

NMS23-E08P1T3A Datasheet



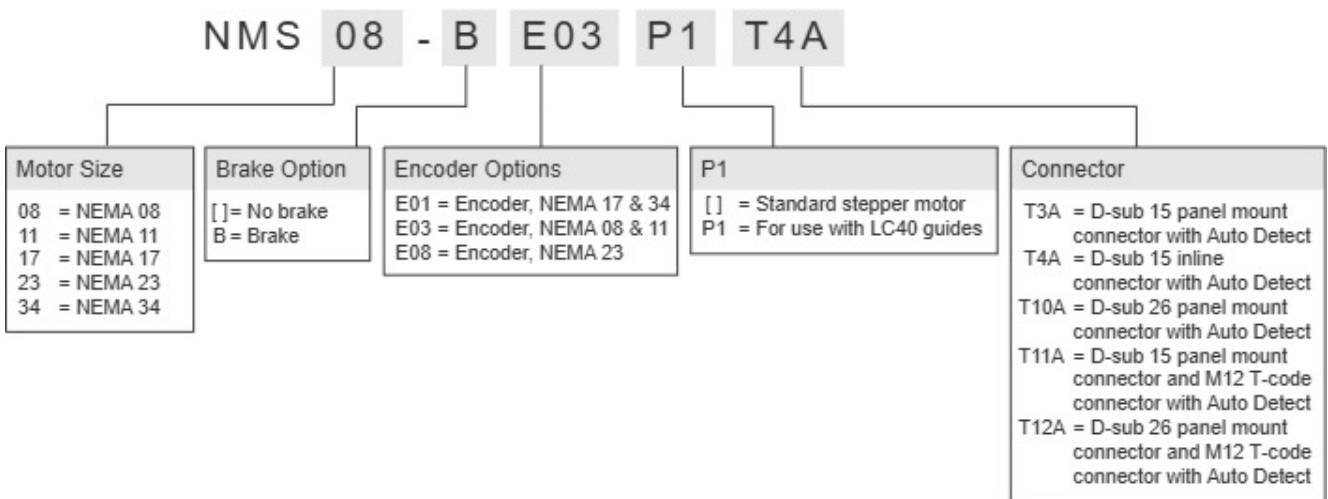
- NEMA size 08 to 34 stepper motors offer a range of size and torque
- Up to 3000 rpm speed and 5.25 N-m torque
- HS02 home sensor and magnet included
- Built-in encoders provide slip/stall detection and recovery
- Optional integrated power-off brake
- Designed for use with an X-MCC Series stepper motor controller or any 2-phase stepper motor controller
- With AutoDetect, the X-MCC controller configures its settings automatically for the connected peripheral

NMS-E Series Overview

These NEMA stepper motors are designed to connect directly to our MCC family of controllers.. Set-up is easy with AutoDetect. Once connected, the MCC controller will automatically detect and configure the motor. The built-in encoder allows closed-loop operation and slip/stall recovery features. A detachable home sensor (HS02) and magnet are included. An optional power-off brake is available on NEMA 23 and NEMA 34 sized steppers to secure the payload across power cycles.

For more information visit: <https://www.zaber.com/products/stepper-motors/NMS-E>

