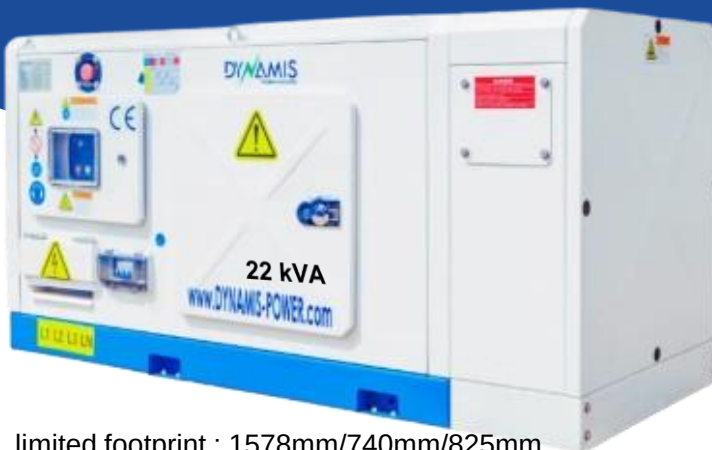




limited footprint : 1578mm/740mm/825mm

Generator Specification

Service	PRP(1)	ESP(2)
Power (KVA)	22	20
Power (KW)	16	18
Rated Speed (r.p.m)	1500	
Standard voltage (V)	400/230V	
Rated at power factor (cos phi)	0.8	



Dynamis Power gensets are compliant with ISO9001 and CE standard, which include the following directives:

- 2006/42/EC Machinery safety.
- 2008/95/EC Low voltage
- EN 60204-1:2006+A1: 2009, EN ISO 12100: 2010, EN ISO13849-1: 2008, EN 12601:2010

PRP (Prime Power):

According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

ESP (Standby Power):

According to ISO8528-1, It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

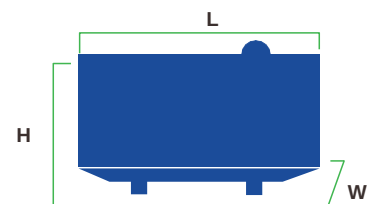
Power Voltage	ESP		PRP		Standby Amps
	KVA	KW	KVA	KW	
400/230	22	18	22	16	32A

Performance Data	
Model	DY-LF22C
Engine Brand	FAW
Engine model	FAW 4DW91-29D
Speed Control type	EFC Electrical
Phase	3
Control system	Digital
Starter motor voltage	12
Frequency	50HZ
Engine Speed (RPM)	1500

Standard Reference Condition

Note: Standard reference condition 25°C [77°F] air inlet temperature, 1000 m (328 ft) A.S.L 30% relative humidity. Fuel consumption data using diesel with a specific gravity of 0.85 and conforming to BS 2869: 1998, Class A2

Noise level 50Hz: 65dB (A) @ 7m



Dimension & Weight	
Dimension	Silent Compact
Length (L)	1578mm
Width (W)	740mm
Height (H)	825mm
Net Weight	582kg
Fuel Tank (L)	50

Note: This Parameters Allow for some acceptable Deviations

■ Engine Specification : FAW 4DW91-29D

Type	in line 4-cylinder 4-stroke
Air intake type	Natural
Cooling mode	Water cooling
Governor mode	Mechanical or electronic
Bore x Stroke (mm)	90 x 100
Compression ratio	17.1
Rated speed (rpm)	1500
Displacement (L)	2.54
Prime power(without fan)(kW)	21
Standby power(without fan)(kW)	23
Oil Consumption (L/h)	0.05
Steady state speed regulation (%)	<5
Oil capacity including filter (L)	8
Emission	Stage II
The flywheel shell interface	SAE4 Flywheel for 7.5" & 10" flexible coupling
Dry weight of base (kg)	220
Dry weight of Gen Pac (kg)	240
Overall dimension (base)(mm)	750 x 555 x 680
Overall dimension (G.P)(mm)	920 x 610 x 760
Fan consumption (kW)	1.6
27C air consumption (m3/min)	1.7
Heat rejection of exhaust (kW)	17.4
Exhaust gas temperature after turbine (C)	450
Exhaust gas flow (m3/min)	4.6
Heat rejection from engine (kW)	1.3
Heat rejection of coolant (kW)	13.7
Base configuration	Standard configuration (add on the base)
Engine with fan	Intake and exhaust system : Air filter and connecting pipes
Alternator 500W 14V	Connecting flang of exhaust pipe
Starter motor 3.5kW 12V	Cooling system: Radiator with connecting pipes; Fan guard; Belt guard

ALTERNATOR SPECIFICATION: Dynamis DY-184-E

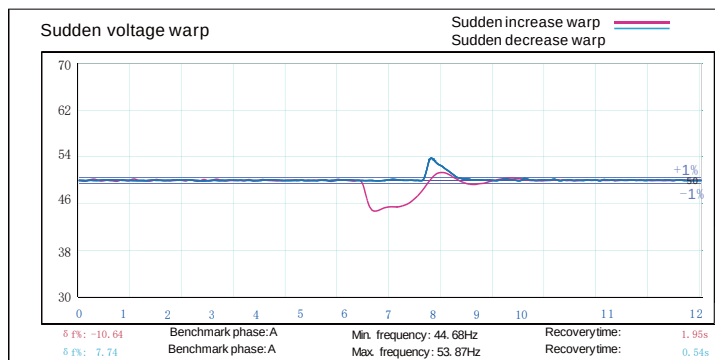
Alternator Specifications

Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Insulation	H class
Enclosure(according IEC-34-5)	IP 23

