



BINDER CLUTCHES & BRAKES

SPRING-APPLIED SINGLE-SURFACE BRAKE

76 13105C0. / 76 13705C0.
76 13111C00



POWER OF PARTNERSHIP AND MAGNETISM

SLIM LINE

Kendrion Power Transmission

BINDER CLUTCHES & BRAKES

Our company's strength is measured by the delivery of products, performances, as well as a high degree of esteem towards our customers. KENDRION POWER TRANSMISSION is striving to develop a long-term relationship with its

customers and to cultivate this relationship under the motto "Power of Partnership". Ambitious aims can only be realised through a close and productive co-operation with our customers.

The development of high-quality standard products as well as optimised tailor made solutions is the foundation of all our actions.

Power of Partnership stands for a co-operation with the Kendrion employees without bureaucracy, ensuring a long and successful partnership with our customers.

Top Market Knowledge...

the realisation of market orientated products are the results of our competence in electromagnetism which has been achieved with decades of experience and knowledge. The development of most innovative concepts and the

use of the most modern technologies in our research department together with the use of the latest production and logistic processes are our strengths.

Our customers profit from the individual solutions for high volume as well as the availability of individual products on the basis of a standard platform.

Our know-how is growing steadily hand in hand with the constant optimisation of every business process.

Optimal tailor made solutions...

are not empty promises. The profound understanding of the Power of Magnetism at KENDRION POWER TRANSMISSION is the source of the research/development of market orientated products. Continuous expansion of the technological possibilities

enables us to be in the position to offer optimal solutions of brakes and clutches for numerous applications. We lay great emphasis on being able to offer solutions for different applications such as:

- ... SECURING
- ... STOPPING
- ... POSITIONING
- ... ACCELERATING.

Important synergies as a basis for success...

KENDRION POWER TRANSMISSION is a European company with a local presence in all economic regions of the world. Integrated in and yielding performance to the Kendrion Holding N.V., which is noted on the Amsterdam stock exchange, as a successful company with an annual turnover of 1,8 billion EUR; and approx. 5500 employees all over the world.

This is an excellent basis to realise, secure and enable our long-term goals and company objectives. A network of connected companies within Kendrion is another valuable factor for the success of KENDRION POWER TRANSMISSION. We live the "Power of Partnership" in a firm exchange

of expertise and business relationship within these companies.



Kendrion Power Transmission protects people and the environment

General technical information

76 13105C0./76 13705C0.

76 13111C00

Product line information

BINDER CLUTCHES & BRAKES



The SLIM LINE is comprised of spring-applied single-disc brakes where the spring actuated brake-discs are attached to the shaft. The brake disc can be designed as a motor fan.

Being designed as single-surface brakes, SLIM LINE brakes are not only extremely flat but are also released with zero residual torque. Electromagnetically operated spring-applied brakes generate the brake torque when voltage is removed.

Applications

- Machining equipment
- Building installations
- Wheelchairs
- ...

Versions

76 13105C0.	torque 25 Ncm DC
76 13705C0.	torque 25 Ncm single-phase AC
76 13111C00	torquet 3 Nm DC high or low version fan

Information on technical data included in the data sheets

The information provided in the operating instructions must be strictly adhered to when designing a machine (e.g. motor) and when using the brakes. The brakes are manufactured and tested in compliance with DIN VDE 0580 requirements. The insulation materials used conform with thermal class F norms. Operation of the brake as a pure holding brake without friction work is only permitted after prior consultation with the manufacturer. The specified times apply to the following conditions: seperate switching of the brake, operating

temperature, rated voltage, and rated air gap. All values are mean values that are subject to variation. In the case of AC brake switching, the coupling time t_1 is substantially longer. W_{max} (maximum switching energy) is the switching energy that must not be exceeded during braking operations at max. 3000 rpm. Braking operations at >3000 rpm lead to a substantial reduction in the maximum admissible switching energy per switching operation. Such operation is only permitted after prior consultation with the manufacturer. The maximum switching power P_{max} is the switching energy W

that can be converted by the brake per hour. In the case of applications where the number of switching operations per hour is greater than 1 ($Z > 1$), the diagram (W_{max} as a function of the number of switching operations per hour Z) shown in the operating instructions applies. The P_{max} and W_{max} values are approximate values; they apply to applications where the brake is attached to the motor. The specified rated torques M_2 characterise the torque level of the brakes. Depending on the application of the brake, the switching torque M_1 and the transmissible

torque M_4 may differ from the specified M_2 values. The switching torque M_1 depends on the speed (rpm). If the friction surfaces are contaminated with oil, grease or dirt the transferable torque M_4 and the switching torque M_1 may drop.

