

1. Port illumination

1.1. The interface definition and specification of SM-01-DP/C

Socket	Terminal	Name	Definition		I/Otype	Remark
JP1	JP1.1	X0	Inspection signals. OFF for inspection, ON for normal		Input	Default
	JP1.2	X1	Up signal, inch-up byinspection and up direction switch by attendant		Input	Default
	JP1.3	X2	Down signal, inch-up byinspection and up direction switch by attendant		Input	Default
	JP1.4	X3	Up double floor terminal deceleration switch, >1.5m/	For inverter in digital	Input	NC
			Up deceleration dry-reed	For double speed, hydraulic and VVVF double speed		
	JP1.5	X4	Down double floor terminal deceleration switch, >1.5m/	For inverter in digital	Input	NC
			Down deceleration dry-reed	For double speed, hydraulic and VVVF double speed		
	JP1.6	X5	Up limit switch		Input	NC
	JP1.7	X6	Down limit switch		Input	NC
	JP1.8	X7	Up terminal deceleration switch		Input	NC
JP1.9	X8	Down terminal deceleration switch		Input	NC	
JP1.10	X9	Up leveling switch		Input	NO	
JP2	JP2.1	X10	Down leveling switch		Input	NO
	JP2.2	X11	Inverter err.signal detection	For VVVF	Input	NO
			Low speed contactor detection	For double speed		
			Temperature detection	For hydraulic		
	JP2.3	X12	Fire return switch		Input	NO
	JP2.4	X13	Light load switch		Input	NO
	JP2.5	X14	Independence switch		Input	NO
	JP2.6	X15	Inverter line-in contactor detection	For VVVF	Input	NO
Up direction contactor detection			For double speed and hydraulic			
JP2.7	X16	Inverter line-out contactor detection	For VVVF	Input	NO	
		Down direction contactor detection	For double speed and hydraulic			
JP2.8	X17	Brake switch detection		Input	NO	

			High speed contactor detection	For double speed		
			Triangle contactor detection	For hydraulic		
	JP2.9	X18	Door zone switch signal input		Input	NO
	JP2.10	X19	Inverter running signal detection	For VVVF	Input	NO
			High speed switch contactor 1A detection	For double speed		
			Down direction contactor 1 detection	For double speed		
JP3	JP3.1	X20	Relays for re-leveling with door open or pre-opening detection		Input	NO
	JP3.2	X21	Fireman switch		Input	NO
	JP3.3	X22	Brake switch detection		Input	NO
	JP3.4	X23	Motor temperature testing signal input		Input	NO
	JP3.5	X24	Lock switch		Input	NO
JP4	JP4.1	TX0	Front door-open limit switch		Input	NC
	JP4.2	TX1	Front door-close limit switch		Input	NC
	JP4.3	TX2	Front safety edge switch		Input	NC
	JP4.4	TX3	Over-load		Input	NC
	JP4.5	TX4	Full-load		Input	NO
	JP4.6	TX5	Delay switch for 3 minutes		Input	NO
	JP4.7	TX6	Attendant switch		Input	NO
	JP4.8	TX7	Front or rear door-open selection switch		Input	NO
	JP4.9	TX8	Attendant by-pass button		Input	NO
	JP4.10	TX9	Front door light curtain		Input	NO
JP5	JP5.1	TX10	Rear door light curtain		Input	NO
	JP5.2	TX11	Rear door-open limit switch		Input	NC
	JP5.3	TX12	Rear door-close limit switch		Input	NC
	JP5.4	TX13	Rear safety edge switch		Input	NC
	JP5.5		COMMON of input			
	JP5.6		Negative pole of isolating circuit power supply, 0V			
	JP5.7		Positive pole of isolating circuit power supply, 24V			
JP6	JP6.1		1 floor commend input		Input	NO
	JP6.2		1 floor up call input		Input	NO
	JP6.3		2 floor commend input		Input	NO
	JP6.4		2 floor down call input		Input	NO
	JP6.5		2 floor up call input		Input	NO
	JP6.6		3 floor commend input		Input	NO
	JP6.7		3 floor down call input		Input	NO
	JP6.8		3 floor up call input		Input	NO

