

### INTRODUCTION

The solid brake arms and base plate minimize deflection, reducing release stroke losses. Optimized lever geometry ensures a maximum ratio for large braking forces. The brake shoes are made of cast iron with steel bushes and asbestos-free linings, either reverted or bonded. Additionally, brake shoe clamping springs are included, and all critical pivot points are equipped with bushes.

#### Application:

A flexible brake for a wide range of industrial applications, including steel processing, material handling cranes, and conveyor systems.

### Brake Selection Procedure

#### Brake Torque Calculation:

For most applications the brake torque must be equal to or greater than motor full load torque as referred to the drum / wheel shaft.

$$\text{Thus, torque in Kg m} = \frac{974 \times \text{KW}}{\text{rpm}}$$

Where

KW = Motor Output  
rpm = Revolution per minute

When torque requirements known and the type and the duty cycle established, the brake is selected accordingly from the selection table. For certain special application e.g. crane hoist and their overhauling loads, the brake should be capable of providing atleast 150% of motor torque.

### TECHNICAL DATA:

|                        |                                  |
|------------------------|----------------------------------|
| Model                  | : EL 400-34                      |
| Thruster               | : EL-34                          |
| Drum Dia               | : 400 mm                         |
| Braking Torque         | : 93 Kg-m                        |
| Thrust                 | : 34 Kg                          |
| Stroke                 | : 51 mm                          |
| Recommended Oil        | : Transformer Oil - Grade BS:148 |
| Oil Capacity           | : 2.4 Ltrs.                      |
| Operating Voltage      | : 415V±10%, 3Phase AC, 50Hz      |
| Power Consumption      | : 0.5 Amps                       |
| Input Watts            | : 200 Watts                      |
| Insulation of Thruster | : F Class                        |
| Insulation Voltage     | : 600V                           |
| Protection             | : IP 54                          |
| Shoe Liner             | : Asbestos Free                  |
| Shoe Width             | : 180 mm                         |

#### Optional:

- Manual release mechanism with lever
- Limit Switch

