







## ELECTRO HYDRAULIC THRUSTOR OPERATED BRAKE TYPE: TOB

'DUPLEX' Electro Hydraulic Thrustor Brake is a heavy duty brake designed to withstand the severe duty conditions imposed by heavy duty machinery in various industries. The Electro Hydraulic Thrustor transmits useful thrust through the levers onto the brake shoe thereby releasing the brake. When the power is switched off, the brake is smoothly applied because the hydraulic thrust acting against the spring pressure is gradually reduced.

**Electro Hydraulic Thrustor**: The Electro Hydraulic Thrustor consists of a cylinder filled with oil and having a centrifugal pump at the bottom of the cylinder. The centrifugal pump is driven by a 3 phase fractional horse power Class 'B' insulated, continuously rated motor. The specially designed radial impeller permits operation of the pump in either direction of rotation. The motor is mounted on the top of the oil cylinder. The motor is suitable for 720 switching operations per hour.

#### GENERAL FEATURES OF DUPLEX BRAKES:

The brake shoes are self aligning type and are fitted with best quality brake lining large cooling surface. The lining is designed for high temperature resistance thereby shoes from getting heated-up.

Compression Springs: The compression springs are made of best quality spring steel and are properly heat-treated to give correct hardness. The compression springs provide the necessary working pressure to apply the brake when the power is switched off. The solenoid Thrustor exerts a force against the spring pressure and releases the brake when the power is supplied to the magnet.

Design, Dimensions and Specifications are subject to alteration without prior intimation.

# SINGLE PHASE ELECTRO MAGNETIC BRAKE Type: EM

'DUPLEX' Electro Magnetic Single Phase A.C. Brake is ruggedly constructed to withstand the effect of mechanical shocks and vibrations. The brake is manufactured to comply with B. S. Specification.

Electro Magnet: The A.C. Electro Magnet is built of high grade, low magnetic steel laminations each insulated from the adjacent one. The entire lbt is tightly riveted and machined accurately to eliminate the air gap when the magnet circuit is closed. The plunger is fitted with brass ring to avoid chattering. The coils are wound on bakelite bobbin and are thoroughly insulated.

A hand release lever is provided for manual release of the brake.

### D. C. ELECTRO MAGNETIC BRAKE Type: D.C.E.M.

D. C. Electro Magnetic Shunt Brake is designed to withstand a large number of switching operations per hour. The minimum number of pivots ensures minimum wear and tear of moving parts.

The Brakes are manufactured for different voltages and are supplied if necessary with Transformer Rectifier Panels.

**Electro Magnet**: The Electro Magnet is secured directly on to the brake lever. The magnet core is made of specially selected steel having very high permeability. The coil is varnished with 'B' class insulating material and made imprevious to moisture.

### SELECTION CHART FOR AC, DC AND THRUSTOR BRAKES

Drum dia in mm	Width of shoe face in mm	BRAKING TORQUE IN KGM			Approximate
		AC/DC I 50%	BRAKE 100%	Thrustor Brake	HP at 1000 r.p.m.
100	57	2.20	1.87	2.20	2.5
150	70	7.60	6.50	5.70	7.5
200	89	17.75	15.00	19.50	15
250	108	22.70	19.30	34.50	25
300	127	45.70	38.80	42.50	50
375	152	69.00	58.60	30.00	80

**BRAKE RATINGS**: 50%—Coil in circuit not more than 5 minutes in 15 minutes (720 operations per hour) 100%—Coil in circuit continuously. (240 operations per hour.)

OFFICE: 224. ACHARYA COMM CENTRE. CHEMBUR. BOMBAY: 400 074 PHONE; 551 38 56, 555 56 10 WORKS: C-420, T.T.C. INDUSTRIAL AREA M.I.DC TURBHE, NEW BOMBAY: 400 703.