









This manual is applicable only to KTH Temporiti brakes. For further information visit the website [www.temporiti.it](http://www.temporiti.it) or contact the technical office.

## 1- Symbols

Symbol	Meaning	Description
	<b>DANGER!</b>	Danger of personal damage caused by a general source of danger It refers to an imminent danger that could give place to serious personal damage or death if the correspondent measures of protection are not respected.
	<b>RISK OF ELECTROCUTION!</b>	Danger of personal damage caused by high electrical voltage It refers to an imminent danger that could give place to serious personal damage or death if the correspondent measures of protection are not respected.
	<b>STOP!</b>	Danger of property damage It refers to an imminent danger the could give place to property damage, if the correspondent measures of protection are not respected.
	<b>NOTE!</b>	Important note to ensure troublefree operation
	<b>TIP!</b>	Useful tip for simple handling

## 2- General Alerts

	<b>THE BRAKE IS DESIGNED TO GUARANTEE, WHILE RESTING AND THROUGH THE BRAKING TORQUE SPRINGS, THE INTRINSEC SAFENESS EQUAL TO ITS Nm PLATE VALUE</b>	The brake function of the brake is to stop rotational movement of a shaft, according to the operating specifics on the site <a href="http://www.temporiti.it">www.temporiti.it</a> . The use of appropriate safety devices is left to the machine manufacturer (partly completed machinery).
	<b>FEEDING VOLTAGE</b>	The brake feeding voltage may vary of a $\pm 6\%$ in observance to the nominal tension signed on the label. The electromagnet requires a tension near the nominal value: an insufficient tension may cause a general bad working of the brake.
	<b>ROOM TEMPERATURE</b>	The room temperature for the brake correct working is between 5°C and 40°C. Call technical office for different or further requirements.

### 3- Toolbox

To follow without troubles the following manual, you need the following tools:



Wrench set



Allen key set



Thickness gauge set



#### USE STANDARD KEYS

Use standard keys only, without the help of extensions to have a correct bolts and nuts tightening.

### 4- Static Torque Values

	K02TH	K03TH	K04TH	K05TH	K06TH	K07TH	K08TH	K09TH
Nominal Static Torque per single brake [Nm]	8	12	16	35	55	90	150	250



#### BRAKE RUNNING-IN

The braking static torque value of the brake without the running-in period may have up to -20% of the plate value and up to -35% with the special antisticking friction material. Always run-in the brake before use



The values in the chart are approximate. Real torque values must be always verified by measurement

### 5- Installation and Regulation



#### KEEP METICULOUSLY THE DIRECTIONS ON THE PRESENT MANUAL

Adjusting operations carried out without following the operations of this manual, lead to a bad brake working.



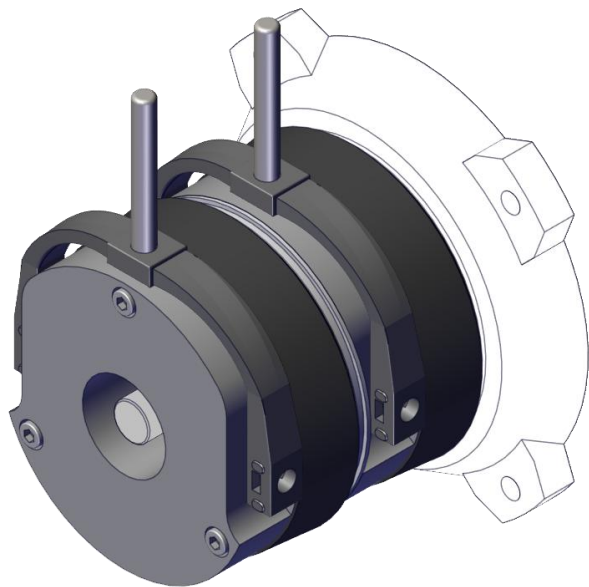
#### DISCONNECT THE BRAKE FROM POWER SUPPLY

Carry out the inspection, servicing and adjusting operations only after the brake electrically disconnection.

