



Economically Smart!

 **MOTOLINE**

PI130 INVERTERS

Product Overview

BEE4	
EMPOWERING SUPPLIER	
ISO 9001	Certified
ISO 14001	Certified
ISO 45001	Certified

ABOUT US

Established in 1974 as a single bearing shop in Durban, South Africa; BMG's aggressive growth strategy has included acquisitions, supplemented by a steady organic growth discipline. BMG attracts best-of-breed talent resulting in technical expertise that differentiates BMG in the industry. Staff are truly part of the BMG family and its success.

BMG boasts an accredited in-house technical and commercial training academy which fosters a culture of staff development and career advancement; it's all about sustainability.

The net result, is a company that reliably supplies and supports 70 000 customers in 15 countries with the widest range of industrial engineered products and expert services in Africa via 105 branches.

BMG is positioned to deliver bespoke 360 degree solutions to its customers, and subsequently return on investment to its investors and shareholders. BMG plays a pivotal role in supporting the productivity and production targets of all Industrial, Manufacturing, Mining and Agricultural sectors of the economies in the countries it serves. With an enviable reputation as Africa's largest distributor, manufacturer and service provider of the highest quality engineering consumables and components; including

- Bearings & Seals
- Power Transmission Components
- Drives, Motors and Controllers
- Hydraulics, Pneumatics and Filtration
- Heavy and Light Duty Materials Handling
- Valves and Lubrication
- Fasteners, Gaskets and Tools

BMG is a level 4 BEE contributor with ISO 9001 Quality Assurance certification. Health and safety of its employees and customers is a paramount focus and the company adheres to ISO 45001. BMG is also committed to environmental care and sustainability and strictly follows the ISO 14001 charter.

As a key contributor to the Invicta Holdings stable, BMG has played a major part in Invicta's unique achievement of being rated in South Africa's Top 100 Companies for 21 consecutive years.



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FEATURES & BENEFITS

PRODUCT INTRODUCTION

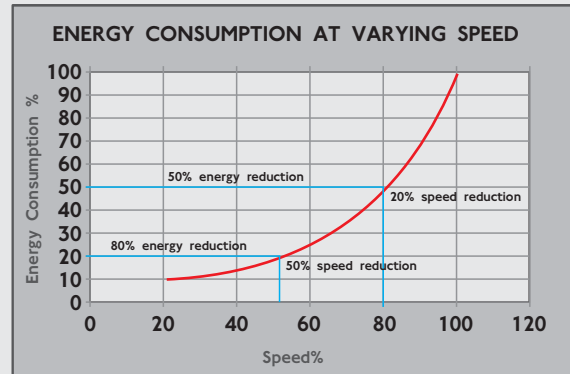
The PI130 series frequency inverter is an economical and high performance vector control frequency inverter which is specifically used to control motor speeds for various small applications.

DISPLAY/KEYPAD

- Removable
- On board potentiometer
- Direction display
- Lock and password protection
- Parameter access

MOTOR FEATURES

- Earth fault on output
- Electronic thermal overload
- Automatic motor tuning
- Stall protection



WHY MOTOLINE PI130 INVERTER?

This general purpose mini drive is packed with powerful features and advantages.

- Low cost
- Reliable
- Efficient
- Compact
- 24 hour support

FEATURES	BENEFITS
• Simple to programme	• Reduces commissioning time
• PID pump control	• Pressure or flow control with minimum equipment
• Energy saving function	• Saves money
• Built in brake chopper	• Allows regenerative load control
• Optional PC software	• Programme via PC possible
• Coated PCB	• Reduces chance of corrosion
• Auto reset	• Reduces calls on service personnel
• 200% start current	• Provides motor with heavy load start

VSD PROTECTION

- Short circuit on output
- Earth fault on output
- Surge protection



RANGE OF CAPACITY

- Power range: 0.4-2.2kW
- Maximum Frequency: 400Hz
- Voltage level:
Single-phase 220V / Three-phase 380V



