

Diesel Generating Set TNPS-59

60Hz

General Features

- Engine 1103A-33TG1 Perkins Made in UK
- Alternator PI144K Stamford Made in China
- Controller DSE6020 Deepsea Made in UK

Prime power	43.2kW/54kVA
Standby power	47.2kW/59kVA



- Electric speed control
- 12V starting batteries, maintenance-free type, connecting cables
- Equipped with CHINT MCCB; ABB in Option
- Equipped with industrial silencer and flexible exhaust hose
- Radiator 40°C max, fans are driven by belt with safety guard

- 12V charge dynamo
- Equipped with 8-hours operation base tank
- Design comply to ISO8528/GB2820
- Absorber (anti instant braking)
- User manual, Packing list

General Ratings

Voltage	Power				Frequency (Hz)	Phase	P.F (COSφ)	Prime Current (A)
	Prime		Standby					
	kw	kva	kw	kva				
220/380V	43.2	54.0	47.2	59.0	60	3	0.8	82.0
230/400V	43.2	54.0	47.2	59.0	60	3	0.8	77.9
240/415V	43.2	54.0	47.2	59.0	60	3	0.8	75.1
254/440V	43.2	54.0	47.2	59.0	60	3	0.8	70.9

Prime power

This rating is for the supply of continuous electrical power at variable load. A 10% overload capability is available for a period of 1 hour within each 12-hour period of operation.

Standby power

This rating is for the supply of continuous electrical power at variable load in the event of utility power failure. No overload is permitted.

Rated voltage

Available with customers requirements.

Sales Promise

TANON POWER provides a full line of 100% brand new and high quality products.

Each and every unit is strictly factory tested before delivery.

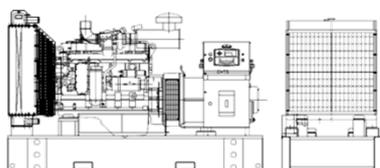
Warranty is according to below standard conditions, subject to the earlier one.

1. 13 months, counted on the day TANON POWER sold to the first buyer.
2. One year after installation.
3. 1000 running hours.

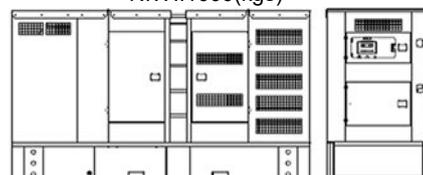
Service and parts are available from TANON POWER or distributors in your location.

Dimension And Weight

Open frame
Size(L*W*H):1700*800*1250(mm)
N.W.:800 (kgs)



Silent with Canopy
Size(L*W*H):2280*950*1510(mm)
N.W.:1000(kgs)



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Engine Specifications

1	Engine model	1103A-33TG1
2	Engine manufacturer	Perkins UK
3	Number of cylinders	3
4	Cylinder arrangement	Vertical in line
5	Cycle	4 stroke
6	Aspiration	Turbo
7	Bore×Stroke(mm×mm)	105×127
8	Displacement (Liter)	3.3
9	Compression Ratio	17.25:1
10	Prime power/speed (kW/RPM)	52.5/1800RPM
11	Standby power/speed (kW/RPM)	57.4/1800RPM
12	Speed governor	Mechanical
13	Cooling system	Water-cooled
14	Coolant capacity (engine only) (L)	10.2
15	Steady speed droop (%)	≤5%
16	Total lubrication system capacity (L)	7.9
17	Oil consumption (% of fuel)	<0.15%
18	Fuel consumption at 100% load (L/h)	9.4
19	Fuel consumption at 75% load (L/h)	7.6
20	Fuel consumption at 50% load (L/h)	5.9
21	Starter motor	12v
22	Dynamo	12V

Alternator Specifications

Compliance with GB755,BS5000,VDE0530,NEMAMG1-22,IED34-1,CSA22.2 and AS1359

1	Alternator model and Prime Power	PI144K
2	Alternator manufacturer	Stamford
3	Exciter type	Single bearing, Brushless, Self-excited
4	Rated speed	1800 RPM
5	Rated frequency	60 Hz
6	Phase	3
7	Rated voltage	440V
8	Power factor	0.8
9	Voltage adjust range	≥5%
10	Voltage regulation NL-FL	±1%
11	Insulation grade	H
12	Protection grade	IP23

Alternator option

Mecc Alte, Stamford, TANON POWER

Main Electrical Performance Data

Voltage				Frequency			
Stable Regulation rate	Fluctuation	Recover time	Instantaneous Regulating rate	Stable regulation rate	Instantaneous regulating rate	Recover time	Fluctuation
+/-2.5%	0.5%	1.5s	+20%/-15%	+5%	+/-10%	5S	0.5%

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Control System

Deepsea (UK)	Model	DSE6020
Protection	Parameter	PHOTO
● Low oil pressure	● Volt	
● High water temp	● current	
● Over speed	● power	
● over crank	● speed	
● Over load	● frequency	
● Over/low volt		
● Over/low frequency		
● Battery charge failure		
	● oil pressure	
	● oil temp	
	● power factor	
	● running time	
	● water temp	
	● battery voltage	

Option

Generator Set

- Trailer generator set
- ABB MCCB circuit breaker
- 50°C Radiator

Fuel system

- 12 hours base fuel tank
- 24 hours base fuel tank
- Dual wall base fuel tank
- External fuel tank

Exhaust system

- Residential exhaust silencer

Alternator

- PMG excitation
- Anti Condensation Heater

For cold area

- Water heater
- Oil heater
- Rapid water preheater (diesel burner)

Auto system

- Remote Control panel
- ATS control cabinet
- Paralleling System

External ATS



220V water heater



Diesel powered heater



220V Oil heated Syn. Cabinet



Parker separator



TANON POWER reserves the right to change the specifications and design without notice.