

EPS-48 Elevator power-cutting rescue devices

.Product introduction :

This product is a power-cutting rescue device which is for converter controlled elevator system. It can meet the demand of emergency relief by using the function of low speed operation of converter. It reached to 25 HP rescue function of converter load by using 1.5 KVA UPS device together with detector of loading weight.

Passengers always trapped in elevator while city power off, it also troubles for maintenance man to do their job. So for assure the passenger's safety and timeliness that our technologist make endeavor to improve the technology and timely rescue.

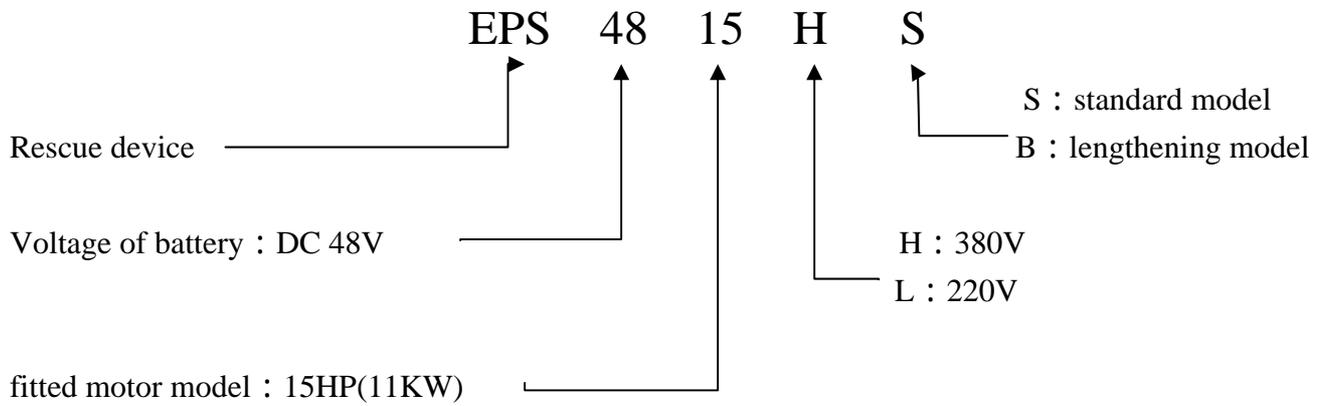
.Matters need attention when opening the case to check:

1. Check the outer package is perfect or not, even any damage.
2. The logo is same as your order or not.
3. Our products are all strictly with QC line before ship. If you find any problem please contact with our company and supplier.

.Model, Sphere of application:

MODEL	Sphere of application
EPS4815 LS	AC220V , 15HP (5.5KW ~ 11KW) MOTOR
EPS4815 HS	AC380V , 15HP (5.5KW ~ 11KW) MOTOR
EPS4820 LB	AC220V , 25HP (15KW ~ 18.5KW) MOTOR
EPS4820 HB	AC380V , 25HP (15KW ~ 18.5KW) MOTOR

