

UNI MAX



UNI MAX Aluminium Frame **TEFC 3-Phase** **Squirrel-Cage** **Induction Motors** **Frames 56 ~ 200**



- 380 ~ 415 Volt, 3-Phase 50 Hz, Duty S1, built to Australian and International standards
- Complies with AS/NZS1359:5 Minimum Efficiency Performance standard
- Motors up to 3kW are 415Volt Star connected and can be connected in Delta for use with 240 Volt VSD's
- Motors 4kW and larger are 415 Volt Delta for general purpose applications, Star-Delta starting
- TEFC IC411 Alloy Frame, Multi-mount construction
- Quality Class F insulation, with design temperature rise less than Class B
- Enclosure Protection to IP55 (upgradeable to IP66)
- Greased for life bearings with 2RS bearing seals for added bearing protection
- Shaft oil seals meeting IP66 ingress protection
- Oversized Fully Gasketed Alloy Terminal Box with supply cable compression gland(s) included
- Thermistor protection on motors Frame size 160 and larger
- Light-weight, ideal for the OEM, resellers and most applications
- Gloss paint with finish colour Graphic Grey, B64 to AS2700
- Full 2 year Australia and New Zealand wide warranty

Please contact your local TECO sales office for more information



Motors - Drives - Controls - Invicta Vibrating Motors

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(07) 3373 9600

AUCKLAND (NZ)
(64) 9 526 8480

Typical Performance Data



UNI MAX Aluminium Frame TEFC 3-Phase Squirrel-Cage Induction Motors Frames 56 ~ 200

(415 V 50Hz)

