

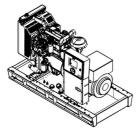


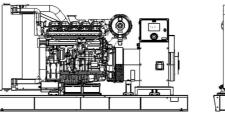
# OR205DW5A

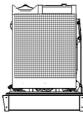




Output				
Standby Power (ESP)	kVA		205	
Stalidby Fower (ESF)	kW		164	
	kVA		185	
Prime Power (ESP)	kW		148	
Size	W x L x H (m)	Weigh (k)	Fuel (It)	Noise @
Canopied	1200 x 3600 x 1950	2392	330	76
Open Skid	1200 x 2700 x 1650	1822	330	TBA







### Continuous

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load. Average load can be 100%. The generator must not be overloaded.

#### Standby

The max power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hrs of operation per year under average of 70% load. Overloading isn't permissible.

#### Prime

The maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12 hrs.

Engine		
Manufacturer		DOOSAN
Model		P086TI
No of Cylinders		6
Cylinder Configuration		INLINE
Displacement	lt	8,1
Bore	mm	111
Stroke	mm	139
Compression Ratio		16,4:1
Aspiration		TURBOCHARGE- INTERCOOLER
Governor Type		ELECTRONIC
Cooling System		WATER
Coolant Capacity	lt	48,5
Lubrication Oil Capacity	lt	15,5
Electrical System	VDC	24
Speed / Frequency 50 Hz	rpm	1500 rpm / 50 Hz
Engine Gross Power (Standby 50 Hz)	kW	199
Fuel Consumption 110 % 50 Hz	lt/h	42,8
Fuel Consumption 100 % 50 Hz	lt/h	38,1
Fuel Consumption 75 % 50 Hz	lt/h	28
Fuel Consumption 50 % 50 Hz	lt/h	18,6
Exhaust Outlet Temperature 50 Hz	°C	580
Exhaust Gas Flow 50 Hz	m3/min	33,9

Cooling Air Flow 50 Hzm3/min250AlternatorManufacturerMARELLIModelMJB250MB4No of Phases3Power Factor0,8No of BearingsSINGLENo of Poles4No of Leads12Voltage Regulation (Steady State)\$100 (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2FrequencyHz50Voltage Output 50 HzVAC230 / 400YAC		0/ 1	10.4	
Alternator       Manufacturer     MARELLI       Model     MJB250MB4       No of Phases     3       Power Factor     0,8       No of Bearings     SINGLE       No of Poles     4       Voltage Regulation (Steady State)     \$\frac{4}{12}\$       Voltage Regulation (Steady State)     Speed from (-%2) to (+%5) and CosØ=0,8-1]       Insulation Class     H       Degree of Protection     IP 23       AVR (Automatic Voltage Regulator), Brushless     State)       Connection Type     STAR       Total Harmonic Content (No Load)     < %2	Combustion Air Flow 50 Hz	m3/min	12,1	
ManufacturerMARELLIModelMJB250MB4No of Phases3Power Factor0,8No of BearingsSINGLENo of Poles4No of Leads12Voltage Regulation (Steady State)\$peed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23AVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 FrequencyFrequencyHz50 Voltage Output 50 Hz	Cooling Air Flow 50 Hz	m3/min	250	
ModelMJB250MB4No of Phases3Power Factor0,8No of BearingsSINGLENo of Poles4No of Leads4Voltage Regulation (Steady State)\$\$Poed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation System\$\$VAVR (Automatic Voltage Regulator), BrushlessConnection Type\$\$TARTotal Harmonic Content (No Load)\$\$%2FrequencyHz50Voltage Output 50 HzVAC230 / 400\$\$	Alternator			
No of Phases3Power Factor0,8No of BearingsSINGLENo of Poles12No of Leads4Voltage Regulation (Steady State)± %0,5 [In Steady State, Speed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 S0FrequencyHz50 Voltage Output 50 Hz	Manufacturer		MARELLI	
Power Factor0,8No of BearingsSINGLENo of Poles12No of Leads41212Voltage Regulation (Steady State)\$\$90,5 [In Steady State, Speed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 VACFrequencyHz50 VACVoltage Output 50 HzVAC230 / 400XAC	Model		MJB250MB4	
No of BearingsSINGLENo of Poles	No of Phases		3	
No of Poles4No of Leads41212Voltage Regulation (Steady State)± %0,5 [In Steady State, Speed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 S0FrequencyHz50 Voltage Output 50 HzVoltage Output 50 HzVAC230 / 400	Power Factor		0,8	
No of Leads4No of Leads12Voltage Regulation (Steady State)± %0,5 [In Steady State, Speed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 S0FrequencyHz50 Voltage Output 50 Hz	No of Bearings		SINGLE	
No of Leads12Voltage Regulation (Steady State)± %0,5 [In Steady State, Speed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 S0FrequencyHz50 Voltage Output 50 Hz	No of Poles			
Voltage Regulation (Steady State)Speed from (-%2) to (+%5) and CosØ=0,8-1]Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 50FrequencyHz50 Voltage Output 50 Hz	No of Leads			
Insulation ClassHDegree of ProtectionIP 23Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2			Speed from (-%2) to (+%5)	
Excitation SystemAVR (Automatic Voltage Regulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 ConcententFrequencyHz50Voltage Output 50 HzVAC230 / 400	Insulation Class		Н	
Excitation SystemRegulator), BrushlessConnection TypeSTARTotal Harmonic Content (No Load)< %2 CFrequencyHzVoltage Output 50 HzVAC230 / 400	Degree of Protection		IP 23	
Total Harmonic Content (No Load)< %2    Hz< %2  50FrequencyHz50Voltage Output 50 HzVAC230 / 400	Excitation System		Regulator),	
Load)Hz50FrequencyHz230 / 400Voltage Output 50 HzVAC230 / 400	Connection Type		STAR	
Voltage Output 50 Hz VAC 230 / 400			< %2	
	Frequency	Hz	50	
Rated Power (Standby) k\/A 205	Voltage Output 50 Hz	VAC	230 / 400	
400_50 Hz	Rated Power (Standby) 400_50 Hz	kVA	205	
Efficiency (4/4_400 V_50 Hz) % 93	Efficiency (4/4_400 V_50 Hz)	%	93	

