



PR5200 SOFT STARTERS

Product Overview



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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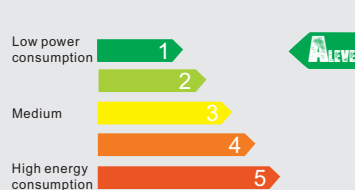
FEATURES & BENEFITS

PRODUCT INTRODUCTION

The PR5200 series intelligent motor soft starter offers the perfect alternative to efficient motor starting & protection.

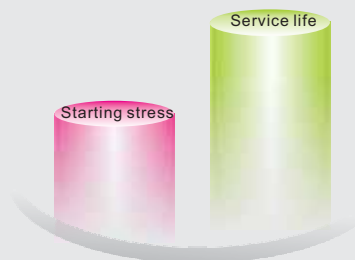
REDUCE ENERGY CONSUMPTION

Reducing the starting current of the motor can reduce distribution capacity requirements, thereby reducing the cost of expensive increases to grid capacity.



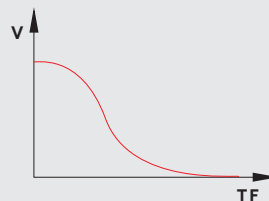
IMPROVE PERFORMANCE

Reducing the starting stress of the motor and load equipment, extends the life of the motor and related mechanical equipment.



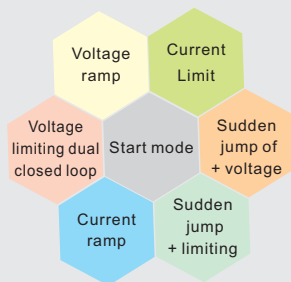
SOFT-STOP FUNCTION

Soft-stop function effectively reduces the stop surge of the process.



MULTI-MODE START

With six unique start modes to adapt to the complexity of the motor and load, you achieve the perfect start profile.



RELIABLE PROTECTION

Comprehensive motor protection.



INTELLIGENT APPLICATION

The latest technology methods have been adopted to deliver advanced motor control.



USER-FRIENDLY DESIGN



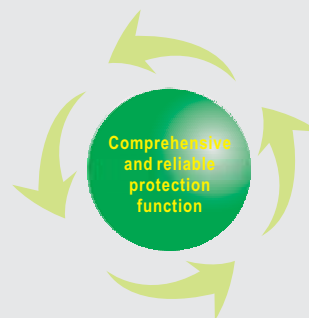
QUALITY ASSURANCE

Highest levels of quality control are used throughout the manufacturing process.



COMPREHENSIVE AND RELIABLE PROTECTION FUNCTIONS

Undervoltage and overvoltage protection. Soft-start thermal protection, motor underload, start time protection. Input phase loss, three-phase balance protection. Overcurrent, running overload, load short-circuit protection.





QUICK & EFFECTIVE AFTER-SALES SERVICE




NAMEPLATE

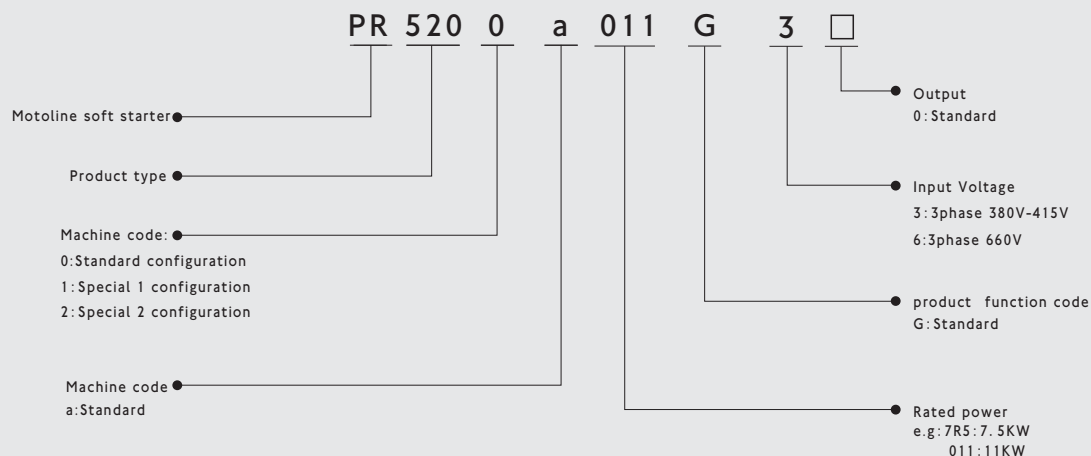
Soft starter model →
Output rating →
Input rating →
Output specifications →
Bar Code →
Serial No. →

