



HIGH-TORQUE MOTORS BT SERIES 420 Nm ... 2,265 Nm
PERMANENT MAGNET MOTOR WITH INTEGRATED LIQUID-COOLING SYSTEM

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HIGH-TORQUE MOTORS BT SERIES

The BT series of High-Torque motors are permanent magnet multi-pole synchronous motors with an integral water-cooling system. The BT series offers very high torque with minimal dimensions, enabling users to achieve greater efficiency and productivity at optimised costs.

An important advantage derived from this technology is the elimination of the gear motor and other transmission components such as pulleys, clutches and chains. This simplifies the drive train while reducing the level of maintenance required and reducing the risk of machine down time.

OTHER ADVANTAGES WHEN USING THE HIGH-TORQUE MOTORS OF BT SERIES:

- Hollow shaft mounting significantly reduces machine design costs
- Extremely compact dimensions compared to gear motor technology
- Reduction of wear parts due to the elimination of the flange, rear cover and bearings
- Significantly reduced maintenance intervals, minimising machine downtime
- Zero backlash thanks to the direct connection to the machine axis
- Lowers acoustic noise emission levels
- Liquid cooling system eliminates contamination in the ventilation channels

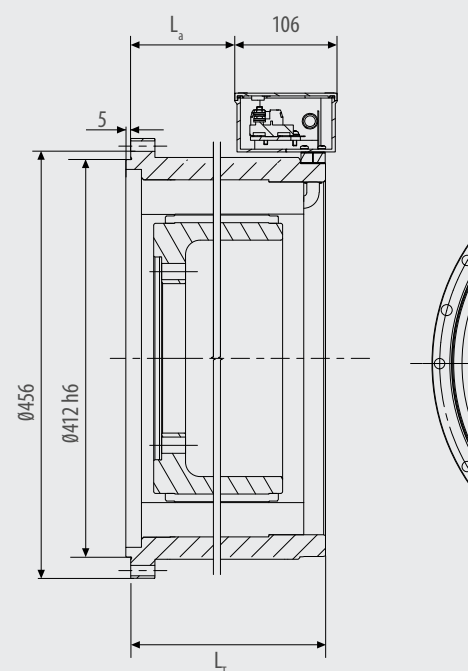
The high-torque BT series motors are available as separate rotor and stator versions for direct installation in OEM machines. They are also highly customisable in terms of both mechanical and electrical specifications to meet even the most demanding requirements in OEM machine design. In combination with the [COMBIVERT F6](#) drive controllers, powerful drive systems are created.

