



ARTHUR ELECTRIC MOTOR

World Class Quality

Three Phase Induction Motor



2010



PT. BERJAYA MAKMUR INDONESIA
The Real Partner

Jl.Cempaka Putih Tengah II D No.17, Cempaka Putih. Jakarta Pusat

Phone : (021) 4224271, Fax: (021) 21475742

Email : berjayamakmur99@gmail.com

Website : <http://www.berjayamakmurindonesia.co.id>

AR series three-phase induction motors suitable as prime mover for hydraulic systems or general machinery. The AR series three-phase induction are produced to ISO 9001 standards. The AR series three-phase induction are designed for 380V, 50Hz operation and are rated to IP54/IP55, IC411, with an Insulation Class F evaluated at class B temperature rise under full load. AR series three-phase induction motors comply with IEC standards and also meet and exceed the efficiency minimum energy ratings of AS/NZS 1359.5:2004

AR series three-phase induction motors offer high efficiency, low noise, low vibration and high locked torque ratings. Combined with M&C' bell housings, couplings, and hydraulic pumps, Complete AR Series ranges from 30 Kw to 315 Kw. Sizes other than listed are available motors are designed and produced to ISO 9001 standards

The AR series is designed for 400 VAC, 50 Hz operation and are rated to IP54/IP55.

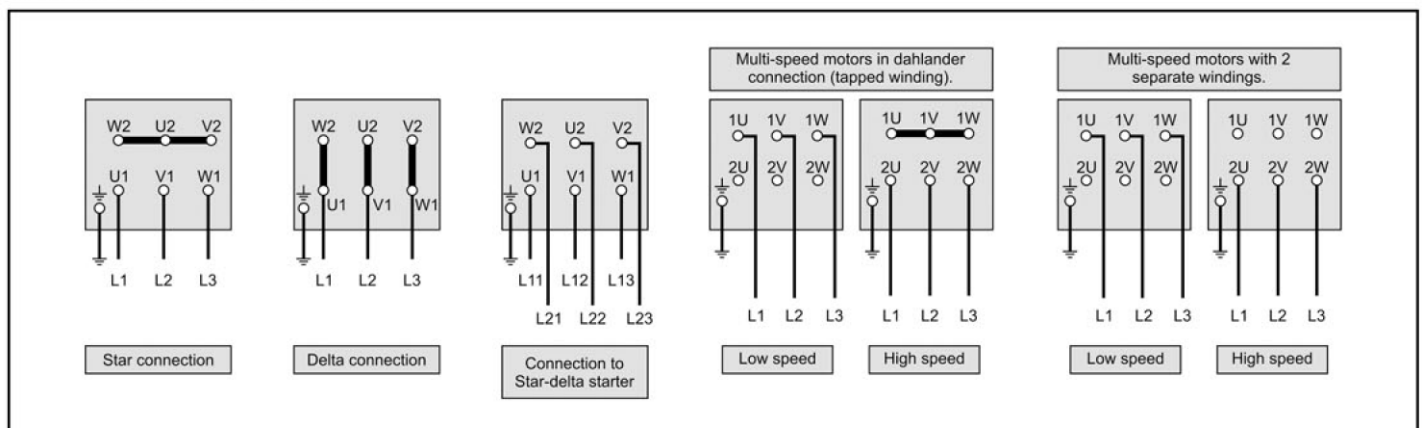
AR series motors meet and exceed the AS/NZS 1359.5:2000 minimum energy ratings.



* Benefits Include :

- Full output range to meet your requirements
- Where applicable, Efficiencies are within the eff2 band and meet MEPS standard efficiency levels.
- Robust construction for long life
- Mountings : foot, Flange, face or combination
- Bolt on feet/pads - aluminium range
- Frequency 50Hz or 60Hz
- Single or multispeed options
- IP55
- Metric entries
- Metal fan cover
- Thermistors fitted as standard on 160 frame and above

