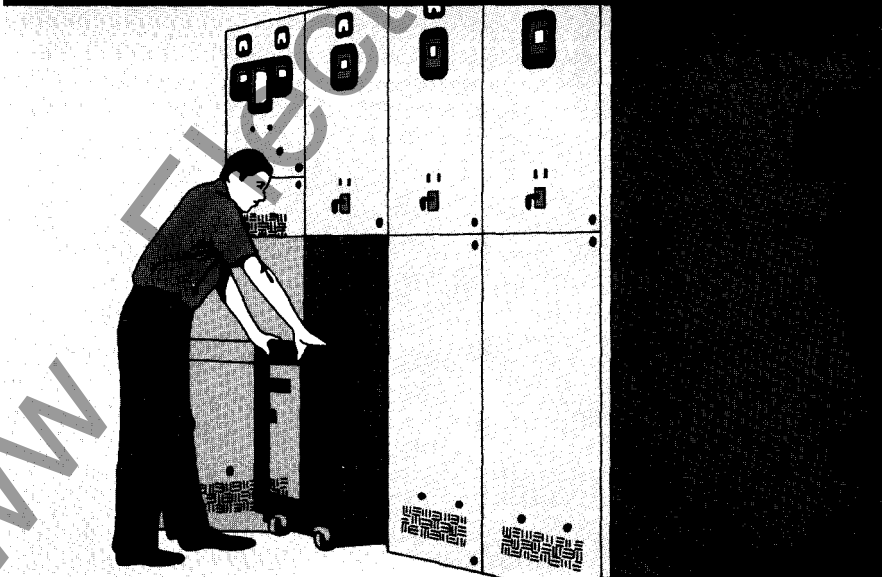
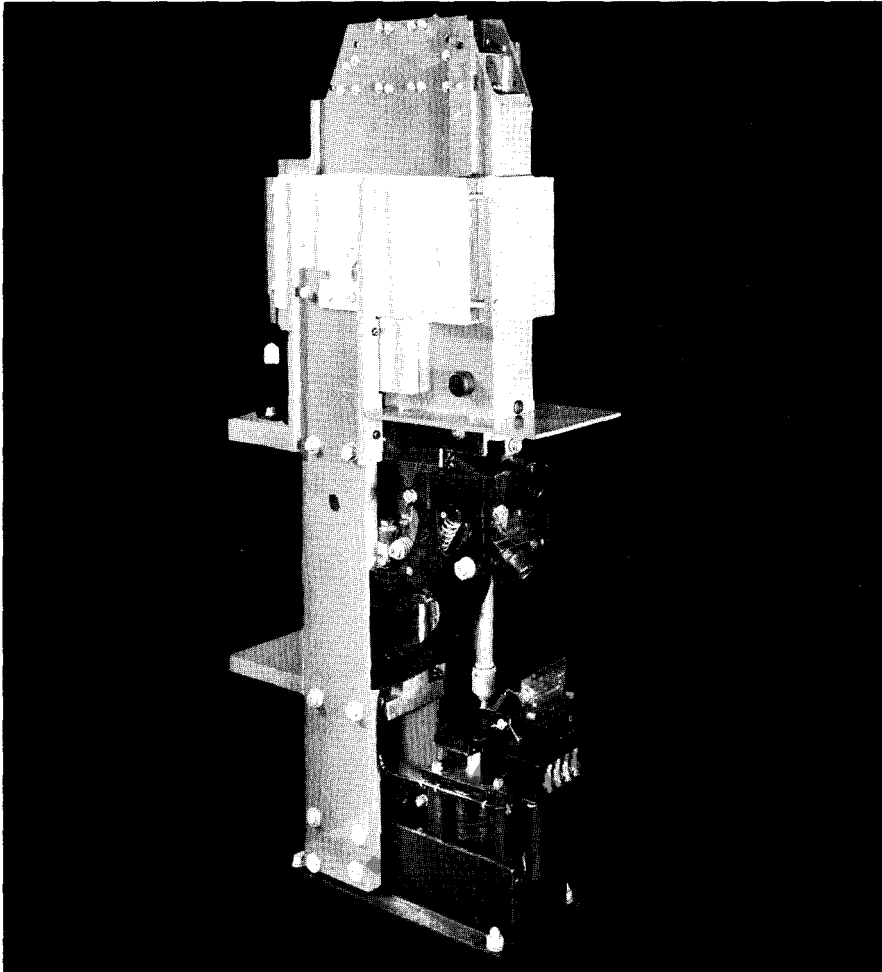


Westinghouse



## Low-Voltage DC Power Circuit Breakers

Type DMD, Semi-High Speed  
Electrically Operated

### Application

Westinghouse Type DMD breakers are designed for steel mill, other heavy duty industrial, and railway use. They are extensively used as cathode breakers, machine, feeder, and tie breakers on dc systems.

### Rating

250-750 – 1500 volts, dc service, single or two pole, 2000–4000 amperes.

