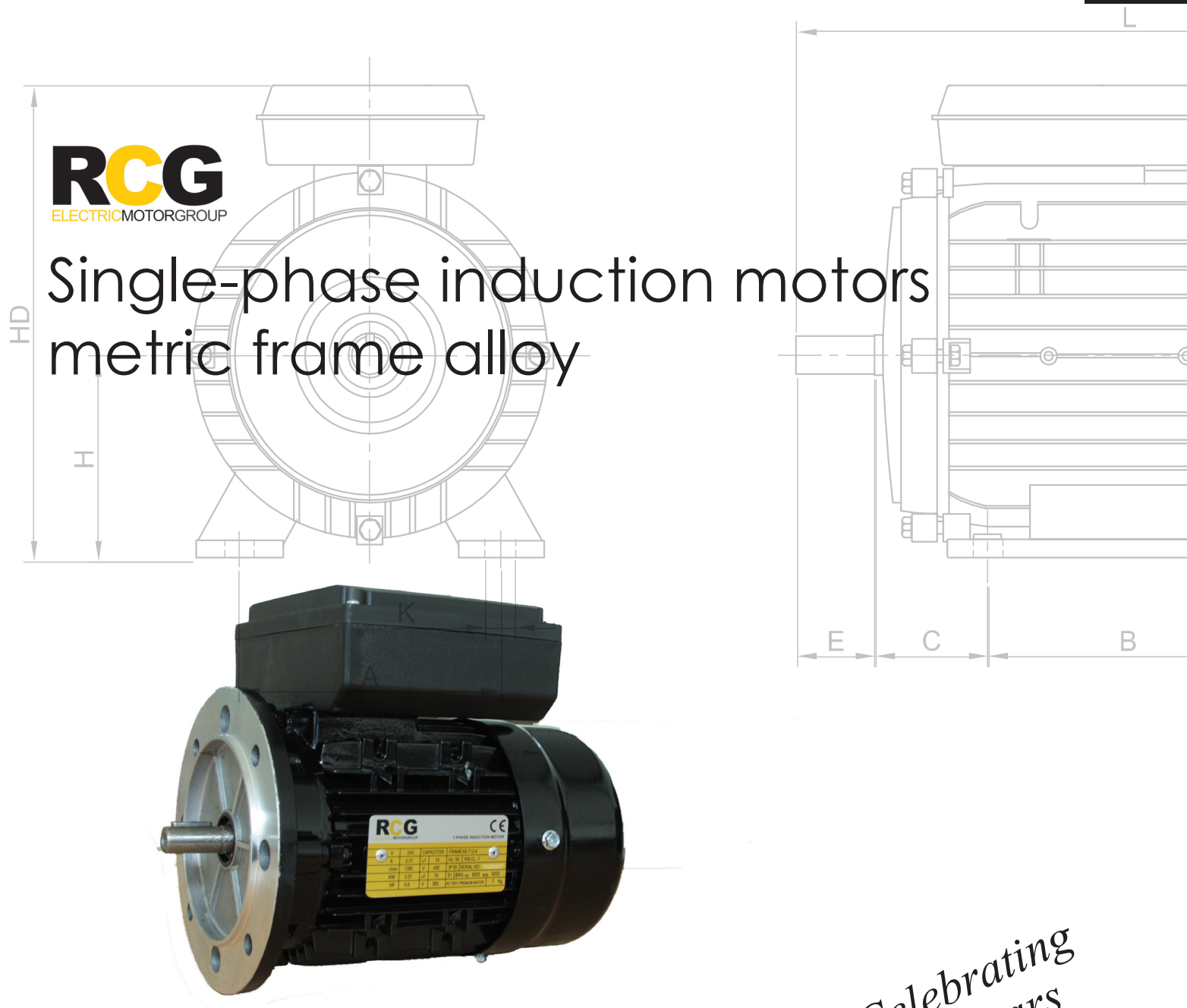


RCG
ELECTRICMOTORGROUP

Single-phase induction motors metric frame alloy



*Celebrating
40 years
in business*

About Us

Royce Cross Agencies prides itself on its large electrical motor and accessory range, product performance, personalised technical service and speedy delivery throughout Australia.

Our range of high-quality electric motors includes such brands as the Royce Cross RCG (which replaces the REMX brand), Crompton Greaves, Toshiba, ABB, Transtecno and Baldor.

