GENERATOR SET SPECIFICATIONS

ZICHAI

YM11000T3

GENSET DIESEL



SILENT DIESEL GENERATOR
YM11000T3

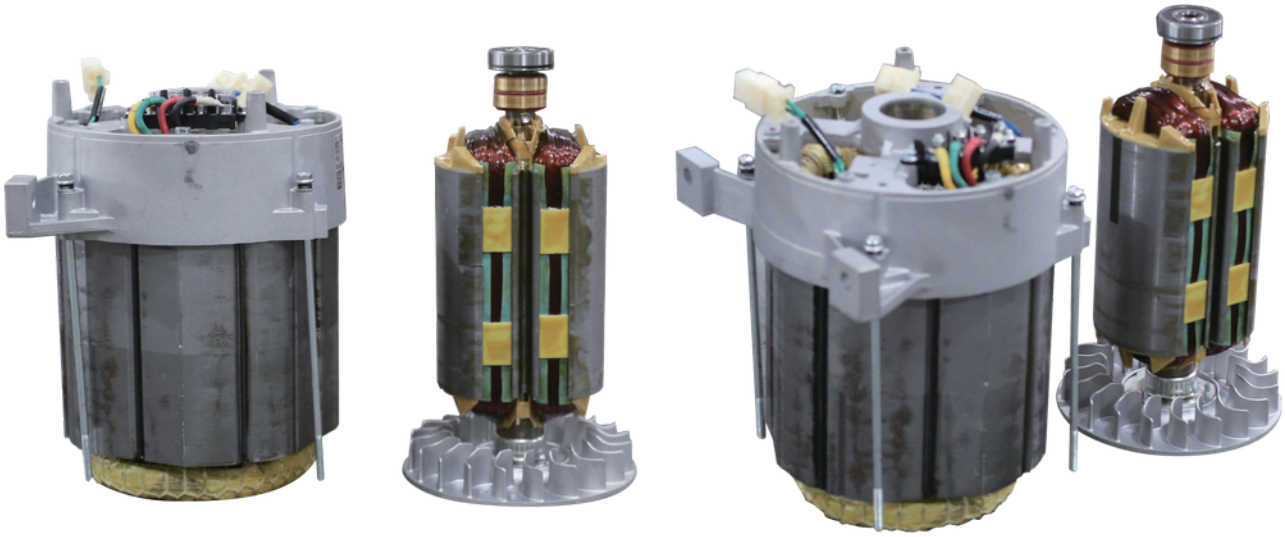


Model	YM11000T3
Rated frequency (Hz)	50
Rated output (kW)	8
Max. output (kW)	9
Rated voltage (V)	220/380
Rated currency (A)	36.3/15.2
Rated rotation speed (r/min)	3000
Phase NO.	3 phase
Power factor (CosΦ)	0.8
Insulation Grade	F
Pole number	2
Excitation mode	Self-excitation & constant voltage (AVR)
Panel Type	General Panel
Receptacle	Two receptacles
DC12V output	Connection pole output
Overall dimension (LxWxH) (mm)	1160*695*880
Dry weight (kg)	205
Working assorting weight (kg))	215
Noise level (7m) [d B(A)]	77
Structure type	Silent type
Engine Model	YM1100FE
Engine Type	Single cylinder, vertical, four-stroke, direct injection, air-cooled
Cylinder NO.- bore × stroke (mm)	1-100×85
Displacement (ml)	667
Rated power [kW (r/min)]	10.5/3000
Compression ratio	19:01
Lubrication system	Pressure splashed
Starting system	Electric Starter
Fuel type	0#(summer)-10#(winter)-35#(chillness)diesel
Lube oil brand	CD grade or SAE10W-30,15W-40
Lube capacity (L)	2.0
Starting motor capacity (V-kW)	12V 1.6kW
Charging generator capacity (V-A)	12V 8.3A
Battery capacity (v-Ah)	12V 36AH
Fuel consumption (glkw*h)	≤300
Fuel tank capacity (L)	25
Continuous running time (hr)	6.5





POWER SYSTEM	
Feature	**Description**
Air-cooled structure, no water refilling, extremely strong environmental adaptability	No radiator, no water-cooling pipes, and no need to top up coolant. Works in the field, on construction sites, at high altitudes, and in low-temperature environments; resistant to freezing, and can even operate when installed at an angle. Maintenance saves you the hassle of changing water or adding antifreeze ideal for mobile equipment and remote sites without a water source.
Single-cylinder design, simple, highly reliable and easy to maintain	Fewer parts mean a lower failure rate; the injector, piston, cylinder liner and filter are all common standard parts, so spares are inexpensive. Maintenance is simple and can be carried out on site, keeping after-sales costs low well suited to overseas markets and job sites.
High torque, excellent heavy-load performance and outstanding fuel economy	The diesel engine's high compression ratio delivers ample low-speed torque and strong load-carrying capability. Compared with a petrol engine of the same power, it consumes less fuel, saving fuel during prolonged operation ideal for continuous loads such as generators and irrigation pumps.
Stable cooling system with cooling fan + air guide hood design	The flywheel is fitted with a large cooling fan, and the integrated air guide hood directs airflow for forced-air cooling, keeping the temperature rise under control during continuous operation. A protective guard shields the fan from debris, improving safety in the field.
Compact overall design with controllable size and weight	The single-cylinder air-cooled design keeps the unit small and space-saving, making assembly and handling easy and convenient to build into a mobile generator set.
Export quality	ZICHAI brand with English branding, exported to 100+ countries and compliant with export standards; the company holds CE, ISO and Euro 5 emission certificates.