| | |
|---------|---------------------------|
| MODEL: | PR5200 5R5G3 |
| POWER: | 5.5kW |
| INPUT: | AC 3PH 380V±10% 50Hz/60Hz |
| OUTPUT: | AC 3PH 0-380V 11A 0-400Hz |


 ZPB1A0100001

MODEL CODE



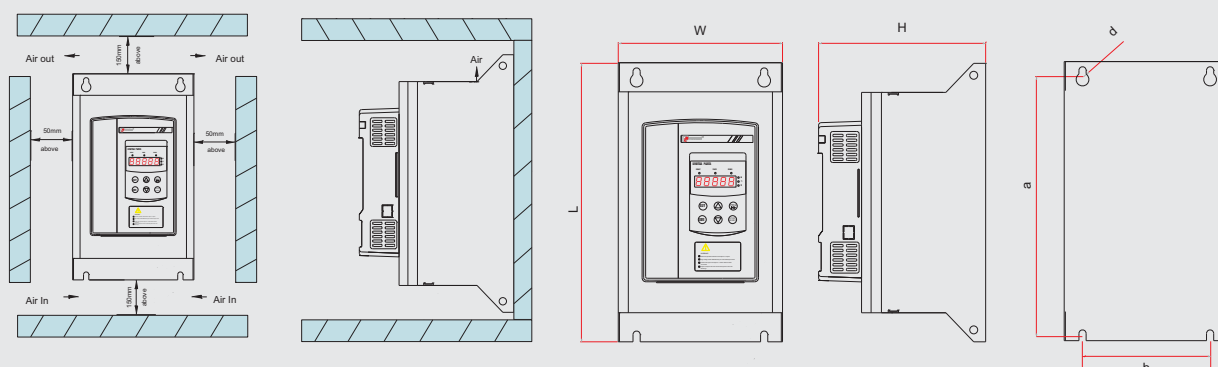
SERVICE CONDITIONS

| No. | item | specification |
|-----|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Power supply | Three-phase ac 380 V or 660 V ± 15%, frequency 50 Hz or 60 Hz, the power supply capacity must meet the soft starter to motor startup requirements |
| 2 | Applicable motor | Squirrel-cage three-phase asynchronous motor . motor rated power should match soft starter rated power |
| 3 | Start frequency | No demands, depending on the specific load |
| 4 | Cooling | Natural airflow |
| 5 | Protection grade | IP20 ^{EN} enclosure |
| 6 | Environmental conditions | Below Elevation of 3000 meters. The ambient temperature must be between -25 ^{°C} ~+ 40 ^{°C} , relative humidity below 90% RH, no condensation, no flammable, explosive or corrosive gas, no conductive dust, indoor ventilation must be good. Vibration is less than 0.5G place |

★ Note: we can offer special variants of products, such as explosion proof type, low temperature, high pressure type soft starters, please enquire at your nearest BMG branch.