All technical data is subject to the running-in process of the brake being completed.

SPRING-APPLIED SINGLE-SURFACE BRAKE
DC or single-phase AC

Versions	76 13105C0. - DC
	76 13705C0. - single-phase AC
Standard rated voltages	76 13105C0. 102 V DC 76 13705C0. 230 V AC, 50 Hz
Protection	IP 00
Thermal class	F
Rated torques	25 Ncm

Specification subject to change without notice.
The "General technical information" and the "Operating instructions"
76 13105C0. / 76 13705C0. must be strictly observed.



Photo: 76 13105C00

Technical data

Size	Rated torque	Max. speed	Max. switching power	Max. switching energy (Z=1)	Rated power		Response times		Moment of inertia friction disc (fan)	Weight
					DC	AC	on	off		
	M ₂ [Ncm]	n _{max} [rpm]	P _{max} [kJ/h]	W _{max} [kJ]	P _N [W]	P _S [VA]	t ₁ [ms]	t ₂ [ms]	J [kgcm ²]	m [kg]
05	25	3600	22	16	9	22	26	5	0.044	0.16

¹⁾ If operated with bridge rectifier.

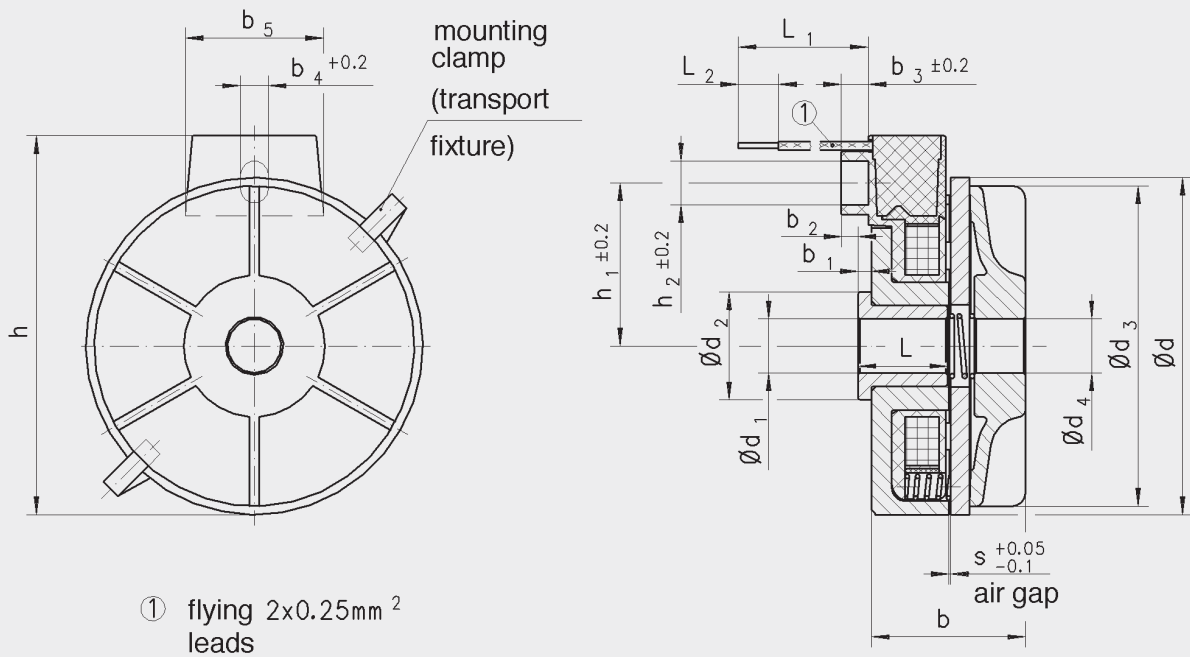
²⁾ If operated with half-wave rectifier with recovery diode.

