125 kVA Weichai Series Diesel Generator Set
Technical Specifications

Model TY-100 | 100 kW / 125 kVA | 50 Hz | 400 / 230 V

GENSET PARAMETERS			
Genset Model	TY-100	**Manufacturer**	Fu'an Taiyu Motor Co., Ltd.
Output Power (kW)	100 kW	**Output Capacity (kVA)**	125 kVA
Phase & Wiring	3-phase, 4-wire	**Output Voltage (V)**	400 / 230
Frequency (Hz)	50	**Rated Speed (rpm)**	1500
Rated Power Factor	0.8 lagging	**Rated Current (A)**	180
Weight (kg)	600	**Dimensions L × W × H (mm)**	2200 × 650 × 1200 (open type) 2650 × 1100 × 1650 (silent type)
Noise Level at 10 m [dB(A)]	80	**Fuel Consumption Rate (g/kW·h)**	210
Starting / Stopping Method	24V DC electric start	**Overhaul Interval (h)**	> 18,000
Ambient Temperature (°C)	≤ 40	**Relative Humidity (%)**	≤ 60
Altitude (m)	≤ 1000	**Lube Oil Capacity (L)**	10

ENGINE			
Model	WP4.1D115E201	**Brand**	Weichai
Origin	Fujian	**Bore × Stroke (mm)**	100 × 105
Engine Type	4-cylinder L-type, turbocharged & intercooled		
Air Intake	Turbocharged	**Compression Ratio**	16.5 : 1
Prime Power (kW)	100	**Standby Power (kW)**	125
Fuel Consumption Rate (L/h)	8 at standby power · 7 at 100% prime power · 6 at 75% prime power		
Fuel Type	Light diesel oil		
Cooling Method	Water-cooled with built-in fan and radiator		
Speed Governing	Electronic governor		
Filtration System	Fully replaceable lube oil, diesel fuel and air filters; paper-element air filter		
Silencer & Exhaust Pipe	Industrial high-attenuation silencer, connected to the exhaust pipe by a flexible bellows coupling; noise reduced by 15–20 dB(A) after the silencer		
Starting Method	24V DC electric start		

AC ALTERNATOR			
Alternator Model	TY-100	**Alternator Brand**	Taiyu Motor
Alternator Origin	Fujian	**Excitation**	Brushless
Insulation Class (rotor & stator windings)	Class H	**Protection Grade**	IP22
Power Quality	Grade G3, GB/T2820	**Voltage (V)**	400 / 230
Voltage Fluctuation (%)	≤ 0.5	**Voltage Stabilization Time**	4 s
Voltage Transient Regulation (%)	+20 to -15	**Voltage Steady-State Regulation (%)**	0–5 (adjustable)
Frequency (Hz)	50	**Frequency Fluctuation (%)**	≤ 0.5
Frequency Stabilization Time	3 s	**Frequency Transient Regulation (%)**	+10 to -7
Frequency Steady-State Regulation (%)	0–5 (adjustable)	**Waveform Distortion**	≤ 5%
No-load Voltage Setting Range	95%–105% of rated voltage	**Short-Circuit Current**	300% In for 2 s

CONTROLLER (ZHONGLING 6110)	
Display	Mains AC phase / line voltage, generator AC phase / line voltage, generator 3-phase AC, mains frequency, generator frequency, generator speed, oil pressure, coolant temperature, active power, output power, battery voltage, power factor, running hours (optional)
Main Functions	Generator under / over-voltage, overload, generator under / over-frequency, under / over-speed, charge failure, emergency stop, low oil pressure, high coolant temperature, shutdown failure, start failure, under / over battery voltage, low fuel alarm, loss of speed signal, mains under / over-voltage, mains under / over-frequency, event log control, records the last 15 emergency stop alarms

