E-Power - Compact water cooled inverter

Variable speed pressure control for single or three phase pumps

- Varies Pump Speed to Match Demand
- Ideal for Booster Pump Sets
- Energy Saving
- Programmable Restart Pressure
- Simple In-Line Fitting
- Water Cooled
- Vertical Or Horizontal Mounting
- Can be Linked with Other E-Power Units Via Integrated CANbus Interface (E-Power Adv Only)
- IP65 Ingress Protection

How Does It Work?

Mac3 E-Power is an in-line pipe mounted variable speed inverter. E-Power is constructed around a stainless steel pipe and pressure sensor without non-return valve or any other flow obstruction resulting in increased system efficiency and superior reliability due to excellent self-cooling characteristics. The stainless steel mounting pipe ends with a 1" male BSPT thread on each end, allowing direct connection into your pump system with ease.

E-Power features a single phase supply with either single phase or three phase 230VAC output, depending on the Epower model, see table for details.

The option of single and three phase variants will allow for *E-Power* to control 3 phase pumps over a greater speed range even where only a single phase supply is available.





E-Power comes in two variations, **E-Power Std**, and **E-Power Adv**.

E-Power Std can control a single pump with variable speed, while a secondary pump can also be activated in an on/off only mode to supplement the main pump as needed.

E-Power Adv controls one directly connected pump, and up to seven additional pumps all at variable speed through the use of multiple slaved **E-Power Adv** controllers. Slave units communicate with one another using *CANbus* protocol, a serial communications standard which is highly immune to environmental interference.

E-Power Adv can also use *Multimaster* mode. This allows connected **E-Power Adv** units to be promoted to the role of 'master' as needed, ensuring continued operation in the event of any single controller failure.

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Technical Specifications Physical			
			Material
Weight	2 Kg		
Dimensions	330x300x150mm		
Mounting	In Line (Vertical or Horizontal)		
Input / Output	1¼" (31.75mm) Male BSPT		
	Environmental		
Ingress Protection	IP65		
Operating Temperature	4°C – 40°C		
Operating Pressure Range	0.3 - 8 bar		
Maximum Overpressure	12 bar		
Operating Temperature	0°C – 50°C		
Fluid Type	Clean Water - No Solids - pH 5 - 9		
	Features		
Display	2 Digit Alphanumeric LED		
Pressure Set Point	0.3 – 8 bar		
Protection	Dry Running, Low/High Power Supply, Short-circuit, Over-current, Thermal Overload, Insufficient Pressure, Water Hammer, Pressure Sensor Malfunction		
Output Frequency	5 – 100 Hz		
Acceleration Time	1.5 – 5 Seconds		
	Standards Compliance		
Electrical Safety	EN60335		
Electromagnetic Compatibility	EN61000 (Specific Norms In CE Certificate)		

Electrical Specifications			
E-Power MM	E-MM08 Std	E-MM08 Adv	
Supply Voltage	230Vac (170 – 270 Vac) Single Phase	230Vac (170 – 270 Vac) Single Phase	
Maximum Phase Current	8A	8A	
Maximum Pump Power 230Vac Single Phase	1.1kW (1.5hp)	1.1kW (1.5hp)	
Inputs	1	1	
Outputs	1	1	
Multiple Pumps	2 (1 variable speed, 1 fixed speed)	8 (up to 7 slaved inverters)	
E-Power MT	E-MT10 Std	E-MT10 Adv	
L-I OWEI WII	E 1111 10 Ota	2 111 10 7141	
Input Voltage	230Vac (170 – 270 Vac) Single Phase	230Vac (170 – 270 Vca) Single Phase	
Input Voltage	230Vac (170 – 270 Vac) Single Phase	230Vac (170 – 270 Vca) Single Phase	
Input Voltage Output Voltage	230Vac (170 – 270 Vac) Single Phase 230Vac (170 – 270 Vac) Three Phase	230Vac (170 – 270 Vca) Single Phase 230Vac (170 – 270 Vca) Three Phase	
Input Voltage Output Voltage Maximum Phase Current Maximum Pump Power	230Vac (170 – 270 Vac) Single Phase 230Vac (170 – 270 Vac) Three Phase 10A	230Vac (170 – 270 Vca) Single Phase 230Vac (170 – 270 Vca) Three Phase 10A	
Input Voltage Output Voltage Maximum Phase Current Maximum Pump Power 230Vac Three Phase	230Vac (170 – 270 Vac) Single Phase 230Vac (170 – 270 Vac) Three Phase 10A	230Vac (170 – 270 Vca) Single Phase 230Vac (170 – 270 Vca) Three Phase 10A	

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3P Technik UK Limited Unit 9 Parc Teifi Cardigan SA43 1EW

Phone: 01239 623506 Fax: 0845 544 3150

sales@3ptechnik.co.uk

www.3ptechnik.co.uk www.mac3uk.com

