

Royce Cross Agencies

Electric Motor & Geared Sales

Royce Cross Agencies
3 Cord Street, Dudley Park, 5008, South Australia
Ph: 08 8269 4000 Fax: 08 8269 6699
Email: sales@roycecross.com.au
Web: www.roycecross.com.au
ABN: 43 515 678

NEWSLETTER ISSUE 3, 1 August 2007

Features IP Rating information, New Crompton Greaves range & SWER Rural Area Inverters

HOW HOT IS HOT?

With summer gone and another fast approaching, we have again cautioned our people about the usual stream of telephone calls enquiring that "My motor is running hot".

Our first question in response to this statement is "How hot is too hot"? The normal reply is, "I can't lay my hand on it." Very seldom will you find anyone who has actually taken a skin temperature measurement.

Our next question of the caller is, "How hot is the hot water tank in your house — 55° to 60° C Degrees?" That's the normal settings on most hot water tanks. We then ask if the caller can hold his hand under the tap with only hot water turned on. The answer is always certainly "NO." Our reply to this is, "why would you expect to keep their hand on something rated at 155° C degrees?"

Most motors sold in Australia today are rated with Class F insulation which has an allowable insulation temperature of 155° C which would give you at least 80° C direct surface temperature.

The different total allowable temperatures for the insulation of the motor is as follows:

Class E	120 degrees C
Class B	130 degrees C
Class F	155 degrees C
Class H	180 degrees C

Keep these figures in mind when you get a call about " My motor is running hot."

Royce Cross Agencies strives to help customers make the right decision, we offer both a rewind / overhaul service and new motor stock holding. This means you get the best of both worlds. We assess and deliver.....

IS MINE BIG OR SMALL?

Basically, electric motors are divided into three broad kilowatt (kw) categories: small, medium and large. The most common motors are considered to be fractional-horsepower motors with ratings from 0.15 kW to 0.75 kW and are categorized as small motors. Also included in the small category are motors with smaller ratings, which are commonly classified as sub-fractional or miniature.

Medium size motors are considered to be in the range of 0.75 kW through 75 kW, with large motors occupying the 75 kW to 40,000 kW range. Categories can vary due to motor type (AC or DC), speed, number of poles and maximum ratings, so the categories listed should be viewed with this in mind.

Since medium-sized motors are also used in large quantities in industrial and consumer applications, IEC standards permit motor comparison between manufacturers. With large motors, however, there is generally no standardization, since motors in this category are normally designed for specific applications.

Monthly News

Crompton Greaves Electric Motor range broadens.

We are please to announce that in the next 8 weeks, Royce Cross Agencies will have on the shelf.

- **Global Three Phase DC Brake Motors (arrived) 0.75kw—4kw 4 Pole**
- **Increased Safety Ex e Three Phase Motors**
- **Airconditioning Motors**



These new product lines broaden an existing line of standard three phase motors and B56 Single Phase Motors. Royce Cross Agencies is also working on Ex d, Metric Frame Single Phase & Generators.

We also work in conjunction with customers on special purpose motors, if your requirement is outside of our normal motor specifications, we can help!

Heavy Duty Crompton Greaves Mining Motors

Royce Cross Agencies is currently developing a Heavy Duty Range of Mining Motors for the Australian Mining Industry.



Other Products
Click on image
for more information



Crompton Greaves
Three Phase Motors
MEPS 2 Compliant



Crompton Greaves
Single Phase Motors



Baldor Motors & Drives
AC & DC Wash Down
Geared motors



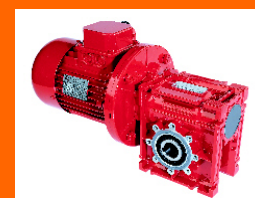
Baldor Servo Products



RXM Series 3 Cast
Iron Three Phase
Electric Motors



Brake Motors



Our business plan is development of electric motors manufactured for the harshest environments.

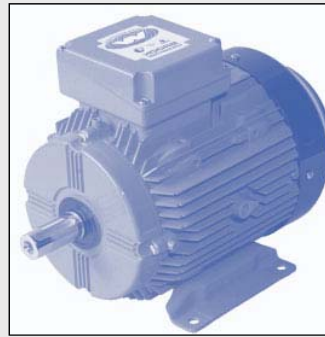
In association with Crompton Greaves Ltd we are now able to offer ex works Heavy Duty Mining Motors with paramount specifications. Our vision is to offer these of the shelf in Australia.

Range: 0.75kW - 350kW (1 - 470HP)

Speed: 2,4,6 ad 8 pole

Standards Specifications:

- IP65 TEFC.
- Twin Pack Epoxy Coatings.
- Cast Iron Fan Blades.
- Cast Iron Cowling.
- "H" Class insulation.
- Vaccum pressure impregnation and Epoxy top coat on winding overhangs.
- Canopy (Horizontal) For V1 mtg canopy is provided.
- Drain Plugs.
- Anti Condensation Heaters.
- Grease Relief Systems



HT Motor Capabilities

Crompton Greaves supply Induction motors of ratings up to 10,000 kW with superior designs and enhanced reliability features for applications in a Thermal Power Plant.

