

# **RXM**

## **Metric Frame Series 5** **SINGLE PHASE INDUCTION MOTORS**





# Metric Frame Series 5

## SINGLE PHASE INDUCTION MOTORS

RXM Series 5 - Single Phase Induction Motors are 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.

### MOTOR FEATURES:

- CAP START / CAP RUN
- IP55 ENCLOSURE
- MULTIPLE FEET LOCATIONS
- ALUMINIUM FRAME, ENDSHIELDS & BASE
- HIGH STRENGTH CABLE GLAND
- CONTINUOUS DUTY S1
- HIGH PERFORMANCE AND EFFICIENCY
- HEAVY DUTY SERVICE FACTORS

### CUSTOMER BENEFITS:

- WATER & DUST RESISTANT
- QUIET OPERATION
- EASILY INSTALLED
- CORROSION RESISTANT
- DEPENDABLE & SUPERIOR LIFE

### Standards

- Designed and Manufactured to IEC34, IEC72 & AS1359. Motors are CE marked.

### Electric Supply

- Motors are designed for 220-250 Volt single phase 50 Hz. Motors 1.5kW and larger are dual voltage 240/480 Volts.

### Mounting

Motors are available in the following mountings:

- Foot mounted IM1001 (B3), Foot and Flange mounted IM2001 (B35), Flange mounted IM3001 (B5), Foot and C Face mounted IM2101 (B34), C Face mounted IM3601 (B14)

Above IM nominations are those for horizontal mounting with other mounting orientations (ie. vertical etc.) available on request.

- **Multi-mount frame construction** to enable 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 distributor.

### Altitude

- Designed for operation at an altitude not exceeding 1000 metres above sea level (refer to distributor for higher altitudes).

### Performance

- Motors are designed to meet the performance requirements of AS1359.

### Motor Construction

- Aluminium frame and end shields. Castings are machined to close tolerances for accurate alignment and minimum vibration.

### Enclosure / Cooling System

- Standard protection is IP55. Cooling is TEFC IC411 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 an including 1.1 kW 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.
- 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 prior to despatch.

### Options

Some available options as follows: IP56, IP65 enclosure, special paint systems / colours, others on request.



# technical data - 2 POLE - 3000 r.p.m.

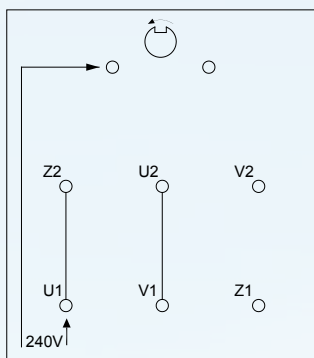
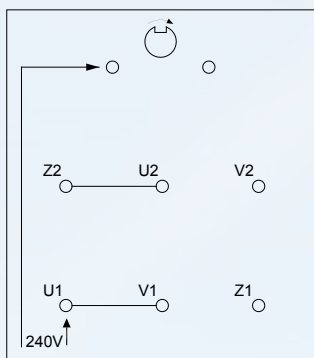
Model	Power (kW)	Voltage (V)	Current (A)	Speed (r.p.m.)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start current (A)	Net weight (kg)	Cap run 450V	Cap start 300V
ML711-2	0.37	220	2.73	2800	67	0.92	2.3	1.8	16	7	16	75
ML712-2	0.55	220	3.88	2800	70	0.92	2.5	1.8	21	8	20	100
ML801-2	0.75	220	5.15	2800	72	0.92	2.5	1.8	30	8.5	25	100
ML802-2	1.10	220	7.02	2800	75	0.95	2.5	1.8	40	9.5	30	150
ML90S-2	1.50	220	9.44	2800	76	0.95	2.5	1.8	55	12.5	40	200
ML90L-2	2.20	220	13.67	2800	77	0.95	2.5	1.8	80	14	60	300
ML100L-2	3.00	220	18.2	2800	79	0.95	2.5	1.8	110	20.5	60	400

# technical data - 4 POLE - 1500 r.p.m.

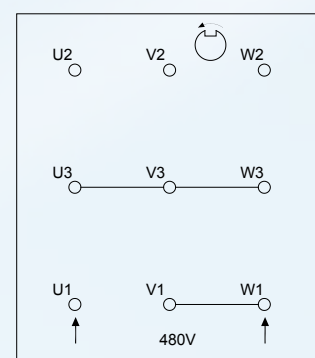
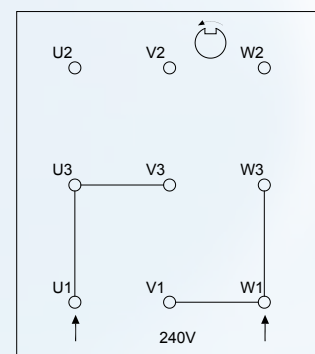
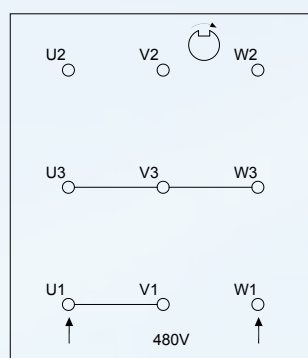
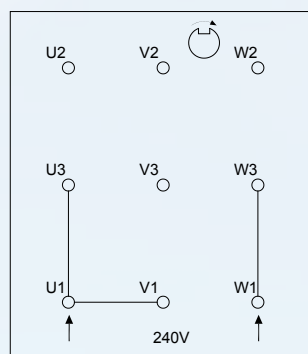
Model	Power (kW)	Voltage (V)	Current (A)	Speed (r.p.m.)	Eff (%)	Power factor	Tstart/Tn	Tmax/Tn	Start current (A)	Net weight (kg)	Cap run 450V	Cap start 300V
MY56-4	0.09	220	0.85	1400	55	0.90	0.7	1.7	6	4.9	8	-
ML631-4	0.18	220	1.36	1400	60	0.92	2.5	1.8	9	5.5	12	50
ML712-4	0.37	220	2.81	1400	65	0.92	2.5	1.8	16	8.1	14	75
ML801-4	0.55	220	4.0	1400	68	0.92	2.5	1.8	21	8.9	25	100
ML802-4	0.75	220	5.22	1400	71	0.92	2.5	1.8	30	9.6	30	150
ML90S-4	1.10	220	7.2	1400	73	0.95	2.5	1.8	40	13	30	150
ML90L-4	1.50	220	9.57	1400	75	0.95	2.5	1.8	55	16	40	200
ML100L1-4	2.20	220	13.9	1400	76	0.95	2.5	1.8	80	23	60	300
ML100L2-4	3.00	220	18.6	1400	77	0.95	2.5	1.8	110	27	60	300

