

# WINTPOWER®



## WT-SC275 275KVA Technical Data sheet



**WINTPOWER**



ISO  
9001  
QUALITY  
ASSURANCE

Professional Genset Manufacture  
FUZHOU WINTPOWER TECHNOLC

# DIESEL GENERATOR



Gensets model	Prime Power (50hz)	Standby Power (50hz)	Engine Model
<b>WT-SC275</b>	<b>250KVA/200KW</b>	<b>275KVA/220KW</b>	<b>SC10E380D2</b>

## General Features:

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

ΔTimeeps Alternator with single bearing alternator; IP23 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

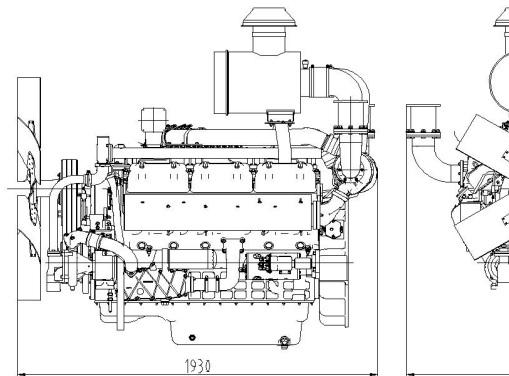
ΔAccessory: A suit of ripple flex exhaust pipe; exhaust siphon, muffler; and a set of spare parts & Tools

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 tested 1500 running hours accumulatively, subject to the earlier, kindly refer to our service terms.

## Engine Technical Data Sheet

◎ SPECIFICATIONS		◎ FUEL CONSUMPTION	
○ Engine Model	SC10E380D2	○ Power	100%
○ Engine Type	In-line, 4 strokes, water-cooled 4 valves, Turbo charged Air-to-air intercooled	25%	
○ Combustion type	Direct injection	50%	
○ Cylinder Type	Wet liner	75%	
○ Number of cylinders	6	100%	
○ Bore × stroke	114(4.49) × 144(5.67) mm(in.)	110%	
○ Displacement	11.8(720) lit.(in <sup>3</sup> )		◎ FUEL SYSTEM
○ Compression ratio	17:01	○ Injection pump	Longkou in
○ Firing order	1-5-3-6-2-4	○ Governor	Elect
○ Injection timing	14° BTDC	○ Feed pump	Mecha
○ Dry weight	Approx. 840 kg (1852 lb)	○ Injection nozzle	Multi
○ Dimension	1787×918×1294 mm	○ Opening pressure	250 kg/cm <sup>2</sup>
○ (L×W×H)	(70.4×36.2×51 in.)	○ Fuel filter	Full flow, 4
○ Rotation	Counter clockwise viewed from Flywheel	○ Used fuel	Diese
○ Fly wheel housing	SAE NO.2		
○ Fly wheel	SAE NO.11.5		

◎ MECHANISM		◎ LUBRICATION SYSTEM	
○ Type	Over head valve	○ Lub. Method	Fully forced p
○ Number of valve	Intake 2, exhaust 2 per cylinder	○ Oil pump	Gear type driv
○ Valve lashes at cold	Intake 0.30mm (0.0118 in.)	○ Oil filter	Full flow, 4
○ Valve lashes at cold	Exhaust 0.55mm (0.0217 in.)	○ Oil pan capacity	High level 25
	◎ VALVE TIMING	○ Oil pan capacity	Low level 22

	Opening	Close	◦ Angularity limit	Front dc
◦ Intake valve	29.5 deg. BTDC	42.5 deg. ABDC	◦ Angularity limit	Front t
◦ Exhaust valve	69.5 deg. BBDC	34.5 deg. ATDC	◦ Angularity limit	Side to s

◎ COOLING SYSTEM

◎ ENGINEERING

◦ Cooling method	Fresh water forced circulation	◦ Water flow	200 liters/m
◦ Water capacity (engine only)	12 liters ( 3.17 gal.)	◦ Heat rejection to coolant	20.35 kcal/s
◦ Pressure system	Max. 0.5 kg/cm2 ( 7.11 psi)	◦ Air flow	18.6 m3/mi
◦ Water pump	Centrifugal type driven by belt	◦ Exhaust gas flow	41 m3/mir
◦ Water pump Capacity	200 liters ( 52.8 gal.)/min	◦ Exhaust gas temp. restrictions	600 °C (
◦ Thermostat	Wax–pellet type	◦ Intake system	3 kP
◦ Thermostat	Opening temp. 82°C	◦ Intake system	6 kP
◦ Thermostat	Full open temp. 93°C	◦ Exhaust system	6 kP
◦ Cooling fan	Blower type, plastic 762 mm diameter, 10 blades	◦ Max. permissible altitude	2,4
◦ Cooling air flow	6.97m³/s		

◎ ELECTRICAL SYSTEM

◎ CONVERSION

◦ Charging generator	28V×55A	in. = mm × 0.0394	lb/f
◦ Voltage regulator	Built-in type IC regulator	PS = kW × 1.3596	U.S.
◦ Starting motor	24V×7.5kW	psi = kg/cm2 × 14.2233	kW
◦ Battery Voltage	24V	in3 = lit. × 61.02	lb/PS.h
◦ Battery Capacity	180 AH	in. = mm × 0.0394	lb/f
		hp = PS × 0.98635	cfm =
		lb = kg × 2.20462	