OUTPUT kW	FULL LOAD rpm	FRAME No.	EFFICIENCY				POWER FACTOR				CURRENT		TORQUE				ROTOR INERTIA J=GD ² /4 kg-m ²	NOISE LEVEL dB(A)	WEIGHT FOOT MOUNT KG (Approx)
			FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	1/4 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	1/4 LOAD (%)	FULL LOAD (A)	LOCKED ROTOR (%)	FULL LOAD N · m	LOCKED ROTOR %FLT	PULL UP %FLT	BREAK DOWN %FLT			
0.09	2800	56M	55.0	49.0	38.6	22.9	67.0	57.0	47.0	38.0	0.34	358	0.307	245	220	265	0.00010	50	2.8
	1400	56M	53.0	48.6	40.0	24.7	59.0	50.5	41.0	32.0	0.40	320	0.614	235	230	285	0.00024	42	3.2
	890	63M	49.2	46.1	38.3	24.2	62.0	53.0	43.5	34.0	0.41	294	0.966	200	185	220	0.00042	42	4.2
	665	71M	40.0	35.6	27.6	57.4	57.0	50.0	42.0	35.0	0.55	242	1.292	240	235	255	0.00072	42	5.0
0.12	2835	56M	58.8	54.3	45.1	28.2	69.0	58.0	46.0	35.0	0.41	442	0.404	250	230	280	0.00013	50	3.2
	1365	63M	53.0	49.9	42.0	26.9	64.0	54.0	43.0	33.0	0.49	328	0.840	230	220	250	0.00027	44	3.7
	890	63M	49.2	46.1	38.3	23.8	61.0	51.0	42.0	33.0	0.56	308	1.288	220	200	240	0.00052	42	4.5
	665	71M	40.1	35.7	27.7	15.5	57.0	50.0	42.0	35.0	0.73	242	1.723	240	230	250	0.00084	42	5.6
0.18	2790	63M	61.0	59.1	52.0	35.5	75.0	64.0	50.0	35.0	0.55	465	0.616	240	230	260	0.00015	53	3.7
	1375	63M	57.0	55.0	48.1	32.8	62.0	52.0	41.0	29.0	0.71	383	1.250	280	270	300	0.00034	44	4.4
	880	71M	50.8	49.4	42.3	27.0	68.0	57.0	45.0	33.0	0.72	302	1.953	220	210	220	0.00084	44	5.6
	685	80M	49.0	45.4	36.4	22.5	62.0	53.0	44.0	35.0	0.82	303	2.509	210	200	230	0.00210	44	9.4
0.25	2790	63M	61.4	60.2	54.1	37.8	76.0	65.0	50.0	33.0	0.75	496	0.856	280	240	280	0.00017	53	4.1
	1370	71M	61.5	60.2	53.5	37.6	76.0	65.0	51.0	36.0	0.74	403	1.743	200	180	220	0.00056	47	5.1
	850	71M	54.7	57.3	52.0	37.3	72.0	61.0	47.0	33.0	0.88	304	2.809	190	180	200	0.00096	44	6.0
	675	80M	50.6	47.6	40.0	24.5	64.0	55.0	44.0	32.0	1.07	313	3.537	210	200	220	0.00250	44	10.1
0.37	2765	71M	63.9	61.6	54.8	39.3	82.0	73.0	60.0	43.0	0.98	522	1.278	250	190	250	0.00031	56	5.3
	1375	71M	66.0	65.2	59.5	44.2	76.0	66.0	51.0	35.0	1.03	444	2.570	220	190	220	0.00071	47	6.0
	900	80M	61.2	58.8	50.9	34.9	71.0	58.0	46.0	35.0	1.18	353	3.926	200	180	210	0.00156	48	8.1
	680	90S	54.4	51.5	44.1	28.2	63.0	53.0	42.0	31.0	1.50	291	5.196	160	130	180	0.00306	48	12.5
0.55	2800	71M	70.0	69.0	63.3	48.2	79.0	69.0	54.0	37.0	1.38	523	1.876	270	180	270	0.00038	56	6.1
	1400	80M	70.0	68.8	63.0	47.9	75.0	64.0	51.0	34.0	1.46	518	3.752	230	180	240	0.00135	50	8.1
	910	80M	67.4	67.7	63.2	49.1	71.0	61.0	47.0	31.0	1.60	411	5.772	210	200	230	0.00210	48	9.6
	670	90L	61.7	62.4	57.9	43.7	66.0	57.0	45.0	31.0	1.88	312	7.840	170	160	180	0.00407	48	15.3
0.75	2840	80M	78.8	79.0	76.1	65.0	81.0	72.0	57.5	36.5	1.63	709	2.522	335	265	350	0.00085	59	8.9
	1410	80M	80.5	81.5	80.0	71.0	73.5	64.5	50.5	31.5	1.76	576	5.080	280	265	300	0.00206	50	11
	935	90S	76.0	76.2	72.8	60.6	69.5	59.5	46.0	29.0	1.98	481	7.660	245	225	265	0.00336	51	13
1.1	2860	80M	80.6	80.5	77.8	67.6	82.0	73.5	59.0	38.0	2.32	746	3.673	370	345	385	0.00111	59	11
	1430	90S	82.2	82.9	81.3	73.2	74.5	66.5	53.0	33.0	2.50	680	7.346	265	230	305	0.00287	53	14
