

The single to three-phase

MultiPhase™ converter



A MultiPhase converts single-phase into 400V three-phase voltages. An ideal choice for machines with three-phase motors connected to inverters, such as in CNC machines. The digital power electronics recognise starting motors and generate the currents to accelerate all motors as fast as if they were connected to the three-phase mains. The three-phase voltage symmetry is electronically maintained at all loads. Leading converter manufacturers world wide use our electronics in their products.

MultiPhase finds application across the spectrum of machinery, including CNC, VFDs, VSDs, 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, air conditioners and more.

The 8kW MultiPhase is available for 230V or 400V single-phase. Versions 12kW and above can be ordered for 230V or 400V or 460V supply. Select a MultiPhase converter with a kW rating that at least corresponds to the combined output of all motors running simultaneously or at least 1.2 times the kW output of the largest motor.

The three-phase outputs supply pure sine waves, always with correct phase angles. The symmetry of output voltages is electronically kept within + - 4% at all loads. This exceeds the guaranteed symmetry of the three-phase grid in New Zealand. The 100% duty cycle enables 24/7 operation at full load.

The momentary motor start and overload capacity is 400%.
A MultiPhase 8 supports a welder up to 300A and a MultiPhase 12 up to 450A.

MultiPhase over 8kW are supplied as several interconnected units of 8kW each. They contain long-life components such as a transformer, intelligent SCR power electronics, low-noise generator motors and capacitors, which are housed in units of 800 x 410 x 370mm. Digital displays show output voltage, output current and status.

The installation process involves connecting a single-phase cable from a switched high power wall outlet to the MultiPhase's input connector and a three-phase cable from the 400V three-phase output to one or several three-phase outlets for the machines. The free part-replacement warranty covers five years.

MultiPhase converters are designed and manufactured in New Zealand.

