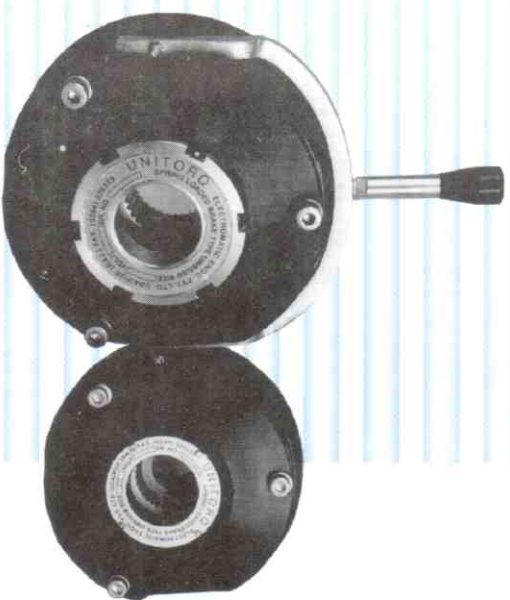




UNI/RQ

TM



INSTALLATION / OPERATION MANUAL ELECTROMAGNETIC NORMALLY ON SPRING LOADED FAIL SAFE BRAKE TYPE-USB/UMB



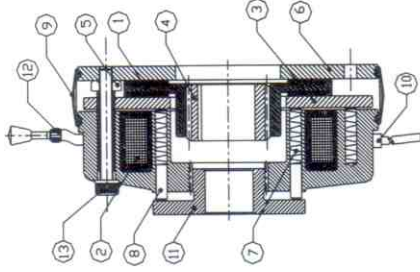
Electromatic Engineers Pvt. Ltd., Udairpur

OM - USB 1003 Rev. 2.0

DESCRIPTION:- This type of Brake consists of stator, armature and rotor. When electric current is given to stator (coil), the armature plate is attracted to the stator against the spring force thus releasing the rotor. When current is cut off strong compression springs push the armature plate back to its position thus clamping the rotor and providing necessary braking torque.



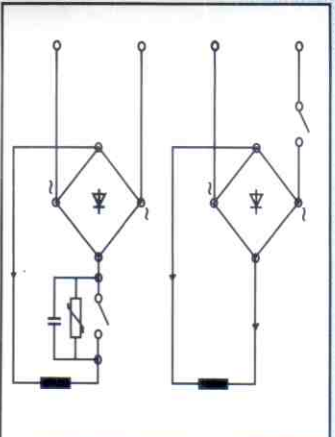
INSTALLATION:- Mounting flange (6) has to be mounted on motor/machine body which should at right angle to the motor/machine shaft as well as centered internally and externally may be with the help of spigot. The hub (4) has to be fitted on the shaft with the help of key and axial retainer (circlip) and rotor (1) on that. Stator (2) with armature (3) has to be fitted on mounting flange (6) with the help of provided allen bolts through adjustable hollow bushes (5). The air gap should be adjusted by adjustable hollow bushes. To reduce air gap rotate all bushes equally anti-clockwise and to increase rotate all bushes equally clockwise. Air gap should be within limits as per following table. Initially it should be nominal.



COMPONENTS

- 1.Rotor
- 2.Stator
- 3.Armature
- 4.Hub
- 5.Adjustable Hollow Bush
- 6.Mounting Flange
- 7.Compression Springs
- 8.Compression Parts
- 9.Protective Seal
- 10.Wire
- 11.Adjustable Torque Ring
- 12.Manual Release Assembly
- 13.Mounting Bolts

Brake size	05	10	20	35	65	85	155	250	390	800	1600
Nominal Air gap mm	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.7
Maximum Air gap mm	0.5	0.6	0.6	0.7	1.1	1.4	1.4	1.6	2.0	2.5	2.5

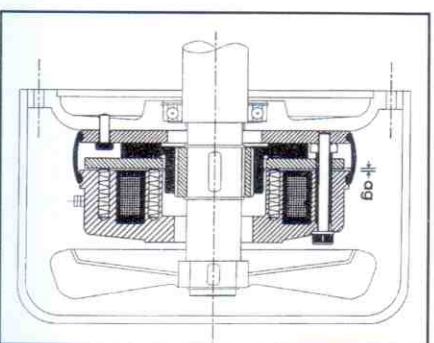


ELECTRICAL CONNECTION : The brake must only be operated with DC current. The rated voltage is shown on the rating plate. This should not be more or less by 10%. DC voltage can be provided by transformer rectifier / rectifiers. Switching of brake can be done on AC as well as on DC side. It is recommended that the switching of the brake is carried out on the DC side of the rectifier unit to ensure fast application and release times. Suppressor and Capacitor should be used across the switch while doing DC switching. Our special fast acting units can be used for further faster switching.

MAINTENANCE:- Unitory fail safe brakes are almost maintenance free. For optimum performance it is desirable to check and adjust air gap periodically. This periodicity depends on application to application, operating frequency, system inertia to be stopped etc. Air gap can be adjusted by rotating adjustable hollow bushes to reduce air gap. Rotate all bushes anti-clockwise and check from all sides by filler gauge and vice-versa. Air gap should be within limits of as per shown in the table.

SAFETY PRECAUTIONS :

- Remove any load held by brake before servicing or repair.
- Disconnect power to the brake from its source before servicing or repairing.
- Do not disturb manual hand release assembly while brake is in operation in case of brake is supplied with manual release assembly .



USB SERIES BRAKE FITTED UNDER THE MOTOR FAN COVER

OUR OTHER PRODUCTS :

IMPORTANT

DO: For better life and best performance it is requested to check air gap regularly.

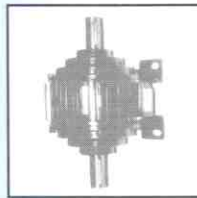
Also check supply voltage. It should be $\pm 10\%$ of rated voltage.

DO NOT - pour oil, grease, water and lubricant

- allow dust and metal chips into brake unit.

- give improper voltages.

- adjust torque ring for gap adjustment.



CLUTCH BRAKE COMBINATIONS



BRAKE MOTORS



NORMALLY OFF BRAKES



NORMALLY OFF CLUTCHES

For any further information or help please contact :

Electromatic Engineers Pvt. Ltd.

8-B, Saheli Marg, Udaipur 313 001 - Rajasthan (India)

Tel. : +91 294 2526933, 2560675 Fax : +91 294 25266525

E-mail : sales@clutchesbrakes.com

Website: www.clutchesbrakes.com



Regional Offices / Dealers

Delhi Electromatic 011-25710274 98102 55901	Kolkata Electromatic 033-26746308 9433046308	Coimbatore Veas Systems 0422-2448432 98422 44843	Bangalore Sumukha Engineers 080-23490695 98440 70752	Chennai Metro Engg. Enterprises 044-25736671 09381005072	Solapur Kanwa Marketing 0217-2620546 9370420540	Kolhapur Madhur Marketing 0230-3090460 93260-22581
Hyderabad Kary Engineering 040-27533112 98480 44729	Indore Shivam Engg. 0731-5043317 09302108876	Pune Accurate Engg. Ind. 020-24356994 98224 31294	Bhilai Esskar Engg. Corp. 0788-2226202 98261 82401	Ludhiana Aaditya Engineers 0161-2681888 9317857377	Jaipur Shree Traders 0141-2785228 9314038731	