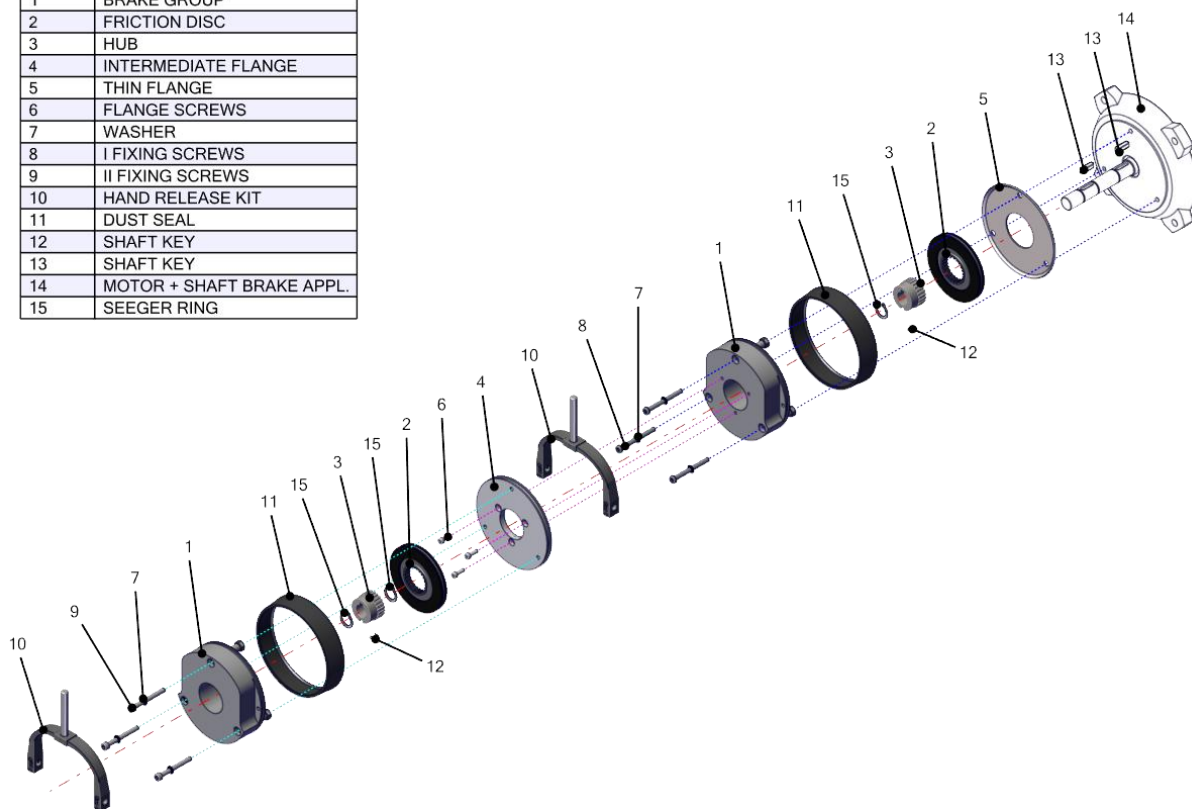


#### SURFACES CLEANING

Good plane and braking surfaces cleaning, by using de-greasers that do not leave oily wasters, is necessary for good brake performance

