

### Applications:

EMN manual line starters and enclosures are used:

- For manual across-the-line starting of single and polyphase AC motors
- To provide motor running protection and manual starting and stopping
- In locations made hazardous due to the presence of flammable vapors, gases, or high combustible dusts
- For installation in petroleum refineries, chemical and petrochemical plants, and other process industry facilities
- In damp, wet, or corrosive locations

### Features:

- Compact, rectangular enclosure makes optimum use of internal space
- Operating handle may be padlocked in either "ON" or "OFF" position
- Compact design allows installation in area where space is limited
- Furnished with drilled and tapped conduit openings
- Polyphase manual starters are furnished with third overload relay as standard

### Certifications and Compliances:

- NEC/CEC
  - Class I, Division 1 & 2, Groups C, D
  - Class II, Division 1, Groups E, F, G
  - Class II, Division 2, Groups F, G
  - Class III
- NEMA/EEMAC: 3, 7CD, 9EFG, 12
- UL Standard: 1203
- CSA Standard: C22.2 No. 14

### Standard Materials:

- Bodies, covers and toggle operator – copper-free aluminum
- Operating shaft – stainless steel
- Internal operating bail – sheet steel or aluminum

### Standard Finishes:

- Copper-free aluminum – natural
- Stainless steel – natural
- Sheet steel – electrogalvanized with chromate finish

### Electrical Rating Ranges:

- Starter sizes 0, 1, 1P

### Options:

The following special options are available from factory by adding suffix to Cat. #:

Description	Suffix
Standard Breather (Cl. I, Groups C, D; Cl. II, Groups E, F, G; Cl. III) .....	<b>S219</b>
Standard Drain (Cl. I, Groups C, D; Cl. II, Groups E, F, G; Cl. III) .....	<b>S198</b>
Standard Breather and Drain (Cl. I, Groups C, D; Cl. II, Groups E, F, G; Cl. III) .....	<b>S198V</b>
Universal Breather-Drain (Cl. I, Groups C, D; Cl. II, Groups F, G) ....	<b>S454</b>
(2) Universal Breather-Drains (Cl. I, Groups C, D; Cl. II, Groups F, G) ....	<b>S454V</b>

### Ordering Information:

Specify HP, voltage, frequency, number of phases, RPM, type and full load ampere rating of motor – or specify ampere rating of heaters.

Two pole starters require one heater; three pole starters have three heaters.



### Motor Starter

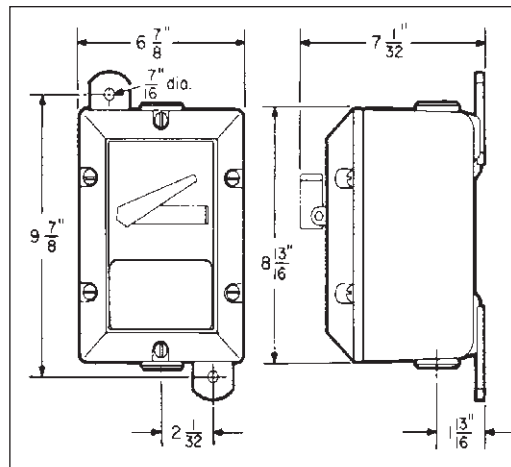
NEMA Size	Poles (Phase)	Max. AC HP Ratings			Enclosure With Starter Cat. #
		115V	208/240V	480/600V	
M-0	2 (1PH)	1	2		EMN24 W20
M-1	2 (1PH)	2	3		EMN24 W21
M-1P	2 (1PH)	3	5		EMN24 W21P
M-0	3 (3PH)	2	3	5	EMN24 W30
	3 (1PH)	2	3		
M-1	3 (3PH)	3	7½	10	EMN24 W31

### Enclosure Without Starter

Starter Manufacturer	Enclosure Cat. #†
Cutler-Hammer	EMN24

### Dimensions\*

In Inches:



†Enclosures are furnished with two 1¼" drilled and tapped openings with 1¼" to 1" reducers.

\*Dimensions are approximate, not for construction purposes.