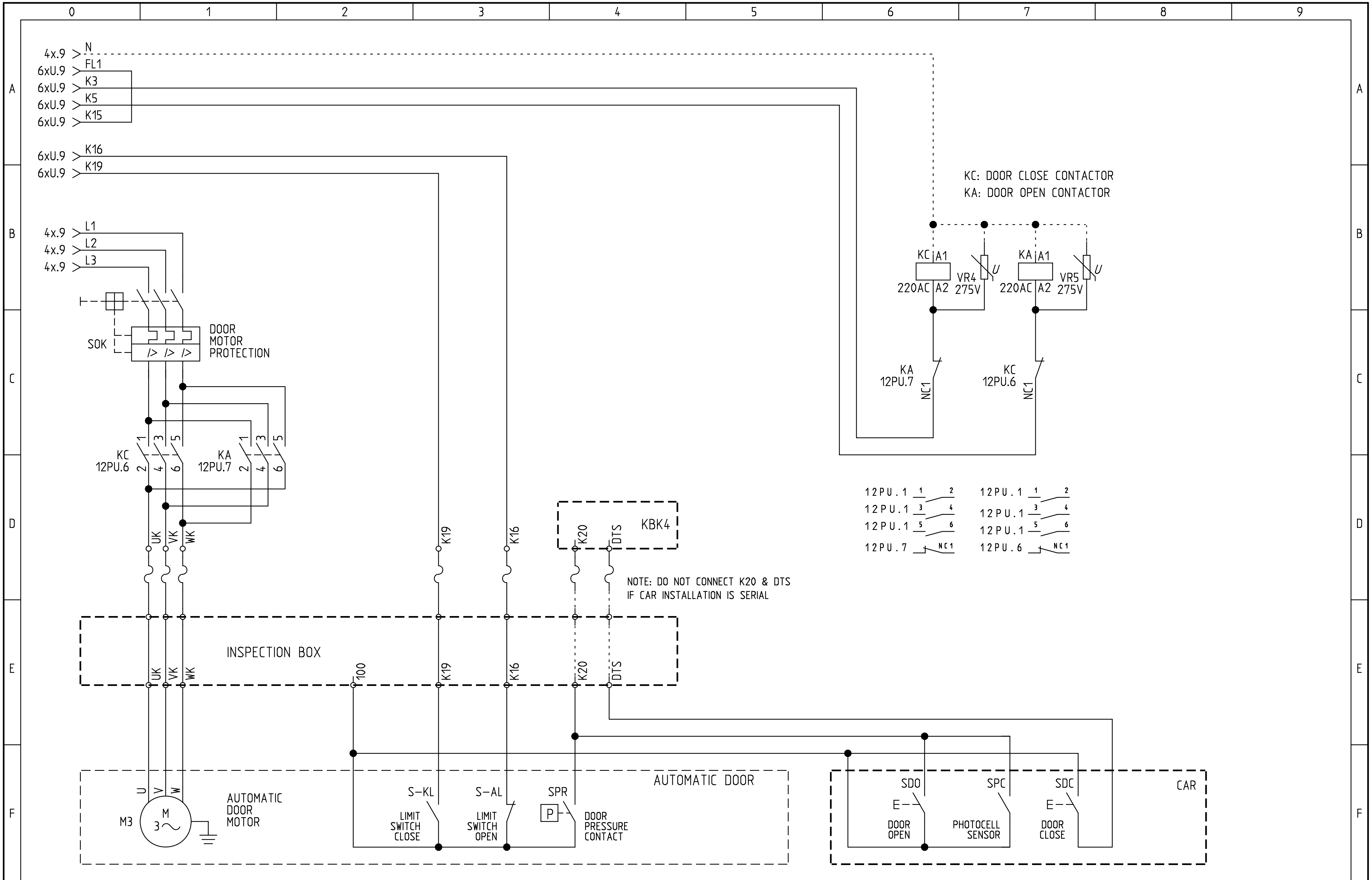
ARKEL www.arkel.com.tr (+90 216) 540 03 10	INSPECTION BOX	CAR TOP CONTROLLER : REVBA CAR INSTALLATION : SERIAL	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 05.10.2009	Sheet: RS Date: 16.03.2009



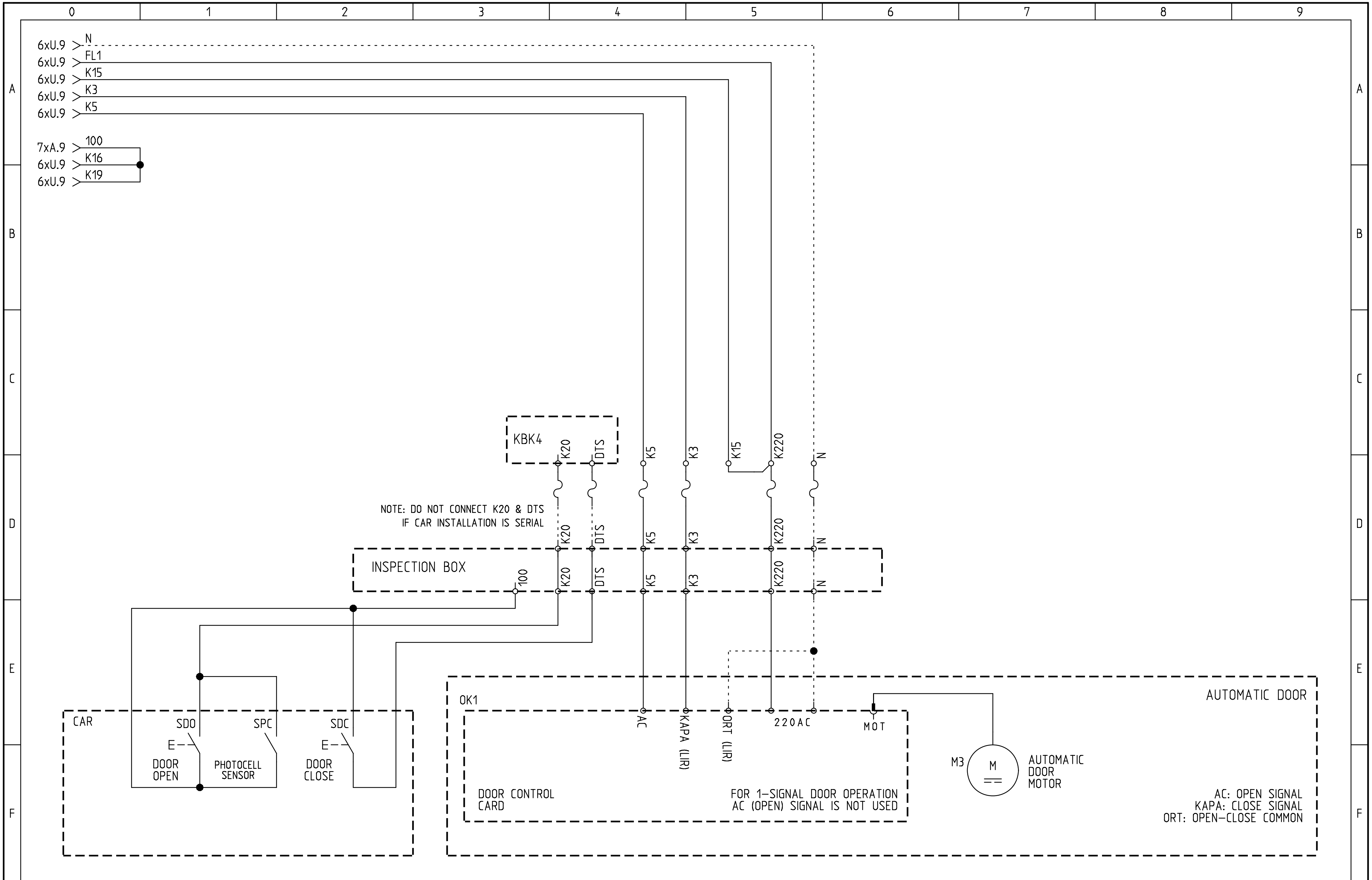
ARKEL www.arkel.com.tr (+90 216) 540 03 10	INSPECTION BOX	CAR TOP CONTROLLER : REVBA CAR INSTALLATION : PARALLEL	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: V12 Rev. Date: 05.10.2009	Sheet: RP Date: 16.03.2009



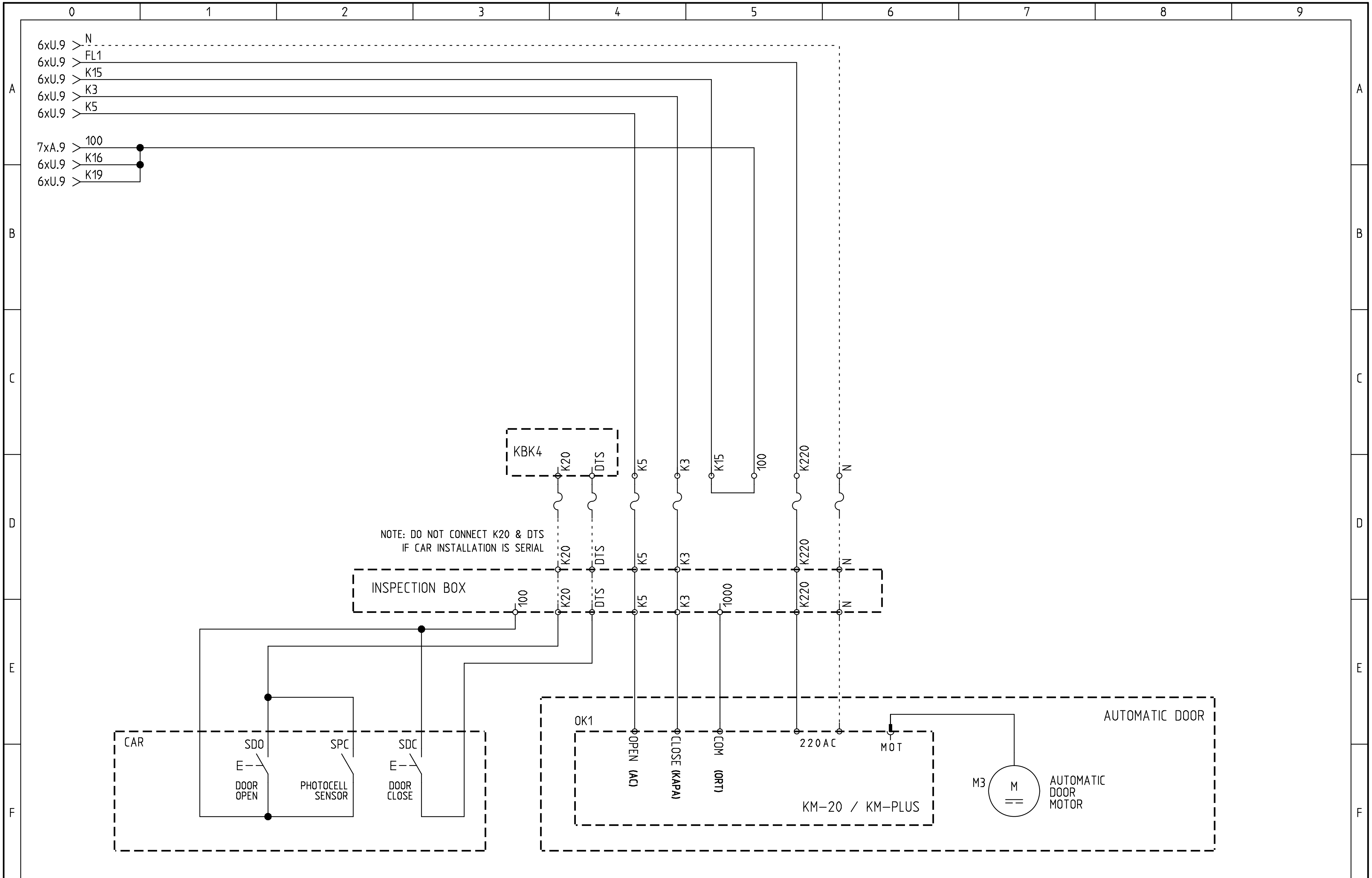
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 1-PHASE EVACUATION SYSTEM : UPS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 RU
			CHECKED BY: C.A.	Rev. Date:	Date: 01.12.2009



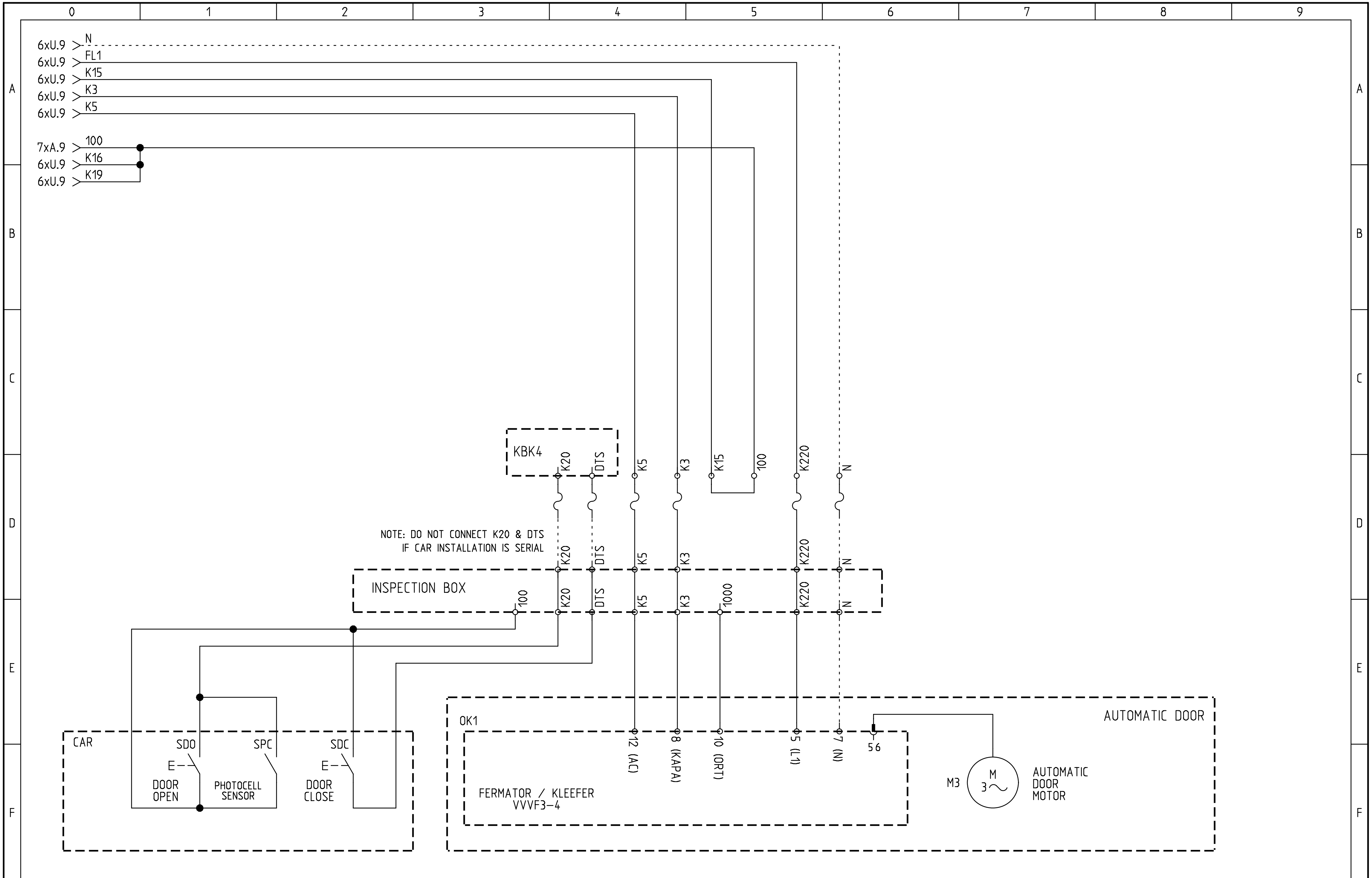
ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : 3-PHASE	DRAWN BY: K.D.	Rev. No:	Sheet: 12 PU
			CHECKED BY: C.A.	Rev. Date:	Date: 01.12.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMI AUTOMATIC WITH DC DOOR CONTROLLER EVACUATION SYSTEM : UPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 MU Date: 01.12.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : KM-20 / KM-PLUS EVACUATION SYSTEM : UPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 KU Date: 28.12.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : FERMATOR / KLEEFER VVVF 3-4 EVACUATION SYSTEM : UPS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 FU
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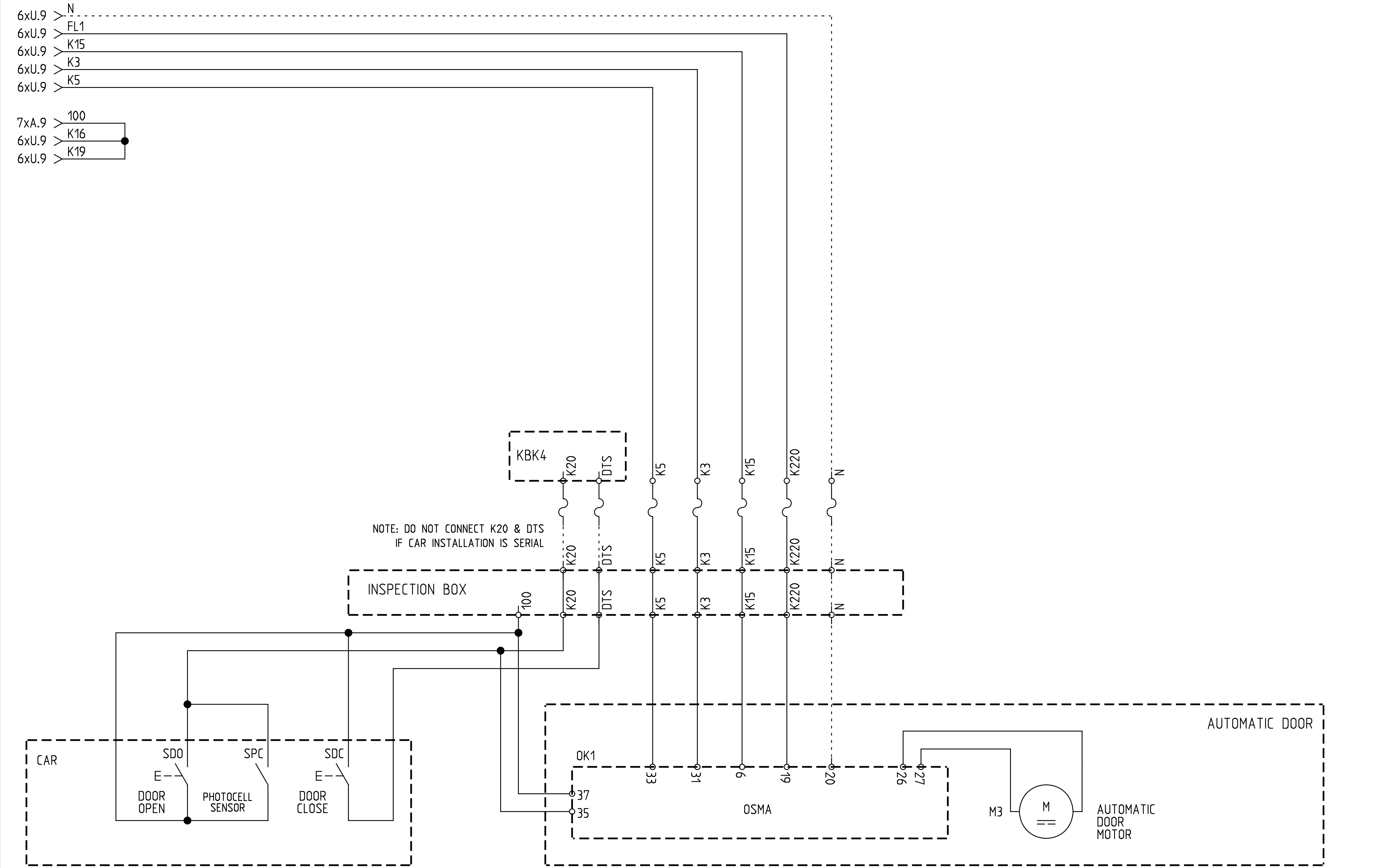
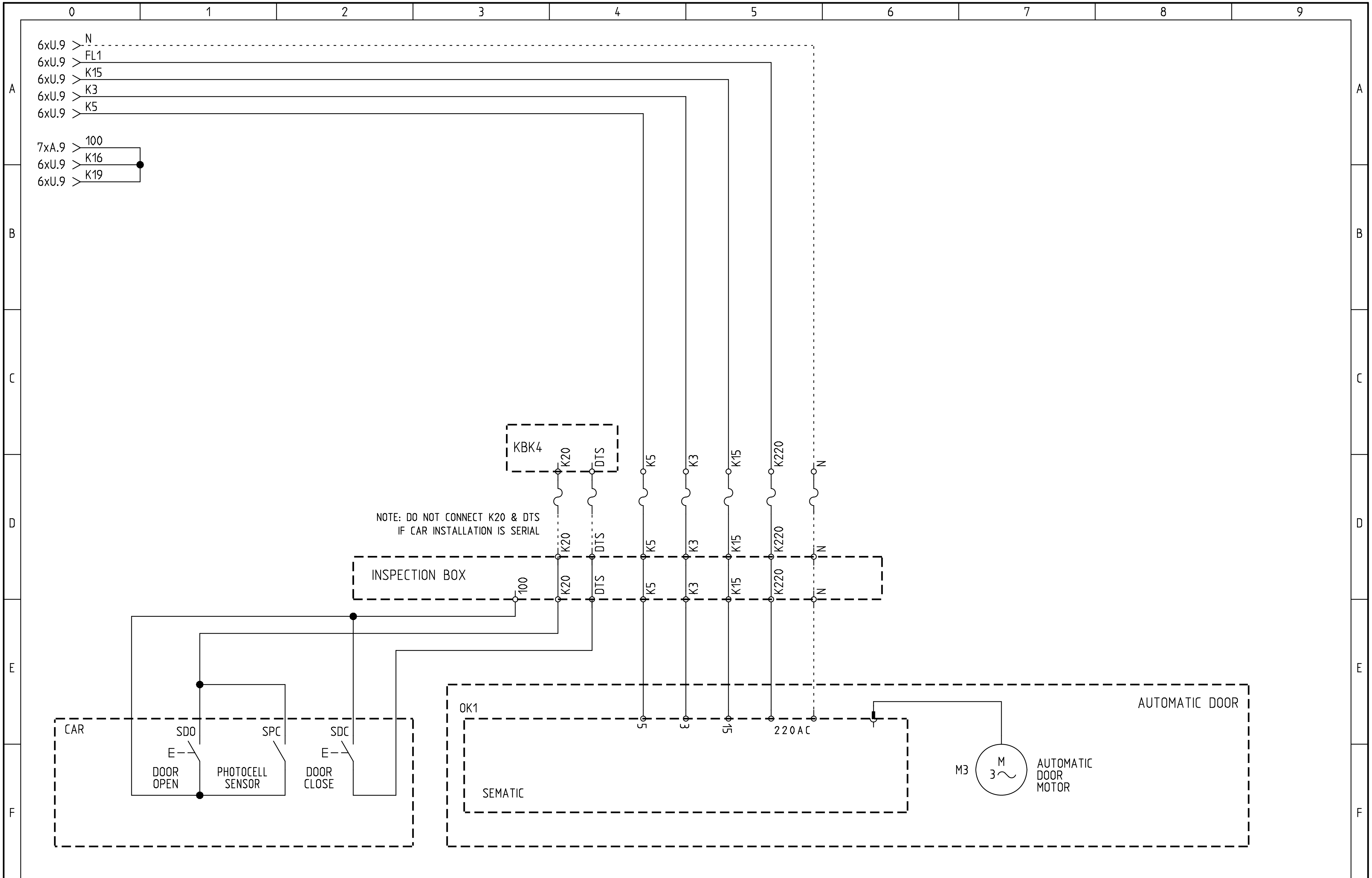


