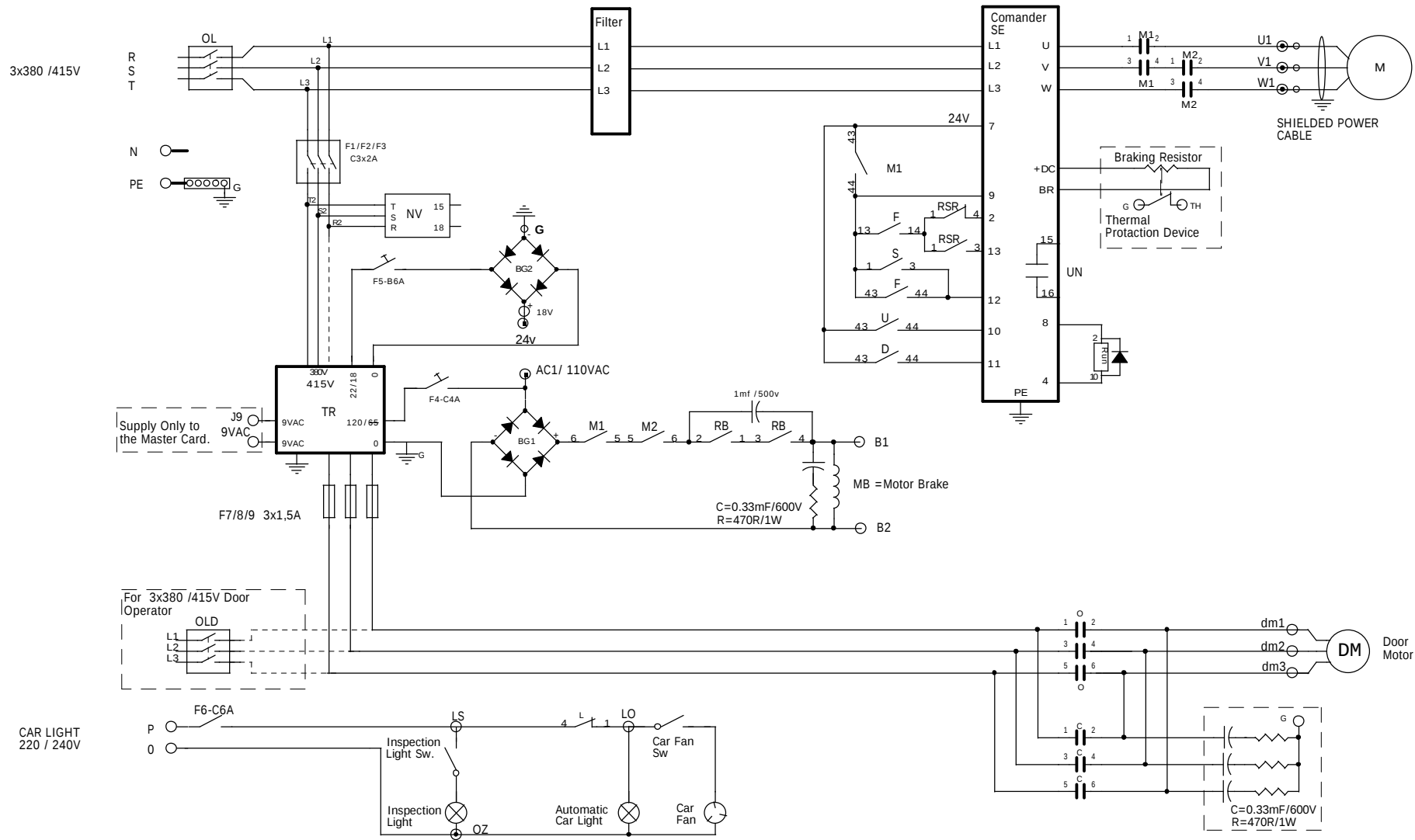


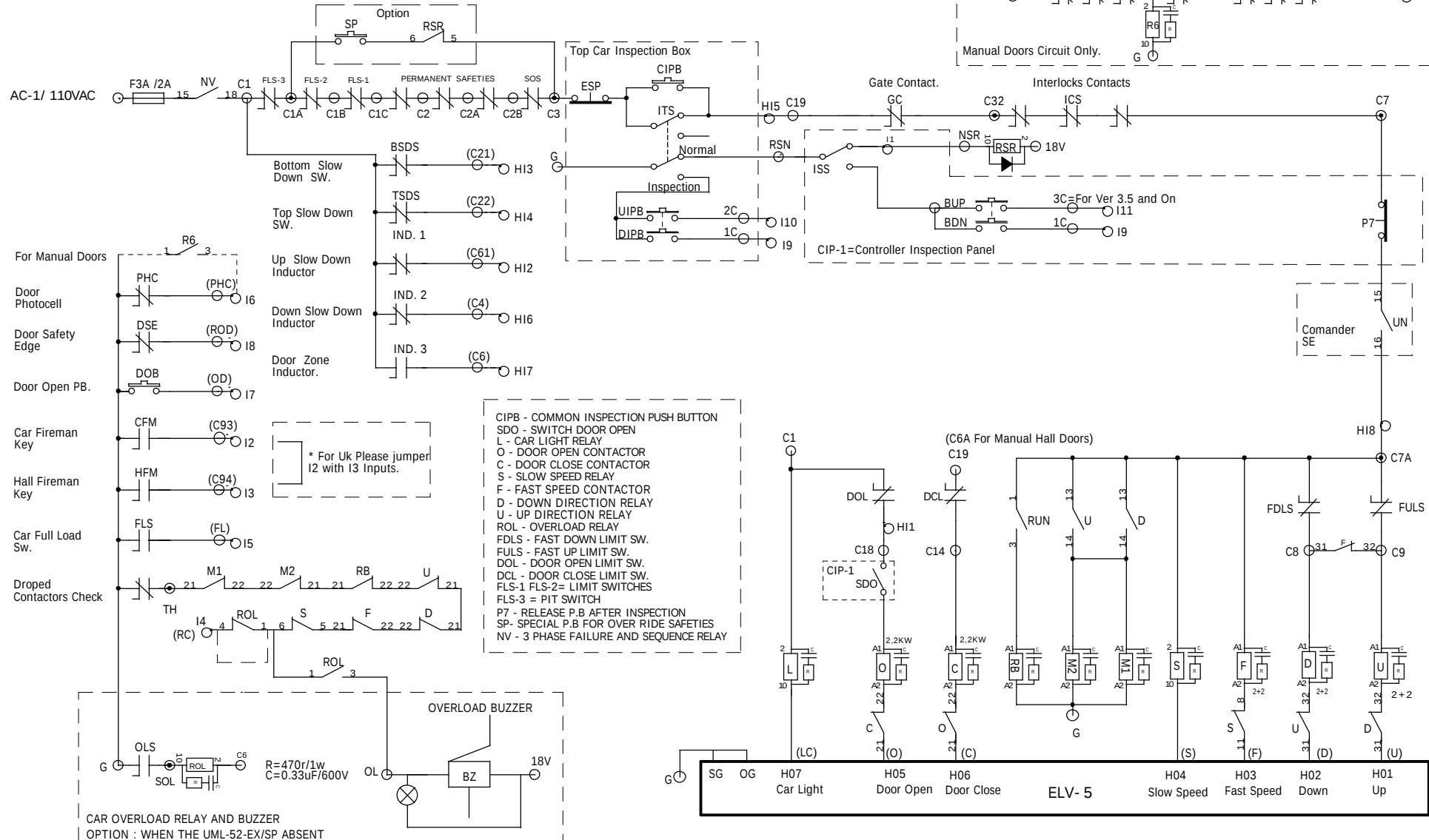


M - Machine Room Motor
M1,M2 - Motor Contactor.
RB - Motor Brake Contactor.
TR - Transformer
MB - Motor Brake
BG1- Motor Brake Bridge.
BG2 - Signalization Bridge.
RSR- Inspection Relay.
Run - Motor Brake Operation Relay
OL - Over Load and Main Switch.
OLD - Door Motor Over Load.
NV - Phase Failure and Sequence Relay.

APP. NAME :	Benci
APP. DATE :	

LEEAV
ELECTRONICS LTD.