When it comes to electric motors, the team at Royce Cross Agencies offers unparalleled knowledge and experience. Our resourceful staff assist a vast array of industries, from agriculture, manufacturing and engineering to electrical, mining, air conditioning and refrigeration. Our technical team also supplies to individuals with home hobbies.

We deliver nationally with orders normally shipped within one to two days. Royce Cross Agencies understands individual needs and adapts to customers' requirements.

Our specialisation in the electric motor business has enabled us to develop and enhance our business, offering a complete solutions package, which includes:

- Three-phase motors
- Single-phase motors
- Air movement motors
- Variable speed drives
- Gear motors
- DC motors & controllers
- Accessories

Technical services

Royce Cross Agencies has established a large network of motor technical specialists that provide a range of quality services which include:

- Motor rewinds and repairs
- Motor redesign and engineering
- Motor overhaul
- Motor weatherproofing
- Mechanical services
- Testing
- Vibration monitoring
- Laser alignment
- Industrial electronics
- Design starter/VSD construction

Visit www.roycecross.com.au to order your products online. Alternatively, speak with a member of our technical sales team by calling 1300 553 229.

Single-phase induction motors



RCG - Single Phase Induction Motors is a range of high quality, totally enclosed fan cooled (TEFC), squirrel cage induction motors, designed, manufactured and tested to the latest International and Australian standards.

benefits

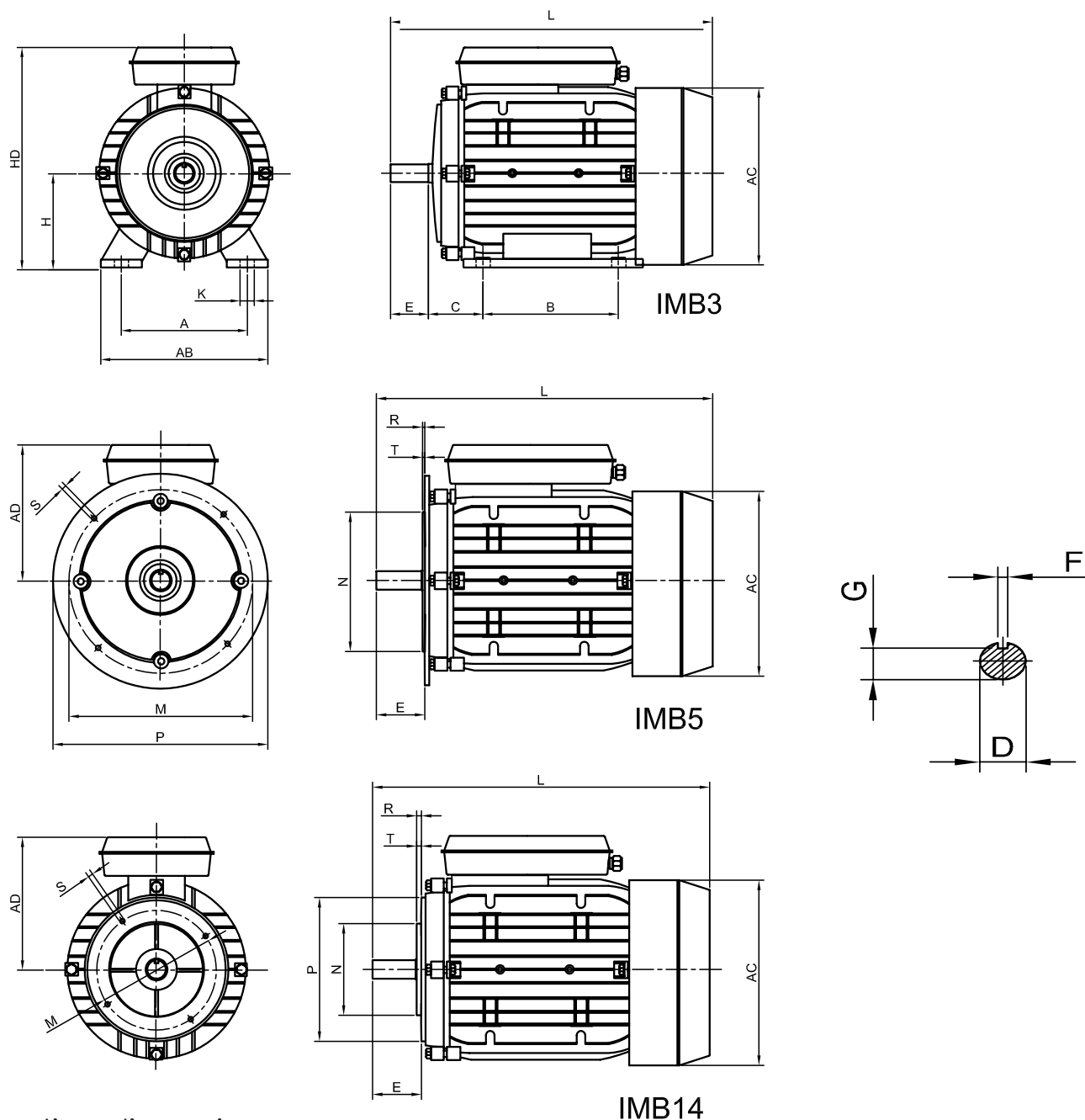
- Quiet operation
- Easily installed
- Dependable and superior life

