



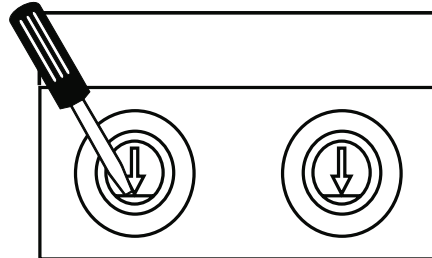
- This information does not replace the detailed operating instructions!
- Installation only by trained personnel observing applicable accident prevention guidelines and the operating instructions!

1 Electrical Installation

Preparation motors size 56 – knockout



Caution: Wear protective goggles – danger of chipped pieces!



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Fig. 1: Cable entry knockout

- Place terminal cover on unit, fasten screws
- Determine cable entries you want to open
- Open cable entries
 - with chisel or similar tool (place at an angle → Fig. 1)
 - with light taps of a hammer



Caution: Do not damage the inside of the terminal box!

- Open terminal box and remove knockout
- Secure cable gland with supplied lock nut

1.1 Cable gland threading

Motor size	Metric cable glands
DT56	2 × M20×1.5; 2 × M12×1.5

1.2 Connecting DT56..+/BMG motor

The motor features a star point with three terminals that is wired in the winding overhang. The power supply lines (L1, L2, L3) are connected in the moulded terminal box (1) in a terminal block with cage clamp springs (2). The BMG02 brake is controlled via a BG1.2 (3) brake rectifier. The brake can also be controlled from the control cabinet with rectifiers of the BM series.

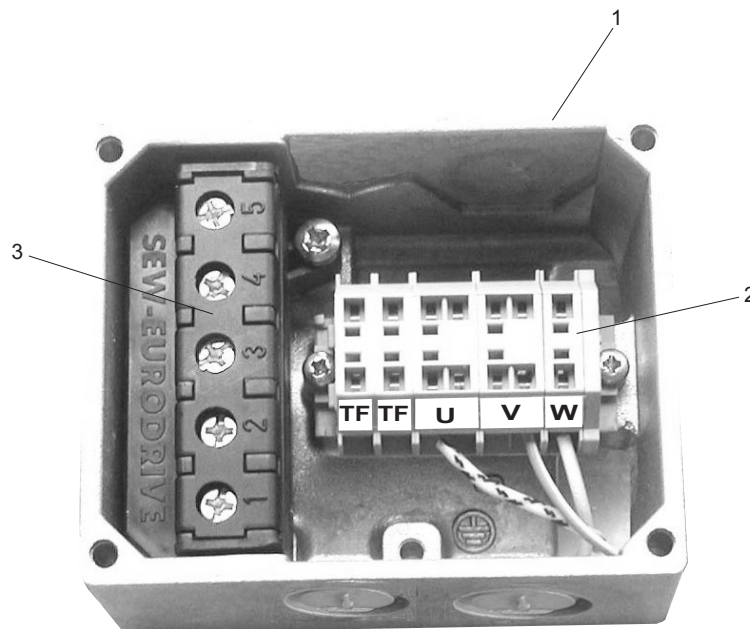


Fig. 2: DT56 terminal box with terminal block and cage clamp springs

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1.3 Single-phase version ET56

The single-phase motor ET56 is available with mounted and connected running capacitor:

1~230 V, 50 Hz $C_B = 4 \mu\text{F}$

1~230 V, 60 Hz $C_B = 4 \mu\text{F}$

1~110 V, 60 Hz $C_B = 20 \mu\text{F}$



**The single-phase motor cannot be combined with a TF.
No full-load starting with running capacitor only!**

2 Inspection / Maintenance

2.1 Inspection / maintenance work on brake BMG02

Measuring brake disc thickness, replace brake BMG02

The condition of the brake disc is determined by measuring its thickness. The brake BMG02 must be replaced when the measurement is less than the minimum thickness (→ Fig. 3). You cannot adjust the working air gap.

