

# ENI-PT600/24/AC/50 Converter

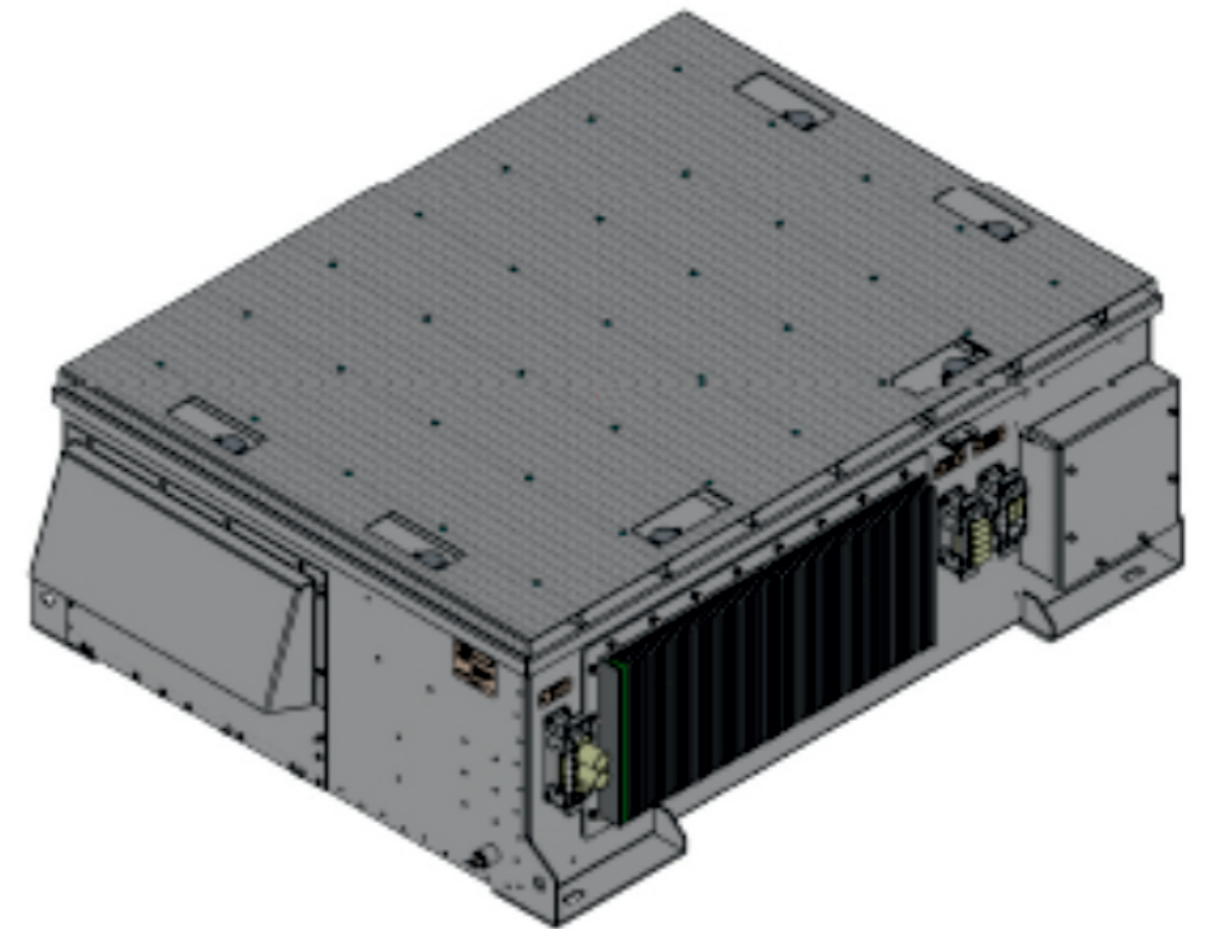
## APPLICATION



The ENI-PT600/24/AC/50 static converter is intended as a 3 x 400 V<sub>AC</sub>, 50 Hz and 24 V<sub>DC</sub> power supply for auxiliary systems in low-floor trams. The ENI-PT600/24/AC/50 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 integrated autostart system starts the converter even if the battery bank is in a discharged condition. The converter control block ensures voltage output stability, battery charging current control and overload and shorting protection.



**SPECIFICATION**

TYPE	ENI-PT600/24/AC/50
Rated input voltage	600 V <sub>DC</sub>
Supply voltage variation	400 ÷ 900 V <sub>DC</sub>
DC output	
Rated voltage	27,6 V ± 0,1 V
Rated current	350 A
Maximum output current	400 A (current source mode for 30 s)
Battery charging current limit	50 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	
AC voltage output	
Rated voltage	3 x 400 V <sub>AC</sub> w/o neutral conductor
Rated power	40 kVA
Rated current	57 A (at 200 A / 1 s overload per minute or longer)
Protection	Overload Output terminal shorting
Output keep-alive for > 200 ms without HV input power	
General parameters	
Integrated autostart systems (w/o battery voltage)	
Cooling	Forced, ambient air
Ambient temperature	-30°C ÷ +40°C
Enclosure protection rating (power electronic box)	IP65
Enclosure protection rating (vent duct)	IP21
Weight	240 kg