TECHNICAL SPECIFICATIONS

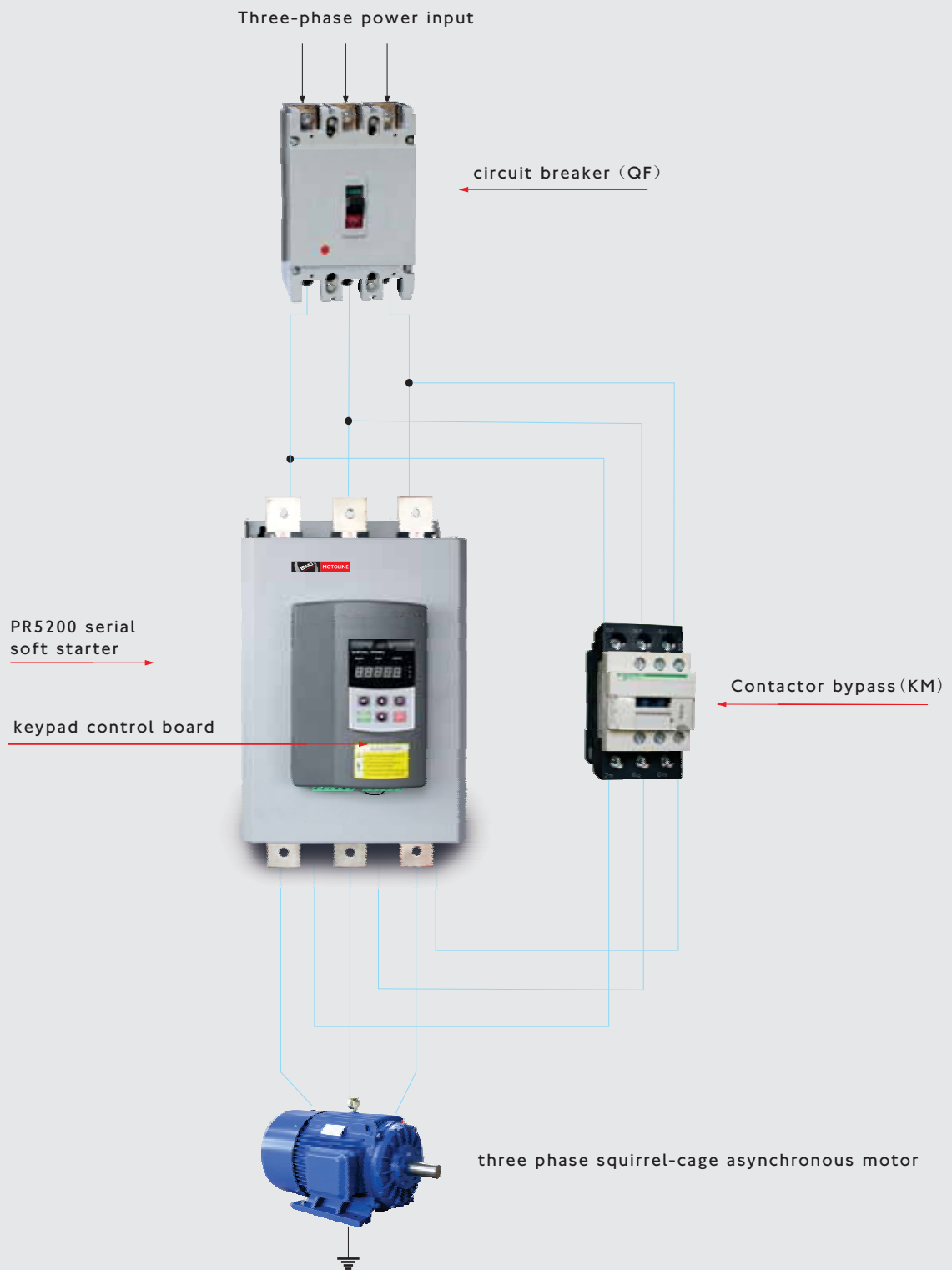
INSTALLATION



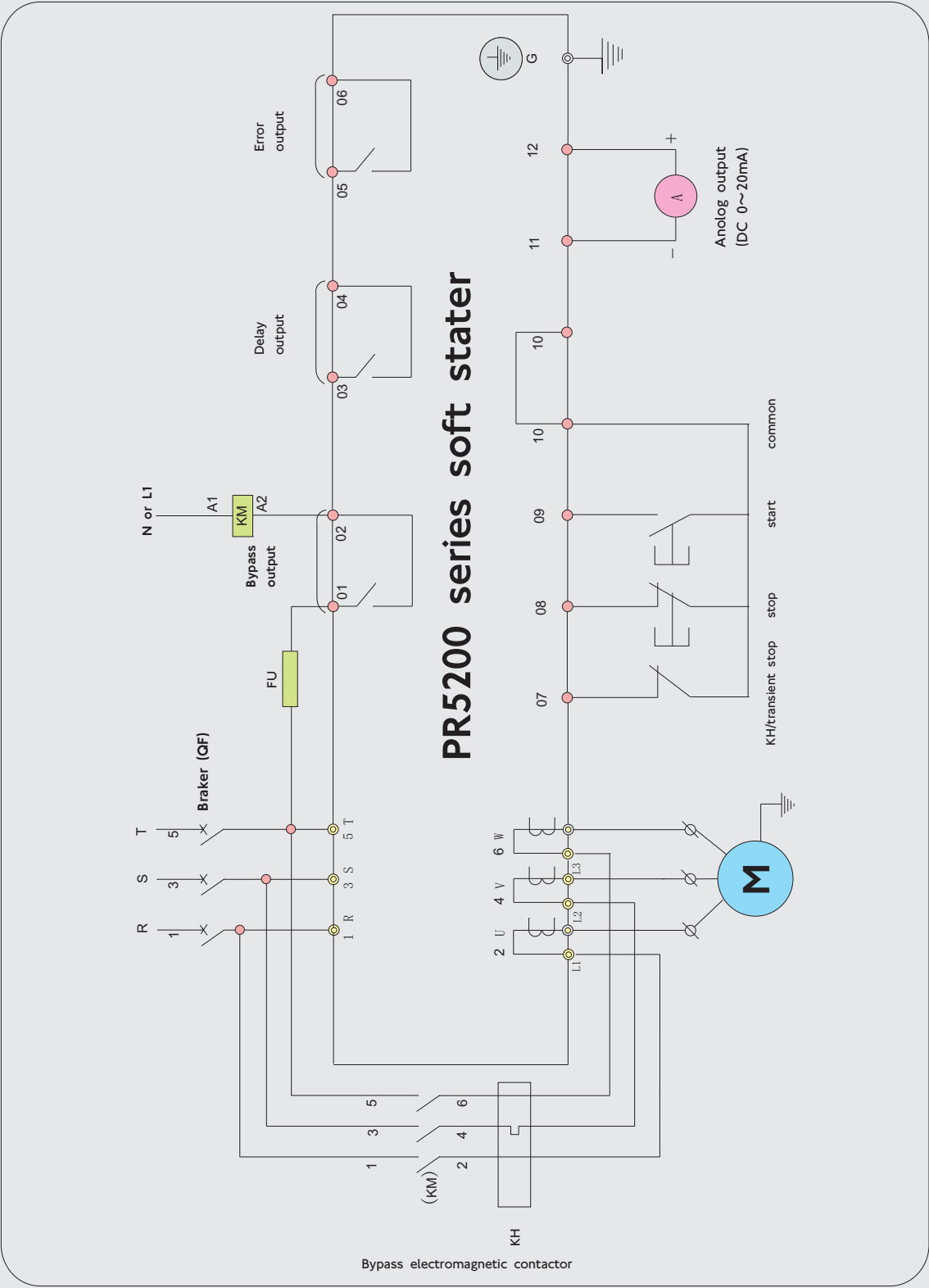
INSTALLATION SIZE

| Product Specification | Rated Power (KW) | Rated Current (A) | Dimension | | | Installation Dimension | | | N.W. (kg) |
|-----------------------|------------------|-------------------|-----------|-----|-----|------------------------|-----|---|-----------|
| | | | L | W | H | a | b | d | |
| PR5200 5R5G3 | 5.5 | 11 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 7R5G3 | 7.5 | 15 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 011G3 | 011 | 23 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 015G3 | 015 | 30 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 018G3 | 18.5 | 37 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 022G3 | 022 | 44 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 030G3 | 030 | 60 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 037G3 | 037 | 74 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 045G3 | 045 | 90 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 055G3 | 055 | 110 | 288 | 146 | 159 | 270 | 115 | 8 | <3.5 |
| PR5200 075G3 | 075 | 150 | 350 | 206 | 210 | 330 | 160 | 8 | <20 |
| PR5200 090G3 | 090 | 180 | 350 | 206 | 210 | 330 | 160 | 9 | <20 |
| PR5200 115G3 | 115 | 230 | 350 | 206 | 210 | 330 | 160 | 9 | <20 |
| PR5200 132G3 | 132 | 264 | 420 | 256 | 250 | 400 | 210 | 9 | <23 |
