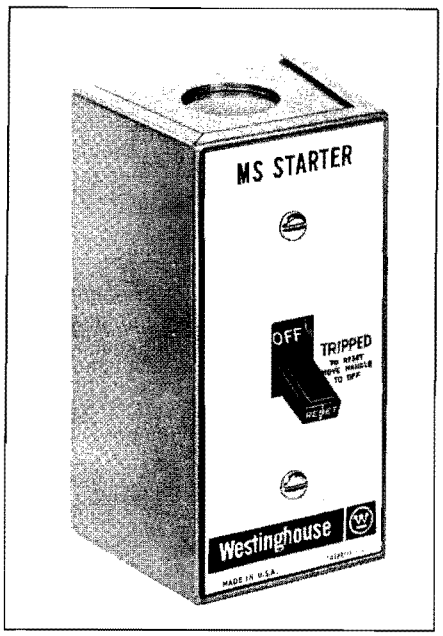
Westinghouse

# Ac Manual Motor Starters

**MS Manual Starters** 1 Hp., 120/240 Volts Single Phase Maximum




## Application

MS manual single phase starters are designed to give positive, accurate, trouble-free overload protection to single phase motors rated up to 1 Hp. Typical applications are unit heaters, fans, burners, motors, etc.

## Ratings

| Volts | Hp. | Poles |
|---|---|---|
| 120/240 Ac | 1 | 1 or 2 |
| 120/240 Dc | 1 | 2 |
| 240 Dc | ¼ | 1 |
| 32 Dc | ¼ | 1 or 2 |

## Enclosures

NEMA 1: General Purpose
NEMA 1B: Flush Mounted, General Purpose
NEMA 3, 4, 5: Watertight
NEMA 7D: Class I, Group D Hazardous Locations
NEMA 9E, F, G: Class II, Groups E, F, G Hazardous Locations

## Typical Specification

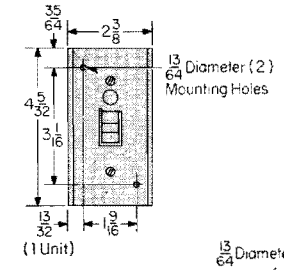
Manual single phase starters shall be Westinghouse Type MS or approved equal for motors of less than 1 Hp. They shall be built and tested in accordance with the latest NEMA standards.

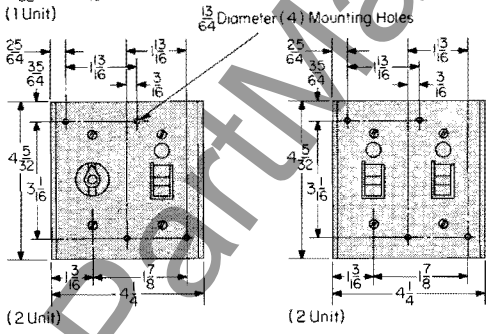
The starter shall have a "quick-make, quick-break" toggle mechanism. The overload shall have a field adjustment allowing up to ±10% variance in ratings of the nominal heater value.

## Dimensions, Inches

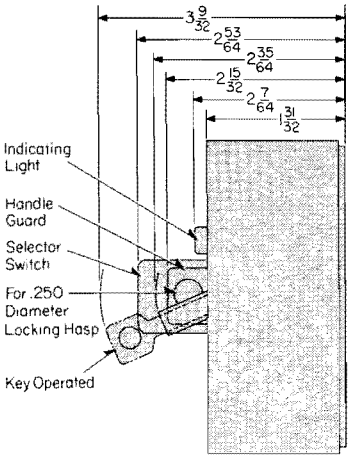
*Dimension certification for construction purposes for G. O. No._____ by_____*

NEMA 1 Enclosures (Boxes and Covers)

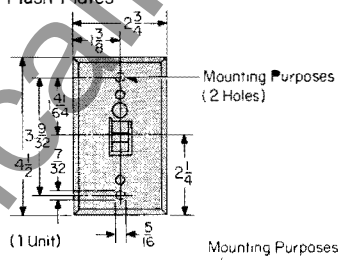


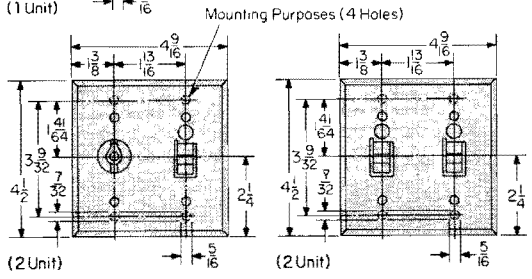




Side View (Enlarged)

