

**PROGEN**  
Generator

# **PROGEN** *Generator*

**PG S440TO**

**GENERATOR SET**

**PRODUCT CATALOGUE**

**ADDRESS: İVEDİK OSB MAHALLESİ 1455 CADDE NO: 106 YENİMAHALLE ANKARA, TURKEY**

GROUP FEATURES	UNIT	PRIME	STAND BY
Power	kVA	400	440
Power	kW	320	352
Current	A	578	636
Standard Voltage	V	230/400	
Revolution Per Minute	r.p.m	1500	
Rated at Power Factor	Q	0.8	

**STANDBY POWER :** Supplying of emergency electrical power at variable load, in the event of normal utility power failure. This rating is maximum power, no overload capability is available.

**PRIME POWER :** It is the continuous operating power under variable load. According to ISO 3046, 10% overload is allowed for 12 hours of operation.



#### STANDARD FEATURES

- 4 Stroke, 1500 RPM, water cooled heavy duty diesel engine
- Protection system on manual run
- Flexible oil pipes and oil draining valve
- Pre-heater
- Lubrication oil and anti-freeze
- 4 Poles, synchron type, single bearing, brushless alternator
- Batteries and cables
- Electrostatic paint coated, steel, welded chassis
- Fuel tank housed in the chassis
- Industrial type silencer
- Electronic battery charger
- Electrical wiring diagram
- User manual and operating manual

#### OPTIONAL EQUIPMENTS

- Sound proof canopy
- Automatic transfer switch
- Circuit breaker
- Trailer
- External fuel tank
- Heating system for fuel tank
- Oil heater
- Fuel filling system
- Automatic / Manual
- Analog indicators
- 1 Phase – 3 Phase switch plugs
- Alarm system for fuel level
- Remote control and monitoring

## DIMENSIONS AND WEIGHT



Length(L) : 3400 mm

Height (H): 1900 mm

Width (W): 1300 mm

Wight (Kg): 2801 kg

Fuel Tank Capacity (L): 380 L

## DIMENSIONS AND WEIGHT



Length (L): 4000 mm

Height(H): 2200 mm

Width (W): 1300 mm

Wight (Kg): 3261 kg

Fuel Tank Capacity (L): 380 L

## ENGINE SPECIFICATIONS

Brand		<b>SHANGAI PRE.</b>	Electrical system	VDC	24
Model		<b>SC13H435</b>	Mineral oil capacity	L	26
Engine Power Stand by	(kWh /hp)	<b>370 / 503</b>	Coolant capacity	L	46
Revolution Per Minute	(r.p.m)	<b>1500</b>	Fuel tank capacity	L	295
Total Displacement	(L)	<b>13,74</b>	Max. exhaust gas temperature	°C	650
Cylinders Orientation		<b>6 SINGLE ROW</b>	Max. exhaust gas flow	M3/h	2564
Bore * Stroke	(mm xmm)	<b>135 X 160</b>	Max. back pressure	kPa	7
Compression Orientation		<b>17:01</b>	Cooling fan flow	M3/min	448
Governor Type		<b>Mechanical</b>	Fuel consumption 50%	L/h	31,8
Aspiration System		<b>Turbocharger + Intercooler</b>	Fuel consumption 75%	L/h	47,7
Spray Pattern		<b>Mechanical</b>	Fuel consumption 100%	L/h	63,6
Cooling		<b>Water Cooled</b>			

· Replaceable wet cylinder liners

· Dry type replaceable air filter

· Radiator that can cool up to 50 °C

## ALTERNATOR FEATURES

Output Voltage	V	<b>230 /400</b>	Overload Runtime		<b>%110 for 1 hour</b>
Frequency	Hz	<b>50</b>	Power Factor		<b>0,8</b>
Permanent Voltage Reg.	±	<b>%1</b>	Total Harmonic Distortion Ratio	Cos Q	<b>&lt; %1</b>
Short Circuit Current		<b>%300 (10 dk.)</b>	Connection style		<b>STAR</b>
Insulation		<b>H</b>	Number of Poles		<b>4</b>
Protection Class		<b>IP 23</b>	Number of Beds		<b>ONLY</b>
Yield	%	<b>88</b>			

· 4-pole, self-excited and cooled, brushless synchronous alternator · Electronic type automatic voltage regulator (YES)

### CONTROL PANEL FEATURES

- Diesel and gas generator support
- 400 Hz generator support
- 400x measurement values
- All parameters can be changed from the front panel
- 3-level program password
- 128x64 pixel graphic LCD
- Language installation
- Current-voltage waveform
- Current-voltage harmonic analysis
- Synchroscope and sync relay
- 16 Amp / 250V ŞK / JK outputs
- 8 programmable digital inputs
- Entries can be increased to 40
- 4 programmable analog inputs
- CANBUS-J1939 & MPU input
- 3 programmed service alarms
- Multiple automatic test report
- weekly work schedule
- Dual generator support, equal aging
- Fine speed tuning (some ECUs)
- Automatic fuel pump control
- Protections cancellation feature
- Over power protection
- Reverse power protection
- Overcurrent IDMT protection
- Load shedding dummy load
- Multiple load shedding programs
- Current unbalance protection
- Voltage imbalance protection
- Fuel filling and fuel run alarms
- Battery powered real time clock
- Idle speed control
- Battery charging work
- Multiple nominal requirement definitions
- Contactor+motorized switch driving
- 4 quarter energy meters
- Grid energy meters
- Fuel meter
- Fuel consumption meter
- Modem & Ethernet pages
- Parameter setting via USB, RS-485 Ethernet and GPRS
- Possibility of control via SMS
- Mobile generator support
- Automatic GSM geolocation
- GPS connection (USB and RS232)
- Dynamic ONS support
- Downloading software via USB
- IP65 protection with standard gasket
- Battle mode support