

Main Features

T

Three-phase



60 Hz



Diesel



1800 r.p.m.

277V/480V



Perkins / 1106A-70TAG2





Leroy somer / TAL-A44-K



0,8



Deepsea 6120



ABB 4x250A

Standby Power (STP) 188 kVA 150 kW Continuous Power (PRP) 169 kVA 135 kW Continuous Power (COP) - kVA - kW

Soundproof

| Length (L) | 3400 mm | |
|---|---------|--------------|
| Height (H) | 1100 mm | |
| Width (W) | 1830 mm | |
| Weight | 2350 kg | |
| Daily deposit | 285 Lts | W L |
| | | 60Hz |
| Medium sound pressure level for a bare engine (without intake or exhaust) at 1 meter. | | 100.74 dB(A) |

Installation in room

| Sistema de escape | | 60Hz | |
|---|-----|------|-----|
| | COP | PRP | STP |
| Maximum backpressure (kPa) | | 6 | |
| Maximum static weight supported on the turbocharger outlet flange (N.m) | | - | |
| Maximum intake air restriction with heavy-duty air filter | - | | |
| Dirty Element (kPa) Clean Element (kPa) | - | | |
| Max. exhaust pipe diameter (mm) | 72 | | |

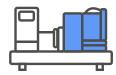
| Fuel System | 60Hz | | |
|------------------------------------|-------------|--|-----|
| | COP PRP STP | | STP |
| Nozzle opening pressure (MPa) | - | | |
| Fuel flow rate (L/hr) | 180 | | |
| Pressure (kPa) | 50 | | |
| Maximum static pressure height (m) | 50 | | |

| Electric System | 60Hz | | |
|---|------|-----|-----|
| | СОР | PRP | STP |
| Starter engine (Vdc) | | 12 | |
| Battery charging system, negative ground (A) | 65 | | |
| Maximum allowed resistance of the starting circuit (Ω) | - | | |
| Minimum recommended battery capacity — Cold soak @ 0 to 32°F (-18 to 0°C) | 960 | | |



Engine specifications

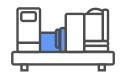
| General specifications | 60Hz |
|-------------------------------------|---------------------------------|
| Model | 1106A-70TAG2 |
| Emissions | Not applicable |
| Operating Method | Four-stroke |
| Fuel Type | Diesel |
| Cooling System | Liquid (water + 50% antifreeze) |
| Aspiration System | Turbocharged, air-cooled. |
| Injection System | Indirect injection |
| Number and Arrangement of Cylinders | 6 in-line |
| Displacement (L) | 7,01 |
| Cylinder Bore (mm) | 105 |
| Cylinder Stroke (mm) | 135 |
| Compression Ratio | 18.2:1 |
| Regulation | Electronic |
| Rotational Speed | 1800 |
| Oil Capacity (L) | 21 |
| Gross Power COP (kWm) | - |
| Gross Power PRP (kWm) | 152,6 |
| Gross Power STP (kWm) | 167,9 |
| Oil Capacity (L) | 18 |
| Net Power COP (kWm) | - |
| Net Power PRP (kWm) | 144,6 |
| Net Power STP (kWm) | 159,9 |



| Consumption | | 60Hz | | |
|--------------------------------|--------|-------|-------|--|
| Fuel consumption | Charge | lt/h | g/kWh | |
| STP | 100% | 41,7 | 203,1 | |
| | 100% | 38,2 | 205,1 | |
| PRP | 75% | 29,1 | 208,4 | |
| PRP | 50% | 19,1 | 202,1 | |
| | 25% | 11 | 232,9 | |
| Fuel flow rate (L/h) | | 180 | | |
| Condiciones de referencia | | | | |
| Temperature (°C) | | 25 | | |
| Atmospheric pressure (kPa) | | 100 | | |
| Sistema de arranque | | | | |
| Voltage (V) | | 24 | | |
| Standard thermostat range (°C) | | 82-93 | | |

Alternator specifications

| General specifications | |
|------------------------|------------------|
| Model | TAL-A44-K |
| Number of Phases | Three-phase |
| Protection | IP23 |
| Insulation | Н |
| Heating | н |
| Waveform IEC = THF: | THF<2% |
| Waveform NEMA = TIF: | TIF<50 |
| Excitation system: | SHUNT/ AREP+/PMG |
| AVR model: | R120/R180 |



| Overspeed: rpm | 2250 | |
|------------------------------------|---|--|
| Voltage regulation: (steady state) | +/- 1,0% | |
| Air flow rate 60 Hz (m3/s) | 0,3 | |
| Radio interference: | Deletion in accordance with the standar European EN61000-6 | |
| AREP+ Short circuit current | 2.7 In: 5 seg. | |

Starter Battery



| Battery voltage | |
|------------------|---|
| Battery Capacity | |
| Amount | |
| Battery type | Maintenance-free, sealed lead-acid type |

