

## 4.5 MSK040C Technical Data

Description	Symbol	Unit	MSK040C-0600-NN
continuous torque at standstill, 60K	$M_{0\_60}$	Nm	2,7
continuous current at standstill, 60K	$I_{0\_60(\text{eff})}$	A	3,1
continuous torque at standstill, 100K	$M_{0\_100}$	Nm	3,1
continuous current at standstill, 100K	$I_{0\_100(\text{eff})}$	A	3,1
maximum torque	$M_{\text{max}}$	Nm	8,1
maximum current	$I_{\text{max}(\text{eff})}$	A	12,4
torque constant at 20°C	$K_{M\_N}$	Nm/A	0,95
constant voltage at 20°C	$K_{\text{EMK\_1000}}$	V/min <sup>-1</sup>	58,2
winding resistance at 20°C	$R_{12}$	Ohm	3,90
winding inductivity	$L_{12}$	mH	21,300
leakage capacitance of the component	$C_{\text{ab}}$	nF	2,0
number of pole pairs	$p$	-	4
moment of inertia of rotor without brake <sup>1)</sup>	$J_{\text{rot}}$	kg*m <sup>2</sup>	0,00014
thermal time constant	$T_{\text{th}}$	min	16,0
maximum speed	$n_{\text{max}}$	min <sup>-1</sup>	7500
sound pressure level	$L_p$	dB[A]	<75
ambient temperature during operation	$T_{\text{um}}$	°C	0 ... 40
degree of protection	-	-	IP65
insulation class EN 60034-1	-	-	F

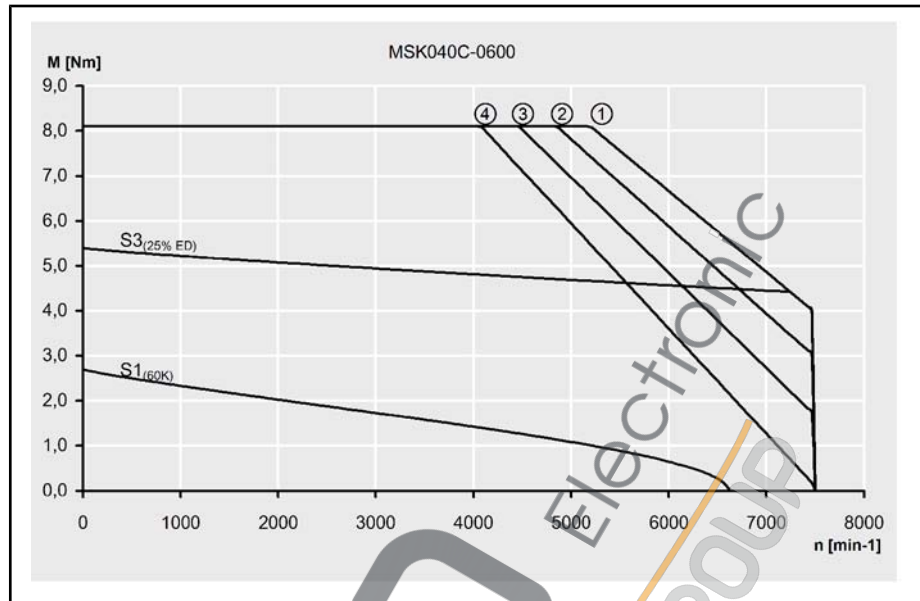
1) specified without brake. If necessary, add the moment of inertia brake.  
Fig.4-16: MSK - Technical Data (natural cooling)

Description	Symbol	Unit	BREMSE-305590
holding torque	$M_4$	Nm	4,0
rated voltage ±10%	$U_N$	V	24
rated current	$I_N$	A	0,50
connection time	$t_1$	ms	35
disconnection time	$t_2$	ms	25
moment of inertia brake	$J_{\text{rot}}$	kg*m <sup>2</sup>	0,000023
mass brake	$M_{\text{Br}}$	kg	0,3

Fig.4-17: MSK040: Holding brake - Technical data (optional)

Technical Data

Speed-torque characteristics



- ① Mmax for IndraDrive, controlled feed, 3x AC 400V
- ② Mmax for IndraDrive, uncontrolled feed, 3x AC 480V
- ③ Mmax for IndraDrive, uncontrolled feed, 3x AC 440V
- ④ Mmax for IndraDrive, uncontrolled feed, 3x AC 400V

Fig.4-18: Speed-torque characteristic of MSK040C-0600

Shaft load

Diagram for determining the maximum permissible radial force  $F_{radial}$ .

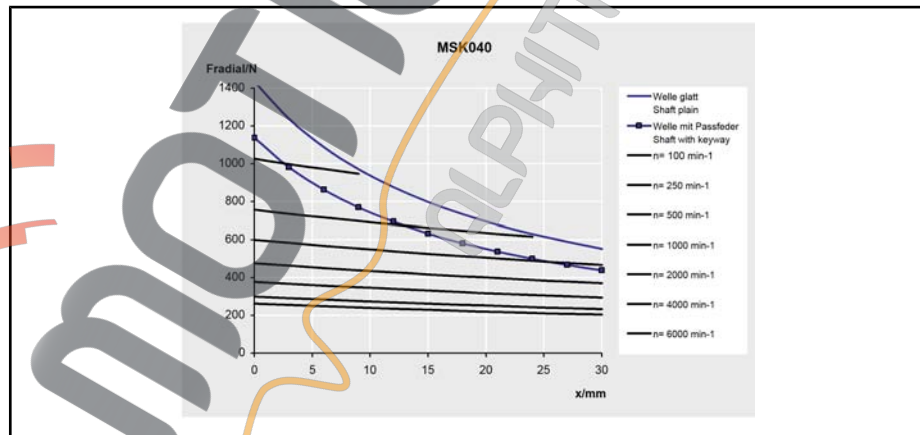


Fig.4-19: permissible radial force of MSK040 - Motors (shaft and bearing load)

The maximum permissible axial force  $F_{axial}$  is 200 N.

For additional information about permissible radial and axial forces, see [chapter 9.7 "Bearing and Shaft Load"](#) on page 164.