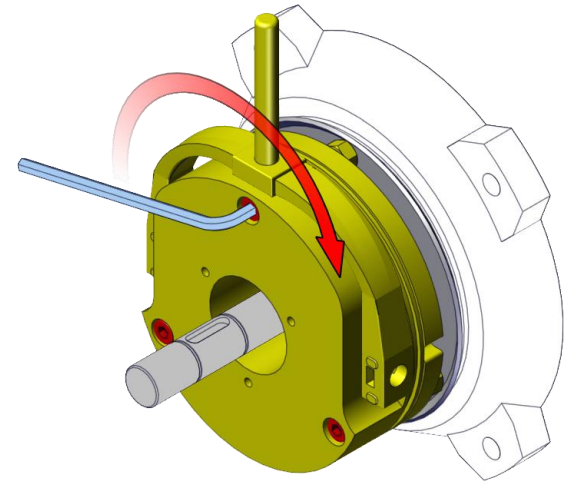
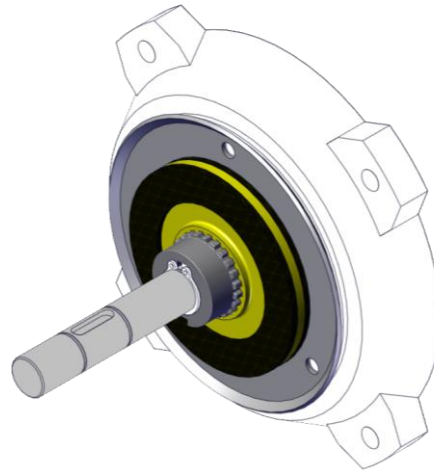
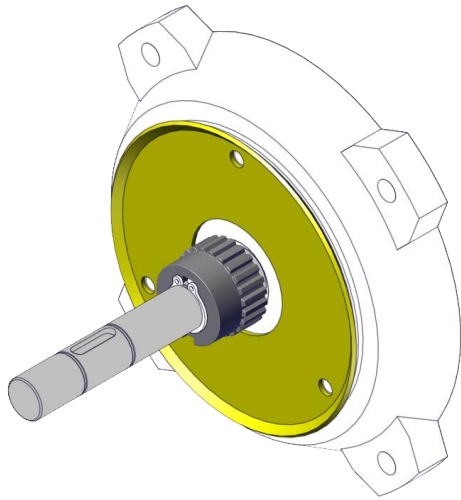
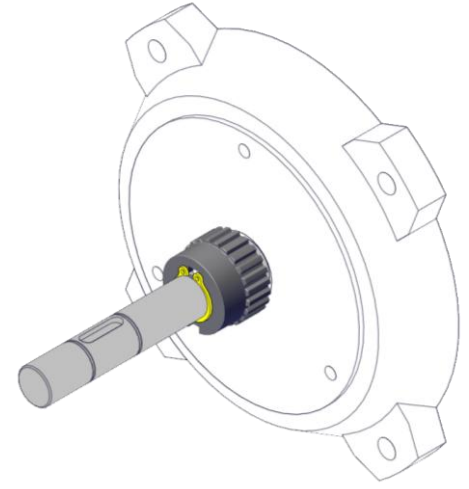
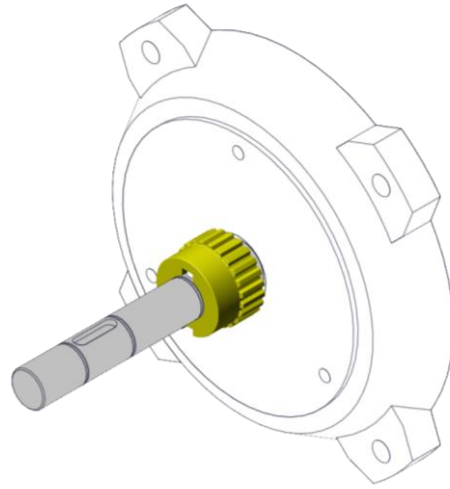
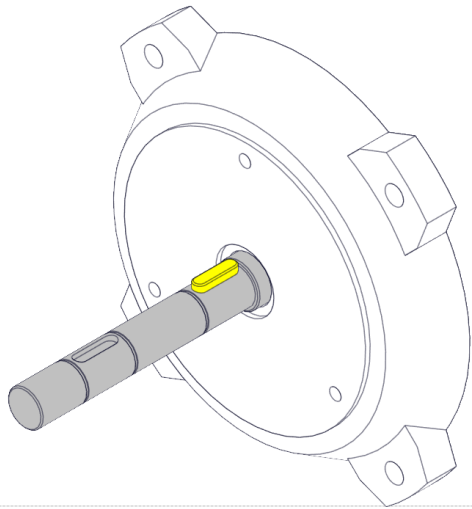


ID BOM	Description
1	BRAKE GROUP
2	FRICTION DISC
3	HUB
4	INTERMEDIATE FLANGE
5	THIN FLANGE
6	FLANGE SCREWS
7	WASHER
8	I FIXING SCREWS
9	II FIXING SCREWS
10	HAND RELEASE KIT
11	DUST SEAL
12	SHAFT KEY
13	SHAFT KEY
14	MOTOR + SHAFT BRAKE APPL.
15	SEEGER RING



**MOTOR PART NOT SUPPLIED BY  
TEMPORITI SRL**

Temporiti srl does not supply motor parts as n-shield, shaft, fan cover, shaft key, hub seeger and sealing ring



