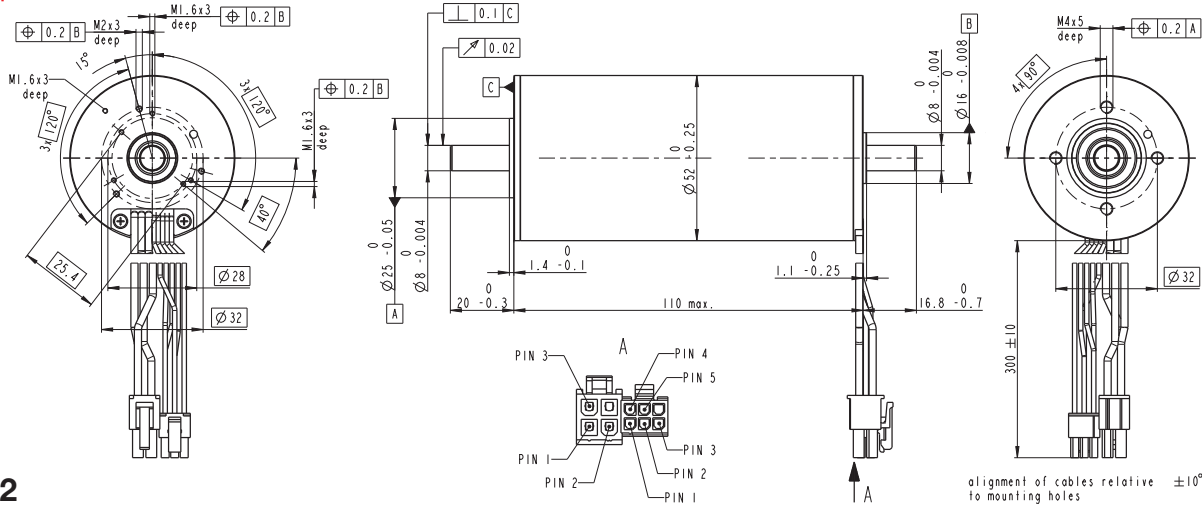


# EC-i 52 XL $\varnothing 52$ mm, 200 Watt

High Torque

NEW

maxon EC-i



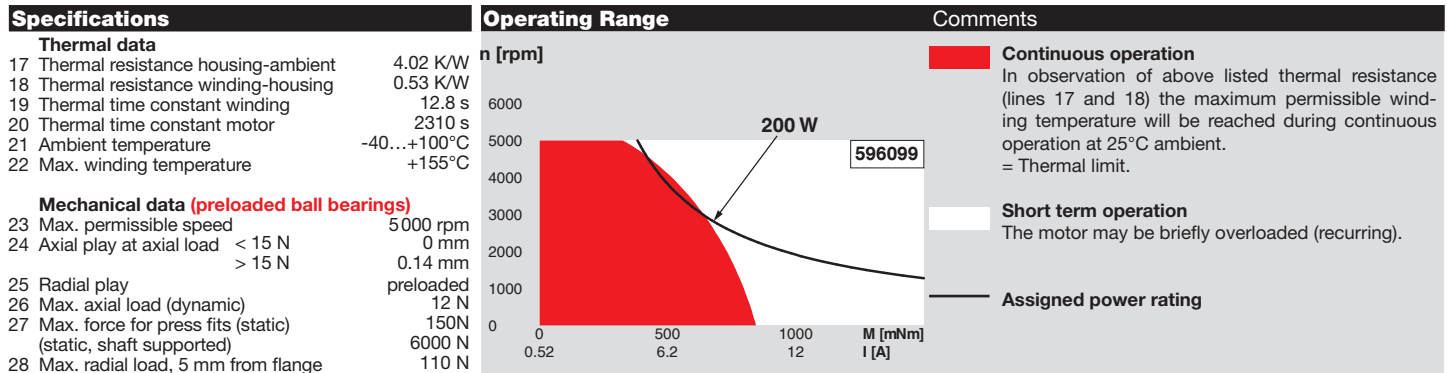
M 1:2

- Stock program
- Standard program
- Special program (on request)

## Part Numbers

with Hall sensors    606793    596099    634043

Motor Data (provisional)		606793	596099	634043
<b>Values at nominal voltage</b>				
1 Nominal voltage	V	24	36	48
2 No load speed	rpm	3340	3660	3970
3 No load current	mA	657	499	419
4 Nominal speed	rpm	2970	3300	3610
5 Nominal torque (max. continuous torque)	mNm	640	649	622
6 Nominal current (max. continuous current)	A	9.36	6.93	5.44
7 Stall torque <sup>1</sup>	mNm	13800	18800	22900
8 Starting current	A	202	202	200
9 Max. efficiency	%	89	90.4	91.1
<b>Characteristics</b>				
10 Terminal resistance phase to phase	$\Omega$	0.119	0.178	0.24
11 Terminal inductance phase to phase	mH	0.149	0.28	0.424
12 Torque constant	mNm/A	68	93.1	115
13 Speed constant	rpm/V	140	103	83.3
14 Speed/torque gradient	rpm/mNm	0.245	0.196	0.174
15 Mechanical time constant	ms	0.677	0.543	0.482
16 Rotor inertia	gcm <sup>2</sup>	264	264	264



## maxon Modular System Overview on page 28–36

<b>Other specifications</b> 29 Number of pole pairs    8 30 Number of phases    3 31 Weight of motor    1150 g Values listed in the table are nominal.	<b>Planetary Gearhead</b> $\varnothing 52$ mm 4 - 30 Nm Page 360		<b>Encoder 16 EASY</b> 128 - 1024 CPT, 3 channels Page 409 <b>Encoder 16 EASY Absolute</b> 4096 steps Page 411 <b>Encoder 16 RIO</b> 1024 - 65536 CPT, 3 channels Page 424 <b>Encoder AEDL 5810</b> 1024 - 5000 CPT, 3 channels Page 427 <b>Encoder HEDL 5540</b> 500 CPT, 3 channels Page 435
<b>Connection motor</b> (Cable AWG 16) red Motor winding 1 Pin 1 black Motor winding 2 Pin 2 white Motor winding 3 Pin 3 N.C. Pin 4	<b>Recommended Electronics:</b> <b>Notes</b> ESCON Module 50/8 (HE) ESCON 70/10 EPOS4 Module/Compact 50/8 EPOS4 Module/Comp. 50/15 EPOS4 70/15 MAXPOS 50/5 ENX16EASY ENX16EASY Absolute ENX16RIO HEDL 5540 AEDL 5810		
<b>Connector Article number</b> Molex 39-01-2040 <b>Connection sensor</b> (Cable AWG 26) yellow Hall sensor 1 Pin 1 brown Hall sensor 2 Pin 2 grey Hall sensor 3 Pin 3 blue GND Pin 4 green V <sub>Hall</sub> 4.5...24 VDC Pin 5 N.C. Pin 6	<b>Connector Article number</b> Molex 430-25-0600		

Wiring diagram for Hall sensors see p. 43  
<sup>1</sup>Calculation does not include saturation effect (p. 53/164)