33

**Product Family Overview** 



NEMA AN16DN0AB NEMA Size 1 Starter



NEMA Size 1 Contactor

# **Product Description**

Freedom Series starters and contactors feature a compact, space-saving design, using state-of-the-art technology and the latest in high strength, impact and temperature resistant insulating materials.

### **Features**

#### Freedom NEMA

- Adjustable Bimetallic Ambient Compensated Overload relays with interchangeable heater packs available in three basic sizes, covering applications up to 900 hp — reducing the number of different contactor/overload relay combinations that have to be stocked. Fixed heater overloads are optional.
- Electronic Solid-State Overload Relay (C396) available as a standalone unit and assembled with Freedom Contactor.
- A full line of snap-on accessories common to both IEC and NEMA devices — top and side mounted auxiliary contacts, solid-state and pneumatic timers, etc.

- Straight-through wiring line lugs at top, load lugs at bottom.
- Horizontal or vertical mounting on upright panel for application freedom.
- Screw type power terminals have captive, backed-out self-lifting pressure plates with ± screws — reduced wiring time.
- Accessible terminals for easy wiring. Optional fingerproof shields available to prevent electrical shock.
- Top located coil terminals convenient and readily accessible. 45 mm contactor magnet coils have three terminals, permitting either top or diagonal wiring easy to replace European or U.S. style starters or contactors without changing wiring layout.
- Encapsulated dual voltage/ frequency magnet coils permanently marked with voltage, frequency and part number. NEMA Sizes 00 – 0 have non-encapsulated coils as standard.
- Designed to meet or exceed NEMA, UL, CSA, VDE, BS and other international standards and listings.
- American engineering built by Eaton, using the latest in statistical process control methods to produce high quality, reliable products.
- Sized based on standard NEMA classifications.
- Easy coil change and inspectable/ replaceable contacts.
- Available in Open and NEMA Type 1, 3R, 4/4X and 12 enclosures.



Series B1 32A Overload

## Standards and Certifications

- Standard: Designed to meet or exceed UL, NEMA, IEC, CSA, VDE and BS.
- UL listed: UL File #E1491, Guide #NLDX — Open and NEMA 1, 4, 12 Enclosed
- CSA Certified: CSA File #LR353, Class #321104 Open and NEMA 1 Enclosed

### **ISO 9000 Certification**

When you turn to Eaton's Cutler-Hammer Products, you turn to quality. The International Standards Organization (ISO) has established a series of standards acknowledged by 91 industrialized nations to bring harmony to the international quest for quality. The ISO certification process covers 20 quality system elements in design, production and installation that must conform to achieve registration. This commitment to quality will result in increased product reliability and total customer satisfaction.

### **Short Circuit Protection**

Fuses and Inverse-Time Circuit Breakers may be selected per Article 430, Part D of the National Electrical Code to protect motor branch circuits from fault conditions. If higher ratings or settings are required to start the motor, do **not** exceed the maximum as listed in Exception No. 2, Article 430-52.

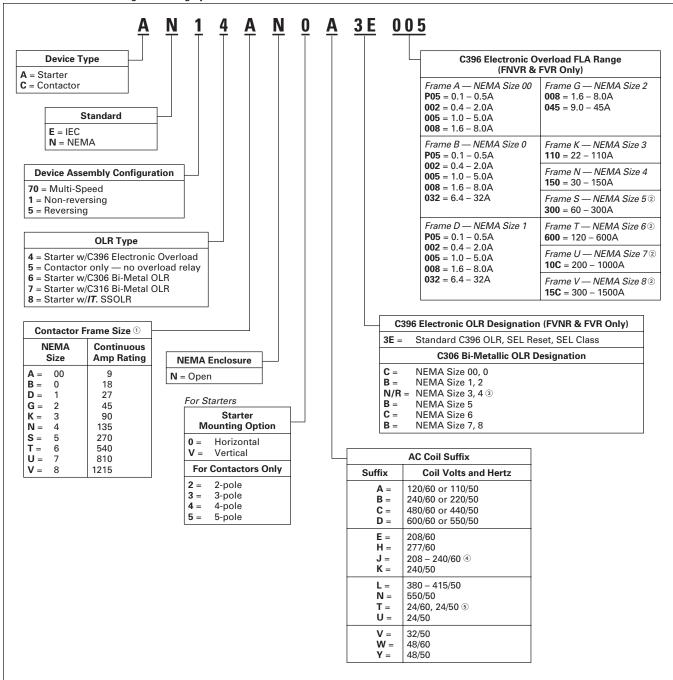


C396 Electronic Overload

**Catalog Number Selection** 

# **Catalog Number Selection**

Table 33-91. Freedom Catalog Numbering System



- ① For Contactor Only orders, add **B** to end of Catalog Number if NEMA Size 00 2, 6.
- ② Uses panel-mount CT with C396A2A005SELAX Overload.
- 3 Not required.
- 4 NEMA Sizes 00 and 0 only.
- <sup>⑤</sup> NEMA Sizes 00 and 0 only. Sizes 1 8 are 24/60 only.