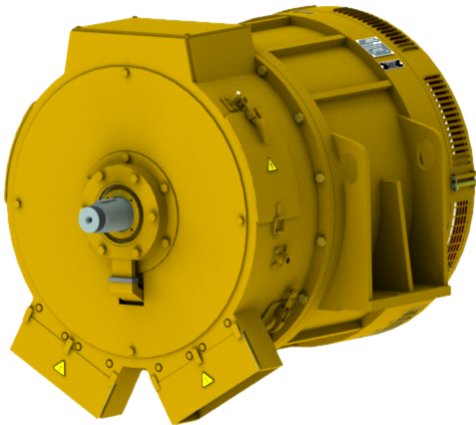




**TRACTION SYNCHRONOUS ALTERNATOR GSN-500/8 (GSN-500/8-A – modification on design)**  
TU 16-99 GPIN.528354.001 TU (Technical condition)



The alternator is intended to be used for feeding electric motors of BelAZ dump trucks with a weight capacity up to 180 t.  
Types of climatic version – NF2, T2 acc. to GOST 15150-69.  
Operation category according to the affection by the mechanical factors of the outdoor environment acc. to M28 GOST 30631-99.  
Heat resistance of the insulating materials as for the alternator stator windings corresponds to "H" class, for rotor winding – "F" class, for contact rings – "B" class acc. to GOST 8865-93.  
The direction of rotation of the alternator – left (from contact rings).  
The direction of rotation of the alternator – left (from contact rings).  
Excitement of the alternator – from an auxiliary winding (excitement from the third harmonica of the field in an air gap).  
Category of the alternator relating to assembly type – M9809 acc. to GOST 2479-79, with the flange end of a shaft on D-end and taper lock

end of a shaft on N-end.

Alternator IP category – IPW 21 acc. to GOST IEC 60034-5-2011 in case of joint operation with diesel plant.

Alternator cooling system – IC11 acc. to GOST R MEK 60034-6-2012.

The alternator can be operated at the heights of up to 3200 m above sea level.

Basic technical specifications

Parameter	Value	
	NF2	T2
Rated capacity, kW	800	720
Nominal voltage (line voltage), V		
– min	490*	490*
– max	700*	700*
Current, A		
– min	2x350	2x315
– max	2x510	4x459
Rotating speed, sec <sup>-1</sup> (rpm)	25 (1500) / 31.67 (1900)**	
Current frequency, Hz	100 / 126.67	
Excitation current, A	210***	
Efficiency, %, above	95	
Duty type acc. to GOST IEC 60034-1-2014	S1 (continuous)	
Weight, kg, max	2900	

Remarks:

\*Voltage on rectifier conclusions on a direct current: min – 2x610 V, max – 2x900 V.

\*\*Depending on the rotating speed of the diesel engine.

\*\*\*The excitement current corresponding to a point of the duty type S1 – max.

The generator shall be admitted for operation with wattage increase up to 1000 (NF2) / 900 (T2) kW:

1) In duty type S6 60% at rectifier leads for direct current equal to 2 x 1000V and rotation frequency of 25 sec.<sup>-1</sup> (1500 rpm). Duration of operation – 40 minutes.

2) In a continuous running mode with the parameters as follows:

- rotation frequency, sec<sup>-1</sup> (rpm)                      31.67 (1900);
- voltage (line voltage), V                                600 / 780;
- current, A    2x565 / 2x390 (NF2); 2x509 / 2x351 (T2).