	Items	Specification
Voltage	Voltage and frequency levels	Single-phase 220V, 50/60Hz; Three-phase 220V, 50/60Hz; Three-phase 380V, 50/60Hz
	Allowable fluctuation	Voltage: $\pm 10\%$ Frequency: $\pm 5\%$
Control	Run method	Keyboard/terminal/serial communication
	Ref setting	Total of 8 frequency setting modes: digital, analog voltage/current, multi-speed and serial port.
	Multi-speed Preset ref	16 speeds can be set (multi-function terminals)
	Multi-stage acceleration	2-stage acceleration can be set (multi-function terminals)
	Input signal Jog	Jog reference overrides standard reference
	Fault reset	When protection function is activated, fault condition can be reset automatically or manually.
	PID feedback signal	0 to 10V/0 to 20mA analogue feedback
Running	Running status	Motor status display, forward, reverse, program running status.
	Output signal Fault output	Relay contact capacity AC 250V/7A
	Analog output	1-way analog output. 9 kinds of signals selectable (frequency, current, voltage, etc), output signal range 0 to 10V/0 to 20mA.
	Output signal	2-way output, 8 kinds of signals selectable each way
	Running function	Frequency Limit , skip frequency, slip compensation, reverse protection, auto-tuning, PID control
	DC braking	Built-in PID regulates braking current to ensure sufficient braking torque
	Input terminals	5 digital input terminals, compatible with active PNP or NPN inputs.
	Output terminals	one digital output terminal, one relay output terminal , one analog output terminal, 0-20mA/0-10V.
Protection function	Inverter protection	Over-voltage protection, under-voltage protection, over-current protection, over-load protection, over-temp protection, over-current stall protection, over-voltage stall protection, external fault, communication error, PID feedback signal faults.
	IGBT temperature display	Displays IGBT temperature
	Instantaneous restart on Power dip	Less than 15 milliseconds: continuous operation. More than 15 milliseconds: instantaneous restart after motor speed detection automatically
	Fly start	Inverter automatically tracks motor speed
	Parameter protection function	Protect inverter parameters by setting administrator password

APPLICATIONS

Packing, printing, spinning, food, construction, farming, irrigation, pumping, washing, assorted mechanization, machine tool, conveyor, blower, water pump, mixing machine.

