# TJT4F36DW

## **Industrial Diesel Generator Sets**

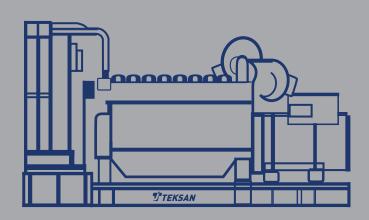
EPA Certified for Mobile / Stationary Prime Applications











### **Genset Standby Power Rating**

				Multi Voltage		
Voltage	208/120V	480/277V	240/120V	208/120V	480/277V	240/120V
Phase	3	3	1	3	3	1
Pf	0,8	0,8	1	0,8	0,8	1
Alternator Model	LSA42.3S4	LSA 42.3 VS3	LSA 42.3 S4		LSA 42.3 S5	
Temp Rise	125/40°C	125 / 40 °C	125 / 40 °C		125 / 40 °C	
Connection	12 Leads PS	12 Leads SS	12 Leads DD	Vo	ltage Selector Swit	ch
Standby Power kW/kVA	32/40	32/40	24/24	32/40	32/40	27/27
Current	112A	48A	100A	112A	49A	115A
Prime Power kW/kVA	29/36	29/36	24/24	29/36	29/36	27/27
Current	100A	43A	100A	100A	43A	115A

#### **Continuous Power**

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.

#### **Prime Power**

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.

#### **Standby Power**

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.

#### **Certifications & Standards**

The Generator set is designed and manufactured in a facility certified to ISO9001:2015, ISO14001:2015, ISO45001-2018 and ISO10002:2014 standards.

The generator set, with its components, are **prototype tested**, factory-built and production tested per UL standards.

# **Industrial Diesel Generator Sets**



### **Application Data - Engine**

Engine	
Manufacturer	Doosan
Model	D18
Number of Cylinders	3, Inline
Cubic Capacity	0.474 gallon
Bore x Stroke	3.54 in x 3.70 in
Aspiration	Turbocharged, air to air aftercooled
Combustion Ratio	17.0 : 1
Gross Engine Power - Standby	42 kW
Net Engine Power - Standby	36 kW
Gross Engine Power - Prime	38 kW
Net Engine Power - Prime	32 kW
Rated rpm	1800
Emission	Tier 4 Final

Electrical System	
Starting Motor Voltage	12V
Battery Charging Alternator	110A / 140A
Battery Qty, CCA Rating	100 Ah, 750CCA

Fuel System	
Fuel Injection	Bosch
Fuel Pump	Common Rail
Governor Type	ECU
Fuel Filter	Full flow, cartridge type

Fuel Consumption	
Standby Power (110% of Prime)	2.42 gal/h
Prime Power (100%)	2.2 gal/h
DEF Consumption	N/A

Cooling System	
Cooling Method	Fresh water forced circulation
Total Coolant Capacity	2.22 gallon
Water Pump	Centrifugal type driven by belt
Cooling Fan	Blower type, Ø17.32 (ATB 52°C)
Water temperature	230 °F (max.)

Lubrication System	
Oil Filter	Full flow, cartridge type
Total lubricating capacity	1.66 gallon
Lubricating Oil	10W30/40 (API CK-4 / ACEA E6)
Max Oil Temperature	275 °F at main oil gallery

Engineering Data	
Water Flow	18.49 gallon/min
Air Flow	15929.186 gal/min
Exhaust Gas Temperature	1382 °F
Max. Intake Permission Restrictions	6.5 kPa dirty filter
Max. Exhaust Permission Restrictions	15 kPa

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# **Industrial Diesel Generator Sets**