Certifications







Control Panel





| Generator | DSE6110/20 |
|------------------------------------|------------|
| Tension (F-F / F-N) | */* |
| Intensity | * |
| Frequency | * |
| RMS values | * |
| Generator phase sequence | * |
| Generator ground current [1] | * |
| Number of events registered | 250 |
| Integrated clock | * |
| PIN protection | * |
| kWh, kVAr, kVAh, kVArh, cos Ø | * |
| Synchronoscope (m) | * |
| Number of available departures [2] | 6 |
| Engine running hours | * |
| Alarm i ndication on LCD | * |
| Total number of LED indicators | 8 |
| No. of LED alarms | X |
| Acoustic alarm signaling | |
| Programmer | * |
| Fuel level | * |
| Engine | DSE6110/20 |
| Engine speed | * |
| Low oil pressure protection | * |
| Oil pressure reading [3] | |
| High engine temperature protection | * |
| Engine temperature reading[3] | |
| Battery voltage | * |
| Battery Intensification [4] | |
| Fuel consumption [5] | * |
| Low water level in radiator [6] | • |
| Scheduled maintenance for engine | * |
| Communication | DSE6110/20 |
| USB Type B Female Port (Max. 6m) | * |
| [7] USB Type A Female Port (n) | X |
| CAN port (Max. 40m) | * |
| PLC function | * |

| Grid | DSE6110/20 |
|--|-------------|
| Tension (F-F / F-N) | * |
| Intensity [1] | X |
| Frequency | * |
| kVA,kW, cos Ø (a) | X |
| Network-group switching control | * |
| Protections and alarms | DSE6110/20 |
| High/low battery voltage | Q. |
| Battery charging alternator failure | Φ |
| Stop failure | ₽/⊗ |
| Boot failure | ₽/⊗ |
| Low fuel level | ₽/⊗ |
| Overload | ₽/⊗ |
| Ground fault | ₽/⊗ |
| Asymmetry between phases | ₽/⊗ |
| Maintenance | ₽/⊗ |
| High/Low Generator Frequency | ₽/⊗ |
| Engine overspeed | ₽/⊗ |
| Low engine speed | ₽/⊗ |
| Surge | ₽/⊗ |
| Low voltage in generator | ₽/⊗ |
| ECU Alert (if applicable) | ₽/⊗ |
| Low oil pressure | ₽/⊗ |
| Low water I evel in radiator [f] | ₽/⊗ |
| High engine temperature | ₽/⊗ |
| Fuel leak/theft | Φ |
| Aplications | DSE6110/20 |
| Automatic or manual start | * |
| Remote start by dry contact NA | * |
| Automatic due to network failure | * |
| Alternation with distributed time | X |
| Multi-generators in synchronism with load (Max 32 generators) (m) | X |
| Generator-grid i n synchronism and with load sharing (1 generator and 1 grid) (m) $$ | X |
| Optional Expansions | DSE6110/20 |
| DSE2130 (8 digital inputs) I I G-IOM (8 digital inputs/outputs + 4 analog inputs)I G-08 (8 ent. dig.) | * |
| DSE2157 I -RB8 G-06 (8 relay outputs) | * |
| DSE2548 IGL-RA15 - (expansion with 8 Additional LEDs | * |
| DSE2510/20 (mirror controller, max distance 1km) | * |
| Rules | |
| Working temperature | -30 -> 70°C |
| Protection index (when mounted with sealing gasket) | IP65 |
| Maximum humidity level (for 48 h) | 93% / 40°C |

Legend

| * | Available |
|-----|--|
| - | Optional |
| X | Not available |
| Ф | Warning alarm |
| ⊗ | Stop alarm |
| [1] | Need an additional IT |
| [2] | Number of outputs available for standard configuration. Outputs do not include relays or additional wiring to terminals. |
| [3] | If the information is not provided by the engine ECU, an additional sensor needs to be included. |

| [4] | Needs an additional ammeter |
|------|---|
| [5] | If the information is provided by the engine ECU |
| [6] | Requires an additional sensor |
| [7] | Need to include an additional IL-NT-S-USB module |
| [8] | Need to include an additional IL-NT-RS232-485 module |
| [9] | DeepSea: Needs to include an additional DSE891 module/ComAp: Needs to include an additional IB-LITE module |
| [10] | DeepSea: Needs to include an additional DSE890 module/ComAp: Needs to include an additional IL-NT-GPRS module |
| [11] | DeepSea: Needs to include an additional DSE892 module/ComAp: Needs to include an additional IB-LITE module |

Emergency Standby Power (ESP)

Emergency standby power is the maximum power available to a variable load during a main power grid failure. The average load factor over 24 hours of operation must not exceed 70% of the motor's ESP rated power. Typical motor operating hours are 200 hours per year, with a maximum usage of 500 hours per year.

This includes an annual maximum of 25 hours per year at the ESP power rating. Overload capability is not permitted. The motor must not be used for sustained utility parallel applications.

Main Power (PRP)

Prime Power is the maximum power available for unlimited hours of use in a variable load application. The average load factor must not exceed 70% of the motor's PRP rating during any 24-hour period. A 10% overload capability is available; however, it is limited to 1 hour within each 12-hour period.

- 1. All ratings are based on operating conditions according to ISO 8528-1, ISO 3046, DIN6271. Performance tolerance $\pm 5\%$.
- Test conditions: 100 kPa, 25°C air inlet temperature, 30% relative humidity, with fuel density of 0.84 kg/L. Derating may be required for conditions outside these, contact factory for details.
- Power output curves are based on engine operation with fuel system, water pump and lubricating oil pump; battery charging alternator, fan and optional equipment are not included.