

EXPRESS-MRL 전기도면

현 장 명 : EX-L1000 표준도면  
발 주 처 :

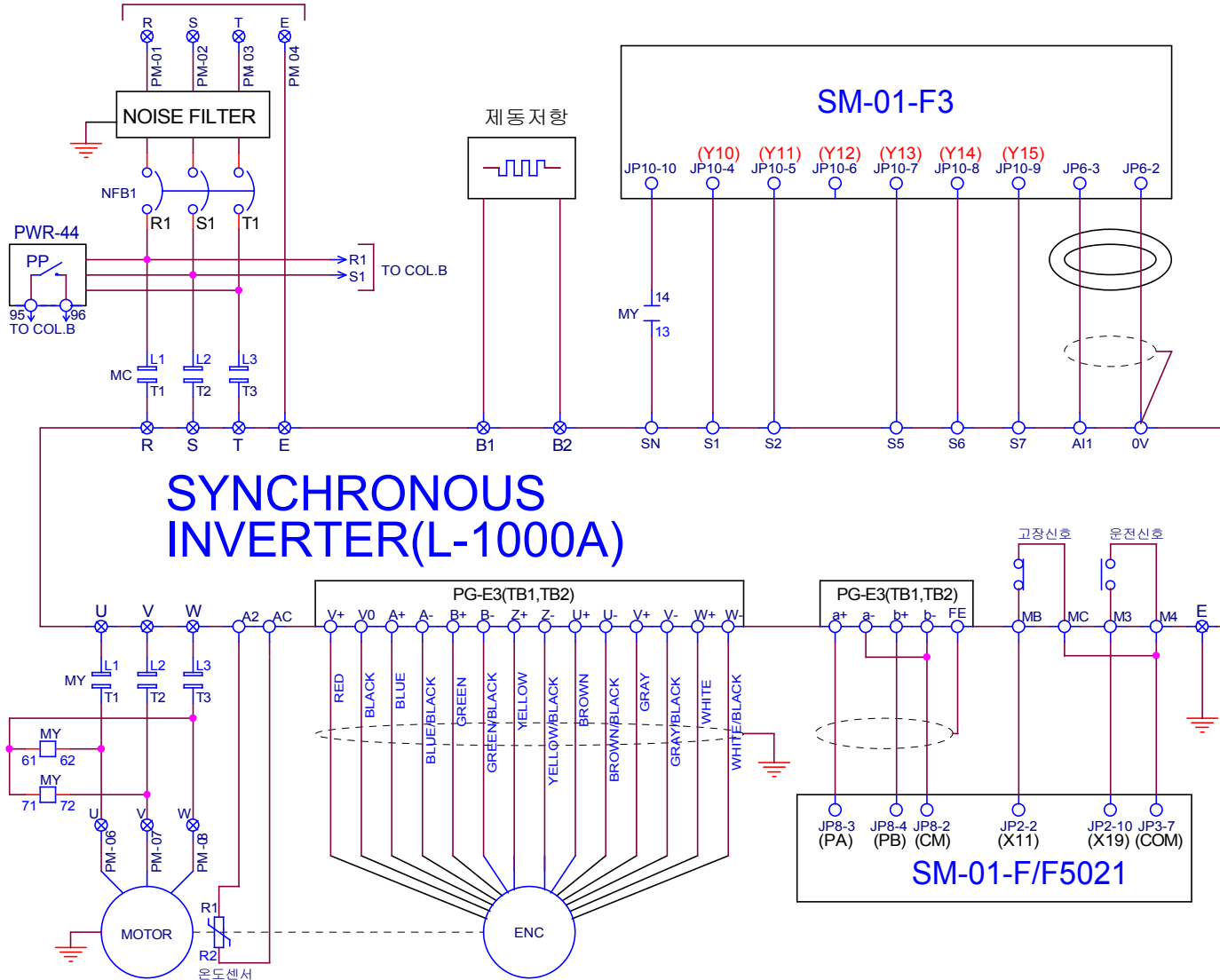
EXPRESS LIFT Co.,LTD

DRWN BY	J.H.KWACK	APPD BY	S.D.LEE
FIELD		TITLE	
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## COL.A

SPEED	SIGNAL FROM SM-01	ADD	DATA
MULTI FL HIGH SPEED	Y10/Y11,Y13,Y14,Y15	D1-08	50HZ
DOUBLE FL HIGH SPEED	Y10/Y11,Y14,Y15	D1-07	40HZ
SINGLE FL HIGH SPEED	Y10/Y11,Y13,Y15	D1-06	30HZ
LEVELING SPEED	Y10/Y11,Y13,Y14	D1-04	3HZ
INSPECTION SPEED	Y10/Y11,Y15	D1-05	10HZ

FROM  
B/D POWER

SM01-JP2		
NO	NAME	DEFINITION
01	X10	LD(LEVEL)
02	X11	INV ERROR-K3
03	X12	FRS-LOBBY
04	X13	SAFETY LOOP
05	X14	DOOR LOCK
06	X15	SPEED IN-LINE
07	X16	SPEED OUT-LINE
08	X17	BRAKE MC
09	X18	FRONT D-ZONE
10	X19	INV DET-K2

SM01-JP3		
NO	NAME	DEFINITION
01	X20	RELEVELLING
02	X21	RBK DET
03	X22	BRAKE SW
04	X23	MOTOR TH
05	X24	SLUH
06	X25	SLDH
07	COM	COMMON
08	COM	COMMON
09	N24	POWER 0V
10	P24	POWER +24V