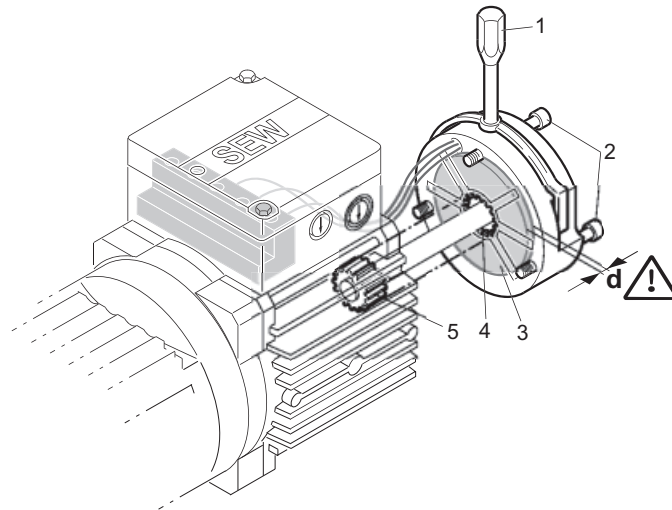


Fig. 3: Replacing brake BMG02

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1. **Disconnect motor and brake from voltage supply source and protect against unintentional restart**
2. Remove hand lever (1) (in versions with manual release), fan guard and fan
3. Loosen screws (2) and remove complete brake with releasing lever (in versions with manual release)
4. Measure thickness "d" of the brake disc (3):

Brake type	Thickness of brake disc [mm]		max. brake torque [Nm]
	max.	min.	
BMG02	6	5.4 5.6	0.8 1.2



5. **The complete brake must be replaced in case the measurement is less than the minimum brake disc thickness.**
6. Mount complete brake on motor:
 - make sure that the brake disc gearing (4) enmeshes with the carrier gearing (5)
 - guide electrical connection cables of brake to terminal box through B bearing shield and internal motor space
7. Install brake with screws (2) to the B bearing shield
8. Install fan, fan guard and manual lever (1) (in designs with manual release)

2.2 Inspection and maintenance periods

Unit / component	Time period	What to do?
Brake BMG02	<ul style="list-style-type: none"> serves as working brake: at least every 3,000 operating hours¹⁾ serves as holding brake: depending on load conditions: every 2 to 4 years¹⁾ 	Inspect brake: <ul style="list-style-type: none"> measure brake disc thickness pressure plate carrier / gearing <ul style="list-style-type: none"> vacuum abrasions check switch contacts, replace if necessary (e.g. erosion)

1) Wear times are subject to a variety of factors and can be rather short.

The required inspection/maintenance periods have to be calculated by the system manufacturer according to the project planning documents (e. g. Drive Engineering - Practical Implementations, Volume 4).

3 Technical Data

3.1 Work done until maintenance, brake torques for BMG02

Brake type	For motor size	Work done until maintenance [10 ⁶ J]	Thickness of brake disc [mm]		Brake torque [Nm]
			max.	min.	
BMG02	DT56	30	6	5.6	1.2
	ET56			5.4	0.8

3.2 Data for replacement order of BMG02

Brake type	Voltage [V _{DC}]	Max. brake torque [Nm]	Part number
BMG	24	0.8	0574 319 2
		1.2	0574 323 0
BMG/HR	24	0.8	0574 327 3
		1.2	0574 331 1

Brake type	Voltage [V _{AC}]	Max. brake torque [Nm]	Part number
BMG	230	0.8	0574 320 6
		1.2	0574 324 9
	400	0.8	0574 321 4
		1.2	0574 325 7
	460/500	0.8	0574 322 2
		1.2	0574 326 5
BMG/HR	230	0.8	0574 328 1
		1.2	0574 332 X
	400	0.8	0574 329 X
		1.2	0574 333 8
	460/500	0.8	0574 330 3
		1.2	0574 334 6