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : OSMA EVACUATION SYSTEM : UPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 OU Date: 01.12.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SEMATIC EVACUATION SYSTEM : UPS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 SU
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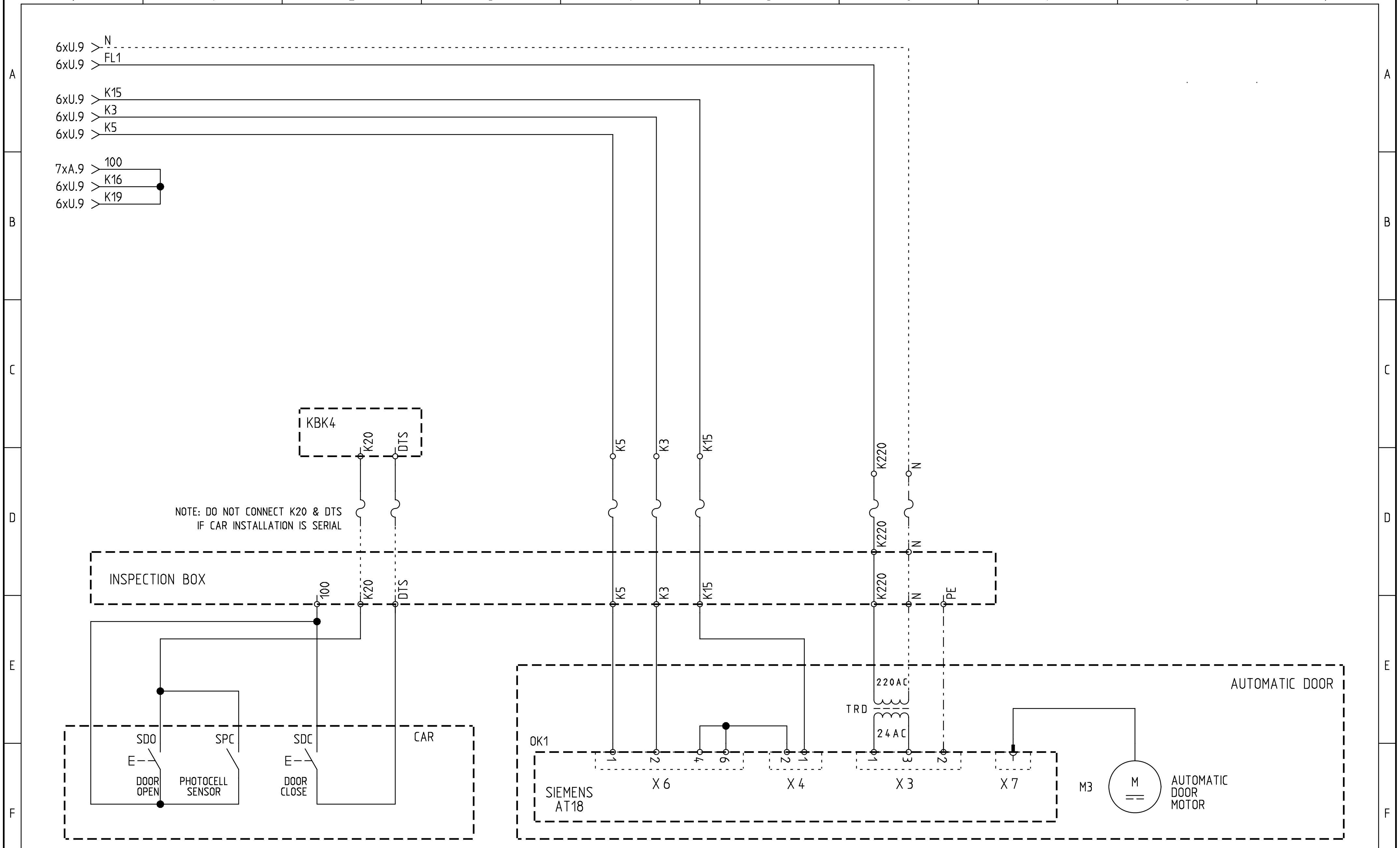
