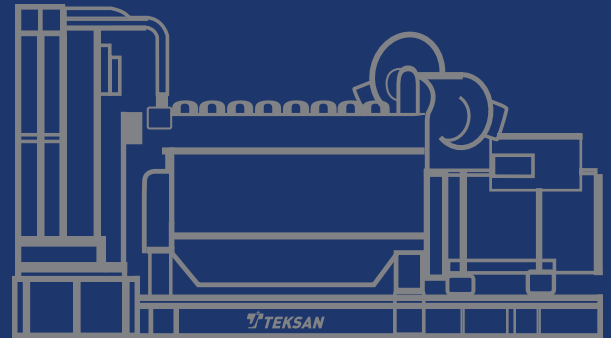


TJUD325H

Industrial Diesel Generator Sets

EPA Certified Tier 3 for Stationary Emergency Applications



Genset Standby Power Rating

125/40 °C Standby Ratings

| Alternator Model | | | TAL0473A | TAL046G | LSA47.3 S4 | LSA46.3 L10 |
|------------------|-------|-----|------------|-----------|------------|-------------|
| Voltage | Phase | Pf | kW / A | kW / A | kW / A | kW / A |
| 480/277V ∟ | 3 | 0,8 | 325 / 488 | 325 / 488 | 330 / 496 | 325 / 488 |
| 208/120V ∟ | 3 | 0,8 | 325 / 1127 | 275 / 954 | 330 / 1145 | 275 / 954 |
| 240/120V ∟ | 3 | 0,8 | 325 / 977 | 275 / 827 | 330 / 992 | 275 / 827 |

| Alternator Model | | | TAL046G | LSA46.3 L11 |
|------------------|-------|-----|-----------|-------------|
| Voltage | Phase | Pf | kW / A | kW / A |
| 600/347V ∟ | 3 | 0,8 | 325 / 390 | 330 / 397 |

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.

TJUD325H

Industrial Diesel Generator Sets



Standard Features – Engine

EPA Certified Tier 3 – Emergency Stationary Only

Unit Mounted Radiator

Oil and Coolant Drain Extension w/Valve

Fuel – Water Separator Filter

Speed Drop to ISO 8528, G3

24V Battery System & Cables

Flex Fuel Connectors

Flex Exhaust Connection

Application Data – Engine

| | |
|------------------------------|-----------------------------|
| Manufacturer | HD HYUNDAI INFRACORE |
| Model | DP126CAK |
| Cubic Capacity | 11.051 liters |
| Bore x Stroke | 123 mm x 155 mm |
| Compression Ratio | 16.5:1 |
| Aspiration | Turbo charged & intercooled |
| Gross Engine Power | 375 kW |
| Net Engine Power | 352 kW |
| BMEP | 2.31 MPa |
| Fuel Feed Pump Capacity | 464 liters / hr |
| Governor Type | Controlled by ECU |
| Battery Charging Alternator | 24V, 80A |
| Battery Qty, CCA Rating | 2 × 102Ah, 860A |
| Ambient Capacity of Radiator | 122 °F (50 °C) |
| Total Coolant Capacity | 53 liters |
| Thermostat Operating Range | 71 °C to 85 °C |
| Cooling Fan Air Flow | 483 m ³ / min |
| Exhaust Gas Temp | |
| Max Allowable Back Pressure | 5.9 kPa |
| Total lubricating capacity | 44 liters |

Fuel Consumption

| | |
|-------------------------------|-------------------|
| Standby Power (110% of Prime) | 25.4 g/h (96 l/h) |
| At 75% of Standby | 20.6 g/h (78 l/h) |
| At 50% of Standby | 14.0 g/h (53 l/h) |
| At 25% of Standby | 8.2 g/h (31 l/h) |

TJUD325H

Industrial Diesel Generator Sets



Standard Features – Alternator

Brushless Single Bearing

Class H Insulation

Low reactance 2/3 pitch windings

IEC 60034, NEMA MG 1.32-33, ISO8528-3

AREP+ Excitation

Digital Automatic Voltage Regulator

100% of Rated Load – One Step

CSA C22.2 n°100-14, UL 1446 Compliant

Application Data – Alternator

| | |
|---------------------------------|----------------------------------------------|
| Manufacturer | Leroy Somer |
| Type | 4 Poles, Brushless |
| Bearing | Single |
| Protection | IP 23 |
| AVR | D350 |
| Voltage Regulation (**) | ± 0.25% |
| AREP+/PMG Short Circuit Current | TAL:2.7 IN: 10 s / LSA:300% (3 IN): 10 s (*) |
| One Step Load Acceptance | 100% of rated load |
| Altitude | ≤1000 meters |
| Over Speed | 2250 rpm |
| THD (***) in no-load | < 2% |
| THD (***) on linear load | < 5% |
| Waveform: NEMA = TIF (***) | < 50 |
| Waveform: I.E.C. = FHT (***) | < 2% |

