



### Spécifications du générateur

Service	PRP(1)	ESP(2)
Puissance (KVA)	80	88
Puissance (KW)	64	70
Vitesse nominale (r.p.m)	1500	
Tension standard (V)	400/230	
Facture de puissance (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):

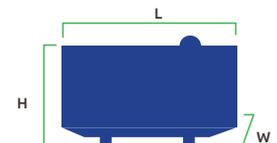
Selon la norme ISO 8528-1, la puissance secours est la puissance maximale disponible dans les conditions de fonctionnement standard, pour laquelle le groupe électrogène peut fonctionner jusqu'à 500 heures par an (dont un maximum de 300 heures en continu), entre les intervalles de maintenance et procédures 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	88	70	80	64	122.4
400/230	88	70	80	64	127.0
380/220	88	70	80	64	133.7

Données de Performance		
Modèle	DY88DE-S12	
Marque du moteur	Deutz	
Modèle du moteur	BF4M2012C G1	
Type de régulation	Mecanique	
Nombre de phases	3	
Système de contrôle	Digital	
Tension de démarrage	12V/24V	
Fréquence	50HZ	
Vitesse moteur (RPM)	1500	
Consommation de carburant (L/H)	100% puissance de secours	-
	100% puissance principale	18.1
	75% puissance principale	13.3
	50% puissance principale	8.9

#### 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: 74dB (A) @ 1m

Données de Performance	
Type	Capoté
Longeur (L)	2770mm
Largeur (W)	1080mm
Hauteur (H)	1250mm
Poids net	1365KG
Réservoir de carburant (L)	180L

Note: This Parameters Allow for some acceptable Deviations

## Engine Specification : BFM3 G2 (33kVA)

Engine	Type	BFM3 G2
Speed	[min-1]	1500
Net frequency	[Hz]	50
Power standard		LTP
Power level		
Exhaust emission standard		COM II
Aspiration		Turbo CAC
No of cylinders		4
Configuration		in-line
Injection system		single injection pumps
Displacement	[ L ]	4,04
Bore	[mm]	101
Stroke	[mm]	126
Compression ratio		19
Mean effective pressure	[bar]	14,8
Piston speed	[m/s]	6,30
Rotation (looking at flywheel)		Ccw
No of teeth on flywheel ring gear		129
<b>Governor performance</b>	<b>Type</b>	
Speed droop (static) mech. gov.	[%]	4-5
Speed droop (static) electr. gov. (EMR/DDE)	[%]	0-3
Governing standards to ISO 8528 Parts 1 and 5		G2
<b>Moment of inertia</b>	<b>Type</b>	
Engine without flywheel	[kg m <sup>2</sup> ]	0,16
Flywheel (standard genset spec.)	[kg m <sup>2</sup> ]	1,2
Max. step load acceptance, 1st step	[%]	
<b>Weight</b>	<b>Type</b>	
Engine dry, w/o cooling system	[kg]	405
Engine with cooling system	[kg]	473
Oil specification		TR0199-99-3002/6
Oil consumption	(as % of fuel consumption)	0,15
Oil capacity	(sump)	8.5
Min. oil pressure (shut down)	[bar]	1,8
Max. permissible oil temperature(oil pan)	[°C]	125
StandBy Power	[kVA]	88
Fan Reduction	[kW]	4,9
Net flywheel	[kW]	70
Prime Power	[kVA]	80

