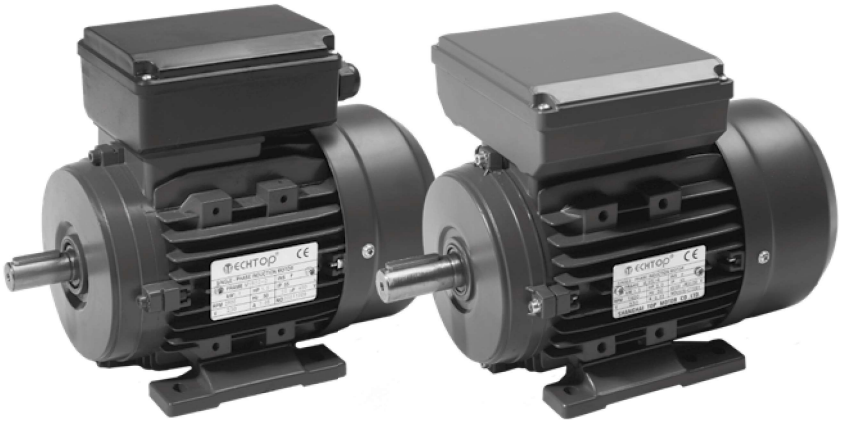
TM SERIES ALUMINIUM SINGLE PHASE

0.06kW to 3.7kW – Sizes 56 to 112

Techtop's TM series are ideally suited to general purpose applications and are available in both permanent split capacitor (TMY) and cap/start–cap/run (TML) series.



Operating parameters
Standard TM series motors are designed with the following parameters:

- 220V to 240V, 50Hz supply
- Continuous (S1) duty
- Ambient temperatures up to 40°C
- Installation up to 1000 MASL

Standards
Dimensions and rated outputs for the TM series conform to Australian Standard AS/NZS 1359 and International Standards IEC 60034 and IEC 60072.

Insulation class
TM motors are insulated with Class F materials and limited to Class B temperature rise.

IP Protection
The standard degree of enclosure protection is IP 55 (increased IP protection is available). Shafts are fitted with an oil seal as standard.

Thermal Protection
TMY series are fitted with an in-winding auto-reset overload up to 0.75kW.
TML series are fitted with a manual reset overload up to 2.2kW.

Multi-mount design
As standard, TM series motors are fitted with detachable feet. The multi-mount design allows for the motor feet to be removed and repositioned to either side to produce a side mounted terminal box.

Fan & Gearbox application
TM series motors are low weight design and come standard a drilled and tapped hole in the shaft which makes this series ideal for fan applications. This motor series is also ideally suited for fitting to aluminium gearboxes.

Terminal box
The terminal box is manufactured from aluminium and is mounted on top of the motor as standard.

Surface Finish
As standard TM motors are powder coat finish with the final colour being RAL 9005 Jet Black.
Other colours are available upon request.

Bearings
Bearings fitted are high quality NSK deep groove ball bearings that are sealed for life.

Frame Size	Bearing Size DE/NDE
56	6201 ZZ
63	6201 ZZ
71	6202 ZZ
80	6204 ZZ
90	6205 ZZ
100	6206 ZZ
112	6206 ZZ

Part Number Logic
Detailed below is the part number logic which should be specified when placing orders. The part number is composed in accordance with the following example:

T	A	4	B	0 1 1	3	TML
1	2	3	4	5-7	8	9-11

Position 1
T = Techtop

Position 2
A = Aluminium

Position 3
2 = 2 Pole
4 = 4 Pole
6 = 6 Pole

Position 4
A = less than 0.99kW
B = 1.0kW to 9.9kW

Position 5 to 7
Output kW

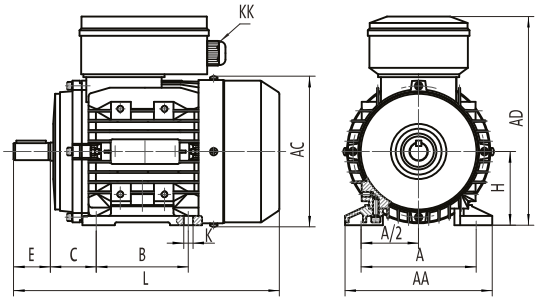
Position 8
Mounting position
1 = V1
3 = B3
4 = B3/5
5 = B5
6 = B3/B14A
7 = B14A
8 = B14B
9 = B3/B14B
A = B5R
B = B3/B5R