Title		
ENG Power Comander Open Loop AC- SAFETY CIRCUIT-UML51r		
Size	Document Number	Rev
A4	ENG-UML-51R_Power Comander SE Open Loop 101006	01
Date:	Tuesday, October 10, 2006	Sheet 1 of 9



CARD TERMINAL- ○

CONTROLLER TERMINAL- ○

APP. NAME : Benci

APP. DATE :



Title

Control Comander SE Open Loop 110ac Safeties UML-51r

Size

A4

Document Number

ENG UML-51R-Control Comander_SE Open Loop 030906

Rev

01

Date:

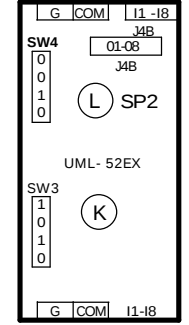
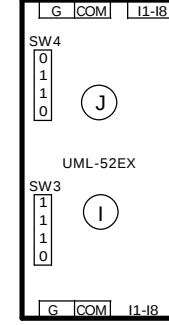
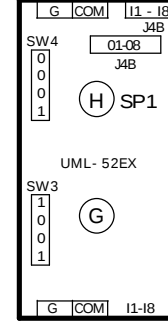
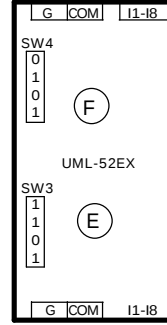
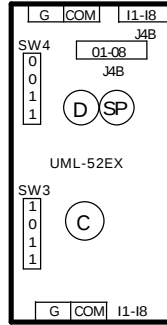
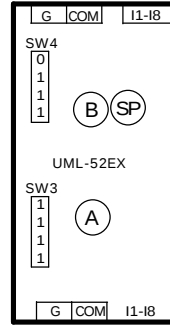
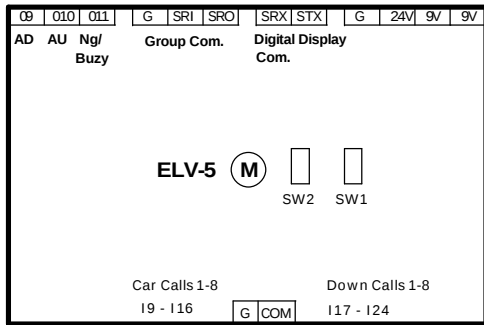
Tuesday, October 10, 2006

Sheet

2

of

9



Car Calls 1-8		ELV-5 (M)							
Floors	I/O	I9	I10	I11	I12	I13	I14	I15	I16
1-8 Floors		1C	2C	3C	4C	5C	6C/CD	7C/LC	8C/BM

Down Calls 1-8 According To the Lobby floor		ELV-5 (M)							
Floors	I/O	I17	I18	I19	I20	I21	I22	I23	I24
7 Lobby Floor		1U	2U	3U	4U	5U	6U	7U	8U
6 Lobby Floor		1U	2U	3U	4U	5U	6U	7U	8D/2D
5 Lobby Floor		1U	2U	3U	4U	5U	6U	7D/3D	8D/2D
4 Lobby Floor		1U	2U	3U	4U	5U	6D/4D-7D/3D	8D/2D	
3 Lobby Floor		1U	2U	3U	4U	5D	6D/4D-7D/3D	8D/2D	
2 Lobby Floor		1U	2U	3U	4D	5D	6D/4U-7D/3D	8D/2D	
1 Lobby Floor		1U	2U	3D	4D	5D	6D/4U-7D/3U	8D/2D	
0 Lobby Floor		1U	2D	3D	4D	5D	6D/4U-7D/3U	8D/2U	

SP-1 Inputs		SP-1 Outputs	
GN - Generator		ZFR - Zero Floor Run	
BM - Lift Cancel		OFR - One Floor Run	
CD - Close Door P.B		RFL - Relay Failure	
CHD - Change Direction		BZ1 - Buzzer 1	
LC - Loading Control		TFR - Two Floor Run	
SOL - Switch Overload		OL - Overload Signal	
RES ERVE		RES ERVE	
RES ERVE		RES ERVE	
AS - Attendant Service			

SP-2 Inputs		SP-2 Outputs	
C18R - Open Limit Sw Rear Door		NGR - Rear Door Nudging	
RODR - Safety Edge Rear Door		OFR - One Floor Run	
PHCR - Photo Cell Rear Door		RFL - Relay Failure	
ODR - Rear Open Door P.B		OR - Open Door Output	
LC - Loading Control		CR - Close Door Output	
SOL - Switch Overload		OL - Overload Signal	
RES ERVE		RES ERVE	
RES ERVE		RES ERVE	

