

WT-SC625 625KVA Technical Data sheet



DIESEL GENERATOR



Gensets model	Prime Power (50hz)	Standby Power (50hz)	Engine Model
WT-SC625	563KVA/450KW	625KVA/500KW	SC27G755D2

General Features:

ΔSDEC diesel engine made by SDEC China, with radiator at ambient temperature 40°C, fans are driven by belt, with safety guard

ΔWintpower Alternator with single bearing alternator; IP Protection, Insulation class H

ΔAir Filter, Oil filter and fuel filter fitted

ΔLube-oil drain valve fitted

ΔElectric Starter Charge motor 24 VD.C

Δ Battery Charger

ΔOptional soundproof and weatherproof canopy

Δ3 pole MCCB Delixi breaker/Optional ABB

ΔOperation & Maintenance manual

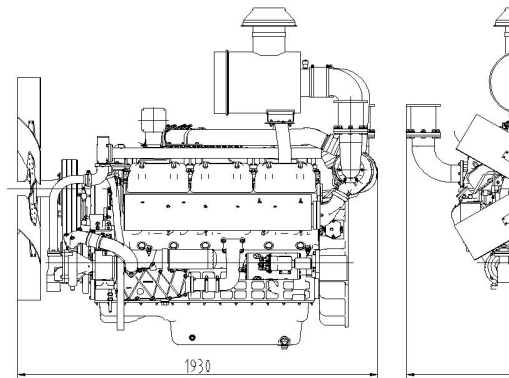
ΔAccessory: A suit of ripple flex exhaust pipe; exhaust siphon, muffler; and a set of spare parts & Tools

Δ The structure is built-up, the built-in residential muffler makes the noise lower.

ΔExhaust guide plate and air channel for air intake&noise reduction are mounted within soundproof canopies.

ΔOutside Emergency Stop Button.

Δ 8 Hours Base Fuel tank is equipped, With lifting ear and forklift slots. Outside fuel inlet/return, outside lub oil and coolant drain.



Voltage Regulation:

Voltage regulation maintained within $\pm 0.5\%$

Between 0.8 and 1.0 lagging and unity

From no load to full load

At speed droop variation upto 4.5%

Frequency Adjustable Ratio:

Change load from 0-100%, within 1.0% (electric speed regulator), within 4.5% (mechanical speed regulator)

Frequency Undulation:

load from 0-100%, frequency undulation within 0.25%

No load wire volts max undulation ration\ within 1.8%

Three Phrase balanced load in the order of 5%

Note:

1)The engine performance is as per GB/T2820/Ratings are based on GB/T1147.1.

2) Prime Power (PRP): Prime power is available for continuous 12-hours running, in accordance with 10% overload capability is available for a period of 1 hour within a 12-hours period of operation. Standby (ESP): The standby power rating is applicable for supplying emergency power. No overload, soundproof under rating power.

3) Standby power is available in the event of a utility power outage or under test conditions for up to 2 per year. The permissible average power output over 24 hours of operation shall not exceed 80% of the rating.

Sales Promise:

(1) All the gensets are tested on load before they leave factory, various kinds of functions are tested and provided.

(2) Warranty for all of our gensets and accessories is according to our standard conditions since test 1500 running hours accumulatively, subject to the earlier, kindly refer to our service terms.

Engine Technical Data Sheet

◎ SPECIFICATIONS		◎ FUEL CONSUMPTION	
○ Engine Model	SC27G755D2	○ Power	110%
○ Engine Type	V-type, 4 strokes, water-cooled Turbo charged air-to-air intercooled	25%	
○ Combustion type	Direct injection	50%	
○ Cylinder Type	Wet liner	75%	
○ Number of cylinders	12	100%	
○ Bore × stroke	135(5.32) × 155(6.1) mm(in.)	110%	
○ Displacement	26.6(1623) lit.(in ³)		◎ FUEL SYSTEM
○ Compression ratio	16:01	○ Injection pump	Yijie in-line
○ Firing order	1-12-5-8-3-10-6-7-2-11-4-9	○ Governor	Electrical
○ Injection timing	11.5° BTDC	○ Feed pump	Mechanical
○ Dry weight	Approx. 2080kg (4585 lb)	○ Injection nozzle	Multi-hole
○ Dimension	1930×1686×1872mm	○ Opening pressure	240kg/cm ²
○ (L×W×H)	(76×66.4×75.8 in.)	○ Fuel filter	Full flow, 100μm
○ Rotation	Counter clockwise viewed from Flywheel	○ Used fuel	Diesel
○ Fly wheel housing	SAE NO. 0		
○ Fly wheel	SAE NO.18		

◎ MECHANISM		◎ LUBRICATION SYSTEM	
○ Type	Over head valve	○ Lub. Method	Fully forced pump
○ Number of valve	Intake 1, exhaust 1 per cylinder	○ Oil pump	Gear type drive
○ Valve lashes at cold	Intake 0.325mm (0.0128 in.)	○ Oil filter	Full flow, 100μm
○ Valve lashes at cold	Exhaust 0.375mm (0.0148 in.)	○ Oil pan capacity	High level 65 l
	◎ VALVE TIMING	○ Oil pan capacity	Low level 55 l

