## TJAG150P

## **Industrial Diesel Generator Sets**

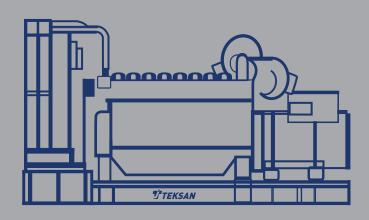
**TTEKSAN** 

Tier 3 EPA Certified for Stationary Emergency Applications









#### Genset Standby Power Rating

Voltage	240/120V	
Power	150kW	
Phase	1	
Pf	1	
Current	625A	
Alternator Model	TAL046C	
Temp Rise	125 / 40 °C	
Connection	12 Leads DD	

#### **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 IS010002:2014 standards.

Generator set meets ISO 8528-5

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

## **Industrial Diesel Generator Sets**



### **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	1106D-E70TAG3
Number of Cylinders	6 Inline
Cycle	4 strokes
Cubic Capacity	7.01 liters
Bore x Stroke	105 mm x 135 mm
Aspiration	Turbocharged and air charge cooled
Combustion System	Direct Injection Diesel
BMEP	1626.2 kPa
Gross Engine Power	184 kW
Net Engine Power	173 kW
Rated rpm	1800
Speed Variation at Constant Load	±0.18%

Fuel Consumption	
Standby Power (110% of Prime)	12.1 gal/hr.
Prime Power (100%)	11.2 gal/hr.
At 75% of Prime	9.2 gal/hr.
At 50% of Prime	6.3 gal/hr.

Cooling System	
Ambient Capacity of Radiator	122 °F (50 °C)
Total Coolant Capacity	20.5 liters
Engine Coolant Flow	170 liters/min
Combustion Air Flow	14.4 m3/min
Fan Power	8 kW
Max Top Tank Temperature	108 °C
Thermostat Operating Range	82 °C to 95 °C

Electrical System	
Starting Motor Voltage	12V
Battery Charging Alternator	65A
Battery Qty, CCA Rating	1 x 102Ah, 860A

Fuel System	
Type of Injection System	Electronic CRIN2
Fuel Pump	CB28
Governor Type	Electronic
Priming Pump Type	Manual
Max Fuel Flow	6.6 liters/min

Exhaust System	
Exhaust Gas Temp	450 °C
Max Allowable Back Pressure	15 kPa
Exhaust Gas Flow	29.93 m3/min
Engine exhaust outlet size (internal)	115.9 mm

Lubrication System	
Total lubricating capacity	17.5 liters
Max Oil Continuous Temperature	125 °C
Oil Consumption @ Full Load (% of fuel)	<0.1%
Pressure at Max No-load Speed	340 kPa

# TJAG150P

## **Industrial Diesel Generator Sets**



### **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
Туре	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	240/120V
Alternator Model	TAL046C
Leads	12 – DD
P.F.	1
Power @ Continuous 40 °C	152kVA / 152kW
skVA @ 30% Voltage Dip (P.F.=0.6)	-
Efficiency @ 100% load	86,35%
Short Circuit Current @ 1000ms	-

### **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

 $\checkmark \ \mathsf{Engine} \ \mathsf{Temp} - \mathsf{low} \, / \, \mathsf{high}$ 

√ 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)

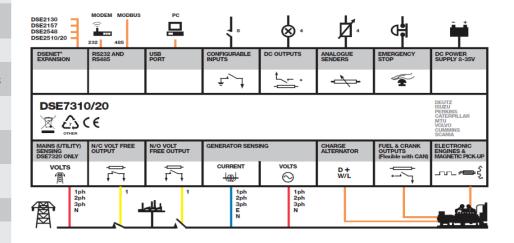
✓ Power (kWh/kVAh/kVArh)

✓ Power Factor

✓ Generator Current

√ Generator Load (%)

√ Earth Current



## **Industrial Diesel Generator Sets**



### **Standard Features - General**

Heavy duty structural steel base frame

Battery charger

Jacket Water Heater

Oil & Coolant Drain Extensions

Operations Manual

Silencer set with stainless steel flex

Battery tray and cables

Heater Isolation Valves

Rubber vibration Isolator

Standby Limited Warranty

### **Battery Charger**

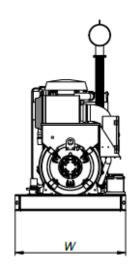
Manufacturer	DSE
Model	9470 MKII
Operation Voltage (L-N)	90V to 305V
Output Current	10A

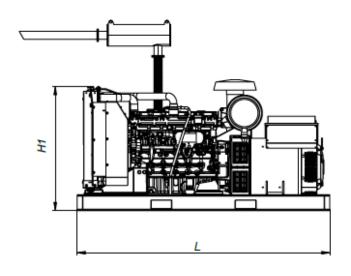
#### **Jacket Water Heater**

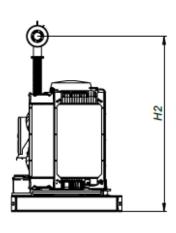
Manufacturer	Hotstart
Model	TPS181GT10-000
Operation Voltage	120V
Power	1800W

## Dimensions, Weights & Sound Levels

	L x W x H1 x H2 (inches)	Weight (lbs)	Sound Level *
Open Skid	TBA	TBA	-







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