	JP6.9		4 floor commend input	Input	NO
	JP6.10		4 floor down call input	Input	NO
JP7	JP7.1		4 floor up call input	Input	NO
	JP7.2		5 floor commend input	Input	NO
	JP7.2		5 floor down call input	Input	NO
	JP7.3		Door open button input	Input	NO
	JP7.4		Door close button input	Input	NO
JP8	JP8.1		0V of input X26-X29 or zero line of 110ACV		
	JP8.2	X26	Safety loop voltage checking, input volatage 110V(AC/DC)		
	JP8.3	X27	Door lock loop voltage checking, input voltage 110V(AC/DC)		
	JP8.4	X28	Landing door lock loop voltage checking, input voltage 110V(AC/DC)		
	JP8.5	X29	Spare		
	JP8.6		0V of input X26-X29 or zero line of 110ACV		
JP9	JP9.1	Y0	Brake contactor output	For VVVF	Output
			Up direction contactor output	For double speed	
			High speed up direction	For Beringer hydraulic	
			Up direction	For GMV hydraulic	
	JP9.2	Y1	Brake forced energized contactor output	For VVVF	Output
			Down direction contactor	For double speed	
			Slow speed up direction	For Beringer hydraulic	
			Down direction	For GMV hydraulic	
	JP9.3	Y2	Inverter line-in contactor output	For VVVF	Output
			High speed contactor	For double speed	
			High speed down direction	For Beringer hydraulic	
			High speed	For GMV hydraulic	
	JP9.4	Y3	Inverter line-out contactor output	For VVVF	Output
			Low speed contactor	For double speed	
			Low speed down direction	For Beringer hydraulic	
			Spare	For GMV hydraulic	
JP9.5		The common of relay Y0, Y1, Y2, Y3			
JP10	JP10.1	Y4	Front door-open relay output	Output	
	JP10.2	Y5	Front door-close relay output	Output	
	JP10.3		The common of relay Y4, Y5		

	JP10.4	Y6	Rear door-open relay output		Output	
	JP10.5	Y7	Rear door-close relay output		Output	
	JP10.6		the common of relay Y6,Y7			
	JP10.7	Y8	Relays for re-leveling with door open or pre-opening relay output		Output	
	JP10.8		The common of relay Y8			
JP11	JP11.1	Y9	Fire signal output		Output	
	JP11.2		The common of relay Y9			
	JP11.3	Y10	Inverter up running direction	For VVVF	Output	
			High speed switch contactor 1A	For double speed		
			Up direction power supply contactor	For hydraulic		
	JP11.4	Y11	Inverter down running direction	For VVVF	Output	
			Low speed switch contactor 2A	For double speed		
			Star type starting contactor	For hydraulic		
	JP11.5	Y12	Inverter running enable output	For VVVF	Output	
			Low speed switch contactor 3A	For double speed		
			Triangle starting contactor	For hydraulic		
	JP11.6	Y13	Inverter multi-speed terminal 1	For VVVF	Output	
			Low speed switch contactor 4A	For double speed		
			Down direction contactor	For hydraulic		
	JP11.7	Y14	Inverter multi-speed terminal 2	For VVVF	Output	
Spare			For double speed			
Down direction contactor 1			For hydraulic			
JP11.8		The common of output relay Y10-Y14				
JP11.9	Y15	Inverter multi-speed terminal 3	For VVVF	Output		
		Spare	For double speed			
		Inspection running	For hydraulic			
JP11.10		The common of output relay Y15				
JP12	JP12.1	TY0	Arrival gong relay output		Output	
	JP12.2	TY1	Car illumination relay output		Output	
	JP12.3		The common of relay TY0, TY1			
	JP12.4	TY2	Overload output		Output	
	JP12.5	TY3	Buzzer output		Output	
	JP12.6	TY4	Full load indicator output		Output	
	JP12.7	TY5	7 segment negative floor display output		Output	
	JP12.8		The common of relay TY2-TY5			
	JP12.9	TY6	Up direction running indicator		Output	
	JP12.10	TY7	Down direction running indicator		Output	
Floor display output		7 segment	Gray code	BCD or binary code		
JP13	JP13.1	TY8	a	Low bit g0	Low bit b0	Output

	JP13.2	TY9	b	g1	b1	Output		
	JP13.3	TY10	c	g2	b2	Output		
	JP13.4	TY11	d	g3	b3	Output		
	JP13.5	TY12	e	g4	b4	Output		
	JP13.6	TY13	f			Output		
	JP13.7	TY14	g			Output		
	JP13.8	TY15	High bit h1			Output		
	JP13.9		The common of relay TY6-TY15					
	JP14	JP14.1		1 floor commend indicator output			Output	
JP14.2			1 floor up call indicator output			Output		
JP14.3			2 floor commend indicator output			Output		
JP14.4			2 floor down call indicator output			Output		
JP14.5			2 floor up call indicator output			Output		
JP14.6			3 floor commend indicator output			Output		
JP14.7			3 floor down call indicator output			Output		
JP14.8			3 floor up call indicator output			Output		
JP14.9			4 floor commend indicator output			Output		
JP14.10			4 floor down call indicator output			Output		
JP15	JP15.1		4 floor up call indicator output			Output		
	JP15.2		5 floor commend indicator output			Output		
	JP15.3		5 floor down call indicator output			Output		
	JP15.4		Door open button indicator output (F118=0) or HOLD button indicator output (F118≠0)			Output		
	JP15.5		Door close button indicator output			Output		
	JP15.6		The common of relay JP14.1-JP15.5			Output		
JP16	JP16.1		0V power supply of main controller					
	JP16.2		+24V power supply of main controller					
JP17	JP17.1		Analog signal 0V					
	JP17.2		Analog loading compensation signal,output to torque compensation terminal of governor,0-10V signal					
	JP17.3		Differential encoder B-					
	JP17.4		Differential encoder B+					
	JP17.5		Differential encoder A-					
	JP17.6		Differential encoder A+					
	JP17.7		+24V output of power supply, for encoder					
	JP17.8		0V power supply					
	JP17.9		A phase of encoder, for receiving output signal of collector open and pull-push, accepting frequency from 0 to 50KHz					
	JP17.10		B phase of encoder, for receiving output signal of collector open and pull-push, accepting frequency from 0 to 50KHz					

