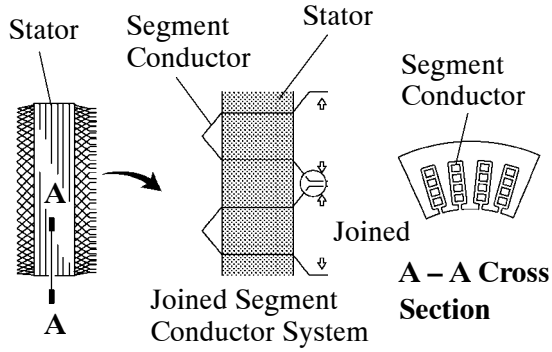
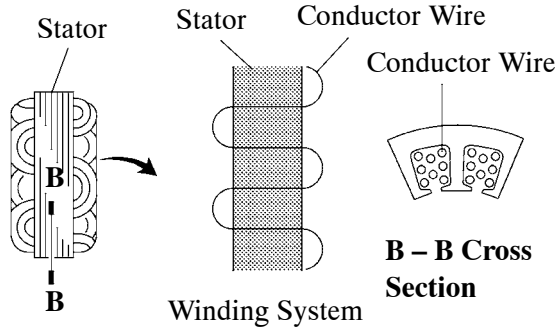
■CHARGING SYSTEM

1. General

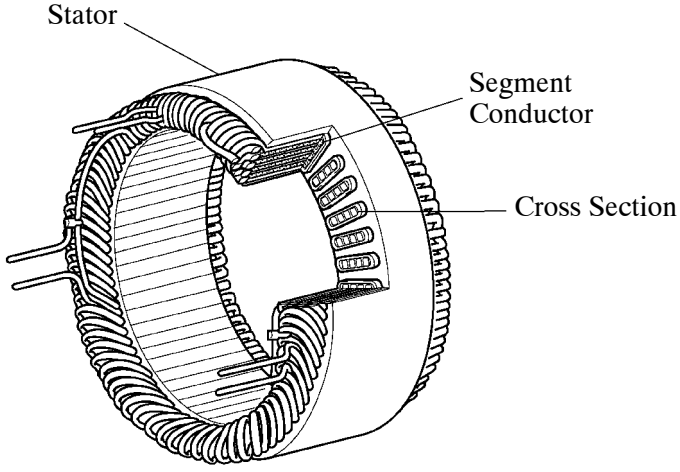
- A compact and lightweight segment conductor type alternator that generates high amperage output in a highly efficient manner is provided as standard equipment.
- This alternator has a joined segment conductor system in which multiple segment conductors are welded together to form the stator. Compared to the conventional winding system, the electrical resistance is reduced due to the shape of the segment conductors, and their arrangement helps to make the alternator compact.