ALTERNATING CURRENT MOTO	
Feature	Description
High starting torque and strong low-speed burst power	100% copper wire. for direct heavy-load starting. Suitable for on-load startup and short-time impact loads. High torque is available starting from zero speed, eliminating the need for a complex frequency converter for startup control.
Simple drive control and low electronic-control cost	No vector drive or rotor position sensor required. A wide speed range is achieved simply by voltage adjustment, resistance control or SCR phase control. Simple wiring and a low commissioning threshold make the integrated electronic-control solution inexpensive — well suited to cost-priority equipment. Supports direct start-up on mains AC 220V/380V.
High power density by volume (204×160 size advantage)	Within this installation envelope (204 mm outer diameter, 160 mm length), it delivers more output power than an induction motor of the same size. The series-wound motor can run at high speeds, providing stronger power in the same mounting dimensions — ideal for applications with limited installation space.
Mature structure and easy maintenance	Simple construction, with carbon brushes as the only key wear parts. Brushes and commutators are standardized spares; performance is restored simply by replacing the brushes on site. No professional electronic-control engineer is required for maintenance, keeping after-sales costs low.
Wide speed-regulation range	Speed can be brought from very low up to very high, giving a far wider adjustment range than an ordinary single-phase induction motor. Suitable for equipment requiring wide speed variation (mixing, winching, grinding, conveying).
Good short-term overload resistance	Tolerates short-term impact loads well, making it suitable for intermittent-duty equipment. Brief overloads will not burn the motor out immediately, offering high fault tolerance in operating conditions.

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DIGITAL PANELS

Feature	Description
Multi-function digital meter HJ-301	Digital voltmeter that simultaneouslydisplaysvoltage and running hours, making it convenient to record the unit's operating time and manage maintenance schedules more accurate readings than traditional analog meters.
Pre-wired for ATS automatic transfer switch	Equipped with an ATS switch; automatic transfer function optional. On mains power failure the unit starts automatically to supply power, and shuts down automatically when mains power is restored deal for standby power applications (shops, construction sites, machine-room backup power).
Key start for safe operation	Three-position key switch: OFF → ON → START, following the standard diesel generator starting logic. The key can be removed to prevent unauthorized personnel from accidentally starting the unit, making equipment management safer.
Rugged panel structure for easy unit assembly	Metal panel with pre-drilled mounting holes, suitable for open-skid/silent diesel generator assembly. Modular components make later repair and parts replacement easy; the circuit breaker, digital meter and sockets are all common standard parts, keeping replacement costs low.
Comprehensive safety protection	Delixi three-phase air circuit breaker: overload, short-circuit and short-circuit protection in the event of any abnormal load it cuts off the AC power immediately to protect the generator and downstream equipment. OIL ALERT oil-level warning lamp: alerts when oil is insufficient or oil pressure is low, prompting shutdown to prevent cylinder scuffing/damage to the diesel engine. DC circuit fitted with a FUSE to protect the 12V starting control circuit.
Dual AC output for strong power-supply compatibility	Blue socket: AC220V single-phase; red socket: AC380V three-phase single phase and three phase loads can be used simultaneously. Industrial CEE waterproof sockets with dust-protection caps provide dust and water protection outdoors and on construction sites, with reliable plug-in connections.

TECHNICAL INSTRUCTION

a. The generator set shall be capable of running continously for 10 hours at a load of 9kW

b. The generator set shall be fitted with an ATS controller. In case of utility grid power outage, the unit shall auto-start within 8 to 12 seconds. Upon restoration of utility grid supply, the unit shall automatically stop.

c. The maximum permissable step-on load of the unit is 3kW





ATS	
Feature	Description
Automatic transfer, unattended operation, uninterrupted power supply	When the mains power (HOUSE NET) fails, it automatically sends a start signal to the diesel generator. Once the generator establishes voltage, the load is automatically transferred to generator power. When the mains power is restored, it automatically switches back to the mains, then shuts down the generator after a delay. Ideal for standby power in machine rooms, shops and construction sites no on-site operator needed during a power outage.
Intuitive status indicators with visualized fault alerts	Red indicator HOUSE NET: mains power present. Green indicator GENERATOR: generator supplying power. Red alarm indicator FAILURE: fault alarm (voltage loss, abnormal transfer, etc.). Operators can tell the current power source status at a glance and troubleshoot quickly.
Dual AUTO/MANUAL operating modes	Rotary switch selects between two operating modes: AUTO — fully automatic unattended mode; MANUAL — manual mode for inspection and generator testing, enabling safe maintenance and convenient commissioning. A manual operating handle on the right allows mechanical manual closing even during a power outage, serving as an emergency fallback for maintenance and inspection.
Comprehensive electrical safety protection	The enclosure is printed with a high-voltage electric shock warning label and houses a built-in circuit breaker with short-circuit and overload protection. The metal enclosure shields and isolates live parts to prevent accidental contact. Electrical interlocking ensures the mains and generator circuits can never close simultaneously, preventing back-feed to the grid and protecting both the generator and grid personnel.