JP18	JP18.1	Stand by, +24Voutput		
	JP18.2	The negative power supply of duplex serial communication, TXV2-		
	JP18.3	The signal terminal of duplex serial communication, TXA2+		
	JP18.4	The signal terminal of duplex serial communication, TXA2-		
JP19	JP19.1	X		
	JP19.2	GND		
	JP19.3	RS485-A		
	JP19.4	RS485-B		
DB1	DB1.1	DCD		
	DB1.2	RXD		
	DB1.3	TXD		
	DB1.4	DTR		
	DB1.5	SGND		
	DB1.6	X		
	DB1.7	X		
	DB1.8	X		
	DB1.9	+5Voutput (enable when J2 port are jumped)		
SW2	Working status selection of main board, both SW1-1and SW1-2 are ON for recording the program, OFF for normal.			
SW4	RS485communication terminal resistor line-lin selection, both SW4-1and SW4-2are On for line in the resistor for communication			
SW3	5V power supply for handset, when SW3 is ON, 9 pin of DB1 has DC 5V voltage.			
	Notice: Forbidden set SW3 to ON, without using handset.			

1.2. The interface definition and specification SM-10-I0/C

Socket	Terminal	Definition	
		First pc of SM-10-I0/C	Second pc of SM-10-I0/C
J3	J3.1	5 floor up call button input	10 floor up call button input
	J3.2	6 floor commend button input	11 floor commend button input
	J3.3	6 floor down call button input	11 floor down call button input
	J3.4	6 floor up call button input	11 floor up call button input
	J3.5	7 floor commend button input	12 floor commend button input
	J3.6	7 floor down call button input	12 floor down call button input
	J3.7	7 floor up call button input	12 floor up call button input
	J3.8	8 floor commend button input	13 floor commend button input
	J3.9	8 floor down call button input	13 floor down call button input
	J3.10	8 floor up call button input	13 floor up call button input
J4	J4.1	9 floor commend button input	14 floor commend button input
	J4.2	9 floor down call button input	14 floor down call button input
	J4.3	9 floor up call button input	14 floor up call button input
	J4.4	10 floor commend button input	15 floor commend button input
	J4.5	10 floor down call button input	15 floor down call button input
J5	J5.1	5 floor up call button input	10 floor up call button input
	J5.2	6 floor commend button input	11 floor commend button input
	J5.3	6 floor down call button input	11 floor down call button input
	J5.4	6 floor up call button input	11 floor up call button input
	J5.5	7 floor commend button input	12 floor commend button input
	J5.6	The common of relay J5 and J6	
J6	J6.1	7 floor down call button input	12 floor down call button input
	J6.2	7 floor up call button input	12 floor up call button input
	J6.3	8 floor commend button input	13 floor commend button input
	J6.4	8 floor down call button input	13 floor down call button input
	J6.5	8 floor up call button input	13 floor up call button input
	J6.6	9 floor commend button input	14 floor commend button input
	J6.7	9 floor down call button input	14 floor down call button input
	J6.8	9 floor up call button input	14 floor up call button input
	J6.9	10 floor commend button input	15 floor commend button input
	J6.10	10 floor down call button input	15 floor down call button input

2. The parameters instruction of SM-01-DP/C

Number	Meanings	Range	Default	Unit	Remarks
F00-F01	Spare				
F02	Double speed lift 1A close delay time	0~200	75	20ms	Enable double speed
F03	Double speed lift 2A close delay time	0~200	40	20ms	
F04	Double speed lift 3A close delay time	0~100	25	20ms	
F05	Double speed lift 4A close delay time	0~100	15	20ms	
F06	Lift rated speed	200~6000	100	cm/s	Enable VVVF
F07	Motor speed	50~3000	1450	rpm	
F08	Encoder pulses	150~20000	1024	pr	
F09	Lift lock and return base floor	1~15	1		
F10	Floor offset	0~10	0		
F11	Total number of floor	2~15	5		
F12	Arrival gong delay time	0~150	20	0.1s	
F13	XPM mode	0~1	0		
F14	Door-open holding time for Hall-call	10~1800	40	0.1s	
F15	Door-open holding time for Car-call	10~1800	25	0.1s	
F16	Brake open delay time or KM3 delay close time in hydraulic lift	0~250	15	0.02s	
F17	Brake close delay time or KM3 delay open time in hydraulic lift	0~250	15	0.02s	
F18	Fire home	1~15	1		
F19	Type of inverter line-in contactor	0~2	0		Enable VVVF
F20	Returning home delay time	0~300	0	0.1s	
F21	Leveling switch action delay time	0~500	2	1ms	
F22	Duplex homestation	0~15	0		
F23	Duplex mode/group control mode	0~2	0		
F24	Drive mode	0~6	0		
F25	X0-X15 input set	0~65535	15		
F26	X16-X31 input set	0~65535	0		
F27	TX0-TX15 input set	0~65535	14351		
F28	TX16-TX31 input set	0~65535	0		
F29	1-16 floor stopping set	0~65535	65535		
F30-F31	Spare				
F32	Type of inverter in digital	0~4	1		Enable VVVF
F33	Spare		0		
F34	Spare		0		