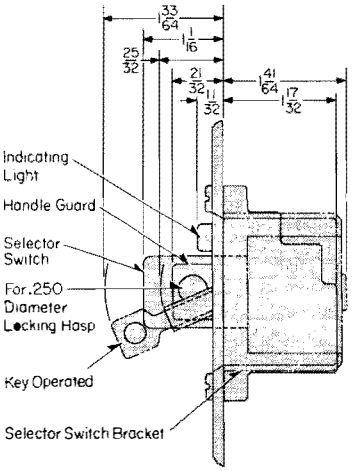



Flush Plates




Side View (Enlarged)




**Westinghouse Electric Corporation**
**MS Motor Starters**

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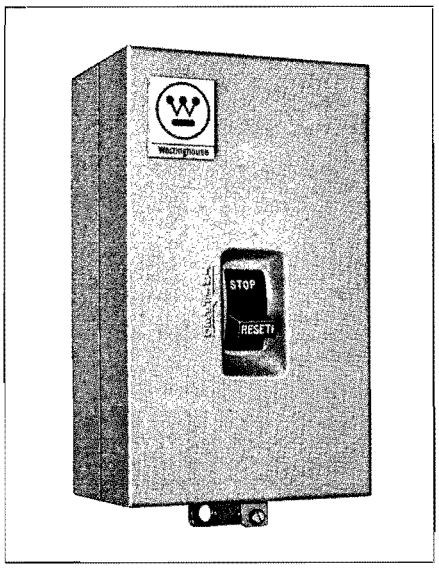
Gen. Ord. No._____ Item No._____

November, 1972
Supersedes Spec. Data 8180, pages 1-2, dated August, 1967
E. D. C/1796/DB

# Manual Motor Starters

**Type A100** 10 Hp., 600 Volts Maximum, 60 Hertz Ac




## Ratings

| NEMA Size | Maximum Horsepower② 120 Volts Ac | 208-240 Volts Ac | 480-600 Volts Ac |
|---|---|---|---|
| **2-Pole, Single Phase Ac** | | | |
| M-0 | 1 | 2 | .... |
| M-1 | 2 | 3 | .... |
| M-1P(1½) | 3 | 5 | .... |
| **3-Pole, 3 Phase Ac** | | | |
| M-0 | 2 | 3 | 5 |
| M-1 | 3 | 7½ | 10 |
| **3-Pole Dc (2 Poles in Series)** | | | |
| M-0 | 1 | 1½ | .... |
| M-1 | 1½ | 2 | .... |

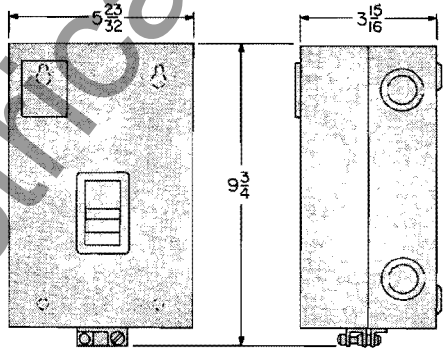
## Enclosures

NEMA 1: General Purpose
NEMA 1B: Flush Mounted General Purpose
NEMA 4: Stainless Steel
NEMA 7: Class I, Group D Hazardous Locations
NEMA 9: Class II, Groups E, F, G Hazardous Locations
NEMA 12: Dust-tight Industrial Use

## Dimensions, Inches

NEMA 1 Enclosure Only

*Dimension certification for construction purposes for G. O. No._____ by_____.*




## Application

A100 manual motor starters are designed to provide positive overload protection when used for across-the-line starting of small motors. Typical applications are for looms, pumps, fans and machine tools, either single phase, polyphase, Ac or Dc.

## Typical Specifications

All three-phase manual starters and single phase starters rated above 1 Hp. shall be Westinghouse Type A100 or approved equal. They shall be built and tested in accordance with the latest NEMA standards.

The starter must feature contact operation which is "quick-make, quick-break" and cannot be teased into a partially open condition. There must be provision which blocks the closure of the contacts while the line terminals are exposed. Operating handle or buttons must clearly show by their position whether unit is On, Off or Tripped.

**Westinghouse Electric Corporation**
**A100 Manual Starters**

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Gen. Ord. No._____ Item No._____

② Ratings up to 3 Hp., 3 phase suitable for group fusing.

Westinghouse Electric Corporation
Control Products Division, Beaver, Pa. 15009
Printed in USA