Ordering data (to be fully specified)

SPRING-APPLIED SINGLE-SURFACE BRAKE

Please specify requested version

1	Type (C00, C05, C06, C07) Type: _____
2	Coil voltage (standard 102V DC, 230V AC) Voltage: _____ V <input type="checkbox"/> DC <input type="checkbox"/> AC
3	Nominal voltage (standard 50 Hz) Frequency: _____ Hz (only with 76 13705C0.)



Type	d	d ₁ (G7)	d ₂	d ₃	d ₄ (S6)	b	b ₁	b ₂	b ₃	b ₄	b ₅	h	h ₁	h ₂	L	L ₁	L ₂	s	s _{max}
76 13.05C00	50	8	16	47.5	8	23	2	2.5	4	4.1	20.5	56.3	24.2	6.5	13.3	200	6	0.25	0.4 ¹⁾ /0.8 ²⁾
76 13.05C05	50	8	16	47.5	8	23	2	6.5	8	4.1	20.5	56.3	24.2	6.5	13.3	200	6	0.25	0.4 ¹⁾ /0.8 ²⁾
76 13.05C06	50	6	16	47.5	6	23	2	6.5	8	4.1	20.5	56.3	24.2	6.5	13.3	200	6	0.25	0.4 ¹⁾ /0.8 ²⁾
76 13.05C07	50	5	14	47.5	5	23	1.4	7.1	8	4.1	20.5	56.3	24.2	6.5	13.3	200	6	0.25	0.4 ¹⁾ /0.8 ²⁾

¹⁾ Max. air gap up to fan replacement if operated with bridge rectifier .

²⁾ Max. air gap up to fan replacement if operated with half-wave rectifier with recovery diode.

SPRING-APPLIED SINGLE-SURFACE BRAKE
DC

Versions	76 13111C00
Standard rated voltages	102 V DC
Protection	IP 54 (if installed under motor fan hood)
Thermal class	F
Rated torques	3 Nm

Specification subject to change without notice.
The "General technical information" and the "Operating instructions" 76 13111C00 must be strictly observed.



Photo: 76 13111C00

Technical data

Size	Rated torque	Max. speed	Max. switching power		Max. switching energy (Z=1)	Rated power	Response times		Moment of inertiafan		Weight
			1)	2)			on	off	1)	2)	
	M ₂	n _{max}	P _{max}	P _{max}	W _{max}	P _N	t ₁	t ₂	J	J	m
	[Nm]	[rpm]	[kJ/h]	[kJ/h]	[kJ]	[W]	[ms]	[ms]	[kgcm ²]	[kgcm ²]	[kg]
11	3	3000	260	350	13	40	20	30	1.5	1.8	0.7

¹⁾ Low version fan without ring groove for pull-off device (type 76 13111C00200).

²⁾ High version fan with ring groove for pull-off device (type 76 13111C01300).

Ordering data (to be fully specified)

SPRING-APPLIED SINGLE-SURFACE BRAKE

Please specify requested version

1

Coil voltage (standard 102V DC)

Voltage: _____ V DC

FAN

1

Construction type

low version (76 13111C00200) high version (76 13111C01300)

2

Bore diameter (standard)