F35	X13 and X14 definition selection	0/1	0	0	
F36	Brake switch contact point detection time	0~200	0	20ms	
F37-F41	Spare				
F42	Spare				
F43	Buzzer and flashing mode in attendant	0~3	0		
F44	RS485 local address in serial communication	0~255	255		
F45	Single floor deceleration distance	40~250	130	1cm	Enable VVVF
F46	Double floor deceleration distance	150~450 (more than 1.5m/s)	290	1cm	Enable VVVF
F47	Triple floor deceleration distance	250~650 (more than 2.0m/s)	400	1cm	Enable VVVF
F48	Digital drive:stop delay time in re-leveling running	0~100	15	0.02s	Enable VVVF
F49	Automatic back to homestation function	0/1	0		
F50	1-15floor front door open set(as per the true floor)	0~65535	65535		
F51-F52	Spare				
F53	1-15floor rear door open set(as per the true floor)	0~65535	0		
F54-F55	Spare				
F56	Leveling adjustment up (50 for baseline)	0~100	50	1mm	Enable VVVF
F57	Leveling adjustment down (50 for baseline)	0~100	50	1mm	Enable VVVF
F58	Delay time from inner start instruction to giving of speed curve	0~250	15	0.02s	Enable VVVF
F59	Front or rear door selection switch	0~65535	0		
F60	Spare				
F61	Floor display mode	0~3	0		
F62	Anti-slippage running time	1000~2250	2250	0.02s	
F63	Forced multi-step speed set	0~3	0		
F64	Inch operate door in inspection	0/1	0		
F65-F112	Floor display code				
F113	Spare				
F114	Reset command	0/11/22/33/4 4	0		
F115	During the set time the door is not completely closed, the door should be	30~300	80	0.1s	

F116	During the set time the door is not completely opened, the door should be	30~300	80	0.1s	
F117	Holding time or force closing time	100~6000	600	0.1s	
F118	Holding time in handicapped function	40~300	100	0.1s	
F119	Offset floor	0~10	0		
F120	Number of registrations anti-nuisance	0~10	5		
F121	Force close door	0/1	0		
F122	Delay time of stopping cancellation	0~250	15	0.02s	
F123-	Spare				
F124	VIP floor	1~15	1		
F125	Distance for two levelling switch	5~50	20	1cm	
F126	Short floor deceleration distance	0~50	20	1cm	
F127	Levelling plate length	7~60	23	1cm	
F128	Open/close door mode	0~4	0		
F129	Open door in advance and open	0~3	0		
F130	Door zone switch mode	0~3	0		
F131-F133	Spare				
F134	1-16 true floor vector	0~65535	65535		
F135	KMC delay time after lift lock resume			0.02s	Enable VVVF
F136	Spare				
F137	NS-SW function floor setting	0~65535	65535		
F138-F139	Spare				
F140-F144	ID number(Spare now)				
F145-F151	Telephone number(Spare now)				
F152	Delay time of automatically closing fan and illumination	0~65535	180	1s	

3. The instruction of parameters

F02—double speed lift 1A delay time It is delay time from high speed contactor to high speed switch contactor 1A energized. The reference value is 75, range is 0~200, unit:20ms.

F03—double speed lift 2A delay time It is delay time from low speed contactor to low speed switch contactor 2A energized. The reference is 40, range is 0~200, unit:20ms.

F04—double speed lift 3A delay time It is the delay time from low speed switch contactor 2A to contactor 3A energized. The reference is 15, range is 0~200,

unit :20ms.

F05—double speed lift 4A delay time It is the delay time from low speed switch contactor 3A to contactor 4A energized. The reference is 30, range is 0~200, unit :0.01ms.

***THE ABOVE FOR PARAMETERS ARE VALID FOR DOUBLE SPEED CONTROL MODE, JUST F24=2.**

F06—lift rated speed

F07—motor rated speed

F08—encoder pulse

***THE ABOVE THREE PARAMETERS ARE VALID FOR VVVF IN DIGITAL MODE, JUST F24=0.**

F06, F07 and F08 are important, which should be set as per the nameplate of lift, motor and encoder equipment. Otherwise, the lift can not run normally.