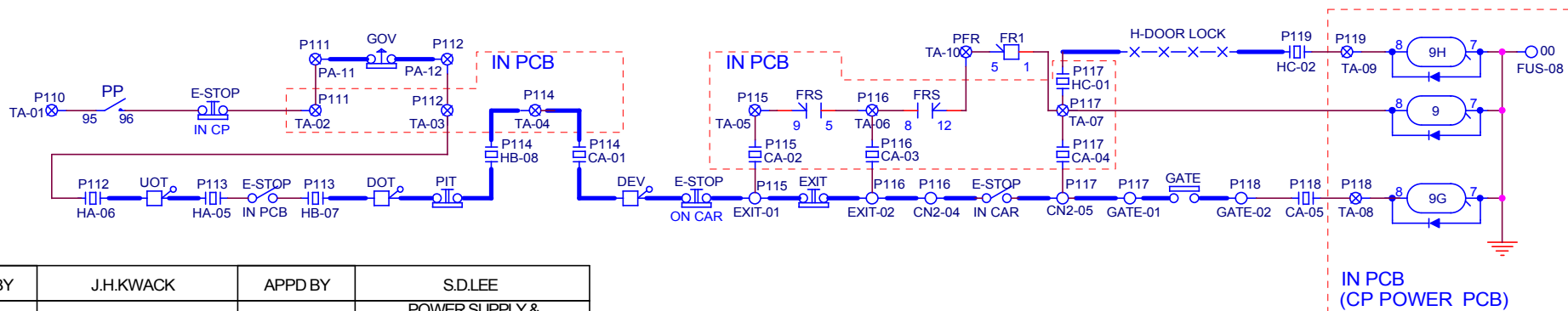
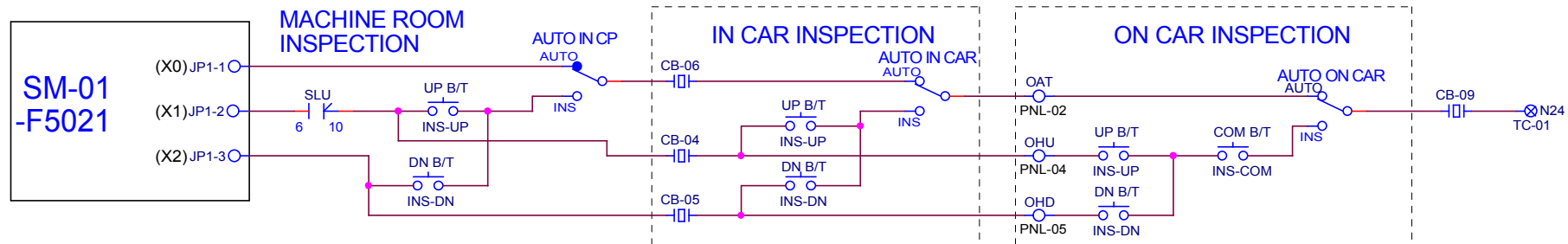
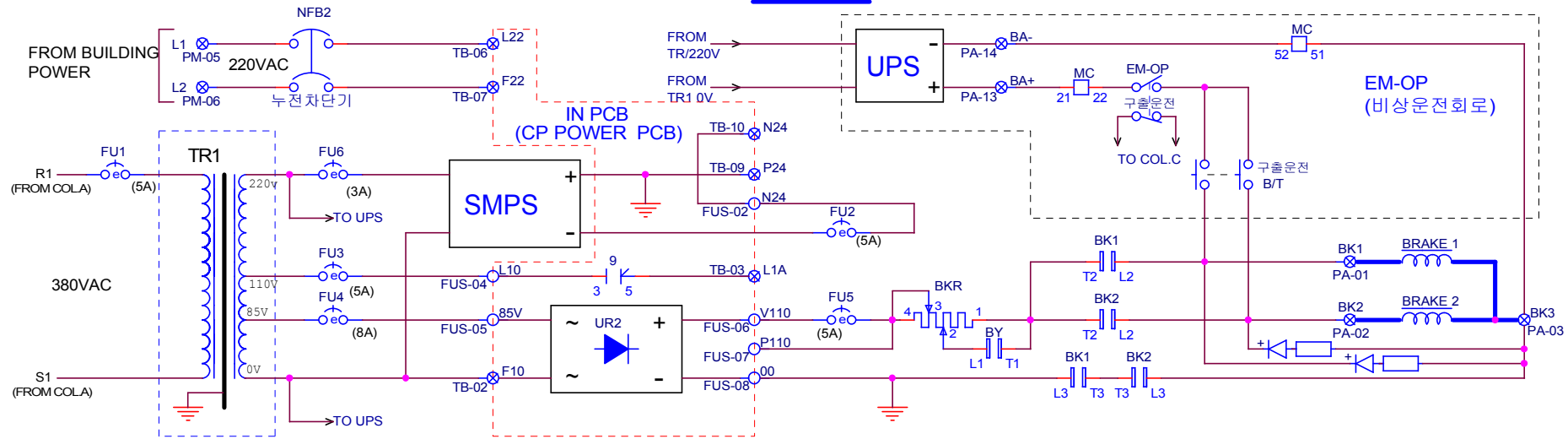
SM01-JP6		
NO	NAME	DEFINITION
01		
02	0V	Analog speed
03	0-10V	Analog speed
04		

SM01-JP8		
NO	NAME	DEFINITION
01		
02	CM	PULSE COM
03	PA	ENC PULSE A
04	PB	ENC PULSE B

SM01-JP10		
NO	NAME	DEFINITION
01	Y8	PRE-OPEN
02	Y9	Fire RY Signal
03	COM	Y8-Y9의COM
04	Y10	INV-UP
05	Y11	INV-DOWN
06	Y12	INV-ENABLE
07	Y13	INV-SPEED1
08	Y14	INV-SPEED2
09	Y15	INV-SPEED3
10	COM	Y10-Y15의COM

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FIELD		TITLE	TRACTION CIRCUIT
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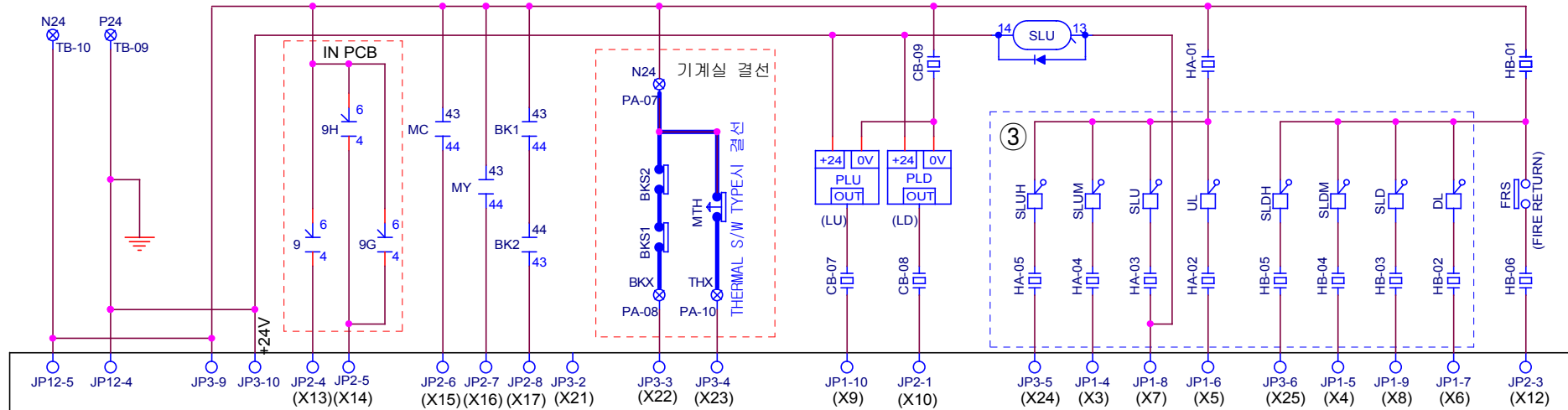
COL.B



