

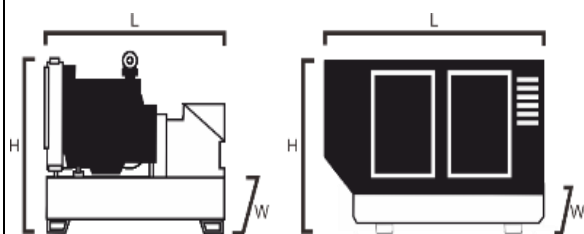
## Technical Data

| Engine                |             | Alternator            |                    |           | Generator Model                            |                                |
|-----------------------|-------------|-----------------------|--------------------|-----------|--|--------------------------------|
| Lister Petter SA432G2 |             | Leroy-somer TAL-A42-F |                    |           | <b>FB44X-SA (Open) / FC44X-SA (Silent)</b> |                                |
| Frequency             | Phase       |                       | Power Factor       |           |  | Emissions                      |
| <b>60Hz/1800rpm</b>   | 3-Phase     |                       | Factor Cos Φ = 0.8 |           |  | N/A                            |
| RATINGS               | Prime Power |                       | Standby Power      |           | Rated Current                              | Fuel Consumption<br>@100% Load |
|                       | (PRP)       |                       | (ESP)              |           | Amps                                       |                                |
| Voltage (V)           | kWe         | kVA                   | kWe                | kVA       | (A)  | L/h                            |
| 380/220               | 35          | 44                    | 39                 | 48        | 66,5                                       | 11,07                          |
| <b>440/254</b>        | <b>35</b>   | <b>44</b>             | <b>39</b>          | <b>48</b> | <b>57,4</b>                                | <b>11,07</b>                   |
| 220/127               | 35          | 44                    | 39                 | 48        | 114,8                                      | 11,07                          |
| 230/132               | 35          | 44                    | 39                 | 48        | 109,8                                      | 11,07                          |



### Key Features:

- High efficient water cooled diesel engine.
- Single bearing with brushless alternators (Class H, with AVR).
- Radiator with pressure cap and drain point.
- Fully guarded engine-driven fan.
- Fully welded steel skid base with lifting holes and fork lift legs.
- Integral fuel tank with filler cap and gauge ( $\leq 650\text{kVA}$ ).
- Heavy duty rubber anti-vibration mountings.
- 12V or 24V maintenance free starter battery and connecting cables.
- Separate engine-driven battery charging alternator.
- Spin on oil and fuel filters and dry type air filter element.
- Industrial silencer (15dBA reduction) supplied loose.
- Auto start control system with LCD show.
- Battery charger provided.
- Main line 3P circuit breaker.
- Rigorous factory test wiring with IEC standard.
- Operation & Maintenance manual & Wiring diagrams.
- Wide range of optional extra features available.



| Dimensions & Weights          | Open      | Silent    |
|-------------------------------|-----------|-----------|
| Length (L)-mm:                | 1566      | 2250      |
| Width (W)-mm:                 | 630       | 930       |
| Height (H)-mm:                | 1080      | 1300      |
| Dry Weight-kg:                | 640       | 950       |
| Standard Fuel Tank Capacity-L | 90        | 90        |
| (dBA)@7m no load              | $\leq 85$ | $\leq 65$ |

### Ratings:

All three phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 0.8 or 1.0 power factor.