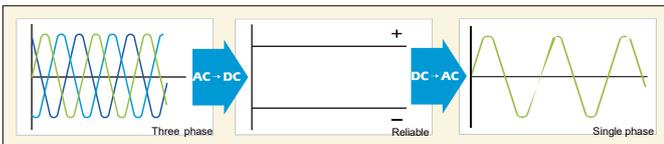
Engine	Type	BFM3 G2
<b>Fuel Consumption</b>		
25% load	[l/h]	5.0
50% load	[l/h]	8.9
75% load	[l/h]	13.3
100% load	[l/h]	18.1
<b>General engine cooling data</b>		
Max. perm. coolant outlet temperature	[°C]	105
Max. perm. flow resistance (cool. syst. and piping)	[bar]	0.22
Max. temperature of coolant (warning)	[°C]	108
Max. temperature of coolant (shut-down)	[°C]	110
Temperature at which thermostat starts to open	[°C]	83
Temperature at which thermostat is fully open	[°C]	98
Delivery of coolant pump	[m <sup>3</sup> /h]	7.2
Min. pressure before coolant pump	[bar]	0,3
Coolant capacity (engine)	[l]	6.0
Temperature at CAC outlet at standard conditions	[°C]	40
Coolant capacity (incl. cooling unit)	[l]	15,9
<b>Fan power consumption</b>	<b>kW</b>	<b>4.9</b>
Air to boil (max. permissible cool. air temp. at fan)	°C	55
<b>Air pressure loss, external</b>	<b>[mbar]</b>	<b>1.5</b>
<b>Cooling air flow</b>	<b>[m<sup>3</sup>/h]</b>	<b>5400</b>
<b>Heat Balance</b>		
Heat dissipation (engine radiator) <sup>6</sup>	[kW]	43 .1
Heat dissipation (convection)	[kW]	7.5
Heat dissipation (CAC) <sup>6</sup>	[kW]	7.5
Inlet / Exhaust Data Max. intake depression (Switch Setting)	[bar]	25
Combustion air volume	[m <sup>3</sup> /h]	267,4
Max. exhaust back pressure	[mbar]	30
Max. exhaust gas temperature	[°C]	600
Exhaust gas flow (at above temp)	[m <sup>3</sup> /h]	829

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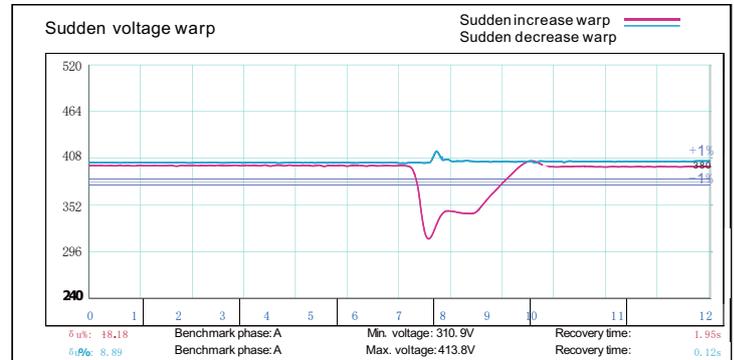


## ALTERNATOR SPECIFICATION

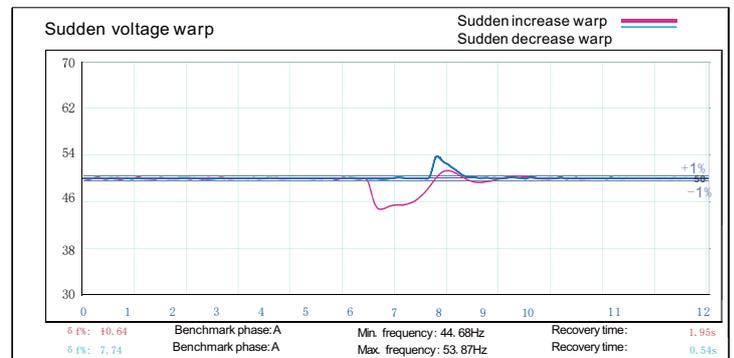
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-Serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	self-excited
Bearing	single Bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



Emergency Voltage curve



Emergency Frequency curve



## OPTIONS

Engine	Alternator	Generator Sets	Fuel System
<ul style="list-style-type: none"> <li>Water Jacket Pre heater</li> <li>Fuel heater</li> </ul>	<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>	<ul style="list-style-type: none"> <li>Tools with the machine</li> <li>Extended range fuel tank</li> <li>Bunded fuel tank</li> </ul>	<ul style="list-style-type: none"> <li>Low fuel level alarm</li> <li>Automatic fuel feeding system</li> <li>Fuel T-valves</li> </ul>
Canopy	Lub Oil System	Cooling System	Control Panel
<ul style="list-style-type: none"> <li>Rental type Canopy</li> <li>Trailer</li> </ul>	<ul style="list-style-type: none"> <li>Oil Pre-heater</li> <li>Oil temp sensor</li> </ul>	<ul style="list-style-type: none"> <li>Front heat protection</li> </ul>	<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"