

# Diesel Generators

## TDG25B

## **Baudouin**

STAND BY	kVA	25
	kW	20
PRIME	kVA	23
	kW	18,4







MAINTENANCE









### 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 – Datakom 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.





Frequency	50Hz			
Output rating	25kW			
Manufacturer and model	Baudouin 4M06G25/5			
Fuel	Diesel			
Injection	Direct			
Aspiration	Naturally aspirated			
Cylinders	4			
Bore and Stroke	89 x 92mm			
Displacement	2,3lt			
Cooling	Water			
Engine oil specification	SAE 15W40			
Compression ratio	17,5:1			
Engine oil capacity (sump only)	9,5lt			
Coolant capacity (incl.radiator)	8,6lt			
Governor	Electronic			
Air filter	Dry element			
FUEL CONSUMPTION				
100% load	7,1lt/h			
75% load	4,5lt/h			
50% load	3,2lt/h			
EXHAUST SYSTEM				
Maximum temperature	< 700°C			
Exhaust gas flow	5,32m³/min			
Maximum exhaust back pressure	80mBar			
Exhaust flange size (internal dia.)	50mm			
AIR SYSTEM				
Intake air flow	1,44m³/min			
Air intake temperature rise	<5°C			
STARTING SYSTEM				
Starter motor	3kW			
Battery capacity	60Ah			
Auxiliary voltage	12V			



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 D300 MK2 genset controller is 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.

#### 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 filling counter
- Fuel consumption counter
- · Modem diagnostics display
- Configurable through USB, RS-485, Ethernet and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring
- · Mobile genset support
- Automatic GSM geo-location
- Easy USB firmware 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**

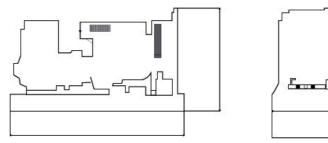
- · 3 ph 4 w, star & delta
- 3 ph 3 w, 2 CTs
- 2 ph 3 w
- 1 phase 2 wires



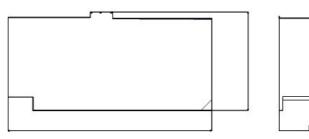
#### CANOPY STANDART SPECIFICATIONS

- 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	1900	900	1200	150
WITH CABINET	1900	900	1300	150

#### **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

