WINTPOWER®

WT-SC185 185KVA Technical Data sheet

WINTPOWER

ISO 9001 QUALITY ASSURANCE

Professional Genset Manufacture

FUZHOU WINTPOWER TECHNOLC

Gensets model	Prime Power (50hz)	Standby Power (50hz)	Engine Model
WT-SC185	169KVA/135KW	185KVA/148KW	SC7H230D2

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

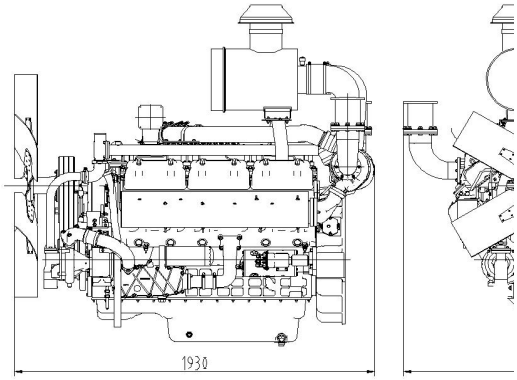
ΔAccessory: A suit of ripple flex exhaust pipe; exhaust siphon, muffler; and a set of spare parts & Tools

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 test 1500 running hours accumutively, subject to the earlier, kindly refer to our service terms.

Engine Technical Data Sheet

◎ SPECIFICATIONS			◎ FUEL CONSUM
○ Engine Model	SC7H230D2	○ Power	I
○ Engine Type	In-line,4 strokes, water-cooled 4 valves, Turbo charged air-to-air intercooled	25%	
○ Combustion type	Direct injection	50%	
○ Cylinder Type	Dry liner	75%	
○ Number of cylinders	6	100%	
○ Bore × stroke	105(4.14) × 124(4.89) mm(in.)	110%	
○ Displacement	6.44(393) lit.(in3)		◎ FUEL SYST
○ Compression ratio	16:01	○ Injection pump	Longkou i
○ Firing order	1-5-3-6-2-4	○ Governor	Elec
○ Injection timing	12°BTDC	○ Feed pump	Mecha
○ Dry weight	Approx. 580 kg (1278.7 lb)	○ Injection nozzle	Multi
○ Dimension	1343×741×1267 mm	○ Opening pressure	250 kg/cr
(L×W×H)	(52.9×29.2×49.9 in.)	○ Fuel filter	Full flow,
○ Rotation	Counter clockwise viewed from Flywheel	○ Used fuel	Diese
○ Fly wheel housing	SAE NO.3		
○ Fly wheel	SAE NO.11.5		

◎ MECHANISM		◎ LUBRICATION S	
○ 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 0.25mm (0.0099 in.)	○ Oil filter	Full flow,
○ Valve lashes at cold	Exhaust 0.50mm (0.0197 in.)	○ Oil pan capacity	High level 17.5
◎ VALVE TIMING		○ Oil pan capacity	Low level 15

	Opening	Close		
○ Intake valve	20.9°BTDC	44.9°ABDC	○ Angularity limit	Front dc
○ Exhaust valve	51.7°BBDC	11.7°ATDC	○ Angularity limit	Front u
			○ Angularity limit	Side to s
			○ Lub. Oil	Refer to Op

◎ COOLING SYSTEM

◎ ENGINEERING

○ Cooling method	Fresh water forced circulation	○ Water flow	170 liters/m
○ Water capacity (engine only)	9.6 liters (2.5 gal.)	○ Heat rejection to coolant	18.4 kcal/s
		○ Heat rejection to CAC	9.1kc
○ Pressure system	Max. 0.5 kg/cm2 (7.11 psi)	○ Air flow	12.2 m3/mi
○ Water pump	Centrifugal type driven by belt	○ Exhaust gas flow	27.2 m3/mi
○ Water pump Capacity	170liters (44.9 gal.)/min at 1,500 rpm (engine)	○ Exhaust gas temp.	600 °C @
○ Thermostat	Wax–pellet type	○ Max. permissible	
○ Thermostat	Opening temp. 82°C	○ Intake system	3 kP
○ Thermostat	Full open temp. 95°C	○ Intake system	6 kP
○ Cooling fan	Blower type, plastic 660 mm diameter, 10 blades	○ Exhaust system	6 kP
○ Cooling air flow	4.53 m³/s	○ Max.	2,(

◎ 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×6kW	psi = kg/cm2 × 14.2233	kW
○ Battery Voltage	24V	in3 = lit. × 61.02	lb/PS.h
○ Battery Capacity	150 AH	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	Underspeed Protection
	Overexcitation Protection
Δ High-quality lubrication sealed long-time bearing	TIF (1960 Weightings)
Δ Rotator sillicon steel close tight	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

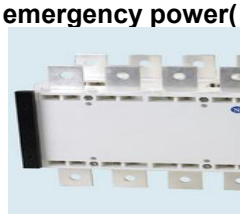
Optional SYK1 (SuYang) Automatic Transfer Switch Without/With Cabinet

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,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)

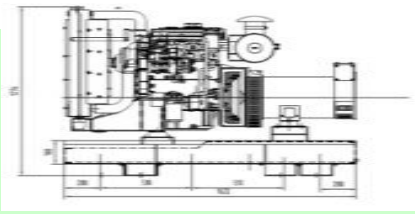
Δ Small Size/Operator conveniently
Δ ATS 63A-1100A with Economical Cost

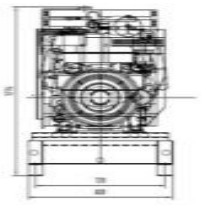


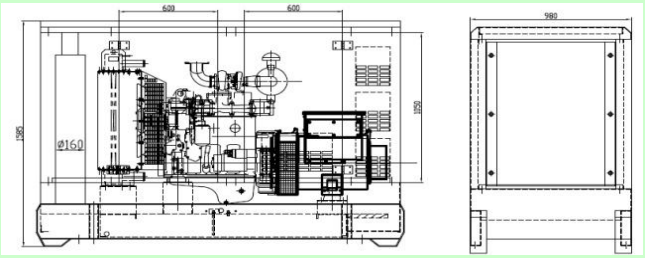
Optional 2-ATS With Cabinet

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
2390	940	1511	2060	2140

Dimensions and Weights-Canopy Type

Length (L)	Width (W)	Height (H)	Dry	Wet
mm	mm	mm	kg	kg
3560	1220	1815	2110	2160

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

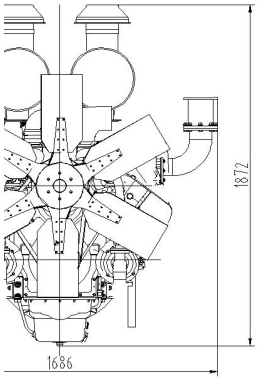
Oil Heater ● Auto Paralleling System Fuel

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

On Your Side
)GY CO., LTD.

TPOWER

Alternator Model
WT274G140



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

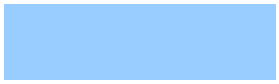
IPTION

it/hr

9.6
18.2
27.3
36.5
40.5

EM

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 (4.62 gal.)

liters (3.96 gal.)

own 25 deg.

up 35 deg.

side 35 deg.

eration Manual

DATA

in @1,500 rpm

ec @1,500 rpm

al/sec @1,500 rpm

in @1,500 rpm

in @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

= 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