3.3 Operating currents for BMG02

	BMG02
Motor size	56
Max. brake torque (Nm)	1.2
Coil power (W)	27

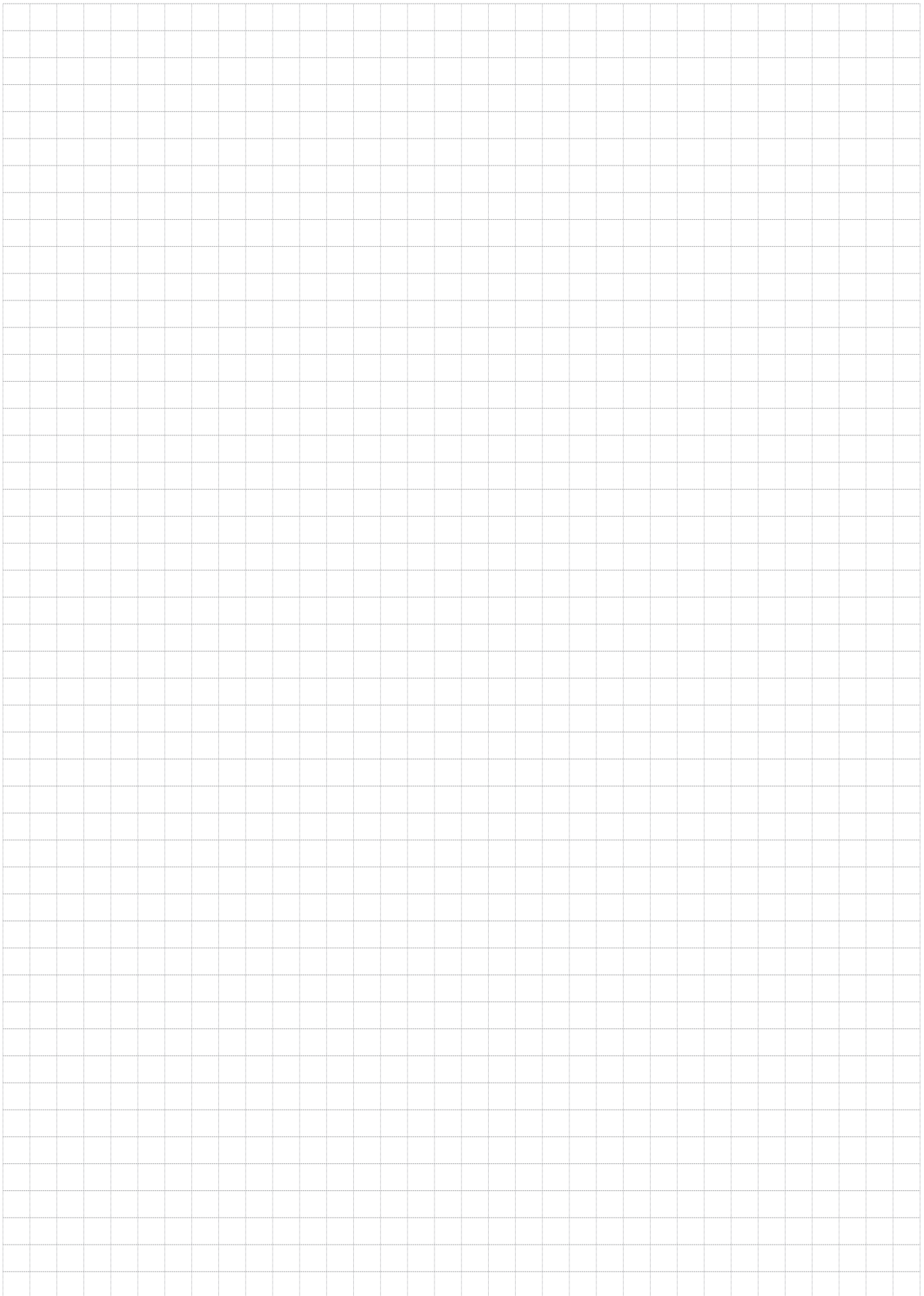
Voltage V_N		BMG02	
V_{AC}	V_{DC}	I_H A_{AC}	I_G A_{DC}
	24	-	0.72
230 (218-243)	96	0.14	0.18
400 (380-431)	170	0.08	0.10
460 (432-500)	190	0.07	0.09

Legend

- I_H Effective value holding current in the supply line to the SEW brake rectifier
- I_G Direct current with direct voltage supply
- V_N Rated voltage (rated voltage range)

3.4 Approved ball bearing types

Motor type	A bearing (foot, flange, geared motor)			B bearing (AC motor, brake motor)	
	flange-mounted motor	geared motor	foot-mounted motor	AC motor	brake motor
DT 56	-	6302-Z-J	-	6001-J	6001-2RS-J



SEW-EURODRIVE GmbH & Co · P.O. Box 3023 · D-76642 Bruchsal/Germany · Phone +49-7251-75-0
Fax +49-7251-75-1970 · <http://www.sew-eurodrive.com> · sew@sew-eurodrive.com

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