#### (1)PRP (Prime Power):

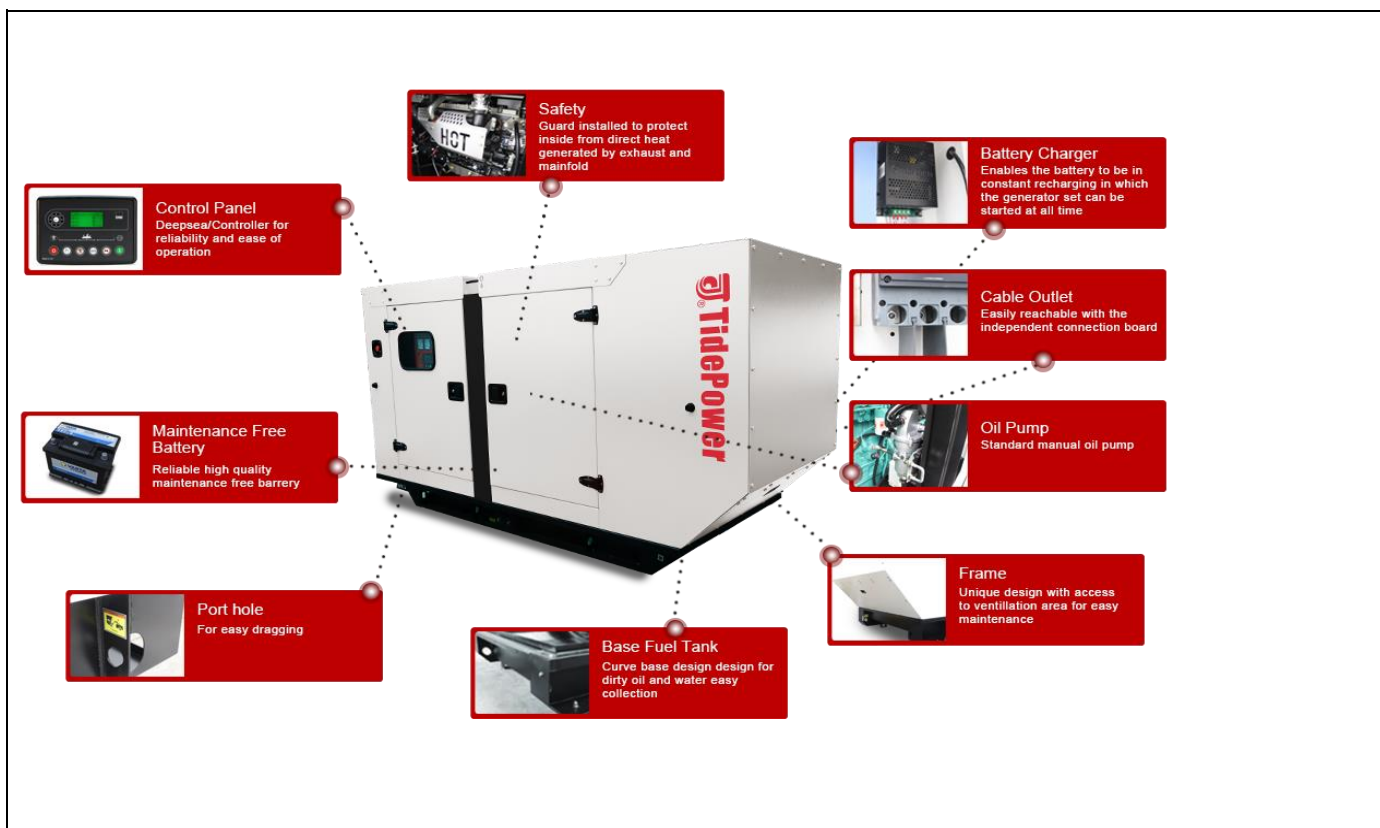
Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

#### (2)ESP (Standby Power):

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure.

#### (3)STD:Standard Alternator.

Tide Power reserves the right to change the design or specifications without notice and without any obligation or liability.



The soundproof Generating set range offers a very large application target with powers ranging from 5-650KVA at 50 and 60Hz. The new and sturdy design whether it is canopies or containerized enclosure are with maximum noise reduction which make it suitable for all construction sites and home backup power supply, both mobile and stationary. At all time we have kept in our inventory a largerange of accessories to answer any immediate need, for sales or after sales services. Our standard Deepsea control panel with its stand alone cabinet is equipped with a large display screen, emergency button, ignition barrel and circuit breaker. Like every of our finished products, all the parts of the unit are subject to a stringent operating test involving over 30 checks prior to delivery.