features

- PSC
- Cap start/cap run
- IP55 enclosure
- Multiple feet locations
- Aluminium frame, end shields and base
- High-strength cable gland
- High-performance and efficiency
- Heavy duty service factors

Item	Description
Standards	Designed and manufactured to IEC34, IEC72 & IEC72 & AS1359. Motors are CE marked.
Electric supply	Motors are designed for 220to250 Volt single phase 50 Hz. Motors 90L and larger are dual voltage 240/480 volts.
Mounting	<p><i>Motors are available in the following mountings:</i></p> <ul style="list-style-type: none"> - Foot mounted IM1001 (B3), Foot and Flange mounted IM2001 (B35), Flange mounted IM3001 (B5), Foot and D Face mounted IM2101 (B34), C Face mounted IM360 (B14) <p>NB: Above IM nominations are those for horizontal mounting with other mounting orientations (i.e. Vertical etc) available on request</p> <ul style="list-style-type: none"> - Multi-mount frame construction to allow terminal box to be located in any position by repositioning cast alloy motor feet, which are bolted to the frame
Duty rating	All motors are maximum continuously rated type S1.
Ambient	Motors are designed to operate in ambient conditions of -15°C to +40°C as standard. Operation in adverse ambient conditions should be referred to RCA.
Altitude	Designed for operation at an altitude of 1000 metres above sea level (refer to RCA for higher altitudes).
Performance	Motors are designed to meet the performance requirements of AS1359.
Motor construction	Aluminium frame and end shields up to 90 Frame. cast iron end shields for 100 Frame and above. Castings are machined to close tolerances for accurate alignment and minimum vibration (G2.5)
Enclosure/cooling system	Standard protection is IP55. Cooling is TEFCIC411 to AS1359.106. Fan cover is pressed steel with cooling fan of polypropylene.
Stator and windings	High-grade insulated, cold-rolled electro-magnetic steel laminations. Vacuum-impregnated Class F insulation with design temperature rise of class B for long motor life and thermal reserve for abnormal conditions.
Winding protection	Manual reset thermal overload device is fitted to motors up to and including 90S to protect against overload conditions.
Bearing and lubrication system	Motors have greased for life sealed ball bearings. Shaft oil seals are provided at each end on all motors to exclude the ingress of dust and water.
Balance	All rotors are dynamically balanced with a half key to Class N, according to AS1359.50.
Terminal box	Terminal box is top mounted on motor frame and is made of high strength polypropylene.
Rating plate	An alloy rating plate containing all details as specified in AS1359 is fitted to all motors.
Finish	All castings are mechanically cleaned and de-greased with aluminium components being primed externally and two finish coats of gloss acrylic resin in finish colour TEALT63 to AS2700 are applied providing a high corrosion protected surface.
Testing	In addition to a full program of tests during manufacture, each motor is subjected to routine tests to AS1359 before to despatch
Options	Some available options are follows: IP56, IP66 enclosure, special paint systems/colours, others on request.