Car Calls (Outputs 17-24 / SP)		SW4 0011 (D)							
Floors	O	O1	O2	O3	O4	O5	O6	O7	O8
17-24 Floors		17I	18I	19I/RPS	20I/BZ	21I/OL	22I/ZFR	23I/OFR	24I/RFL

Car Calls (Inputs 17-24 / SP)		SW4 0011 (D)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
17-24 Floor		17c-18c/GN-19c/PS-20c/SS-21c/SOL-22c/CD-23c/LC-24c/BM							

Hall Calls 17-24		SW3 1011 (C)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
17-24 Floors		17d-18d/8U-19d/7U-20d/6U-21d/5U-22d/4U-23d/3U-24d/2U							

Car Calls (Outputs 9-16/SP)		SW4 0111 (B)							
Floors	O	O1	O2	O3	O4	O5	O6	O7	O8
9-16 Floors		9L	10L	11I/RPS	12I/BZ	13I/OL	14I/ZFR	15I/OFR	16I/RFL

Car Calls (Inputs 9-16/SP)		SW4 0111 (B)							
Floors	I	I1	I2	I3	I4	I5	I6	I7	I8
9-16 Floors		9c 10c/GN 11c/PS 12c/SS 13c/SOL 14c/CD 15c/LC 16c/BM							

Hall Calls 9-16		SW3 1111 (A)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
9-16 Floors		9D-10D/8U-11D/7U-12D/6U-13D/5U-14D/4U-15D/3U-16D/2U							

APP. NAME :
APP. DATE :

Special Port / SP1		SW4 0001 (H)							
Floors	I/O	I/O1	I/O2	I/O3	I/O4	I/O5	I/O6	I/O7	I/O8
INPUTS		GN	BM	CD	CHD	Lc/As	SOL	-	-
OUTPUTS		ZFR	OFR	RFL	BZ1	TFR	OL	-	-

Up Calls 17-24		SW3 1001 (G)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
17-24 Floors		17U	18U	19U	20U	21U	22U	23U	24U

Up Calls 9-16		SW4 0101 (F)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
9-16 Floors		9U	10U	11U	12U	13U	14U	15U	16U

Hall Calls According The Lobby		SW3 1101 (E)							
Floors	I/O	I17	I18	I19	I20	I21	I22	I23	I24
7 Lobby Floor		1U	2D	3D	4D	5D	6D	7D	8D
6 Lobby Floor		1U	2D	3D	4D	5D	6D	7D	8U
5 Lobby Floor		1U	2D	3D	4D	5D	6D	7U	8U
4 Lobby Floor		1U	2D	3D	4D	5D	6U	7U	8U
3 Lobby Floor		1U	2D	3D	4D	5U	6U	7U	8U
2 Lobby Floor		1U	2D	3D	4U	5U	6U	7U	8U
1 Lobby Floor		1U	2D	3U	4U	5U	6U	7U	8U
0 Lobby Floor		1U	2U	3U	4U	5U	6U	7U	8U

Special Port / SP2		SW4 0010 (L)							
Floors	I/O	I/O1	I/O2	I/O3	I/O4	I/O5	I/O6	I/O7	I/O8
INPUTS		C18R	RODR	PHCR	ODR	Lc/As	SOL	-	-
OUTPUTS		NGR	OFR	RFL	OR	CR	OL	-	-

Rear Car Calls 1CR-8CR		SW3 1010 (K)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
1-8 Floors		1CR	2CR	3CR	4CR	5CR	6CR	7CR	8CR

Rear Hall Calls 1UR-8DR		SW4 0110 (J)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
1-8 Floors		1ur	2dr/8ur-3dr/7ur-4dr/6ur-5dr/5ur-6dr/4ur-7dr/3ur-8dr/2ur						

Rear Hall Calls 1UR-8UR		SW3 1110 (I)							
Floors	I/O	I1	I2	I3	I4	I5	I6	I7	I8
1-8 Floors		1ur	2ur	3ur	4ur	5ur	6ur	7ur	8ur



Title	ENG-INPUT / OUTPUT MAP FOR UML-51 (Ver. 2.04 AND ON)		
Size	Document Number	Rev	
A4	ENG-INPUT / OUTPUT MAP UML-51R 310806	02	
Date:	Tuesday, October 10, 2006	Sheet	4 of 9

