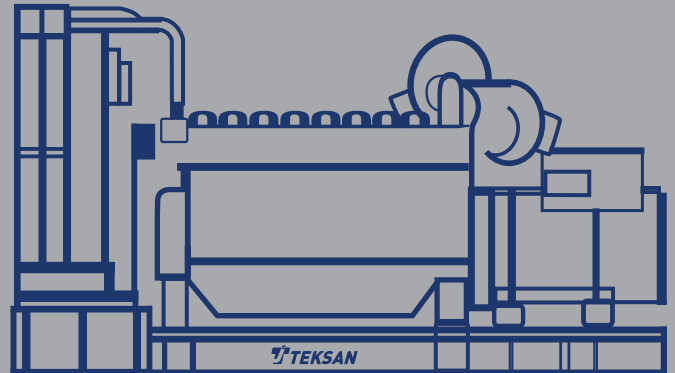


# TJUD550P

## Industrial Diesel Generator Sets

EPA Certified Tier 2 for Stationary Emergency Applications



### Genset Standby Power Rating

Voltage	208/120V	240/120V	480/277V	600/347V
Power	565kW	565kW	550kW	550kW
Phase	3	3	3	3
Pf	0,8	0,8	0,8	0,8
Current	1960A	1699A	826A	661A
Alternator Model	TAL0473F	TAL0473F	TAL0473D	TAL0473E
Temp Rise	125 / 40 °C	125 / 40 °C	125 / 40 °C	125 / 40 °C
Connection	12 Leads WYE	12 Leads DELTA	12 Leads WYE	6 Leads WYE

#### 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**.

Generator set is **UL2200**, cUL listed and meets **ISO 8528-5**

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

The generator set meets **NFPA110 Level 1** when equipped with the necessary accessories and installed per NFPA standards.

### Standard Features - Engine

EPA Certified – Emergency Stationary Only

Heavy-duty, 4-cycle, direct injection

Unit Mounted Radiator

Electronic Isochronous Governor

Fuel – Water Separator Filter

ISO 8528, ISO 3046, BS 5514, DIN 6271 standards

Capable of full rated load acceptance in one step

Low emission and maximum reliability and durability

Heavy Duty Air Cleaner w/Restriction Gauge

Flex Exhaust Connection

### Application Data - Engine

#### Engine

Manufacturer	Perkins
Model	2506C-E15TAG4
Number of Cylinders	6 Vertical Inline
Cycle	4 stroke
Cubic Capacity	15.2 liters
Bore x Stroke	137 mm x 171 mm
Aspiration	Turbocharged, air to air charge cooling
Compression Ratio	16:1
BMEP	2769 kPa
Gross Engine Power	623 kW
Net Engine Power	597 kW
Rated rpm	1800
Speed Variation at Constant Load	±0.25%

#### Fuel Consumption

Standby Power (110% of Prime)	38.5 gal/hr.
Prime Power (100%)	-
At 75% of Prime	-
At 50% of Prime	-

#### Cooling System

Ambient Capacity of Radiator	122 °F (50 °C)
Total Coolant Capacity	58 liters
Engine Coolant Flow	7.2 liters/sec
Combustion Air Flow	42 m3/min
Fan Power	25 kWm
Max Top Tank Temperature	107 °C
Thermostat Operating Range	88 °C to 98 °C

#### Electrical System

Starting Motor Voltage	24V
Battery Charging Alternator	70A
Battery Qty, CCA Rating	2 x 102Ah, 860A

#### Fuel System

Type of Injection System	MEUI
Fuel Injector Pressure	200 Mpa
Governor Type	ECM
Fuel Pump Delivery Pressure	550 kPa
Max Fuel Flow	457 liters/hr

#### Exhaust System

Exhaust Gas Temp	550 °C
Max Allowable Back Pressure	6.8 kPa
Exhaust Gas Flow	120 kg/s
Engine exhaust outlet size (internal)	127 mm

#### Lubrication System

Total lubricating capacity	60 liters
Max Oil Continuous Temperature	114 °C
Oil Consumption @ Full Load (% of fuel)	<0.1%
Pressure at Max No-load Speed	420 kPa

