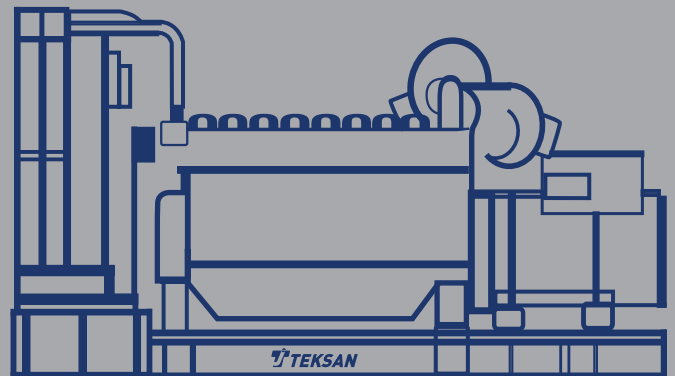


# TJT4F78JD

## Industrial Diesel Generator Sets

EPA Certified for Mobile / Stationary Prime Applications



### Genset Standby Power Rating

Voltage	208/120V	480/277V	240/120V	Multi Voltage		
				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	LSA 44.3 S3	LSA 44.3 S2	LSA 44.3 S3	LSA 44.3 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	Voltage Selector Switch		
Standby Power kW/kVA	69/86	68/85	52/52	69/86	69/86	65/65
Current	239A	103A	217A	240A	103A	271A
Prime Power kW/kVA	62/78	61/77	52/52	62/78	62/78	62/62
Current	216A	93A	217A	217A	94A	260A

#### 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.

## Application Data - Engine

Engine		Fuel Consumption	
Manufacturer	JOHN DEERE	Standby Power (110% of Prime)	5.23 gal/h
Model	4045HFG04	Prime Power (100%)	4.75 gal/h
Number of Cylinders	4, Inline	DEF Consumption	4.3% of Diesel consumption
Cubic Capacity	4.5 L	Cooling System	
Bore x Stroke	4.2 in x 5.0 in	Cooling Method	Fresh water forced circulation
Aspiration	Turbocharged, air to air aftercooled	Total Coolant Capacity	3.19 gallons
Combustion Ratio	17.0:1	Water Pump	Centrifugal type driven by belt
Gross Engine Power - Standby	80 kW	Cooling Fan	Blower type, Ø24.80 in
Net Engine Power - Standby	74.4 kW	Water temperature	235 °F (max.)
Gross Engine Power - Prime	73 kW	Lubrication System	
Net Engine Power - Prime	67.4 kW	Oil Filter	Full flow, cartridge type
Rated rpm	1800	Total lubricating capacity	3.88 gallons
Emission	Tier 4 Final	Lubricating Oil	SAE 10W30
		Max Oil Temperature	280 °F at main oil gallery
Electrical System		Engineering Data	
Starting Motor Voltage	12V	Water Flow	64.72 gallons/min
Battery Charging Alternator	110A	Air Flow	20540.4 gallons/min
Battery Qty, CCA Rating	1 x 75Ah, 700A	Exhaust Gas Temperature	752 °F
		Max. Intake Permission Restrictions	6.25 kPa dirty filter
Fuel System		Max. Exhaust Permission Restrictions	11.5 kPa
Fuel Injection	Denso		
Fuel Pump	Common Rail		
Governor Type	ECU		
Fuel Filter	Full flow, cartridge type		

### Application Data - Alternator

Manufacturer	Leroy Somer					
Type	4 Poles, Brushless					
Protection	IP 23					
Voltage Regulation	± 0.25%					
One Step Load Acceptance	100% of rated load					
Bearing	Single					
THD in Linear Load	< 5%					
Waveform: NEMA TIF	< 50					
Altitude	≤ 1000 meters					
Over Speed	2250 rpm					
AVR	D350					
Genset Voltage	208/120V	480/277V	240/120V	208/120V	480/277V	240/120V
Alternator Model	LSA 44.3 S3	LSA 44.3 S2	LSA 44.3 S3	LSA 44.3 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	87kVA	88kVA	52kVA	108kVA	125kVA	65kVA
Power @ Temp Rise 105/40 °C	79kVA	80kVA	47kVA	99kVA	114kVA	59kVA
Efficiency @ 100% load	92,40%	91,90%	92,20%	92,90%	92,30%	92,70%
skVA @ 30% Voltage Dip (P.F. = 0.6)	200kVA	270kVA	-	315kVA	420kVA	-

