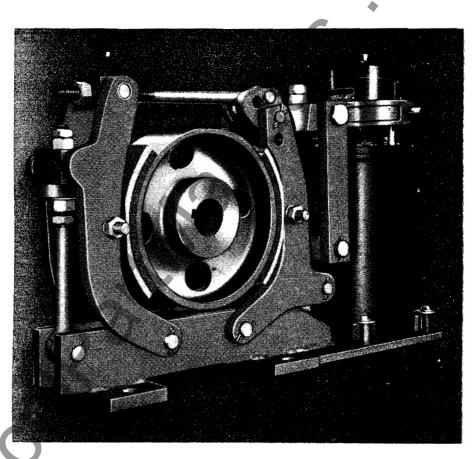
# Westinghouse



# Ac Spring Set Shoe-Type Brakes Hydraulic Operated

Type HI, Floor or Motor Mounting 125 to 10,000 Lbs Ft Torque



# **Application**

Type HI ac magnetic brakes are spring set, electrically released shoe brakes designed to quickly stop and hold a load, but are not designed for lowering loads. All brakes are floor mounted, but by the addition of an adapter may be mounted directly on the front end of motors that are provided with suitable brake mounting pads.

For outdoor service a weather-proof ventilated housing for the entire brake is recommended. For extreme conditions a watertight enclosure can be furnished.

#### **Advantages**

Accessible Adjustments: Only three independent adjustments are required – adjusting nuts readily accessible.

Low Inertia: Small wheel sizes permit quicker starting and stopping – require less power – reduce wear on wheel and linings.

Non-Chattering: Brake shoes designed to prevent chattering and dragging – assure quiet, economical operation. Machined wheels prevent vibration.

Strong and Durable: Rolled steel base and arms provide maximum strength with light weight. Bronze pins at all bearing points assure long life.

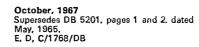
### **Further Information**

Prices: Price List 5220.

Dimensions: Dimension Sheet 5240.

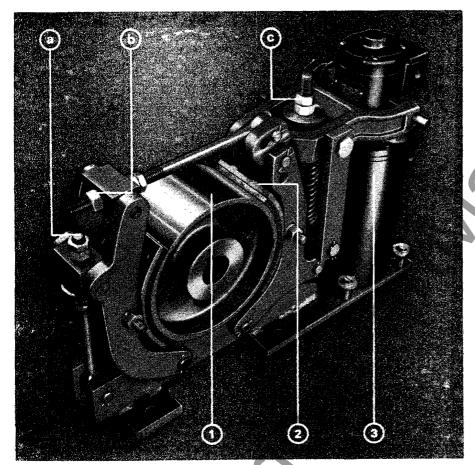
Ratings and Specifications: Price List

5220.



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## Construction



### Wheels

Brake wheels are high strength cast iron, designed for long wear and high resistance to scoring. All wheels are machined all over.



All shoes are self-aligning with just enough friction in the pivot bolts to prevent the tips from dragging when the brake is released, but still permit the shoes to align themselves to the wheel when the brake sets.

# Hydraulic Operator

Spring set and quick release by 3-phase operator (no single phase operator is available). The operator consists of a hydraulic cylinder and piston, the pressure for which is supplied by a small vertical motor and centrifugal impeller. The motor, a 3-phase squirtel-cage totally enclosed induction machine, operates continuously to hold the

brake released. Provision is made for connection of flexible conduit. The oil for the hydraulic cylinder is a special grade, little affected by extreme changes in temperature. Adjustable time delay is supplied on standard brakes (except as noted in Price List 5220) for delaying setting or releasing of brake up to 5 seconds. The operation, both in releasing and setting the brake, is cushioned so that the stress of sudden starts and stops is not transmitted to the driven machine.

## Three Independent Adjustments

Only three adjustments are required, each independent of the other. They are all readily accessible from the top of the brake.

Adjustments for equalizing clearance between the two brake shoes.

Adjustment to compensate for lining wear.

Adjustment for braking torque; made before installation and rarely requires further adjustment.

### **Optional Features**

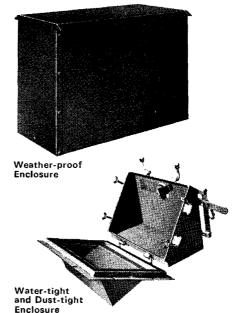
Manual Release Lever: This lever permits releasing the brake by hand and holding it in the released position so that adjustments may be made on the equipment without applying power, An interlocking switch may also be connected in the control circuit to prevent the motor being operated when the brake is released.

Weather-proof Enclosure: For outdoor service or where excessive moisture is present, a ventilated drip-proof, splash-proof housing for the entire brake is recommended. When this enclosure is supplied on brakes having a manual release lever, the release lever arm extends outside the cover for convenience in operation.

Water-tight and Dust-tight Enclosures: For extreme operating conditions, a water-tight and dust-tight enclosure can be furnished. However, since these are totally enclosed and considerable heat may be generated by the wheel, the duty cycle should be checked with the Corporation before ordering.

Non-corrodible Fittings: Where the brake is subject to excessive moisture, such as on lock or dam operating machinery, non-corrodible fittings are recommended for maximum trouble-free service.

Tilted Mounting: When so specified on the order, all HI brakes can be supplied for tilted mounting 45° from the horizontal except the HI-83 frame which is limited to a tilt of 15° from the horizontal.



Westinghouse Electric Corporation

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