

Single to three-phase Booster™ converter



A Booster converts 240V single-phase into 415V three-phase power, making it an optimal choice for machines with motors. Its power quality mirrors that of utility-supplied power, ensuring fast motor starts as in a three-phase utility network.

Using intelligent and robust digital power electronics, Boosters offer exceptional resilience against blackouts, brownouts, power surges, fast transients, short circuits, line disturbances, and momentary overloads, surpassing the performance of other converters. Specially selected components contribute to an extended service life.

Determining the suitable kW rating of a Booster converter involves selecting a Booster with a rating equal to the combined rating of all motors running simultaneously or 1.2 times the rating of the largest motor, whichever is higher.

Boosters find application across a diverse spectrum of machinery, including lathes, planers, saws, thicknessers, spindle moulders, band saws, drill presses, grinders, milling machines, combination machines, car hoists, surface or deep well pumps, welders, guillotines, conveyors, escalators, air conditioners, and more.

Boosters are designed for a 240V single-phase power source, while versions of 8kW and above are optionally available for 480V split-phase. All versions have a second input for 415V two-phase supply.

Installation involves connecting a single-phase cable from a 240V switched high power wall outlet to the Booster's input connector block and a three-phase cable from the Booster's 415V three-phase output connector block to one or multiple three-phase outlets or directly to a machine.

Boosters feature a transformer, digital power electronics, a quiet running generator motor, and long-life capacitors housed in a steel enclosure with dimensions of 800 x 410 x 370 mm. Digital indicators show output voltage and current. The unit weight is 70-100 kg, depending on the kW rating.

The three-phase outputs deliver pure sine waves with phase angles of 120°. The 100% duty cycle supports continuous operation at full load. The momentary overload capacity is 300%. A Booster 8 supports welders up to 300A, a Booster 12 up to 450A. Boosters exceeding 8kW are multiple units, interconnected with a link cable.

Manufactured in New Zealand, each Booster includes a free part replacement warranty covering five years, offering peace of mind and reliability.