### Standard Features - Alternator

Brushless Single Bearing

125/40 °C Temperature Rise

Class H Insulation

Low waveform distortion with non-linear loads

EC 60034-1; CEI EN 60034-1; NEMA MG 1.22, NF 51- 100,111

AREP Excitation

300% Short Circuit Capability

Low reactance 2/3 pitch windings

Self-ventilated and drip-proof construction

BS 4999-5000; VDE 0530, OVE M-10

### 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	240/120V	480/277V	600/347V
Alternator Model	TAL0473F	TAL0473F	TAL0473D	TAL0473E
Leads	12 Leads WYE	12 Leads DELTA	12 Leads WYE	6 Leads WYE
P.F.	0,8	0,8	0,8	0,8
Power @ Continuous 40 °C	715kVA / 572kW	715kVA / 572kW	690kVA / 552kW	685kVA / 548kW
skVA @ 30% Voltage Dip (P.F. = 0.6)	2660kVA	2660kVA	1600kVA	1280kVA
Efficiency @ 100% load	94,87%	94,87%	94,55%	94,75%
Short Circuit Current @ 100ms	2300A	3985A	2000A	2100A

### Application Data - Circuit Breaker

Genset Voltage	208/120V	240/120V	480/277V	600/347V
ABB (80% Rated) Breaker Model	E2.2N-A 2000	E2.2N-A 2000	T7S 1000	T6N 800
Current Rating (In)	2000A	2000A	1000A	800A
Trip Unit	LI	LI	LS/I	LS/I

### 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

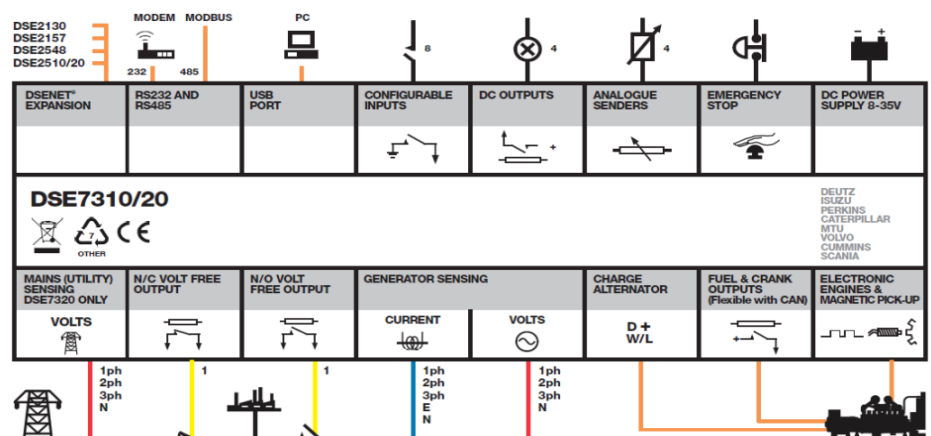
License free PC software
4-Line back-lit LCD text display
Five key menu navigation
LCD Alarm Indication
DSENet expansion compatibility
Internal PLC editor
Protection disable feature
Data logging facility
Fully configurable via PC
Front panel configuration
Power safe mode
6 configurable DC outputs
2 configurable 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



# TJUD550P

## Industrial Diesel Generator Sets



### Standard Features - General

Heavy duty structural steel base frame  
Battery charger  
Jacket Water Heater  
Oil & Coolant Drain Extensions  
Operations Manual

Critical grade silencer  
Battery tray and cables  
Heater Isolation Valves  
Rubber vibration Isolator  
Standby Limited Warranty

### Battery Charger

Manufacturer DSE  
Model 9470 MKII  
Operation Voltage (L-N) 90V to 305V  
Output Current 10A

### Jacket Water Heater

Manufacturer Hotstart  
Model CTM25210-N00  
Operation Voltage 240V  
Power 2500W

