TEREX DIESEL

YANGDONG

DIESEL GENERATOR SET

# TRX YD TA 0020-60 HZ

WATER COOLED | 1-3 PHASE | 60 Hz | DIESEL

| Service | | Standby | Prime |
|---|---|---|---|
| Power | *kVA* | 21 | 18 |
| Power | *kW* | 17 | 15 |
| Motor Speed | *r.p.m* | 1800 | |
| Voltage | *V* | 480/277 | |
| Power Factor | *Cos Phi* | 0,8 | |

**Standby power;** In standby operation, the load value defined in the document defines the annual usage at an average load of 70% under variable load conditions. Overloading is not allowed. Standby power is 10% more than prime power. It is used as backup power in areas where grid power infrastructure is available.

**Prime operation;** Unlimited hours of use throughout the year with an average load factor of 70% of the power defined in the document during a 24-hour operation period. Overloading is allowed for a maximum of 1 hour in variable periods every 12 hours of operation.This does not include continuous operation for 1 hour under overload.

**Continuous operation;** Unlimited hours of use of the entire defined power (100%). Overloading above the defined power is not allowed. It is for use in areas without grid power.

## QUALITY STANDARDS

Our generators comply with VDE 0530, BSE 4999 BS5000, IEC 34, EN12601; EN60204-1; TS ISO 8528-1 ... -13; EN12100-1; EN12100-2; EN61000-6-4; EN61000-6-2; EN61000-4-11; EN61000-4-6; EN61000-4-5; EN61000-4-2; EN55011; EN55016-2-1; EN55016-2-3; EN61000-3-2; EN61000-3-3; EN55014-1; EN61000-6-2; EN61000-4-3; EN61000-4-4; Manufactured in accordance with EN61000-4-8; EN61000-4-11; TS EN ISO 3744; TS EN ISO 3746; TS EN 60034-1; TS EN 60034-22; TS EN ISO 3046; BS 5514; NEMA MG 21; IEC 60034, BS 4999/5000, TS EN 60947-1..4 standards.

ISO 9001-2015, ISO 14001-2015, ISO 45001-2018 and ISO 1002-2006 management system certificates have been obtained with accreditation from TUV AUSTRIA.

Our generators, with sound insulation enclosures up to 400 kW power, are manufactured in accordance with directive 2000/14/EC and are certified by SZUTEST.

Our generators are certified according to TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 Insulation Foam Fire Behavior and TS EN ISO 9227 1500 Hour Neutral Salt Test. Our generators have CE Declaration.

TÜV AUSTRIA | SZUTEST | CE | TSE | EAC | TÜRKAK

TEREX DIESEL

www.terexdiesel.com

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## ENGINE SPECIFICATIONS

| Service | | Features |
|---|---|---|
| Brand | | YANGDONG |
| Model | | YND485D |
| Engine Type | | 4 Stroke - Diesel |
| Injection Type | | Direct Injection |
| Intake Type | | Natural |
| Number of Cylinders | | 4 In line |
| Cylinder Bore and Stroke | *mm* | 85x95 |
| Cylinder Volume | *L* | 2,156 |
| Cooling Type | | Water Cooled |
| Compression Ratio | | 18:1 |
| Fuel Consumption at 100% Prime Load | *(Ltr/h)* | 6,2 |
| Fuel Consumption at 75% Prime Load | *(Ltr/h)* | 5,5 |
| Fuel Consumption at 50% Prime Load | *(Ltr/h)* | 5,3 |
| Fuel Consumption at 25% Prime Load | *(Ltr/h)* | 3,9 |
| Total Oil Capacity | *L* | 5,5 |
| Total Cooling Capacity | *L* | 7 |
| Governor Type | *Type* | Mechanic |

The engine used in the generator set is a heavy-duty, industrial-type diesel engine. Depending on the model, the system is equipped with a water-cooled structure, naturally aspirated or turbocharged air intake system, mechanical or electronic governor, 12V/24V starter motor and charging alternator. The engine has replaceable air, fuel and oil filters, a flexible fuel hose, an oil drain valve and extension hose or oil drain pump. The system is also supplied with an industrial-type muffler, exhaust spiral or compensator, maintenance-free starter battery, and, in suitable models, an engine block water heater. Maintenance and operating manuals and electrical diagrams are provided with all products.

