



POWER WIN
Developing & Nurturing Resources...

'Powerwin™' - Power Saver
for Elevators

POWER WIN

Developing & Nurturing Resources...

Powerwin™-Power Saver for Elevators

The **Powerwin™-Power Saver for Elevators** technology is fully designed by POWERWIN having great performance, Flexible dual PWM and LCL filter technology. The flexible dual PWM technology significantly reduces machine running noise and temperature rise, output waveform is better. Where LC filtering techniques suppress the harmonic and electromagnetic interference effectively, so that the feedback power is in full compliance with the national grid, the grid THD<5%, and will not cause pollution on the grid. Energy feedback '**Zero current**' processing technology can improve the feedback current quality, improve light load stability and improve power factor.

Elevator Working/Operation Principal for Energy Consumption:

When the elevator heavy load down or light load up, the extra mechanical energy (including bits Energy and kinetic energy), the traction motor will generate electricity when it is led for operation, these electricity is wasted by resistor, this is not only the generated electricity waste, but also need air conditioner to reduce the power room temperature, so both the generated electricity and the cooling system power is wasted.

Power Feedback Advantage for Elevator System:

- Recycle the generated electricity.
- Reduce the motor room cooling system energy cost.
- Avoid the system crack down or parts destroy, reduce system maintenance cost.

Powerwin™-Elevator Power Saver Area:

- The higher is the elevator, greater the energy saving.
- Newly installed elevator has more Mechanical inertia & so possibility of Energy Saving is more.
- The faster the elevator, the greater the energy saving.
- The more frequently the elevator used, the greater energy saving.
- The total energy saving can be up to **15% to 35%**, in various types of locations like Malls, Hotel, Office Buildings, Hospital and so on.

Powerwin™-Elevator Power Saver Software technology

Use military industry DSP to control the system, make the feedback unit operate fast and exactly, stable and reliable

Powerwin™-Elevator Energy Saver Feedback Technology:

Flexible dual PWM and the LCL filter technology; significantly reduce machine running noise and temperature rise, the output waveform is more perfect; effectively suppress harmonics and electromagnetic interference, the feedback voltage THD <3%.

Powerwin™-Elevator Energy Saver Feedback Technology Features:

1. High efficiency and energy saving:

Elevator brake energy recovery more than 97% of the conversion rate, the saving rate of 15% to 45%, frequent braking, high floors, speed elevator energy saving effect is more pronounced up to about 45%.

2. Multi-function:

- Digital panel Display.
- Have self-diagnostic fault protection features.
- Automatic voltage tracking function to ensure accurate output voltage phase.
- To prevent the current loopback function, never affect the inverter.
- Terminals and voltage dual control system, more adapted to some special Occasions, such as Static voltage is high.

3. Plug and Play, easy installation:

Simply connect the feedback device DC (+) ", the" DC (-) to the inverter DC positive and negative terminals correctly, connect the feedback device AC output "A", "B", "C" to the inverter input AC power correctly is ok.

4. Advance Features:

- Use the advanced TMS320F28 series DSP chip as control processor; ensure the feedback unit operation speed and reliability to be the best.
- To meet customer requirement, based on special software algorithm design, operation is very quiet.
- Internal digital filtering, more accurate, reliable signal processing; with special zero current processing technology, can improve the quality of the feedback current, improve the stability and power factor.

- With bus voltage, three-phase input voltage, internal temperature, feedback operation voltage, feedback time operation monitoring function, provides easy user parameter settings.
- Three digital input ports and two digital output port is released to customer, support MODBUS protocol, convenient and reliable information communication with control systems, real-time monitoring and control, can supply

Powerwin™-Elevator Energy Saver Technical Specifications:

Powerwin™-Elevator Energy Saver: -Single Phase

Sr. No.	Model	Rated Current in Amps.	Peak Current in Amps	Max. Load in KW
01	SPPS-E11	15	29	1
02	SPPS-E18	24	47	18.5
03	SPPS-E22	39	58	22
04	SPPS-E30	44	78	30
05	SPPS-E37	49	97	37
06	SPPS-E45	55	110	45

Powerwin™-Elevator Energy Saver: -Three Phase

Sr. No.	Model	Rated Current in Amps.	Peak Current in Amps	Max. Load in KW
01	TPPS-E11	08	16	11
02	TPPS-E18	14	27	18.5
03	TPPS-E22	17	33	22
04	TPPS-E30	23	44	30
05	TPPS-E37	28	55	37
06	TPPS-E45	34	68	45