



Generator Specification

Service	PRP(1)	ESP(2)
Power (KVA)	180	200
Power (KW)	155	160
Rated speed (r.p.m)	1500	
Standard voltage (V)	400/230 V	
Rated at power factor (cos Phi)	0,8	

(1) 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.

(2) ESP (Standby Power):

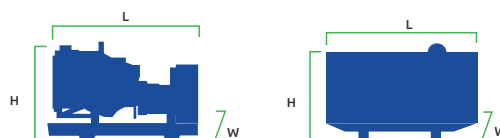
According to ISO 8528-1, It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

Performance Data		
Model	DY200P-S1	
Engine	Perkins	
Engine model	1106A-70TAG4	
Speed control type	Electronic	
Phase	3	
Control sytem	Digital	
Starter motor voltage	12V	
Frequency	50Hz	
Engine speed (RPM)	1500	
Fuel Consumption (L/H)	100% standby power	50.5
	100% prime power	46.4
	75% prime power	35.3
	50% prime power	22.7

Standard reference Conditions

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

Power Voltage	ESP		PRP		Standy Amps
	KVA	KW	KVA	KW	
415/240	200	160	180	155	278
400/230	200	160	180	155	288
380/220	200	160	180	155	303



Dimension and Weight		
Dimension	79 dB(A)@1m-65 dB(A)@7m	Silent
Length (L)	3600 mm	
Width (W)	1110 mm	
Height (H)	2170 mm	
Net Weight	2399 KG	
Fuel Tank (L)	300L	

Engine Specification : 1106A-70TAG4

Basic technical data

Engine brand	Perkins
No. of cylinders	3-L
Engine ref.	1106A-70TAG3
Engine type	4 stroke diesel
Governor type	mech
Injection	Direct
Bore*Stroke	103*135mm
Aspiration	Turbocharged & Air charge cooled
Displacement	7.0L
Cooling system	Water-cooled

Cooling system

Total coolant capacity -with radiator	20.5L
Maximum top tank temp	110°C
Thermostat operation range	82-93°C
Radiator face area	0.276 m ²
Rows and material	38 aluminium
Pressure cap setting	100kPa
Fan diameter	559 mm
Drive ratio	1 : 1
Number of blades	10

Fuel system

Injection system	Direct
Fuel injection pump	Rotary
Fuel atomiser	Multi-hole
Nozzel opening pressure	29.0 MPa
Fuel lift pump type	Electronic
-flow/hour	120-150 l/h
-pressure	30-75 kPa
Maximum suction head: -1500 rev/min	10 kPa

Induction system

Clean filter	3.0kpa
Dirty filter	6.4kpa
Air filter type	Dry

Lubrication system

Lubre oil consumption with full load	0.5%-1% of fuel consumption
Compression Ratio	16:1
Total coolant capacity	20.5L
Engine oil capacity	16.1L
Air Filter Type	Dry
oil flow at rated speed	10.9 litres/min.

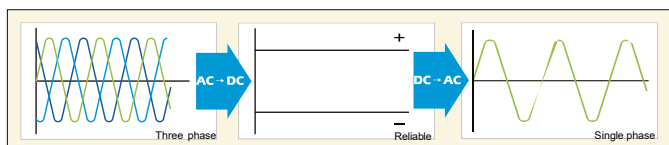
Electrical system Type

Type	Negative ground
Alternator voltage	12 volts
Alternator output	TBD
Starter motor voltage	12 volts
Starter motor power	TBD

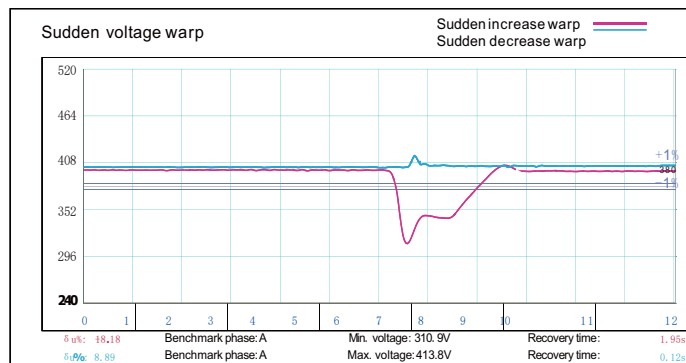
ALTERNATOR SPECIFICATION : LEROY SOMER TAL-A44-L

Alternator

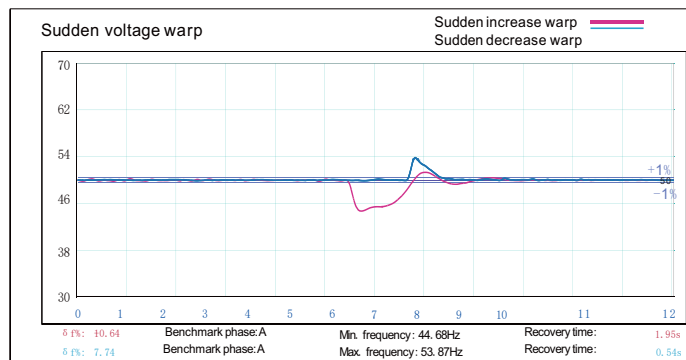
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Coupling	Flexible disc



Emergency voltage curve



Emergency frequency curve



OPTIONS

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

Control Panel: DEEPSEA 7320MKII

Configuration

- Emergency stop button
- Protection MCB
- Battery charger
- Integrated aviation plug
- ATS connection
- Digital control module

Features

- 3 phase generator set monitoring
- Support of engines equipped with electronic control unit
Comprehensive diagnostic message
- Automatic or manual start/ stop of the gensets
- Push buttons for simple control, lamp test
- Graphic back lit. LCD display
- Parameters adjustable via keyboard or PC
- Mains measurements (50HZ/ 60HZ)
- Generator measurements (50HZ/ 60HZ)
- Comprehensive shutdown or warning on fault condition
- 3 phase Generator protections
 - Over/under voltage
 - Over-/under frequency
 - Current voltage asymmetry
 - Over current/ overload
- 3 phase AMF function
 - Over-/under frequency
 - Over-/under voltage
 - Voltage asymmetry
- Configurable analog inputs
- Battery voltage, engine speed (pick-up) measureme
- Configurable programmable binary inputs and outputs
- Warm-up and cooling functions
- Generator C.B. and Mains C.B. control with feedback and re-
turn timer
- RS232 interface
- Modem communication support
- Hours counter
- Sealed to Ip65
- Event log

Benefits

- Less wiring and components
- Integrated solution
- Less engineering and programming
- User friendly set up and button layout
- Module can be configured to suit individual applications
- PC software for simplified configuration
- Wide range of communication capabilities

Operation conditions

- Operation temp: -20 °C to + 70 °C
- Storage temp: -30 °C to + 80 °C
- Operating humidity: 95% w/o condensation
- Vibration: 5-25Hz ,+/- 1.6 mm
5-100 Hz, a = 4g
- Shocks: a = 500m/s²

Options

- Ethernet interface (Remote monitoring and control)
- GSM modem/wireless internet (Remote monitoring and control)
- RS232-RS485 Dual port interface
- Synchronizing control panel
- Distribution board with sockets kit and power busbar
- Battery trickle charge ammeter
- Earth leakage protection
- Earth fault protection
- Low fuel level alarm
- Low fuel level shutdown
- High fuel level alarm
- Fuel transfer system control
- Low coolant level shutdown
- High lube oil temp shutdown
- Overload via alarm switch on breaker
- Engine coolant heater controls
- Control panel heater
- Speed adjust switch
- Oil temp displayed on LCD screen
- Additional 8 inputs and outputs