Installation Dimensions



Mounting dimensions

Frame Size	Mounting dimensions (mm)																				Frame dimensions (mm)					
	IMB14															IMB5										
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
56	90	71	36	9	20	3	7.2	56	5.8	65	50	80	0	M5	2.5	98	80	120	0	7	3.0	110	120	110	155	195
63	100	80	40	11	23	4	8.5	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	130	130	115	185	230
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	145	145	125	205	250
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	235	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	265	335
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	265	360
100L	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	215	180	250	0	15	4	205	215	170	280	380
112	190	140	70	28	60	8	24	112	18	130	110	160	0	M8	3.5	215	180	250	0	15	4	223	220	180	290	420

Single-phase MY range - PSC

Technical data - 2 pole 3000 rpm

Model	Power (kW)	Voltage (V)	Current (A)	Approx speed (rpm)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start current	Net weight (kg)	Cap run 450V
S.09B2RCG	0.09	240	0.79	2800	56	0.92	0.50	1.7	2.5	3.2	4
S.12B2RCG	0.12	240	0.99	2800	60	0.92	0.50	1.7	3.5	3.4	6
S.18B2RCGPSC	0.18	240	1.48	2800	60	0.92	0.40	1.7	5	3.9	8
S.25B2RCGPSC	0.25	240	1.96	2800	63	0.92	0.40	1.7	7	4.4	12
S.37B2RCGPSC	0.37	240	2.8	2800	67	0.92	0.35	1.7	10	6.2	16
S.55B2RCGPSC	0.55	240	4.3	2800	70	0.92	0.35	1.7	15	6.5	20
S.75B2RCGPSC	0.75	240	5.15	2800	72	0.92	0.33	1.7	20	8.3	25
S1.1B2RCGPSC	1.1	240	7.02	2800	75	0.95	0.33	1.7	30	9	30
S1.5B2RCGPSC	1.50	240	9.2	2800	76	0.95	0.30	1.7	45	13	40
S2.2B2RCGPSC	2.20	240	13.1	2800	77	0.95	0.30	1.7	65	15	60
S3B2RCGPSC	3	240	16.8	2800	78	0.95	0.30	1.7	90	28	70

Options available include: BB, B14A, B35, B5

Technical data - 4 pole 1500 rpm

Model	Power (kW)	Voltage (V)	Current (A)	Approx speed (rpm)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start current	Net weight (kg)	Cap run 450V
S.06B4RCG	0.06	240	0.61	1400	55	0.90	0.45	1.7	2	2.7	6
S.09B4RCG	0.09	240	0.81	1400	55	0.90	0.7	1.7	6	3	8
S.12B2RCG	0.12	240	1.1	1400	55	0.90	0.4	1.7	3.5	4	8
S.18B4RCGPSC	0.18	240	1.62	1400	56	0.90	0.4	1.7	3.5	4.5	10
S.25B4RCGPSC	0.25	240	1.9	1400	61	0.92	0.35	1.7	7	6.1	10
S.37B4RCGPSC	0.37	240	2.85	1400	62	0.92	0.35	1.7	10	7	14
S.55B4RCGPSC	0.55	240	4.7	1400	64	0.92	0.35	1.7	15	9.5	20
S.75B4RCGPSC	0.75	240	6.2	1400	68	0.92	0.32	1.7	20	10	25
S1.1B4RCGPSC	1.1	240	7.95	1400	71	0.95	0.32	1.7	30	13	35
S1.5B4RCGPSC	1.5	240	9.4	1400	73	0.95	0.3	1.7	45	16	45
S2.2B4RCGPSC	2.2	240	11.21	1400	80	0.98	0.3	1.7	66	23	60

Single-phase ML range - cap start, cap run

Technical data - 2 pole 3000rpm

Model	Power (kW)	Voltage (V)	Current (A)	Approx speed (rpm)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start current	Net weight (kg)	Cap run 450V	Cap start 300V
S.25B2RCG	0.25	240	1.65	2800	65	0.95	2.3	1.8	5.6	4.5	12	50
S.37B2RCG	0.37	240	2.73	2800	67	0.92	2.3	1.8	16	7	16	75
S.55B2RCG	0.55	240	3.88	2800	70	0.92	2.5	1.8	21	8	20	100
S.75B2RCG	0.75	240	5.15	2800	72	0.92	2.5	1.8	30	8.5	25	100
S1.1B2RCG	1.10	240	7.02	2800	75	0.95	2.5	1.8	40	9.5	30	150
S1.5B2RCG	1.5	240 / 480	9.44	2800	76	0.95	2.5	1.8	55	12.5	40	200
S2.2B2RCG	2.2	240 / 480	13.67	2800	77	0.95	2.5	1.8	80	14	60	300
S3B2RCG	3.0	240 / 480	18.2	2800	79	0.95	2.5	1.8	110	20.5	60	400
S4B2RCG	3.7	240 / 480	22.4	2800	80	0.95	2.5	1.8	137	25	50	500