F09—lift lock and return home floor

F10—floor offset Difference in floor number refers to the number of underground floors in duplex and group lift.

F11—no. of floor The total floors should be the same as the actual quantities of leveling plate.

F12—arrival gong delay time It is the delay time from lift arrive deceleration point to deceleration starting.

F13—XPM mode 0: KJX mode; 1: XPM mode.

F14—Door-open holding time for Hall-call When the lift is responding to the hall call and stop, the door will keep opening during F14 set time. And door closes when this time elapses. Valid ONLY withou attendant.

F15—Door-open holding time for Car-call When the lift is responding to the car call and stop, the door will keep opening during F15 set time. And door closes when this time elapses. Valid ONLY withou attendant.

F16 — — Brake open delay time or KM3 delay close time for hydraulic lift
When the lift starts, it is the delay time from giving running enable and direction to brake contactor opening. **For hydraulic lift, it is the delay time of triangle switch contactorKM3 energized.** The default is 15, unit:0.02s.

F17 — — Brake close delay time or KM3 delay open time for hydraulic lift
When the lift stops, it is the delay time from giving inner stopping instruction to brake contactor closing. **For hydraulic lift, it is the delay time of triangle switch contactorKM3 opened.** The default is 15, unit:0.02s.

- F18—Fire home** When the fire switch acts, the lift will return to set floor automatically.
- F19— Type of inverter line-in contactor** Enable at VVVF.
- 0: line-in contactor is preposition and will break when safety circuit is broken
- 1: line-in contactor is postposition and won' t break when safety circuit is broken
- 2: There are two line-out contactors
- F20—Returning home delay time** When F49=1, back to home floor is availd. If F20 is set more than 0, and lift finishes registered instruction , after time which is set by F20 and without any hall call and car call, the lift will automatically return to the home floor, which is set by F9. The lift will not do, if F2 is set 0.
- F21—Leveling switch action delay time** The default vaule is 6ms. (for optical switch) F21 is to compensate the delay time of leveling switch action, to keep the lift leveling comfortablely and accurately.
- F22—Duplex homing floor** When the lift connects as duplex, set both lifts' F9 to the same value. When F49=1, either lift has responded all hall call and car calls and there is no lift at homing floor. The lift will go to the duplx homing floor, which is set by F9. If there is lift at homing floor, the lift will stop at the floor, which finished last instruction.
- F23—duplex mode** With duplex lift, 0 for master lift and 1 for slave lift; with single lift, 0 for the lift.
- F24—speed instruction mode** 0:inverter drive mode mode; 1: invalid mode; 2 double speed drive mode; 3 Berlinger hydraulic drive mode; 4: GMV hydraulic drive mode; 6: VF digital mode, slow-down switch is valide.
- F25—X0-X15 input set** It is a 16-bits figure, the lowest bit for X0 while the hight for X15. If the switch is normally open, pls set to 0; whereas 1 for normally closed.
- F26—X16-X31 input set** It is a 16-bits figure, the lowest bit for X16 while the hight for X31. If the switch is normally open, pls set to 0; whereas 1 for normally closed.
- F27—TX0-TX15 input set** It is a 16-bits figure, the lowest bit for TX0 while the hight for TX15. If the switch is normally open, pls set to 0; whereas 1 for normally

closed.

F28—TX16-TX31 input set It is a 16-bits figure, the lowest bit for TX16 while the highest for TX31. If the switch is normally open, pls set to 0; whereas 1 for normally closed.

Calculations by the power of 2:

2 ¹⁵	2 ¹⁴	2 ¹³	2 ¹²	2 ¹¹	2 ¹⁰	2 ⁹	2 ⁸	2 ⁷	2 ⁶	2 ⁵	2 ⁴	2 ³	2 ²	2 ¹	2 ⁰
32768	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1

For instance, in Input , X3 for normally closed; X4 for normally closed; X5 for normally closed(up limit switch); X6 for normally closed(down limit switch); X7 for normally closed(up terminal deceleration switch); X8 for normally closed(down terminal deceleration switch), with the other input points from the Main board set normally open. F25 should be set as below:

X 15	X 14	X 13	X 12	X 11	X 10	X 9	X 8	X 7	X 6	X 5	X 4	X 3	X 2	X 1	X 0
0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0

Parameter $F25=2^8+2^7+2^6+2^5+2^4+2^3=504$. The settings of other parameters under Input Type can be dealt with accordingly.

F29—1-16 floor stopping set One of the 16 floors(1-16), which is allocated to a floor by a 16-bit binary for 1. The parameter can be set under the menu of Door Blocking by the hand-operator.

For instance: A lift service eight of the 16 floors(1-16)without basement and two of the floor(2, 5)are NOT to be served, hence the lift allow to stop at all floors except 2Fl. and 5Fl.

16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1

Parameter $F29=2^{15}+2^{14}+2^{13}+2^{12}+2^{11}+2^{10}+2^9+2^8+2^7+2^6+2^5+2^3+2^2+2^0=(2^{16}-1)-2^4-2^1=65517$

The setting of other floors in service follows the same way.