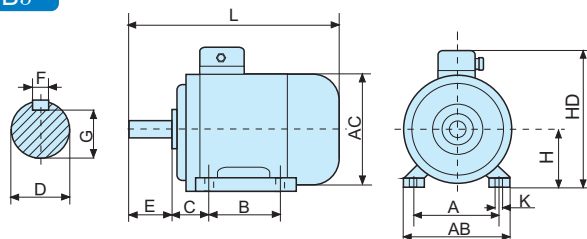
Connection Diagrams



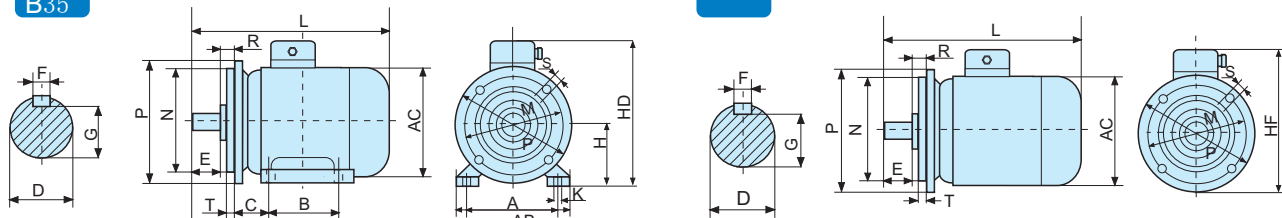
2 POLE - 3000 RPM SYNCHRONOUS SPEED AT 380V, 50HZ											
MODEL	POWER		CURRENT at	SPEED	EFF	POWER	NOMINAL	Tstart	Ist	MOMENT	WEIGHT
	KW	HP	380 V (A)	(R.P.M)	(%)	FACTOR	TORQUE(Nm)	Tn	In	OF INERTIA (KG M2)	(KG)
AR160M1-2	11	15	21.3	2900	88	0.88	36.10	2.0	2.2	0.0377	85
AR160M2-2	15	20	28.7	2900	89	0.89	49.23	2.0	2.2	0.0449	95
AR160L-2	18.5	25	34.6	2900	90	0.90	60.71	2.0	2.2	0.055	105
AR180M-2	22	30	40.9	2900	90.5	0.90	72.20	2.0	2.2	0.075	130
AR200L1-2	30	40	55.4	2900	91.2	0.90	98.45	2.0	2.2	0.124	217
AR200L2-2	37	50	67.7	2900	92	0.90	121.43	2.0	2.2	0.139	245
AR225M-2	45	60	82.3	2900	92.3	0.90	147.68	1.8	2.2	0.233	310
AR250M-2	55	75	101	2900	92.5	0.90	180.50	1.8	2.2	0.312	369
AR280S-2	75	100	134	2900	93	0.90	246.13	1.8	2.2	0.597	500
AR280M-2	90	125	160	2900	93.8	0.91	295.36	1.8	2.2	0.675	557
AR315S-2	110	150	195	2900	94	0.91	361.00	1.8	2.2	1.18	960
AR315M-2	132	175	233	2900	94.5	0.91	433.20	1.8	2.2	1.82	1060
AR315L1-2	160	220	279	2900	94.6	0.92	525.09	1.8	2.2	2.08	1140
AR315L2-2	200	270	348	2900	94.8	0.92	656.36	1.8	2.2	2.82	1190
AR355M-2	250	335	433	2900	95.3	0.92	820.45	1.6	2.2	3.28	1740
AR355L-2	315	420	544	2900	95.6	0.92	1033.76	1.6	2.2	4.1	1880

4 POLE - 1500 RPM SYNCHRONOUS SPEED AT 380V, 50HZ											
MODEL	POWER		CURRENT at	SPEED	EFF	POWER	NOMINAL	Tstart	Ist	MOMENT	WEIGHT
	KW	HP	380 V (A)	(R.P.M)	(%)	FACTOR	TORQUE(Nm)	Tn	In	OF INERTIA (KG M2)	(KG)
AR160M-4	11	15	22.3	1500	88	0.85	72.45	2.0	7.0	0.0747	90
AR160L4	15	20	30	1500	89	0.85	98.79	2.0	7.0	0.0918	100
AR180M-4	18.5	25	36.4	1500	90	0.85	121.84	2.2	7.5	0.139	130
AR180L-4	22	30	43.1	1500	90.5	0.85	144.90	2.2	7.5	0.158	140
AR200L-4	30	40	57.4	1500	91.2	0.86	197.59	2.2	7.5	0.262	231
AR225S-4	37	50	69.9	1500	92	0.87	296.38	2.2	7.5	0.406	290
AR225M-4	45	60	84.7	1500	92.3	0.87	362.24	2.2	7.0	0.469	320
AR250M-4	55	75	103	1500	92.5	0.89	362.24	2.2	7.0	0.66	380
AR280S-4	75	100	140	1500	93	0.87	493.97	2.2	7.0	1.12	526
AR280M-2	90	125	167	1500	93.8	0.87	592.76	2.2	7.0	1.46	600
AR315S-4	110	150	201	1500	94	0.88	724.48	2.1	6.9	3.11	980
AR315M-4	132	175	240	1500	94.5	0.88	869.38	2.1	6.9	3.62	1080
AR315L1-4	160	220	287	1500	94.6	0.88	1053.79	2.1	6.9	4.13	1120
AR315L2-4	200	270	359	1500	94.8	0.88	13117.24	2.3	6.9	4.82	1170
AR355M-4	250	335	443	1500	95.3	0.88	1646.55	2.3	6.8	5.21	1780
AR355L-4	315	420	556	1500	95.6	0.89	2074.66	2.2	6.9	5.4	1920