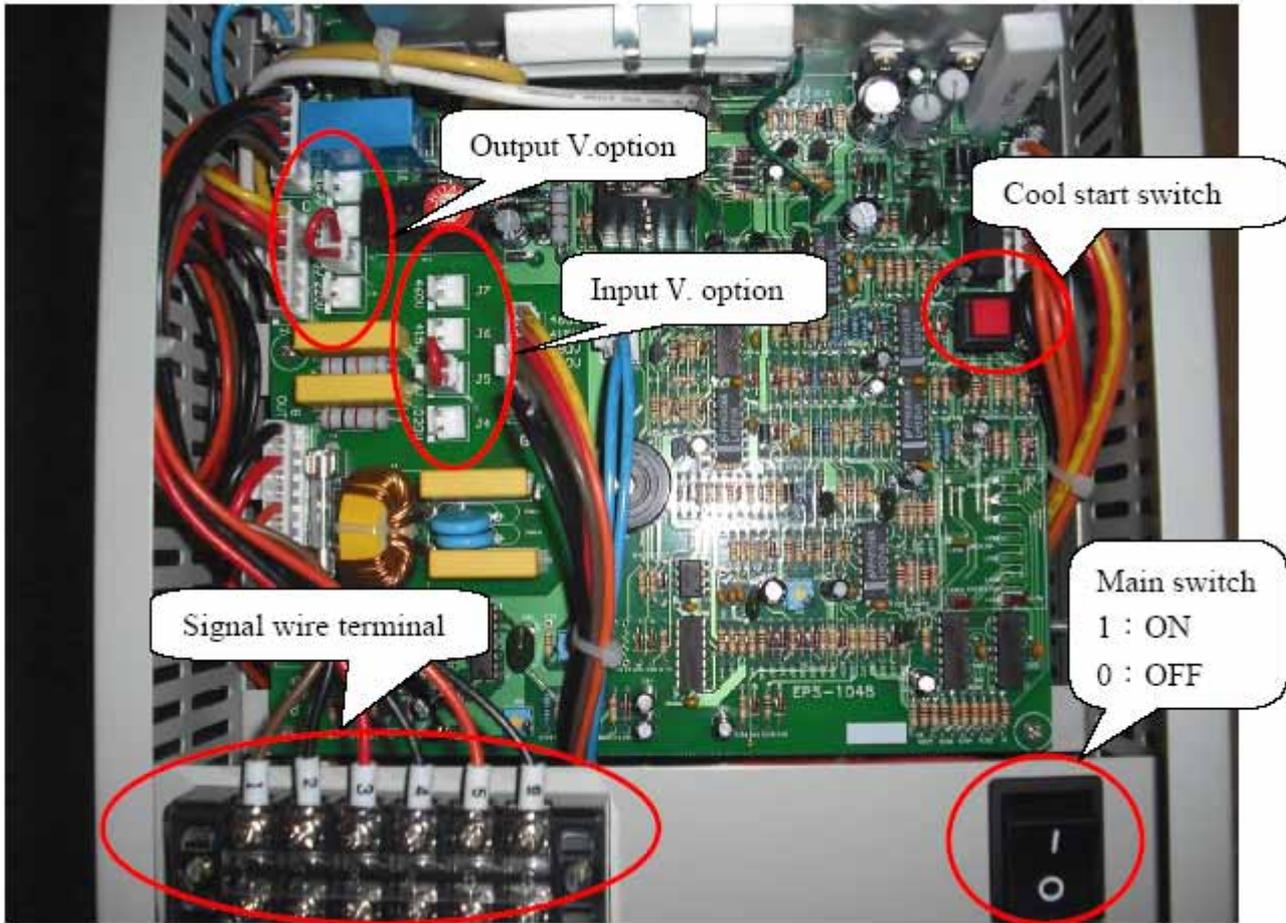
* The description of Model (for EPS4815 example)



.Wire connection terminal function:

Terminal Name	Name	instruction
L1	input terminal	L1,L2 for single-phase
L2		
L3		
T1	Emergency power /output terminal	3-5 seconds output delay while emergency power
T2		
T3		
1	output signal-1	Output signal-1 when emergency power operated
2		
3	output signal-2	Output signal-2 when emergency power operated
4		
5	input close signal	output emergency power stopped
6		

.The position of switch and input/output voltage operation :



. Characters of products:

Model	EPS48- **ASL**	EPS48- **ABH **
Motor capacity for elevator	Option according to model	
rated operating mode	Operating direction is under indications of controller board, and the better is light loading direction	
inputpower	Number of phases	Sigle phase (L1、 L2)
	voltage	220V Option 380V、 415V、 460V
	frequency	50Hz / 60Hz
emergency output	standard voltage	the same as city power voltage
	Emergency voltage	AC 220V±5% option AC 380V、 415V、 460V

	frequency	50Hz / 60Hz \pm 5%
	waveform	sine wave
	wave distortion	THD 3% (0~100%linear load)
	inversion efficiency	90%
	overload capacity	> 120% rated current , stop output after 5 seconds
> 150% rated current or load short circuit , stop output after one seconds for current-limiting output		
battery	model	valve control lead storage battery with none maintaining
	rotated voltage	DC 12V
	Battery quantity	4 pcs (12V/7Ah or12V/12Ah , according to capacity)
	Charging time	within 20 hours
transform device	ATS (auto transform system)	
transit time	5seconds	
noise	emergency output 45dB	
environment temperature	-10 ~40	
environment humidity	0%~90% (no moisture condensation)	
high above sea level	below 2000 meters	
weight	26 Kg(standard)、31Kg(lengthening)	
Body dimension	390 x 228 x 213 (standard)、470 x 228 x 213 (lengthening)	
Installation size	430 x 228 x 218 (standard) 、510 x 228 x 218 (lengthening)	

