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
WT-SC275	250KVA/200KW	275KVA/220KW	SC9D340D2

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

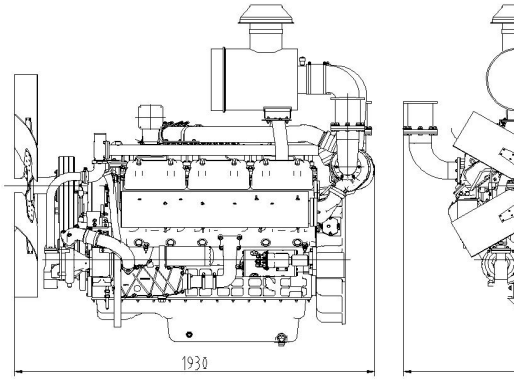
ΔElectric Starter Charge motor 24 VD.C

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 maintanined within ±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. Stan (ESP): The standby power rating is applicable for supplying emergency power. No overload, soundpr 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 t rating.

Sales Promise:

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

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

Engine Technical Data Sheet

◎ SPECIFICATIONS

⚬ Engine Model	SC9D340D2
⚬ Engine Type	In-line,4 strokes, water-cooled 4 valves, Turbo charged Air-to-air intercooled
⚬ Combustion type	Direct injection
⚬ Cylinder Type	Wet liner
⚬ Number of cylinders	6
⚬ Bore × stroke	114(4.49) × 144(5.67) mm(in.)
⚬ Displacement	8.82(538.2) lit.(in3)
⚬ Compression ratio	16.5:1
⚬ Firing order	1-5-3-6-2-4
⚬ Injection timing	8.5°BTDC
⚬ Dry weight	Approx.840 kg (1852 lb)
⚬ Dimension	1578×778×1290 mm
⚬ (L×W×H)	(62.2×30.7×50.8 in.)
⚬ Rotation	Counter clockwise viewed from Flywheel
⚬ Fly wheel housing	SAE NO.2
⚬ Fly wheel	SAE NO.11.5

◎ FUEL CONSUM

⚬ Power	I
25%	
50%	
75%	
100%	
110%	

◎ FUEL SYST

⚬ Injection pump	Longkou ir
⚬ Governor	Elec
⚬ Feed pump	Mecha
⚬ Injection nozzle	Multi
⚬ Opening pressure	250 kg/cr
⚬ Fuel filter	Full flow,
⚬ Used fuel	Diese

◎ MECHANISM

⚬ Type	Over head valve
⚬ Number of valve	Intake 2, exhaust 2 per cylinder
⚬ Valve lashes at cold	Intake 0.30mm (0.0118 in.)
⚬ Valve lashes at cold	Exhaust 0.55mm (0.0217 in.)

◎ VALVE TIMING

◎ LUBRICATION S

⚬ Lub. Method	Fully forced p
⚬ Oil pump	Gear type driv
⚬ Oil filter	Full flow,
⚬ Oil pan capacity	High level 25
⚬ 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 u
⚬ 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 kI
⚬ Thermostat	Full open temp. 93°C	⚬ Exhaust system	6 kP
⚬ Cooling fan	Blower type, plastic 762 mm diameter, 10 blades	⚬ Max. permissible altitude	2,(
⚬ 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 WT274G200

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 - DEEPSEA DSE7220

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 DEEPSEA DSE7320

DEEPSEA DSE7320 CONTROLLER

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

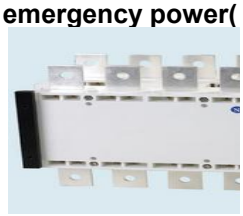
The Automatic Transfer Switch Without/With Cabinet Main Function as follows:

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,t emergency generating set after a preset time 0-10 seconds(adjustable),and transfer the loac power(generating set).Contrarily, when the main power revovers normal,the ATS will transf emergecncy 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

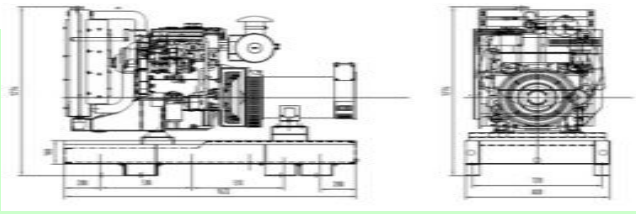
ΔGensets on load lamp

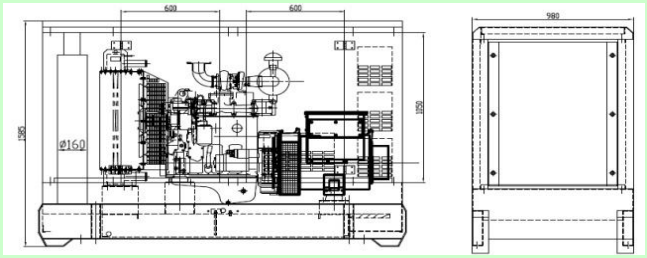
ΔMode Transfer Switchr

ΔEmergency Stop

ΔATS 63A-3200A

Sound Attenuated Enclosure/Option





Robust Corrosion Resustan

Δ Black finish stainless stell lock a

Δbody made from steelcomponent

Excellent Access for Ma

Δtwo large doors on each side

Δradiator fill access plate

Δlube oil and cooling water drains the enclosure

Security and Saf

Δcontrol panel viewing window in door

Δemergency stop push buttom (re

Δcooling fan and battery charging

Δexhaust 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% 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℃ to 45℃.The coolant heater is needed when the temperature is below 5℃

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 Syste

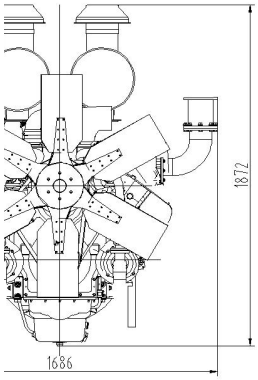
Oil Heater ● Auto Paralleling System Fuel

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

On Your Side
)GY CO., LTD.

POWER®

Alternator Model
WT274G200



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

IPTION

it/hr

14.7

27.3

40.8

54.1

59.6

TEM

n-line “P” type

tric type

nical type

hole type

n2 (3556 psi)

cartridge type

el fuel oil

SYSTEM

ressure feed type

ven by crankshaft

cartridge type

5 liters (6.6 gal.)

2 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

n @1,500 rpm

@1,500 rpm

a initial

Pa final

Pa max.

000 m

TABLE

ft = N.m × 0.737

gal = lit. × 0.264

= 0.2388 kcal/s

= g/kW.h × 0.00162

ft = N.m × 0.737

= m3/min × 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

inel is equipped as

ne genset

/ inputs and outputs

urement
AMF25 only)

Electronic Control Unit

es; SPN/FMI

ol with feedback and

nerationg set)
the ATS will start
l to emergency
er the load from the
generating set.)

t Construction

and hinges

ts treated with

aintenance

pipes to exterior of

fety

a lockable access

d)mounted on
alternator fully
enclosed for

s) ● Auto Transfer

m For