The type DMD breaker is a dc semi-high speed breaker designed for application on circuits having time-current characteristics which meet the limits established by NEMA for dc breakers of the semi-high speed breaker class, with system short-circuit capabilities of up to 5 amperes/microsecond rate-of-rise.

Consequently, where the system fault current (determined without the circuit breaker in the circuit) falls between 40,000 amperes and 125,000 amperes at an instant 0.025 second after the beginning of the fault current transient, the type DMD breaker, equipped with instantaneous series overcurrent tripping, will limit the magnitude of fault current so that its crest is passed not later than 0.03 second after the beginning of the fault current transient.

However, if the maximum available current is less than 40,000 amperes at an instant 0.025 second after initiation of the fault, the time at which the crest of fault current is passed may be greater than the rated 0.03 second.

### Construction

The DMD breaker is a self-contained trip-free unit. Included are the arc-quencher, dc closing solenoid, shunt trip or under-voltage release, instantaneous trip and 2 four pole auxiliary switches. A boot barrier can be supplied for close multiple mounting. The closing coil and trip coil are wired to a terminal block. A control panel, for separate mounting, can be supplied. It will consist of a steel panel, control power switch, fuse closing relay and an anti-pump relay. The breaker can be supplied for single (or multiple) pole pedestal mounting. It can also be supplied drawout metal enclosed. Three versions can be supplied: single pole, single pole with a negative disconnect device, and two poles mounted in one truck. The dimensions of the metal enclosed cell are 26" wide, 90 $\frac{3}{4}$ " high, and 72" deep. The dimensions of the pedestal mounted cell are 7 $\frac{1}{2}$ " wide, 48 inches high, and 26" deep. The pedestal mounted breakers can be mounted with boot barriers on 9" centers.

Prices are effective October 23, 1972; subject to change without notice. For standard terms and conditions of sale, refer to Selling Policy 33-700

February 1, 1973  
Supersedes CS 33-925, pages 1-2, dated January 15, 1971  
E, D, C/1954, 1957/PL

## Low-Voltage DC Power Circuit Breakers

Type DMD, Semi-High Speed  
Electrically Operated

### Net Prices

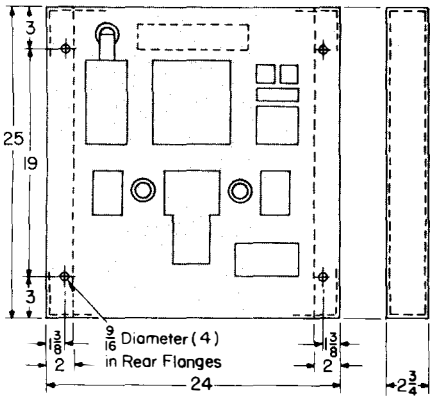
Ampere Rating	Net Price
1 pole – 2000 amperes	\$2990.00
2 pole – 2000 amperes	5425.00
1 pole – 4000 amperes	\$3103.00
2 pole – 4000 amperes	5544.00

### Attachments

	Net Price Addition
Overcurrent trip (instantaneous)	② \$168
Instantaneous undervoltage release	95
Auxiliary switch (2-4 circuit supplied) four additional circuits	602
Control panel ③	

② Included in price of breaker.  
③ When sold with breaker.

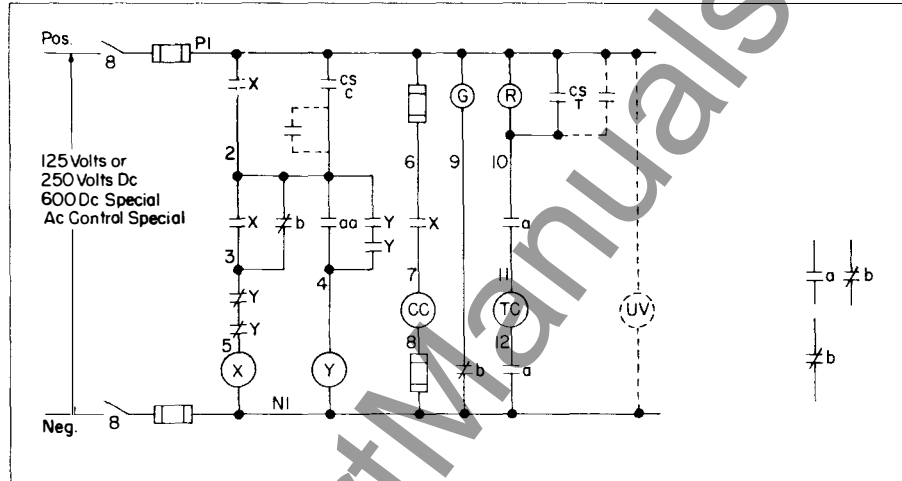
### Typical Control Panel Layout



### When ordering, specify:

1. Type of breaker
2. Ampere rating
3. Voltage
4. Control Voltage
  - a. Dc or ac and Hertz
  - b. Magnitude
5. Attachments
6. Both studs horizontal

### Typical Control Scheme for DMD



### Approximate Dimensions in Inches