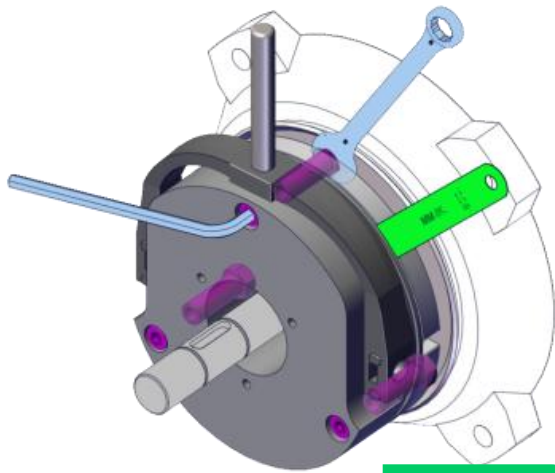
Remove

Install

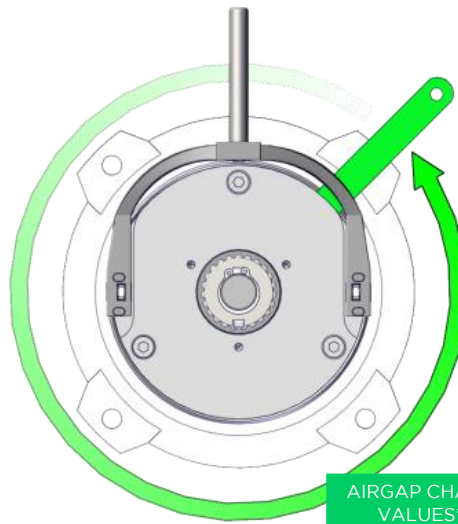
Adjust

Measure

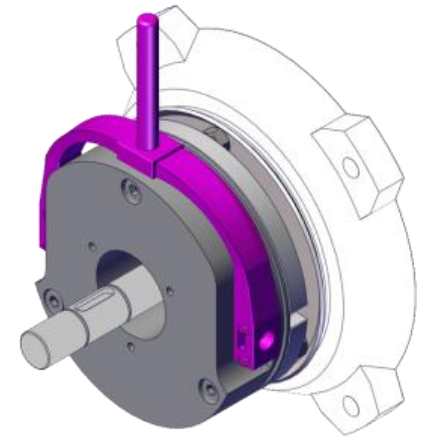
Torque



AIRGAP CHART VALUES\*



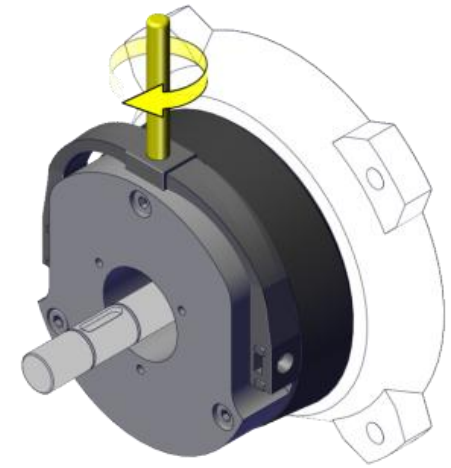
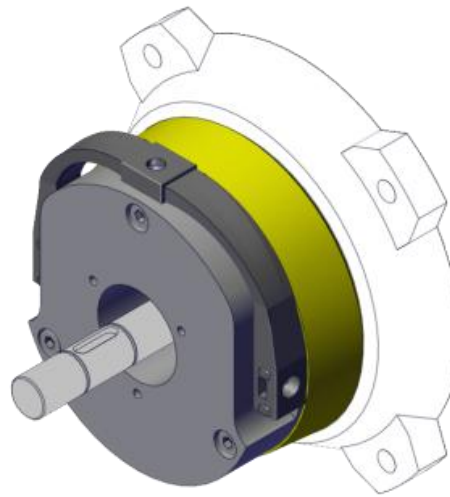
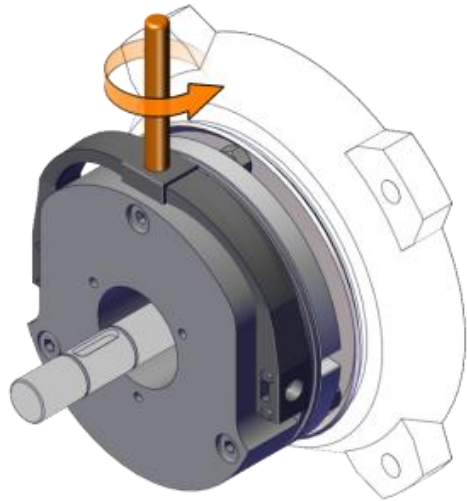
AIRGAP CHART VALUES\*

