

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 ϕ

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