NMS-E Series Part Numbering & Options



NMS23-E08P1T3A Drawings

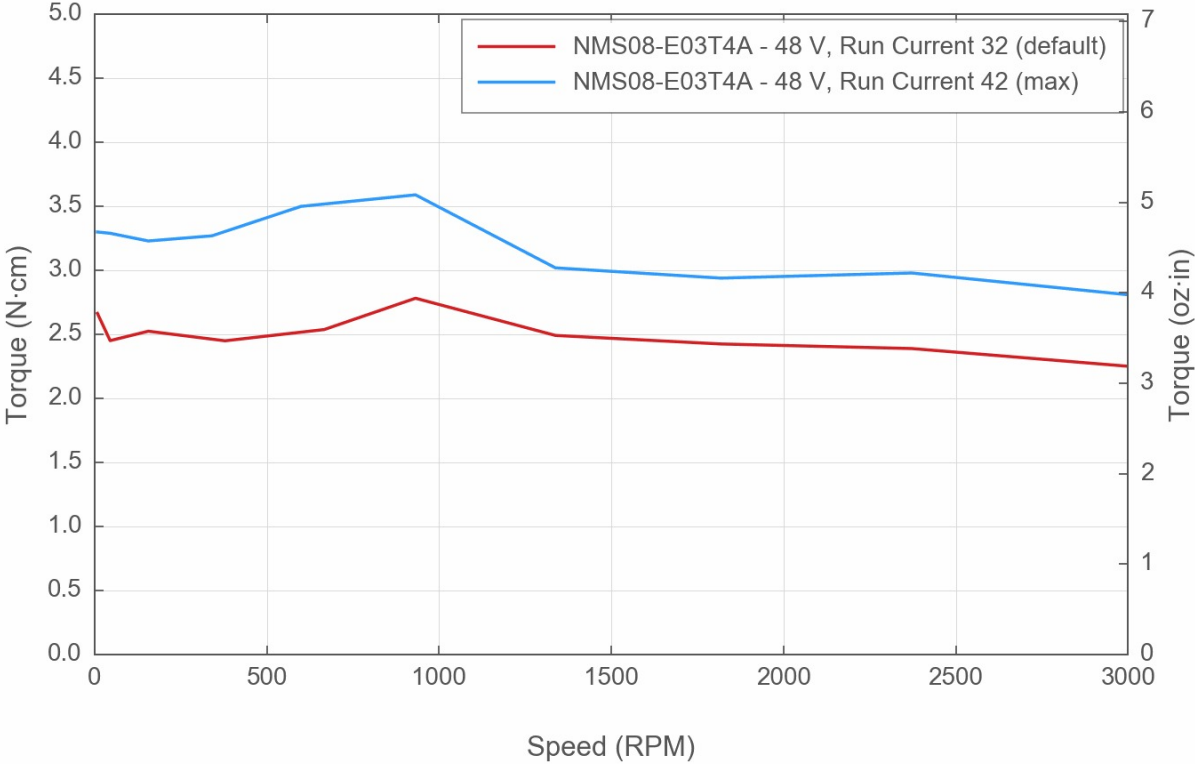
- [NMS23-ET3A.png \(Drawing for the NMS23-ET3A\)](#)

