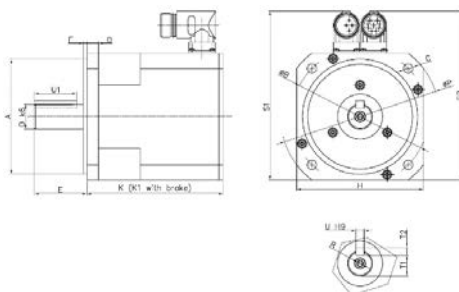


Contract nr. 125 / 2020, Project Code EUROSTARS-2019-E!12367-iTorque  
<http://www.icpe.ro/itorque/>

## BRUSHLESS SERVO-MOTORS WITH STATOR CORE MADE OF SEGMENTS

The electric servomotor type SBM is a permanent magnets brushless synchronous motor with cylindrical rotor. The stator core is made of segmented laminated teeth which allow high copper density and low cogging torque. They have a compact construction, low ripple torque, high efficiency and high torque density.



Tip	Gabarit	A (j6)	B	C	D (k6)	E	F	H	K	K1	M	O	P	R	T1	T2 (h9)	U (h9)	U1
SBM-121-110-090	121	110	130	9	24	50	3,5	121	130	170	121	11	152	M8-20	27	3	8	40

Nr. Crt.	Parameter	Symbol	Unit	SBM-121-110-090-325A
2.1.	Rated Power±10%	$P_n$	kW	2.2
2.2.	Rated Tortque ±10%	$M_n$	Nm	7*
2.3.	Static torque ±10%	$M_0$	Nm	14*
2.4.	Motor constant	$K_M$	N/√W	1.38
2.5.	Electric constant	$T_E$	msec	6.56
2.6.	Prazit torque	$M_p$	mNm	560
2.7.	Inertia	J	kg·cm <sup>2</sup>	4
2.8.	Weight	$W_t$	kg	7
2.9.	Number of poles	$N_p$		10
2.10.	Insulation class			F
2.11.	Nominal voltage	$U_n$	V <sub>cc</sub>	325
2.12.	Rated current ±10%	$I_n$	A	6.5
2.13.	Static current ±10%	$I_0$	A	13
2.14.	Peak torque	$M_{0\ max}$	Nm	56
2.15.	Torque constant ±10%	$K_T$	Nm/A	1.08
2.16.	Voltage constant ±10%	$K_E$	V/krpm	68
2.17.	Rated speed ±10%	$n_o$	rpm	3000
2.18.	Resistance ±8%	$R_L$	Ω	0.61
2.19.	Inductivity ±20%	$L_L$	mH	4

