

The single to three-phase Booster™ converter



The Booster is a single to three-phase converter designed for industrial applications. The device reliably converts 230V single-phase power to 400V pure sine-wave power. Boosters produce balanced three-phase voltages for all machines with motors.

Boosters are used on a wide range of machinery, including lathes, planers, saws, thicknessers, spindle moulders, combination machines, band saws, drill presses, grinders, milling machines, compressors, car hoists, surface and deep-well pumps, welders, and guillotines, to name a few.

The three-phase outputs of this device provide correct 120-degree phase angles and an output voltage symmetry of $\pm 6\%$ at all loads. These values are very close to those offered by utility companies. The 100% duty cycle facilitates uninterrupted 24/7 operation at full load. Motors in the machines accelerate at the same rate as if they were connected to the three-phase grid.

The momentary overload capability is up to 300% for a period of up to five seconds. It is recommended that a converter with a kW rating that is at least 10% higher than the largest maximum continuous load is selected.

A Booster is able to identify when a motor is starting up and provides the necessary currents to ensure stable voltages during motor start-up conditions. The smart digital controller uses contact-free zero crossing technology to connect and disconnect long-life capacitors with millisecond precision.

This is why leading converter manufacturers world wide use them in their products.

A Booster is supplied with clear and straightforward installation guidelines. This process involves the connection of a single-phase cable from a switched single-phase wall outlet to the Booster's input connector block, and the connection of a cable from the Booster's three-phase output connector block to a number of three-phase wall outlets equal to the number of machines.

Digital indicators provide clear information on output voltage and output current. Longevity is ensured by carefully selected, long-lasting components like a step-up transformer, long-life capacitors and a quiet running service-free generator motor. The steel cabinet, measuring 800 x 410 x 370 mm, is powder-coated black for enhanced durability.

The free part replacement warranty is five years.

