

**Diesel Generating Set TNFM-500**

50Hz

**General Features**

- **Engine** C13 TE6 FPT Made in Italy
- **Alternator** ECO40 2S4A Mecc Alte Made in China
- **Controller** DSE7320 Deepsea Made in UK



Picture is only for reference

Prime power 360kW/450kVA

Standby power 400kW/500kVA



- Electric speed control
- 24V 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
- 28V 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 kw	kva	Standby kw	kva				
415/240V	360	450	400.0	500	50	3	0.8	626.1
400/230V	360	450	400.0	500	50	3	0.8	649.5
380/220V	360	450	400.0	500	50	3	0.8	683.7

**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.

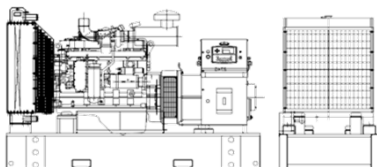
Warranty is according to below standard conditions, subject to the earlier one.

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

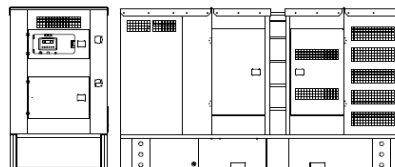
Service and parts are available from TANON or distributors in your location.

**Dimension And Weight**

**Open frame**  
Size(L×W×H):3200×1150×2200(mm)  
N.W.:3400 (kgs)



**Silent with Canopy**  
Size(L×W×H):4500×1700×2250(mm)  
N.W.:5000 (kgs)



## Diesel Generating Set TNFM-500

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### Engine Specifications

1	Engine model	C13 TE6
2	Engine manufacturer	FPT
3	Number of cylinders	6
4	Cylinder arrangement	Vertical in line
5	Cycle	4 stroke
6	Aspiration	Turbocharged aftercooled air/air
7	Bore×Stroke(mm×mm)	135 x 150
8	Displacement (Liter)	12.88
9	Compression Ratio	16.5:1
10	Prime power/speed (kW/RPM)	395/1500RPM
11	Standby power/speed (kW/RPM)	435/1500RPM
12	Speed governor	CR
13	Cooling system	Water-cooled
14	Coolant capacity (engine only) (L)	19.5
15	Steady speed droop (%)	≤5%
16	Total lubrication system capacity (L)	32
17	Oil consumption (% of fuel)	<0.1%
18	Fuel consumption at 100% load (L/H)	89.9
19	Fuel consumption at 80% load (L/H)	72.5
20	Fuel consumption at 50% load (L/H)	51.8
21	Starter motor	2x12Vx200Ah×4.53kW
22	Dynamo	28V×90A

### Alternator Specifications

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

1	Alternator model	ECO40 2S4A
2	Alternator manufacturer	Mecc Alte
3	Exciter type	Single bearing, Brushless, Self-excited
4	Rated output prime power	450KVA
5	Rated speed	1500 RPM
6	Rated frequency	50 Hz
7	Phase	3
8	Rated voltage	415V/240V, 400V/230V, 380V/220V
9	Power factor	0.8
10	Voltage adjust range	≥5%
11	Voltage regulation NL-FL	≤±1%
12	Insulation grade	H
13	Protection grade	IP23


#### Alternator option

Mecc Alte, Stamford, TANON

### 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%

**Control System**

Deepsea (UK)	Model	DSE7320
Protection	Parameter	PHOTO
<ul style="list-style-type: none"> <li>• Low oil pressure</li> <li>• High water temp</li> <li>• Over speed</li> <li>• over crank</li> <li>• Over load</li> <li>• Over/low volt</li> <li>• Over/low frequency</li> <li>• Battery charge failure</li> </ul>	<ul style="list-style-type: none"> <li>• Volt</li> <li>• current</li> <li>• power</li> <li>• speed</li> <li>• frequency</li> </ul>	
	<ul style="list-style-type: none"> <li>• oil pressure</li> <li>• oil temp</li> <li>• power factor</li> <li>• running time</li> <li>• water temp</li> <li>• battery voltage</li> </ul>	

**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 heater Syn. Cabinet



Parker separator



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