

AC ELECTROMAGNETIC BRAKES-EMS SERIES



INTRODUCTION

A.C drum brakes are suitable for single phase A.C supply up to 440V and are available for drum diameters of 100mm to 375mm and braking torque up to 69kg-m.

CONSTRUCTIONAL & WORKING

The shoes and the base of the brakes are of graded cast iron. Other components are fabricated steel. The lever is hinged on the main arm, which is connected to the side arm through a tie rod and is stressed by a pre-loaded compression spring. The compression of the spring can be adjusted to set the braking torque to the desired value. The brake liner of selected quality material and are riveted to the shoes by aluminium rivets.

A.C. selenoids with laminated magnetic sheet metal house a copper magnetizing coil that is impregnated with Class F materials. The plunger which is connected to the lever, is drawn into the coil, when it is energised with A.C source. This loads the spring and releases the brakes shoes from the brake drum. When the supply is cut off, the plunger is pulled out of the coil, and the spring force clamps the brake shoes on the brake drum and the brake are applied.

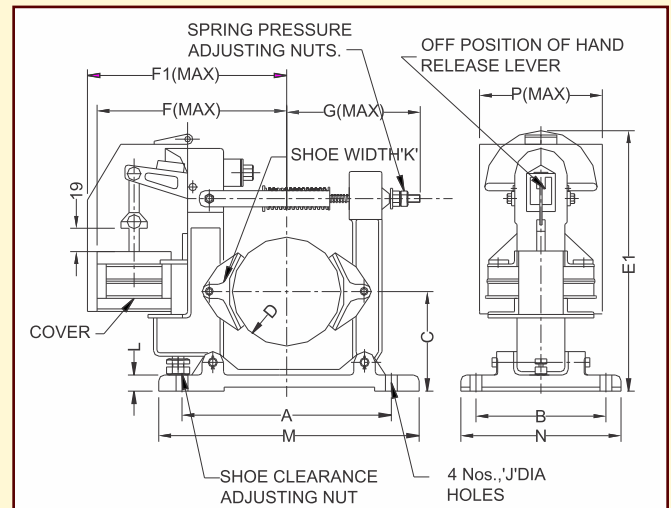
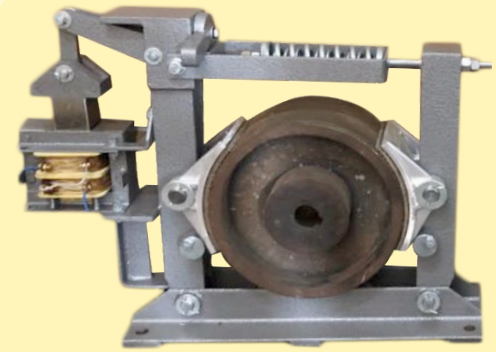
FEATURES

1. The brake is fail-to-safety. The brake is applied in absence of A.C. current and is released when the supply is restored.
2. High-quality brake lining material ensures consistent braking torque and reliable operation.
3. Clean environmental working, less noise.
4. Braking torque can be adjusted easily and quickly.
5. Ease of maintenance.

DIMENSION DETAILS

BRAKE TYPE	DRUM DIA.		BRAKING TORQUE		A	B	C	E	E1	F	F1	G	J	K	L	M	N	P	WT (KG) (APPROX)
	INCH	MM	50%	100%															
EMS- 4" EMS 100	4	100	2.20	1.87	232	70	130	275	295	230	255	140	10	57	14	267	98	155	13
EMS- 6" EMS 150	6	150	7.60	6.5	310	76	143	305	325	260	285	175	10	70	18	340	114	155	18.5
EMS- 8" EMS 200	8	200	17.75	15	400	92	175	380	390	340	265	235	14	89	20	441	126	175	30.5
EMS- 10" EMS 250	10	250	22.7	19.3	470	114	225	460	480	380	405	275	14	108	23	508	150	175	43.5
EMS- 12" EMS 300	12	300	45.7	38.8	530	152	254	530	552	445	470	320	18	127	22	616	210	190	78
EMS- 15" EMS 380	15	380	69	58.6	610	190	315	645	667	495	520	355	22	152	28	680	240	190	97

* The above dimensions of braking torque is in Kg-m



NOTES

1. Brake type EMS 4 denotes A.C. single phase 4" drum diameter (inch series)
2. Brake type EMS 100 denotes A.C. single phase 100mm diameter (metric series)
3. Brake are made to inch or metric drum
4. Coils are rated for operation single phase, 440/440V, 50 cycles.
5. Coils can be supplied with class B insulation.
6. Coils for higher ambient temperature up to 60°C can be offered on request.
7. Tolerance on indicated dimensions is +2mm.
8. Higher braking torque can be adjusted for reduced CDF duty.