ELV-5 / SW-2

0=OFF 1=ON

ELV-5 / SW1

Inductor Magnets & Shaft Switches

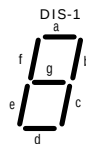
DIP No.	1	2	3	4	5	6	7	8
FLOOR No.								
0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0
4	0	0	1	0	0	0	0	0
5	1	0	1	0	0	0	0	0
6	0	1	1	0	0	0	0	0
7	1	1	1	0	0	0	0	0
8	0	0	0	1	0	0	0	0
9	1	0	0	1	0	0	0	0
10	0	1	0	1	0	0	0	0
11	1	1	0	1	0	0	0	0
12	0	0	1	1	0	0	0	0
13	1	0	1	1	0	0	0	0
14	0	1	1	1	0	0	0	0
15	1	1	1	1	0	0	0	0
16	0	0	0	0	1	0	0	0
17	1	0	0	0	1	0	0	0
18	0	1	0	0	1	0	0	0
19	1	1	0	0	1	0	0	0
20	0	0	1	0	1	0	0	0
21	1	0	1	0	1	0	0	0
22	0	1	1	0	1	0	0	0
23	1	1	1	0	1	0	0	0
24	0	0	0	1	1	0	0	0
25	1	0	0	1	1	0	0	0
26	0	1	0	1	1	0	0	0
27	1	1	0	1	1	0	0	0
28	0	0	1	1	1	0	0	0
29	1	0	1	1	1	0	0	0
30	0	1	1	1	1	0	0	0
31	1	1	1	1	1	0	0	0

AC-2 SPEED DRIVE SYSTEM	0	0
VVVF DRIVE SYSTEM	1	0
HYDRAULIC DRIVE SYSTEM	0	1
RESERVE	1	1

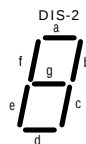
SW/6 Should Be In On=1 Position For FDS Digital Displays.

FAILURES EXPLANATION

a/1 - INTERLOCKS BRIDGED INDICATION AFTER INSPECTION
b/1 - TRAVELING TIMER OR OBSTRUCTION TIMER
c/1 - DOOR INTERLOCK FAILURE
d/1 - CAR FIREMAN MODE TAKEN OUT NOT AT THE MAIN HALL FIREFIGHTER KEY
e/1 - ONE OR MORE OF THE MAIN CONTACTORS DOESN'T RELEASE.
f/1 - DOOR OPEN LIMIT SWITCH DIDN'T OPENED
g/1 - HALL PUSH BUTTON STACKED
dp - LIGHTING CONTINUOUSLY = POWER ON
dp - WHEN FLASHING = PERMANENT SAFETIES OPENED



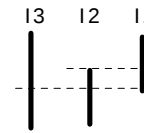
a/2 - INDUCTORS I1 or I2 STOPPED FUNCTIONING
b/2 - PHOTO ELECTRIC EYE STOPPED ACTING
c/2 - DIESEL GENERATOR TERMINATION
d/2 - 60 sec. CAR DELAYED ON FLOOR
e/2 - SLOW SPEED TRAVELING TIMER
f/2 - INDUCTOR i3 DID NOT CHANGED AFTER START
g/2 - THE LIFT DOESN'T STOPPED IN DOOR ZONE
dp - LIGHTING CONTINUOUSLY = POWER ON
dp - WHEN FLASHING = GROUP COMMUNICATION FAILURE



0=OFF			1=ON	
1) MANUAL HALL DOORS			FULL AUTOMATIC DOORS	
2) PARKING WITH OPEN DOOR (NOT LOBBY)			PARKING WITH CLOSE DOOR	
3) SLOW SPEED INSPECTION DRIVE			FAST SPEED INSPECTION DRIVE	
4) WITHOUT RE LEVELING			RE LEVELING FOR HYDRAULIC AND VF	
5) WITHOUT PRE OPENING			PRE-OPENING (VVVF CLOSE LOOP ONLY)	
6	7	8	The Number Of Lift For Group Communication	
0	0	0	SIMPLEX (WITHOUT GROUP)	
1	0	0	LIFT No 1	
0	1	0	LIFT No 2	
1	1	0	LIFT No 3	
0	0	1	LIFT No 4	
1	0	1	LIFT No 5	
0	1	1	LIFT No 6	
1	1	1	LIFT No 7	

FINAL LIMIT SW.