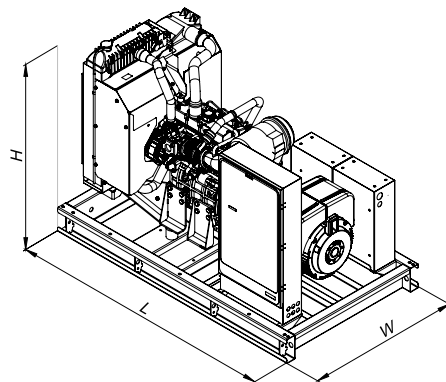
### Dimensions, Weights & Sound Levels

	L x W x H (inches)	Weight (lbs)	Sound Level *
Open Skid	203 x 69 x 82	7950	-
Level 2 Enclosure	256 x 70 x 101	10400	TBA
Level 3 Enclosure	TBA	TBA	TBA

\*All measurements are approximate and for estimation purposes only. \* Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at stand-by power rating

### Fuel Tank (UL142 Listed – Option)

Size	L x W x H (inches)	Weight (lbs)
1000gal / 24hr	250 x 69 x 20.5	3400
2000gal / 48hr	264 x 69 x 36	4600
3010gal / 72hr	380 x 69 x 36	6300



### Sound Attenuated Enclosure (Option)

Compatible with 2000/14/EC directives,  
Factory built, UL Certified  
Amplified paint against corrosion and rust  
Exceeds 2000hours salt spray test  
Level 2 / 3 Sound Level Compliant  
Heavy Duty Steel / Aluminum Structure  
High performance sound absorb material  
Vertical air discharge  
Exhaust muffler inside the canopy



### Available Options

#### Circuit Brakers

- ☐ Magnetic Trip
- ☐ Thermal Magnetic Trip
- ☐ Electronic Trip LS/I
- ☐ Electronic Trip LSI
- ☐ Electronic Trip LSIG
- ☐ 80% Rating
- ☐ 100% Rating
- ☐ Electrically Operated CB (paralleling)
- ☐ Shunt Trip – wired to controller
- ☐ Auxiliary Contact – volt free contact

#### Alternator

- ☐ Upsize Alternator
- ☐ Space Heater
- ☐ RTD Sensors

#### Electrical

- ☐ GFCI Receptacle Outlet
- ☐ Load Center
- ☐ Power Outlet (14-50R, 120/240V, 50A)
- ☐ Power Outlet (TT30R, 120V, 30A)
- ☐ Power Outlet Panel (120/240V, 80A) NEMA5-20R, NEMA14-50R, TT-30R
- ☐ Surge Protector

#### Control System

- ☐ Remote Annunciator Panel – 8 lights
- ☐ Remote Annunciator Panel – 16 lights
- ☐ Remote Annunciator Panel – 24 lights
- ☐ Common Alarm Relay – V free contact
- ☐ Generator Run Relay – V free contact
- ☐ Control Panel Heater
- ☐ Dry Contacts Expansion Relay
- ☐ Remote E-Stop Switch
- ☐ Remote E-Stop Switch – Break Glass
- ☐ Remote Monitoring (DSE892 SNMP)
- ☐ Remote Monitoring (DSE890 Webnet)
- ☐ Paralleling System Upgrade
- ☐ Manual Voltage Adjust
- ☐ Manual Speed Adjust

#### Miscellaneous

- ☐ ATS Panel
- ☐ Rated Power Factor Factory Testing
- ☐ Enclosure Heater
- ☐ Oil Pan Heater
- ☐ Spring Isolators
- ☐ Crankcase Ventilation Filter
- ☐ Critical Silencer Set w/Open Skid Unit

#### Enclosures

- ☐ Sound Attenuated Level 2
- ☐ Sound Attenuated Level 3
- ☐ Enclosure DC light w/timer
- ☐ Enclosure AC light
- ☐ Enclosure Space Heater
- ☐ Motorized Air Inlet Damper
- ☐ Gravity Radiator Louver

#### Fuel Tank

- ☐ UL142 Listed
- ☐ UL2085 Listed
- ☐ Fuel Level Display on Controller
- ☐ Fuel / Water Separator

#### Battery System

- ☐ Starting Batteries
- ☐ Battery Charger (NFPA110 Compliant)
- ☐ Battery Wrap Heater
- ☐ Battery Restraint
- ☐ Battery Disconnect Switch

#### Warranty

- ☐ 5 Years Extended Limited Warranty

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