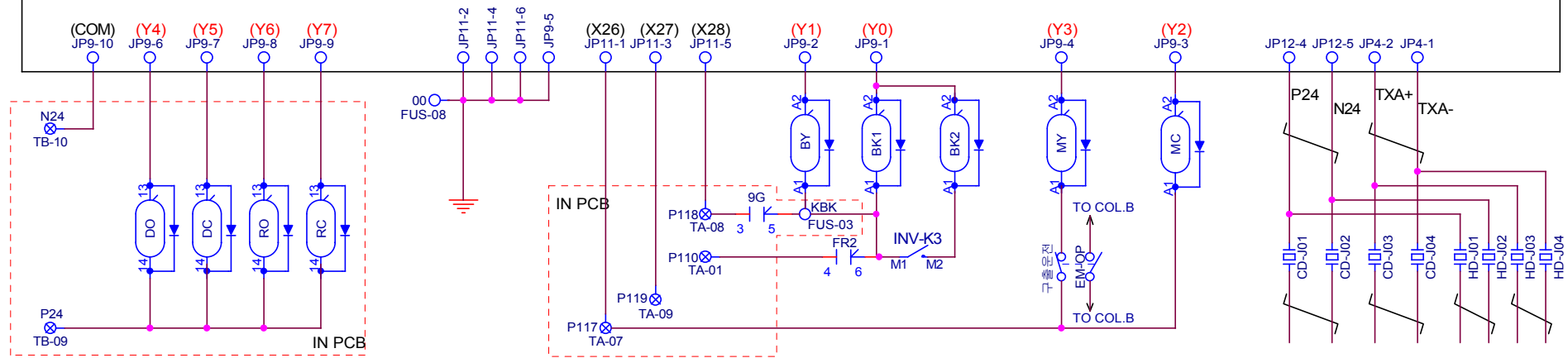
DRWN BY		J.H.KWACK		APPD BY		S.D.LEE	
FIELD				TITLE		POWER SUPPLY & SAFETY CIRCUIT	
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## COL.C

③	60M/MIN이하	105M/MIN미만	105M/MIN이상
SIMULATION	SLU,SLD	SLU,SLD	SLU,SLD,SLUM,SLDM
DIGITAL	SLU,SLD	SLU,SLD,SLUM,SLDM	SLU,SLD,SLUM,SLDM,SLUH,SLDH



## SM-01-F5021



SM01-JP1		
NO	NAME	DEFINITION
01	X0	AUTO/INS
02	X1	INS-UP
03	X2	INS-DOWN
04	X3	SLUM
05	X4	SLDM
06	X5	UP LIMIT
07	X6	DN LIMIT
08	X7	SLU
09	X8	SLD
10	X9	LU(LEVEL)

SM01-JP2		
NO	NAME	DEFINITION
01	X10	LD(LEVEL)
02	X11	INV ERROR-K3
03	X12	FRS-LOBBY
04	X13	SAFETY LOOP
05	X14	DOOR LOCK
06	X15	SPEED IN-LINE
07	X16	SPEED OUT-LINE
08	X17	BRAKE MC
09	X18	FRONT D-ZONE
10	X19	INV DET-K2

SM01-JP3		
NO	NAME	DEFINITION
01	X20	RELEVELLING
02	X21	RBK DET
03	X22	BRAKE SW
04	X23	MOTOR TH
05	X24	SLUH
06	X25	SLDH
07	COM	COMMON
08	COM	COMMON
09	N24	POWER 0V
10	P24	POWER +24V

SM01-JP9		
NO	NAME	DEFINITION
01	Y0	BRAKE MC
02	Y1	BRAKE EXCIT
03	Y2	SPEED IN-LINE
04	Y3	SPEED O-LINE
05	COM	Y0-Y3의 COM
06	Y4	F-DOOR OPEN
07	Y5	F-DOOR CL
08	Y6	R-DOOR OPEN
09	Y7	R-DOOR CL
10	COM	Y4-Y7의 COM

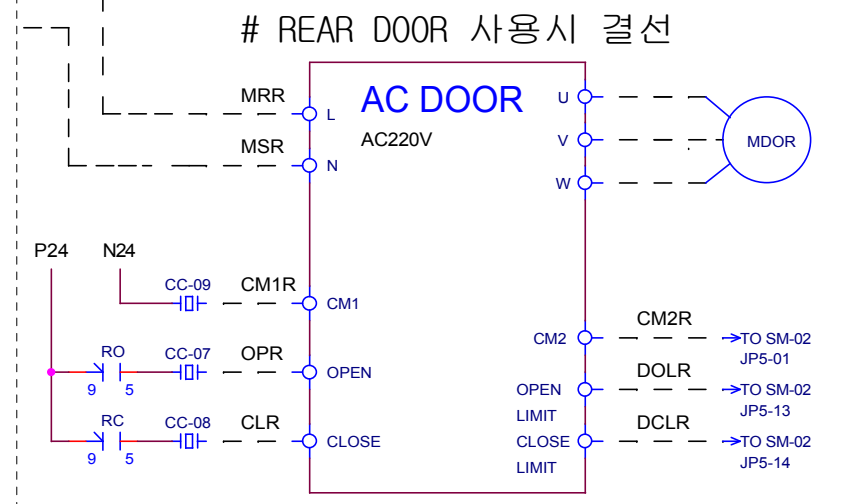
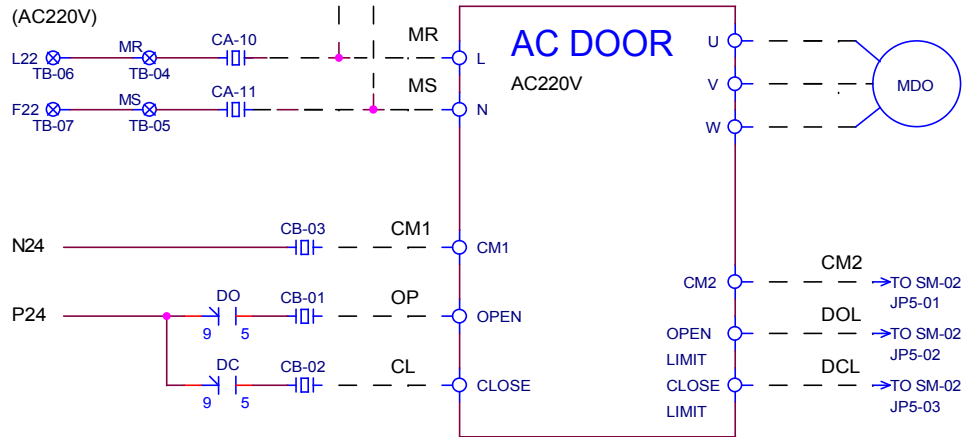
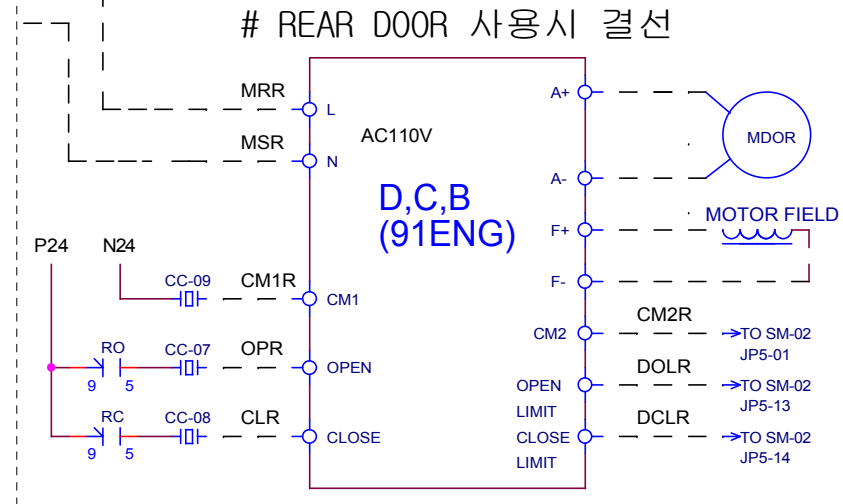
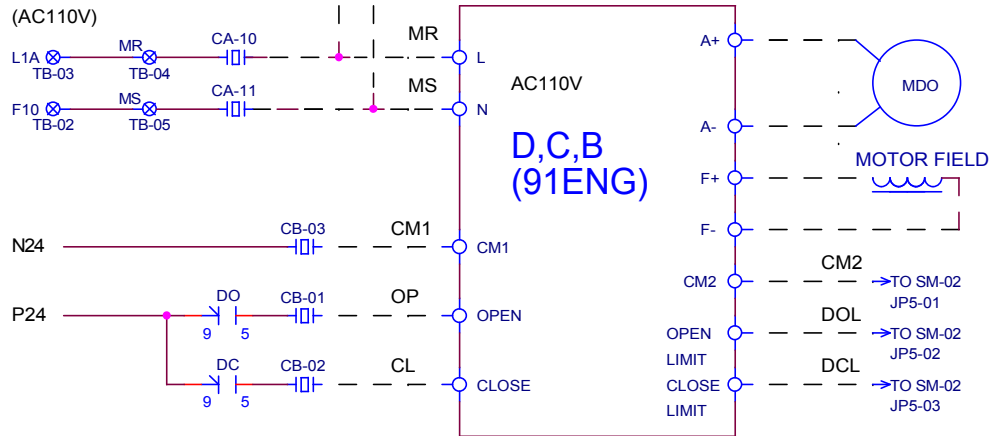
SM01-JP11		
NO	NAME	DEFINITION
01	X26	안전회로DC110
02	0V	X26의 COM
03	X27	외부도어스위치
04	0V	X27의 COM
05	X28	카드어스위치
06	0V	X28의 COM