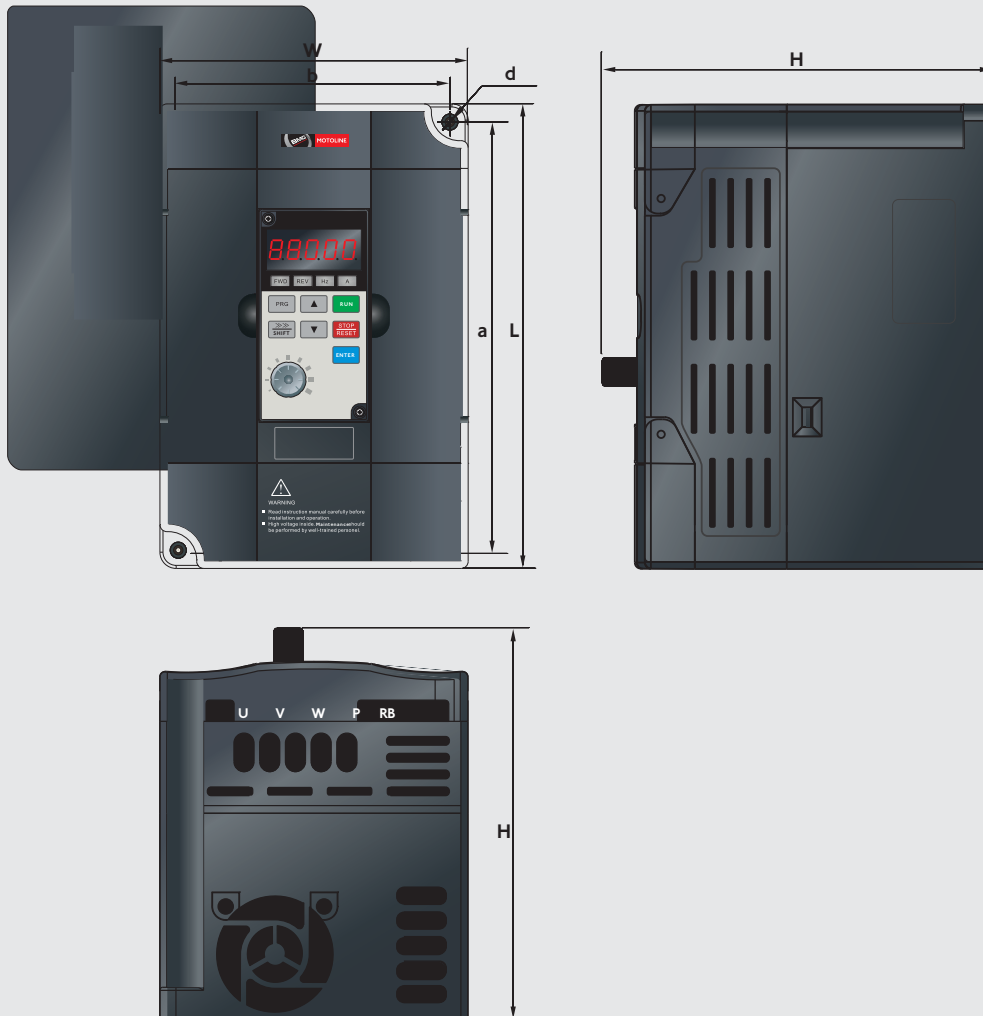


TECHNICAL SPECIFICATIONS

	Items	Specification
Protection function	Inverter protection	Over-voltage protection, under-voltage protection, over-current protection, over-load protection, over-temp protection, over-current stall protection, over-voltage stall protection, external fault, communication error, PID feedback signal faults.
	IGBT temperature display	Displays IGBT temperature
	Instantaneous restart on Power dip	Less than 15 milliseconds: continuous operation. More than 15 milliseconds: instantaneous restart after motor speed detection automatically
	Fly start	Inverter automatically tracks motor speed
	Parameter protection function	Protect inverter parameters by setting administrator password
Display	LED Keyboard	Monitoring variables: running frequency, set frequency, output current, DC bus voltage, motor voltage, actual motor speed, PID setting value, PID feedback value, input terminal status, output terminal status, analog AI1 value, analog AI2 value, current stage of multi-speed, torque set value, etc.
		Saves maximum of 3 error messages, error type, voltage, current, frequency and terminal status when failure has occurred.
	LED display	Display parameters
	Key lock and function selection	Locks user keys
Communication	RS485	Isolated RS485 communication module, allows internet communication with host computer.
Environment	Environment temperature	-10 ° to 40 ° (temperature at 40 ° to 50 °, please derate)
	Storage temperature	-20 ° to 65 °
	Environment humidity	Less than 90% RH, non-condensate
	Height and vibration	Below 1000m and 5.9m/s ² (= 0.6g)
	Application sites	Indoor where no sunlight or corrosive, explosive gas and water vapor, dust, flammable gas, oil mist, water vapor, water drop or salt, etc.
	Altitude	≤1000m
	Pollution degree	2
Product standard	Product safety standards.	IEC61800-5-1:2007
	Product adopts EMC standards.	IEC61800-3:2005
Cooling method	Force-air cooling	Natural / Cooled



DIMENSIONS



Model	Voltage(V)	Power(KW)	Input current	Output current	Dimension (L□W□Hmm)	Installation size (a□b dmm)	Base.
PI130-0R4G1	Single phase 220V ± 10%	0.4	5.4	2.5	142x85x112	130x73 Ø5.3	1M2
PI130-0R7G1		0.75	8.2	4.0			
PI130-1R5G1		1.5	14.0	7.0	152x101x117	140x89 Ø5.3	1M3
PI130-0R4G3	Three phase 380V ± 10%	0.4	2	1.2	152x101x117	140x89 Ø5.3	1M3
PI130-0R7G3		0.75	4.3	2.5			
PI130-1R5G3		1.5	5.0	3.8	152x101x117	140x89 Ø5.3	1M3
		2.2	5.8	5.1			

BRINGING THE WORLD'S BEST BRANDS TO YOU

In the bid to procure cutting-edge components at competitive prices, BMG is able to capitalise on long-standing relationships with leading manufacturers dedicated to excellence in design and production.