| PR5200 160G3 | 160 | 320 | 420 | 256 | 250 | 400 | 210 | 9 | <23 |
| PR5200 185G3 | 185 | 370 | 420 | 256 | 250 | 400 | 210 | 9 | <23 |
| PR5200 200G3 | 200 | 400 | 420 | 256 | 250 | 400 | 210 | 9 | <23 |
| PR5200 250G3 | 250 | 500 | 490 | 360 | 290 | 465 | 290 | 9 | <31 |
| PR5200 280G3 | 280 | 560 | 490 | 360 | 290 | 465 | 290 | 9 | <31 |
| PR5200 320G3 | 320 | 640 | 490 | 360 | 290 | 465 | 290 | 9 | <31 |
| PR5200 400G3 | 400 | 800 | 490 | 360 | 290 | 465 | 290 | 9 | <31 |

WIRING



MAIN CIRCUIT DIAGRAM



MODEL SELECTION REFERENCE

| Mechanical application type | Load type | Starting current(%) | Starting time(t) |
|------------------------------------------|------------------------|---------------------|------------------|
| Centrifugal pump | Standard load | 300 | 5-15 |
| Piston pump | | | |
| Fan | | 350 | 5-15 |
| 5-15 cold-reducing machine | | 300 | 10-40 |
| Screw compressor | | 300 | 5-10 |
| Centrifugal compressor | Standard or heavy load | 350 | 3-20 |
| Piston compressor | Standard load | 300 | 10-40 |
| Conveyor belts | | 400 | 5-10 |
| Spiral Crane | | 350 | 3-10 |
| T-type cable car | | 300 | 3-10 |
| Elevator | | 300 | 2-10 |
| Circular Saw | | 100 | 15-10 |
| Band Saw | Or heavy load | 350 | 10-16 |
| Blending machine Cutting machine chip | Heavy load | 400 | 3-10 |
| Mixer - thin | | 350 | 5-20 |
| Mixer - thick | | 350 | 5-10 |