Position 9 to 11
TML = CS/CR series
TMY = PSC series

TMY SERIES PERFORMANCE DATA

Output kW	Full Load Speed [RPM]	Frame Size	Shaft Dia [mm]	Current @ 240v		Efficiency	Power Factor	Torque			Capacitor	Weight Foot Mount [Kg]
				Full Load [A]	Locked Rotor [%]	Full Load [%]	Full Load [%]	Full Load [Nm]	Locked Rotor [% FLT]	Break Down [% FLT]	Run Capacitor [mfd/volt]	
0.09	2760	56A	9	0.76	380	54.0	0.94	0.3	0.65	160	4/450	2.9
0.12	2770	56B	9	0.94	410	58.0	0.92	0.4	0.65	160	6/450	3.2
0.18	2780	63A	11	1.3	380	62.0	0.95	0.6	0.60	170	10/450	4.0
0.25	2780	63B	11	1.7	400	65.0	0.95	0.9	0.60	170	12/450	4.5
0.37	2800	71A	14	2.4	400	67.0	0.95	1.3	0.60	170	16/450	5.1
0.55	2810	71B	14	3.3	430	70.0	0.98	1.9	0.55	170	24/450	7.2
0.75	2810	80A	19	4.4	430	72.0	0.98	2.5	0.35	170	25/450	9.6
1.1	2820	80B	19	6.2	430	75.0	0.98	3.7	0.33	170	35/450	11.0
1.5	2820	90S	24	8.1	460	76.0	0.98	5.1	0.30	180	45/450	14.0
2.2	2820	90L	24	12.2	470	77.0	0.98	7.5	0.30	180	60/450	16.5
3	2860	100L	28	16.0	435	79.0	0.99	10.0	0.35	180	80/450	23.1
0.06	1360	56A	9	0.57	420	48.0	0.92	0.4	0.75	160	4/450	3.5
0.09	1370	56B	9	0.80	360	51.0	0.92	0.6	0.75	160	6/450	3.8
0.12	1380	63A	11	0.99	340	55.0	0.92	0.8	0.65	160	10/450	4.0
0.18	1390	63B	11	1.4	370	57.0	0.92	1.2	0.65	150	10/450	4.6
0.25	1400	71A	14	1.8	420	61.0	0.94	1.7	0.50	150	14/450	5.7
0.37	1400	71B	14	2.4	360	62.0	0.94	2.5	0.50	150	16/450	6.7
0.55	1400	80A	19	3.8	380	64.0	0.95	3.8	0.35	170	20/450	8.2
0.75	1410	80B	19	4.8	400	68.0	0.95	5.1	0.33	170	25/450	9.0
1.1	1410	90S	24	6.6	440	71.0	0.98	7.5	0.33	180	40/450	14.5
1.5	1420	90L	24	8.7	440	73.0	0.98	10.1	0.33	180	45/450	16.2
2.2	1450	100LA	28	12.5	496	79.0	0.93	14.5	0.31	180	70/450	23.4
3	1450	100LB	28	16.1	542	81.0	0.96	19.8	0.31	180	90/450	28.7
0.09	900	63A	11	0.87	200	44.5	0.97	0.96	0.38	153	8/450	5.1
0.12	875	63B	11	1.07	200	47.5	0.98	1.31	0.25	123	11/450	6.0
0.18	920	71A	14	1.39	220	55.5	0.97	1.87	0.50	150	11/450	6.3
0.25	930	71B	14	1.90	250	56.0	0.98	2.57	0.45	150	16/450	7.6
0.37	960	80A	19	2.44	350	66.0	0.96	3.68	0.35	160	20/450	9.0
0.55	955	80B	19	3.35	350	70.5	0.97	5.50	0.35	160	25/450	11.6
0.75	905	90S	24	4.77	260	67.0	0.98	7.91	0.35	160	35/450	13.5
1.1	940	90L	24	6.32	300	74.0	0.98	11.2	0.35	150	50/450	16.2