SM01-JP12		
NO	NAME	DEFINITION
04	+24	POWER IN
05	0V	POWER IN
06	0V	POWER IN

SM01-JP4		
NO	NAME	DEFINITION
01	TXA1-	SERIAL COMM
02	TXA1+	SERIAL COMM
03	N24	SERIAL COMM
04	P24	SERIAL COMM

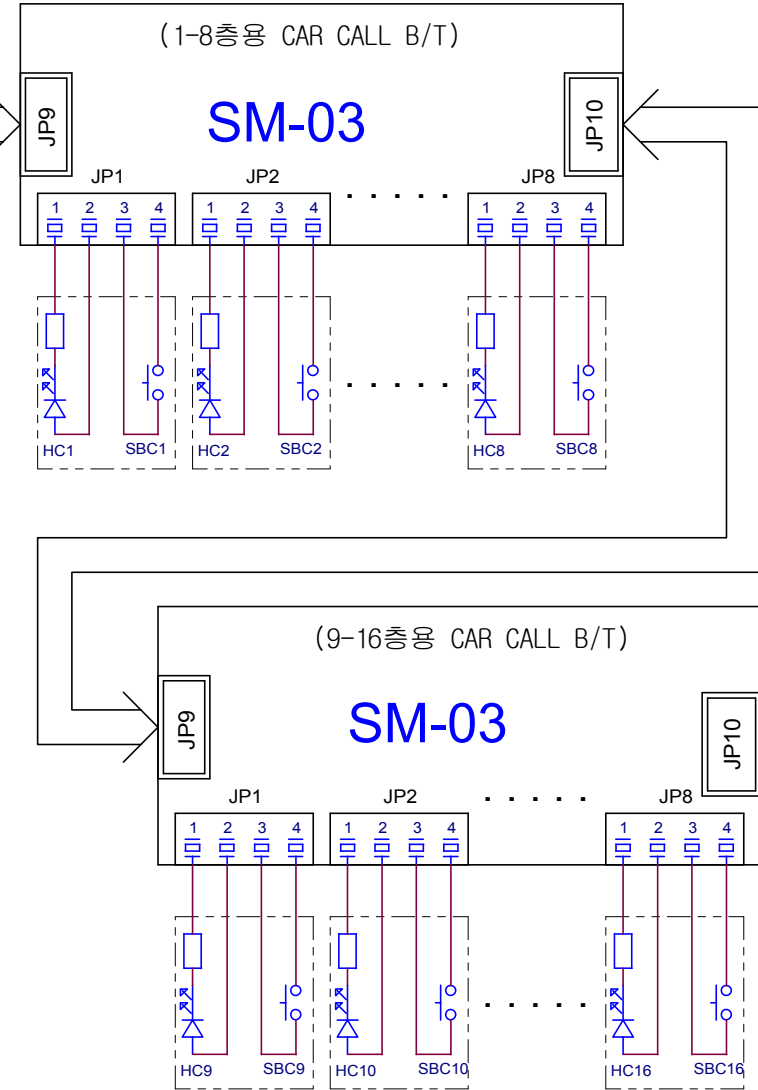
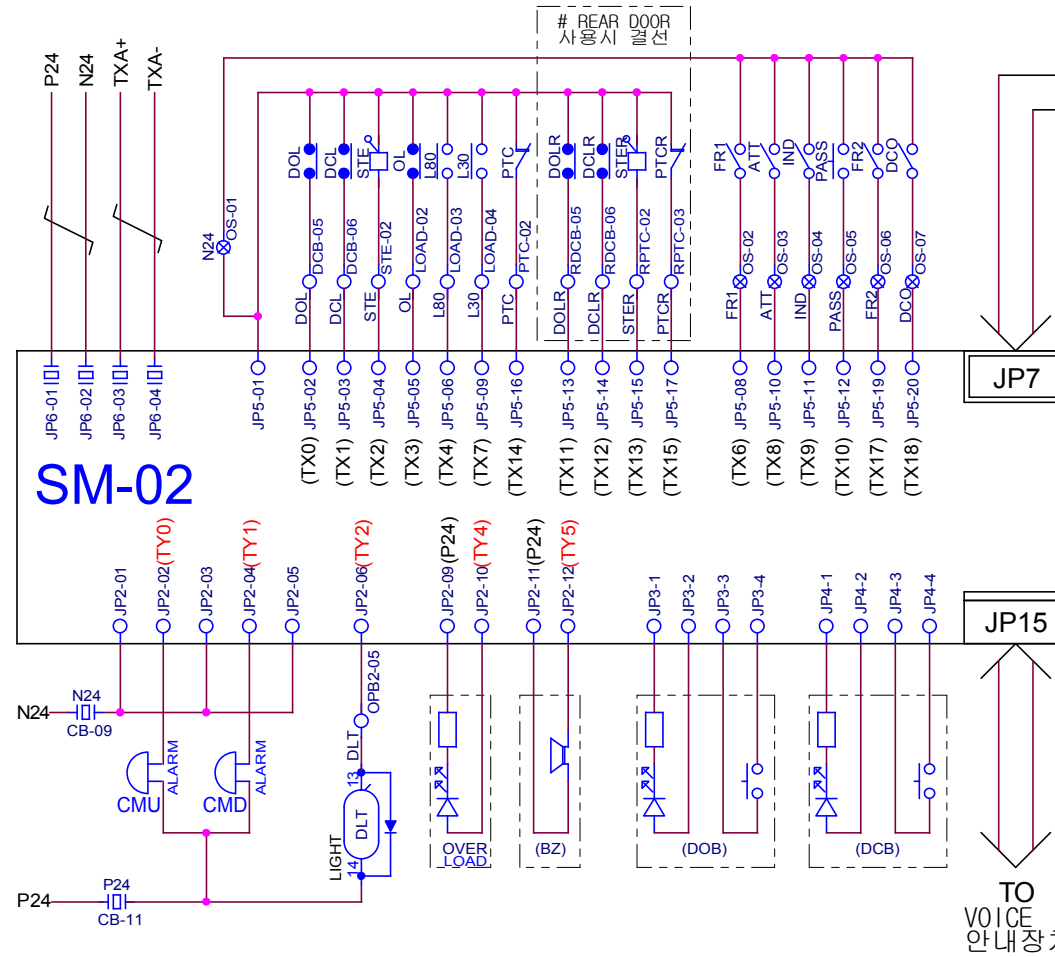
DRWN BY	J.H.KWACK	APPD BY	S.D.LEE
FIELD		TITLE	CONTROL CIRCUIT SM-01
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# COL.D



