

ECI motor.

ECI-63.XX-K1

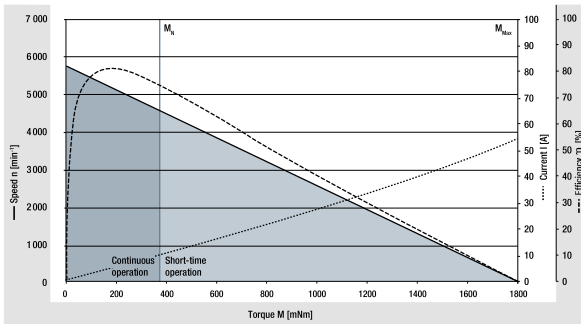


- Highly dynamic 3-phase internal rotor motor with EC technology
- Low cogging torque
- Robust, noise-optimized ball bearing system for a long service life
- High efficiency and high power density realized in a compact design
- Basic motor with electronic module K1 for operation with external control electronics
- Mechanical design and interfaces designed for modular flexibility
- Protection class IP 40 / IP 54 and connection by connector system

Nominal data							
Type		ECI-63.20-K1 -B00	ECI-63.20-K1 -D00	ECI-63.40-K1 -B00	ECI-63.40-K1 -D00	ECI-63.60-K1 -B00	ECI-63.60-K1 -D00
Nominal voltage (U_N)	V DC	24	48	24	48	24	48
Nominal speed (n_N)**	rpm	4 000					
Nominal torque (M_N)**	mNm	360	360	670	670	800	880
Nominal current (I_N)**	A	8.50	4.50	14.0	6.50	17.6	8.50
Nominal output power (P_N)**	W	150	150	280	280	335	370
Starting torque (M_{max})	mNm	1 800	1 800	3 300	3 300	5 300	4 400
Permissible peak current (I_{max})***	A	55	30	95	45	150	57
Speed at no-load operation (n_0)	rpm	5 800	6 800	5 900	5 900	6 100	6 000
No-load current (I_0)	A	0.50	0.30	0.70	0.32	1.30	0.45
Recommended speed control range	rpm	0 ... 5 000					
Rotor moment of inertia (J_R)	kgm ² x10 ⁻⁶	19	19	38	38	57	57
Motor constant (K_E)	mVs/rad	41.4	73.3	40.4	83.8	40.4	83.8
Connection resistance (R_N)	Ω	0.14	0.42	0.08	0.24	0.04	0.15
Connection inductance (L_N)	mH	0.26	0.88	0.14	0.57	0.09	0.33
Overload protection		To be implemented via the control electronics					
Permissible ambient temperature range (T_U)	°C	0 ... +40					
Weight	kg	0.90	0.90	1.20	1.20	1.50	1.50
Order no. (wire interface)*	IP 40	932 6320 103	932 6320 105	932 6340 103	932 6340 105	932 6360 106	932 6360 108
Order No. (connector interface)*	IP 54	932 6320 100	932 6320 102	932 6340 100	932 6340 102		932 6360 102
Subject to alterations		* Classification of protection class refers to installed state with sealing on the flange side The wave geometry for the IP54 version differs from the illustrated drawing ** At T_U max. 40°C *** Permissible time for peak current: max. 1 sec. – to be repeated only after complete cool down					

Characteristic curve

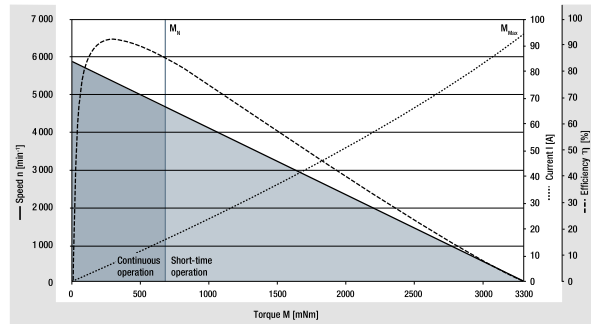
ECI-63.20-K1, 24 V (at 25°C)