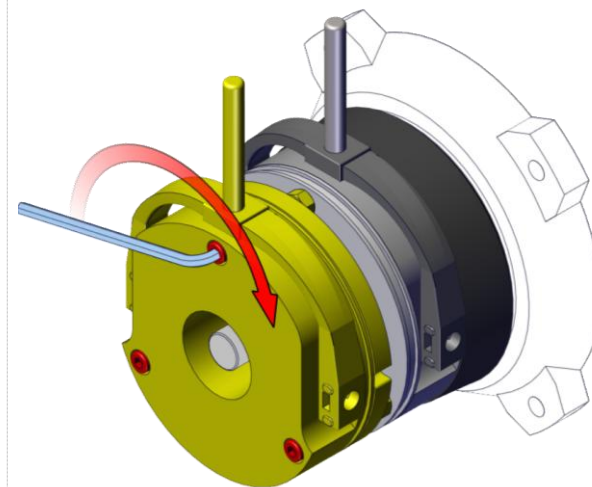
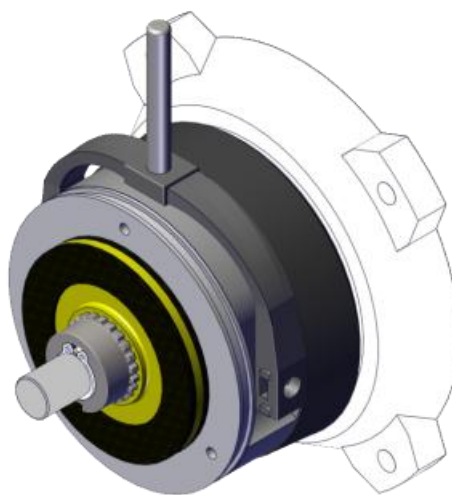
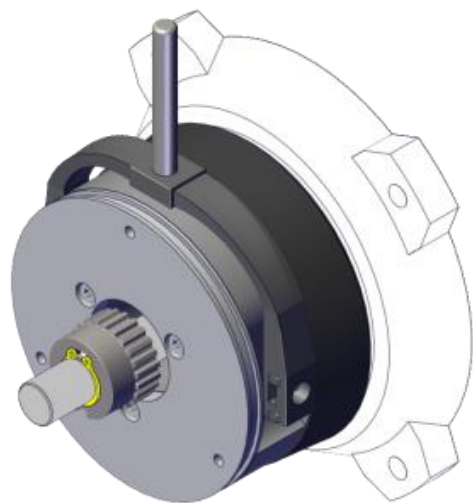
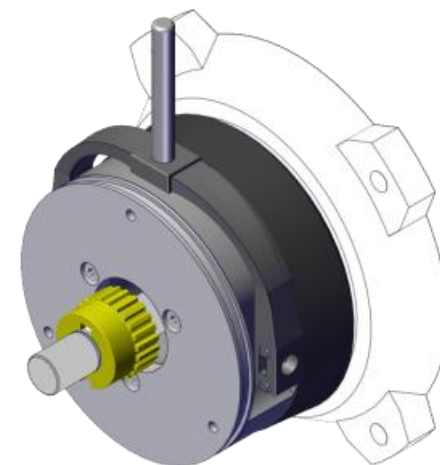
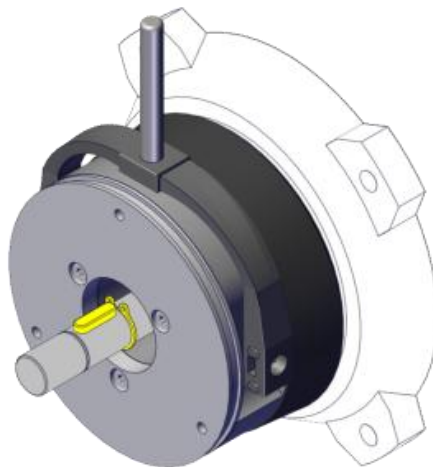
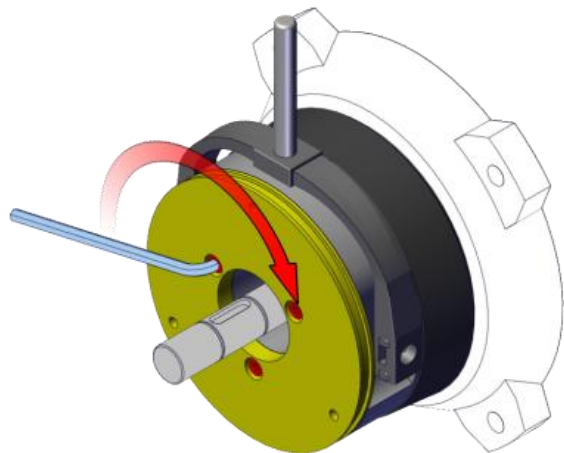