Cautions :

1. Please accord to terminal indication for correct wire connection.
2. Please confirm AC input/output voltage and adjust the short circuit PIN of PC board. Option as bellow:

Power voltage	voltage input choose	Voltage output choose	remark
220V	J4	J18	220V set position
380V	J5	J17	380V set position
415V	J6	J16	
460V	J7	J15	

3. Input and output voltage been set. Please reset input terminal and output terminal if the voltage is 415V or 460V.

4. Please turn on from main switch for operating.

5. Cool start switch is only for test use, pressing it 2 seconds for operation of T1, T2.

Explanation for basic operation

1. The main switch must be turn off when we work for wire connecting.

2. Turn on main switch after wire connected, LED 7 on PC board is light on.

3. Put in AC power and EPS start in charge, and now LED7 is off, LED8 is on. LED1-LED6 is showing battery charge volume.

4. About 3-5 seconds later EPS start to supply power when AC power off, meanwhile LED 9 is light on, terminal 1,2,3,and 4 output signal is light on. This is the normal situation for power-off emergency.

5. When the energy content battery is using up, the light of LED1-LED6 will extinguish one by one. When power supply volume is under loading LED10 will be light on and as meanwhile the buzzer will send out warning signal and automatic power off after three seconds.

6. Terminal 5、 6 is a signal of mandatory shutdown for emergency power. The emergency power will stop work when it receives the signal.

7. PC board indicator light and push button instruction:

name	position	description	remark
Indicator light	LED1~LED6	Indicator light for charging battery	Light on shows battery is full
Indicator light	LED7	Indicator light for POWER ON/OFF	
Indicator light	LED8	Indicator light for charging battery	Charging battery in standby

Indicator light	LED9	EPS indicator light when power off	EPS work condition when power off
Indicator light	LED10	Overload indicator light	
Power switch	On the machine body	EPS main switch	Push on then EPS can work normally
Push button	SW1	Cool start switch	without AC power only use for test

.EPS for elevator system instruction:

1. According to the electrical diagram to set up EPS-1048 emergency power then the 3 phase power position of controller reconnect to emergency input terminal L1、 L2、 L3 and T1、 T2、 T3 emergency power connect the general supply of controller.

2. When put out terminal 1、 2(operation of emergency power is out put signal 1) can be used for advice main board of controller.

Now is the emergency power situation and must be moved with low speed (under 8HZ) to light loading direction when rescue passengers.

3. When put out terminal 3、 4(operation of emergency power is out put signal 2) it need set less-phase protection device if without it in controller, so when operating which has set less-phase protection is in vane still with function of emergency rescue.

4. The terminal 5、 6(input shutdown signal), can be use limit switch point of door open for input, it means door open signal back to EPS when rescued on base floor, close EPS.