	940	90L	78.3	78.9	76.6	66.5	69.5	59.5	46.0	28.0	2.81	542	11.18	285	235	290	0.00480	51	16
1.5	2880	90S	82.6	82.5	79.9	70.0	81.5	73.0	59.5	38.0	3.10	896	4.974	340	320	355	0.00143	64	13
	1420	90L	83.5	84.5	83.3	75.9	73.5	66.5	53.5	33.5	3.40	705	10.09	290	280	325	0.00371	53	17
	955	100L	79.9	80.1	77.7	67.7	73.0	64.0	50.0	31.0	3.58	620	15.00	290	225	305	0.00955	53	22
2.2	2880	90L	84.1	84.4	82.6	74.5	82.0	73.5	59.5	38.0	4.44	901	7.295	370	360	380	0.00218	64	16
	1440	100L	84.9	85.0	83.1	74.9	76.5	68.0	54.5	33.5	4.71	784	14.59	335	295	360	0.00731	56	22
	950	112M	81.9	82.6	81.1	73.0	73.5	65.0	51.5	32.0	5.08	581	22.12	260	210	270	0.01697	56	30
3	2900	100L	85.3	86.2	85.4	79.6	89.0	85.5	77.0	56.5	5.50	909	9.879	310	240	330	0.00301	68	23
	1440	100L	86.0	86.2	84.4	76.5	78.0	70.5	57.0	36.0	6.22	841	19.90	345	250	360	0.00934	56	26
	960	132S	83.5	84.6	83.6	76.6	76.5	69.0	56.0	35.0	6.53	629	29.84	220	170	260	0.02993	56	35
4	2910	112M	86.3	86.3	84.4	76.9	87.5	82.0	70.0	47.5	7.37	997	13.13	345	215	390	0.00627	69	26
	1440	112M	87.0	87.7	86.6	80.4	81.5	74.5	61.5	39.0	7.85	830	26.53	305	260	320	0.01331	57	32
	965	132M	84.7	85.5	84.5	77.9	75.5	68.0	55.0	34.5	8.70	696	39.59	250	185	290	0.04026	60	45
5.5	2900	132S	87.2	87.8	86.9	81.1	88.0	84.0	74.5	53.0	10.0	864	18.11	270	260	350	0.01202	72	42
	1460	132S	87.9	88.6	87.7	82.0	82.0	76.0	63.5	41.0	10.6	916	35.98	280	210	335	0.02774	63	43
	965	132M	86.1	86.7	85.6	78.9	74.0	66.0	52.5	32.0	12.0	743	54.43	275	195	300	0.05341	60	54
7.5	2910	132S	88.3	89.1	88.3	83.6	90.5	88.0	81.0	61.5	13.1	953	24.61	245	180	345	0.01464	72	46
	1460	132M	88.9	89.5	88.7	83.4	84.0	78.5	67.5	45.0	14.0	912	49.06	310	215	335	0.03586	63	53
	970	160M	87.3	88.0	86.9	80.8	76.0	66.0	53.5	33.0	15.7	607	73.84	215	145	245	0.08969	60	73
11	2940	160M	89.5	89.6	88.2	82.3	88.5	85.5	78.0	58.5	19.3	932	35.73	300	235	350	0.04847	78	79
	1460	160M	89.9	90.4	89.6	84.6	84.5	80.0	70.5	49.0	20.1	749	71.95	215	155	275	0.08963	67	82
	970	160L	88.7	89.3	88.4	82.8	74.5	67.5	55.0	34.0	23.2	724	108.3	275	160	280	0.12273	65	90
15	2930	160M	90.3	90.6	89.8	84.9	90.0	87.5	81.0	63.0	25.7	941	48.89	305	230	350	0.05942	78	97
	1460	160L	90.8	91.0	90.0	84.8	83.5	79.0	69.0	47.0	27.5	864	98.12	265	175	315	0.11835	67	104
	975	180L	89.6	90.0	89.3	84.7	82.5	77.5	66.0	44.0	28.2	804	146.9	220	130	265	0.25406	69	130
18.5	2930	160L	90.8	91.2	90.6	86.4	91.0	89.0	83.5	67.0	31.1	934	60.30	320	220	320	0.06881	78	103
	1460	180M	91.2	91.6	91.1	87.0	87.5	83.0	73.5	51.5	32.3	803	121.0	240	185	300	0.15506	72	119
	975	200L	90.3	90.7	90.0	85.6	83.0	77.5	66.0	43.5	34.3	906	181.2	260	175	320	0.30394	72	149
22	2950	180M	91.2	91.4	90.7	86.6	90.5	89.0	85.5	68.0	37.1	829	71.22	255	140	295	0.09502	80	128
	1460	180L	91.6	92.1	91.8	88.3	87.5	84.0	75.0	53.5	38.2	795	143.9	245	170	285	0.17329	72	129
	975	200L	90.8	91.3	90.6	86.0	83.0	78.0	67.0	45.0	40.6	916	215.5	225	160	305	0.35316	72	167
30	2950	200L	92.0	92.1	91.2	86.5	91.5	89.0	84.5	68.5	49.6	918	97.12	285	135	290	0.12225	82	158
	1470	200L	92.3	92.5	91.8	88.5	87.5	84.5	75.0	54.5	51.7	900	194.9	325	235	370	0.24231	75	169
37	2960	200L	92.5	92.5	91.6	87.5	92.5	91.0	87.0	70.5	60.2	923	119.4	265	135	310	0.14882	82	181