Application	Data - A	lternator
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Application Data - Alternator						`
Manufacturer			Leroy Sc	omer		
Туре		4 Poles, Br	ushless			
Protection			IP 23	3		
Voltage Regulation			± 0.2	5%		
One Step Load Acceptance			100% of rat	ed load		
Bearing		Single				
THD in Linear Load			< 5%	6		
Waveform: NEMA TIF		< 50				
Altitude		≤1000 meters				
Over Speed			<b>2250</b> r	pm		
AVR			D350	)		
Genset Voltage	208/120V	480/277V	240/120V	208/120V	480/277V	240/120V
Alternator Model	LSA42.3 S4	LSA42.3 VS3	LSA42.3 S4		LSA42.3 S5	
Phase / Leads / Connection	3 / 12/ PS	3/12/SS	1/12/DD	Multi	Voltage Selector	- 3/3/1
P.F.	0,8	0,8	1	0,8	0,8	1
Power @ Temp Rise 125/40 °C	40,5kVA	40kVA	24kVA	46kVA	50kVA	27,5kVA
Power @ Temp Rise 105/40 °C	37kVA	36,5kVA	22kVA	42kVA	45,5kVA	25kVA
Efficiency @ 100% load	90,30%	88,90%	87,40%	89,70%	90,20%	85,20%
skVA @ 30% Voltage Dip (P.F. = 0.6)	100kVA	100kVA	-	100kVA	135kVA	-

## **Application Data - Circuit Breaker**

Genset Voltage	208/120V	480/277V	240/120V	Multi Voltage
ABB (80% Rated) Breaker Model	XT1N125-125A	XT1N125-50A	XT1N125-100A	XT1N125-125A
Current Rating (In)	125	50	100	125
Trip Unit	TMF	TMF	TMF	TMF

### **Industrial Diesel Generator Sets**



#### **Control Panel**

Manufacturer	DSE - Deep Sea Electronics
Model	7310 MKII
DC Supply	8 to 35V Continuous
Generator Voltage Range (Ph-Ph)	26V to 719V AC
Generator Frequency Range	3,5Hz to 75Hz
	BS EN 61000-6-2, BS EN 61000-6-4,
	BS EN 60950, BS EN 60529
Standards	BS EN 60068-2-1, BS EN 60068-2-2
	BS EN 60068-2-6, BS EN 60068-2-30
	BS EN 60068-2-78, BS EN 60068-2-27



#### **Key Features**

License free PC software

4-Line back-lit LCD text display

Five key menu navigation

**LCD Alarm Indication** 

DSENet expansion compatibility

Internal PLC editor

Protection disable feature

Data logging facility

Fully configurable via PC

Front panel configuration

Power safe mode

6 configurable DC outputs

2 configurable volt free relay outputs

6 configurable analogue/digital inputs

8 configurable digital inputs

Configurable 5 stage dummy load and load shedding outputs

Backed up real time clock

Fuel usage monitor and low fuel level alarms

Remote SCADA monitoring via DSE Configuration Suite PC Software

Advanced SMS messaging (additional external model required)

Start & Stop capability via SMS messaging

Configurable event log (250)

Multiple date and time scheduler

#### **Protections**

√ Gen. Voltage – under / over

√ Gen. Freq. – under / over

√ Engine Speed – under / over

√ Engine Oil Pressure – low

√ Engine Temp – low / high

√ Battery Voltage – low / high

√ Weak Battery

√ Fail to Start / Stop

√ Charge Alternator Fail

√ Over Current & Load (kW/kVAr)

√ Unbalanced Load

√ Independent Earth Fault

✓ Reverse Power

√ Loss of Speed Signal

#### Instruments

√ Gen. Voltage (L-L/L-N)

√ Gen. Frequency

√ Engine speed

√ Oil Pressure

√ Water Temperature

√ Battery Voltage

✓ Run Time

√ Phase Sequence

✓ Power monitoring (kWh/kVAh/kVArh)

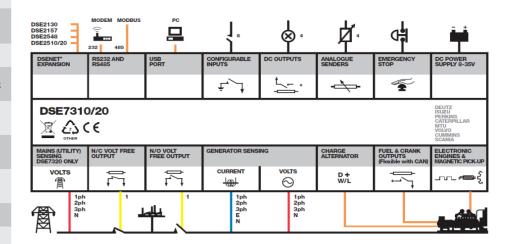
✓ Power (kWh/kVAh/kVArh)