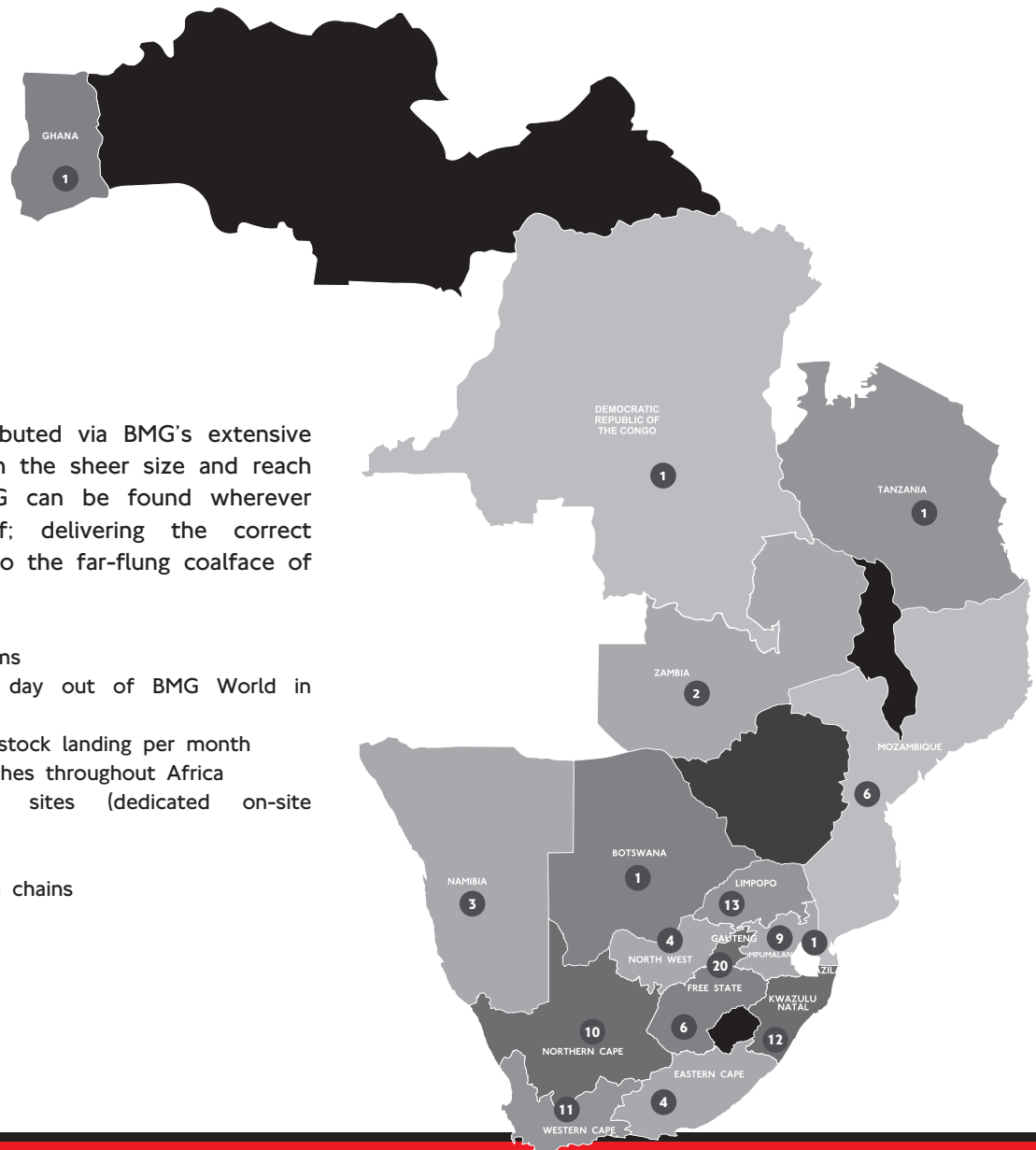
Products are imported from around the globe and brought to BMG's strategically located distribution facilities and regional service centres via the main distribution hub in Johannesburg - BMG World. A world-class facility boasting 308 000m³ of fully stocked warehouse space, an accredited training facility and unlimited engineering capabilities.

Preferred Brands:



Our Extensive Coverage Throughout Africa

105
BRANCHES



Products and services are distributed via BMG's extensive distribution network. It's through the sheer size and reach of our infrastructure, that BMG can be found wherever industry has established itself; delivering the correct components at the right time, to the far-flung coalface of our customers' operations.

- Over 300 000 product line items
- Around 4 500 transfers per day out of BMG World in Johannesburg
- Over 1 000 tons of imported stock landing per month
- 105 strategically situated branches throughout Africa
- Vendor Managed Inventory sites (dedicated on-site stockholding)
- International exports
- Locally empowered distribution chains

Bee PART

24 HR TOLL-FREE EMERGENCY
BRANCH HELPLINE:

0800 022 224

WEBSITE:

www.bmgworld.net



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