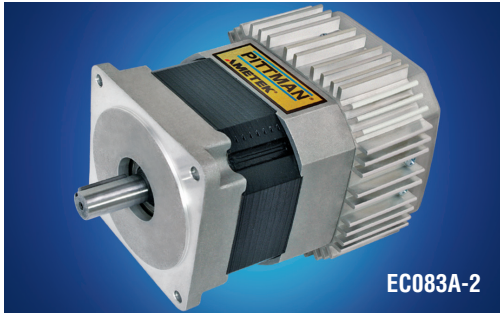


**EC083A Series**  
 with Integrated Drive



The EC083A series brushless motor is available with an integrated drive for direct operation off a 120 VAC supply. The EC083A is an excellent choice for both power transmission and simple velocity control applications. It is offered in 1/4 and 1/3 HP ratings with continuous torques from 0.073 to 1.5 Nm.

**Features:**

- Speeds up to 1750 or 3450 RPM
- Line voltage input of 120 Vac
- NEMA 34 mounting
- Reversible

**Assembly Options:**

- Brake:** B5 Fail-Safe
- Drive Options:** Panel with speed pot and control switches

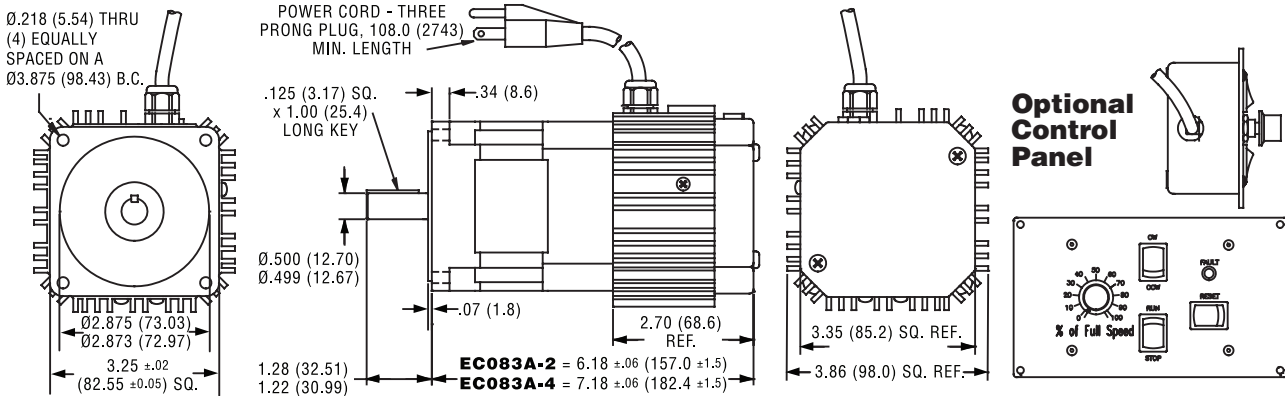
**Salient Characteristics**

MOTOR DATA	SYMBOL	UNITS	EC083A-2	EC083A-2	EC083A-4
Rated Voltage	$V_r$	$V_{AC}$	120	120	120
Minimum Voltage		$V_{AC}$	108	108	108
Maximum Voltage	$V_T$	$V_{AC}$	132	132	132
Rated Torque <sup>1</sup>	$T_r$	Nm	0.915	0.734	1.514
		lb-in	8.1	6.5	13.4
Speed at Rated Torque <sup>1</sup>	$\omega_r$	rpm	1750	3450	1750
Current at Rated Torque <sup>1</sup>	$I_r$	Amps	2.0	4.0	8.0
Rated Power <sup>1</sup>	$P_r$	Watts	168	265	278
Peak Torque (2 sec.)	$T_{pk}$	Nm	0.915	0.734	1.514
		lb-in	8.1	6.5	13.4
Peak Current (2 sec.)	$I_{pk}$	Amps	2.0	4.0	8.0
No-Load Speed	$\omega_{nl}$	rpm	1800	3600	1800
No-Load Current	$I_{nl}$	Amps	1.0	1.1	1.3
Rotor Inertia	$J_r$	$kg\ m^2$	9.94E-05	9.94E-05	1.63E-04
		$lb\text{-}in\text{-}s^2$	8.80E-04	8.80E-04	1.44E-03
Max. Winding Temp	$\Theta_{MAX}$	$^{\circ}C$	125	125	125
Direction of Rotation	SE	Shaft End	Reversible	Reversible	Reversible
Weight	$W_m$	kg	2.80	3.80	4.80
		lbs	6.2	8.4	10.6

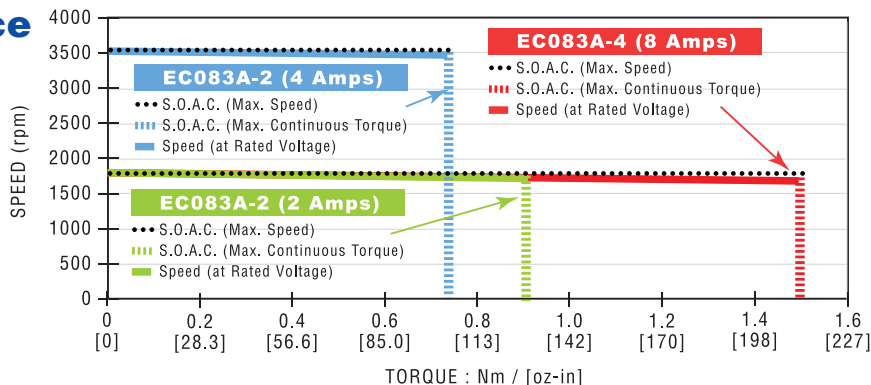
<sup>1</sup> Recorded as motor only without heatsink at maximum winding temperature. Recorded at Rated Voltage. Recorded at 25°C.

**Dimensional Drawings**

Dimensions = inches (mm)



**Performance Graphs**



NOTE: All values specified at 25°C ambient temperature and without heatsink. Peak values are theoretical and for reference only.