F32—type of inverter in digital

When the inverter runs in digital, pls set the type code into the inverter as below:

0:invalid; 1:iStar, YASKAWA, CT, FUJI; 2: SIMENS; 3:KEB; 4:MICO;

F35—X13 and X14 definition selection when F35=0, X13 is light load and X14 is

independent input, and when F35=1, X13 is safety circuit and X14 is door lock circuit low voltage detection. Default is 0.

F36—Brake switch contact point detection delay time

After the control system gives out a brake control signal, a N/C contact in the switch is ready for the DPC board to detect the present time for testing delay before the brake opens. If there is not a brake switch, pls set F36 to 0.

F43—Buzzer and flashing mode in attendant 0: neither buzzer nor flashing; 1:buzzer but no flashing; 2: flashing but no buzzer; 3 both buzzer and flashing

F44—RS485 local address in serial communication For single lift running or monitoring, the value should be set to 255. If the lifts are under community monitor by Port 485 or remote monitor by Port 232, any one of the lifts in the bank should have a natural numeral smaller than 255. The parameters--F44 of every lift should be set different.

F45—Single floor deceleration distance It is used in digital control. It is the deceleration distance if the lift speed is less than 1m/s. It is the deceleration distance of single floor running, if the lift speed is more than 1.5m/s.

F46—Double floor deceleration distance It is used in digital control. It is the deceleration distance for two or more than two floors, if the lift speed is less than 1.5m/s.

F47—Triple floor deceleration distance It is used in digital control. It is the deceleration distance for three or more than three floors, if the lift speed is more than 2m/s.

★Notice:If the crawl distance is short, pls increase above two parameters. If the crawl distance is long, pls reduce these parameters.

F49—Arrival gong pronunciation distance

It is valid in digital control. It is used to control arrival gong pronunciation time. When the travelling distance is equal or less than arrival gong pronunciation distance, the arrival gong will pronounce.

F50—1-15floor front door open set(as per the true floor)

F53—1-15floor rear door open set(as per the true floor)

F50 is for front door open and F53 is for rear door open. 1 means that door open are allowed. 0 means that door open are forbidden

For instance: A lift has 8 floors, three of the floors(1,5 and 8)opens front

door, and three of the floors(3,7 and 8)opens rear door.

Front door set :

16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1			
								+ 2 ⁷					+ 2 ⁴					+ 2 ⁰

Parameter F50=2⁷+2⁴+2⁰=145, hence F50 is set to 145

Rear door set:

16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	
								+ 2 ⁷ + 2 ⁶								+ 2 ²

Parameter F53=2⁷+2⁶+2²=196, hence F53 is set to 196

F56--- Leveling adjustment up (50 for baseline)

F57--- Leveling adjustment down (50 for baseline)

F58---Delay time from inner start instruction to giving of speed curve

These two parameters are invalid with digital mode. With analogy control, use F56 and F57 in adjusting leveling deviation only when the deviation remains the same value and in the same direction. F56 for lowering over-leveling by reducing the value whereas F57 for raising under-leveling by increasing the value. The range of parameter is 0-100 and 50 by ex-works.

★ Note: Both parameters F56 and F57 feature a compensation adjustment in floor leveling for a range as small as 15 mm. If the deviation exceeds 15mm, it is recommended that the position of leveling switches, plates should be adjusted at first, then use the parameters for fine adjustment. Otherwise the traveling comfort would be affected.

F59---Front and rear door selection switch

0: Front and rear door selection mode, both doors open when it is set OFF.

If it is set ON, only front door open(TX7).

1: Old mode, front and rear door switches are not restricted by TX7

F60---Gonveror line-in contactor detection 0: detection; 1: no detection

F61---floor display mode 0: 7 segment; 1: BCD code; 2: Gray code; 3: binary code

F62---Anti-slippage running time The default value is 45, Unit: second. If the running lift can not receive any leveling signal in 45 seconds, the lift will emergency stop and show Err.25.

F63---Setting the step of multi-speed. The parameter run in digital adopt several

speed:1 standard speed, 1 speed is less than 1 m/s, 2 speed is more than 1.75 m/s. 1: 1 speed 2: 2 speed

F64---- Inch operate door in inspection

0: disable; 1: enable

F65~ F112——floor display code

Indication of floor, the figure or symbols in display of floor. For instance: with a lift serving FIVE floor, man wants to floor indicate: -1, 1, 3, 5, 6, then setting F65=60, F66=1, F67=3, F68=5, F69=6. Meanwhile main board will show the floor display follow the code.

