

Tecnotion presents its full range of TM-motors

The TM-motor is the smallest of the Tecnotion family of iron core motors. It has the same outstanding properties as the other motors in this family.

The TM-motors stand out for their compact construction, lightweight, low attraction force, fast acceleration, high speed and micron operational accuracy.

Now available with 2m flexcable.



Specifications

	Symbol	Unit	TM 3 S	TM 6 S	TM 12 S
Motortype, max. voltage ph-ph			3-phase synchronous Ironless, 300 Veff		
Ultimate Force (temp. rise 10°C/s) magnet @25°C	Fu	N	120	240	480
Ultimate Current magnet @25°C	Iu	Arms	4.1	8.3	16.6
Peak Force (temp. rise 6°C/s) magnet @25°C	Fp	N	105	210	420
Peak Current magnet @25°C	Ip	Arms	3.1	6.2	12.5
Continuous Force * coils @100°C	Fc	N	30..60	60..120	120..240
Maximum Continuous Current * coils @100°C	Ic	Arms	1.53	3.1	6.1
Maximum Continuous Power Loss all coils	Pc	W	49	99	197
Maximum speed @300V	Vmax	m/s	8	8	8
Motor Force Constant I < 0.6 Ip, @25°C	K	N/A	39	39	39
Back EMF phase-phase peak	Bemf	Vdc / m/s	32	32	32
Motor Constant	S	N ² /W	95	190	380
Magnet Pitch NN	τ	mm	24	24	24
Resistance per phase coils @25°C	Rf	Ω	5.4	2.7	1.34
Induction per phase	Lf	mH	35	17	9
Electrical Time Constant coils @25°C	τe	ms	6.5	6.5	6.5
Thermal Resistance	Rth	°C/W	1.50	0.75	0.38
Thermal Time Constant minimum	τ th	s	75	75	75
Motor Attraction Force	Fa	N	300	500	900
Length of Coilunit	L	mm	93	143	241
Weight of Coilunit ex. cables	M	kg	0.6	0.9	1.6
Weight of Cables	m	kg/m	0.2	0.2	0.2
Temperature Sensors			PTC 1kΩ and KTY 21		
* Depends on application: use of watercooling, cooling surface, air speed and ambient temperature.					

This leaflet gives you the TM's vital technical data. For additional information, please contact

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Dimensions Magnetplates

Le	96 mm	144 mm	384 mm
M5 bolts	4x	6x	16x
Mass	2.1 kg/m		
Magnetplates can be butted together.			