- Notes :
- All figures are based on full load tests carried out on 415 Volt 3 Phase Motors
 - Test Method : IEC60034-2-1, AS/NZS1359:2004 Test Method A
 - Tolerance : AS60034-1
 - dB(A) Mean Sound Pressure Level on no load at 1 metre
 - Motor data 8 pole and slower speeds not listed available on request
 - Data subject to change without notice



Other 50Hz Mains Voltage	380V	400V	440V	525V	550V	690V
Full Load Current multiplication factor (x)	1.092	1.038	0.943	0.790	0.755	0.601

Outline Dimension Sheet



UNI MAX Aluminium Frame TEFC 3-Phase Squirrel-Cage Induction Motors
Frames 56 ~ 200 Foot Mount

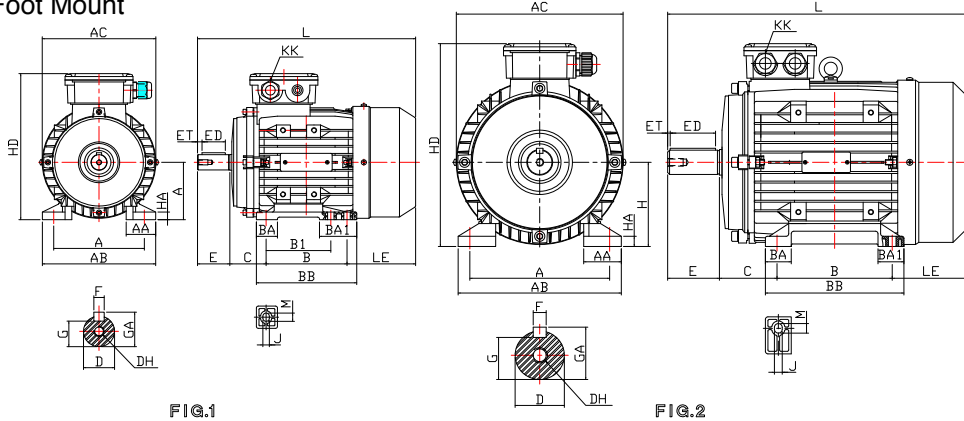


FIG.1

FIG.2

Output (kW)			FRAME SIZE	FIG. NO.	Dimensions (mm)													
2P	2P	6P			A	AA	AB	AC	B	B1	BA	BA1	BB	C	H	HA	HD	KK
0.09	0.09	-	56	1	90	20	110	110	71	-	20.5	20.5	89	36	56	6.5	156	1-M16X1.5
0.12		0.09	63		100	27.5	120	121	80	-	25.5	25.5	103	40	63	7	171	
0.18	0.12	0.09	71		112	28	132	139	90	-	22.5	22.5	105	45	71	10	186	
0.25	0.18	0.12			125	35	160	156	100	-	35	35	130	50	80	10	213	
0.37	0.25	0.18	80M		140	35	175	174	100	-	32.5	32.5	130	56	90	12	229	
0.55	0.37	0.25							125	100	31.5	56.5	155					
0.75	0.55	0.55	90S		160	50	198	195.5	140	-	42	42	176	63	100	14	252	1-M25X1.5
1.1	0.75								80M	190	55	220	220	140	-	42	42	
1.5	1.1	0.75	90L		2	216	58	252	255.5	140	-	40	40	176	89	132	16	318
2.2	1.5	1.1								178	-	214						
3	2.2	1.5	100L	254		54	290	312.5	210	-	88	88	294	108	160	16	384	2-M32XP1.5
4	3								132S	216	58	252	255.5					
5.5	5.5	3	132M	279		60	340	355	178	-	214	214	214	121	180	20	440	
7.5		4							132M	254	54	290	312.5					
-	7.5	5.5	160M	279		60	340	355	241	-	91.5	91.5	330	121	180	20	440	
11	11	7.5							160L	254	54	290	312.5					210
15	15	11	180M	279		60	340	355	241	-	91.5	91.5	330	121	180	20	440	
18.5		15							160L	279	60	340	355					279
22	18.5	-	180L	318	70	390	355	305	-	79.5	79.5	376	133	200	20	460	2-M40XP1.5	
-	22	15						200L	318	70	390	355	305	-	79.5	79.5	376	133
30	30	18.5	200L	318	70	390	355	305	-	79.5	79.5	376	133	200	20	460		
37		22						200L	318	70	390	355	305	-	79.5	79.5	376	133