## ALTERNATOR SPECIFICATIONS

| Service | | Features |
|---|---|---|
| Brand | | TEREX |
| Model | | TA160-15N2 |
| Output Voltage | *V* | 480/277 |
| Frequency | *HZ* | 60 |
| Automatic Voltage Regulation | *±%* | 1 |
| Alternator Standby Power | *kVA* | 22 (50 Hz value) |
| Alternator Continuous Power | *kVA* | 25 |
| Power Factor | *Cosq* | 0,8 |
| Number of Cables | | 12 |
| Winding Pitch | | 2/3 |
| Protection Class | | IP23/H |
| Warning System | | Self-excited |
| AVR Model | | SX460 |
| Performance - PF 0.8 / 75% Load | *%* | 85,1 |

The alternator used in the generator set is a brushless, single-bearing, 4-pole synchronous type with flexible disc connections. It has Class H insulation and IP21-IP23 protection class. The system is self-excited and provides voltage stability with an electronic voltage regulator (AVR). The alternator stator windings are designed with a 2/3 pitch to reduce harmonic distortions. All windings are protected with a special insulation varnish against oil, moisture and acidic effects, offering long-lasting and reliable operation.

* Rows marked “50 Hz value” are taken from the model’s 50 Hz catalogue; their 60 Hz figures are confirmed in the quote.

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## DIMENSIONS

### OPEN TYPE

| | | |
|---|---|---|
| LxWxH | *mm* | 1200x1000x1050 |
| Weight | *kg* | 565 |
| Fuel Tank | *lt* | 100 |

### WITH CABIN

| | | |
|---|---|---|
| LxWxH | *mm* | 1800x1000x1250 |
| Weight | *kg* | 765 |
| Fuel Tank | *lt* | 100 |

### CABIN FEATURES

- Soundproof enclosure designed according to a modular principle
- Enclosure assembly using bolts and nuts without welding
- Enclosure components painted with epoxy-polyester outdoor powder coating using nanotechnology
- IP23 protection rating
- Design suitable for easy generator maintenance
- Lockable doors on both sides
- Emergency stop button in a flush-mounted special recess on the cabinet's exterior
- Transparent panel window
- Fire-resistant acoustic foam insulation
- Nano-technology cleaning system
- Container optional

### GENERATOR PROTECTION AND ALARMS

- High engine temperature
- Low oil pressure
- Excessive and low engine RPM
- Low coolant level
- Excessive current
- Excessive and low alternator voltage and frequency
- Start/stop system malfunction

### SILENCER OPTIONS

- Industrial-grade
- Critical-grade silencer
- Hospital-grade

### CABIN OPTIONS

- Standard Cabin
- Quiet Cabin
- Oval-Shaped Cabin

### OPTIONAL EQUIPMENT

- Charging ammeter
- Thermal-magnetic circuit breaker (in automatic models)
- Hospital/critical-grade silencer
- Soundproof enclosure designed according to a modular principle
- Trailer
- Synchronization panel for 2–16 generators
- 3-pole/4-pole power transfer panel
- Fuel heater, oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water separator filter
- PMG warning system

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*DIESEL GENERATOR SET*

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## GENERATOR CONTROL DEVICES

A new generation of single-generator control units that combine versatility with extensive communication capabilities for both backup and primary power applications, featuring EFI engines.

Datakom DKG 309

**STANDARD**

Datakom D500

OPTIONAL

Datakom D500-GSM

OPTIONAL

EMKO Trans-AUTO

OPTIONAL

DEEPSEA 7320

OPTIONAL

ComAp AMF25

OPTIONAL

| | Datakom DKG 309 | Datakom D500 | Datakom D500-GSM | Deepsea 6120 | Deepsea 7320 | ComAp AMF25 | EMKO Trans-AUTO |
|---|---|---|---|---|---|---|---|
| Automatic Main Monitoring | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Manual Operation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Remote Operation | OPTIONAL | OPTIONAL | ✓ | X | OPTIONAL | OPTIONAL | OPTIONAL |
| Remote Monitoring via SIM Card | X | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| Optional Features (Horn, Oil/Fuel, etc.) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Warning Light and MIM Diagram | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Battery Charger | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| RS-485 Communication | OPTIONAL | ✓ | ✓ | X | ✓ | OPTIONAL | ✓ |
| Ethernet (TCP/IP) Communication | X | ✓ | ✓ | X | OPTIONAL | OPTIONAL | OPTIONAL |

## GENERATOR CONTROL DEVICES FOR SYNCHRONIZATION SYSTEMS

The new-generation synchronous generator control unit is equipped with a full range of communication capabilities and functionalities.

Datakom D500 MK2

Datakom D700

DEEPSEA 8610

DEEPSEA 8620

DEEPSEA 8660

ComAp InteliCompact NT SPtM

ComAp InteliGen BaseBox

ComAp InteliGen 200

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