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# COL.E



NO	NAME	DEFINITION
01	COM	TY0-COM
02	TY0	UP도착공
03	COM	TY1-COM
04	TY1	DOWN도착공
05	COM	TY2-COM
06	TY2	카라이트(DLT)
07	TY3	SPARE
08	TY3	SPARE
09	TY4	OVERLOAD-
10	TY4	OVERLOAD+
11	TY5	BUZZER -
12	TY5	BUZZER+
13		
14		
15	RS485+	통신 케이블
16	RS485-	통신 케이블
17		SPARE
18		SPARE
19	PWR+	POWER+
20	PWR-	POWER-

NO	NAME	DEFINITION
01	COM	COMMON OV
02	TX0	OPEN LIMIT-F
03	TX1	CLOSE LIMIT-F
04	TX2	CLOSE LIMIT-F
05	TX3	OVERLOAD
06	TX4	FULL LOAD
07	TX5	SPARE
08	TX6	1ST FIRE
09	TX7	LIGHT LOAD
10	TX8	ATTENDANT
11	TX9	IND-VIP
12	TX10	ATT BY-PASS
13	TX11	OPEN LIMIT-R
14	TX12	CLOSE LIMIT-R
15	TX13	SAFETY EDGE-R
16	TX14	PHOTO CELL-F
17	TX15	PHOTO CELL-F
18	TX16	SPARE
19	TX17	2ND FIRE
20	TX18	DOOR HOLD

NO	NAME	DEFINITION
01	LAMP -	D-OPEN LAMP
02	LAMP+	D-OPEN LAMP
03	DOB	OPEN BUTTON
04	DOB	OPEN BUTTON

NO	NAME	DEFINITION
01	LAMP -	CLOSE LAMP
02	LAMP+	CLOSE LAMP
03	DCB	CL BUTTON
04	DCB	CL BUTTON

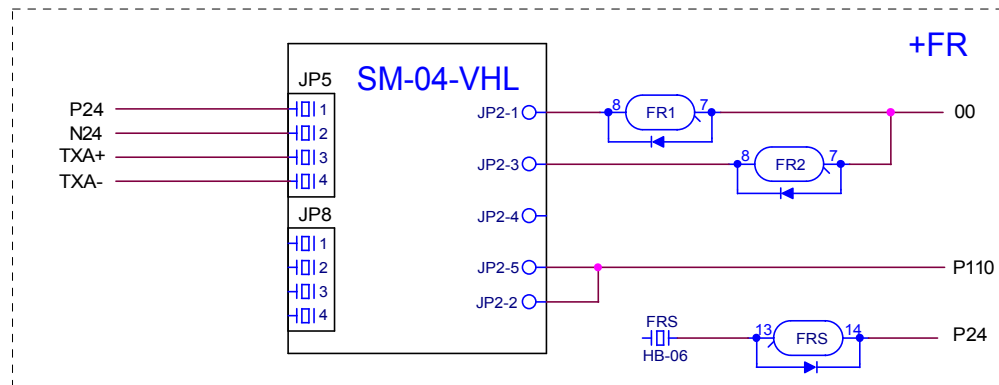
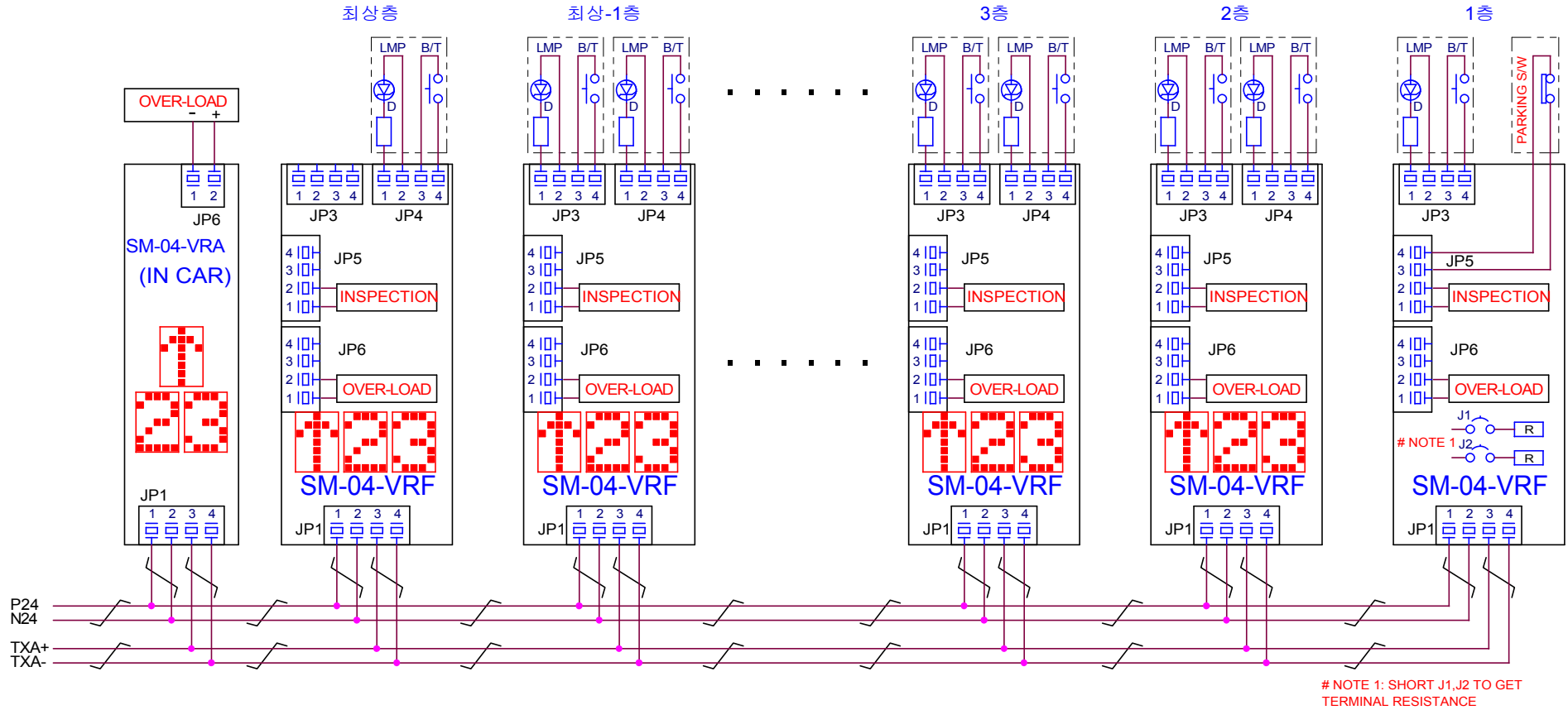
NO	NAME	DEFINITION
01	P24	통신 케이블
02	N24	통신 케이블
03	TXA+	통신 케이블
04	TXA-	통신 케이블

