ENERGY SOLUTIONS

Product: **ZEN 550TBI**







Liquid cooling



50 Hz



Three-phase



Diesel







DIESEL GENERATOR ZEN 550 TBI	STANDBY POWER (ESP)	PRIME POWER (PRP)	
Power (kVA)	550	495	
Power (kW)	440	396	
Speed (rpm)	1500		
Voltage (V)	400 / 230		
Power factor (cos phi)	0,	0,8	
Amperage (Amp)	7	18	

Endress Zenessis Group S.R.L. certifications:

ISO 9001: 2008, ISO 14001: 2005, ISO 18001: 2008.

ZENESSIS generators are CE compliant, and are tested according to the EU legislation on noise levels 2000/14 / EC.

Reference ambient conditions: 1000 mbar; 25° C; 30% relative humidity; power according to ISO 3046 / ISO 8528 standards.

Prime power (PRP) - ISO 8528

Prime power (PRP) – represents the continuous power a generator is able to provide continuously while supplying a variable electrical load when operating for an unlimited number of hours per year, under the agreed operating conditions, maintenance intervals and procedures being performed as prescribed by the manufacturer.

Standby Power (ESP) - ISO 8528

Standby Power (ESP) is the maximum power available at a variable load, under the operating conditions provided, that a generator is able to provide in case of power failure or under test conditions, maintenance intervals and procedures being performed as prescribed by the manufacturer.

Endress Zenessis Group S.R.L.

Offices:

Bucharest: km 16 A1 - Ciorogarla, Sos. Bucuresti, Nr. 108

D38486 Apenburg - Winterfeld, In Altensalzwedel 49

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BOCSA,str. Medresului 17, Tel.: 0040.255.227.825; Fax: 0040.255.227.828 . BUCURESTI: km 16 A1 – Ciorogarla, Sos. Bucuresti, Nr. 108; Tel.: 0040.21.350.09.95; Fax: 0040.31.817.66.08. E-mail: office@endress-group.ro;

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1. DIESEL ENGINE

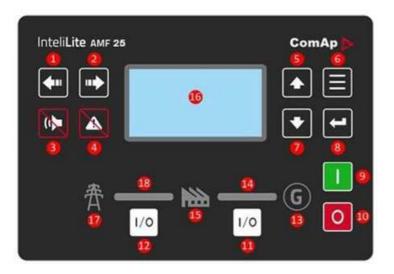
ENGINE SPECIFICATIONS		
Туре	BAUDOUIN	
Model	6M21G8D0	
No. of cylinders & arrangement	6 in line	
Induction system	Turbocharged and Intercooled	
Cooling system	Liquid cooling	
Standby power (kWm)	490	
Speed (rpm)	1500	
Displacement (I)	12,54	
Bore & Stroke (mm)	127 X 165	
Compression factor	15,2:1	
Regulator	ECU	
Total oil capacity (I)	40	
Coolant capacity of engine (I)	62	
Fuel consumption at 75% load in standby mode (I / h)	75.3	

2. ALTERNATOR

ALTERNATOR SPECIFICATIONS	Strathon / Leroy Somer	
Model	ECO 550 KW / TAL 0473 C	
Frequency (Hz)	50	
Concept	Brushless, 4 poles	
Phases	3 + n	
Voltage (V)	400 / 230	
Protection class	Н	
Excitation system	Electronic	
Performance	93%	
Protection	IP23	
Certification test	EN 10204 : 2001	

3. CONTROL PANEL

Made in metal box, IP54 degree, with lock. The control panel is equipped with the ComAp AMF25 control module, with the possibility of starting and stopping the generator, both in automatic and in electric mode. The control panel monitors the power grid and can command and control the ATS panel (automatic transfer switch).



- 1. Left button
- 2. Right button
- 3. HORN RESET button
- 4. FAULT RESET button
- 5. **UP** button
- 6. PAGE button
- 7. **DOWN** button
- 8. ENTER button
- 9. START button
- 10. STOP button
- 11. GCB button. Works in MAN and TEST modes only
- 12. MCB button. Works in MAN and TEST modes only
- 13. **GENERATOR** status indicator
- 14. **GCB ON**. Green LEDs are on if GCB is closed and Gen-set is healthy.
- 15. **LOAD**
- 16. Graphic B/W display, 132x64 pixels
- 17. MAINS status indicator
- 18. **MCB ON**. Green LEDs are on if MCB is closed and Mains is healthy





♦ Control panel standard specifications:

The command and control panel is mounted inside the casing, in a metal box with IP 54, equipped with a viewing glass, equipped with:

- ComAp AMF 25 command module
- Static battery charger
- Emergency stop button & circuit breaker fuses
- Overcurrent differential protection
- Protection relays

♦ Configuration:

- 1. ComAp AMF 25 command module
- 2. Circuit Breaker protection
- 3. Locks
- 4. Alarm
- 5. START button ON/OFF
- 6. Hinges
- 7. Maintenance schedule
- 8. Metal box

♦ Command module standard specifications:

- Microprocessor control
- 132 x 64 pixel LCD display
- Programming on front panel as well as through PC software
- Control buttons and soft touch navigation
- Remote communication via USB or with optional modules via RS232, RS485, Ethernet or SMS
- Store 350 events with date and time
- Maintenance programming 3 levels
- Engine heater control Optional

•Displays:

Engine: engine speed; oil pressure; coolant temperature; running time; battery voltage; maintenance data.