## Advantages of FENOVA PLUS:

- Powerful Engine, Large Output Power;
- Stable Performance
- Compact Structure
- Waterproof and Dustproof and weatherproof
- Noise Level 60—80 dBA@7m
- Ambient temperature: -5℃--50℃
- Excellent design and craftsmanship
- Excellent Cooling System
- Automatic Air—Bleeding
- Easy Operation and Maintenance;

| Engine                     | Lister Petter SA432G2 |           |    |
|----------------------------|-----------------------|-----------|----|
| Engine Frequency and Speed | Hz / r/min            | 60 / 1800 |    |
| Engine Power               | kWm                   | 42        | 46 |
| Type of fuel injection     | Direct                |           |    |
| Number of cylinders        | 4                     |           |    |



|                           |   |                  |        |
|---------------------------|---|------------------|--------|
| General Performance       | Nominal cylinder bore×Stoke                   | mm               | 98×105 |
|                           | Total cylinder capacity                       | Litre            | 3,17   |
|                           | Compression ratio                             | 18.5:1           |        |
|                           | Speed governor                                | Electronic       |        |
|                           | Fly wheel housing                             | SAE 4            |        |
| Fuel System               | Fuel Consumption at 110% Prime Power          | L/h              | 12,56  |
|                           | Fuel Consumption at 100% Prime Power          | L/h              | 11,07  |
|                           | Fuel Consumption at 75% Prime Power           | L/h              | 8,94   |
|                           | Fuel Consumption at 50% Prime Power           | L/h              | 6,19   |
|                           | Fuel Consumption at 25% Prime Power           | L/h              | 3,62   |
| Exhaust and Intake System | Maximum allowable back-pressure               | kPa              | ≤10    |
|                           | Exhaust gas flow                              | m³/min           | 6,7    |
|                           | Exhaust gas temperature, continuous           | °C               | 342    |
|                           | Exhaust gas temperature, overload             | °C               | 385    |
|                           | Exhaust pipe diameter - recommended           | mm               | 63,5   |
|                           | Maximum allowable inlet restriction           | kPa              | ≤ 4    |
|                           | Combustion air flow                           | m³/min           | 2,5    |
| Cooling System            | Total system with radiator capacity           | Litres           | 13,25  |
|                           | Total system without radiator capacity        | Litres           | 5,8    |
|                           | Thermostat type                               | Wax Capsule      |        |
|                           | Cooling package maximum operating temperature | °C               | ≤110   |
|                           | Thermostat opens                              | °C               | 82 ± 2 |
|                           | Thermostat fully open                         | °C               | ≤ 95   |
|                           | Minimum temperature to engine                 | °C               | -25    |
|                           | Cooling fan flow rate                         | L/s              | 65     |
| Lubrication System        | Sump capacity including filter                | Litres           | 8,0    |
|                           | Oil consumption, 100% (l/hr)                  | L/hr             | 0,016  |
|                           | Lubricating oil temperature                   | °C               | 90-105 |
|                           | Maximum oil temperature                       | °C               | 108    |
| Electric System           | Electrical System Voltage                     | V                | 12     |
|                           | Starter motor                                 | 12V×3.0kW        |        |
|                           | Battery                                       | Maintenance-free |        |

| Alternator   | 60Hz/1800rpm               |                         |
|--------------|----------------------------|-------------------------|
| General Data | Manufacture / Brand        | Leroy-somer             |
|              | Model                      | TAL-A42-F               |
|              | Coupling / No. of Bearings | Direct / Single Bearing |
|              | Phase / Poles              | 3-Phase / 4-Pole        |
|              | Power Factor               | Cos Φ = 0.8             |
|              | AVR Regulation             | Yes                     |
|              | Voltage Regulation         | ±0.5 %                  |
|              | Insulation Class           | H                       |
|              | Drip Proof                 | IP23                    |
|              | Voltage Regulator          | AVR                     |
|              | Altitude                   | ≤1000 m                 |