### Application Data - Circuit Breaker

Genset Voltage	208/120V	480/277V	240/120V	Multi Voltage
ABB (80% Rated) Breaker	250A	125A	250A	400A

### 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
Standards	BS EN 61000-6-2, BS EN 61000-6-4, BS EN 60950, BS EN 60529 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

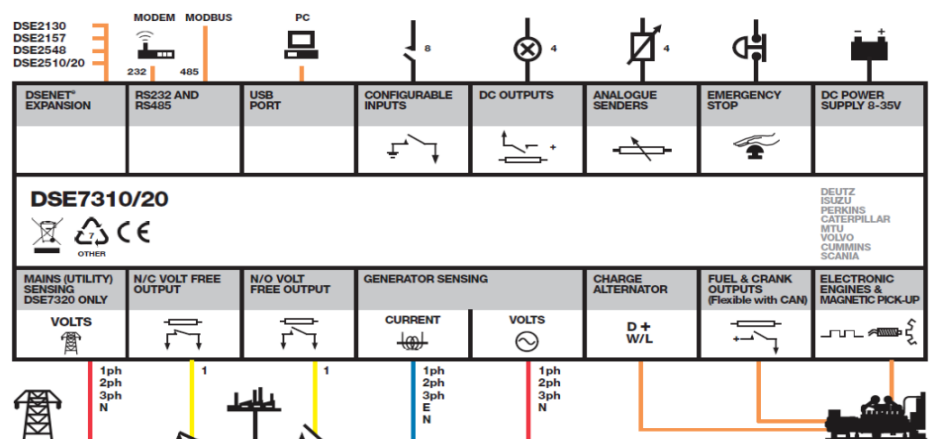
- License free PC software
- 4-Line back-lit LCD text display
- Five key menu navigation
- LCD Alarm Indication
- DSENet expansion compatibility
- Internal PLC editor
- Protection disable feature
- Data logging facility
- Fully configurable via PC
- Front panel configuration
- Power safe mode
- 6 configurable 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 (kW/kVAh/kVArh)
- ✓ Power Factor
- ✓ Generator Current
- ✓ Generator Load (%)
- ✓ Earth Current