Application for the range of motors include Boiler Feed Pumps, Circulating Water Pumps, In-duced Draft Fans, Forced Draft Fans, Primary Air Fan, Secondary Air Fan, Condensate Extract Pump, Crushers, Coal Mills Conveyer and Ash Slurry Pumps.

HT Motors of Crompton Greaves offers benefits of easy installation, low noise levels, easy main-tenance, great energy savings low vibration levels and high efficiency even at part loads. The Division has received certification from BVQI and has been awarded the ISO 9001.

Please contact us for more information sales@roycecross.com.au

IP Ratings

- ◆ IP ratings International Protection ratings are covered in Australian Standard AS1939.
- ◆ This system uses a two digit code to specify the degree of particle and water resistance.
- ◆ The first digit indicates the degree of protection of the interior from the ingress of solid foreign objects.
- ◆ The second digit indicates the degree of protection of the interior from the ingress of water.

For example IP65 means: *Complete protection against entry of dust & protection from a low pressure jet of water in any direction.*

First Digit		Second Digit	
X	Not tested (no protection specified)	X	Not tested (no protection specified)
0	No protection provided	0	No protection provided
1	Protection against entry of objects larger than 50	1	Protection against drops of water falling vertically
2	Protection against entry of objects larger than 12 square mm	2	Protection against drops of water falling vertically when the luminaire is tilted up to 15 degrees from its normal position
3	Protection against entry of objects larger than 2.5 square mm	3	Protection from entry of water spray from angle of up to 60 degrees from vertical
4	Protection against entry of objects larger than 1.0 square mm	4	Protection from entry of water splashes or spray from any direction
5	Protection against entry of dust in sufficient quantity to prevent satisfactory op-	5	Protection from a low pressure jet of water in any direction
6	Complete protection against entry of dust	6	Protection against heavy seas or a strong jet of water in any direction

Geared REDUCTION Motors



Toshiba Variable Speed Drives



Toshiba Soft Starters



Stainless Enclosures

Inverters for 480Volt single phase power supply to 15kw



Toshiba Programmable Logic Controllers

Hazardous Location Motors

Mining Motors

2 Speed Motors

Slide Rails

Starters and Control

Pulleys and Sprockets

Rewinding and Repairs

Electric Motor Spare Parts and Accessories

		7	Protection against immersion up to 1 metre
		8	Protection against submersion over 1 metre

Monthly Featured Product

Inverters for 480V SWER single phase power supply for use in Rural Areas. Uses

standard three phase 415V AC induction motors

We can supply inverters designed to operate from a 480V 50Hz 2 Phase SWER supply network.

The inverter will produce a 3 phase supply output to operate a standard 3phase 415V AC 50hZ electric motor. Included in the supply of the inverter is an auto-transformer. The auto-transformer assists in moderating voltage fluctuations in the supply seen by the inverter and helps smooth out current ripple back to supply network.

BENEFITS:

- ◆ No need for costly 480V AC single-phase motors, avoiding downtime through wear and tear of single-phase motor centrifugal switches and capacitors
- ◆ Avoid high inrush power supply current when starting motor.
- ◆ Smooth acceleration and deceleration of load.
- ◆ Ideal for pumping applications and refrigeration compressors.
- ◆ Standard Range 7.5kW to 22kW (other sizes also available on application.)



Contact us for more information at sales@roycecross.com.au

Royce Cross Agencies Electric Motor & Geared Sales

To remove your name from our mailing list, please [click here](#).

Questions or comments? E-mail us at sales@roycecross.com.au or call (08) 8269 4000.

If you require any further information on our products and service please do not hesitate to contact us [click here](#) [More Details](#)

Direct On Line Starters

Contractors

Electronic Overload Protectors

Staff Contact

Phillip Cross - Sales Manager 15 years of Electric Motor, gearbox, PLC and VF drive sales

Email:

phillip@roycecross.com.au

Mobile: 0415 160 462

Jeff Weyland - Technical Sales 35 years experience in Electric Motors, specialist in DC motors and control, Variable Speed Drives and Geared Motors

Email:

jeff@roycecross.com.au

Mobile: 0414 752 317

Sam Penaluna - Technical Sales with 12 years experience in AC and DC Electric Motor and Generator rewinding and repairs

Email:

samp@roycecross.com.au

Mobile: 0425 712 402

Tony Beddow - Technical Sales and Store Manager with over 30 years experience in AC and DC Electric Motor

rewinding and repairs.

Email:

tony@roycecross.com.au

Mobile: 0433 452 196

Leanne Vinaev -

Administration and Accounts Manager

Email: leanne@roycecross.com.au