

ENI-PT600/24/AC/2x30 Converter

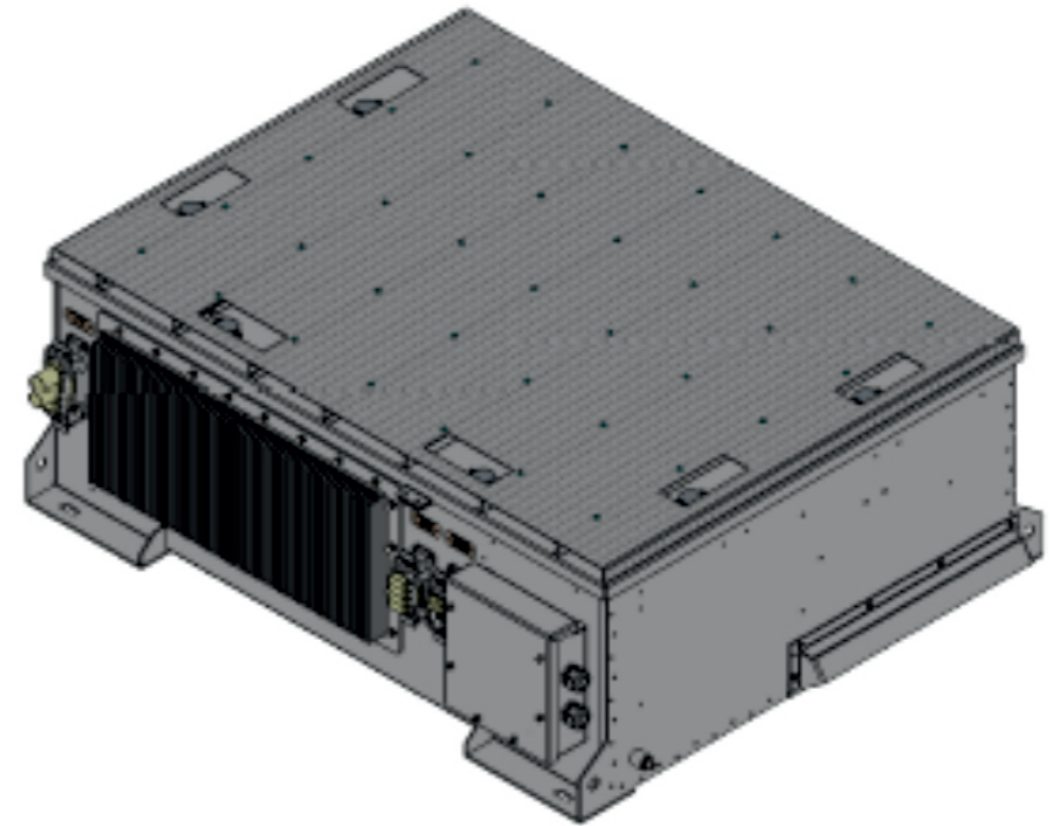
APPLICATION



The ENI-PT600/24/AC/2x30 static converter is intended as a 24VDC and sine-wave 3 x 400VAC, 50 Hz power supply for auxiliary lines in tram cars. The ENI-PT600/24/AC/2x30 converter transforms the tram contact system HV into:

- 24V stabilised supply for tram onboard auxiliary and battery charging/floating lines,
- stabilised three-phase voltage supply for air conditioning systems.

The converter control block ensures voltage output stability, battery charging current control and overload and shorting protection. The control block stabilises the AC and DC voltage outputs, irrespective of variations in converter voltage input or onboard loads. The converter features two (2) separate 3 x 400 VAC power outputs, each rated at 30 kVA. This enables separate energization of each power output to ensure soft starting of the connected loads and adjustment of the power output parameters to the load profile.



SPECIFICATION

| TYPE | ENI-PT600/24/AC/2x30 |
|--|---|
| Rated input voltage | 600 V _{DC} |
| Supply voltage variation | 400 ÷ 900 V _{DC} |
| DC output | |
| Rated voltage | 27,6 V ± 0,1 V |
| Rated output current | 350 A |
| Rated/max output current | 400 A/ 450 A (current source mode for 30s) |
| Battery charging current limit | 48 A ± 2 A, with temperature compensation |
| Protection | Overload Output terminal shorting |
| The output is designed for parallel operation with two converters per battery bank | |
| SiC output design | |
| 2 x AC voltage output | |
| Rated voltage | 3 x 400 V / 50 Hz |
| Rated power | 2 x 30 kVA (115% overload for 10 s) |
| Protection | overload and shorting |
| Output keep-alive for > 200 ms without HV input power | |
| General parameters | |
| Wbudowany układ autostartu (bez napięcia baterii) | |
| Cooling | Forced, ambient air |
| Ambient temperature | -30°C ÷ +40°C |
| Enclosure protection rating (power electronic box) | IP65 |
| Enclosure protection rating (vent duct) | IP21 |
| Weight | 260 kg |