CONTACT OUR SPECIALISTS TO DISCUSS YOUR APPLICATIONS TODAY: sales@keb.de

MOTOR FEATURES

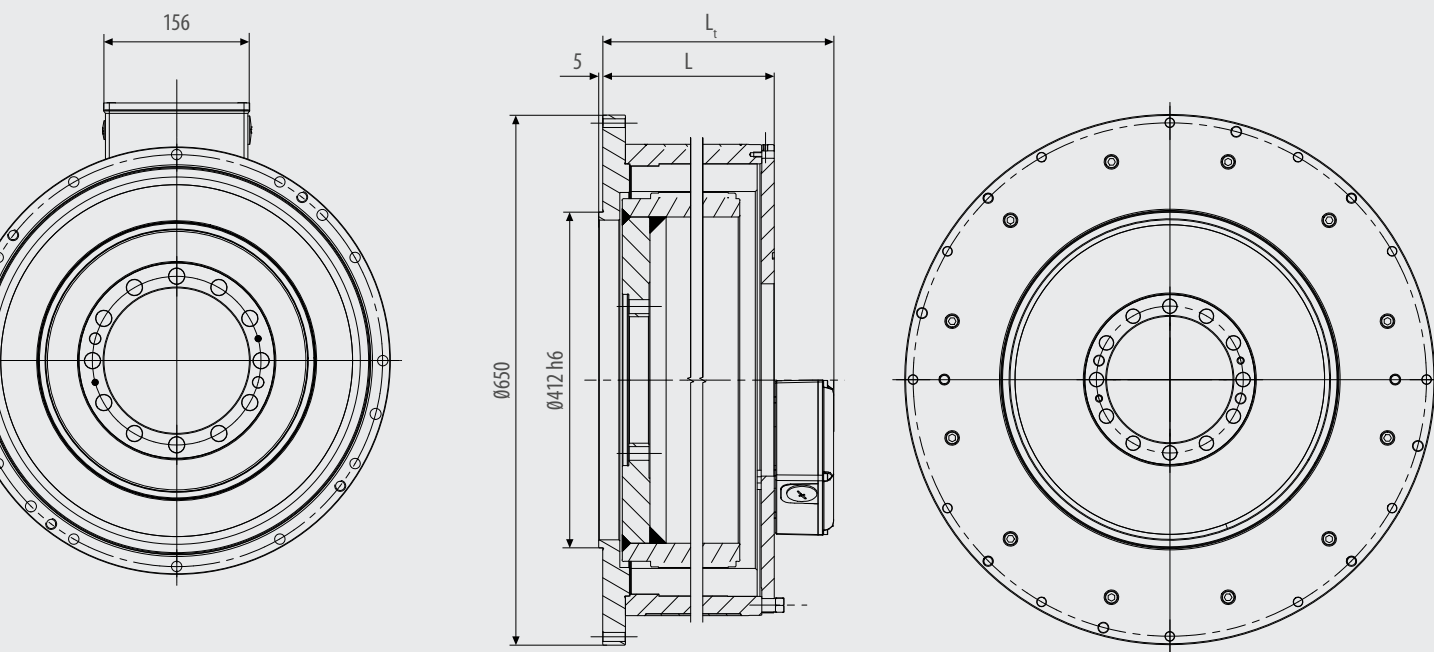
Windings	Three-phase Y-connection without accessible neutral wire	
Windings insulation	Class H	
Dimensioning	Class F	
Service type	S1 - Continuous	
Number of poles	22 (BT 370)	38 (BT 530)
Degree of protection	IP00 for stator + rotor configuration (open frame)	
Ambient temperature	-20 °C to +40 °C	
Environmental conditions	Maximum altitude: 1.000 m above sea level	
	Humidity: ≤ 90 % (no condensation)	
	Transport / storage temperature: from -20 °C to +70 °C	
Encoder system	Without encoder	HIPERFACE® SRS50
	Resolver	HIPERFACE® SRM50
Magnetic material	Neodymium-Iron-Boron	
Color	RAL 7046 Grey	
Cooling	Liquid cooling	
Thermal protection	Thermistor PTC	
Power connection	Three-phase terminal block	
Signal connection	Terminal block	
Reference switching frequency	8 kHz	

BT 370



Size	Length	Speed [rpm]	MOTOR DATA							DIMENSIONS			
			T_{on} [Nm]	T_n [Nm]	P_n [W]	T_{pk} [Nm]	I_{on} [A _{rms}]	I_n [A _{rms}]	I_{pk} [A _{rms}]	L_t [mm]	L_a [mm]	L_t [mm]	L [mm]
BT 370	60	100	470	470	4,922	902	15.5	15.5	33	170	76	/	/
		250		447	11,689	902	29.7	27.5	64.2				
		450		423	19,933	902	48.5	44.6	105				
	90	100	705	705	7,383	1,354	20.9	20.9	46.2	195	101	/	/
		250		670	17,534	1,354	40.8	38.1	88.9				
		450		635	29,900	1,354	75.1	70.1	165.1				
	120	100	1,010	1,010	10,577	2,121	28.1	28.1	63	225	131	/	/
		250		893	23,379	2,121	53.5	49.5	135.8				
		450		846	39,867	2,121	89.1	81.7	226.3				
	180	100	1,410	1,410	14,765	2,679	37.2	37.2	81.7	255	161	/	/
		250		1,340	35,068	2,679	75.8	70.7	163.4				
		450		1,269	59,800	2,679	132.7	123.7	285.9				
BT 530	70	100	795	795	8,325	1,910	18	18	50.1	/	/	269	196
		200		755	15,818	1,814	30.8	30.8	85.8				
	140	100	1,542	1,542	16,150	3,705	31.5	31.5	87.6	/	/	339	266
		200		1,392	29,152	3,344	56.8	56.8	158				
	210	100	2,266	2,266	23,726	5,443	44	44	122.5	/	/	409	336
		200		1,937	40,573	4,654	87.8	87.8	244.4				

