

**Elevator Controller System** 





# STEP Integrated Controller AS3800-C7000

-Closed-loop vector control.

-New no-load sensor startup compensation technology.

-New PWM dead-zone compensation technology

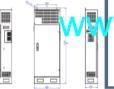
-Dynamic PWM carrier modulation technology.

-Applicable for both synchronous and asynchronous motor.

-Dual 32-bit embedded microprocessor.

-CAN-Bus series communication.

-Applicable for residential lift,passenger lift,goods lift,etc.





Integrated Controller technical support									
Model	Rated	Rated	Rated	Rated	Matching	Contro	ller Cabine	t Dimension	n(mm.)
AS380-	Input Power	Capacity	Input	Output	Motor Power		н	w	D
C7000	(V)	(kVA)	(A)	(A)	(kW)	A	п	vv	U
AT05P5	380	8.5	13.8	13	5.5	320	1184	420	200
AT07P5		14	19	18	7.5				
AT0011		18	28.5	27	11				
AT0015		24	36	34	15				
AT18P5		29	43	41	18.5				
AT0022		34	50	48	22				

## Controller Cabinet technical support

Name Power Speed Max floor Control method Communication Applicable main engine \* Brake voltage Connector Elevator type Installation Controller cabinet dimension Elevator Controller Model AS380-C7000 5.54W-224W 0.4-20 m/s Stops up to 64 Stops Stops up to 64 Stops CAM-Bias serves communication Geartes JM synchronous pulling machine Geartes JM synchronous pulling Out (Web/CM) 118446(2000 mm.

Beveter Control System Standard Function				
No. Description of function	No. Description of function	No. Description of function		
1 Colle we Control	21 Service Floor Setting	41 ver Speed Protection		
ion eration	22 Indu ang Symbols for Example	2 vitch Fault Protection		
3Self scue perato	3 Att dart Service	43 N Computinication Fault Protection		
d Test I Mo	. Ir pendent Mod	44 Sety Ed Protection		
	25 elin	15 de Swinn Contact Direction		
6 Automatic Control for Door-opening time	24 ire Emergency Return Running	46 Diagnosis of Failure in Self-Teaching of Shaft information		
7 Open the Door by Landing Call	2) Automatic Correction of Shaft Information	47 Motor Thermal Protection		
8Pre-close the Door-closing Button	28 Elevator Lock-out	48 Door Switch Fault Protection		
9 Open The Door by Door-Opening Button	29 Protection against Door-opening outside Door Zone	49 Protection of Door Switch Off in Running		
10 Door Mode Selection	30 Light Curtains Protection for Doors	50 Duplex Mode		
11 Next Landing	31 Over-load Protection	51 Leveling Fine-tuning		
12 Cancel a Wrong Registration	32 Anti-maisance at Light-load	52 Door Nudging with Buzzer		
13 Clear Registrations before Reversing	33 Reversing Protection	53 Door-opening when Standby at Main Floor		
14 Direct Landing	34 Running Time Limiter	54 Floor Blocking within Setting Time Interval		
15 By-passing Landing Call When Full-load	35 Fault Protection for Terminal Switch	55 Automatic Inquiry of Landing Call Board		
16 Power-off Car Light&Fan when Stand-by	36 Protection Against Terminal Over Travel	56 CAN Communication Interference Evalutions		
17 Auto Homing	37 Contaction detection for Safety Relays and Contactors	57 Evaluation about Encoder Interferance		
18 Re-close Door	38 Protection Against Safety Circuit Fault	58 Elevator Alustment in Car		
19 Historical Error Log	39 Master CPU Protection by WDT			
20 Self-teching of Shaft information	40 Over Speed Protection	11 1		
	Elevator Control Sysytem Standard Function			
No. Description of function	No. Description of function	No. Description of function		
1Pre-door-opening(with SM11-A/B Board)	9 Emergency Opeartion for Earthquake	17 Voice Reporting		
2Releveling with Door Open(with SM11-A/B Board)	10 Arrival Gong on Car	18 Load Compensation for Starting		
3 Fireman Service Operation	11 Arrival Light on Landing	19 Door-opening Holding Button		
4 The Second COP	12 Arrival Gong on Landing	20 Display for Out od Service		
5 Rear Door COP	13 Sperated Control of Car Doors(front & rear)	21 Car Call Controlled by IC Card		
6 COP for the Handicapped	14 VIP Priority Service	22 Landing Call Controlled by IC Card		
7 Group Control(with SM-GC Board)	15 Emergency Landing when Power Failure	<u>  </u>		
8 Community Monitoring	16 Service Floor Controlled by Switch			





