

Description	Symbol	Unit	MKD071B-035		
Cooling mode – Motor overtemperature			Natural 60K	Natural 100K	Surface 60K /100K

Electric parameters

Characteristic motor speed	n_K	min^{-1}	2500		
Continuous torque at standstill	M_{dN}	Nm	8,0	9,0	12,0
Continuous current at standstill	I_{dN}	A	6,3	7,4	9,5
Peak current	I_{max}	A	28,3		
Torque constant at 20°C ¹⁾	K_m	Nm/A	1,38		
Voltage constant at 20°C	$K_{E(\text{eff})}$	V/1000min ⁻¹	125		
Winding resistance at 20°C	R_{12}	Ω	4,57		
Winding inductance	L_{12}	mH	23		
Number of pole pairs	p		4		

Rated data ²⁾

Rated speed	n_N	min^{-1}	2500	2500	2500
Rated torque	M_N	Nm	5,2	7,5	10,2
Rated current	I_N	A	2,9	4,4	5,7
Rated power	P_N	kW	1,6	2,5	3,4
Rated voltage	U_N	V	333	349	366
Rated frequency	f_N	Hz	167	167	167

Mechanical parameters

Rotor inertia

Theoretical maximum torque	J_M	kgm^2	$8,7 \times 10^{-4}$		
Minimum strand cross-section ⁴⁾	M_{max}	Nm	32		
Thermal time constant	S	mm^2	1	1	1
Maximum speed	T_{sh}	min	45	45	20
Motor mass ³⁾ ⁵⁾	m	kg	4500		
Perm. storage and transport temp.	T_L	°C	8,8		
Permissible ambient temperature ⁶⁾	T_{um}	°C	-20 to +80		
Max. setup height ⁶⁾	h	m	0 to +40		
Protection category ⁷⁾			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 $\sqrt{2}$.

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

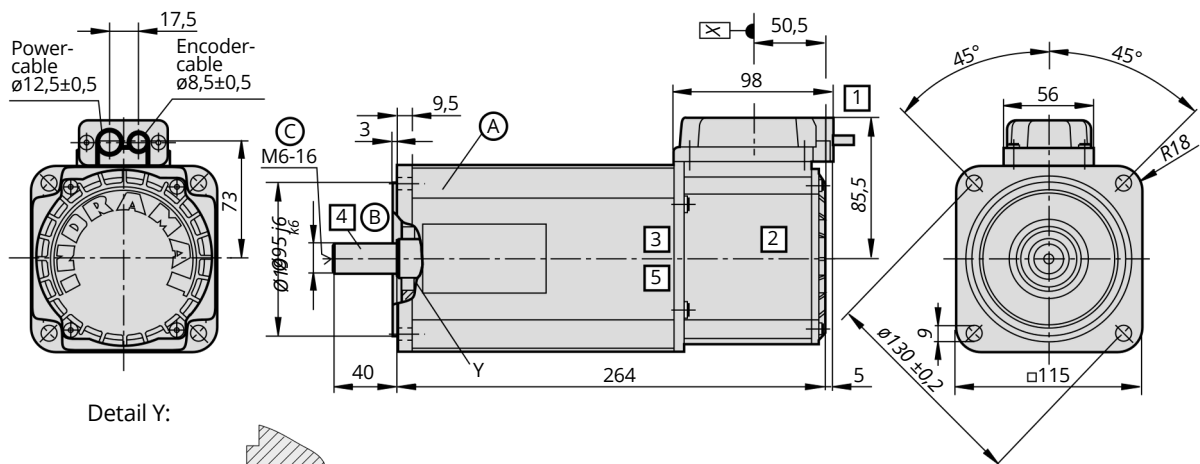
³⁾ Use the declared value in bracket for motors holding brake.

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

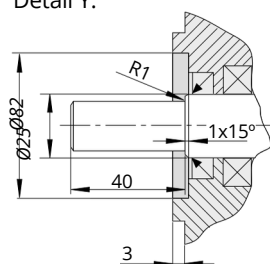
⁵⁾ Without blower unit.

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".

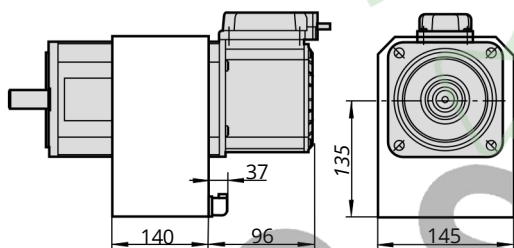
⁷⁾ Provided the power and encoder cables are mounted properly



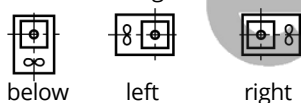
Detail Y:



- Ⓐ Motor as per DIN EN60034-7 ed. 1996-06, B5 for all mounting orientations.
- Ⓑ
- Flange as per DIN 42948, ed. 11.65
 - Position accuracy per concentricity, excentricity and coaxiality to shaft as per DIN 42955 toleranz class N, ed. 12.81
- Ⓒ
- Shaft end per DIN 748 sec. 3, ed. 07.75, IEC 72, ed. 1971, cylindrical
 - center drill hole D5 M6 per DIN 332 sec. 2, ed. 05.83
 - max. screw tightening torque 5,0 Nm
 - vibration severity level N per DIN VDE 0530 sec. 14, ed. 02.93
- Ⓔ Cooling mode:
- natural convection (dim. see above)
 - radial surface cooling



Possible arrangements:



(looking from front onto motor shaft)

Options:

Output direction

- 1 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

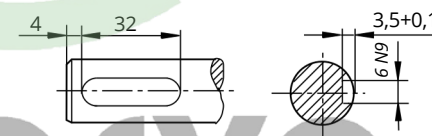
- Resolverfeedback (RSF)
 - Resolverfeedback (RSF) with integral multiturn absolute encoder
- The dimensions are identical.

3 Holding brake:

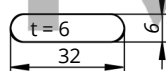
- without
 - with
- The dimensions are identical.

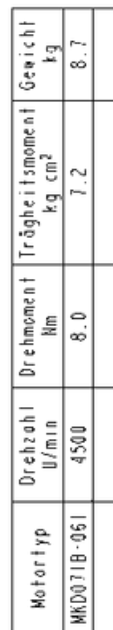
Output shaft

- 4
- plain shaft (preferred type)
 - with keyway per DIN 6885 sheet 1, ed. 08.68 (Note! balanced with entire key!)



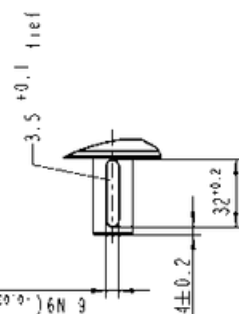
Matching keyway: DIN 6885-A 6 x 6 x 32, not Part of delivery.





Schutzart: IP65
Einbaulage beliebig
Bremsen: Hallenmoment 10Nm
Gewicht kg
Trägheitsmoment kg cm²

Option Paßfedernut:



(mit ganzer Postfeder gewuchtet)

[illegible]

Zeichnung darf nur mit CAD geändert werden.