

FRMSM 1,000 W

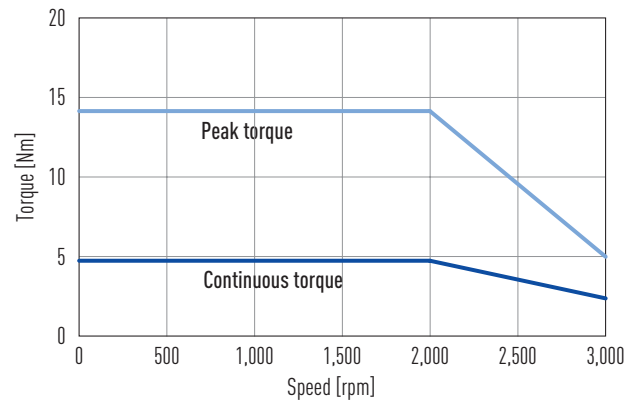
Technical data FRMM 1,000 W			
Motor data	Symbol	Unit	FRMM1K2 __13__
Nominal voltage	V	VAC	220
Nominal power	W	W	1,000
Nominal torque	T_C	Nm	4.77
Nominal current	I_C	A_{eff}	5.1
Peak torque for 1 sec.	T_P	Nm	14.3
Peak current for 1 sec.	I_P	A_{eff}	15.3
Nominal speed	n_N	rpm	2,000
Maximum speed for 1 sec.	n_{max}	rpm	3,000
Torque constant	K_T	Nm/ A_{eff}	0.94
Voltage constant	K_e	$V_{eff}/(1,000 \text{ rpm})$	54.7
Winding resistance ¹⁾	R	Ω	0.81
Winding inductance ¹⁾	L	mH	8
Mass inertia of rotor	J	$kgm^2 \times 10^{-4}$	7.6
Mass inertia of rotor with brake	J	$kgm^2 \times 10^{-4}$	8.7
Motor weight	M	kg	5.4
Motor weight with brake	M	kg	6.2
Motor insulation class			A
Motor brake (optional) ²⁾			
Braking torque (static)	T_b	Nm	10
Power supply	V	VDC	$24 \pm 10\%$
Power consumption	A	A	0.6
Rated input	W	W	13.4
Response time open	t_0	ms	80.0
Response time close	t_R	ms	30.0

¹⁾ Line to line

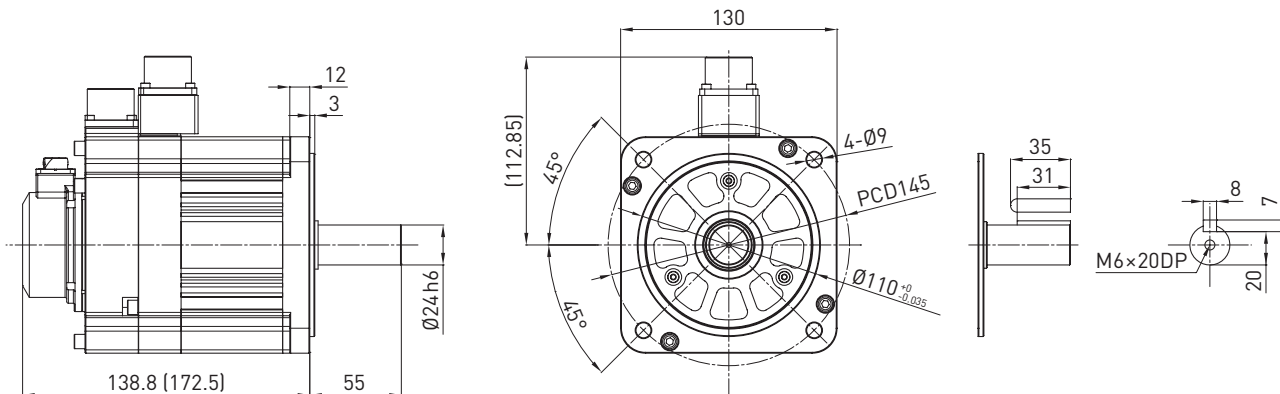
²⁾ The motor brakes are holding brakes only, not operating brakes



Torque-speed curve FRMM 1,000 W:



Dimensions FRMM 1,000 W:



Values in brackets apply to model with motor brake