Orientalmotor

AC Speed Control Motors BSD Series

BSD315-412D

Select the gearheads and circuits to be combined

Motor/Control Circuit

Product Classification	Product Name	List Price	List Price	Shipping Date
Motor / Control Circuit	BSD315-412D			

• Gearhead is required separately.

Included

Motor and Driver Package: Motor, Control Circuit, Capacitor, Connection Socket, Operating Manual

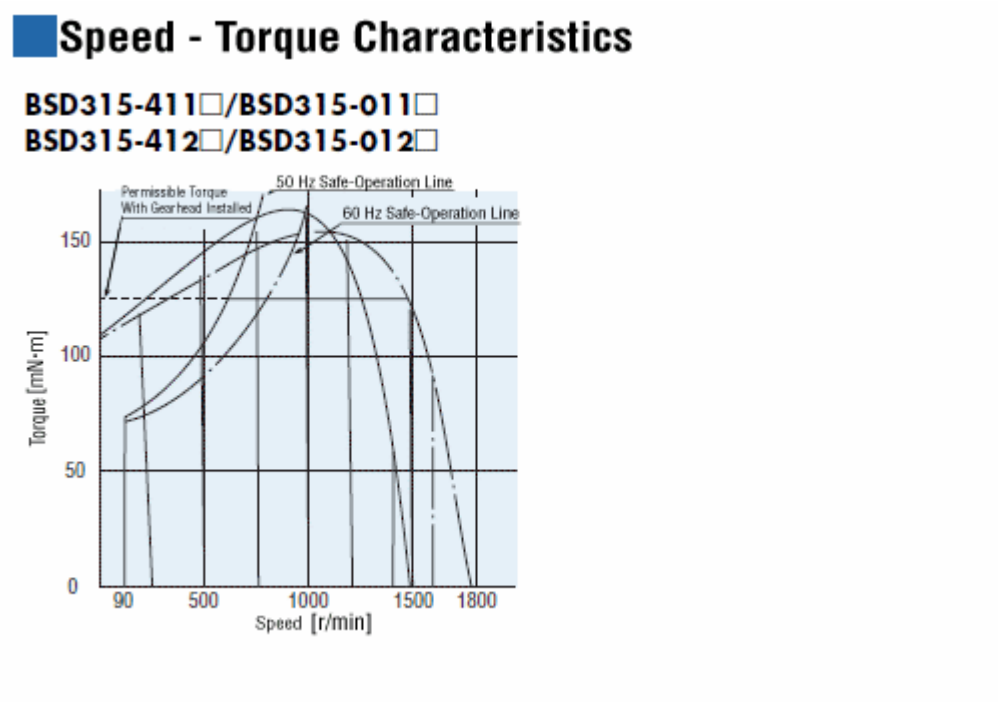
Specifications

Frame Size	70 mm
Maximum Output Power	15 W
Time Rating	30 Minutes
Shaft/Gear Type	Pinion Shaft Type
Controller Type	For DIN Rail Mounting
Electromagnetic Brake	Equipped
Voltage/ Frequency/ Current/ Power Consumption	Single-Phase200 VAC / 50 Hz / 0.3 A / 60 W Single-Phase200 VAC / 60 Hz / 0.3 A / 60 W
Starting Torque (Motor Shaft)	Single-Phase200 VAC / 50 Hz: 95 mN·m Single-Phase200 VAC / 60 Hz: 95 mN·m
Speed Control Range	Depends on the combination gear head.
Permissible Torque (Motor Shaft)	Single-Phase200 VAC / 60 Hz, Setting speed90 r/min: 65 mN·m Single-Phase200 VAC / 50 Hz, Setting speed1200 r/min: 125 mN·m Single-Phase200 VAC / 60 Hz, Setting speed1200 r/min: 140 mN·m
Electromagnetic Brake Brake Type	Power off activated type
Electromagnetic Brake Voltage/ Frequency/ Current/ Input	Single-Phase 200 VAC / 50 Hz / 0.05 A / 7 W Single-Phase 200 VAC / 60 Hz / 0.05 A / 7 W
Electromagnetic Brake Static Friction Tor	80 mN·m