Adjust hand release system following the point 6, page 9

To choose the right thickness gauges dimensions, following the chart at point 5.2, page 7 and use **starting airgap value** as thickness gauge dimension for this step

To choose the right thickness gauges dimensions, following the chart at point 5.2, page 7 and use **control airgap value** as thickness gauge dimension for this step





Remove



Install



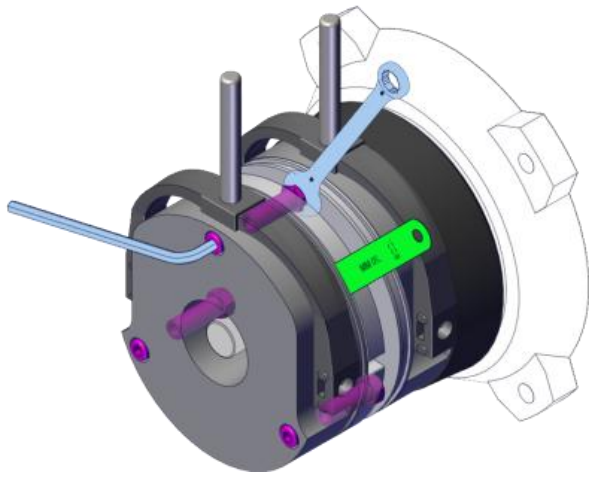
Adjust



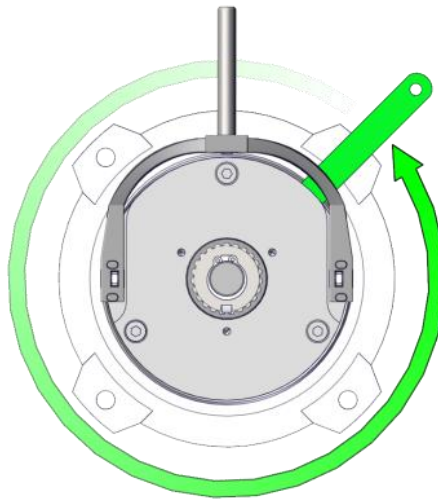
Measure



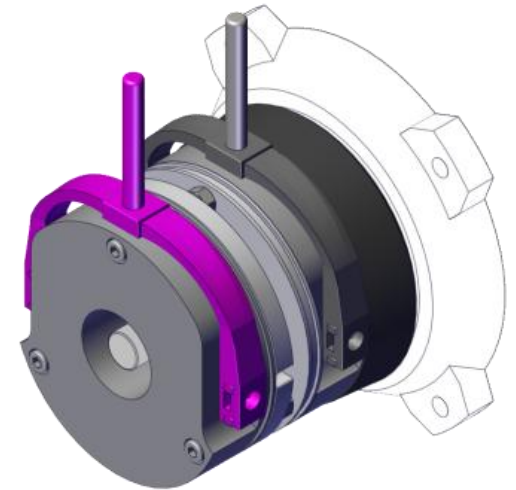
Torque



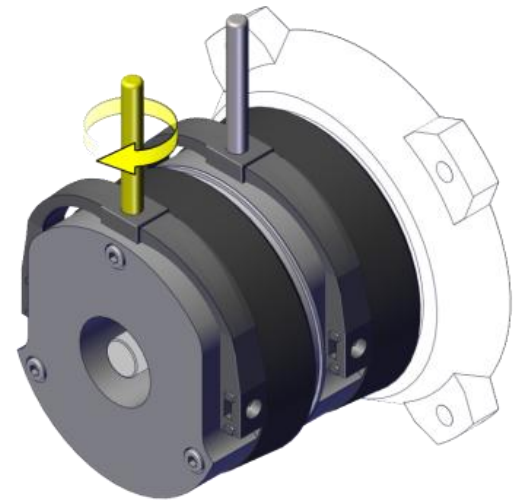
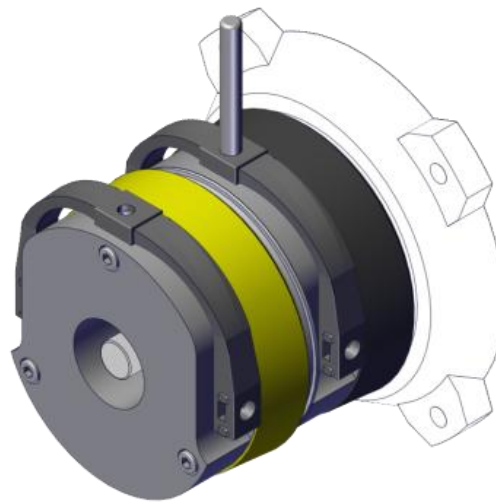
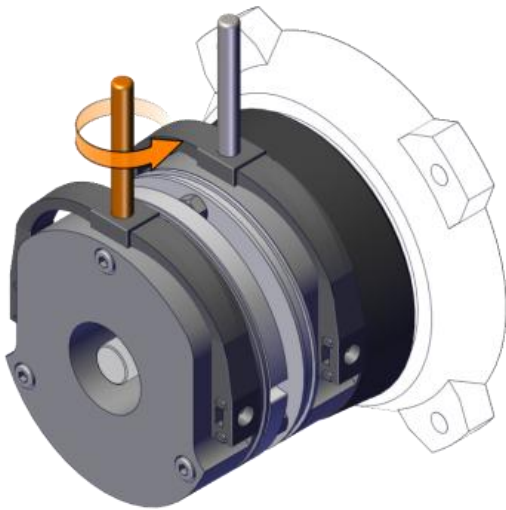
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To choose the right thickness gauges dimensions, following the chart at point 5.2, page 7 and use **control airgap value** as thickness gauge dimension for this step



