WINTPOWER[®]



WT-SC1000 1000KVA Technical Data sheet







Professional Genset Manufacture On Your Side FUZHOU WINTPOWER TECHNOLOGY CO., LTD.

DIESEL GENERATOR



Gensets model	Prime Power (50hz)	Standby Power (50hz)	Engine Model	Alternator Model		
WT-SC1000	900KVA/720KW	1000KVA/8000KW	6WTAA35-G32	WT634H		
General Feature	es:					
-	ΔSDEC diesel engine made by SDEC China, with radiator at ambient temperature 40°C, fans are driven by belt, with safety guard					
Protection, Insulation	ΔWintpower Alternator with single bearing alternator; IP23					
ΔAir Filter,Oil filter an ΔLube-oil drain valve						
Δ Battery Charger	ΔElectric Starter Charge motor 24 VD.C					
	of and weatherproof canopy					
Δ3 pole MCCB Delixi	breaker/Optional ABB		•	R		
ΔOperation & Mainte	nance manual	2878		1515		
ΔAccessory: A suit of ripple flex exhaust pipe; exhaust siphon, muffler; and a set of spare parts & Tools						
Δ The structure is bu makes the noise low	illt-up, the built-in residential er.	muffler				
• •	plate and air channel for air intake&noise ounted within soundproof canopies.					
∆Outside Emergency	side Emergency Stop Button.					
	tank is equipped, With lifting fuel inlet/return, outside lub					

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 GB/T2820, ISO8528; A 10% overload capability is available for a period of 1 hour within a 12-hours period of operation. Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power. No overload, soundproof gensets only run under rating power.



3)Standby power is available in the event of a utility power outage or under test conditions for up to 200 hours of operation per year. The permissible average power output over 24 hours of operation shall not exceed 80% of the standby power rating.

Sales Promise:

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

(2) Warranty for all of our gensets and accessories is according to our standard conditions since testing: 24 months or 1500 running hours accumutively, subject to the earlier, kindly refer to our service terms.

Engine Technical Data Sheet

Ø	SPECIFICATIONS	© FUEL CONSUMPTION		
◦ Engine Model	6WTAA35-G32	o Power	lit/hr	
◦ Engine Type	line, 4 strokes, water-cooled Turbo charged air-to-air intercooled	25%	54	
 Combustion type 	Direct injection	50%	100.7	
 Cylinder Type 	Wet liner	75%	144.9	
 Number of cylinders 	6	100%	189.5	
o Bore × stroke	180(7.09) × 215(8.47) mm(in.)	110%	213.5	
 Displacement 	32.8(2001) lit.(in3)	© FUEL SYSTEM		
 Compression ratio 	15:01	 Injection pump 	Longkou in-line "P9" type	
• Firing order	1-5-3-6-2-4	o Governor	Electric type	
 Injection timing 	22°BTDC	• Feed pump	Mechanical type	
o Dry weight	Approx. 3400kg (7495.7 lb)	 Injection nozzle 	Multi hole type	
o Dimension	2878×1515×1889 mm	 Opening pressure 	290kg/cm2 (4125 psi)	
○ (L×W×H)	(113.3×59.7×74.4 in.)	○ Fuel filter	Full flow, cartridge type	
• Rotation	Counter clockwise viewed from Flywheel	 Used fuel 	Diesel fuel oil	
o Fly wheel housing	SAE NO. 0			
o Fly wheel	SAE NO.18			

O MECHANISM			© LUBRICATION SYSTEM	
о Туре	Over head valve		Lub. Method	Fully forced pressure feed type
 Number of valve 	Intake 1, exhaust 1 per cylinder		 Oil pump 	Gear type driven by crankshaft
 Valve lashes at cold 	Intake 0.4mm (0.0158 in.)		 Oil filter 	Full flow, cartridge type
 Valve lashes at cold 	Exnaust 0.45mm (0.0177 In.)		Oil pan capacitv	High level 75 L (19.8 gal.)
			 Oil pan capacity 	Low level 50 L (13.2 gal.)
	Opening	Close	 ○ Angularity limit 	Front down 25 deg.
o Intake valve	58 deg. BTDC	48 deg. ABDC	 Angularity limit 	Front up 35 deg.
• Exhaust valve	ve 54 deg. BBDC 48 deg. ATDC		 Angularity limit 	Side to side 35 deg.