NMS23-E08P1T3A Specifications

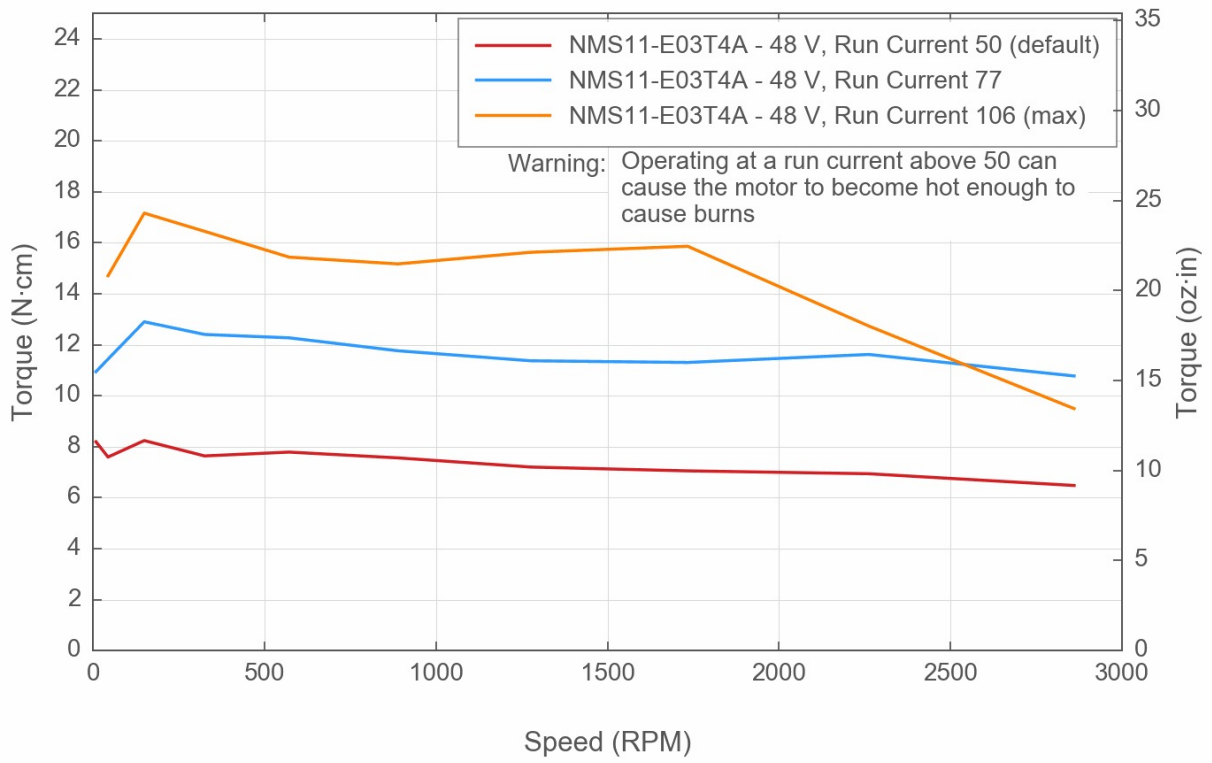
| | |
|--|---------------------------------|
| Microstep Size (Default Resolution) | 0.028125° (490.866 μrad) |
| Built-in Controller | No |
| Recommended Controller | MCC (48 V) Recommended |
| AutoDetect | Yes |
| Maximum Speed | 18000°/s (3000 rpm) |
| Minimum Speed | 0.017172°/s (299.703 μrad/s) |
| Speed Resolution | 0.017172°/s (299.703 μrad/s) |
| Encoder Resolution | 400 CPR (1600 states/rev) |
| Encoder Type | Rotary quadrature encoder |
| Maximum Torque | 180 N-cm (254.9 oz-in) |
| Motor Steps Per Rev | 200 |
| Motor Type | Stepper (2 phase) |
| Motor Rated Current | 3000 mA/phase |
| Motor Winding Resistance | 0.53 ohms/phase |
| Inductance | 2 mH/phase |
| Motor Connection | D-sub 15 |
| Motor Frame Size | NEMA 23 |
| Limit or Home Sensing | Magnetic home sensor |
| Operating Temperature Range | 0 to 50 °C |
| CE Compliant | Yes |
| Vacuum Compatible | No |
| Weight | 1.3 kg (2.866 lb) |