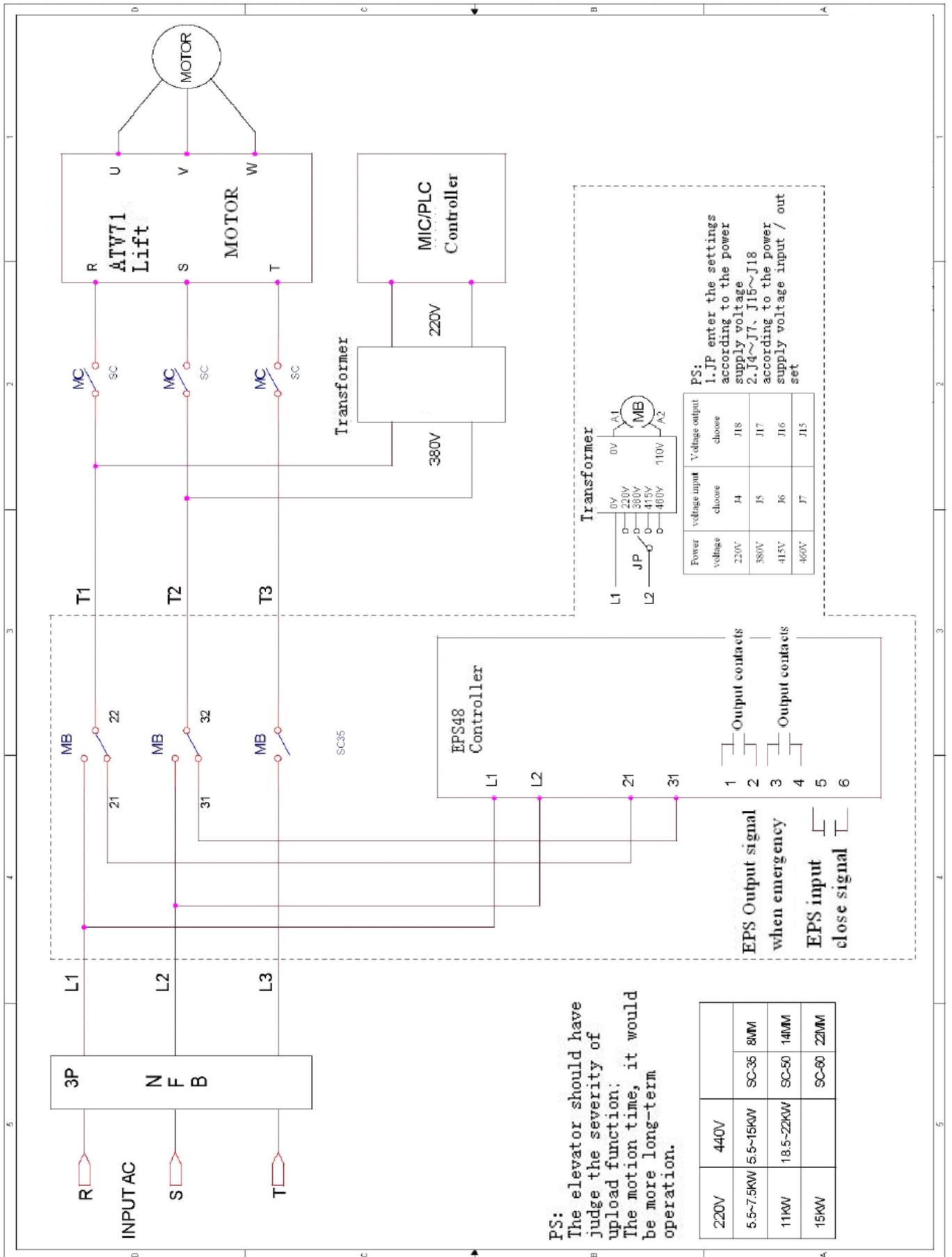
5. When city power is in normal situation:

Main switch “on”, the power input from L1、 L2、 L3 terminal , through T1,T2 T3 terminal output, power indicator light on, battery is operating for charge, emergency power system is ready situation.

6. when city power-off:

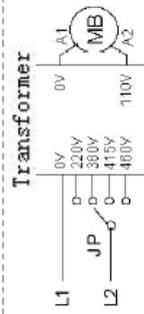
If elevator is not in base floor, the power will delay 3-5 seconds then through T1,T2 output for supply power to whole system, output 2 sections emergency operating signal by 1,2 and 3 ,4 terminal to controller that now is at emergency, it needs coordinate rescue indication and also adjust set under 8HZ for move to most near floor, after send a signal to EPS(5,6 terminal), close EPS power, rescue finished.

.Electrical diagrams:



PS: The elevator should have judge the severity of upload function; The motion time, it would be more long-term operation.

220V	440V	
5.5~7.5KW	5.5~15KW	SC-35 8MM
11KW	18.5~22KW	SC-50 14MM
15KW		SC-60 22MM



Power voltage	voltage input choose	Voltage output choose
220V	J4	J18
380V	J5	J17
415V	J6	J16
460V	J7	J15

PS: 1. JP enter the settings according to the power supply voltage
2. J4~J7, J15~J18 according to the power supply voltage input / out set