List of Standard display code

Code	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Display	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Code	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Display	15	16	17	18	19	A*	b*	C*	d*	E*	F*	H*	L*	P*	q*
Code	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Display	U*	y*													
Code	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Display						-1	-2	-3	-4	-5	-6	-7	-8	-9	

NOTICE:SYMBOL * IS VALID FOR 7 SEGMENT DISPLAY

F114—reset command set 11 as parameters rest, 22 as err code reset, 33 as runnint times reset, 44 commission running

F115——Setting how long the door can not close fully, then open door reversely. The default value is 8s

F116——Setting how long the door can not open fully, then close door reversely. The default value is 8s

F117——Hold time before force door closing, the door remaine one by the preset time value once the HOLD button is pressed. The default value is 60s.

F118—— Hold time for handicapped function, the door remaine one by the preset time value once the handicapped COP button is pressed. The default value is 10s.

F119—Offset floor. Only enable when lifts connect are in duplex and group control mode

- F120**—Number of registration an- nuisance, when light switch is activated, if the number of registration more than F120 setting value, the system will cancel all registrations since somebody make nuisance.
- F121**—**Force door-closing enable**, setting 1 is enable.
- F122**—**delay time of stopping cancel direction** It is the delay time from brake contactor open to cancellation direction. This parameter is used for adjusting stopping comfortable. Default is 15(0.3s)
- F124**—**VIP floor**. Default is 1st floor.
- F125**—**distance between two levelling switch** If total two floors, this parameter must be set. If more than two floors, the parameter is invalid. It is the distance between two levelling switch. Default is 20cm.
- F126**—**short floor deceleration distance** When the inverter in digital, if the distance between two floor is between 0.3m to 2m, the inverter will run in inspection speed. If the distance is less than 0.3m, the inverter will run in crawl speed.
- F127**—**levelling plate length** If the lift only have two floor, this parameter must be set. Default is 22cm.
- F128**—**Open/Close door mode setting: setting door open/close relay output mode by this parameter when door open/close**
- 0: standard mode, stop the door open/close relay output when door open/close limit
 - 1: Door open holding mode, remain the door open relay output when door open limit, stop the door close relay output when door close limit
 - 2: Door close holding mode, stop the door open relay output when door open limit, remain the door close relay output when door close limit.
 - 3: Door open/close holding mode, remain the door open/close relay output when door open/close limit.
 - 4: In running door close holding mode, stop the door open/close relay output when door open/close limit, remain the door close relay output when lift is running
 - 6/7: Manual door mode. Binary code, when bit4=1, manual door has not door open and close limit mode.
- F129**—**Door open advanced and releveling with door open enable**. Range from 0—3. 0 for nothing; 1 only for door open advance; 2 only for releveling with door

open; 3 for both on. The default value is 0.

F130—Door zone switch mode

0: door zone switch signal as per the leveling switch; 1: front door zone switch independence; 2: rear door zone switch independence; 3: both front and rear door zone switches are independence

F134—1-15actual floor vector

F135—KMC delay time after lift lock resume It is delay time from lift lock resume to KMC contactor energized. Unit 0.02s.

F137—NS-SW function floor setting

F152—Delay time of automatically closing fan and illumination The default value is 180s.

Error Code List

4. 1 Error code list

Error Code	Description	Mark
2	Door locked released during running (Emergency stop)	
5	Door switch error. 1. After door open 3s, door lock can't break; 2. Door open limit and close limit switch act at the same time; 3. Door open limit and door lock switch act at the same time	
6	Door close fault: door close limit does not activate after attempting to close the door in 8 times in Normal	
7	There is no inverter running feedback signal, after 2s the running signal having been sent	Only for VVVF
9	Inverter fault signal	Only for VVVF
13	Terminal switch fault: up and down limit switch or up and down slow-down switch act at the same time.	
15	Floor wrong at the terminal floor: When stop on the door zone, single floor slow down switch active but no park on the terminal floor. or parking on the terminal floor but single floor slow down switch does not active.	Only for VVVF
18	Shaft teach can finish	Only for VVVF
22	It's more than 3 seconds in converse direction running.	Only for VVVF
23	Over-speeding (The feedback speed is over 110% of rated speed, or over 120% of given speed or leveling speed is more than 16m/min)	Only for VVVF
	In leveling state, overspeed detection terminal has input signal.	For hydraulic
24	Lift underspeed excessively (Given speed is more than 0.13m/s or CK_SPDCOD is equals or more than 5, the running speed is less than 4m/min)	Only for VVVF
25	Lift speed lost protection (In normal mode, leveling switches does not act during 20s to 45s.)	
26	Leveling switch or door zone switch are fault	
29	Floor base position shaft teach datum detection fault	Only for VVVF
30	Leveling position and base position has large error or the lift is mis-flooring. When leveling sensors acts 200 times there are 3 times, the rate between leveling position and base position is 100:2. Or calculation position is not the same as actual position.	Only for VVVF
31	Slippage fault	Only for VVVF
32	In running safety circuit switch acts	
35	Brake contactor fault	For VVVF
	KM1 contact point fault, more than 2s, drive signal and point detection signal are not accordant.	For hydraulic
36	Inverter out-line contactor fault	For VVVF
	Slow speed contact point fault	For double speed
	KM2 contact point fault	For hydraulic
37	Door lock relay fault	
38	Brake switch fault	For VVVF or double speed