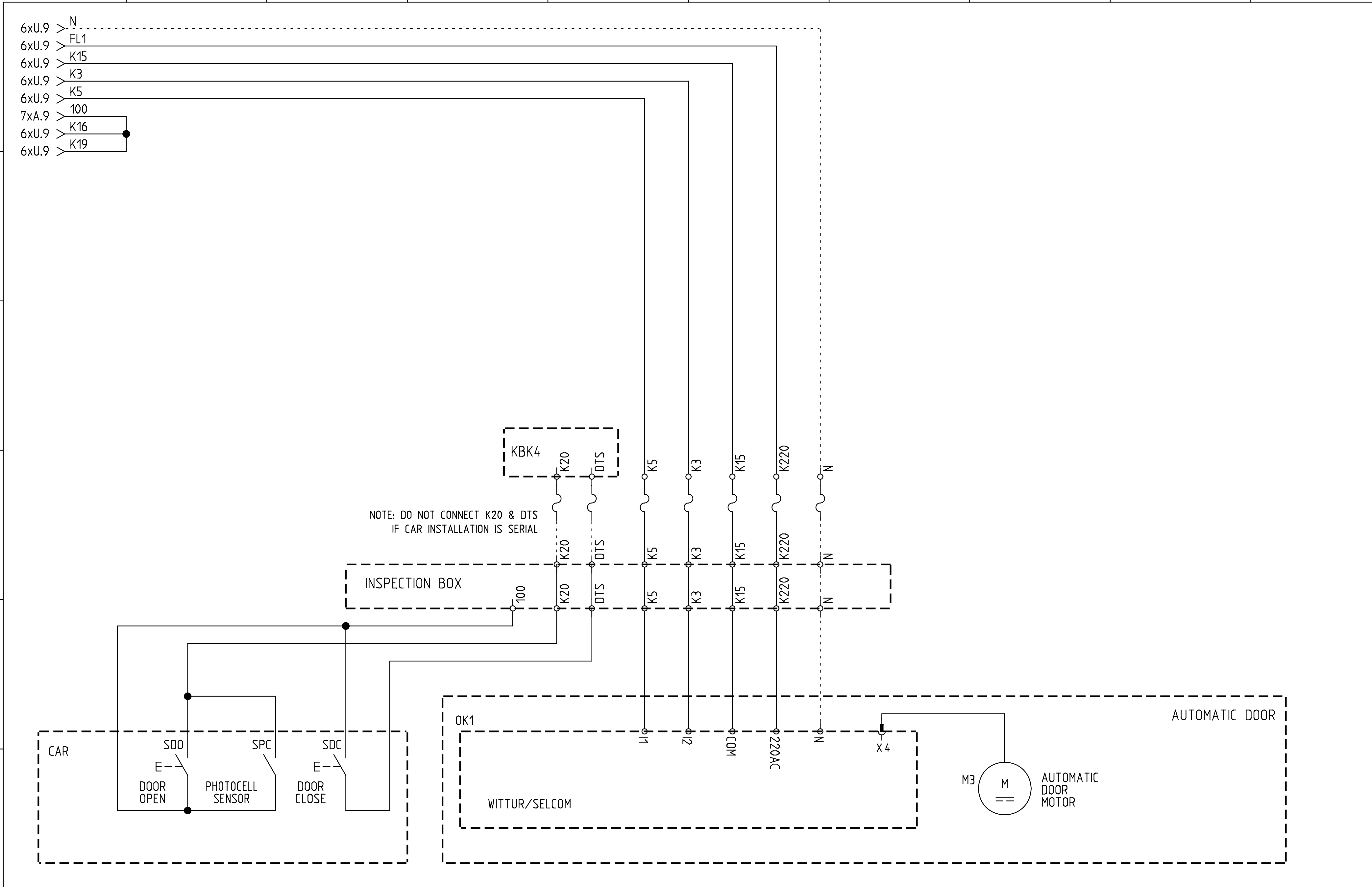


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : SIEMENS AT18 EVACUATION SYSTEM : UPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 GU Date: 01.12.2009



ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : WITTUR HYDRA PLUS EVACUATION SYSTEM : UPS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 WU