B3



B35



AR SERIES MOTOR OVERALL INSTALLATION DIMENSIONS

Frame Size	Mounting Dimensions (mm)																Overall Dimensions (mm)					
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	AB	AC	AD	HD	HF	L	
160M	254	210	108	42	110	12	37	160	15	300	250	350	0	19	5	320	330	255	420	385	615	
160L	254	254	108	42	110	12	37	160	15	300	250	350	0	19	5	320	330	255	420	385	670	
180M	279	241	121	48	110	14	42.5	180	15	300	250	350	0	19	5	355	380	280	455	430	700	
180L	279	279	121	48	110	14	42.5	180	15	300	250	350	0	19	5	355	380	280	455	430	740	
200L	318	305	133	55	110	16	49	200	19	350	300	400	0	19	5	395	420	305	505	480	770	
225S	356	286	149	60	140	18	53	225	19	400	350	450	0	19	5	435	470	335	560	535	815	
225M-2	356	311	149	55	110	16	49	225	19	400	350	450	0	19	5	435	470	335	560	535	820	
225M-4、6	356	311	149	60	140	18	53	225	19	400	350	450	0	19	5	435	470	335	560	535	845	
250M-2	406	349	168	60	140	18	53	250	24	500	450	550	0	19	5	490	510	370	615	595	910	
250M-4、6	406	349	168	65	140	18	58	250	24	500	450	550	0	19	5	490	510	370	615	595	910	
280S-2	457	368	190	65	140	18	58	280	24	500	450	550	0	19	5	550	580	410	680	650	985	
280S-4、6	457	368	190	75	140	20	67.5	280	24	500	450	550	0	19	5	550	580	410	680	650	985	
280M-2	457	419	190	65	140	18	58	280	24	500	450	550	0	19	5	550	580	410	680	650	1035	
280M-4、6	457	419	190	75	140	20	67.5	280	24	500	450	550	0	19	5	550	580	410	680	650	1035	
315S-2	508	406	216	65	140	18	58	315	28	600	550	660	0	24	6	635	645	530	845	900	1160	
315S-4、6	508	406	216	80	170	22	71	315	28	600	550	660	0	24	6	635	645	530	845	900	1270	
315M-2	508	457	216	65	140	18	58	315	28	600	550	660	0	24	6	635	645	530	845	900	1190	
315M-4、6	508	457	216	80	170	22	71	315	28	600	550	660	0	24	6	635	645	530	845	900	1300	
315L-2	508	508	216	65	140	18	58	315	28	600	550	660	0	24	6	635	645	530	845	900	1190	
315L-4、6	508	508	216	80	170	22	71	315	28	600	550	660	0	24	6	635	645	530	845	900	1300	
355M-2	610	560	254	75	140	20	67.5	355	28	740	680	800	0	24	6	730	710	655	1010	1010	1500	
355M-4、6	610	560	254	95	170	25	86	355	28	740	680	800	0	24	6	730	710	655	1010	1010	1530	
355L-2	610	630	254	75	140	20	67.5	355	28	740	680	800	0	24	6	730	710	655	1010	1010	1500	
355L-4、6	610	630	254	95	170	25	86	355	28	740	680	800	0	24	6	730	710	655	1010	1010	1530	