

Table of contents

■ MS2N05-D0BRN

MS2N05-D0BRN

MS2N05-D0BRN

Designation	Symbol	Unit	MS2N05-D0BRN- ___0-_N	MS2N05-D0BRN- ___1-_N
Standstill torque - 60K ¹⁾	M ₀ 60K	Nm		7.9
Standstill current - 60K	I ₀ 60K	A		6.05
Standstill torque - 100K ¹⁾	M ₀ 100K	Nm		9.35
Standstill current - 100K	I ₀ 100K	A		7.2
Moment of inertia of rotor ¹⁾	J _{rot}	kg*m ²	0.00040	0.00051
Rated speed - 100K	n _N 100K	1/min		3510
Rated torque - 100K ¹⁾	M _N 100K	Nm		4.74
Rated current - 100K	I _N 100K	A		3.95
Rated power - 100K ¹⁾	P _N 100K	kW		1.74
Maximum torque 20 °C (cold) ¹⁾	M _{max} 20°C	Nm		34.0
Maximum torque 100K (warm) ¹⁾	M _{max} 100K	Nm		31.3
Maximum current	I _{max} (rms)	A		30.3
Maximum speed (electrical)	n _{max} el	1/min		6000
Maximum speed (mechanical)	n _{max} mech	1/min		6000
Number of pole pairs	p			5

Designation	Symbol	Unit	MS2N05-D0BRN- ___0-_N	MS2N05-D0BRN- ___1-_N
Torque constant at 20 °C ¹⁾	K _m	Nm/A		1.4
Voltage constant at 20 °C ¹⁾	K _E	V/1000 min ⁻¹		84.8
Winding resistance at 20 °C	R ₁₂	Ohm		1.76
Winding inductance	L _{12_min}	mH		11.18
Leakage capacitance of the component	C _{ab}	nF		3.29
Thermal time constant of winding	T _{th_W}	s		45.8
Thermal time constant of motor	T _{th_M}	min		18.5
Mass	m _{mot}	kg	7.3	8.4
<u>Holding brake</u>				
Holding torque	M ₄	Nm	0	10.00
Rated voltage	U _N	V	0	24
Rated current	I _N	A	0	0.73
Maximum connection time	t ₁	ms	0	30
Maximum disconnection time	t ₂	ms	0	80
1) For tolerance details refer to ↘ “Tolerances”			Latest amendment: 2016-07-13	

Fig. 62: MS2N05-D0BRN-___0-___-__, ctrlX DRIVE, uncontrolled supply 3 × AC 400 V

Fig. 63: MS2N05-D0BRN-___0-___-__, ctrlX DRIVE, controlled supply 3 × AC 400 ... 480 V