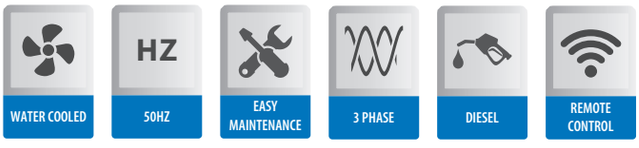
TDJ500B

MOTEURS Baudouin

STAND BY	kVA	500
	kW	400
PRIME	kVA	455
	kW	364



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.

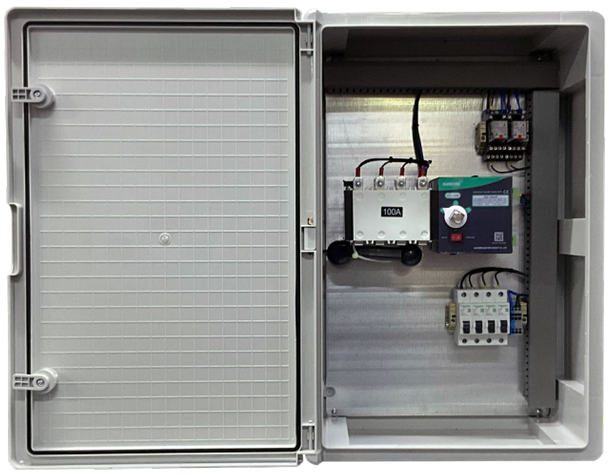
CONTROL PANEL FEATURES

- 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.

- Schneider 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	450kW
Manufacturer and model	Baudouin 6M21G500/5
Fuel	Diesel
Injection	Direct
Aspiration	Naturally aspirated
Cylinders	6
Bore and Stroke	127 x 165mm
Displacement	12,54lt
Cooling	Water
Engine oil specification	SAE 15W40
Compression ratio	16:1
Engine oil capacity (sump only)	40lt
Coolant capacity (incl.radiator)	45lt
Governor	Electronic
Air filter	Dry element
FUEL CONSUMPTION	
100% load	110,2lt/h
75% load	69,6lt/h
50% load	46,6lt/h
EXHAUST SYSTEM	
Maximum temperature	< 740°C
Exhaust gas flow	99m^3/min
Maximum exhaust back pressure	120mBar
Exhaust flange size (internal dia.)	100mm
AIR SYSTEM	
Intake air flow	28,7m^3/min
Air intake temperature rise	< 15°C
STARTING SYSTEM	
Starter motor	8,5kW
Battery capacity	70Ah
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 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

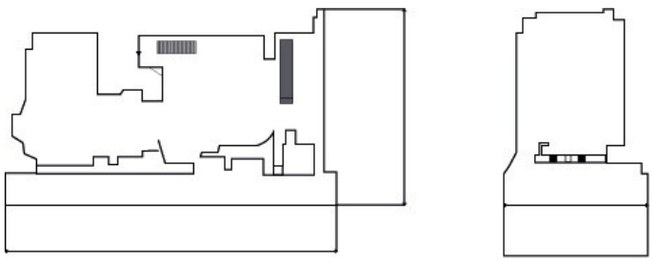
TOPOLOGIES

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

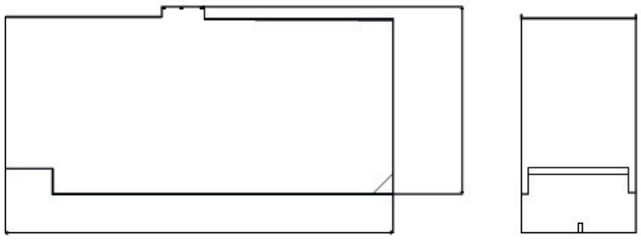
CANOPY STANDART SPECIFICATIONS

- 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	4280	1800	2416	900
WITH CABINET	4280	1800	2716	900

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