NMS-E Series Charts

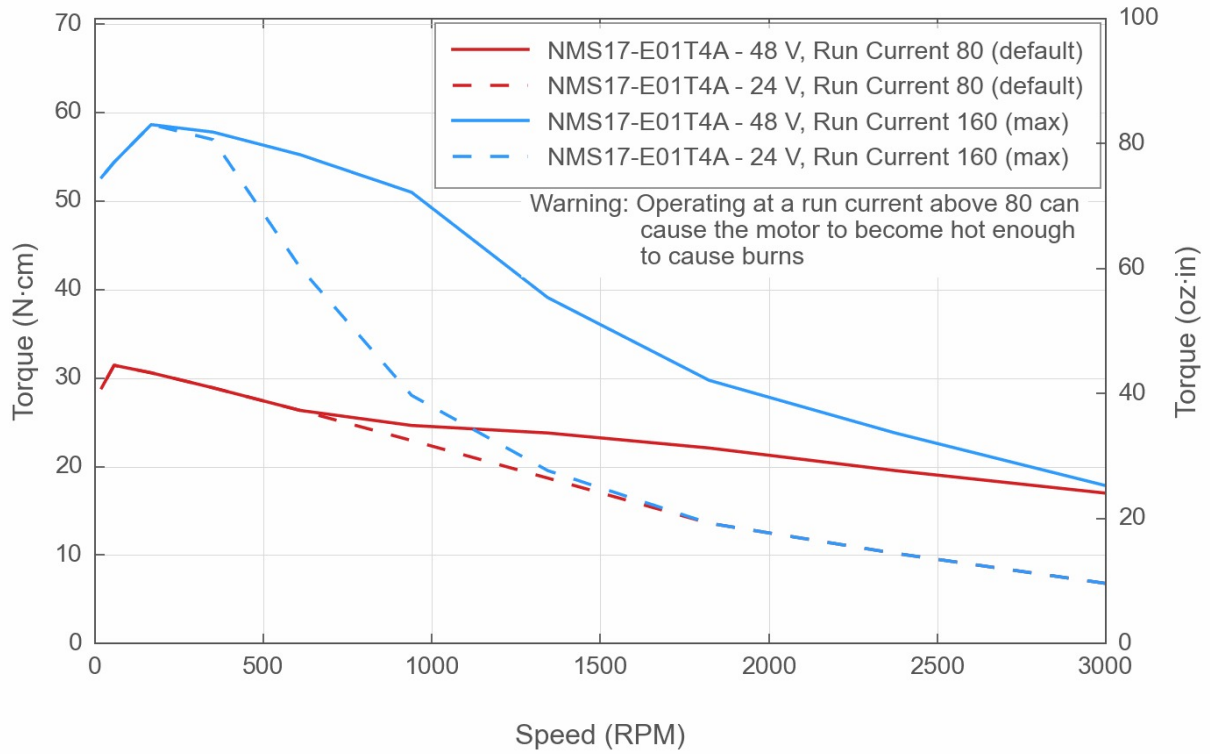
Torque Speed Performance



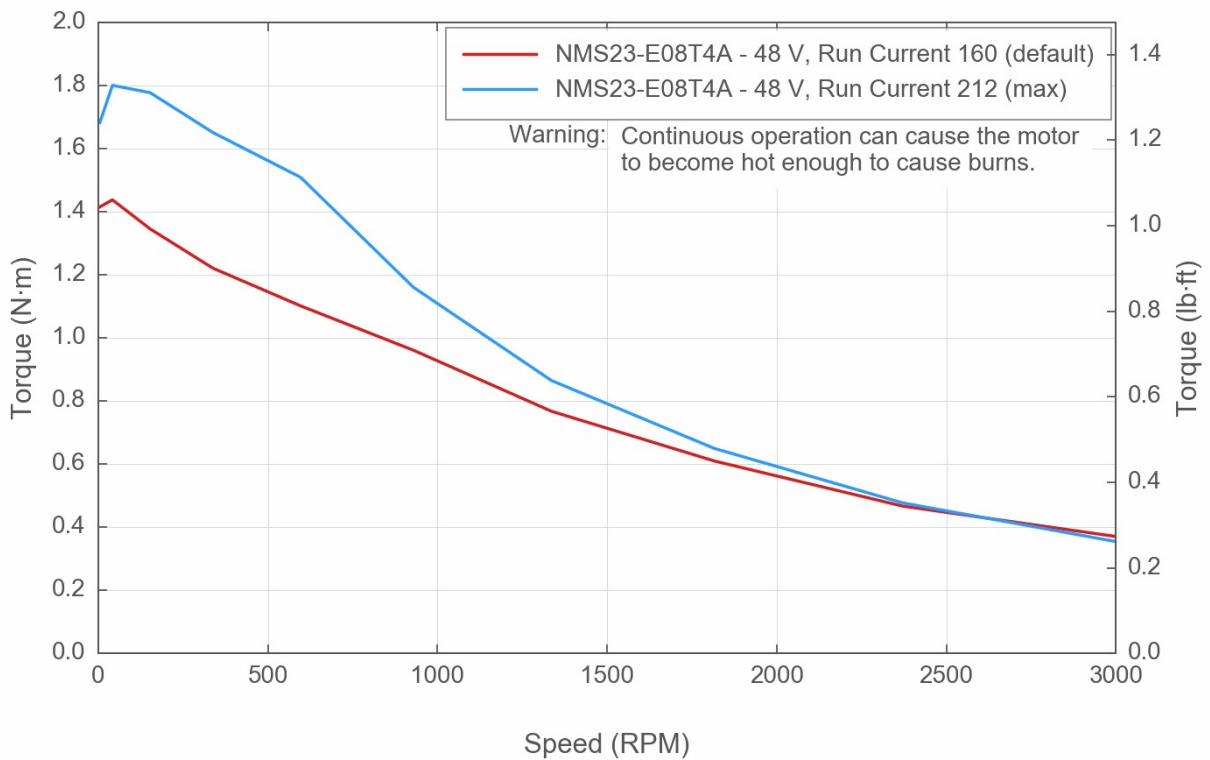
Torque Speed Performance



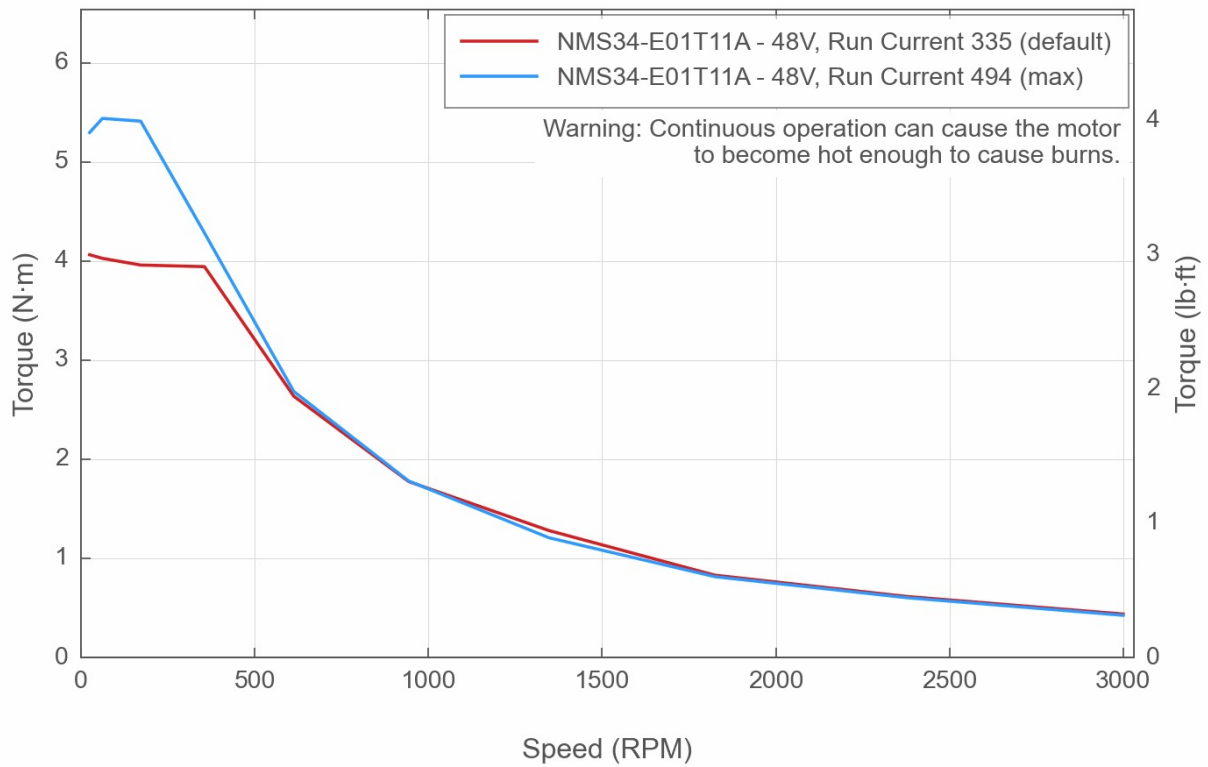
Torque Speed Performance



Torque Speed Performance



Torque Speed Performance



Contact

Email: contact@zaber.com

Phone (toll free Canada/USA): 1-888-276-8033

Phone (direct): 1-604-569-3780

Fax: 1-604-648-8033

Zaber Technologies Inc.

#2 - 605 West Kent Ave. N.

Vancouver, British Columbia

Canada, V6P 6T7

<https://www.zaber.com>