Adjust hand release system following the point 6, page 9



Remove



Install



Adjust



Measure





Torque

## 5.2- Airgap values

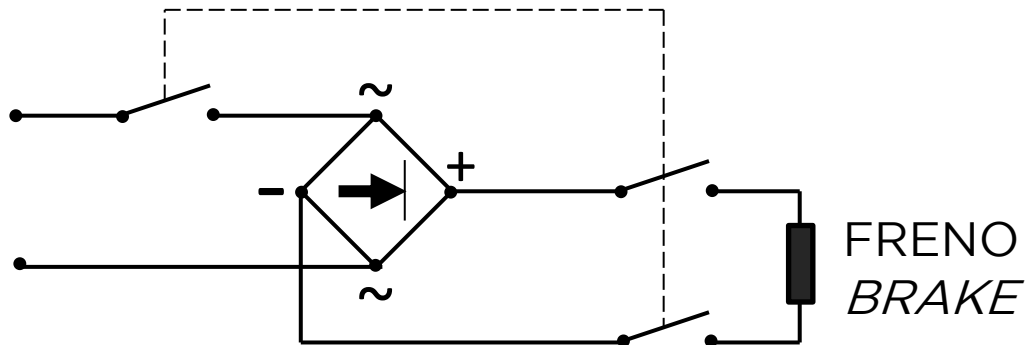
AIRGAP CHART

K02TH		K03TH		K04TH		K05TH		K06TH		K07TH		K08TH		K09TH	
CONTROL		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL	
STARTING	MAX	STARTING	MAX	STARTING	MAX	STARTING	MAX	STARTING	MAX	STARTING	MAX	STARTING	MAX	STARTING	MAX
0.20	0.50	0.20	0.50	0.20	0.70	0.20	0.70	0.20	0.70	0.20	0.70	0.20	0.70	0.20	0.70

	<b>MAX AIRGAP VALUE</b>	Max airgap value is the airgap value for which, once reached, it is compulsory restore to starting airgap value
	<b>THICKNESS GAUGE POSITIONING</b>	For a correct airgap measuring, the thickness gauge has to be positioned in correspondence of the magnet surface and not on the external border of the magnet container or resin

