

## Contents

<i>Description</i>	<i>Page</i>
<b>Manual Motor Protectors</b>	
Product Description . . . . .	34-294
Application Description . . . . .	34-294
Features . . . . .	34-294
Standards and Certifications . . . . .	34-294
Instructional Leaflets . . . . .	34-294
Product Selection . . . . .	34-295
Accessories . . . . .	34-297

**Note:** For more information, see CA03801001E.



*A307, A308 and A309  
Manual Motor Protectors*

## Product Description

The Cutler-Hammer® A307, A308 and A309 family of Manual Motor Protectors (MMPs) from Eaton's electrical business feature a rotary ON/OFF manual disconnect, Class 10 adjustable bimetallic overload relay and fixed magnetic short circuit trip capability in one compact unit. Three frame sizes are available: A307 (45 mm) for motors with FLA ratings up to 25A, A308 (55 mm) covers motor FLA ratings up to 50A and the A309 (70 mm) is suitable for motor FLA ratings to 100A.

## Application Description

The A307, A308 and A309 MMPs can be used in the following applications:

### Manual Motor Protectors

All of the MMPs are UL Listed under UL508 as Manual Motor Controllers. They provide an economical solution for applications requiring simple manual starting and stopping of motors. When used as an MMP, they are typically installed in an enclosure. IP55 enclosures are offered as accessories for the MMPs. Separate short-circuit protective devices, such as circuit breakers or fuses, are wired ahead of the MMPs. The short-circuit protective device should be sized per the NEC code and should not exceed 400% of the maximum FLA dial setting of the MMP.

### Group Motor Installations

A Group Motor Installation can be defined as more than one motor circuit protected by a single set of fuses or circuit breaker on a motor branch circuit. This eliminates the need for individual fuses or circuit breakers for each motor circuit. Substantial component cost savings, panel space savings and reduced wiring installation time can be achieved in Group Motor Installations.

**Table 34-384. Short Circuit Ratings**

Description	Specification
<b>UL 508 Type E Manual Combination Starter/Motor Controller</b>	
A307 ①	65 kA @ 240V, 480Y/277V 30 kA @ 600Y/347V up to 12.5A
A308 ①	65 kA @ 240V, 480Y/277V 25 kA @ 600Y/347V
A309 ①	65 kA @ 240V, 480Y/277V 30 kA @ 600Y/347V up to 75A

① See **Pages 34-295 – 34-296** for individual ratings.

## Features

- ON/OFF Rotary Handle with Lockout Provision
- Visible Trip Indication
- Class 10 Overload Protection
- Phase Loss Sensitivity
- Ambient Temperature Compensation to 140°F

- Fixed Short Circuit Trip — 13 times maximum setting of overload FLA dial
- Type 2 Coordination per IEC 947
- Identification Markers Standard on Starter Faceplate
- Motor Applications from 0.11A to 100A
- Built-in heater and magnetic trip elements to protect the motor
- Adjustment dial for setting motor FLA
- DIN Rail or Panel Mount
- Accessories include:
  - Front and Side Auxiliary Contacts
  - Trip Indicating Contacts
  - Tamperproof Cover for OLR Dial
  - Undervoltage Release
  - Shunt Trip
  - Thru-the-Door Operators
  - Enclosures
  - 3-Phase Line Side Connecting Links

## Standards and Certifications

- UL File No. E176513, Category NKJH (A307, A308, A309)  
UL File No. E37317, Category NKCR (Accessories)
- CSA File LR12530, Class 3211-05
- IEC 947-1; IEC 947-2; IEC947-4-1
- DIN VDE 0660 Part 100, Part 101 and Part 102



## Instructional Leaflets

- IL49490 — A307 Manual Motor Protectors
- IL49491 — A308 Manual Motor Protectors
- IL49492 — A309 Manual Motor Protectors
- IL49493 — C320TR11 Trip Indicating Contacts
- IL49494 — IP55 Enclosures and Front Plates
- IL49495 — C320HN Thru-the-Door Operators
- IL49496 — Indicating Lights

See Application Note — AP03402001E.