# DIESEL GENERATORS

Tescom HELLAS

## TDG1250B

MOTEURS Baudouin

| | | |
|---|---|---|
| STAND BY | kVA | 1250 |
| | kW | 1000 |
| PRIME | kVA | 1125 |
| | kW | 900 |


WATER COOLED · 50HZ · EASY · 3 PHASE · DIESEL · REMOTE

### STAND BY RATING (ESP)

It is the way that generators operate under variable load at certain time intervals. It can work as a backup power. It is not suitable to work under extreme load.

### PRIME RATING (PRP)

Applicable for supplying power to varying electrical load for unlimited hours. 10% overload capability is available for a period of 1 hour within 12-hour perod of operation.

### CONTINUOUS OPERATION

It is the continious working under constant load. Unlimited hours use of all (100%) of the defined power. It cannot be overloaded above the defined power. For use where there is no mains power.

### DESCRIPTION

TESCOM TDJ Series Diesel generator set is a fully integrated power generation system, providing optimum performance, reliability, and versatility for stationary standby, prime power and continuous duty applications.

### FEATURES

Baudouin heavy-duty engine - Rugged 4-cycle industrial diesel delivers reliable power, low emissions and fast response to load changes.

Alternator - Low reactance 2/3 pitch windings; low waveform distortion with non- linear loads, fault clearing short- circuits capability, and class H insulation.

Cooling system - The standart integrated kit model radiator system designed and tested for nominal ambient temparatures, simplifres facility design requirements for heat rejected.

Control system – TESCOM TCM01 electronic control is standard equipment and provides total genset system integration, including auto remote start/ stop, alarm and status message display.

Canopy Types - Optionally it is possible to make it protective and soundproof against adverse climatic conditions.

Warranty and service - Backed by a comprehensive warranty and worldwide aftersales support, 10 years of spare parts supplying.

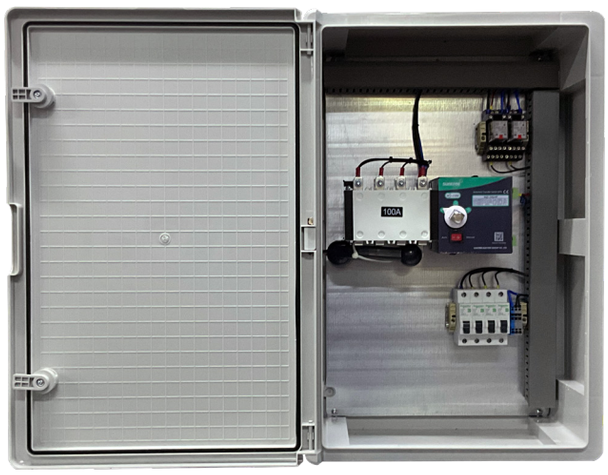
## CONTROL PANEL FEATURES

- The cable group we use in our generators is  fireproof cable class. Cable sheaths form the defense line of cables against various chemicals and flame.

- The use of Halogen-free materials in the outer sheath of the cables prevents the spread of toxic gases during a fire. At the same time, fireproof cable sheaths have low smoke density and flame retardant properties. This feature of firepr of cable sheaths prevents the spread of fire and minimizes possible damages.

- chneider Electric breaker group is used in generator control panels. As a standard, all our products have a 4-pole MCCB (Molded Case Circuit Breaker)

## ATS (AUTOMATIC TRASFER SWITCH) GENERAL FEATURES



- The SQ5 Dual Power Automatic Transfer Switch Series is a kind of automatic transfer switch that combines the switch and the logic controller, enabling the mechanical and electrical to become an inseparable whole.
- Superior electromagnetic compatibility, high resistance to interference.
- It has zero-time transfer technology with high reliability.
- It cuts the dual circuit power simultaneously.
- In addition to PLC remote control, it has a multi-circuit input / output interface that can automate the system.

| ATS MODEL | GENERATOR POWER RANGE |
|---|---|
| 100 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 0-70 kVA |
| 160 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 82-124 kVA |
| 250 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 125-165 kVA |
| 400 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 220-275 kVA |
| 630 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 300-440 kVA |
| 800 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 500-550 kVA |
| 1000 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 660-715 kVA |
| 1250 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 750-825 kVA |
| 1600 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 900-1100 kVA |
| 2000 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 1250kVA |
| 2500 A SUNTREE BRAND TRANSFER PANEL WITH TRANSFER SWITCH | 1400-1600 kVA |

## MOTOR FEATURES

| | |
|---|---|
| Frequency | 50Hz |
| Output rating | 1108kW |
| Manufacturer and model | Baudouin 12M33G1250/5 |
| Fuel | Diesel |
| Injection | Direct |
| Aspiration | Naturally aspirated |
| Cylinders | 12 |
| Bore and Stroke | 150 x 185mm |
| Displacement | 39,2lt |
| Cooling | Water |
| Engine oil specification | SAE 15W40 |
| Compression ratio | 15:1 |
| Engine oil capacity (sump only) | 160lt |
| Coolant capacity (incl.radiator) | 167lt |
| Governor | Electronic |
| Air filter | Dry element |
| **FUEL CONSUMPTION** | |
| 100% load | 262,2lt/h |
| 75% load | 175lt/h |
| 50% load | 119,5lt/h |
| **EXHAUST SYSTEM** | |
| Maximum temperature | < 750°C |
| Exhaust gas flow | 225,1$m^3$/min |
| Maximum exhaust back pressure | 75mBar |
| Exhaust flange size (internal dia.) | 200mm |
| **AIR SYSTEM** | |
| Intake air flow | 74,1$m^3$/min |
| Air intake temperature rise | < 5°C |
| **STARTING SYSTEM** | |
| Starter motor | 10kW |
| Battery capacity | 55Ah |
| Auxiliary voltage | 24V |

