



### Spécifications du générateur

Service	PRP(1)	ESP(2)
Puissance (KVA)	20	22
Puissance (KW)	16	18
Vitesse nominale (r.p.m)	1500	
Tension standard (V)	400/230V	
Rated at power factor (cos phi)	0.8	

#### RP (Puissance principale):

Selon la norme ISO 8528-1, la puissance principale est la puissance maximale disponible pendant une période de charge variable. Cette puissance est disponible pendant un nombre illimité d'heures par an, entre les intervalles de maintenance indiqués. La puissance de sortie moyenne autorisée sur une durée de 24 heures ne doit pas dépasser 80% de la puissance principale. Surcharge de 10% disponible ponctuellement.

#### ESP (Puissance de secours):

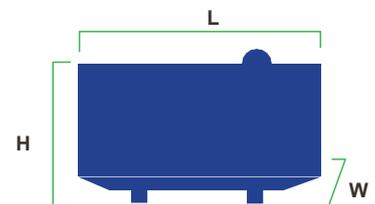
Selon la norme ISO 8528-1, la puissance secours est la puissance maximale disponible dans les conditions de fonctionnement standard, pour laquelle le groupe électrogène peut fonctionner jusqu'à 500 heures par an (dont un maximum de 300 heures en continu), entre les intervalles de maintenance et procédures effectuées conformément aux recommandations du fabricant. Aucune capacité de surcharge n'est disponible.

Power Voltage	ESP		PRP		Standby Amps
	KVA	KW	KVA	KW	
415/240	22	18	20	16	30.6
400/230	22	18	20	16	32
380/220	22	18	20	16	33.4

Données de Performance	
Modèle	DY22SZ
Marque du moteur	SDEC
Modèle du moteur	4Z2.7-G11
Type de régulation	Electrique
Nombre de phases	3
Système de contrôle	Digital
Tension de démarrage	12V/24
Fréquence	50HZ
Vitesse moteur (RPM)	1500

#### Conditions de référence standard

Remarque: Condition de référence standard 25 ° C [77 ° F] température d'entrée d'air, 1000 m (328 ft) A.S.L 30% d'humidité relative. Données de consommation de carburant avec du diesel avec une densité de 0,85 et conforme à BS 2869: 1998, Classe A2



Noise level 50Hz: 64dB (A) @ 7m

Données de Performance	
Type	Silent
Longeur (L)	1870mm
Largeur (W)	750mm
Hauteur (H)	1025mm
Poids net	719KG
Réservoir de carburant (L)	65L

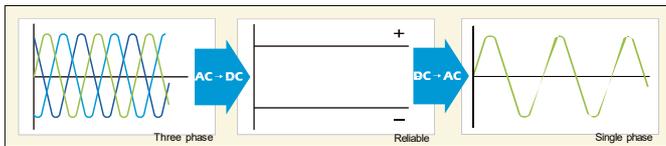
Note: This Parameters Allow for some acceptable Deviations

## ■ Engine Specification : 4Z2.7-G11

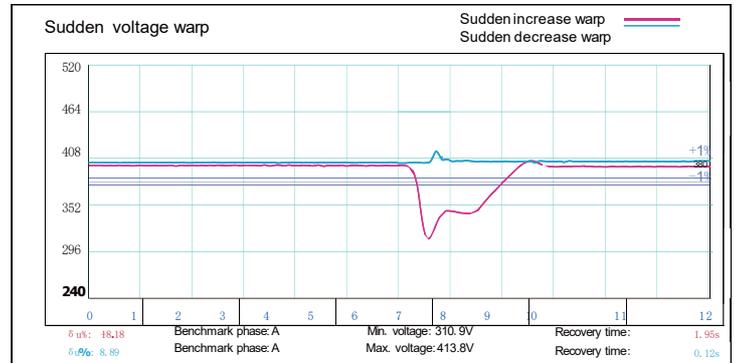
Description	diesel, 4-stroke, water-cooled, atmospheric, direct injection, electronic speed control
Number and arrangement of cylinders	4 cylinders, in-line, vertical, 2 valves per cylinder
Constant Power	22 kW
Reserve power	24 kW
Rotation frequency	1500 rpm
Accuracy of speed control	+/- 5%
Engine displacement	2.7 l
piston stroke	90 mm
Piston diameter	105 mm
Compression ratio	18.5:1
The order of operation of the cylinders	1-3-4-2
Oil type	SAE 15W40 / 10W30
Oil system capacity	8.0 l
Specific consumption of oil for waste	0.3%
coolant type	GOST 28084-89
Cooling capacity	3.0 l
Exhaust gas temperature	550 °C
Exhaust flow	7.5 m <sup>3</sup> /min
<b>Fuel consumption:</b>	
Diesel fuel	GOST 305-82
25% PRP	2.1/h
50% PRP	3.2/h
75% PRP	4.5/h
100% PRP	5.9/h
<b>Electrical system</b>	
System voltage	12 V
Starting device	electric starter 3.5 kW
Charging generator	14 V x 35 A
Accumulator battery	1x12VAh