NO	NAME	DEFINITION
01	BIT 0	
02	BIT 1	
03	BIT 2	
04	BIT 3	
05	BIT 4	
06	BIT 5	
07	BIT 6	
08	BIT 7	
09	0V	
10	+24V	

DRWN BY	J.H.KWACK	APPD BY	S.D.LEE
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(주)익스프레스리프트

# COL.F



## SM-04 PCB FLOOR ADDRESS 입력방법

S1 JUMPER PIN이 꽂힌 상태에서 외부버튼 UP/DOWN을 누르면 디지털에 숫자가 올라가고 내려갑니다. 최하층을 1로 기준하여 두번째층은 2, 다음은 3, 4... 순서로 각층을 차례대로 층의 값을 넣고 S1 JUMPER PIN을 빼면 층 값이 입력됩니다.

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FIELD		TITLE	HALL CALL CIRCUIT SM-04
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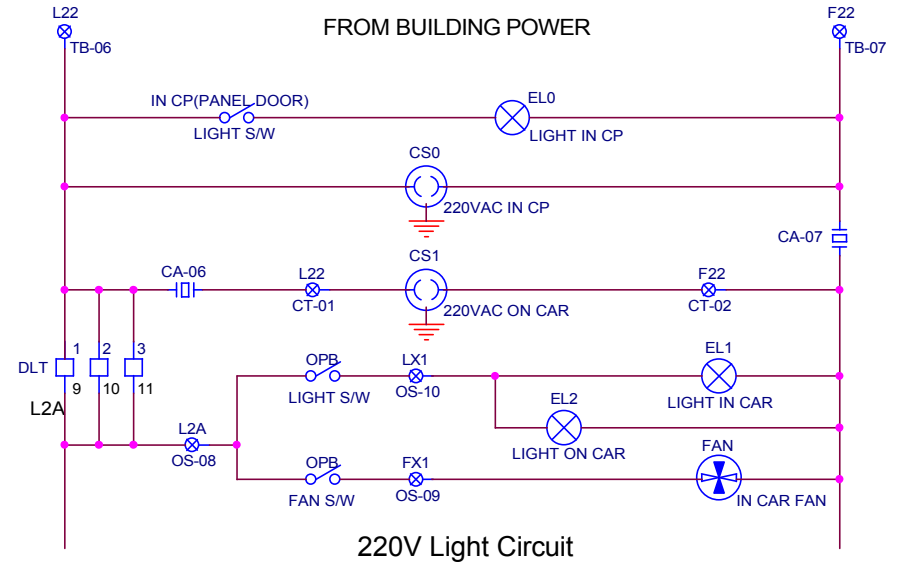
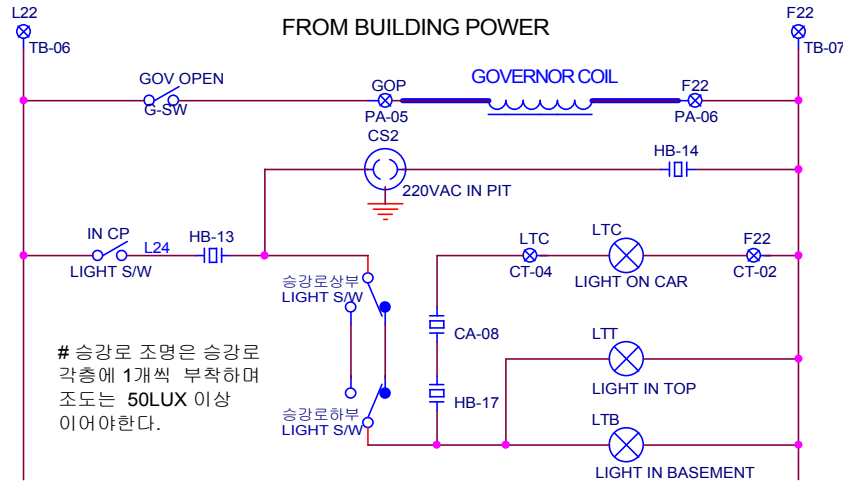
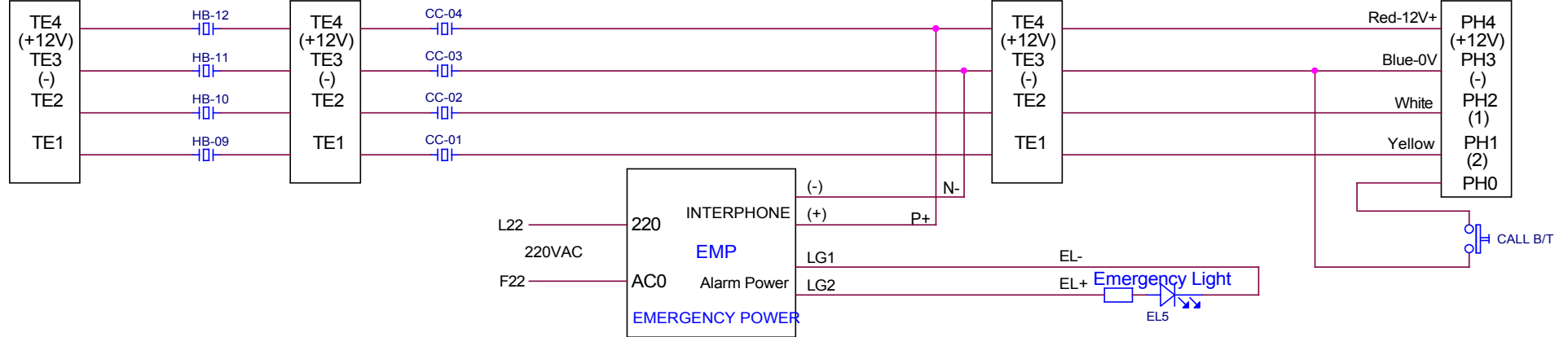
# COL.G

