

# TRX BD TA 0550



| Service      |         | Standby | Prime |
|--------------|---------|---------|-------|
| Power        | kVA     | 550     | 500   |
| Power        | kW      | 440     | 400   |
| Engine Speed | r.p.m   | 1500    |       |
| Voltage      | V       | 230/400 |       |
| Power Factor | Cos Phi | 0,8     |       |

**Standby power;** In standby mode, the load value defined in the document describes annual usage under variable load conditions, averaging 70% load. Overloading is not permitted. Standby power is 10% more than prime power. It is used as backup power in areas where grid power infrastructure is available.

**Prime power;** This document specifies 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 working period. It may be overloaded for a maximum of 1 hour at varying intervals during every 12-hour workday. This does not include continuous operation for 1 hour under overload conditions.

**Continuous power;** This allows for unlimited hours of use at the full (100%) of the defined power. Overloading beyond the defined power is not permitted. It is intended for use in locations without mains 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 TÜV 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.

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## ENGINE

| Service                             |      | Features                   |
|-------------------------------------|------|----------------------------|
| Brand                               |      | BAUDOUIN                   |
| Model                               |      | 6M21G550/5                 |
| Engine Type                         |      | 4 Stroke - Diesel          |
| Injection Type                      |      | Direk Enjeksiyon           |
| Intake Type                         |      | Turbo Charge & Aftercooler |
| Number of Cylinders                 |      | 6                          |
| Cylinder Bore and Stroke            | mm   | 127x165                    |
| Cylinder Volume                     | L    | 12,54                      |
| Cooling Type                        |      | Water Cooled               |
| Compression Ratio                   |      | 15,2:1                     |
| Fuel Consumption at Standby Load    | l/h  | 123,1                      |
| Fuel Consumption at 100% Prime Load | l/h  | 109,5                      |
| Fuel Consumption at 75% Prime Load  | l/h  | 75,3                       |
| Fuel Consumption at 50% Prime Load  | l/h  | 51                         |
| Total Oil Capacity                  | L    | 34                         |
| Total Cooling Capacity              | L    | 37                         |
| Governor Type                       | Type | ECU                        |

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

| Service                         |      | Features     |
|---------------------------------|------|--------------|
| Brand                           |      | TEREX        |
| Model                           |      | TA315-400N   |
| Output Voltage                  | V    | 230/400      |
| Frequency                       | HZ   | 50           |
| Automatic Voltage Regulation    | ±%   | 1            |
| Alternator Standby Power        | kVA  | 590          |
| Alternator Continuous Power     | kVA  | 550          |
| Power Factor                    | Cosφ | 0,8          |
| Number of Cables                |      | 12           |
| Winding Pitch                   |      | 2/3          |
| Protection Class                |      | IP23/H       |
| Warning System                  |      | Self-Warning |
| AVR Model                       |      | AS440        |
| Performance - PF 0.8 / 75% Load | %    | 95,2         |

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.

## DIMENSIONS

### Open Type



|           |    |                |
|-----------|----|----------------|
| LxWxH     | mm | 4000x1900x2990 |
| Weight    | kg | 5450           |
| Fuel Tank | lt | 1370           |

### Canopied



|           |    |                |
|-----------|----|----------------|
| LxWxH     | mm | 4000x1900x2790 |
| Weight    | kg | 5775           |
| Fuel Tank | lt | 1370           |

### CABIN FEATURES

- Modular design, sound insulation cabin
- Cabin assembly performed with bolts and nuts without welding
- Cabin parts painted with epoxy polyester exterior powder paint using nanotechnology
- IP23 protection class
- Design suitable for easy generator maintenance
- Lockable doors on both sides
- Emergency stop button in a special, non-protruding recess on the cabin's exterior surface
- Transparent panel window
- Fireproof acoustic foam insulation
- Nanotechnology cleaning system
- Container optional

### GENERATOR PROTECTION AND ALARMS

- High engine temperature
- Low oil pressure
- Excessive and low engine speed
- Low radiator water level
- Excessive current
- Excessive and low generator voltage and frequency
- Start/stop malfunction

### SILENCER OPTIONS

- Industrial type
- Critical type Silencer
- Hospital type

### CABIN OPTIONS

- Standard Cabin
- Quiet Cabin
- Special Type Cabin

### OPTIONAL EQUIPMENT

- Charging ammeter
- Thermal magnetic circuit breaker (in automatic models)
- Hospital/Critical type muffler
- Sound insulation cabinet designed according to 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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## OPTIONAL GENERATOR CONTROL DEVICES

Next-generation single generator control units combining multifunctionality for backup and main power applications and extensive communication with EFI engines.



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

## GENERATOR CONTROL DEVICES FOR SYNCHRONIZATION SYSTEMS

The new generation synchronized generator control unit has all kinds of communication and functionality.

