

Description	Symbol	Unit	MKD025B-144		
Cooling mode – Motor overtemperature			Natural 60K	Natural 100K	Surface 60K /100K
Electric parameters					
Characteristic motor speed	n _K	min ⁻¹	9000		
Continous torque at standstill	M _{dN}	Nm	0,9 (0,8)	1,0 (0,9)	---
Continous current at standstill	I _{dN}	A	5,1(4,5)	5,7 (5,1)	---
Peak current	I _{max}	A	23,0		
Torque constant at 20°C ¹⁾	K _m	Nm/A	0,2		
Voltage constant at 20°C	K _{E(eff)}	V/1000min ⁻¹	18,2		
Winding resistance at 20°C	R ₁₂	Ω	2,7		
Winding inductace	L ₁₂	mH	3,7		
Number of pole pairs	p		3		
Rated data ²⁾					
Rated speed	n _N	min ⁻¹	5000	5000	---
Rated torque	M _N	Nm	0,31 (0,28)	0,59 (0,53)	---
Rated current	I _N	A	1,2 (1,1)	2,4 (2,1)	---
Rated power	P _N	kW	0,2 (0,18)	0,4 (0,36)	---
Rated voltage	U _N	V	94,7 (94,3)	98,4 (97,5)	---
Rated frequency	f _N	Hz	250	250	---
Mechanical parameters					
Rotor inertia					
Theoretical maximum torque	J _M	kgm ²	0,3 × 10 ⁻⁴		
Minimum strand cross-section ⁴⁾	M _{max}	Nm	4		
Thermal time constant	S	mm ²	1	1	---
Maximum speed	T _{th}	min	15	15	---
Motor mass ^{3) 5)}	m _{max}	min ⁻¹	9000		
Perm. storage and transport temp.	m	kg	2,0 (2,3)		
Permissible ambient temperature ⁶⁾	T _L	°C	-20 to +80		
Max. setup height ⁶⁾	T _{um}	°C	0 to 40		
Protection category ⁷⁾	h	m	1000 above NN		
Insulation class (according to DIN VDE 0530 Part 1)			IP65		
Housing coat			F		
			Prime coat black in a/wRAL 9005		

¹⁾ K_m is to be used for calculations with crest values (I_{dN}, I_{max}). For calculations with root-mean-square values (rated data), the torque constant K_m must be multiplied by a factor of √2.

²⁾ Values determined according to EN 60034-1. Current and voltage specified as root-mean-square values.

³⁾ Use the declared value in bracket for motors holding brake.

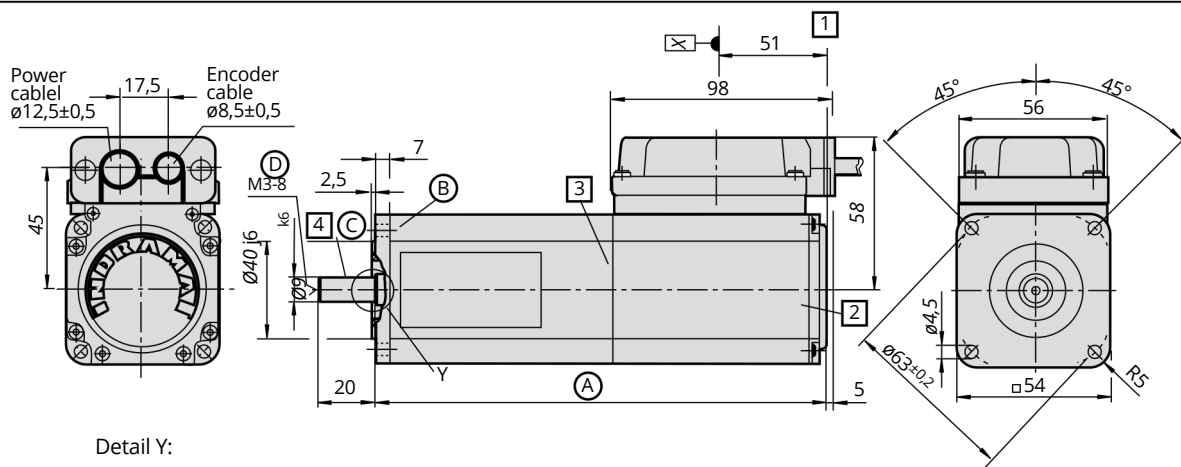
⁴⁾ Applicable to REXROTH cables. Rated according to VDE0298-4 (1992) and installation type B2 according to EN 60204-1 (1993) at an ambient temperature of 40 °C.

⁵⁾ Without blower unit.

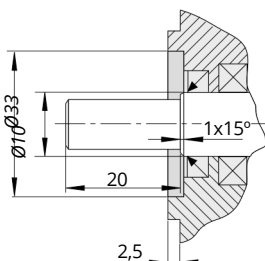
⁶⁾ If the limits specified are exceeded, the performance data must be reduced if necessary. For reduction factors, refer to the chapter entitled “Environmental Conditions”.

⁷⁾ Provided the power and encoder cables are mounted properly

Fig. 6-3: Technical Data MKD025B



Detail Y:



(A) Dimensional table:

Motor	
MKD 025 A 183 only without brake	
MKD 025 B 236 with and without brake	

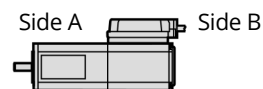
- (B)** Motor as per DIN EN 60034-7 1996-06, B5 for all mounting orientations
- (C)**
- Flange as per DIN 42948, ed. 11.65
 - Position accuracy per concentricity, excentricity and coaxiality to shaft as per DIN 42955 tolerance class N, ed. 12.81
- (D)**
- Shaft end per DIN 748 sec. 3, Aed. 07.75, IEC 72, ed. 1971, cylindrical
 - center drill hole DS M3 as per DIN 332 sec. 2, ed. 05.83
 - max. screw tightening torque 0.7 Nm
 - vibration severity level N per DIN VDE 0530 sec. 14, ed. 02.93

Options:

1 Output directions

The output direction of this box (power and encoder cables) is selected at the time of mounting. Possible directions are:

- to side A
- to side B



Side B is the output direction illustrated. The dimensions for side A as output direction can be obtained by turning the terminal box around the X axis.

2 Motor encoder

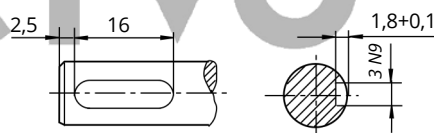
- Resolverfeedback (RSF)
 - Resolverfeedback (RSF) with integral multiturn absolute encoder
- The dimensions are identical.

3 Holding brake:

- without
 - with
- The dimensions are identical.

4 Output shaft

- plain shaft (preferred type)
- with keyway per DIN 6885 sheet 1, ed. 08.68 (Note! balanced with entire key!)



Matching keyway: DIN 6885-A 3 x 3 x 16, not part of delivery.