# TJT4F78JD

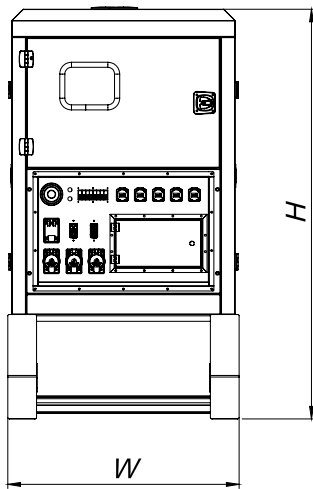
## Industrial Diesel Generator Sets



### Dimensions, Weight & Sound Data

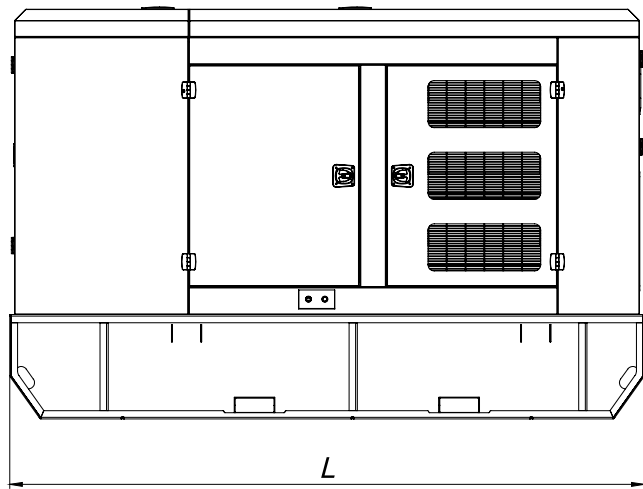
#### Enclosed Genset Data

L (inches)	W (inches)	H (inches)	Weight (lbs)
122"	44.5"	80.9"	5650



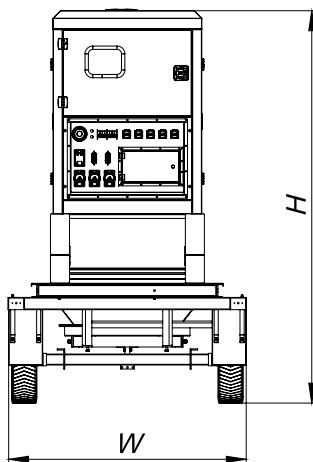
#### Integral Base Tank / DEF Tank

Sound Level	Run Time	Tank Capacity	DEF Capacity
67dBA*	30h	159gal / 600lt	5.6gal / 21lt



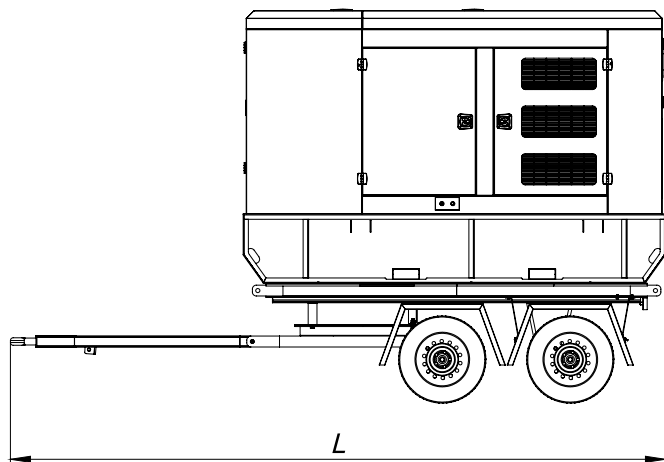
#### Genset w / Trailer Data

L (inches)	W (inches)	H (inches)	Weight (lbs)
185"	90"	107"	7150



#### Integral Base Tank / DEF Tank

Sound Level	Run Time	Tank Capacity	DEF Capacity
67dBA*	30h	159gal / 600lt	5.6gal / 21lt



\*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.

### Standard Features & Accessories

#### General

- Galvennealed Steel Enclosure
- Heavy Duty Base Frame (110% Fluids Containment)
- Integrated 24h Double Wall Fuel Tank
- Fork pockets and transportation tie downs
- Rust Prevention Hardware (Latches/Hinges)
- Single Top Lifting Hook (Genset only)
- Locable Fuel Filling Cap on Enclosure
- Jacket Water Heater w/Isolation Valves
- DOC Catalysts / Silencer Mounted
- 3 Way Fuel Connection Valve
- Oil & Coolant Drain Extension
- Vibration Isolation Mounts

#### Electrical

- Three Position Voltage Selector Switch
- Main Line CB
- Battery Charger
- Voltage Adjust Rheostat

#### Convenience Panel

- (3)-50A 125/250VAC 3P4W Twist Lock CS6369
- 2-20A 120VAC Duplex GFCI Nema 5-20R
- Thumb Screw Terminals for 2-Wire Remote Start
- 15A 120VAC Male Receptacle Shore Power Connection
- (5)-400A Rated Female Cam Style Locking Receptacles
- (5)-400A Rated Lug Connection
- Emergency Stop Switch

### Optional Accessories

#### General

- DOT Approved Trailer
- Trailer Mounted Spare Tire
- Trailer Mounted Tool Box
- Battery Disconnect Switch
- Crankcase Ventilation Filter

#### Electrical

- Low Fuel Level Switch & Alarm
- Fuel Level Monitoring via Controller
- Low Coolant Switch & Alarm
- Paralleling Controller Upgrade
- Motor Operated Breaker

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