NEMA Starter Size vs. Horsepower

U.S. three-phase motor starter identification & pre-order checks

SOURCE BASIS Rockwell Automation Bulletin 509 | 600 V AC max | 60 Hz

01 / THREE-PHASE HORSEPOWER QUICK REFERENCE

Rockwell Bulletin 509 non-reversing starters • Maximum HP; motor FLA must not exceed continuous A.

NEMA SIZE	CONT. AMPERES	200 V HP	230 V HP	460 V HP	575 V HP
00	9	1.5	1.5	2	2
0	18	3	3	5	5
1	27	7.5	7.5	10	10
2	45	10	15	25	25
3	90	25	30	50	50
4	135	40	50	100	100
5	270	75	100	200	200

Scope: Full-voltage, non-reversing, standard-duty starter ratings for this product family. These are not universal NEMA size limits; confirm exact catalog number and duty.

02 / IDENTIFY THE EXISTING STARTER

ILLUSTRATIVE IDENTIFICATION LABEL

CAT / TYPE: _____

NEMA SIZE: ____ COIL: ____ V

OL RELAY / HEATERS: _____

CAPTURE BOTH NAMEPLATES

Starter: catalog number, NEMA size, coil voltage/frequency, overload model, enclosure and wiring arrangement.

Motor: HP, rated voltage, nameplate full-load amperes (FLA), phase, frequency and duty.

03 / FOUR CHECKS BEFORE ORDERING

01 MOTOR FLA + DUTY

Confirm motor nameplate FLA, duty cycle and starting requirements against the specific starter rating.

02 COIL / CONTROL

Match control voltage, AC/DC, frequency, control transformer and auxiliary-contact needs.

03 OVERLOAD PROTECTION

Select compatible overload relay/heater elements from motor data and manufacturer tables.

04 FAULT + ASSEMBLY

Verify available fault current, protective device, SCCR, enclosure and installation requirements.

CAUTION **Horsepower and NEMA size alone do not establish a safe replacement.**

REPLACING A LEGACY STARTER?

Send starter + motor labels, coil voltage, overload details, photos & quantity.

Source: Rockwell 500-SG008D-EN-P (Dec 2024), Bulletin 509, pp. 14 & 17.