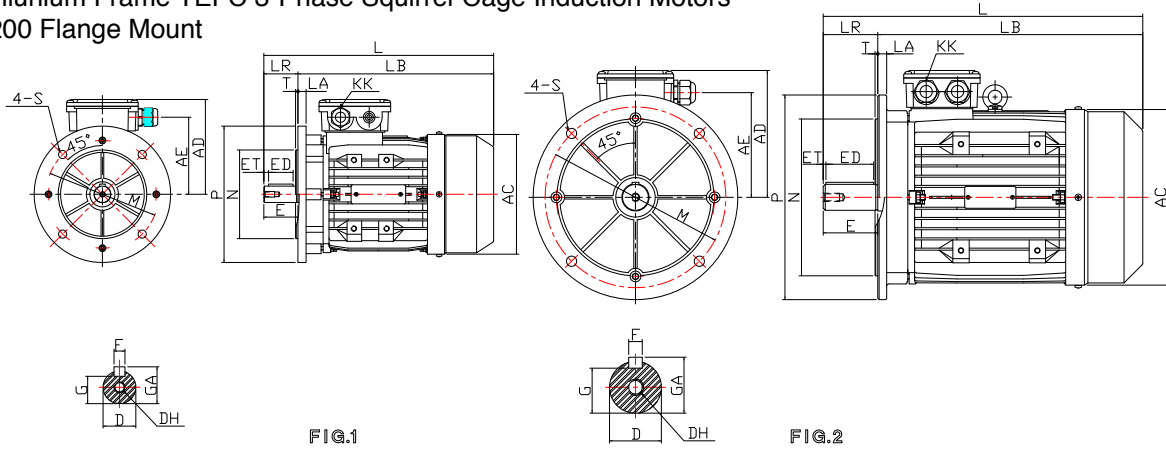
FRAME SIZE	SHAFT EXTENSION												BEARING	
	L	LE	J	M	D	E	ET	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END
56	196	69	5.8	8.8	9	20	3	12	3	7.2	10.2	M3	6201-2RSC3	6201-2RSC3
63	220	77	7	10	11	23	3	16	4	8.5	12.5	M4	6201-2RSC3	6201-2RSC3
71	241	76	7	10	14	30	3	22	5	11	16	M5	6202-2RSC3	6202-2RSC3
80M	290	100	10	13	19	40	3	32	6	15.5	21.5	M6	6204-2RSC3	6204-2RSC3
90S	312	106	10	10	24	50	4	40	8	20	27	M8	6205-2RSC3	6205-2RSC3
90L	337													
100L	370	107	12	15	28	60	4	50	8	24	31	M10	6206-2RSC3	6206-2RSC3
112M	397	127	12	15	28	60	4	50	8	24	31	M10	6306-2RSC3	6206-2RSC3
132S	437	128	12	15	38	80	4	70	10	33	41	M12	6308-2RSC3	6208-2RSC3
132M	475													
160M	640	212	15	19	42	110	10	90	12	45	37	M16	6309-2RSC3	6309-2RSC3
160L	640	168												
180M	729	257	15	25	48	110	10	90	14	51.5	42.5	M16	6311-2RSC3	6211-2RSC3
180L	729	219												
200L	745	197	19	29	55	110	19	90	16	59	49	M20	6312-2RSC3	6212-2RSC3

