# Tanan 图 次 SHANGHAI TANON POWER CO., LTD.

# **Diesel Generating Set TNXS-22**

(S-22 50Hz

### **General Features**

Engine 4DW91-29DAlternator WHI184EController HGM6110U

FAWDE Made in china Wattek Made in China Smartgen Made in CHINA 16kW/20kVA

Standby power 17.6kW/22kVA







- Electronic speed control
- 12V starting batteries,maintennance-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

Prime power

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

# **General Ratings**

|          | Power |      |         |      | Fraguanay |       | P.F    | Prime Current  |
|----------|-------|------|---------|------|-----------|-------|--------|----------------|
| Voltage  | Prime |      | Standby |      | Frequency | Phase | (COS¢) | Fillie Cullent |
|          | kw    | kva  | kw      | kva  | (Hz)      |       |        | (A)            |
| 240/415V | 16.0  | 20.0 | 17.6    | 22.0 | 50        | 3     | 0.8    | 27.8           |
| 230/400V | 16.0  | 20.0 | 17.6    | 22.0 | 50        | 3     | 8.0    | 28.9           |
| 220/380V | 16.0  | 20.0 | 17.6    | 22.0 | 50        | 3     | 0.8    | 30.4           |

### 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 peiord 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.

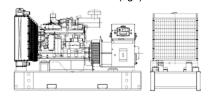
Warranty is according to below standard conditions, subject to the earlier one.

- 1. 15 months, counted on the day TANON sold to the first buyer.
- 2. One year after installation.
- 3. 1500 running hours.

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

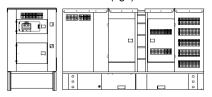
### **Dimension And Weight**

Open frame Size(L×W×H):1600×800×1050(mm)



N.W.:600 (kgs)

Silent with Canopy Size(L×W×H)::2000×850×1150(mm) N.W.:0 (kgs)







**Diesel Generating Set TNXS-22** 

| _   | _          |   |   |
|-----|------------|---|---|
| h   | <i>(</i> 1 | ш | 7 |
| - 1 | .,         |   | • |

| Engine Specifications |                                       |                  |  |  |  |  |
|-----------------------|---------------------------------------|------------------|--|--|--|--|
| 1                     | Engine model                          | 4DW91-29D        |  |  |  |  |
| 2                     | Engine manufacturer                   | FAWDE            |  |  |  |  |
| 3                     | Number of cylinders                   | 4                |  |  |  |  |
| 4                     | Cylinder arrangement                  | Vertical in line |  |  |  |  |
| 5                     | Cycle                                 | 4 stroke         |  |  |  |  |
| 6                     | Aspiration                            | Natural          |  |  |  |  |
| 7                     | Bore×Stroke(mm×mm)                    | 90x 100          |  |  |  |  |
| 8                     | Displacement (Liter)                  | 2.545            |  |  |  |  |
| 9                     | Compression Ratio                     | 17:1             |  |  |  |  |
| 10                    | Prime power/speed (kW/RPM)            | 21/1500RPM       |  |  |  |  |
| 11                    | Standby power/speed (kW/RPM)          | 23/1500RPM       |  |  |  |  |
| 12                    | Speed governor                        | mech             |  |  |  |  |
| 13                    | Cooling system                        | Water-cooled     |  |  |  |  |
| 14                    | Coolant capacity (engine only) (L)    | 12               |  |  |  |  |
| 15                    | Steady speed droop (%)                | ≤5%              |  |  |  |  |
| 16                    | Total lubrication system capacity (L) | 7.8              |  |  |  |  |
| 17                    | Oil consumption (% of fuel)           | <0.15%           |  |  |  |  |
| 18                    | Fuel consumption at 100% load (L/H)   | 5.0              |  |  |  |  |
| 19                    | Fuel consumption at 75% load (L/H)    | 4.0              |  |  |  |  |
| 20                    | Fuel consumption at 50% load (L/H)    | 3.0              |  |  |  |  |
| 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         | WHI184E                                 |
|----|--------------------------|---|
| 2  | Alternator manufacturer  | Wattek                                  |
| 3  | Exciter type             | Single bearing, Brushless, Self-excited |
| 4  | Rated output prime power | 22.5KVA                                 |
| 5  | Rated speed              | 1500 RPM                                |
| 6  | Rated frequency          | 50 Hz                                   |
| 7  | Phase                    | 3                                       |
| 8  | Rated voltage            | 400V                                    |
| 9  | Power factor             | 0.8                                     |
| 10 | Voltage adjust range     | ≥5%                                     |
| 11 | Voltage regulation NL-FL | ≤±1%                                    |
| 12 | Insulation grade         | Н                                       |
| 13 | Protection grade         | IP22                                    |

### Alternator option

Mecc Alte, Stamford, Leroy Somer

# Main Electrical Performance Data

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



**(€** Page: 2/3

# 农 SHANGHAI TANON POWER CO., LTD. Power & Machinery

# **Diesel Generating Set TNXS-22**

50Hz

#### **Control System** Model **HGM6110U** Deepsea (UK) **Parameter** РНОТО **Protection** Volt • oil pressure Low oil pressure • High water temp oil temp current Over speed power factor power • over crank • running time speed Over load • water temp frequency Over/low volt battery voltage Over/low frequency Battery charge failure

### 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.



CE ISO9001:2008 TANON POWER Diesel Generating Set Page: 3/3