



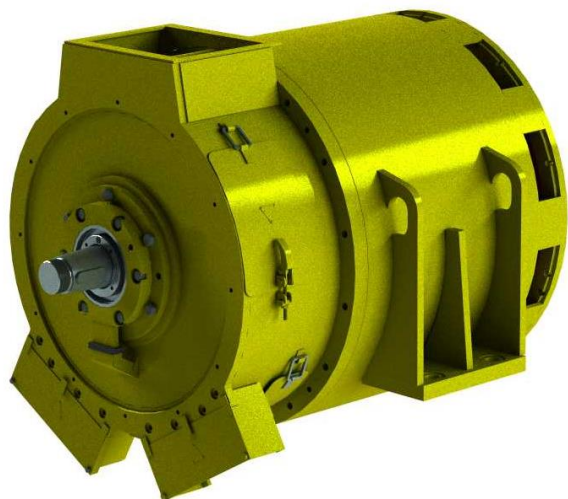
CREATION

ENERGY

PARTNERSHIP

### TRACTION SYNCHRONOUS ALTERNATOR GSN 700/8

GPIN.528254.002 TU (Technical condition)



The alternator is intended to be used for feeding electric motors of BelAZ dump trucks with a weight capacity up to 90 t.

Types of climatic version - NF2 acc. to GOST 15150.

Operation category according to the affection by the mechanical factors of the outdoor environment M28 acc. to GOST 30631.

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.

The direction of rotation of the alternator – left (from contact rings).

Excitement of the alternator – from an auxiliary winding from the stator slots (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, with the flange end of a shaft on D-end and taper lock end of a shaft on N-end.

Alternator IP category – IPW21 acc. to GOST IEC 60034-5 in case of joint operation with diesel plant.

Alternator cooling system - IC11 acc. to GOST R MEK 60034.6.

The alternator can be operated at the heights of up to 1200 m above sea level.

#### Basic technical specifications

Parameter	Значение
Rated capacity, kW	700
Nominal voltage (network), V :	
– min	510
– max	850
Current, A :	
– min	546
– max	870
Rotating speed, $\text{sec}^{-1}$ (rpm)	30 (1800) / 31,67 (1900)
Current frequency, Hz	120 / 126,67
Excitation current, A	210
Efficiency, %, above	94,8/94,6
Duty type acc. to GOST IEC 60034-1	S1 (continuous)
Weight, kg	2500

The alternator shall be admitted for operation with wattage increase up to 800 kW in duty type S6 60%.

The alternator without damages and residual deformations maintains within 2 min. emergency increase in frequency of rotation to  $38 \text{ sec}^{-1}$  (2280 rpm).

