



## Complete 1 to 3 Phase Converter which feeds a 415v 3 Phase Idler Motor Technical & Installation Information

Tortech single to three phase converters are simply a 240/415v transformer which is connected to an Electronic controller with capacitors to give a phase shift. These changes are done electronically. This three phase 415v supply then feeds a 415v 2 Pole Idler motor. Now, the idler motor will now start. The idler motor acts as a 3 phase rotary transformer but is still controlled by the Electronic Controller to produce a 415V 3 Phase supply. This will give 95% torque performance and fast run up speed.

Single to three phase converters must be connected (input & output) by a Licensed Electrician and comply with Australian Standard AS3000 (SAA Wiring Rules).

Voltages as high as 800VAC are in the Converter. Wait 10 minutes after isolating before removing covers to allow the capacitors to discharge.

The single to three phase converter size (KW) must be equal to, or greater than, the 415V three phase load (KW) it is to supply. The three phase load must be balanced or allowance must be made for unbalanced loads. The single to three phase converter output is continuously rated.

Three phase loads that have a 240V control circuit must have the active which feeds the control circuit connected to phase #3.

The 240V (or 480V) Single Phase Supply must be connected from a **circuit breaker** with a current rating selected from the table below for that size converter. It must be a delayed type circuit break, characteristics.

Ensure the single to three phase converter is positioned in a clean dry place away from any other heat or other sources that could be detrimental to electrical equipment.

Minimal maintenance is required as the only moving part is the electric motor.

MODEL	KW	240V AMPS	240V CB	480V AMPS	480V C/B D CURVE	415 V 3P AMPS	LENGTH	WIDTH	HEIGHT	MASS KG
MMT4	4	20	20			7	728	368	350	
MMT5.5	5.5	29.5	32			14	728	368	350	
MMT8	8	36	40	18	20	14	728	368	350	
MMT11	11	54	63	27	32	21	Refer to Factory			
MMT16	16	72	80	37	40	28	Refer to Factory			