TMY SERIES MOTOR OUTLINE DIMENSIONS



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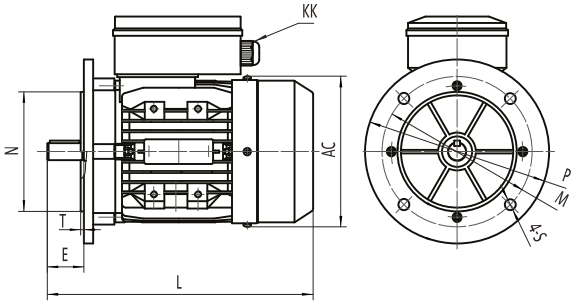

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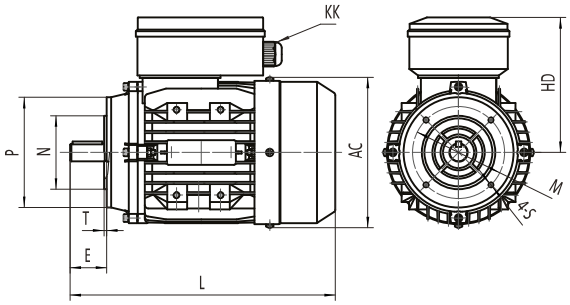

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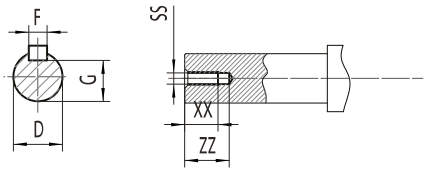

SHAFT

TMY SERIES DIMENSIONAL DATA Sizes are in mm

FRAME	Foot Mounting				Shaft								General				
	H	A	B	C	D	E	F	G	K	SS	XX	ZZ	AA	AD	HD	AC	L
TMY 56	56	90	71	36	9	20	3	7.2	5.8	M3	9	12	110	144	88	117	196
TMY 63	63	100	80	40	11	23	4	8.5	7	M4	10	14	120	181	118	130	220
TMY 71	71	112	90	45	14	30	5	11	7	M5	12	17	132	196	125	147	241/255
TMY 80	80	125	100	50	19	40	6	15.5	10	M6	16	21	160	226	146	163	290
TMY 90S	90	140	100	56	24	50	8	20	10	M8	19	25	175	243	153	183	312
TMY 90L	90	140	125	56	24	50	8	20	10	M8	19	25	175	243	153	183	337/367
TMY 100L	100	160	140	63	28	60	8	24	12	M10	22	30	198	265	165	205	369/387

FRAME	KK	B5					B14A					B14B				
		N	M	P	S	T	N	M	P	S	T	N	M	P	T	S
TMY 56	1-M16*1.5	80	100	120	4-7	3	50	65	80	M5	2.5					
TMY 63	1-M20*1.5	95	115	140	4-10	3	60	75	90	M5	2.5	80	100	120	3	M6
TMY 71	1-M20*1.5	110	130	160	4-10	3.5	70	85	105	M6	2.5	95	115	140	3	M8
TMY 80	1-M20*1.5	130	165	200	4-12	3.5	80	100	120	M6	3	110	130	160	3.5	M8
TMY 90	1-M20*1.5	130	165	200	4-12	3.5	95	115	140	M8	3	110	130	160	3.5	M8
TMY 100	1-M20*1.5	180	215	250	4-15	4	110	130	160	M8	3.5	130	165	200	3.5	M10