Alternator Technical data

WINTPOWER WT314G220

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 silicon steel close tight

Underspeed Protection  
Overexcitation Protection  
TIF (1960 Weightings)  
Excitation System

### Control Panel - DEEPSEA DSE4620

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

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

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

c) Control module: Standard collocation is DEEPSEA DSE4620

#### Main Features:

- Δ Automatic or manual start/stop of the generator
- Δ 3 phase AMF function
- Δ configuration analog inputs
- Δ Configurable programmable binary outputs
- Δ Warm-up and cooling functions
- Δ Battery voltage, engine speed measurement
- Δ Modem communication support (IL-308)
- Δ RS232 interface
- Δ Support of engines equipped with J1939 interface
- Δ Graphic back-lit LCD display
- Δ Comprehensive diagnostic message codes; KWP2000 Support
- Δ 6 LED indicators
- Δ Sealed to IP65
- Δ Generator C.B and Mains C.B control return timer



DEEPSEA DSE4620 CONTROLLER

### 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 (generator) without operator. When the main power fails or voltage drops below 80% of normal voltage, the emergency generating set after a preset time 0-10 seconds (adjustable), and transfer the load power (generating set). Contrarily, when the main power recovers normal, the ATS will transfer the emergency power (generating set) to the main power, and then stop the emergency power (generating set).

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

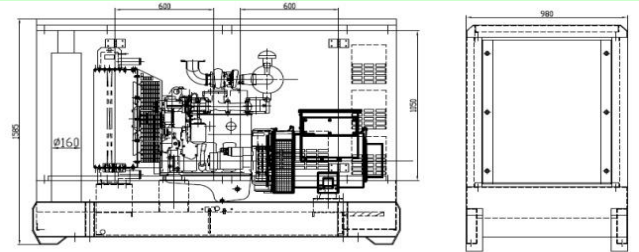
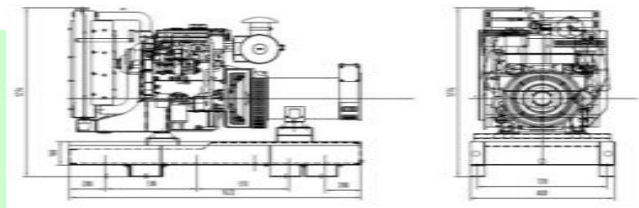
- Δ Small Size/Operator conveniently
- Δ ATS 63A-1100A with Economical Cost

#### Optional 2-ATS With Cabinet

- Δ Mains on lamp
- Δ Mains on load lamp
- Δ Gensets on lamp
- Δ Gensets on load lamp
- Δ Mode Transfer Switch
- Δ Emergency Stop
- Δ ATS 63A-3200A



### Sound Attenuated Enclosure/Option



### Robust Corrosion Resistant

- Δ Black finish stainless steel lock and
- 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 (remote)
- Δ cooling fan and battery charging
- Δ exhaust silencing system totally

### Dimensions and Weights-Open Type

Length (L)	Width (W)	Height (H)	Dry	Wet
mm	mm	mm	kg	kg
2700	1038	1680	2660	2710

### Dimensions and Weights-Canopy Type

Length (L)	Width (W)	Height (H)	Dry	Wet
mm	mm	mm	kg	kg
3560	1220	1815	2760	2810

### Sound Attenuated (SA) Sound Pressure Levels ( dBA)

7m (23ft)		1m (3ft)	
75%	100%	75%	100%
Load	Load	Load	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 Generator (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

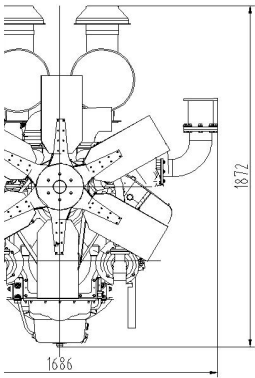


**On Your Side**  
**JOGY CO., LTD.**

**POWER**®

**Alternator Model**

**WT314G220**





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

200 hours of operation  
he standby power

. and test reports are

ting: 24 months or

## PTION

it/hr

15.8

32.1

49.4

60.8

67.5

EM

n-line "P" type

tric type

anical type

hole type

n2 (3556 psi)

cartridge type

el fuel oil

## SYSTEM

ressure feed type

ren by crankshaft

cartridge type

5 liters ( 6.6 gal.)

1 liters ( 5.8 gal.)

own 25 deg.

up 35 deg.

side 35 deg.

### DATA

in @1,500 rpm

ec @1,500 rpm

in @1,500 rpm

1 @1,500 rpm

@1,500 rpm

Pa initial

Pa final

Pa max.

000 m

### TABLE

$$t = N.m \times 0.737$$

$$gal = lit. \times 0.264$$

$$= 0.2388 \text{ kcal/s}$$

$$= g/kW.h \times 0.00162$$

$$t = N.m \times 0.737$$

$$: m^3/min \times 35.336$$



Brushless

Cast alloy aluminum

Single,double shielded

100% copper

Reconnectable

Class H

2/3

Full

AVR SX460

±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  
stop 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