	Opening	Close	◦ Angularity limit	Front dc
◦ Intake valve	20 deg. BTDC	48 deg. ABDC	◦ Angularity limit	Front t
◦ Exhaust valve	48 deg. BBDC	20 deg. ATDC	◦ Angularity limit	Side to s

◎ COOLING SYSTEM

◎ ENGINEERING

◦ Cooling method	Fresh water forced circulation	◦ Water flow	740 liters/m
◦ Water capacity (engine only)	48 liters (12.7 gal.)	◦ Heat rejection to coolant	68 kcal/se
◦ Pressure system	Max. 0.5 kg/cm2 (7.11 psi)	◦ Air flow	36 m3/mir
◦ Water pump	Centrifugal type driven by belt	◦ Exhaust gas flow	91.8 m3/mi
◦ Water pump Capacity	740 liters (195.36 gal.)/min	◦ Exhaust gas temp. restrictions	600 °C (
◦ Thermostat	Wax–pellet type	◦ Intake system	3 kP
◦ Thermostat	Opening temp. 77°C	◦ Intake system	6 kP
◦ Thermostat	Full open temp. 90°C	◦ Exhaust system	6 kP
◦ Cooling fan	Blower type,iron 1220 mm diameter, 6 blades	◦ Max. permissible altitude	2,4
◦ Cooling air flow	15.92 m³/s		

◎ ELECTRICAL SYSTEM

◎ CONVERSION

◦ Charging generator	28V×55A	in. = mm × 0.0394	lb/ft
◦ Voltage regulator	Built-in type IC regulator	PS = kW × 1.3596	U.S.
◦ Starting motor	24V×11kW	psi = kg/cm2 × 14.2233	kW
◦ Battery Voltage	24V	in3 = lit. × 61.02	lb/PS.h
◦ Battery Capacity	200 AH	in. = mm × 0.0394	lb/ft
		hp = PS × 0.98635	cfm =
		lb = kg × 2.20462	

Alternator Technical data

Wintpower

Δ Bruxhless,self exciting	Exciter
Δ class "H" insulation	Cooling Fan
Δ Standard degree of protection is IP23	Bearing
Δ self regulating	Windings
Δ With fan cooling	Connection Type
Δ Resist Humid grease	Insulation Type
Δ AC excitation,roating rectification tube	Pitch
Δ Stator grease insulation covered	Amortisseur Winding
Δ Rotator and exciation high polymer,Resist the corruption of oil and acid	Voltage Regulator
	Voltage Regulator NL-FL

Δ Rotator ballance is in accordance with BS5625 standard 12.5

Δ High-quality lubrication sealed long-time bearing
Δ Rotator sillicon steel close tight

Underspeed Protection
Overexcitation Protection
TIF (1960 Weightings)
Exciation System

Control Panel -Comap AMF20

The base mounted control panel in a vibration isolated sheet steel enclosure.The control pa

a) Instruments:Analogue Volmeter,Hours Run Meter.Water pressure Meter.

b) Controls:Emergency Stop Pushbutton,Volmeter Phase Selector Switch.

c) Control module:Standard collocation is Comap AMF20



Control module Comap AMF 20

Main Features:

- Δ Automatic or manual start/stop of th
- Δ 3 phase AMF function
- Δ configuration analog inputs
- Δ Configurable programmable binary
- Δ Warm-up and cooling functions
- Δ Battery voltage,engine speed meas
- Δ Modem communication support(IL-
- Δ RS232 interface
- Δ Support of engines equipped with (J1939 interface)
- Δ Graphic back-lit LCD display
- Δ Comprehensive diagnostic messag codes;KWP2000 Support
- Δ 6 LED indicators
- Δ Sealed to IP65
- Δ Generator C.B and Mains C.B contr return timer

Optional SYK1 (SuYang) Automatic Transfer Switch Without/With Cabinet

The Automatic Transfer Switch Without/With Cabinet Main Function as follows:

ATS can automatically transfer load between the main power and the emergency power(ger without operator.When the main power fails or voltage drops below 80% of normal voltage,1 emergency generating set after a preset time 0-10 seconds(adjustable),and transfer the loa power(generating set).Contrarily, when the main power revovers normal,the ATS will transf emergency power(generating set) to the main power, and then stop the emergency power(

Optional 1-ATS without Cabinet (Can be installed on the control panel Directly)