BT 530



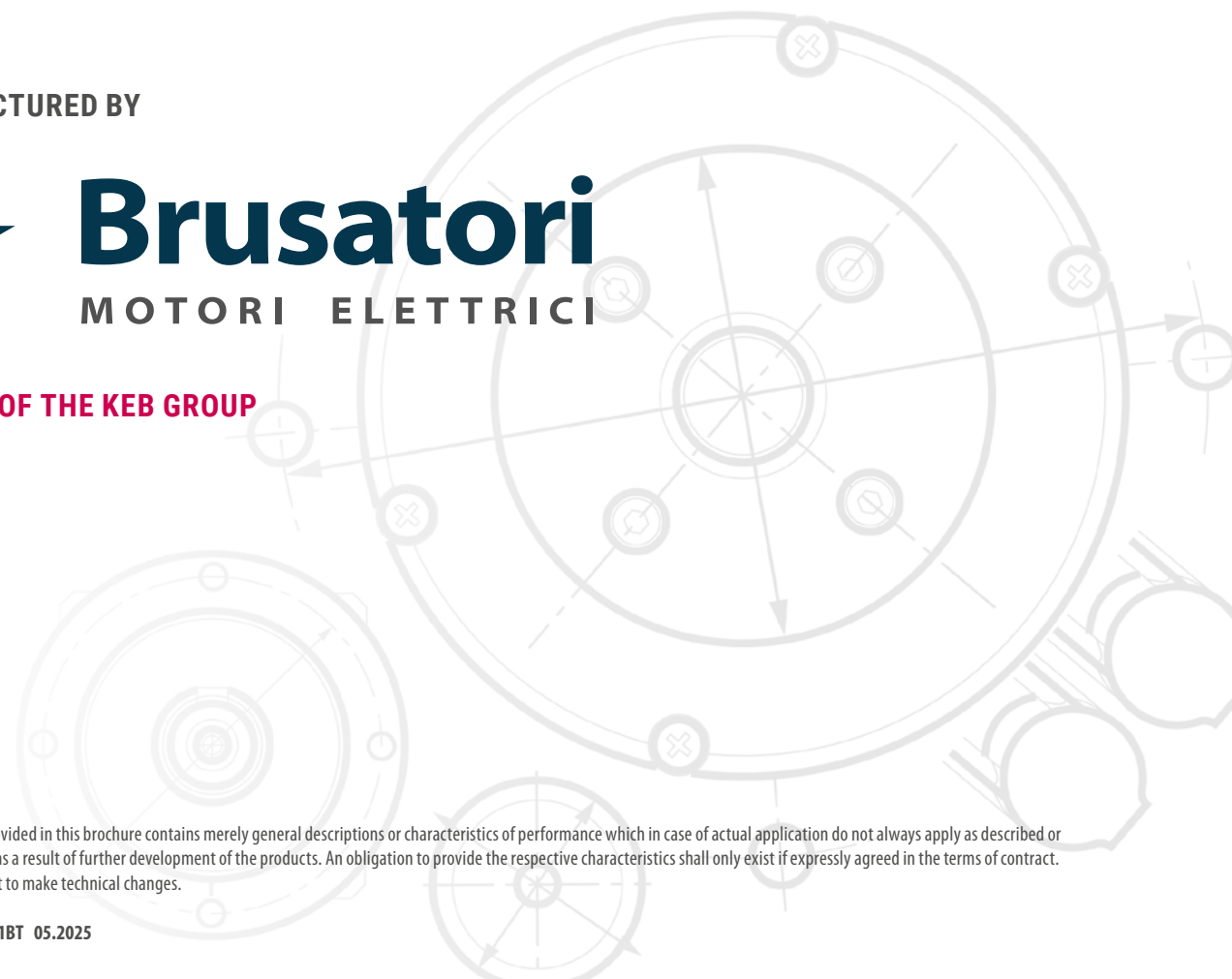
The KEB logo consists of the letters 'KEB' in a bold, white, sans-serif font, set against a red rectangular background.

MANUFACTURED BY

The Brusatori logo features a stylized lightning bolt shape, with the top half in red and the bottom half in dark blue.

Brusatori
MOTORI ELETTRICI

MEMBER OF THE KEB GROUP

A large, light gray technical drawing of a motor's internal components, including the stator and rotor, is overlaid on the page. It shows various parts like windings, cooling fans, and mounting points with dimension lines and arrows.

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. We reserve the right to make technical changes.

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Automation with Drive

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