## plug&single-phase



plug&single-phase system by **epic power**, is an electronic system that can completely feed an elevator from a low-peak power (500W) single-phase mains connection. It also enables the elevator to be used for about one hundred trips in case of blackout.

The system reuses the energy generated by the motor, thus reducing the overall

consumption up to 55%. It can be installed in new or existing elevators.

It can also include a connection to commercial solar panels thus transforming the elevator into a completely selfsufficient one.



## **A**DVANTAGES

- Be able to install an elevator where there is no three-phase mains. Retain current customers offering this addition to already installed elevators.
- Attract clients that are environmentally concerned.
- Incorporate the latest technology in the field.
- No need to include any UPS system as the elevator will continue to operate for a certain number of trips (in the order of tens, depending on speed and load).
- Nobody will need to be rescued in case of a blackout.

### WHAT IT OFFERS TO THE END USER

- In an existing building that wants to incorporate an elevator, no three-phase mains electrical installation is needed.
- Peak power of the electrical contract can be strongly reduced to only 500W. This typically implies some savings (country and area dependent).
- Energy savings up to 55% of the motor consumption due to the regenerative feature.
- Normal operation for a long period of time during blackout.



## P2S

#### plug&single-phase

System that feeds an elevator with single-phase mains

Advantages New technology to power an elevator

#### For the end user

No need to contract a high peak power threephase mains, monetary savings

#### Installation

Less than one hour in new or existing elevators

#### **Technical features**

Power consumption 500W or less. Up to 100 trips in case of blackout

#### Our company

Energy storage system to enhance any lift efficiency

www.epicpower.es info@epicpower.es

## HOW TO INSTALL

- Connect the P2S main unit to the VVVF drive terminals P(+) and N(-)
- P2S is in charge of powering the VVVF so there is no need of three-phase mains connection.
- Connect the battery module to the P2S unit.
- Plug P2S unit to a standard single-phase mains.
- Plug all the other remaining elevator systems (control, lights, door operators, brakes, etc.) to the single-phase (230V) output of P2S.
- Turn ON the P2S. The system will be ready to operate in a few seconds.

NOTE: These are simple guidelines that do not substitute the Instructions Manual. Please read the Manual in full before installing the system.

## **TECHNICAL FEATURES PLUG&SAVE**

	Main features
Maximum input power	500 W
Maximum number of trips (in blackout)	100
Máximum number trips per hour	90
Battery voltage	4 x 12V
Nominal output power (DC output to VVVF driver)	3500 W
Nominal 230Vac output power	400 W or 700 W (two options)



P2S system does not require the modification of any elevator system. A braking resistor needs to be installed as usual.

Batteries are a commercial reference and can be changed easily. Estimated duration of batteries is about four years.

P2S Solar+ version is available with connectors for commercial solar panels. With this option, no extra electronics are needed in order to fully power an elevator with solar energy.

### OUR COMPANY



- epic power is your power electronics partner for energy efficiency and energy storage solutions for elevators.
- We can adapt our systems to your needs.
- We take your ideas as our challenges

# epic power TEAM