que (Motor Shaft)	
Permissible Inertia J	Depends on the combination gear head.
Capacitor	Product Name: CH15B, Capacitance: 1.5 μF, Rated Voltage: 400 VAC
Power Supply Input Voltage	Single-Phase 200 VAC±10%
Power Supply Input Frequency	50/60 Hz
Speed Setting Methods	Digital Setting (Speed setting is available by unit of 10 r/min)
Function	Speed Control, Instantaneous Stop, Bi-Direction, Speed Change, Acceleration/Deceleration, Rotation Speed Display (7-Segment LED), Electromagnetic Brake and Electronic Brake Interlocking, Electromagnetic Brake Free, Operation Stop at Abnormal Condition
Control Power Supply	24 VDC±10%, 0.1 A min.
Input Signal	Input Signals: CW/CCW/SPEED SELECT Photocoupler Input External Operation Signal Input: 26.4 VDC 15 mA
Braking Current (Peak Value)	50Hz: 1.5 A, 60Hz: 1.4 A
Maximum Extension Distance	10 m
Motor Section Mass	1.4 kg
Circuit Mass	0.14 kg

• The variable speed ranges shown are under no load conditions.
• This type of motor does not contain a built-in friction brake.

Characteristics



Speed - Torque Characteristics

Other Specifications

Common Specifications of the Circuit Section

Item	DSP501M□	DSP502M□
Power Supply Input	Single-Phase 100 VAC±10% 50/60 Hz	Single-Phase 200 VAC±10% 50/60 Hz
Functions	Speed control, no-contact instantaneous stop, no-contact bidirectional rotation, no-contact rotation speed switching, slow start/slow down, rotational speed display (7-segment LED), electromagnetic brake and electronic brake interlocking, electromagnetic brake free, operation stop in case of abnormality	
Control Power Supply	24 VDC±10 %, min. 0.1 A	
Control Input	Signal Input: CW/CCW/SPEED SELECT Photocoupler input External contact capacity 26.4 VDC 15 mA	
Variable Speed Range	50 Hz: 90~1400 r/min 60 Hz: 90~1700 r/min	
Speed Setting Methods	Digital Setting (Speed can be set in units of 10 r/min)	

General Specifications

Item	Motor	Speed Controller

Insulation Resistance		After rated operation at normal ambient temperature and humidity,the measurement between the coils and the case is 100 MΩ min. using a 500 VDC megger.	After rated operation at normal ambient temperature and humidity,the measurement value between the power supply input terminal and the signal input terminal is 100 MΩ min. using a 500 VDC megger.
Dielectric Strength		After rated operation at normal ambient temperature and humidity,no abnormalities were observed even with an application of 1.5 kV at 50 Hz or 60 Hz between the coils and the case for 1 minute.	No abnormality is observed even with an application of 1.5 kVAC at 50 Hz or 60 Hz between the power supply input terminal and the signal input terminal for 1 minute after rated operation at normal ambient temperature and humidity.
Temperature Rise		After no-load rated operation at normal ambient temperature and humidity, the motor surface temperature rise measured by the thermometer method is 60 °C max.	-
Operating Environment	Ambient Temperature	-10~+50°C (Non-freezing)	0~+40°C (Non-freezing)
	Ambient Humidity	85 % max. (Non-condensing)	
Thermal Class		120(E)	-

Note

Do not perform an insulation resistance measurement or a dielectric strength test while the motor and speed controller are connected.

Standards

Hazardous Substances

The product does not contain any substances (10 substances) exceeding the regulation values of the RoHS Directive (2011/65/EU, 2015/863/EU).

Cables and Accessories

Other Accessories

Classification	Product Name	Description	Dimensions	List Price	List Price	Shipping Date
CR Circuit for Surge Suppression	EPCR1201-2	250 VAC (120 Ω, 0.1 μF)	View	SGD 5	USD 4	3 Working Days
Capacitor Cap (Square Type) 10 Pieces	CHC4817AUL	This is an insulating cap for the capacitor terminals.	View	SGD 5	USD 4	35 Working Days