Segment Conductor Type Alternator



Conventional Type Alternator



Stator of Segment Conductor Type Alternator

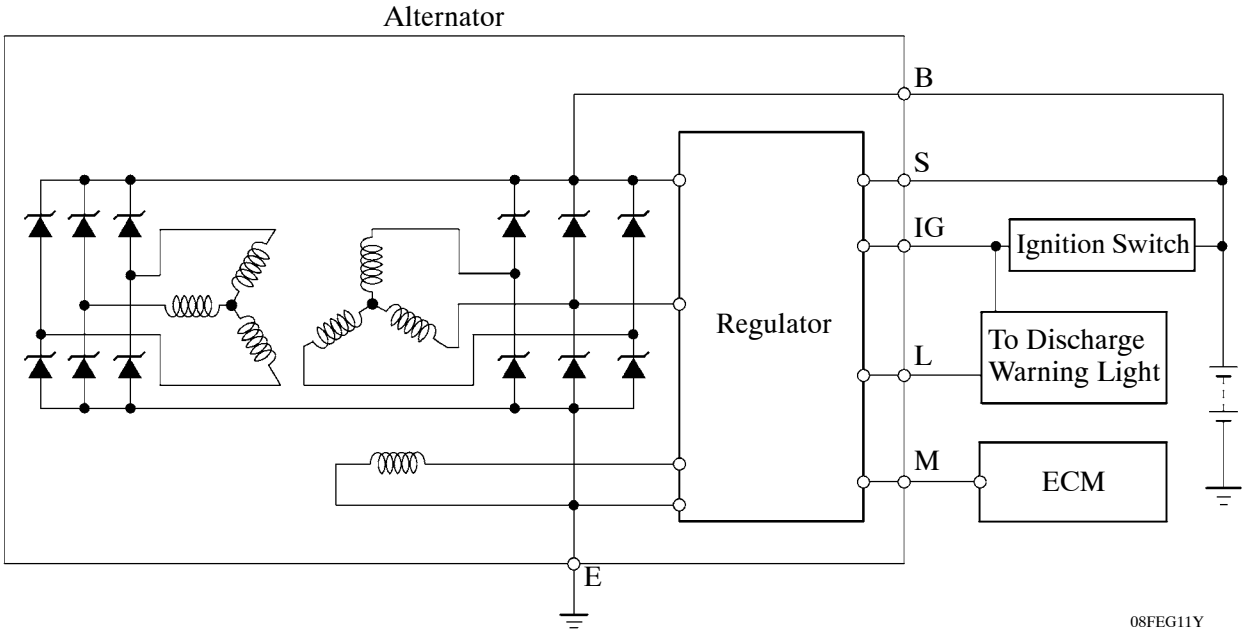
▶ Specifications ◀

Type	SC2*1	SC6L*2
Rated Voltage	12 V	←
Rated Output	150 A	180 A
Initial Output Starting Speed	Max. 1500 rpm	Max. 1000 rpm

*1: SR5 grade

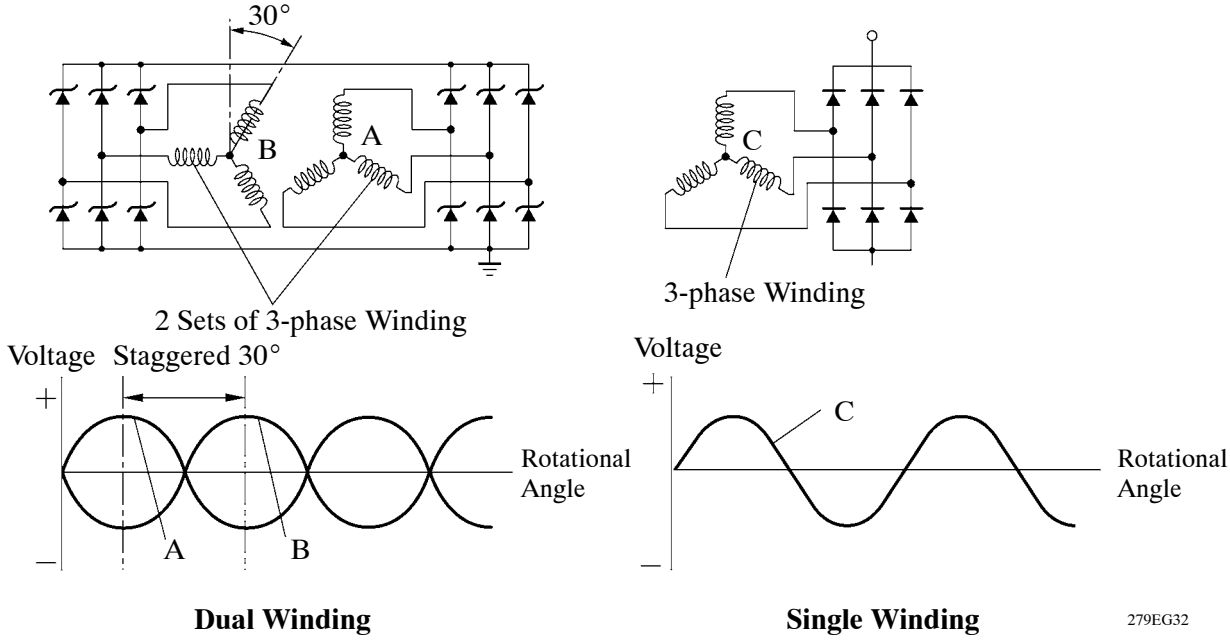
*2: Limited grade and Platinum grade

▶ Wiring Diagram ◀



2. Dual Winding System

A dual winding system is used. This system consists of 2 sets of 3-phase windings whose phases are staggered 30°. This system results in the reduction of both electrical noises (ripple and spike) and magnetic noise (a hum heard as alternator load is increased). This system significantly suppresses noise at the source (alternator). Since the waves that the respective windings generate have opposite polarities, magnetic noise is reduced. However, the electrical power generated does not cancel itself out due to the use of separate rectifiers. The opposite polarities generated are shown below:



Dual Winding **Single Winding**