# wiring diagrams

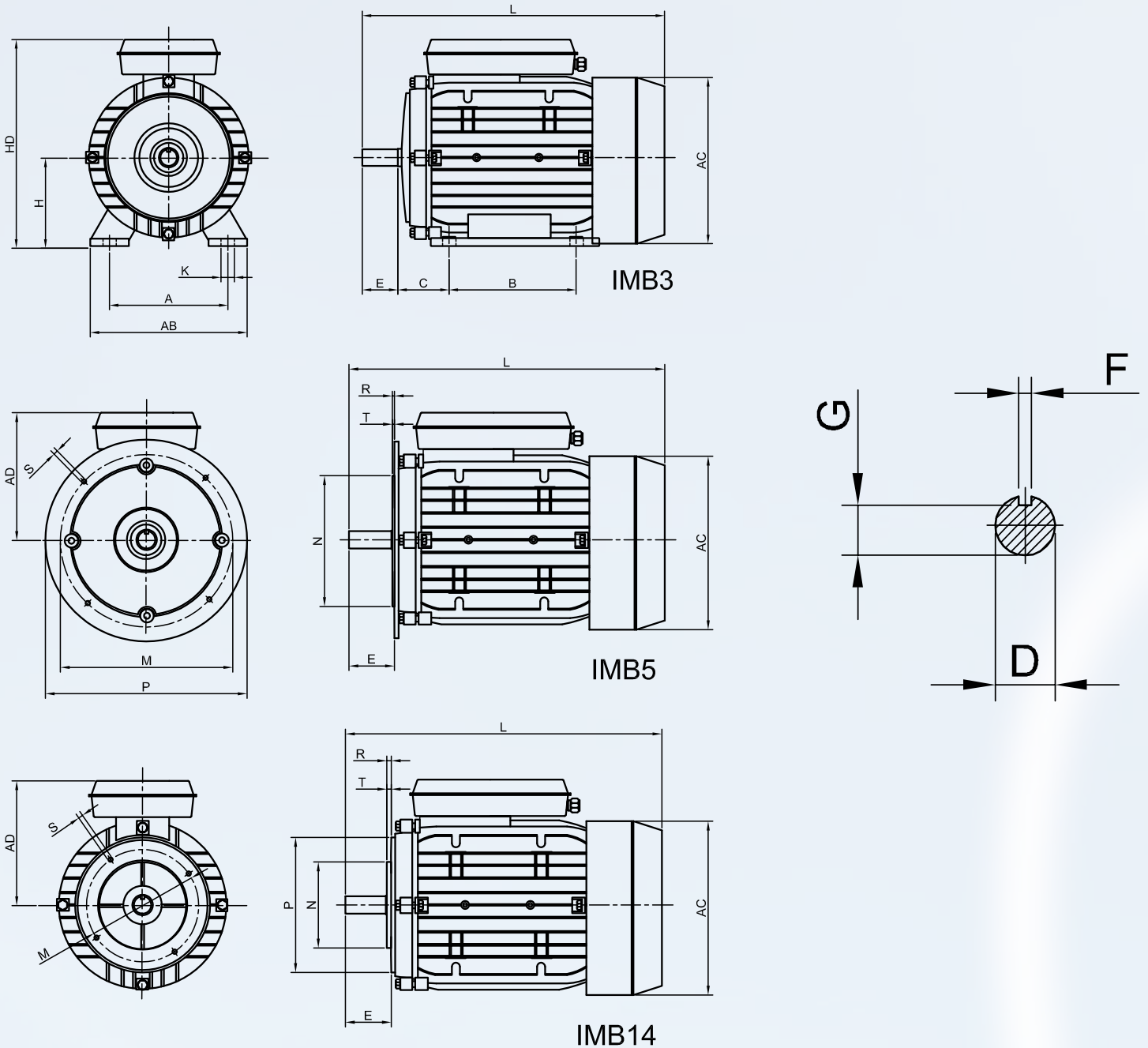
UP TO 1.1 kW



1.5kW AND ABOVE



# installation 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	165	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	210	255
80	125	100	50	19	40	5	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	240	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	170	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	270	360
100L	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	215	130	250	0	15	4.0	205	215	170	280	380

RXM products are sold and recommended by:



## Royce Cross Agencies

3 Cord Street, Dudley Park SA 5008, Australia

telephone: 61 8 8269 4000 fax: 61 8 8269 6699

sales@roycecross.com.au www.roycecross.com.au

ABN: 56 493 011 345