Eco-Tech® Alternators – 14V, 325A

Rev 12/30/2024

J-325-II, 14V, 325A, J-Mount
P-325 -II, 14V, 325A, P-Mount

Feature and Benefits

- Designed for vehicles that spend significant operating time at engine idle
- Output current at idle is two and one-half times the output of the similar size alternators
- Typical applications are fire, ambulance, shuttle bus, utility trucks, and other high-amps vehicles
- Permanent magnet and wound rotor design for high output and power density
- Heavy duty bearings for a long alternator lifetime
- Regulator over-voltage protection
- Regulator short-circuit protection
- Regulator load dump protection
- Rectifier with avalanche diodes

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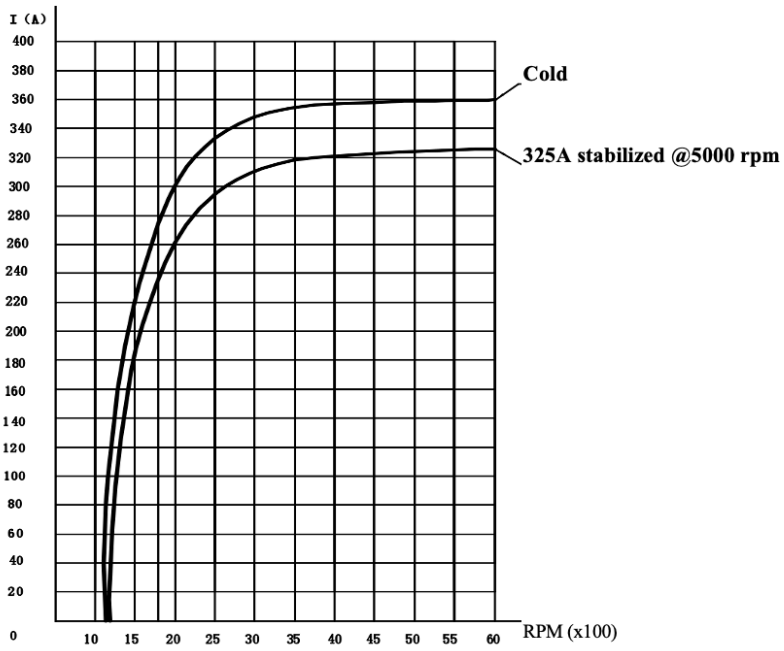
Output Performance



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Specifications

1. Rated Current at 5,000 RPM 23 degrees C: 325 amps
2. Rated Current at idle 1,800 RPM 23 degrees C: 240 amps
3. Efficiency at 1,800 RPM: 80%
4. Ambient temperature operating range: -40°C to 105°C (-40°F to 221°F)
5. Regulated voltage: 14.2V±.2V

*The regulator contains a temperature compensation feature which lowers the set point as temperature rises.

6. Normal maximum operating RPM is: 6000 with intermittent maximum of 8000
7. The rectifier uses avalanche diodes
8. Alternator weight: 28lbs
9. Package weight: 30lbs

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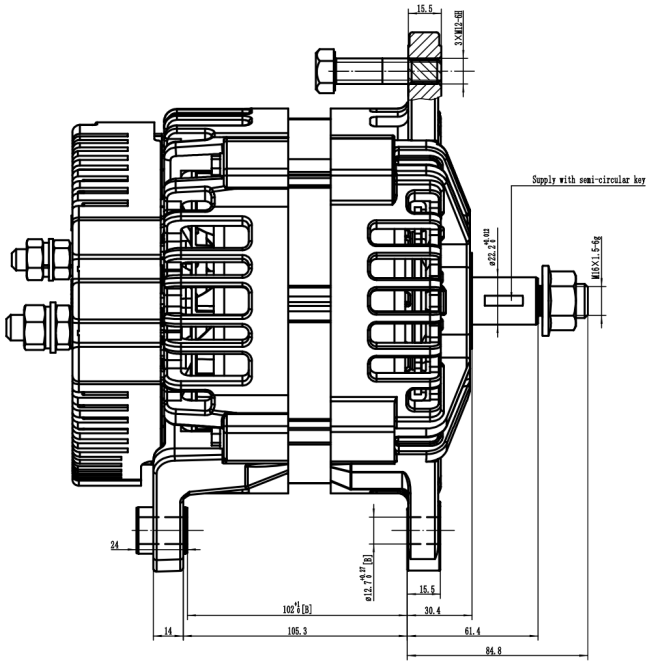
OVERALL DIMENSIONS