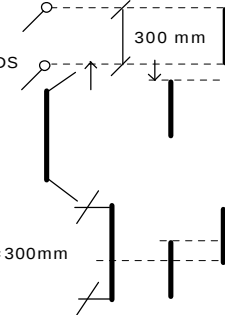
FSL1



FULS

Up Identification & Slow Down SW.

(H14) TSDS



I3 = DZ = 300mm

Landing

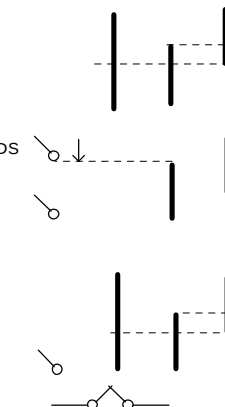
Down Dirrection
Slow Down Point.

Up Dirrection
Slow Down Point.

Bottom Identification & Slow Down SW.

(H13) BSDS

FDLS

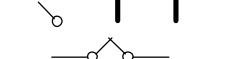


FINAL LIMIT SW.

FLS2

FLS3 - PIT. SWITCH

FLS3

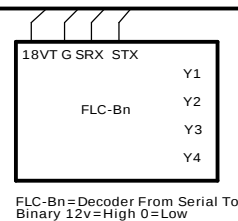
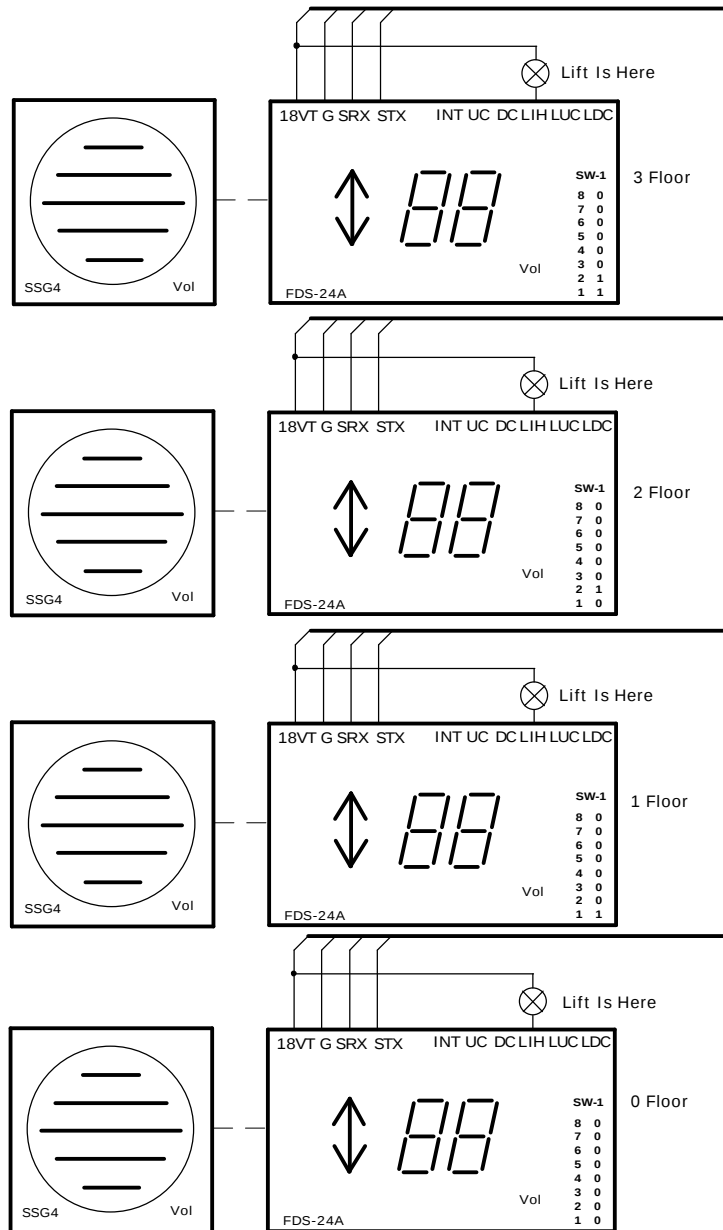


Size Of i1 & i2 Flags = Speed/ 6 Minimum = 100 mm

APP. NAME :	Benci
APP. DATE :	