Technical data - 4 pole 1500rpm

Model	Power (kW)	Voltage (V)	Current (A)	Approx speed (rpm)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start current	Net weight (kg)	Cap run 450V	Cap start 300V
S.18B4RCG	0.18	240	1.36	1400	60	0.92	2.5	1.8	9	5.5	12	50
S.25B4RCG	0.25	240	1.99	1400	62	0.92	2.5	1.8	12	6.9	14	75
S.37B4RCG	0.37	240	2.81	1400	65	0.92	2.5	1.8	16	8.1	14	75
S.55B4RCG	0.55	240	4.0	1400	68	0.92	2.5	1.8	21	8.9	25	100
S.75B4RCG	0.75	240	4.0	1400	71	0.92	2.5	1.8	30	9.6	30	150
S1.1B4RCG	1.1	240	7.2	1400	73	0.95	2.5	1.8	40	13	30	150
S1.5B4RCG	1.5	240 / 480	9.57	1400	75	0.95	2.5	1.8	55	16	40	200
S2.2B4RCG	2.2	240 / 480	13.9	1400	76	0.95	2.5	1.8	80	23	60	300
S3B4RCG	3.0	240 / 480	18.6	1400	77	0.95	2.5	1.8	110	27	60	300

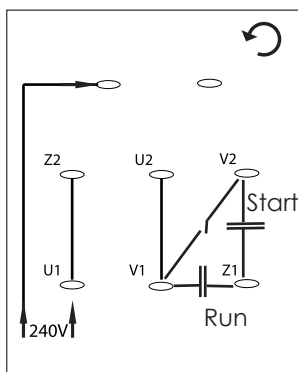
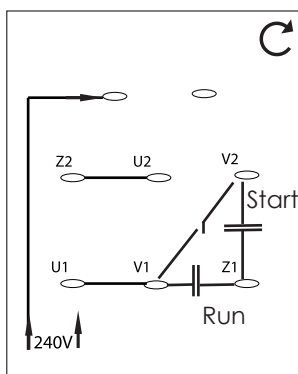
Technical data - 6 pole 900rpm

Model	Power (kW)	Voltage (V)	Current (A)	Approx Speed (rpm)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start Current	Net weight (kg)	Cap run 450V	Cap start 300V
S.37B6RCG	0.37	240	2.6	900	65.9	0.9	1.8	1.7	11.5	11.6	12	50
S.75B6RCG	0.75	240	4.85	900	70	0.92	1.8	1.7	24.5	15.5	15	100

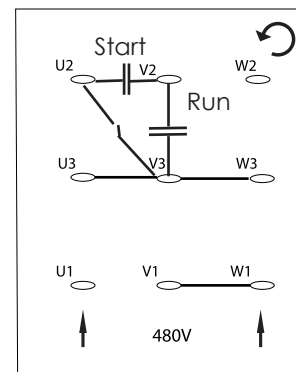
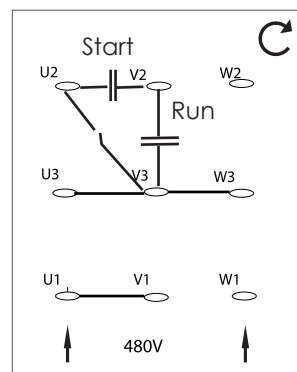
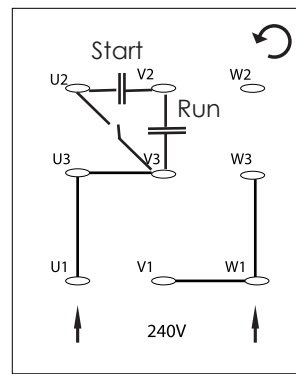
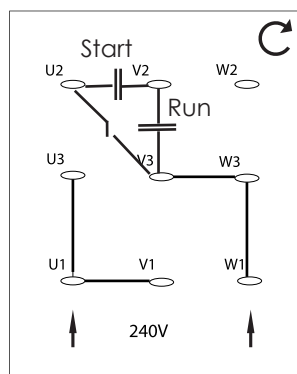
Please note other motor sizes are available on request

Wiring diagram ML range

Single voltage



Dual voltage motors



RCG

ELECTRICMOTORGROUP

RCG is the Royce Cross Agencies motor brand. The family-owned company has been in operation for 40 years. The brand represents a long history of delivering quality products which meet efficiency standards and quality regulations.

Our single-phase range has been manufactured in a world-class manufacturing facility that has been delivering electric motors for more than 16 years.