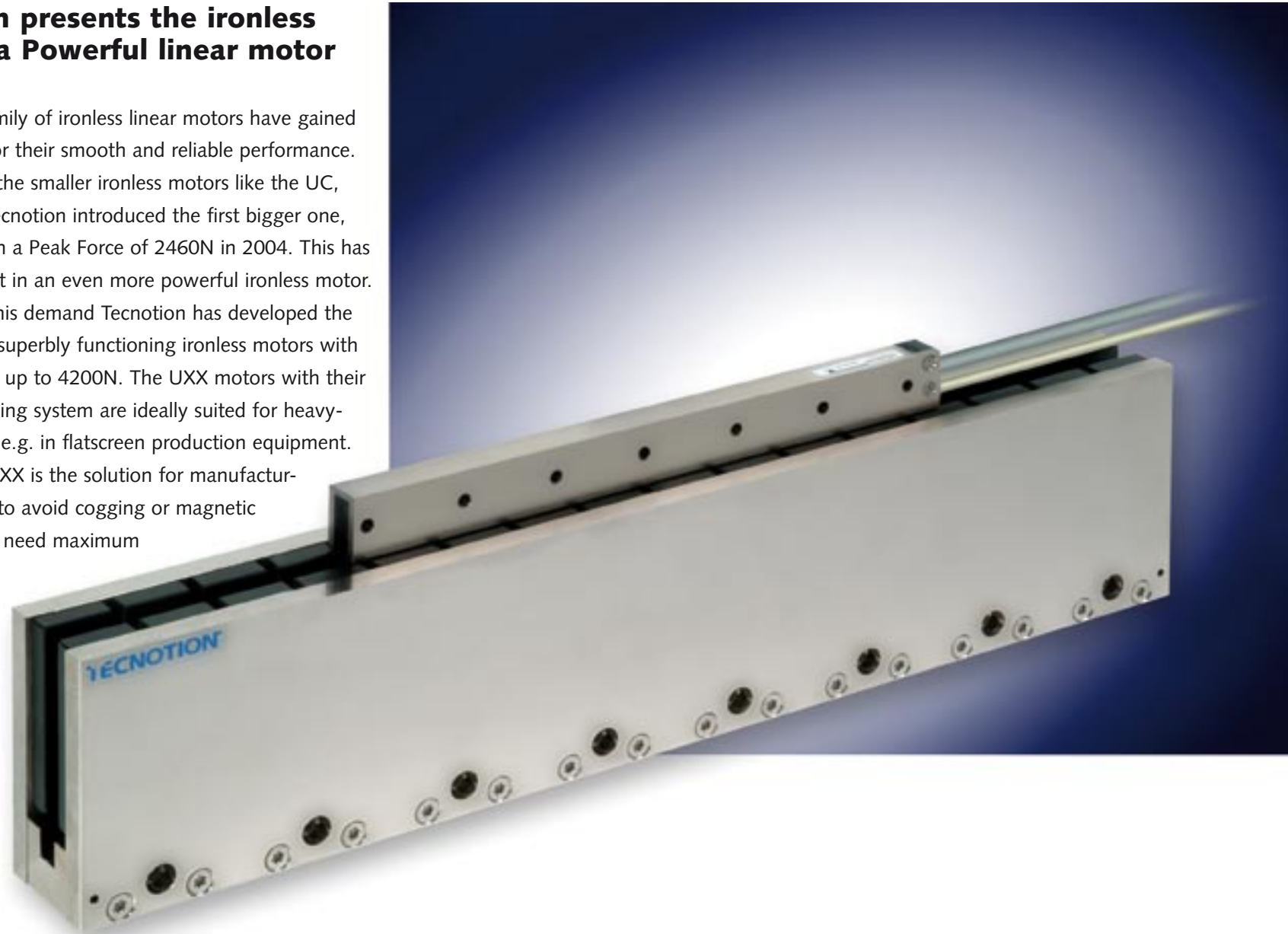


## **Tecnotion presents the ironless UXX Extra Powerful linear motor**

Tecnotion's family of ironless linear motors have gained a reputation for their smooth and reliable performance. In addition to the smaller ironless motors like the UC, UM and UL Tecnotion introduced the first bigger one, the UX 12 with a Peak Force of 2460N in 2004. This has created interest in an even more powerful ironless motor. In answer to this demand Tecnotion has developed the UXX range of superbly functioning ironless motors with Peak Forces of up to 4200N. The UXX motors with their controlled cooling system are ideally suited for heavy-duty purposes e.g. in flatscreen production equipment. In short, the UXX is the solution for manufacturers who want to avoid cogging or magnetic influences and need maximum power in their production processes.



## Specifications

	Symbol	Unit	UXX 3		UXX 6		UXX 9		UXX 12		UXX 18
			N	S	N	S	N	S	N	S	N
Motortype, max. voltage ph-ph			3-phase synchronous Ironless, 300Veff								
Peak Force (temp. rise 20°C/s) magnet @25°C	Fp	N	700		1400		2100		2800		4200
Peak Current (temp. rise 20°C/s) magnet @25°C	Ip	Arms	5.6	13.9	11.3	28	16.9	42	22.6	56	34
Continuous Force* coils @110°C	Fc	N	67..141		134..282		201..423		268..564		402..846
Maximum Continuous Current coils @110°C	Ic	Arms	1.14	2.80	2.27	5.6	3.4	8.4	4.5	11.2	6.8
Maximum Continuous Power Loss all coils	Pc	W	82		165		247		330		494
Maximum speed @300V	vmax	m/s	2.7	6.6	2.7	6.6	2.7	6.6	2.7	6.6	2.7
Motor Force Constant motor @25°C	K	N/A	124	50.3	124	50.3	124	50.3	124	50.3	124
Back EMF phase-phase peak	Bemf	Vdc / m/s	101	41	101	41	101	41	101	41	101
Motor Constant	S	N <sup>2</sup> /W	323		647		970		1293		1940
Magnet Pitch NN	τ	mm	57		57		57		57		57
Resistance per phase coils @25°C	Rf	Ω	15.8	2.6	7.9	1.29	5.3	0.86	4.0	0.65	2.6
Induction per phase	Lf	mH	28	4.6	14	2.3	9	1.5	7	1.2	4.7
Electrical Time Constant coils @25°C	τe	ms	1.8		1.8		1.8		1.8		1.8
Thermal Resistance	Rth	°C/W	1.04		0.52		0.35		0.26		0.17
Thermal Time Constant minimum	τth	s	156		156		156		156		156
Motor Attraction Force	Fa	N	0		0		0		0		0
Length of Coilunit	L	mm	134		248		362		476		704
Weight of Coilunit Ex. cables	M	kg	0.55		0.95		1.35		1.75		2.55
Weight of Cables	m	gr/m	180		180		180		180		180
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 UXX's vital technical data. For additional information, please contact

### Tecnotion BV

Marketing & Sales Department

P.O.Box 23, 7600 AA Almelo

The Netherlands

Tel. +31 (0)546 536300

Fax +31 (0)546 536310

sales@tecnotion.com

www.tecnotion.com

### Dimensions Magnetyokes

Le	114 mm	171 mm	456 mm
M6 bolts	2	3	8
Mass	24 kg/m		

Magnetyokes can be butted together.