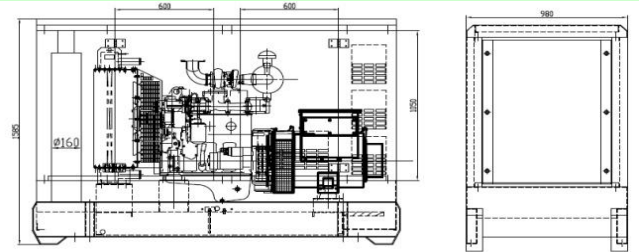
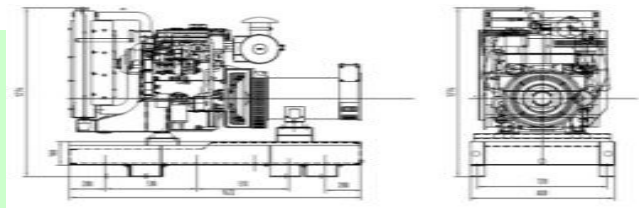
- Δ Small Size/Operator conveniently
- Δ ATS 63A-1100A with Economical Cost

Optional 2-ATS With Cabinet

- ΔMains on lamp
- ΔMains on load lamp
- ΔGensets on lamp
- ΔGensets on load lamp
- ΔMode Transfer Switchr
- ΔEmergency Stop
- ΔATS 63A-3200A



Sound Attenuated Enclosure/Option



Robust Corrosion Resistant

- Δ Black finish stainless steel lock and handle
- Δ body made from steel component

Excellent Access for Maintenance

- Δ two large doors on each side
- Δ radiator fill access plate
- Δ lube oil and cooling water drains the enclosure

Security and Safety

- Δ control panel viewing window in door
- Δ emergency stop push button (red)
- Δ cooling fan and battery charging fan
- Δ exhaust silencing system totally enclosed

Dimensions and Weights-Open Type

Length (L) mm	Width (W) mm	Height (H) mm	Dry kg	Wet kg
3500	3550	1687	2063	5000

Dimensions and Weights-Canopy Type

Length (L) mm	Width (W) mm	Height (H) mm	Dry kg	Wet kg
5000	5000	1900	2400	5100

Sound Attenuated (SA) Sound Pressure Levels (dBA)

7m (23ft)		1m (3ft)	
75% Load	100% Load	75% Load	100% Load
76.9	77.8	77.9	79.7



General Information

Wiring Diagram And Testing

A full set of operation and maintenance manuals and circuit wiring diagrams.

Ambient temperature: -25°C to 45°C. The coolant heater is needed when the temperature is below 5°C

Humidity: Less than 80%.

Inspection items

Protection devices working test

Starting ability in normal temperature

50% rated power load moment capability

Voltage deviation and speed variation: 0%, 25%, 50%,

The customer could also choose the color which the manufacturer offers

Offer a range of optional features to tailor our generator sets to meet your power needs.

Options

50°C High Temperature ● Permanent Magnet Gen ● Auto Control Panel ● Daily Fuel Tank Radiator -erator (PMG Switch)(ATS) ● Base Fuel Tank

Water Separator ● Anti Condensation Heater ● Trailer Type

Water Jacket Heater ● Drop CT(For Paralleling) ● Manual Paralleling System ● Automatic Input System

Oil Heater ● Auto Paralleling System Fuel

Oil Discharging Pump ● Electronic Indicator for ● Maintenance Tools Fuel Level ● Accessory Bag

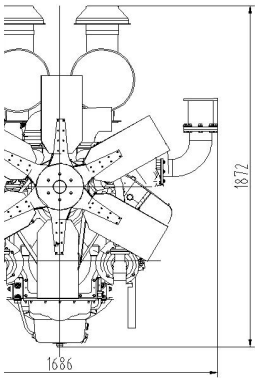


On Your Side
JOGY CO., LTD.



Alternator Model

WT354G450



GB/T2820, ISO8528; A
dbly Power Rating
oof gensets only run

200 hours of operation
he standby power

. and test reports are

ting: 24 months or

PTION

it/hr

32.4

55.3

79.6

126

19.1

EM

ine "P" type

tric type

anical type

hole type

n2 (3414 psi)

cartridge type

el fuel oil

SYSTEM

ressure feed type

ren by crankshaft

cartridge type

liters (17.16 gal.)

liters (14.52 gal.)

own 25 deg.

up 35 deg.

side 35 deg.

DATA

in @1,500 rpm

c @1,500 rpm

n @1,500 rpm

in @1,500 rpm

@1,500 rpm

Pa initial

Pa final

Pa max.

000 m

TABLE

$t = N.m \times 0.737$

gal = lit. $\times 0.264$

= 0.2388 kcal/s

= g/kW.h $\times 0.00162$

$t = N.m \times 0.737$

= m³/min $\times 35.336$

Brushless

Cast alloy aluminum

Single,double shielded

100% copper

Reconnectable

Class H

2/3

Full

AVR SX460

$\pm 0.5\%$

**Standard
IP23
<50
SHUNT**

Panel is equipped as

to the genset

for inputs and outputs

Measurement
(AMF25 only)

Electronic Control Unit

Models; SPN/FMI

Control with feedback and

(generating set)
When the ATS will start
to emergency
transfer the load from the
generating set.)



t Construction

nd hinges
is treated with

aintenance

pipes to exterior of

ety

a lockable access

d)mounted on
alternator fully
enclosed for



3) ● Auto Transfer

m For