### STEP Full Serial V/V/E Control Cabinet Model MCP-ST/C0100

The control functions are achieved by STEP Full Serial Control System. Humanized functions.i.e. Simplex.Duplex.Group control.Remote monitoring. Emergency rescue, are visible to be realized Cable cores and cost are reduced efficiently with CAN-Bus Serial communication More stability and best travel feeling are realized due to excellent V/V/E drive system

## Controller Cabinet technical support

Power Sneed Max floor Control method Communication Applicable main engine Brake voltage Elevator type Input power Installation Control or ca Main Control M

Elevator Controller Model MCP-ST/C 0100 5 5kW\_45kW 0.4-4.0 m/e Stops up to 64 Stops Full Collecting Control CAN-bus series communication Gearless PM synchronous pulling machine Geared IM asynchronous electric motor DC110V/AC110V/ Plug and Pin connector Machine Room 400V:three-ph e 340-440.50-60Hz On the ground w)6 0x(h)1.4 41.8L v(d 75 m.) TT 2 SM-01- 5021 E al ST P A\$3201 vies F evu or Invition



STEP Group Control Cabinet Model BCP/PO 100

The group control functions are achieved by STEP Full Serial Control System.

## Controller Cabinet technical support

Name	Elevator Group Controller Model BCP/PO 100
Max.number of group	3-8 Unit Elevator
Simple configuration	Only one group control board required and CAB-Bus
Max floor	Max elevator 64 floors
Peak hour mode Communication	Applicable to elevator usage in peak hour of public places such office buildings. CAN-bus series communication
Balanced running mode	Optimal elevators allocation to monimize waiting time and reasonable and fast elevator response.
Idel running mode	Even distribution of elevator at designated floor in indle time to minimize the reaction time of landing call.
Automatic removal of reluctant elevator	Short reaction time of landing call.



Elevator Remote Monitoring System



#### STEP Destination Dispatch System

Super Effcient	Various leading-edge technology applied such as expert system,fuzzy logic,neural network,etc CAN-Bus based, improve dispatching efficiency greatly.
Joy-Journey	By destination dispatching system to guide passengers to the assigned lift, it reduces the average waiting time & long waiting ratio to avoid the crowded lobby and rushing people which makes them more comfortable.
Cost-Saving	With more efficient dispatching, reducing lift deployment in group for same traffic capacity requirement.
Energy-Saving	Fewer unnecessary stops helps reducing energy consumption in the building.

Support Hybrid & Full DDS Both Multi-Choice for Destination Selecetor Multi-Choice for Destination Indicator

### STEP District Monitoring System

# Supports star and bus connection. # 500ms perfect monitoring for 100 units of individual elevator.

# Real-time fault alarm alert and intelligent trouble shooting. # Management based on Multi-level authorization which can be set up by intelligent user software.

# Multiple interface.

#### STEP Remote Intelligent Dianosis System

# Only 3 Parameters complete debugging. # 2-minute vibration curve # Humanized leveling adjustment. # Automatically recognize input type(NO/NC) # Intelligently recognize the display board address.

#Remotely assisnt in controller adjustment.

STEP	Roomless Full Serial VVVF Control Cabinet

Model MCP-SW/F 0400

The control functions are achieved by STEP Roomless Full Serial Control System and easier to adjust by adopting CAN-Bus Serial Communication. Humanized functions, i.e. Simplex, Duplex, Group control, Remote monitoring, Emergency rescue, make elevator operator safer more reliable.

# Controller Cabinet technical support

Name		Elevator Controller Model MCP-SW/F 0400
Power		5.5kW-22kW.
Speed		0.4-2.5 m/s
Max floor		Stops up to 64 Stops
Control met	hod	Full Collecting Control
Communica	tion	CAN-bus series communication
Applicable r	nain engine	Gearless PM synchronous pulling machine
Brake volta	3e	DC110V/AC110V/
Connector		Plug and Pin connector
Elevator typ	e	Machine Roomless
Input power		400V:three-phase 340-440,50-60Hz
Installation		On the ground and Wall
Controller ca	binet dimension	(w)400x(h)2,100x(d)260 mm.
Main Contro	oller	STEP SM-01-F5021 Board
Compatible	Invertor	STEP AS320 Series Elevator Invertor
Safety Stan	dard	GB7588/EN81