¹⁾ Nominal data, see table

Characteristic curve 48 V on request

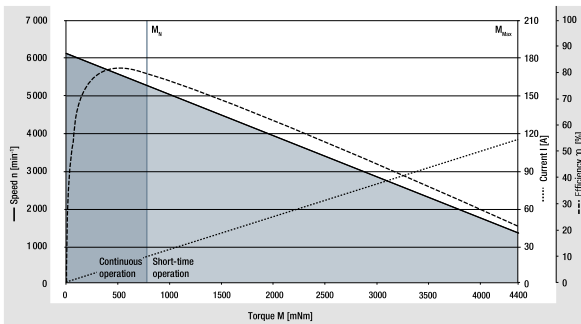
ECI-63.40-K1, 24 V (at 25°C)



¹⁾ Nominal data, see table

Characteristic curve 48 V on request

ECI-63.60-K1, 24 V (at 25°C)



¹⁾ Nominal data, see table

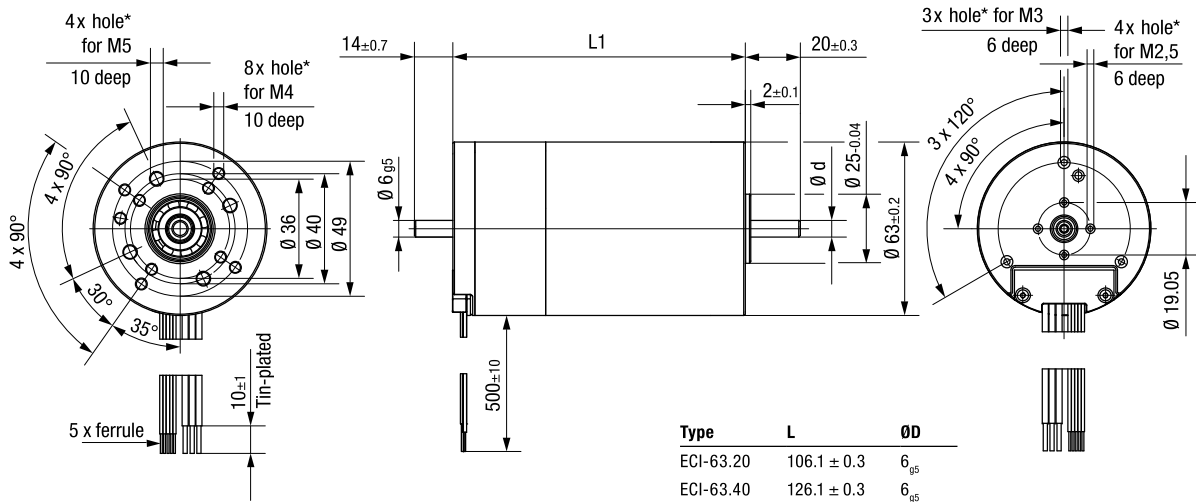
Characteristic curve 48 V on request

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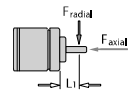
ECI-63.XX-K1

Technical drawing Strand design

All dimensions in mm



Type	L	∅D
ECI-63.20	106.1 ± 0.3	6 _{g5}
ECI-63.40	126.1 ± 0.3	6 _{g5}
ECI-63.60	146.1 ± 0.3	10 _{g5}



Permissible shaft load at nominal speed and life expectancy L_{10} (nominal operation) of 20 000 h (at T_U max. 40°C)

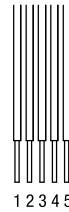
F_{axial}	150 N
F_{radial}	150 N
$L1$	20 mm

* For thread-rolling screws according to DIN 7500

Electrical connection

Supply wire

Wire	Color	Function
1	yellow	Phase W
2	violet	Phase V
3	brown	Phase U



Signal wire

Wire	Color	Function
4	green	Hall A
5	white	Hall B
6	gray	Hall C
7	red	U_B
8	black	GND