## Tide Power Easycon Function Summary

|                             |              |
|-----------------------------|--------------|
| Controller Model / Deep Sea | EC3.0        |
| Brand / Model               | DSE4520 MKII |
| Viewable Parameters         |              |
| Phase Voltage               | 3            |
| Current                     | •            |
| Frequency                   | -            |
| Act                         |              |





|                             |     |
|-----------------------------|-----|
| Reactive Power              | •   |
| Apparent Power              | •   |
| Power Factor                | •   |
| Electric Energy Metering    | •   |
| <b>Generator Protection</b> |     |
| Abnormal Voltage            | •   |
| Over-current Warning        | •   |
| Over current Protection     | •   |
| Over Frequency Protection   | •   |
| Short Circuit Protection    | ×   |
| <b>Engine Figure</b>        |     |
| Oil Pressure                | •   |
| Water Temperature           | •   |
| Fuel Meter / Fuel Sensor    | •/○ |
| Speed                       | •   |
| Battery Voltage             | •   |
| Runing hours                | •   |
| <b>Engine Protection</b>    |     |
| Low Oil Pressure Warning    | •   |
| Low Oil Pressure Protection | •   |
| High Temperature Warning    | •   |
| High Temperature Protection | •   |
| Overspeed Warning           | •   |
| Overspeed Protection        | •   |
| Alternator Charger          | •   |
| <b>Functions</b>            |     |
| Remote Start                | •   |
| AMF (Auto Main Failure)     | •   |
| Service Indicate            | •   |
| Fault History               | •   |
| Gen-Gen Synchronising       | ×   |
| Gen-Mains Synchronising     | ×   |

Remark:

- Standard Supply
- Available as Optional
- × Not Available

## FEATURES:

Ø The DSE4510 MKII Auto Start Control Module and the DSE4520 MKII Auto Mains (Utility) Failure Control Module are suitable for a wide variety of single gen-set applications.  
Ø Whilst maintaining functions included within higher end controllers, such as generator or load power monitoring, the DSE45xx MKII range of especially compact controllers provide the user with the ultimate size to feature ratio.

## Key features :

Ø Auto Start and AMF mode in one module (DSE4520 MKII only)  
Ø J1939-75 support and CAN alarm ignore function  
Ø Alternator frequency & CAN speed sensing in one variant  
Ø Largest back-lit icon display in its class  
Ø Heated display option  
Ø Real time clock provides accurate event logging  
Ø Fully configurable via the fascia or PC using USB communication  
Ø Extremely efficient power save mode  
Ø 3 phase generator sensing  
Ø 3 phase mains (utility) sensing (DSE4520 MKII only)  
Ø Compatible with 600 V ph to ph nominal systems  
Ø Generator/load power monitoring (kW, kV A, kV Ar, pf)  
Ø Accumulated power monitoring (kW h, kVA h, kVAr h)  
Ø Generator overload protection (kW)  
Ø Generator/load current monitoring and protection  
Ø Fuel and start outputs (configurable when using CAN)  
Ø 4 configurable DC outputs  
Ø 3 configurable analogue/digital inputs  
Ø 4 configurable digital inputs  
Ø Configurable staged loading outputs  
Ø 3 engine maintenance alarms  
Ø Engine speed protection  
Ø Engine hours counter  
Ø Engine pre-heat  
Ø Engine run-time scheduler  
Ø Engine idle control for starting & stopping  
Ø Tier 4 engine instrumentation screens  
Ø Battery voltage monitoring  
Ø Start on low battery voltage  
Ø Configurable remote start input  
Ø 1 alternative configuration  
Ø Comprehensive warning, electrical trip or shutdown protection upon fault condition  
Ø LCD alarm indication  
Ø Event log (50)  
Ø Fuel solenoid pulling circuit  
Ø On-screen line diagram on/off functionality  
Ø Configurable CAN instrumentation(10)  
Ø Water in fuel digital input  
Ø Tank bund alarm digital input  
Ø Generator at rest output  
Ø ECU periodic wake-up for information retrieval  
Ø Back-light power-save mode  
Ø Adjustable delay crank timer  
Ø Pre/post heat functionality  
Ø Overload protection  
Ø Mains/generator A/C system selection  
Ø Output timer for external audible alarm