J-MOUNT



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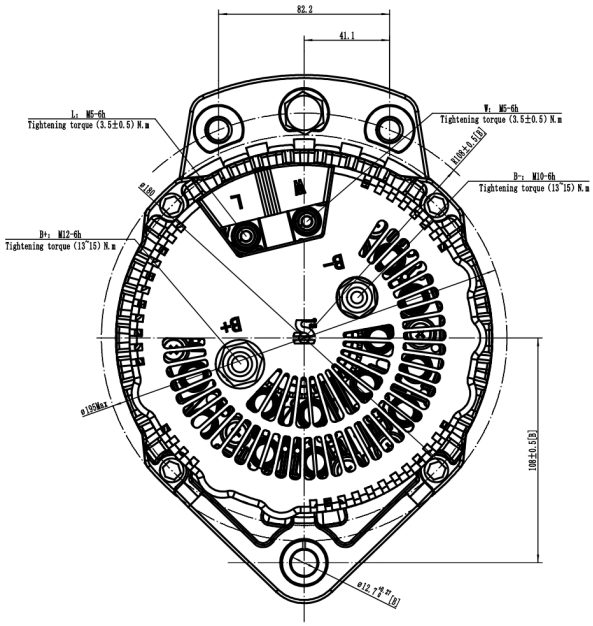

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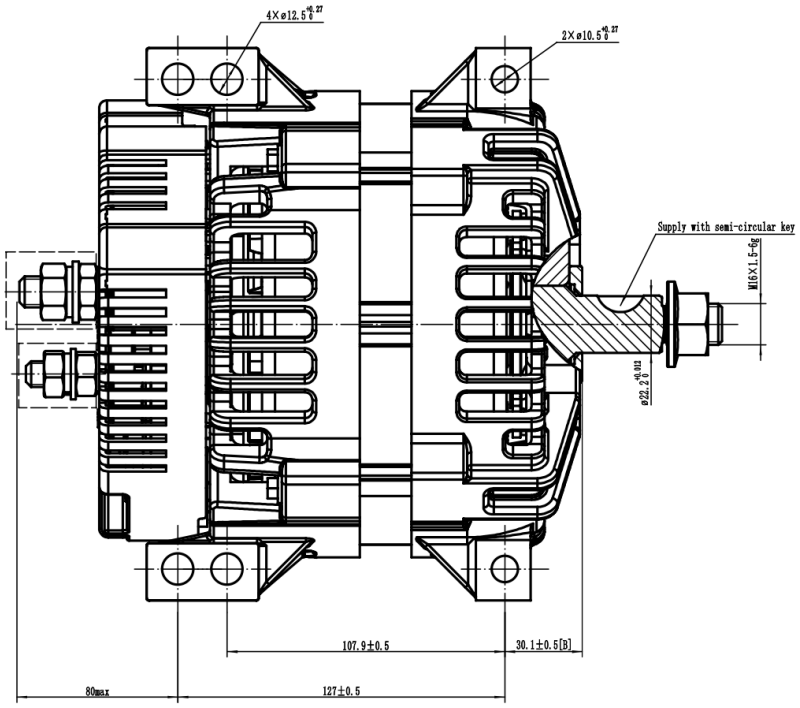
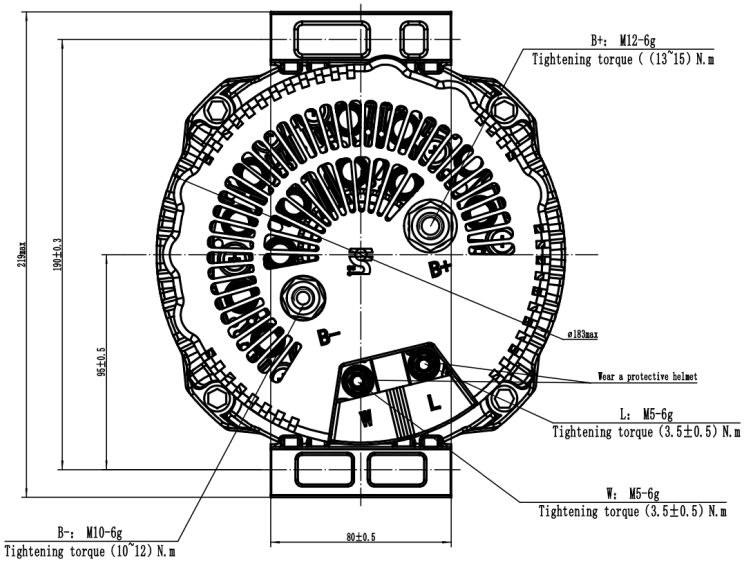
OVERALL DIMENSIONS

P-MOUNT





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Installation Instructions and requirements

1. Ambient temperature operating range: -40°C to 105°C (-40°F to 221°F) 2. Negative pole (B-) of the alternator must be grounded
3. Rotation is clockwise when viewed from the drive end.
4. To avoid damaging the regulator, a battery is required to be in the circuit.
5. When connecting pole W to a tachometer, note that there are 6 poles and f=pn/60
6. Regulated voltage: 14.2V±.2V
   a. The regulator contains a temperature compensation feature which lowers the set point as temperature rises.
7. Tightening of the pulley nut should be between 100 and 120 Nm
8. Normal maximum operating RPM is 6000 with intermittent maximum of 8000
9. If the no charge indicator light is absent from installation then a resistor must be install between B+ and W. See installation instructions
10. If welding on a vehicle application all of the alternator's external connections must be disconnected.
11. After installation the alternator should be rotated to ensure that there are no abnormal noises.
12. For isolated ground applications, the negative terminal connection is essential and must be maintained.

Electrical schematic diagram