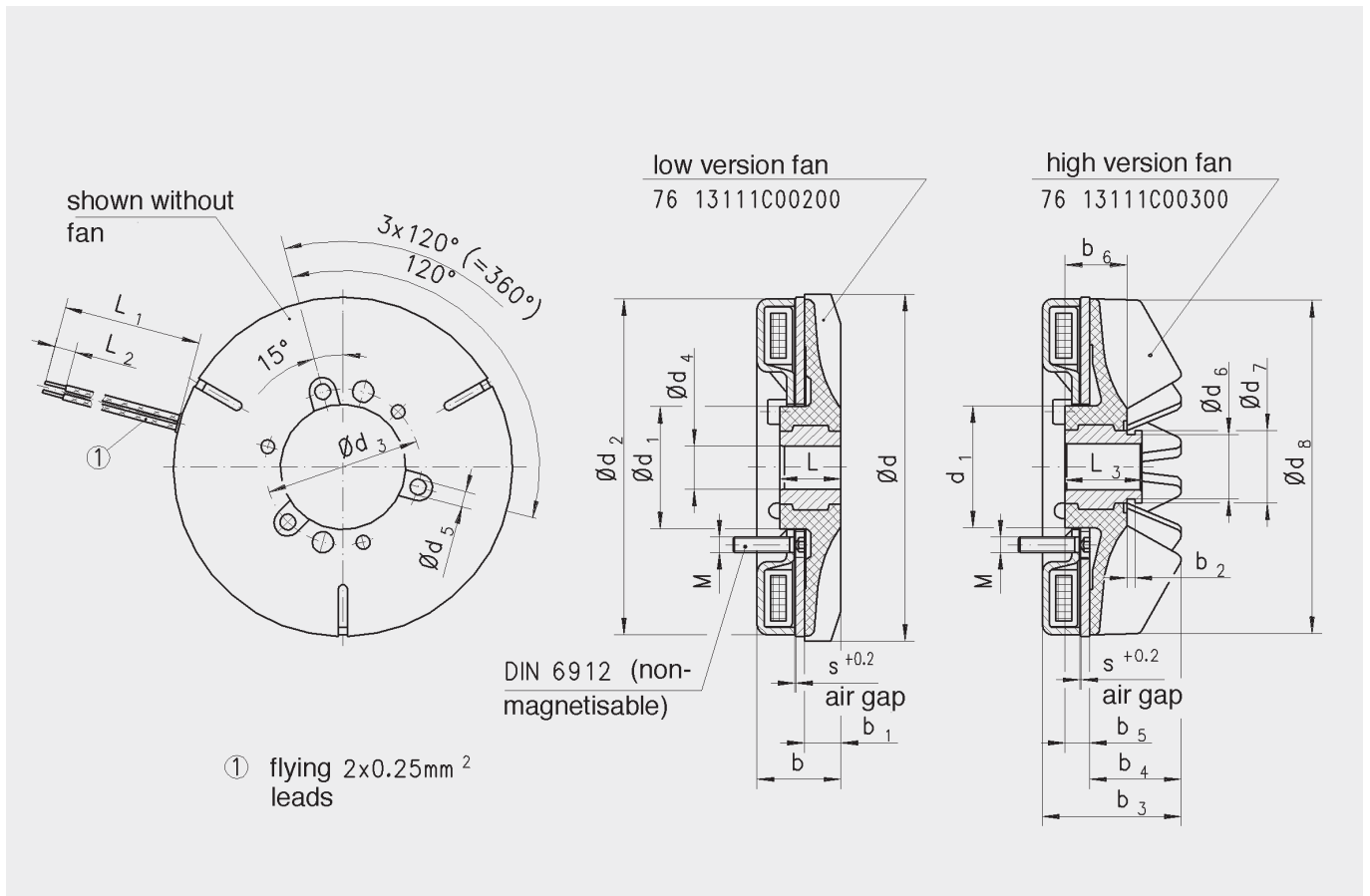
Low version fan: Ø 15, Ø 17, Ø 20 mm (76 13111C00200)

Required tolerance ring width: 14 mm

High version fan: Ø 15, Ø 17, Ø 20 mm (76 13111C01300)

Required tolerance ring width: 19 mm

or pilot bore



Gr.	d	d ₁	d ₂	d ₃	d ₄ (H7)	d ₅	d ₆	d ₇	d ₈	b	b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	L	L ₁	L ₂	L ₃	L ₄	s	s _{max}	M
11	113	40	110	51	15 ¹⁾ /20 ²⁾	5,2	21	24	110	27,5	12	2,5	45,5	30	8	20,2	20	400	7	25	380	0,2	0,6	3xM5

¹⁾ Min bore.

²⁾ Max. bore.

Shaft ISO fitting f7 with necking for tolerance ring.

Accessories

Size	Friction plate	Mounting screws			
		Screw	Rated torque	Material number	Screws per brake
11	76 13111C00005	DIN 6912-M5 x 20-8.8	2,5 Nm	304 490	3



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