

ZI series brushless DC motor is constant speed motor with a new type of permanent magnetic motor with high efficiency specifically for indoor unit of cooler. The motor advantages include high efficiency, low noise and low vibration. We have two types of brushless DC motors: High Voltage and Low Voltage.

## Application

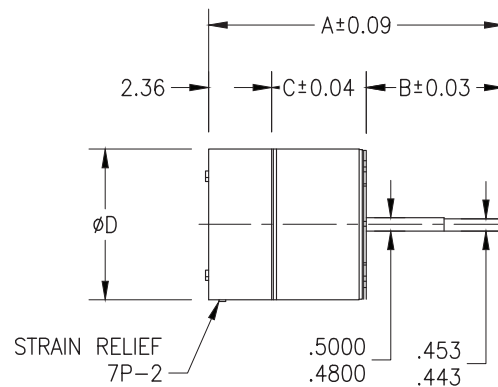


Installation in cooler.  
Usage temperature range:  
-20° to 200°F / -28° to 93°C

## Specifications

Model	Voltage (VAC)	Nominal output power (W)	Poles (P)	Operating System	Rated Speed (RPM)	Weight LBS (Kg)
AMI-ZI-ECM-50A-8	230	50 (1/15HP)	8	S1	1600	5 (2.25)
AMI-ZI-ECM-50B-8	120	50 (1/15HP)	8	S1	1500	5 (2.25)
AMI-ZI-ECM-50C-8	230	50 (1/15HP)	8	S1	1600	5 (2.25)
AMI-ZI-ECM-50D-8	120	50 (1/15HP)	8	S1	1500	5 (2.25)
AMI-ZI-ECM-185A-12	230	185 (1/4HP)	12	S1	1175	10.7 (4.85)
AMI-ZI-ECM-185B-12	120	185 (1/4HP)	12	S1	1175	10.7 (4.85)

# Electronically Commutated (ECM) Constant Speed Fan Motor for Outdoor Condenser Unit



Electronically Commutated (ECM) Constant speed Fan Motor is a new type of Brushless DC motor with a magnetic motor which is made of permanent magnet ferrite materials and a specially designed condenser. Advantages include high efficiency, low noise, low vibration, low temperature rise, stable speed, fine performance index and easy control. It is an energy-saving high quality motor.

## Features

1. High efficiency, high reliability, strong overload capacity and speed control.
2. Brushless and sensor-free control technology to ensure high control accuracy and reliable operation of motor.
3. Characteristics include low noise, compact size, low starting temperature and stable speed.
4. Additional surge antistatic and lightning strikes protection.

Model	A	B	C	D
AMI-ZO-ECM-185A-12	10.4	4.5	3.54	5.63
AMI-ZO-ECM-185B-12	10.4	4.5	3.54	5.63
AMI-ZO-ECM-245A-12	10.4	4.5	3.54	5.63
AMI-ZO-ECM-245B-12	10.4	4.5	3.54	5.63

## Application

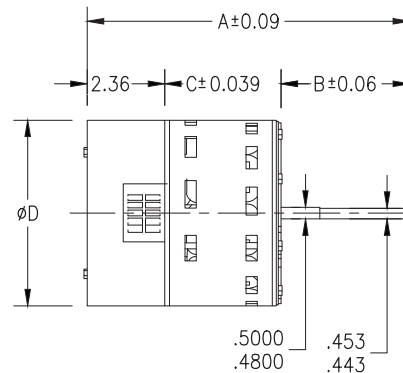
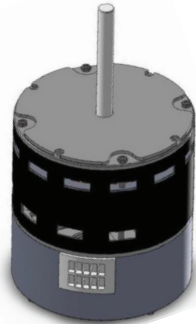


Outdoor  
Condenser Unit

## Specifications

Model	Voltage (VAC)	Frequency (Hz)	Nominal output power (W)	Poles (P)	Operating System	Rated Speed (RPM)
AMI-ZO-ECM-185A-12	230	50/60	1/4	12	S1	1175
AMI-ZO-ECM-185B-12	120	50/60	1/4	12	S1	1175
AMI-ZO-ECM-245A-12	230	50/60	1/3	12	S1	1175
AMI-ZO-ECM-245B-12	120	50/60	1/3	12	S1	1175

# Electronically Commutated Motor (ECM) Constant Torque Fan Motor for Indoor Evaporator in Blower or Furnace



Connector ID	Description	Operating Mode	Input Voltage
C	Signal Common	Signal Common	24V
L	Line	Line	115V
G	Ground	Ground	115V
N	Neutral	Neutral	115V

Connector ID	Description	Operating Mode	Input Voltage
1	TAP1	Torque PT1	24V
2	TAP2	Torque PT2	24V
3	TAP3	Torque PT3	24V
4	TAP4	Torque PT4	24V
5	TAP5	Torque PT5	24V

## Application



Applied to the fan load, such as central air-conditioning system, furnace, air handler etc.

## Dimensions

Model	A	B	C	D
AMI-ZB-ECM-245TA/B-12	10.75	4.5	3.883	5.63
AMI-ZB-ECM-375TA/B-12	10.75	4.5	3.883	5.63
AMI-ZB-ECM-560TA/B-12	12.25	5.5	4.388	5.63
AMI-ZB-ECM-735TA/B-12	11.75	4.5	4.888	5.63

## Specifications

Model	Voltage (VAC)	Frequency (Hz)	Nominal out power (W)	Poles (P)	Operating System	Rated Speed (RPM)
AMI-ZB-ECM-245TA-12	115	60	1/3	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-245TB-12	208-230	60	1/3	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-375TA-12	115	60	1/2	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-375TB-12	208-230	60	1/2	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-560TA-12	115	60	3/4	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-560TB-12	208-230	60	1/2	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-735TA-12	115	60	1	12	S1	600-1200 (5SPD)
AMI-ZB-ECM-735TB-12	208-230	60	1/2	12	S1	600-1200 (5SPD)