Alternator: voltage (L - L, L - N); current (L1 - L2 - L3); frequency; kW; Pf; kVAr; kWh,kVAh, kVarh; phase sequence.

Main network: voltage (L - L, L - N); frequency, mains ready; mains off; generator set ready, generator set disconnected, active power kW, apparent power kVA, reactive power kVA r, power factor, phase sequence.

- •Warning: battery faulty charging, low battery voltage, fail to stop, low fuel level, overload, phase reversing, speed sensor failure.
- •Alarms: low oil pressure, high engine temperature, under / over voltage, under /over frequency, under /overvoltage, ECU fault -optional.
- •Status displays: missed start, emergency stop, low oil pressure, high engine temperature, under /overspeed, under / over frequency, under / overvoltage, oil sensor, phase rotation, overload, overcurrent group, phase reversal.





♦ Static battery charger: Made with TSD technology, with high efficiency. Protected for short-circuit currents, it can be used as a current source, input voltage 196-264 V, output voltage 27.6 V / 5A or 13.8 V / 5A.

♦ Standards:

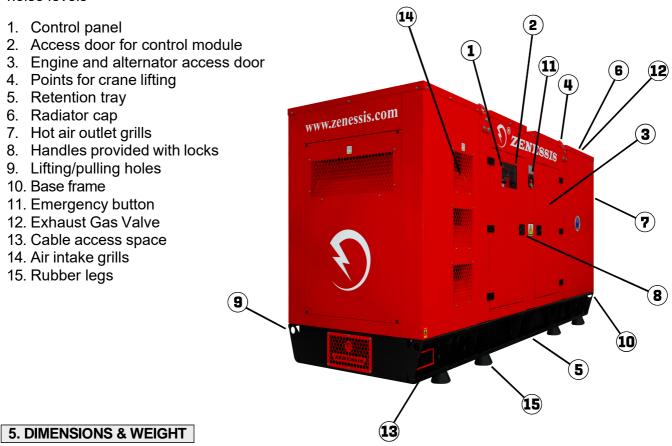
Electrical safety / EMC, BS EN 60950; BS EN 60950 - 6 - 2 EMC; BS EN 61000 - 6 - 4 EMC.

4. CANOPY

Fuel tank capacity (liters)

Noise level (from distance of 7m)

Made of zinc plate steel, painted in electrostatic field, soundproofed, fire protect. It is modularly designed with in-door access doors on all sides of the generator. The exhaust pan is residential type, mounted inside the casing. The carcasses are designed to optimize the cooling of the engine and alternator assembly, and can be mounted outdoors, providing protection against weathering and low noise levels



Opened generator sizes & weightSizes (length x width x height) (mm)3505 x 1262 x 2565Weight (kg)3000Fuel tank capacity (liters)700Noise level (from distance of 7m)82 dbClosed generator sizes & weight82 dbSizes (length x width x height) (mm)4005 x 1480 x 2330Weight (kg)4000

700

70 db





6. STANDARD FEATURES

Control & comand panel with indicators and measuring devices, IP 54 protection



Thermostatic heater for cooling liquid



Stating charger for charger



Oversized starting battery



Dinamic alternator for battery charging



Emergency stop button



Chassis with fuel tank dimensioned for an 8 hour autonomy with retention tray



Rubber legs



Vibration dampers



Metal hinges



Device for measuring fuel level



Access doors provided with locks





Electric lines protected by tubing and seal



System for manipulation with crane or forklift



Residential exhaust pipe



Fireproof antiphonic pillow



Web: www.endress-group.ro



7. OPTIONAL FEATURES

Anti-condensation embedding system for electric panels

Heating system for fuel/ oil

Circulation pump for heating cooling liquid

Oil evacuation pump

Motorized AAR, patented invention ENDRESS-Patent OSIM 00048/2015

3/4 poles differential protection

Sockets 400V/ 230V

Fuel filter with water detection

Bypass panel-petented invention ENDRESS-Patent OSIM 00010/ 2012

Auto trailer

Remote control start

Lack of grounding protection

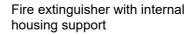
Interior lighting with switches operated at door opening



Liquid retention tray + fuel tank with double wall

Liquid leak detection sensor

Exterior fuel filler cap with lock



Super soundproof housing

Intake air heating spark plug

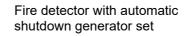


Grounding electrodes

Fuel transfer automatic pump



Cable reel



Fire extinguishing system with inert gas













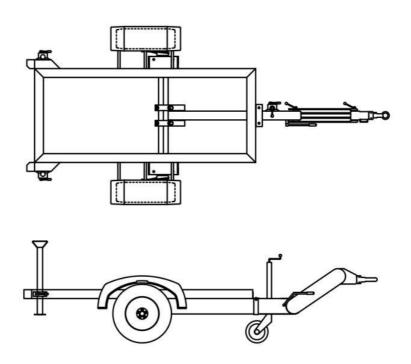






Optional:

RAR homologated auto trailer Model: EGR 6000





Created in Germany – Assembled in Romania Warranty: 24 months or 3000 operating hours



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