

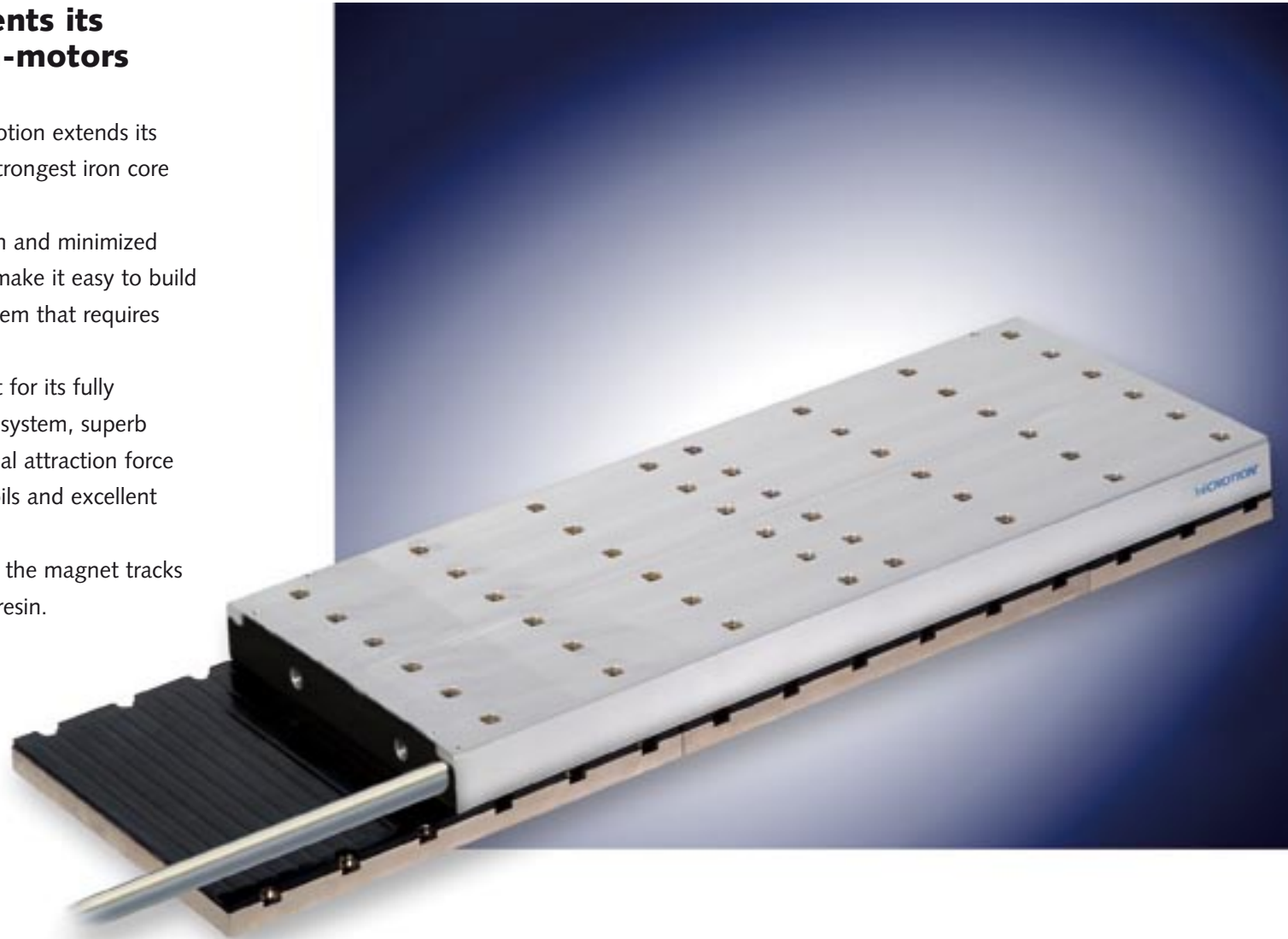
Tecnotion presents its full range of TG-motors

With the TG-motor Tecnotion extends its product range with the strongest iron core linear motor.

The compact construction and minimized height of the TG-motor make it easy to build the TG-motor in any system that requires maximum power.

The TG-motor stands out for its fully integrated water-cooling system, superb heat performance, minimal attraction force between magnets and coils and excellent motor constant.

For optimal protection of the magnet tracks they are cast into epoxy resin.



Specifications

	Symbol	Unit	TG 15 S	TG 30 S	TG 45 S
Motortype, max. voltage ph-ph			3-phase synchronous Ironcore, 600 Veff		
Ultimate Force 10°C/s @25°C	Fu	N	4250	8500	12750
Ultimate Current	Iu	Arms	33	65	98
Peak Force 6°C/s @25°C	Fp	N	3780	7560	11340
Peak Current	Ip	Arms	25	50	75
Continuous Force watercooled coils @100°C	Fcw	N	1950	3900	5850
Continuous Current watercooled coils @100°C	Icw	Arms	11.1	22	33
Continuous Force aircooled * coils @100°C	Fca	N	900..1900	1800..3800	2700..4700
Max. Continuous Power Loss all coils	Pc	W	1200	2400	3600
Maximum speed @560V	Vmax	m/s	3	3	3
Motor Force Constant I <0.6 Ip	K	N/Arms	176	176	176
Back EMF	Bemf	V / m/s	143	143	143
Motor Constant coils @25°C	S	N ² /W	4200	8400	12600
Magnet Pitch NN	τ	mm	24	24	24
Resistance per phase coils @25°C	Rf	Ω	2.44	1.22	0.81
Induction per phase I <0.6 Ip	Lf	mH	20	10	6.7
Electrical Time Constant coils @25°C	τe	ms	8	8	8
Thermal Resistance	Rth	°C/W	0.06	0.03	0.02
Thermal Time Constant	τ th	s	78	78	78
Motor Attraction Force	Fa	N	8000	16000	24000
Length of Coil unit	L	mm	296	568	840
Weight of Coil unit ex cable	M	kg	12	23	34
Weight of Cables	m	kg/m	0.4	0.4	0.4
Watercooling Flow @25°C	Φ _w	l/min	6	9	12
Watercooling Pressure indication	Pw	bar	1.2	2	3
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 TG's vital technical data. For additional information, please contact

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Dimensions Magnetplates

Le	192 mm	288 mm
N	3	5
M6 bolts	8x	12x
Mass	28 kg/m	

Magnetplates can be butted together.

