

# Synchronous AC Alternator

This synchronous AC alternator is designed as a power generating unit for supplying electricity. It features a drip-proof construction, self-excitation, and constant voltage regulation.



## Overview

### ST Series Single-Phase AC Synchronous Generator

The ST series generators are versatile power units designed for small-capacity electricity supply, ideal for lighting on ships and powering household devices in remote towns or villages. Featuring a drip-proof, salient pole rotating field with self-excitation, these alternators ensure a constant voltage supply and excellent dynamic performance. Their robust construction follows IEC standards, making them suitable for international markets including Europe, America, and Australia.

## Key Performance Metrics

### Performance Highlights

**1500 RPM**

Rated Speed

**1 cos $\phi$**

Power Factor

**50 Hz**

Frequency

**4**

Pole Number

## Technical Specifications

### Electrical Output Models

Model	Output (kW)	Voltage (V) Series/Parallel	Current (A) Series/Parallel
ST-1	1	230 / 115	8.7 / 4.35
ST-2	2	230 / 115	17.4 / 8.7
ST-3	3	230 / 115	26 / 13
ST-5	5	230 / 115	43.5 / 21.8
ST-7.5	7.5	230 / 115	65.2 / 32.6
ST-10	10	230 / 115	87 / 43.5
ST-15	15	230 / 115	130 / 65.3
ST-20	20	230 / 115	174 / 87

## Design & Construction

### Generator Structure

- Drip-proof design
- Salient pole rotating field
- Self-excitation system
- Constant voltage type
- Harmonic wave excitation

### Insulation Standards

Class E Stator, Class B Stator, Class B Rotor

## Operational Requirements

### Coupling Options

- Direct coupling with prime mover
- V-belt connection

### Duty Cycle

Continuous duty

## Compliance

### International Standards

IEC Standard • Model B End Covers