Error Code	Description	Mark
	KM3 contact point protect	For hydraulic
39	Safety circuit relay fault	
45	Re-leveling relay fault	
50	When landing door and car door lock circuit detection are separated, landing door lock relay protect terminal has input signal.	
51	Down contactor protect	For double speed
	KA1 relay protect	For hydraulic
52	Fast speed contact fault	For double speed
53	Inverter in-line contactor is fault	For VVVF
	IA contact point protect	For double speed
54	Car and landing door lock switch detection are not the same	
55	Up contactor point protection fault	For double speed
	Temperature alarm fault	For hydraulic
57	KMC and KMY out-line install, KMY detection fault.	Only for VVVF
63	Motor over temperature protect	Only for VVVF

27	Up leveling switch fault	Up leveling switch does not active	Check up leveling switch
28	Down leveling switch fault	Down leveling switch does not active	Check down leveling switch
32	Safety circuit switch fault in running	Phase relay is abnormal	Check the phase
		Safety circuit act in running	Check the safety circuit
34	Invert input contact conglutination fault	Invert input contact conglutination	Check invert input contact
35	Contact joint fault	Brake contact damage, can not energize noamally	Replace the Varying frequency drive
		Up contact is block	Replace the Double speed drive
		Up contact is block	Replace the Hydraulic drive
36	Contact joint fault	Invert output contact damage, can not energize noamally	Replace the Varying frequency drive

		Drive slowly contact is block	Replace the contact	Double speed drive
37	Door lock relay joint fault	Door lock relay damage, can not energize normally	Replace the door lock relay	
		Door lock relay is block	Replace the door lock relay	
		Main board input port of door lock circuit high voltage damaged	Replace the main board	
		Door lock circuit signal is not accord with door lock relay detection	Check door lock circuit input and door lock relay detection	
38	Brake switch fault (varying frequency)	Brake can not open	Check brake and connection	
		Input type of brake detection is not accord with setting	Change the input type	
		Setting time of brake detection is little	Increase the time of brake detection	
	Triangle start up contact fault	Brake switch is damaged	Replace the brake switch	
	Triangle start up contact fault	Triangle start up signal is not accord with contact detection	Check the contact	Hydraulic drive
39	Safety circuit relay joint fault	Safety relay damage and can not energize normally	Replace safety relay	
		Safety relay is block	Replace safety relay	
		Input signal of safety circuit is	Check the contact and	
		Main board input port of safety circuit high voltage damaged	Replace the main board	
40	Invert has no feedback after has been sent run signal for 3 seconds.	Invert run signal break or no connection	Check the connection	
		Setting wrong parameter of invert	Check the parameter of invert	
45	Releveling after door relay joint fault	The releveling contact is block and can not energize normally	Check the connection and replace the contact	
51	Contact joint protection	Down contact damage and can not energize normally	Replace the contact	Double speed drive
		Down contact damage and can not energize normally	Check the connection	Hydraulic drive

52	Contact joint protection	Drive fast contact damage and can not energize normally	Replace the contact	Double speed drive
		Down contact 1 damage and can not energize normally	Check the connection	Hydraulic drive
53	Joint fault	contact 1A joint protection	Check the connection	Double speed drive
54	Hall door detection does not accord with car door detection for 3 second of not closing door	Contact is block and can not energize normally	Replace the contact	
		Contact is block	Contact is block	
		Input X11 does not accord with X25	Check the connection	
55	Up contact joint fault	Contact damage and can not energize normally	Replace the contact	Double speed drive
		Contact is block	Replace the contact	
		Input signal X12 break	Check the connection	
	Temperature alarm fault	Oil overheat	Recover automatically and wait for cool down	Hydraulic drive
56	Drive fast contact conglutination fault	Drive fast contact conglutination	Check the connection	Double speed drive
80	Down one floor slow down switch install fault	The install position of down one floor slow down switch is wrong	Check the install position of down one floor slow down switch	
81	Down two floors slow down switch install fault	The install position of down two floors slow down switch is wrong	Check the install position of down two floors slow down switch	
84	Up one floor slow down switch install fault	The install position of up one floor slow down switch is wrong	Check the install position of up one floor slow down switch	
85	Up two floors slow down switch install fault	The install position of up two floors slow down switch is wrong	Check the install position of up two floors slow down switch	

96	Install progression of slow down switch	The install progression of slow down switch does accord with setting	Check the install progression of slow down switch
97	The releveling switch connection in reverse fault	The releveling switch has been detected connected in reverse in self-teaching in shaft	Check the releveling switch install sequence
98	Door zone or leveling plate fault	The releveling zone is too big or leveling plate is too short	Check the gap between plate and releveling switch
99	Self-teaching fault	The quantity of floor in self-teaching does not accord with No of setting floor	Check the No of setting floor