경비실 인터폰

Machine Room

Car Top

In car



## HB-16C

NO	NAME	DEFINITION
01	COM	Common
02	DL	DOWN-Limit
03	SLD	Slow-down(dn)
04	SOLD	Slow-down(dn1)
05	SOLDH	Slow-down(dn2)
06	FRS	FIRE RETURN
07	P113	Safety DOT
08	P114	Safety PIT
09	TE1	INTERPHONE
10	TE2	INTERPHONE
11	TE3	INTERPHONE
12	TE4	INTERPHONE
13	L24	AC220V
14	F22	AC220V
15	PE	EARTH
16	LTA	PIT LIGHT
17	LTC	ON CAR LIGHT

## CA-12P

NO	SIGNAL	DEFINITION
CA-01	P114	SAFETY ON CAR1
CA-02	P115	SAFETY-EXIT1
CA-03	P116	SAFETY-EXIT2
CA-04	P117	Safety-End
CA-05	P118	Gate s/w
CA-06	L22	AC220V
CA-07	F22	AC220V
CA-08	LTC	ON CAR LIGHT
CA-09	--	SPARE
CA-10	MR	Door Power
CA-11	MS	Door Power
CA-12	--	SPARE

## CB-12P

NO	SIGNAL	DEFINITION
CB-01	OP	Door-Open
CB-02	CL	Door-Close
CB-03	CM1	Door-CM1
CB-04	IHU	INS-UP B/T
CB-05	IHD	INS-DOWN B/T
CB-06	IAT	AUTO-In car
CB-07	LU	LCS-Level Up
CB-08	LD	LCS-Level Down
CB-09	N24	0V(N24)
CB-10	N24	N24
CB-11	P24	P24
CB-12	--	SPARE

## CC-12P

NO	SIGNAL	DEFINITION
CC-01	TE1	INTERPHONE
CC-02	TE2	INTERPHONE
CC-03	TE3	INTERPHONE
CC-04	TE4	INTERPHONE
CC-05	PE	EARTH
CC-06	PE	EARTH
CC-07	OPR	R-DOOR OPEN
CC-08	CLR	R-DOOR CLOSE
CC-09	CM1R	R-DOOR CM1
CC-10	--	SPARE
CC-11	--	SPARE
CC-12	--	SPARE

## HA-8C

NO	NAME	DEFINITION
01	N24	Common
02	UL	Up-Limit
03	SLU	Slow-down(up)
04	SLUM	Slow-down(up1)
05	SLUH	Slow-down(up2)
06	P112	Safety UOT
07	P113	Safety UOT
08	PE	EARTH

## 220V Light Circuit

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FIELD		TITLE	LIGHT CIRCUIT
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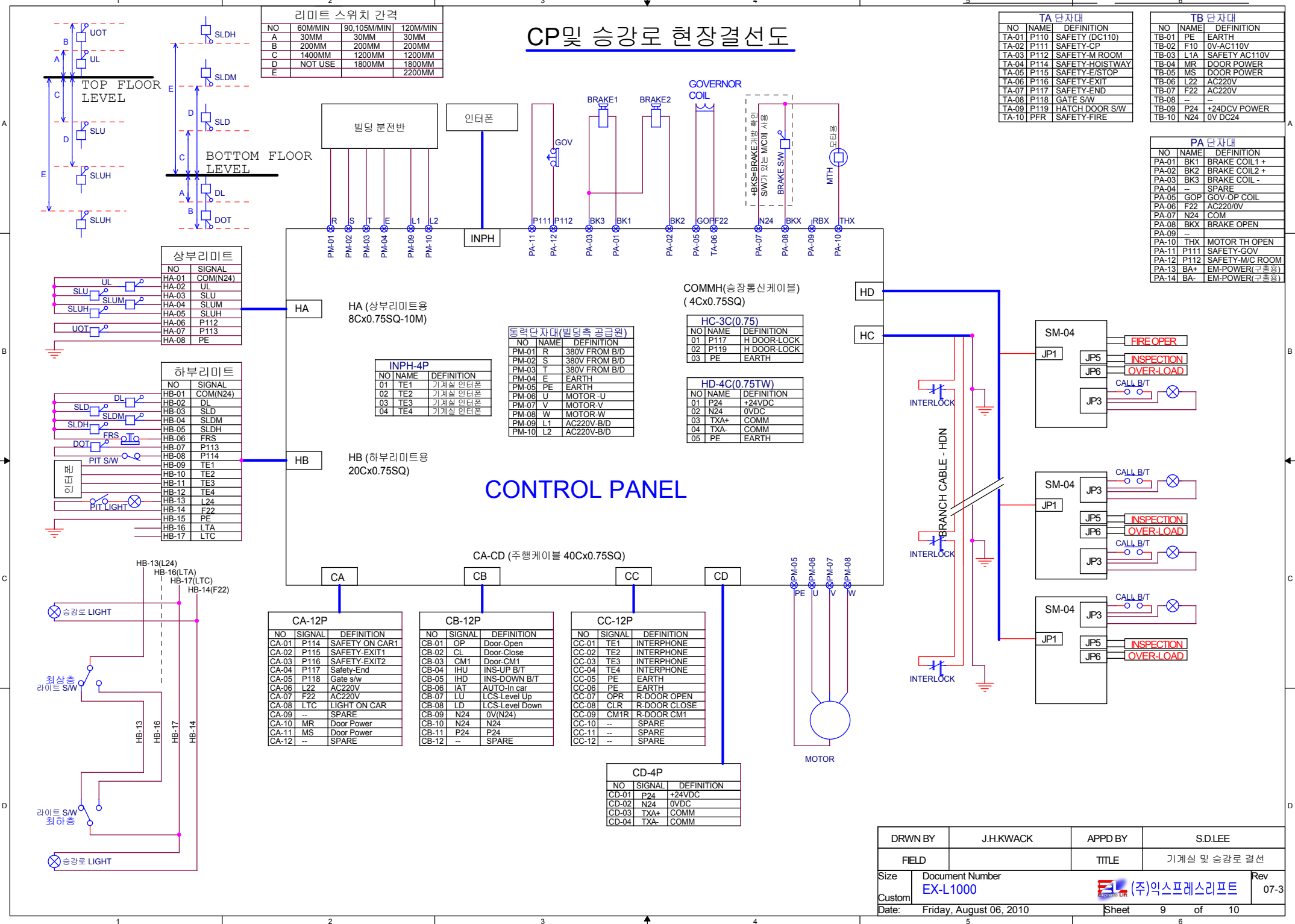
# CP및 승강로 현장결선도