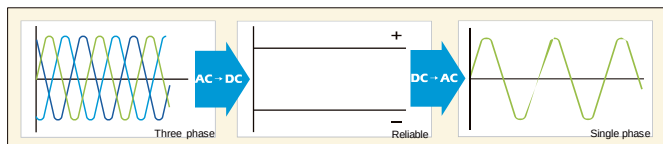
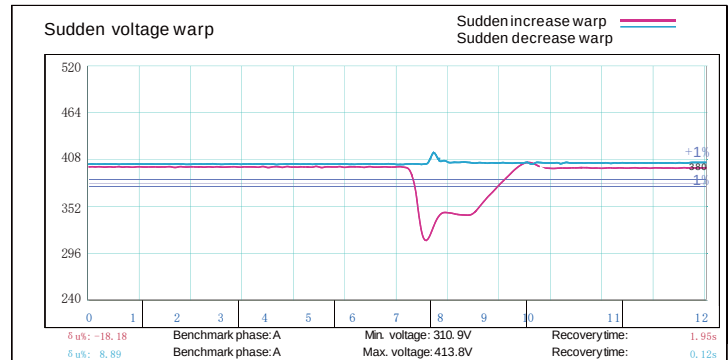
Alternator Specifications

Excitation system	Self-excited, brushless
Voltage regulator	AVR (Electronic)
No. of bearings	Single bearing
Coupling system	Flexible disc
Coating type	Standard (Vacuum impregnation)

Emergency frequency curve



Emergency voltage curve



Control Panel: DEEPSEA 4520MKII

DSE4520 MKII

AUTO MAINS FAILURE CONTROL MODULE



KEY FEATURES

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

KEY BENEFITS

- Automatically transfers between mains (utility) and generator
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored simultaneously which are clearly displayed on the large back-lit icon display.
- The module can be configured to suit a wide range of applications
- Uses DSE Configuration Suite PC Software for simplified configuration
- Compatible with a wide range of CAN engines including Tier 4
- Licence-free PC software
- IP65 rating (with optional gasket) offers increased resistance to water ingress

SPECIFICATIONS

DC SUPPLY

CONTINUOUS VOLTAGE RATING
8 V to 35 V Continuous

CRANKING DROPOUTS

Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries. LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT

85 mA at 12 V, 96 mA at 24 V

MAXIMUM STANDBY CURRENT

51 mA at 12 V, 47 mA at 24 V

MAXIMUM SLEEP CURRENT

35 mA at 12 V, 32 mA at 24 V

MAXIMUM DEEP SLEEP CURRENT

<10 uA at 12 V, <10 uA at 24 V

MAINS (UTILITY)

VOLTAGE RANGE

15 V to 415 V AC (Ph to N)
26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE

3.5 Hz to 75 Hz

OUTPUTS

OUTPUT A (FUEL)

10 A short term, 5 A continuous, at supply voltage

OUTPUT B (START)

10 A short term, 5 A continuous, at supply voltage

AUXILIARY OUTPUTS C, D, E & F

2 A DC at supply voltage

GENERATOR

VOLTAGE RANGE

15 V to 415 V AC (Ph to N)
26 V to 719 V AC (Ph to Ph)

FREQUENCY RANGE

3.5 Hz to 75 Hz

DIMENSIONS

OVERALL

140 mm x 113 mm x 43 mm
5.5" x 4.4" x 1.7"

PANEL CUT-OUT

118 mm x 92 mm
4.6" x 3.6"

MAXIMUM PANEL THICKNESS

8 mm
0.3"

STORAGE TEMPERATURE RANGE

-40 °C to +85 °C
-40 °F to +185 °F

OPERATING TEMPERATURE RANGE

-30 °C to +70 °C
-22 °F to +158 °F



Monitoring 3G/4G: DEEPSEA 890MKII (OPTIONAL)



MONITORING

Découvrez Dynamis Webnet

Une solution de gestion et de contrôle des générateurs à distance.

DYNAMIS WEBNET vous permet de recevoir des rapports détaillés incluant des recommandations de maintenance corrective et préventive.

Il vous permet également de vous connecter et d'accéder en temps réel aux données sur une page de paramètres de fonctionnement des générateurs.

La solution vous offre un contrôle en temps réel de votre groupe électrogène. Des notifications vous seront envoyées par e-mail ou par SMS si vos générateurs manquent de carburant, s'ils nécessitent de la maintenance ou s'il y a une urgence...

- Passerelle DSE890 MKII 4G utilisée avec les contrôleurs DSE pour la surveillance à distance et la communication via DSEWebNet® ou des brokers MQTT tiers.
- Communique avec jusqu'à cinq contrôleurs DSE connectés pour surveiller les instruments et les états de fonctionnement.
- Enregistre les changements de données en interne et les transmet à DSEWebNet® ou à un broker MQTT (Amazon Web Services, Google, IBM, etc.).
- Le logiciel DSEWebNet® est accessible via un navigateur Internet ou une application dédiée.
- Permet plusieurs opérations : surveillance des équipements, effacement des alarmes, démarrage/arrêt des équipements, et surveillance des niveaux de carburant.
- La fonctionnalité IoT du DSE890 MKII prend en charge MQTT V 3.1.1 (ISO/IEC 20922:2016).
- Connexion possible à un serveur tiers exécutant un broker MQTT, tout en maintenant la connexion au serveur DSEWebNet®.
- Pour plus d'informations sur le logiciel DSEWebNet®, consulter la fiche technique 055-192.
- Le DSE890 MKII prend également en charge les connexions 2G et 3G.