## ALTERNATOR SPECIFICATION: DY184E

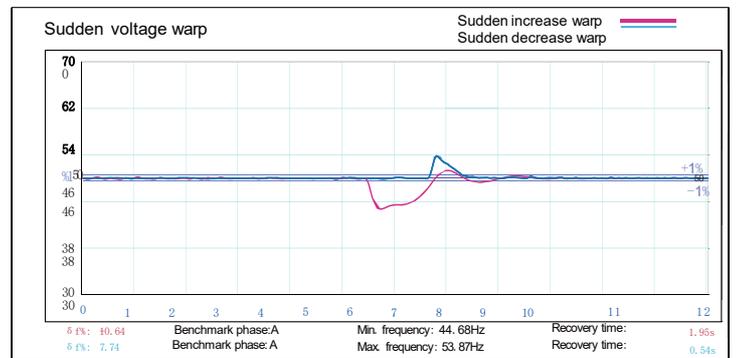
Alternator	
Number of phase	3
Power factor (Cos Phi)	0,8
Poles	4
Winding Connections (standard)	Star-Serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	self-excited
Bearing	single Bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



Emergency Voltage curve



Emergency Frequency curve



## OPTIONS

<b>Engine</b> <ul style="list-style-type: none"> <li>• Water Jacket Pre heater</li> <li>• Fuel heater</li> </ul>	<b>Alternator</b> <ul style="list-style-type: none"> <li>• Winding Temp measuring Instrument</li> <li>• Alternator Pre heater</li> <li>• PMG</li> <li>• Anti-damp and anti corrosion treatment</li> <li>• Anti-condensation heater</li> <li>• Winding and bearing RTD</li> </ul>	<b>Generator Sets</b> <ul style="list-style-type: none"> <li>• Tools with the machine</li> <li>• Extended range fuel tank</li> <li>• Bunded fuel tank</li> </ul>	<b>Fuel System</b> <ul style="list-style-type: none"> <li>• Low fuel level alarm</li> <li>• Automatic fuel feeding system</li> <li>• Fuel T-valves</li> </ul>
<b>Canopy</b> <ul style="list-style-type: none"> <li>• Rental type Canopy</li> <li>• Trailer</li> </ul>	<b>Lub Oil System</b> <ul style="list-style-type: none"> <li>• Oil Pre-heater</li> <li>• Oil temp sensor</li> </ul>	<b>Cooling System</b> <ul style="list-style-type: none"> <li>• Front heat protection</li> </ul>	<b>Control Panel</b> <ul style="list-style-type: none"> <li>• Remote control panel</li> <li>• ATS</li> <li>• Synchronizing controller</li> <li>• Adjustable earth leakage relay</li> </ul>

## Control Panel: DEEPSEA 6120MKII

### DSE6110/20 MKIII

AUTO START & AUTO MAINS (UTILITY)  
FAILURE CONTROL MODULES



DSE6110 MKIII



DSE6120 MKIII

#### KEY FEATURES

- 4-line back-lit LCD text display
- Multiple display languages
- Five-key menu navigation
- LCD alarm indication
- Customisable power-up text and screen images.
- DSENet® expansion compatibility
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB communications
- Front panel configuration with PIN protection
- Power save mode
- 3-phase generator sensing and protection
- 3-phase mains (utility) sensing and protection (DSE6120 MKIII only)
- Automatic load transfer control (DSE6120 MKIII only)
- Generator current and power monitoring (kW, kvar, kVA, pf)
- Mains (utility) current and power monitoring (kW, kvar, kVA, pf) (DSE6120 MKIII only)
- kW overload alarm
- Over current protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN
- 6 configurable DC outputs
- 4 configurable analogue/digital inputs
- Support for 0 V to 10 V & 4 mA to 20 mA sensors