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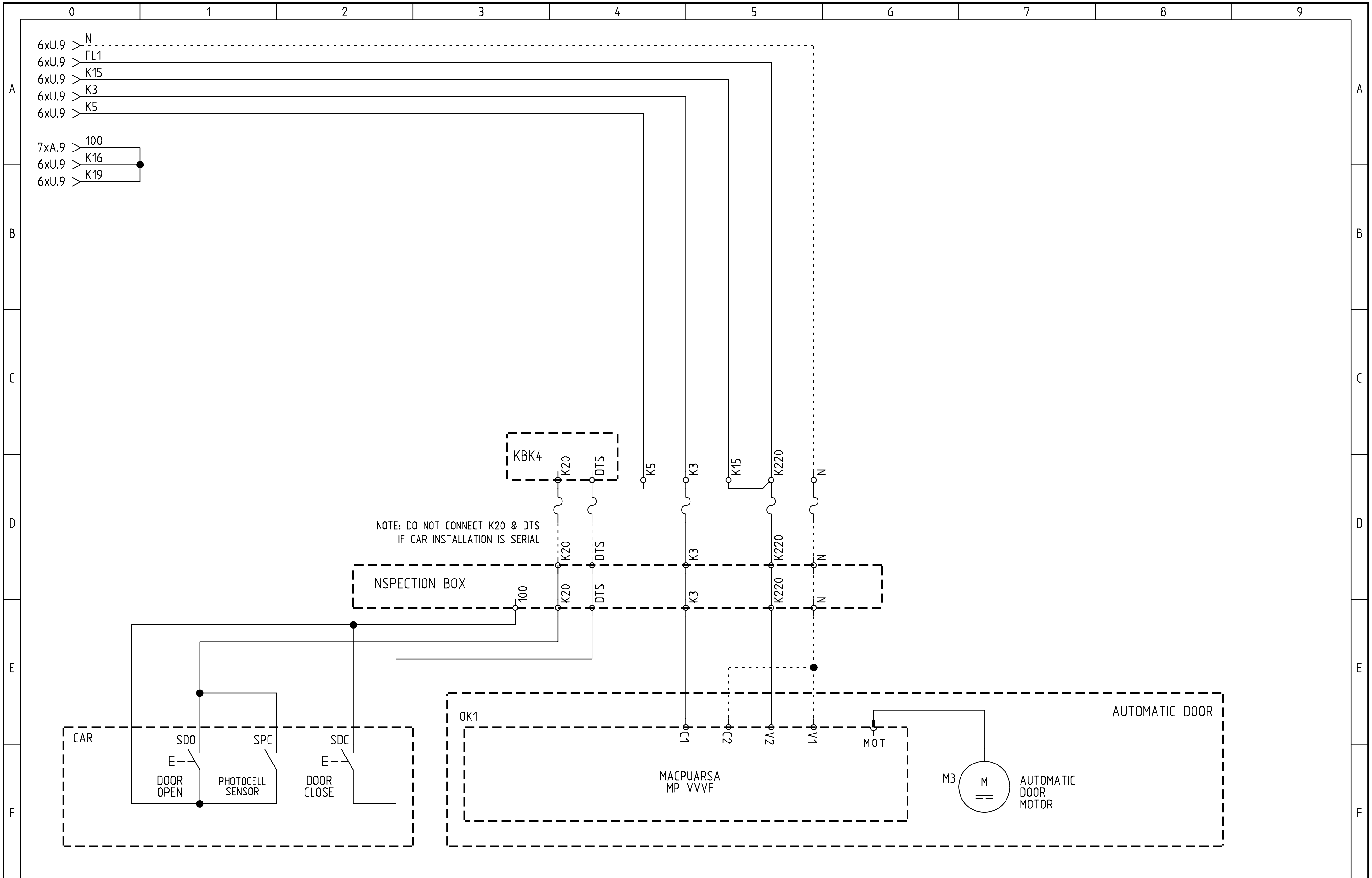

ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : MACPUARSA VVVF EVACUATION SYSTEM : UPS	DRAWN BY: K.D.	Rev. No:	Sheet: 12 CU
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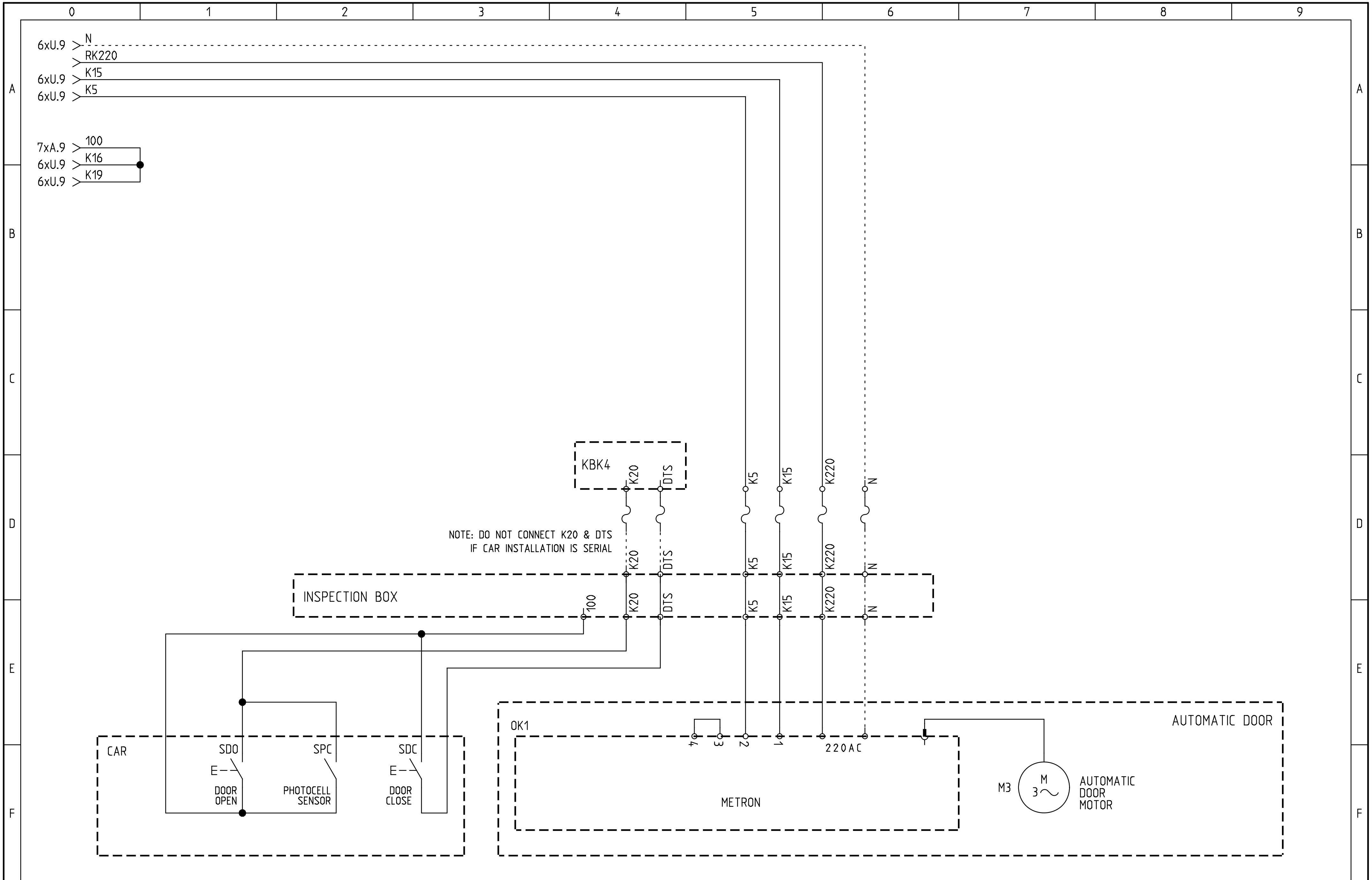
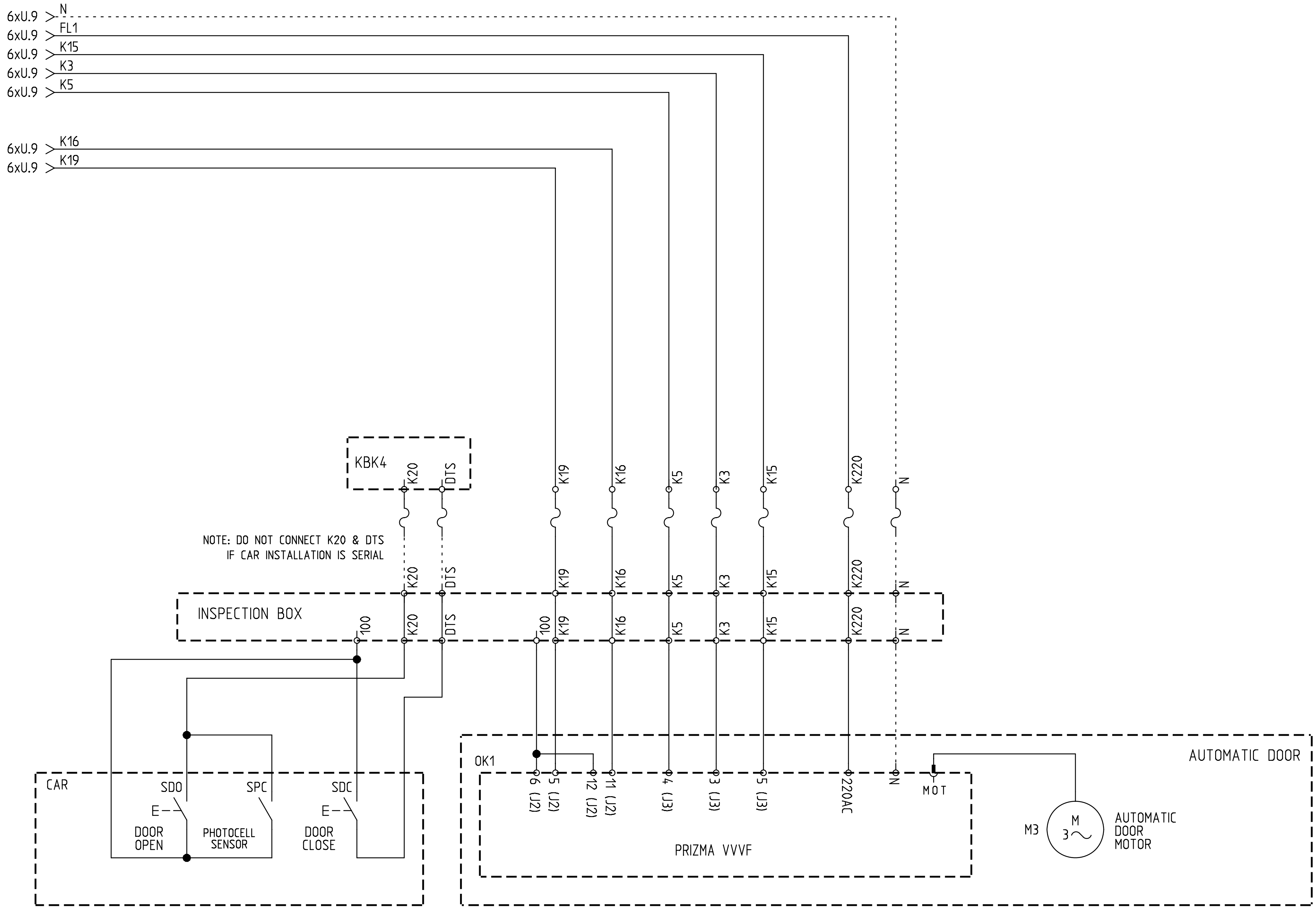


ARKEL www.arkel.com.tr (+90 216) 540 03 10	ARL-300 CONTROL PANEL	AUTOMATIC DOOR CONNECTION DOOR TYPE : METRON EVACUATION SYSTEM : UPS	DRAWN BY: K.D. CHECKED BY: C.A.	Rev. No: Rev. Date:	Sheet: 12 EU Date: 01.12.2009



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ARL-300 CONTROL PANEL

AUTOMATIC DOOR CONNECTION
DOOR TYPE : PRIZMA VVVF
EVACUATION SYSTEM : UPS

DRAWN BY: K.D.	Rev. No:	Sheet: 12 YU
CHECKED BY: C.A.	Rev. Date:	Date: 01.12.2009