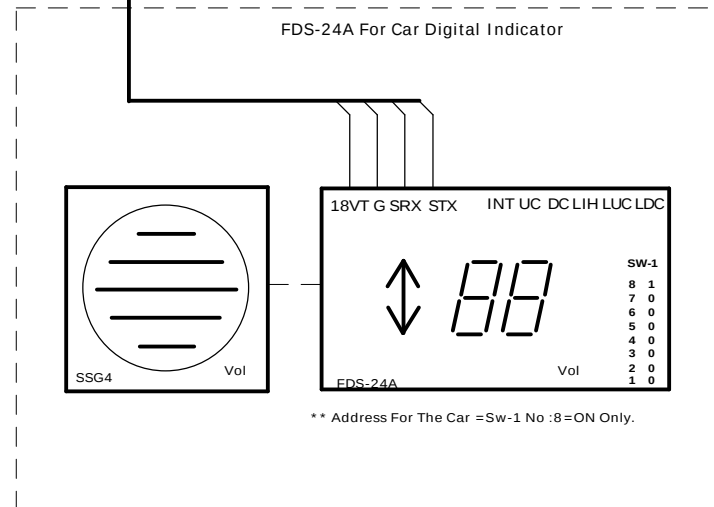
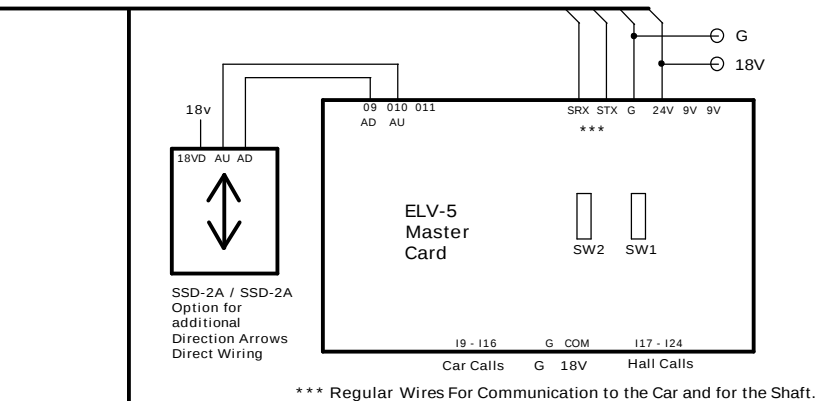


Title		
Size	Document Number	Rev
A4	ENG_UML-51r_SHAFT FLAGS,DIP SW.,FAILURES 240806	02
Date:	Tuesday, October 10, 2006	Sheet 5 of 9



SW-1/ FLOOR ADDRESS 1=ON 0=OFF								
DIP No.	1	2	3	4	5	6	7	8
FLOOR No.	1	2	3	4	5	6	7	8
0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0
4	0	0	1	0	0	0	0	0
5	1	0	1	0	0	0	0	0
6	0	1	1	0	0	0	0	0
7	1	1	1	0	0	0	0	0
8	0	0	0	1	0	0	0	0
9	1	0	0	1	0	0	0	0
10	0	1	0	1	0	0	0	0
11	1	1	0	1	0	0	0	0
12	0	0	0	1	1	0	0	0
13	1	0	1	1	0	0	0	0
14	0	1	1	1	0	0	0	0
15	1	1	1	1	0	0	0	0
16	0	0	0	0	1	0	0	0
17	1	0	0	0	1	0	0	0
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19	1	1	0	0	1	0	0	0
20	0	0	1	0	1	0	0	0
21	1	0	1	0	1	0	0	0
22	0	1	1	0	1	0	0	0
23	1	1	1	0	1	0	0	0
24	0	0	0	1	1	0	0	0
25	1	0	0	1	1	0	0	0
26	0	1	0	1	1	0	0	0
27	1	1	0	1	1	0	0	0
28	0	0	0	1	1	1	0	0
29	1	0	1	1	1	1	0	0
30	0	1	1	1	1	1	0	0
31	1	1	1	1	1	1	0	0

* SW-1/7 = ON Only for Rear Side Floor Indicators ,Gongs and Lanterns.



Each FDS Haze Car Calls Acceptance Buzzer including Volume Adjustment.
SSG4 = Two Sound Serial Floor Gong including Volume Adjustment.

APP. NAME :	Benci
APP. DATE :	



Title		
Shaft and Car Position Indicators For UML-51r		
Size	Document Number	Rev
A4	ENG Digital FDS Displays and Signalization UML-51r 020906	02
Date:	Tuesday, October 10, 2006	Sheet 6 of 9