## ALTERNATOR FEATURES

| | |
|---|---|
| Brand | TESCOM |
| Poles | 4 Poles |
| Frequency | 50/60Hz |
| Winding connections | Star |
| Insulation | Class H |
| Enclosure | IP23 |
| Power factor | 0,8 |
| Altitude | 1000m |
| Exciter system | Self exication |
| Voltage regulator | AVR |
| Steady state voltage regulation | ± 1% |
| Direction of rotation | Clockwise |
| Cooling | Direct drive centrifugal blower fan |

## CONTROL SYSTEM

The new TESCOM TCM01 genset controllers are a cost effective modular genset controller ready for internet monitoring through plug-in modules. Its main advantages are multifunctionality, support for multiple topologies, harmonic analysis and detailed power measurements. Different brand controller can be offered upon request.


## DESCRIPTION

Software features are complete with easy firmware upgrade through USB port. The Windows based PC software allows monitoring and programming through USB, RS-485, RS-232, Ethernet and GPRS. The Rainbow Scada web service allows monitoring and control of an unlimited number of gensets from a single central location.

## MAJOR FEATURES

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable languages
- Waveform display of V & I
- Harmonic analysis of V & I
- 16Amp MCB & GCB outputs
- 8 configurable digital inputs
- 6 configurable digital outputs
- 3 configurable analog inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of gensets
- Manual “speed fine adjust” on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel filling & fuel theft alarm
- Battery back-up real time clock
- Idle speed control
- Battery charge run enabled
- Combat mode support
- Multiple nominal conditions
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel ÿlling counter
- Fuel consumption counter
- Modem diagnostics display
- Conÿgurable through USB, RS-485, Ethernet and GPRS
- Free conÿguration program
- Allows SMS controls
- Ready for central monitoring
- Mobile genset support
- Automatic GSM geo-location
- Easy USB ÿrmware upgrade
- -40°C operation with optional display heater
- IP65 rating with optional gasket

## COMMUNICATION

- USB Device
- J1939-CANBUS
- Geo-locating through GSM
- Internet Central Monitoring
- SMS message sending
- E-mail sending
- Free PC software: Rainbow Plus
- Modbus RTU (2400-57600baud)
- Modbus TCP/IP

## MEASUREMENTS

- Mains & genset PN/PP voltages
- Mains & genset frequency
- Mains & genset phase currents
- Mains & genset neutral currents
- Mains & genset, phase & total, kW, kVA, kVAr, pf
- Engine speed
- Battery voltage

## PLUG-IN MODULES

- GSM Modem (2G-3G-4G)
- Ethernet 100Mbps
- Wi-Fi (802.11 b/g/n)
- RS-485 (2400-57600baud)
- RS-232 (2400-57600baud)

## FUNCTIONALITIES

- AMF unit
- ATS unit
- Remote start controller
- Manual start controller
- Engine controller

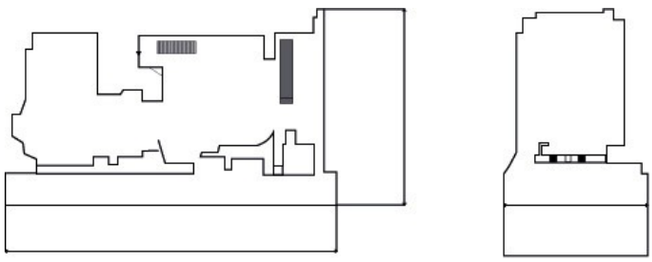
## TOPOLOGIES

- 3 ph 4 w, star & delta
- 3 ph 3 w, 2 CTs
- 2 ph 3 w
- 1 phase 2 wires

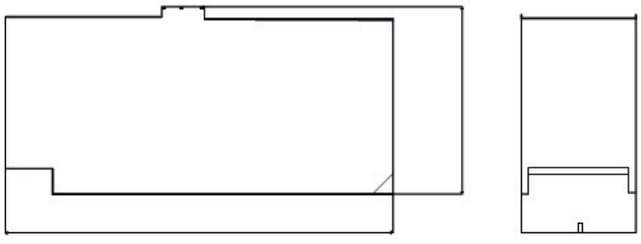
# CANOPY STANDARD SPECIFICATIONS

- Compact design connection with non-welded nuts and bolts.
- Integrated canopy,generator set,exhaust system fuel tank.
- Body made from steel components treated with polyester powder coating
- Easy access to all service points
- Exhaust system inside canopy
- Large doors on each side
- Control panel viewing window in a lockable access door
- Emergency stop push button mounted on cabin exterior
- Fuel fill and battery can only be reached via lockable access doors.
- Customer options available to meet your applications needs.
- TESCOM makes its generating sets noise level tests in accordance with directive 2000/14/EC validation of the noise level test has been aproved by the notified body Szutest (CE conformity assessment body).

## OPEN TYPE



## WITH CABINET



| | Length (mm) | Width (mm) | Height (mm) | Tank capacity (L) |
|---|---|---|---|---|
| OPEN TYPE | 5500 | 2300 | 2730 | 1500 |
| WITH CABINET | 5500 | 2300 | 3130 | 1500 |

# CERTIFICATES

- Power according to ISO 3046 and ISO 8528
- EN 12100 , EN 13857 , EN 60204
- 2006/42/CE Machinery Safety
- 2006/95/EC Low Voltage
- 2004/108/CE EMC
- Ambient reference conditions 1000 mbar, 25 °C, 30 % relative humidity ISO8528

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