© C(OOLING SYSTEM	© ENGINEERING DATA		
• Cooling method	Fresh water forced circulation	 Water flow 	1150L/min @1,500 rpm	
 Water capacity (engine only) 	56L (14.78 gal.)	 Heat rejection to coolant 	33.8kcal/sec @1,500 rpm	
 Pressure system 	Max. 0.5 kg/cm2 (7.11 psi)	• Air flow	62.9m3/min @1,500 rpm	
○ Water pump	Centrifugal type driven by belt	o Exhaust gas flow	152.6m3/min @1,500 rpm	
o Water pump Capacity	1150L(303.6gal.)/min	 Exhaust gas temp. restrictions 	680 °C @1,500 rpm	
○ Thermostat	Wax-pellet type	○ Intake system	3 kPa initial	
○ Thermostat	Opening temp. 77°C	○ Intake system	6 kPa final	
○ Thermostat	Full open temp. 90°C	 Exhaust system 	6 kPa max.	
◦ Cooling fan	Blower type,iron 1371 mm diameter, 8 blades	o Max. permissible altitude	2,000 m	
• Cooling air flow	20.82 m³/s			

© ELECTRICAL SYSTEM		© CONVERSION TABLE		
 Charging generator 	28V×55A	in. = mm × 0.0394	lb/ft = N.m × 0.737	
 Voltage regulator 	Built-in type IC regulator	PS = kW × 1.3596	U.S. gal = lit. × 0.264	
• Starting motor	24V×11kW	psi = kg/cm2 × 14.2233	kW = 0.2388 kcal/s	
 Battery Voltage 	24V	in3 = lit. × 61.02	lb/PS.h = g/kW.h × 0.00162	
 Battery Capacity 	200 AH	in. = mm × 0.0394	lb/ft = N.m × 0.737	
		hp = PS × 0.98635	cfm = m3/min × 35.336	
		lb = kg × 2.20462		

Alternator Technical data

Wintpower WT634H		
△ Bruxhless,self exciting	Exciter	Brushless
∆ class "H" insulation	Cooling Fan	Cast alloy aluminum
△ Standard degree of protection is IP23	Bearing	Single,double shielded
∆ self regulating	Windings	100% copper
△ With fan cooling	Connection Type	Reconnectable
△ Resist Humid grease	Insulation Type	Class H
△ AC excitation,roating rectification tube	Pitch	2/3
△ Stator grease insulation covered	Amortisseur Winding	Full
${\scriptstyle \Delta}$ Rotator and exciation high polymer,Resist the corruption of	Voltage Regulator	AVR AS480UL
oil and acid	Voltage Regulator NL-FL	±0.5%
△ Rotator ballance is in accordance with BS5625 standard	Underspeed Protection	Standard
12.5	Overexcitation Protection	IP23
Δ High-quality lubrication sealed long-time bearing	TIF (1960 Weightings)	<50
△ Rotator sillicon steel close tight	Exciation System	SHUNT

Control Panel -Comap AMF20

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

Main Features:

- Δ Automatic or manual start/stop of the genset
- Δ 3 phase AMF function
- Δ configuration analog inputs
- Δ Configurable programmable binary inputs and outputs
- Δ Warm-up and cooling functions
- Δ Battery voltage,engine speed measurement
- Δ Modem communication support(IL-AMF25 only)
- Δ RS232 interface
- Δ Support of engines equipped with Electronic Control Unit (J1939 interface)
- Δ Graphic back-lit LCD display
- Δ Comprehensive diagnostic messages; SPN/FMI
- codes;KWP2000 Support
- Δ 6 LED indicators
- Δ Sealed to IP65

 $\boldsymbol{\Delta}$ Generator C.B and Mains C.B control with feedback and return timer

Control module Comap AMF 20

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

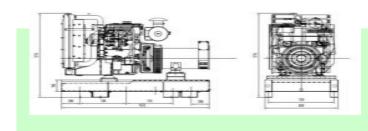
Δ Small Size/Operator conveniently Δ ATS 63A-1150A with Economical Cost

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





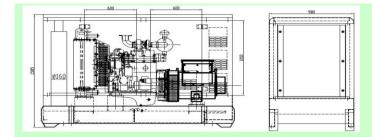
Sound Attenuated Enclosure/Option



Robust Corrosion Resustant Construction

Δ Black finish stainless stell lock and hinges Δbody made from steelcomponents treated with Excellent Access for Maintenance

Δtwo large doors on each side Δradiator fill access plate



Δlube oil and cooling water drains pipes to exterior of the enclosure

Security and Safety

Δcontrol panel viewing window in a lockable access door

Δemergency stop push buttom (red)mounted on Δcooling fan and battery charging alternator fully Δexhaust silencing system totally enclosed for operator

Dimensions and Weights-Open Type						
	Length (L)	Width (W)	Height (H)	Dry	Wet	
	mm	mm	mm	kg	kg	
	4365	1580	2300	7850	7900	
Di	mensions and	Weights-Can	ору Туре			
	Length (L)	Width (W)	Height (H)	Dry	Wet	
	mm	mm	mm	kg	kg	
	5900	2350	2390	7950	8000	
Sc	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℃ 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) ● Auto Transfer 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 For

Oil Heater • Auto Paralleling System Fuel

Oil Discharging Pump

Electronic Indicator for

Maintenance Tools Fuel Level

Accesory Bag