(*) D350: 10 seconds (**) Steady state (***) Total harmonic distortion between phases, no-load or on-load (non-distorting)

Motor starting (AREP+) Locked rotor kVA at P.F. = 0.6, 480V – 60Hz

| | | | | |
|------------------|----------|---------|------------|-------------|
| Alternator Model | TAL0473A | TAL046G | LSA47.3 S4 | LSA46.3 L10 |
| %30 Voltage Drop | 1000kVA | 1020kVA | 1520kVA | 1050kVA |

(-)For a starting P.F. other than 0.6, the starting kVA must be multiplied by $K = \text{Sine P.F.} / 0.8$

(-)For voltages other than 400V (Y), 230V (Δ) at 50 Hz, then kVA must be multiplied by $(400/U)^2$ or $(230/U)^2$.

Application Data – Circuit Breaker

| | | | | |
|-------------------|--------------|----------------|----------------|--------------|
| Genset Voltage | 480/277V ↘ | 208/120V ↘ | 240/120V ↘ | 600/347V ↘ |
| ABB Breaker Model | XT5N600-600A | XT7S1200-1200A | XT7S1000-1000A | XT5N400-400A |

TJUD325H

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 |
| 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 (kWh/kVAh/kVArh)
- ✓ Power Factor
- ✓ Generator Current
- ✓ Generator Load (%)
- ✓ Earth Current



TJUD325H

Industrial Diesel Generator Sets



Standard Features – General

UL 2200 & cUL Listed

Main Line Circuit Breaker Mounted & Wired

Vibration Isolation Mounts

Aluminized Steel Silencer

NFPA-110, Level 1 Compliant (*)

Jacket Water Heater w/Isolation Valves

Battery Charger & Starter Battery

2 Year / 2000 Hours Standby Warranty

Battery Charger

| | |
|-------------------------|-------------|
| DSE Model | 9470 MKII |
| Operation Voltage (L-N) | 90V to 305V |
| Output Volts/Current | 24V / 10A |

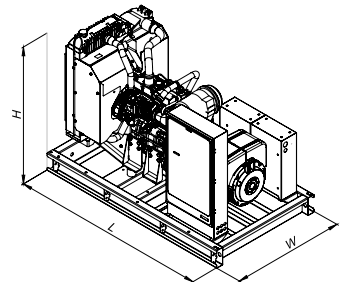
Jacket Water Heater

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

Dimensions, Weights & Sound Levels

Open Set

| Fuel Tank Capacity | Run Time (hr) | L in(mm) | W in(mm) | H in(mm) | Weight lbs(kg) |
|--------------------|---------------|---------------|------------|------------|----------------|
| No Tank | - | 137" (3480) | 69" (1750) | 78" (1980) | 6,505 (2,950) |
| 700gal | 24 | 161.5" (4100) | 69" (1750) | 99" (2515) | 10,140 (4,600) |
| 1400gal | 48 | TBA | TBA | TBA | TBA |
| 2100gal | 72 | TBA | TBA | TBA | TBA |



Sound Attenuated Enclosure Level 2

| Fuel Tank Capacity | Run Time (hr) | L in(mm) | W in(mm) | H in(mm) | Weight lbs(kg) | | Sound Level dBA(**) |
|--------------------|---------------|---------------|--------------|---------------|----------------|----------------|---------------------|
| | | | | | Steel | Aluminum | |
| No Tank | - | 198.8" (5050) | 71.1" (1806) | 99.2" (2520) | 9,260 (4,200) | 7,275 (3,300) | TBA |
| 700gal | 24 | 213.5" (5425) | 71.1" (1806) | 115.7" (2940) | 13,140 (5,960) | 11,155 (5,060) | |
| 1400gal | 48 | TBA | TBA | TBA | TBA | TBA | |
| 2100gal | 72 | TBA | TBA | TBA | TBA | TBA | |

Sound Attenuated Enclosure Level 3

| Fuel Tank Capacity | Run Time (hr) | L in(mm) | W in(mm) | H in(mm) | Weight lbs(kg) | | Sound Level dBA(**) |
|--------------------|---------------|----------|----------|----------|----------------|----------|---------------------|
| | | | | | Steel | Aluminum | |
| No Tank | - | TBA | TBA | TBA | TBA | TBA | TBA |
| 700gal | 24 | TBA | TBA | TBA | TBA | TBA | |
| 1400gal | 48 | TBA | TBA | TBA | TBA | TBA | |
| 2100gal | 72 | TBA | TBA | TBA | TBA | TBA | |

(*)Generator set meets NFPA-110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.

(**)Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at stand-by power rating

- All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact Teksan for detailed installation drawings

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Industrial Diesel Generator Sets



Available Options

Circuit Breakers

- 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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