# Standard Equipments

#### Engine

In Teksan generator sets, leading engine brands that have state of the art technology and have compliance with ISO 8528, ISO 3046, BS 5514, DIN 6271 standarts, are being used. These engines with low fuel consumption, provide accurate speed setting and order, mount to the fuel pump, also have mechanic or electronic type governors.

#### Alternator

In products Teksan produced, leading alternator brands of the world that have state of the art technology, high quality, productivity and durability, are being used. All alternators, which pass necessary test process and found appropriate according to EC 60034-1; CEI EN 60034-1; BS 49995000; VDE 0530, NF 51- 100,111; OVE M-10, NEMA MG 1.22. standarts, have bearing system that does not need maintenance, with electronic type voltage regulator providing voltage setting.

#### **Control Panel**

Standard control panel, that is used in Teksan generator sets, ensures comfortable and safe usage. All measured and statistical parameters, operating modes, notice and alarms and condition of generator, are monitored easily from the control panel. On the front of the panel's metal body has electronic control module and the emergency stop button and the panel's metal body is made of steel sheet and is painted with electrostatic powder paint.

Teksan offers panel design and solutions that comply with special requirements of customers as well as quality standard panels.

#### Chassis and Fuel Tank

Chassis is manufactured from steel that has features and durability for carrying burden of generator set. Thanks to its rigid structural design and anti-vibration mounts, it reduces vibration level to minimum. All chassis contain lifting lugs. Apart from chassises that are produce by Teksan, special solutions that design in accordance with customer desires, make transportation and positioning easier.

In less than 1600 kVA power generator sets, fuel tank is produced integratedly to the chassis. In more than 1600 kVA power generator sets, rectangular type fuel tank is provided with generator set seperately. In all types of fuel tank have its level and indicator.

Cooling System System, that consists of quality industrial type radiator, expansion tank and cooler fan, keeps the temprature of generator set's equipments constant at a proper level.



Canopy

ORKAL Standard Canopies' default features are as follows;

 Compatible with 2000/14/EC directives, certified noise emission level,

 2 or 4 points transport possibility according to cabin size,

 Hidden exhaust inside the canopy,

 Emergency stop button located on the canopy,

Improved air suction channel to ensure homogenous cooling in the canopy,

 Radiator air outlet and exhaust with designed towards above,

- Lid on cab that provides to be filled up water and antifreeze easily to the radiator,
- Amplified paint system against corrosion and rust,
- Improved performance in terms of sound insulation,
- Demounted parts that make transportation and maintenance easier,

As well as the standard range of canopies, TEKSAN can also design tailormade canopies with specific sound level or size upon customer requests.

## **Optional Equipments**

Some Optional Equipments that Teksan provides with Generator Sets;

- Medium voltage alternator,
- Remote radiator applications,
- Automatic fuel filling system,
- Fuel tank, oil pan, dashboard, alternator, coil heaters,
- Alternator with double AVR and PMG,
- Synchronization systems,
- The generator output breaker,
- Grid-generator transfer switches,
- Accordance with the specific volume of demandinsulated cabins,
- Seismic

solutions,

Trailer,

## Control Panel Features-TJ 509-T

- The TJ-509T is a next generation genset control unit combining multifunctionality and wide communication possibilities together with a reliable and low cost design.
- The unit complies and mostly exceeds world's tightest safety, EMC, vibration and environmental standards for the industrial category.
- Software features are complete with easy firmware upgrade process through USB port. The Windows based PC software allows monitoring and programming through USB, RS-485, Ethernet and GPRS.
- The PC and server based Rainbow Scada software allows monitoring and control of an

unlimited number of gensets from a single central location.

## Function

- AMF unit with uninterrupted transfer
- ATS unit with
- uninterrupted transfer
- Remote start
- controller
- Manual start controller
- Engine controller
- Remote display &
- control unit
- Waveform display of V & I
- Harmonic analysis of
   V & I
- CTs at genset or

load side

## Communication

- SM-GPRS
- Web monitoring
- Web programming
- GSM-SMS
- e-mail
- USB Device
- RS-232
- J1939-CANBUS

Topologie



2 phase 3 wires, L1-L2

- 2 phase 3 wires, L1-L3
- 3 phase 3 wires, 3 CTs
- 3 phase 3 wires, 2 CTs (L1-L2)
- 3 phase 3 wires, 2 CTs (L1-L3)

- 3 phase 4 wires, star
- 3 phase 4 wires, delta
- 1 phase 2 wires
- Technical information and values are according to ISO8528, ISO3046,NEMA MG-1.22, IEC 600341, BS 4999-5000, VDE 0530 standards.
- Producing with ISO9001, ISO14001, OHSAS18001, TSE, CE standards.
- All information given in this leaflet is intended for general purposes only.
- Due to a policy continuous improvement Teksan reserves the right to amend details and specifications without notice and all information given is subject to the Teksan's current condition of sales.

TBA: To Be Asked TBD: To Be Determined NA: Not Avaliable N/A: Not Applicable TTDTJ205DW5A20170214EN