TJT4F49DW

Industrial Diesel Generator Sets

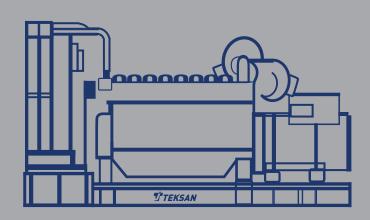
EPA Certified for Mobile / Stationary Prime Applications











Genset Standby Power Rating

Voltage	208/120V	480/277V	240/120V	208/120V	Multi Voltage 480/277V	240/120V
Phase	3	3	1	3	3	1
Pf	0,8	0,8	1	0,8	0,8	1
Alternator Model	LSA 42.3 M8	LSA42.3 M7	LSA 42.3 M8		LSA 42.3 L9	
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	Itage Selector Swit	ch
Standby Power kW/kVA	43/54	43/54	34/34	43/54	43/54	39/39
Current	151A	66A	142A	151A	66A	163A
Prime Power kW/kVA	39/49	39/49	34/34	39/49	39/49	37/37
Current	135A	59A	142A	135A	59A	157A

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	D24
Number of Cylinders	4, Inline
Cubic Capacity	0.632 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	50 kW
Net Engine Power - Standby	48 kW
Gross Engine Power - Prime	45 kW
Net Engine Power - Prime	43 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)	3.32 gal/h
Prime Power (100%)	2.99 gal/h
DEF Consumption	N/A

Fresh water forced circulation
2.46 gallons
Centrifugal type driven by belt
Blower type, Ø18.11 (ATB 52°C)
230 °F (max.)

Lubrication System	
Oil Filter	Full flow, cartridge type
Total lubricating capacity	2.27 gallons
Lubricating Oil	10W30/40 (API CK-4 / ACEA E6)
Max Oil Temperature	275 °F at main oil gallery

Engineering Data	
Water Flow	22.46 gallons/min
Air Flow	15929.58 gallon/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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Application Data - Alternato	or					
Manufacturer			Leroy So	mer		
Туре			4 Poles, Bru	ıshless		
Protection			IP 23			
Voltage Regulation			± 0.25	5%		
One Step Load Acceptance			100% of rate	ed load		
Bearing			Single	9		
THD in Linear Load			< 5%			
Waveform: NEMA TIF			< 50			
Altitude			≤1000 m	eters		
Over Speed			2250 rp	om		
AVR			D350			
Genset Voltage	208/120V	480/277V	240/120V	208/120V	480/277V	240/120V
Alternator Model	LSA42.3M8	LSA42.3M7	LSA42.3M8		LSA42.3L9	
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	56,5kVA	56,5kVA	34kVA	65kVA	75kVA	39kVA
Power @ Temp Rise 105/40 °C	51kVA	51kVA	31kVA	59kVA	68kVA	35,5kVA
Efficiency @ 100% load	90,30%	90,50%	87,10%	90,80%	90,90%	87,50%

Application Data - Circuit Breaker

skVA @ 30% Voltage Dip (P.F. = 0.6)

Genset Voltage	208/120V	480/277V	240/120V	Multi Voltage
ABB (80% Rated) Breaker Model	160A	80A	160A	160A

150kVA

150kVA

200kVA

130kVA

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)

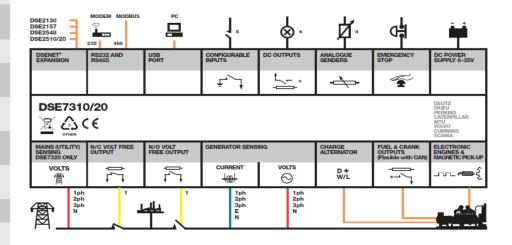
✓ Power (kWh/kVAh/kVArh)

✓ Power Factor

√ Generator Current

√ Generator Load (%)

√ Earth Current



Industrial Diesel Generator Sets



Dimensions, Weight & Sound Data

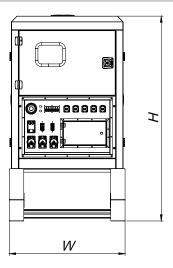
Enclosed Genset Data

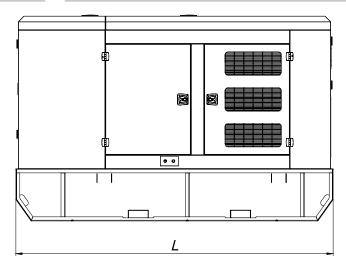
L (inches) W (inches) H (inches) Weight (lbs)

110.2" 44.5" 70" 4700

Integral Base Tank / DEF Tank

Sound Level	Run Time	Tank Capacity	DEF Capacity
66dBA*	24h	71gal /270lt	NO DEF





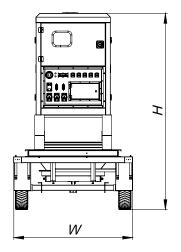
Genset w / Trailer Data

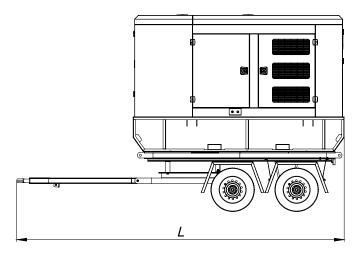
L (inches) W (inches) H (inches) Weight (lbs)

170" 90" 95" 6200

Integral Base Tank / DEF Tank

Sound Level	Run Time	Tank Capacity	DEF Capacity
66dB A *	24h	71gal /270lt	NO DEF





^{*}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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Standard Features & Accessories

General	Electrical	
□ Galvennealed Steel Enclosure	□ Three Position Voltage Selector Switch	
□ Heavy Duty Base Frame (110% Fluids Containtment)	□ Main Line CB	
□ 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	□ 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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