## 5.3- Electrical connection

Connect the brake to motor following the following schema:

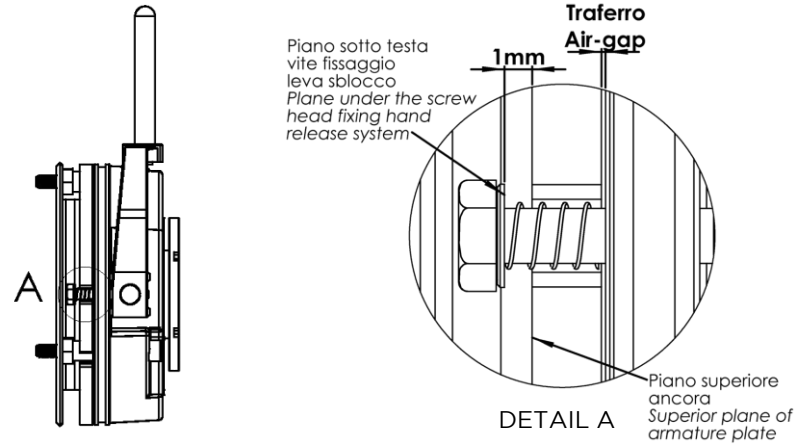




# 6- Hand release system adjusting

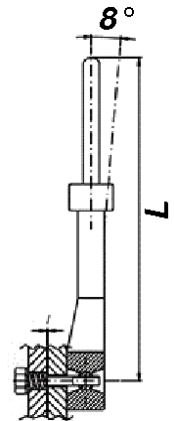
Manual release allows manual and temporary release of the brake. After the manoeuvre, the device returns to its original position.

By acting on the hexagonal screw with a standard hexagonal wrench, screw/unscrew the same screw, so that the distance between the surface under the head of the blocking screw, including the washer, and the top surface of the armature plate is of about 1mm.



The free stroke of the lever expressed in millimeters (mm) corresponds to a shift of about 8° of the same lever: the unhooking phase and consequent release of the brake must take place after this excursion

	K02TH	K03TH	K04TH	K05TH	K06TH	K07TH	K08TH	K09TH
Free stroke without strain [mm]	6	6	6	6	8	8	9	9
Maximum strain on the lever [kg]	3,5	4,5	11	11	12	17	19,5	24



**BLOCKING SCREWS OF THE RELEASE LEVER SUPPLIED WITH NON ACTIVE THREADLOCKER**

The fixing screws of the release lever are only partially screwed by Temporiti srl and have a part of threadlocker, which activates, on the remaining thread, carrying out the mentioned function, only after the adjusting of the distance of , by the installer: verify the presence of threadlocker at each further adjusting and replace if necessary (Loctite medium strength 243 o equivalent threadlocker suggested).


## 7-Servicing

A frequent brake inspection is necessary for all parts as the wear depends on a series of factors and mainly on the load inertia, the shaft speed and the operation frequency. Verify the main parts of the brake group and, in case, replace them with original spare parts supplied by Temporiti SRL. Servicing may be roughly determined according to what is pointed out on the site.

### 7.1- Braking torque regulation

The disc must be replaced after a consumption of 1,5mm per friction material ring, that is when the minimum total thickness value is reached.

Disc replacement thickness limit - B [mm]								
BRAKE SIZE	K02TH	K03TH	K04TH	K05TH	K06TH	K07TH	K08TH	K09TH
THICKNESS LIMIT [mm]	8	8	8	8.8	8.8	10	10.6	10.8

A diagram of a brake disc with a vertical double-headed arrow on the right side labeled 'B', indicating the thickness of the friction material ring.

## 8-Disposal and recycle information



Recycle in eco-friendly way the packaging, metals and all the parts of no longer working brakes.

DO NOT THROW USED ELECTROBRAKES, OR PARTS THEREOF IN THE HOUSEHOLD RUBBISH!

Dispose separately from household rubbish the friction material (asbestos-free) after removing it from the metal part of the disk with a proper tool. Remove the resin from the electromagnet with a proper tools and dispose of it in accordance with current law regulations. According the European Directive 2002/96/CE on waste electrical and electronic equipments (RAEE) and its implementation of national law, the electrical equipments no longer usable must be collected separately and must be sent to a recycling step