리미트 스위치 간격			
NO	60M/MIN	90,105M/MIN	120M/MIN
A	30MM	30MM	30MM
B	200MM	200MM	200MM
C	1400MM	1200MM	1200MM
D	NOT USE	1800MM	1800MM
E		2200MM	

TA 단자대		
NO	NAME	DEFINITION
TA-01	P110	SAFETY (DC110)
TA-02	P111	SAFETY-CP
TA-03	P112	SAFETY-M ROOM
TA-04	P114	SAFETY-HOISTWAY
TA-05	P115	SAFETY-E/STOP
TA-06	P116	SAFETY-EXIT
TA-07	P117	SAFETY-END
TA-08	P118	GATE S/W
TA-09	P119	HATCH DOOR S/W
TA-10	PFR	SAFETY-FIRE

TB 단자대		
NO	NAME	DEFINITION
TB-01	PE	EARTH
TB-02	F10	0V-AC110V
TB-03	L1A	SAFETY AC110V
TB-04	MR	DOOR POWER
TB-05	MS	DOOR POWER
TB-06	L22	AC220V
TB-07	F22	AC220V
TB-08	-	-
TB-09	P24	+24DCV POWER
TB-10	N24	0V DC24

PA 단자대		
NO	NAME	DEFINITION
PA-01	BK1	BRAKE COIL1 +
PA-02	BK2	BRAKE COIL2 +
PA-03	BK3	BRAKE COIL -
PA-04	-	SPARE
PA-05	GOP	GOV-OP COIL
PA-06	F22	AC220/0V
PA-07	N24	COM
PA-08	BKX	BRAKE OPEN
PA-09	-	-
PA-10	THX	MOTOR TH OPEN
PA-11	P111	SAFETY-GOV
PA-12	P112	SAFETY-MIC ROOM
PA-13	BA+	EM-POWER(구동용)
PA-14	BA-	EM-POWER(구동용)



동력다자대(발달축 공급원)		
NO	NAME	DEFINITION
PM-01	R	380V FROM B/D
PM-02	S	380V FROM B/D
PM-03	T	380V FROM B/D
PM-04	E	EARTH
PM-05	PE	EARTH
PM-06	U	MOTOR-U
PM-07	V	MOTOR-V
PM-08	W	MOTOR-W
PM-09	L1	AC220V-B/D
PM-10	L2	AC220V-B/D

COMMH(승강통신케이블) (4Cx0.75SQ)		
NO	NAME	DEFINITION
01	P117	H DOOR-LOCK
02	P119	H DOOR-LOCK
03	PE	EARTH

HD-4C(0.75TW)		
NO	NAME	DEFINITION
01	P24	+24VDC
02	N24	0VDC
03	TXA+	COMM
04	TXA-	COMM
05	PE	EARTH


INPH-4P		
NO	NAME	DEFINITION
01	TE1	기계실 인터폰
02	TE2	기계실 인터폰
03	TE3	기계실 인터폰
04	TE4	기계실 인터폰

CA-12P		
NO	SIGNAL	DEFINITION
CA-01	P114	SAFETY ON CAR1
CA-02	P115	SAFETY-EXIT1
CA-03	P116	SAFETY-EXIT2
CA-04	P117	Safety-End
CA-05	P118	Gate s/w
CA-06	L22	AC220V
CA-07	F22	AC220V
CA-08	LTC	LIGHT ON CAR
CA-09	-	SPARE
CA-10	MR	Door Power
CA-11	MS	Door Power
CA-12	-	SPARE

CB-12P		
NO	SIGNAL	DEFINITION
CB-01	OP	Door-Open
CB-02	CL	Door-Close
CB-03	CM1	Door-CM1
CB-04	IHU	INS-UP B/T
CB-05	IHD	INS-DOWN B/T
CB-06	IAT	AUTO-In car
CB-07	LU	LCS-Level Up
CB-08	LD	LCS-Level Down
CB-09	N24	0V(N24)
CB-10	N24	N24
CB-11	P24	P24
CB-12	-	SPARE

CC-12P		
NO	SIGNAL	DEFINITION
CC-01	TE1	INTERPHONE
CC-02	TE2	INTERPHONE
CC-03	TE3	INTERPHONE
CC-04	TE4	INTERPHONE
CC-05	PE	EARTH
CC-06	PE	EARTH
CC-07	OPR	R-DOOR OPEN
CC-08	CLR	R-DOOR CLOSE
CC-09	CM1R	R-DOOR CM1
CC-10	-	SPARE
CC-11	-	SPARE
CC-12	-	SPARE


CD-4P		
NO	SIGNAL	DEFINITION
CD-01	P24	+24VDC
CD-02	N24	0VDC
CD-03	TXA+	COMM
CD-04	TXA-	COMM

DRWN BY	J.H.KWACK	APPD BY	S.D.LEE
FIELD		TITLE	기계실 및 승강로 결선
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# SYMBOL SPECIFIC

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WIRE IN CONTROL PANEL		JOINT POINT WIRE IN COTROL PANEL		WIRE IN HOISTEAY
	"A" CONTACT IN PCB		CONDENSER		JOINT POINT WIRE IN HOISTWAY
	"A" CONTACT MAGNETIC CONTACTOR		DIODE		TRANSFORMER
	"B" CONTACT MAGNETIC CONTACTOR		RESISTER		RESISTER IN PCB
	"A" CONTACT MY-4 TYPE RELAY		FUSE		MOTOR FIELD(DOOR MOTOR)
	"B" CONTACT MY-4 TYPE RELAY		TERMINAL IN PCB		HARNESS(P112=signal name, HA-06=NUMBER OF HARNESS PIN)
	"A" CONTACT LIMIT SWITCH		"A" CONTACT TOGGLE SWITCH		"A" CONTACT MAGNETIC CONTACTOR
	"B" CONTACT LIMIT SWITCH		"B" CONTACT TOGGLE SWITCH		SCREW TERMINAL IN CP/CARTOP
	"A" CONTACT CAM SWITCH		OCR		2P NFB(NO FUSE BREAKER)
	"A" CONTACT CAM SWITCH		MOTOR THERMAL SWITCH		1P NFB(NO FUSE BREAKER)
	HATCH DOOR INTERLOCK		LAMP		GONGELECTRIC BUZZER
	BLOWER MOTOR FAN MOTOR IN CAGE		UP,DOWN DIRECTION LAMP		BUZZER
	"A" CONTACT PUSH BUTTON		"B" CONTACT PUSH BUTTON		"B" CONTACT THERMAL SWITCH
	EMERGENCY LIGHT		2WAY TOGGLE SWITCH		SOLENOIDE
	BRAKE COIL		EARTH		COIL OFMAGNETIC CONTACTOR
	MOTOR ARMATURE		COIL OF MY-4 TYPE RELAY		LEVELING INDUCTOR

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