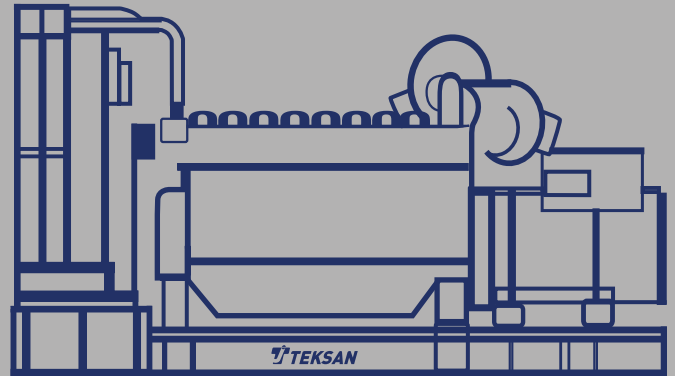


TJUD600P

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	610kW	610kW	600kW	600kW
Phase	3	3	3	3
Pf	0,8	0,8	0,8	0,8
Current	2116A	1834A	902A	721A
Alternator Model	TAL049B	TAL049B	TAL0473E	TAL0473F
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	2806C-E18TAG3
Number of Cylinders	6 Vertical Inline
Cycle	4 stroke
Cubic Capacity	18.13 liters
Bore x Stroke	145 mm x 183 mm
Aspiration	Turbocharged, air to air charge cooling
Compression Ratio	14.5:1
BMEP	2493 kPa
Gross Engine Power	678 kW
Net Engine Power	652 kW
Rated rpm	1800
Speed Variation at Constant Load	±0.25%

Fuel Consumption

Standby Power (110% of Prime)	41.7 gal/hr.
Prime Power (100%)	38.3 gal/hr.
At 75% of Prime	29.6 gal/hr.
At 50% of Prime	20.9 gal/hr.

Cooling System

Ambient Capacity of Radiator	122 °F (50 °C)
Total Coolant Capacity	61 liters
Engine Coolant Flow	7.2 liters/sec
Combustion Air Flow	52 m3/min
Fan Power & Restriction Losses	25 kWm
Max Top Tank Temperature	103 °C
Thermostat Operating Range	88 °C to 98 °C

Electrical System

Starting Motor Voltage	24V
Battery Charging Alternator	70A
Battery Qty, CCA Rating	4 x 102Ah, (2)860A

Exhaust System

Exhaust Gas Temp	554 °C
Max Allowable Back Pressure	6.9 kPa
Exhaust Gas Flow	141 m3/min
Engine exhaust outlet size (internal)	202 mm

Fuel System

Type of Injection System	MEUI
Fuel Injector Pressure	200 Mpa
Governor Type	ECM
Fuel Pump Delivery Pressure	600 kPa
Max Fuel Flow	457 liters/hr

Lubrication System

Total lubricating capacity	62 liters
Max Oil Continuous Temperature	113 °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	TAL049B	TAL049B	TAL0473E	TAL0473F
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	795kVA / 636kW	795kVA / 636kW	750kVA / 600kW	755kVA / 604kW
skVA @ 30% Voltage Dip (P.F. = 0.6)	2330kVA	2330kVA	2000kVA	1280kVA
Efficiency @ 100% load	93,30%	93,30%	94,95%	95,23%
Short Circuit Current @ 100ms	2100A	3640A	2100A	2300A

Application Data - Circuit Breaker

Genset Voltage	208/120V	240/120V	480/277V	600/347V
ABB (80% Rated) Breaker Model	E4.2S-A 2500	E2.2N-A 2000	T7S 1000	T6N 800
Current Rating (In)	2500A	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

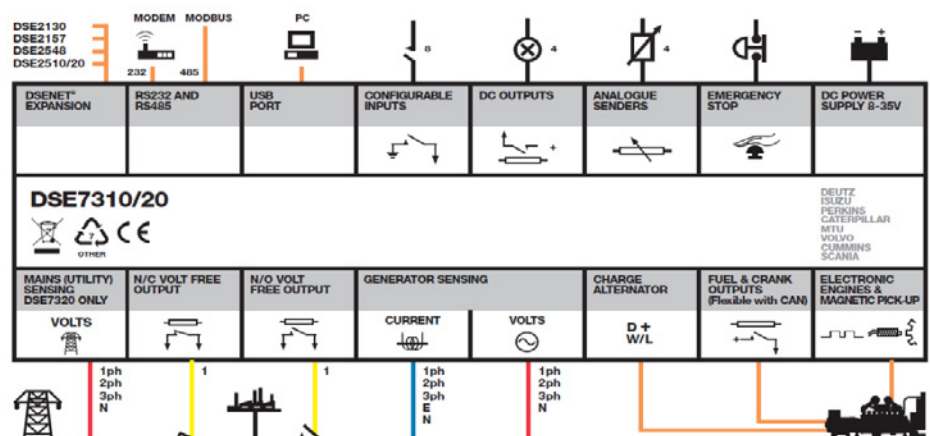
License free PC software
4-Line back-lit LCD text display
Five key menu navigation
LCD Alarm Indication
DSENet expansion compatibility
Internal PLC editor
Protection disable feature
Data logging facility
Fully configurable via PC
Front panel configuration
Power safe mode
6 configurable DC outputs
2 configurable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



TJUD600P

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

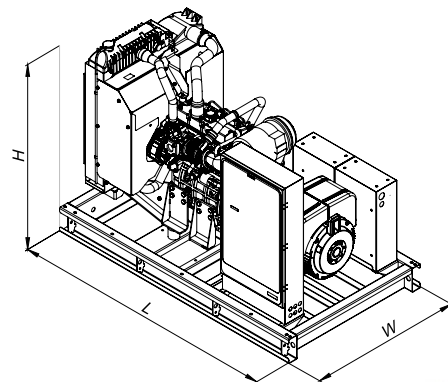
Dimensions, Weights & Sound Levels

	L x W x H (inches)	Weight (lbs)	Sound Level *
Open Skid	203 x 69 x 82	9000	-
Level 2 Enclosure	256 x 70 x 101	11450	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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