



### MAIN TECHNICAL DATA

Type	AAT
Nominal voltage	28V
Nominal current	75A-140A
Stator diameter	165 mm
Weight	~9.6 kg without pulley for 75A ~14.5 kg without pulley for 140A
Max. speed	9,000 RPM
Regulator	Built-in or separate Monofunction Hybrid technology
Pulleys and drive end brackets	Different types according to customers' requirements
Terminals	Screw and/or blade terminal
Drive end bearings	Type 62306-2RS
Rear end bearings	Type NU 202
Power diodes	Press fit Zener diodes
Protection of the slip rings and brushes	Protected against ingress of solid foreign matter and powerful water jets (IP 56)
Ambient temperature	From - 40°C to + 110°C

### APPLICATIONS

These alternators provide very high output power and are designed to be built into applications requiring high consumption of electrical energy. They were all initially designed for installation on diesel engines in buses and some special purpose applications.

### DESIGN

The alternators are three-phase, 16-pole synchronous generators, self-excited by a rotor consisting of claw poles using protected slip rings. They have a built-in rectifier and regulator and are cooled by an external fan. Design solutions and anticorrosion coatings as well as specially chosen bearings ensure long life without maintenance under normal operating conditions. For operation in extremely hard conditions - temperature, dust, water - it is advisable to ventilate the alternator using a special protection cover on the rear.

### Cooling

The alternator has a built-in fan with axial - radial blades that allow rotation in both directions. It is also possible to use a low-noise fan with specially shaped blades.

### Stator

A three-phase stator winding with a high filling factor of the slots and a special method of assembly provide better cooling and high output power.

### Rotor

The rotor field winding provides excitation of the alternator through slip rings. With regard to the installation requirements, slip rings and brushes are protected in an enclosed environment sealed against dust and water.

### Rectifier

The rectifier stack is a three-phase bridge circuit with built-in press fit power and excitation diodes. Press fit Zener diodes are used to protect alternator and loads on the vehicle against overvoltages.

### Regulator

The regulator together with the brush holder is built into the rear end bracket of the alternator. Regulators are produced in thick-film hybrid technology. Monofunction versions of the regulator only are available.

### Brackets - Bearings - Pulleys

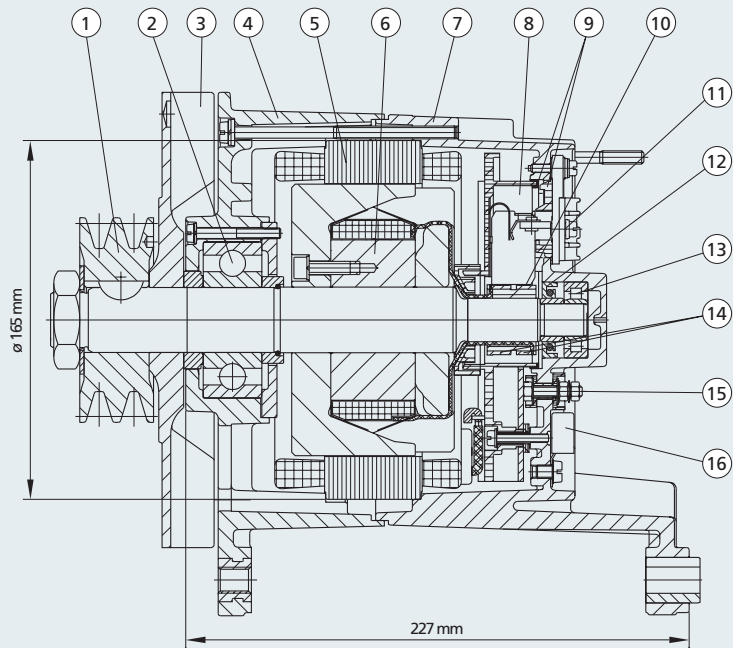
The high quality specially chosen bearings provide long service free life.

### Electrical terminals

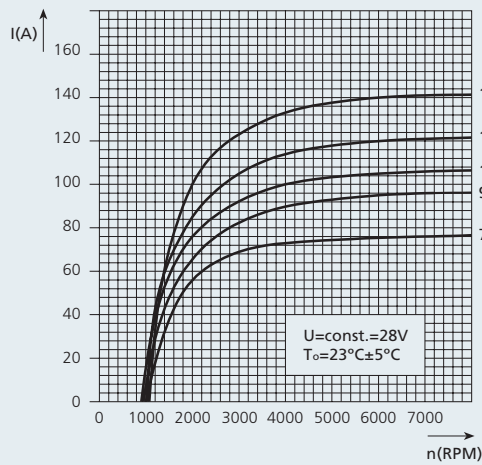
Electrical terminals are according to the customers' requirements.

CROSS SECTION

- Pos 1 ... Pulley
- Pos 2 ... Drive end bearing
- Pos 3 ... Fan
- Pos 4 ... Drive end bracket
- Pos 5 ... Stator
- Pos 6 ... Rotor
- Pos 7 ... Rear bracket
- Pos 8 ... Rectifier
- Pos 9 ... Rubber gaskets
- Pos 10 ... Brush
- Pos 11 ... Brush holder with voltage regulator
- Pos 12 ... Oil seal
- Pos 13 ... Rear bearing
- Pos 14 ... Slip rings
- Pos 15 ... Terminals D+, B+, W
- Pos 16 ... Capacitor



CHARACTERISTIC



	n <sub>0</sub> (RPM)	I (A) at 1800 RPM	I (A) at 6000 RPM
28V 75A	1000	50	75
28V 95A	950	60	95
28V 105A	900	70	105
28V 120A	1020	78	120
28V 140A	1080	90	140

CONNECTION DIAGRAM