✓ Power Factor

√ Generator Current

√ Generator Load (%)

√ Earth Current



## **Industrial Diesel Generator Sets**



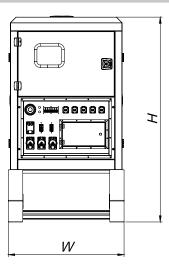
### **Dimensions, Weight & Sound Data**

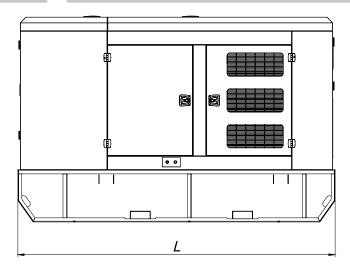
#### **Enclosed Genset Data**

L (inches) W (inches) H (inches) Weight (lbs)
110.2" 44.5" 66.5" 3500

### **Integral Base Tank / DEF Tank**

Sound Level	Run Time	Tank Capacity	DEF Capacity
65dBA*	32h	71gal / 270lt	NO DEF



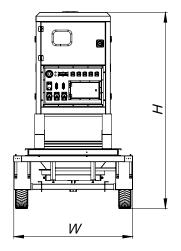


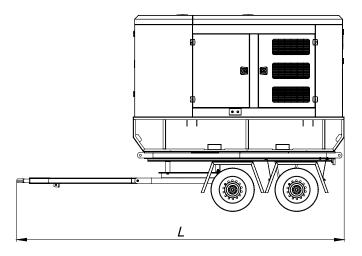
### **Genset w / Trailer Data**

L (inches) W (inches) H (inches) Weight (lbs)
185.0" 65.0" 90.0" 4900

### **Integral Base Tank / DEF Tank**

Sound Level	Run Time	Tank Capacity	DEF Capacity
65dBA*	32h	71gal / 270lt	NO DEF





<sup>\*</sup>All measurements are approximate and for estimation purposes only. Weights are without fuel in tank. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

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# **Industrial Diesel Generator Sets**



### **Standard Features & Accessories**

General	Electrical
□ Galvennealed Steel Enclosure	☐ Three Position Voltage Selector Switch
□ Heavy Duty Base Frame (110% Fluids Containtment)	□ Main Line CB (3P/400A)
□ Integrated 24h Double Wall Fuel Tank	□ Battery Charger
□ Fork pockets and transportation tie downs	□ Voltage Adjust Rheostat
□ Rust Prevention Hardware (Latches/Hinges)	Convenience Panel
□ Single Top Lifting Hook (Genset only)	□ (3)-50A 125/250VAC 3P4W Twist Lock CS6369
□ Locable Fuel Filling Cap on Enclosure	□ 2-20A 120VAC Duplex GFCI Nema 5-20R
□ Jacket Water Heater w/Isolation Valves	□ Thumb Screw Terminals for 2-Wire Remote Start
□ DOC Catalysts / Silencer Mounted	$\hfill\Box$ 15A 120VAC Male Receptacle Shore Power Connection
□ 3 Way Fuel Connection Valve	□ (5)-400A Rated Female Cam Style Locking Receptacles
□ Oil & Coolant Drain Extension	□ (5)-400A Rated Lug Connection
□ Vibration Isolation Mounts	□ Emergency Stop Switch

## **Optional Accessories**

General	Electrical
□ DOT Approved Trailer	□ Low Fuel Level Switch & Alarm
□ Trailer Mounted Spare Tire	□ Fuel Level Monitoring via Controller
□ Trailer Mounted Tool Box	□ Low Coolant Switch & Alarm
□ Battery Disconnect Switch	□ Paralelling Controller Upgrade
□ Crankcase Ventilation Filter	□ Motor Operated Breaker

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