

Hi-Tork Types ST and ST/E

3-Phase AC Hy-Thrust Brakes

types "ST" and "ST/E", 3 Phase AC brakes are spring applied and electrically-released by a completely sealed, continuously rated Meldro® Hy-Thrust electro-hydraulic actuator. These proven, high performance actuators are tough, reliable units, which will provide years of trouble-free service under normal operating conditions.

This versatile brake, with its standard and optional features, can be applied to a wide variety of mechanical handling applications and environmental conditions, where smooth, responsive stopping and holding are desirable. Since the growth in popularity of AC controlled cranes this type of brake has rapidly become the standard in many parts of the world for all crane motions. The cushioned braking torque produces significantly less mechanical oscillation than the AC or DC solenoid and clapper-operated brakes.

When fitted with the built-in "C" spring (torque spring) and switched by the capacitor/contactor control circuit, this arrangement produces fast response times making it suitable for applications such as crane hoists, rubber mills, paper machines and other overhauling load applications.

When fitted with the optional time delays and adjustable external torque spring, the naturally smooth operation of the brake is improved making it ideal for many high inertia applications such as crane bridges, trolleys, conveyors, ship-loaders etc., where the energy in the system can be dissipated during the controlled stopping cycle.

STANDARD FEATURES

- Fast response
- High switching frequency
- Long service life with minimum maintenance
- Bi-directional motor/pump
- CSA approved
- Supplies 110V through 660V – 3 Ph – 50 or 60Hz
- Standard stock voltages 230, 460V, 575V – 3 Ph – 60Hz
- Working fluid operates over a wide temperature range -13°F (-25°C) through +122°F (+50°C) ambient
- Convenient adjustments for torque, lining wear and shoe clearance
- Built-in compression spring (C spring) Type ST
- Hand release lever (Self reset)

OPTIONAL FEATURES

- Stepless, externally adjustable time delays for setting (S) and/or releasing (H) which can be independently adjusted
- Special working fluids available for operation -22°F (-30°C) through +140°F (+60°C)
- Internal heaters available for below -40°F (-40°C)
- External torque springs type ST/E
- Units available in explosionproof, flameproof and tropicalized versions
- Braketronic stepless remote braking available, consult factory
- Hydraulic Over-ride/Parking/Emergency Stopping – These features are available when the pedal operated hydraulic over-ride kit is added to the standard brake. Details are given on page 11.



TYPE 13" ST - Ed 30/5C BRAKE

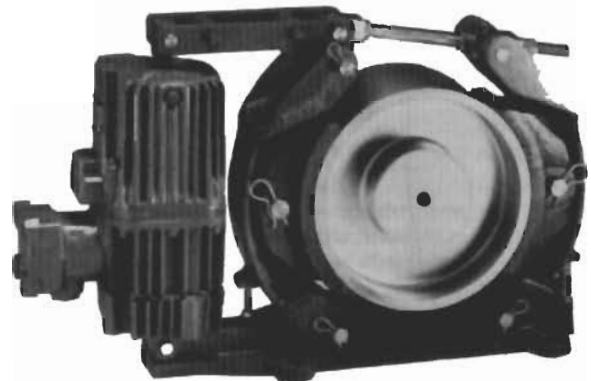
FAST SETTING

The setting time of the actuator (brake) can be reduced to 85% of the normal figures shown on page 19 by connecting motor capacitors across the supply and switching the actuator through a contactor. Details of this arrangement are given on page 20.

BRAKING TORQUES

Internal Compression Spring (C spring) Type ST – When this spring is used as a braking spring, the torque can be easily adjusted down to 60% of the maximum torque by means of an adjustable lever ratio. Normally, four fixed ratios allow the torque to be reduced in three fixed steps down to approximately 60% of maximum torque.

External Torque-Springs Type ST/E – With this arrangement, the torque setting is continuously adjustable down to 40% of maximum torque. The actual setting can be easily read from the calibrated torque indicator (CTI) which is part of the torque spring tube.



TYPE 15" STX - EdE 30/5C AC HY-THRUST EXPLOSIONPROOF (CSA APPROVED) ACTUATOR AS FITTED TO OIL RIG CRANE.