- 8 configurable digital inputs
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Manual and automatic fuel pump control
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel level alarms
- 3 configurable maintenance alarms
- Compatible with a wide range of CAN engines, including Tier 4 engine support
- Uses DSE Configuration Suite PC Software for simplified configuration
- Licence-free PC software
- IP65 rating (with optional gasket) offers increased resistance to water ingress
- Configurable CAN read & transmitted information.
- 1 alternative configuration.

#### KEY BENEFITS

- Automatically transfers between mains (utility) and generator (DSE6120 MKIII only) for convenience.
- 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 & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements.

#### SPECIFICATIONS

##### DC SUPPLY

##### CONTINUOUS VOLTAGE RATING

8 V to 35 V Continuous  
5 V for up to 1 minute

##### CRANKING DROPOUTS

Able to survive 0 V for 100 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

260 mA at 12 V, 150 mA at 24 V

##### MAXIMUM STANDBY CURRENT

145 mA at 12 V, 85 mA at 24 V

##### CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

##### GENERATOR & 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

##### MAGNETIC PICKUP

##### VOLTAGE RANGE

+/- 0.5 V to 70 V

##### FREQUENCY RANGE

10,000 Hz (max)

##### INPUTS

##### DIGITAL INPUTS A TO H

Negative switching

##### ANALOGUE INPUTS A & D

Configurable as:  
Negative switching digital input  
0 V to 10 V sensor  
4 mA to 20 mA sensor  
Resistive sensor

##### ANALOGUE INPUTS B & C

Configurable as:  
Negative switching digital input  
Resistive sensor

##### OUTPUTS

##### OUTPUT A & B (FUEL & START)

10 A DC at supply voltage

##### AUXILIARY OUTPUTS C, D, E, F, G & H

2 A DC at supply voltage

##### DIMENSIONS

##### OVERALL

216 mm x 158 mm x 43 mm  
8.5" x 6.2" x 1.5"

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



### MONITORING

## Discover Dynamis Webnet

A remote generator management and control solution.

DYNAMIS WEBNET allows you to receive detailed reports including recommendations for corrective and preventive maintenance.

It also enables you to connect and access real-time data across a range of generator operating parameters.

The solution offers you real-time control of your generator.

- DSE890 MKII 4G gateway used with DSE controllers for remote monitoring and communication via DSEWebNet® or third-party MQTT brokers.

- Communicates with up to five connected DSE controllers to monitor instruments and operating states.

- Internally records data changes and transmits them to DSEWebNet® or to an MQTT broker (Amazon Web Services, Google, IBM, etc.).

- DSEWebNet® software is accessible via a web browser or a dedicated app.

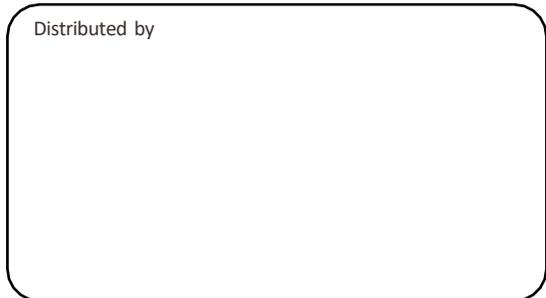
- Supports multiple operations: equipment monitoring, alarm clearing, equipment start/stop, and fuel level monitoring.

- The IoT functionality of the DSE890 MKII supports MQTT V 3.1.1 (ISO/IEC 20922:2016).

- Connection to a third-party server running an MQTT broker is possible, while maintaining a connection to DSEWebNet®.

- For more information on DSEWebNet® software, refer to datasheet 055-192.

- The DSE890 MKII also supports 2G and 3G connectivity.



Extended tanks– 200-500-600-1000l



**22kVA 1000l**



**33kVA 1000l antitheft**



**55kVA 600l**

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