- Notes :
- Tolerance of Shaft End Diameter D: 1) F#56 ~ 112M : j6.
2) F#132 ~ 200: k6.
 - Tolerance of Shaft Center Height H: +0, -0.5 .
 - Data subject to change without notice

Outline Dimension Sheet



UNI MAX Aluminium Frame TEFC 3-Phase Squirrel-Cage Induction Motors
Frames 56 ~ 200 Flange Mount



Output (kW)			FRAME SIZE	FIG. NO.	Dimensions (mm)												
2P	4P	6P			AC	AD	AE	L	LA	LB	LR	M	N	P	KK		
0.09	-	-	56	1	110	100	71	196	7	176	20	100	80	120	1-M16X1.5		
0.12	0.09	-	63		121	108	121	220	8	197	23	115	95	140			
0.18	0.12	0.09	71		139	115	85.5	241	8	211	30	130	110	160			
0.25	0.18	0.12			156	133	102	290	10	250	40	165	130	200			
0.37	0.25	0.18	80M		174	139	108.5	312	12	262	50	165	130	200		1-M20X1.5	
0.55	0.37	0.25						337		287							
0.75	0.55	0.55	90S		2	195.5	152	119	370	15	310	60	215	180			250
1.1	0.75	1.1	90L														
1.5	1.1	0.75	100L		255.5	186	152	437	16	357	80	265	230	300			1-M25X1.5
2.2	1.5	1.1						475		395							
3	2.2	1.5	112M	3	312.5	224	188	640	18	530	110	300	250	350			
4	3	3	160L					640		530							
5.5	4	4	132S	355	260	213.5	729	18	619	110	300	250	350	2-M32XP1.5			
7.5	5.5	5.5					180M		729						619		
-	7.5	4	132M	355	260	213.5	729	18	619	110	300	250	350				
-	5.5	5.5					180L		729						619		
11	11	7.5	160M	200L	355	260	213.5	745	18	635	110	350	300		400	2-M40XP1.5	
15	-	-	200L					745		635							
18.5	15	11	160L	2	195.5	152	119	370	15	310	60	215	180		250		
22	18.5	-	180M														220
-	22	15	180L	3	355	260	213.5	729	18	619	110	300	250		350		
30	30	18.5	180L					729		619							
37	-	22	200L	2	195.5	152	119	370	15	310	60	215	180	250			
-	-	-	112M												220		167

FRAME SIZE	SHAFT EXTENSION										BEARING	
	S	T	D	E	ET	ED	F	G	GA	DH	DRIVE END	OPPOSITE DRIVE END
56	7	3	9	20	3	12	3	7.2	10.2	M3	6201-2RSC3	6201-2RSC3
63	10	3	11	23	3	16	4	8.5	12.5	M3	6201-2RSC3	6201-2RSC3
71	10	3.5	14	30	3	22	5	11	16	M3	6202-2RSC3	6202-2RSC3
80M	12	3.5	19	40	3	32	6	15.5	21.5	M3	6204-2RSC3	6204-2RSC3
90S	12	3.5	24	50	4	40	8	20	27	M8	6205-2RSC3	6205-2RSC3
90L												
100L	15	4	28	60	4	50	8	24	31	M10	6206-2RSC3	6206-2RSC3
112M	15	4	28	60	4	50	8	24	31	M10	6306-2RSC3	6206-2RSC3
132S	15	4	38	80	4	70	10	33	41	M12	6308-2RSC3	6208-2RSC3
132M												
160M	19	5	42	110	10	90	12	45	37	M16	6309-2RSC3	6309-2RSC3
160L												
180M	19	5	48	110	10	90	14	51.5	42.5	M16	6311-2RSC3	6211-2RSC3
180L												
200L	19	5	55	110	19	90	16	59	49	M20	6312-2RSC3	6212-2RSC3

- Notes :
 1. Tolerance of Shaft End Diameter D: 1) F#56 ~ 112M : j6.
 2) F#132 ~ 200: k6.
 2. Tolerance of Shaft Center Height H: +0, -0.5.
 3. Data subject to change without notice.