| Grinding machine | Heavy load | 450 | 5-60 |
| Crusher | Standard load | 400 | 10-40 |
| Refiner | | 300 | 5-30 |
| Press | Heavy load | 400 | 20-60 |

Heavy load profiles may require a larger unit.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS

| In accordance with standard | | Unit | PR5200 developed the electronic soft start t-soft stop unit ,and passed performance testing ,meet the requirements of national standard. | | | |
|----------------------------------------|-----------|------|------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------|---------|
| 3-phase power source voltage/frequency | | V | 380-15% 50Hz | 415+10% | 440-15% | 500+10% |
| | | Hz | | | | |
| Nominal current motor power | | A | 11 ... 800A 5.5...400kW | | | |
| | | KW | | | | |
| Motor voltage | | V | 380..415 | 440 ... 500 | | |
| Adjust the current | | | 0.5-5 x FLC | | | |
| Start mode | | | Current limit start Voltage ramp start | | Current ramp Double -closed loop start mode | |
| Stop mode | Free stop | | | | | |
| | Soft stop | | Between 0.5 to 60s can adjust through writing programmable codes. | | | |
| Display and keyboard | | | Motor operating current or percentage. Displays relevant alarms or warnings. | | | |
| Select starter | | | Choose PR5200 devices according to motor nominal power and load capacity ; starter power can be used on general load or heavy load. | | | |



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:

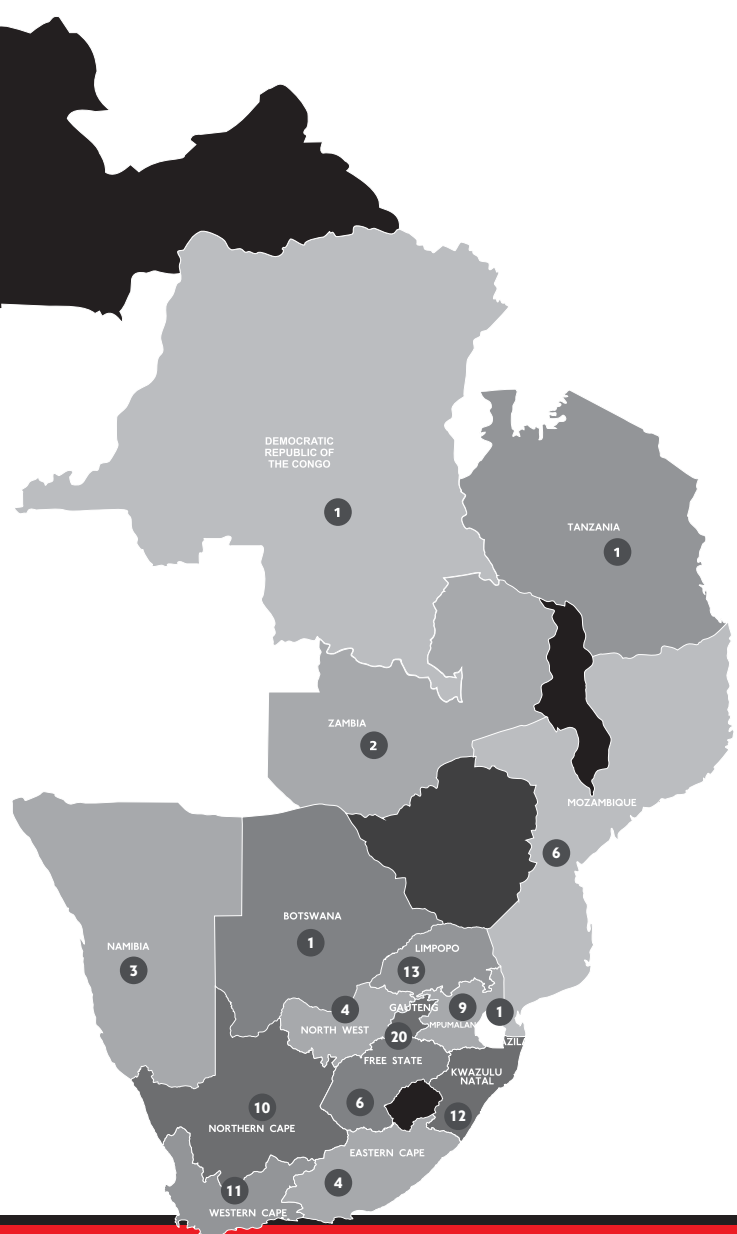


Our Extensive Coverage Throughout Africa

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



Be PART

24 HR TOLL-FREE EMERGENCY
BRANCH HELPLINE:

0800 022 224

WEBSITE:

www.bmgworld.net



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TECHNICAL RESOURCES • FIELD SERVICES

