



ENGINE / TECHNICAL DATA         Engine Make       Perkins         Engine Model       2806A-E18TAG2         Governing Class       ISO 8528-5 G2         Number of Cylinders       6         Cylinder Arrangement       Vertical in line         Bore and Stroke mm       145 x 183         Displacement / Cubic Capacity litres       18.1         Induction System       Turbocharged and air to air charge cooled         Cycle       4 stroke         Combustion System       Direct Injection         Conding System       Oreganication         Rotation       Anti-clockwise, viewed on flywheel         Cooling System       Water - cooled         Frequency and Engine Speed       50Hz & 1500rpm       60Hz & 1800rpm         Prime       Standby       Prime       Stand         Gross Engine Power kW (hp)       584 (783)       628 (842)       568 (762)       623 (8         Fuel Consumption @ 50% load L/hr       97       -       95       -         @ 100% load L/hr       132       143       127       141         Total Lubrication System Capacity litres       62       62       62       62       62       62       62       62       62       62       62       <	GENERATING SET MO	DEL (JP650)					
520 KW         560 KW           480 V, 3 ph, 60 Hz, 1800 rpm         625 KVA         687 KVA           500 KW         550 KW           Atternators ratings may change at different vottages.         Ratings at 0.8 Pow           Engine Make         Perkins           Engine Make         Perkins           Engine Model         2806A-E18TAG2           Governing Class         IS0 8528-5 G2           Number of Cylinders         6           Cylinder Arrangement         Vertical in line           Bore and Stroke mm         145 x 183           Displacement / Cubic Capacity litres         18.1           Induction System         Turbocharged and air to air charge cooled           Cycle         4 stroke           Combustion System         Direct Injection           Cooling System         Turbocharged and air to air charge cooled           Cooling System         Yater - cooled           Frequency and Engine Speed         50Hz & 1500rpm           Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         97         95         -         @ 100% load L/hr         132         143         127         141           Total Lubrication System	Output Ratings		Prime	rime		Standby	
480 V, 3 ph, 60 Hz, 1800 rpm         625 KVA         687 KVA           500 KW         550 KW           Alternators ratings may change at different voltages.         Ratings at 0.8 Pow           ENGINE / TECHNICAL DATA         Perkins           Engine Make         Perkins           Engine Model         2806A-E18TAG2           Governing Class         ISO 8528-5 G2           Number of Cylinders         6           Cylinder Arrangement         Vertical in line           Bore and Stroke mm         145 x 183           Displacement / Cubic Capacity litres         18.1           Induction System         Turbocharged and air to air charge cooled           Cycle         4 stroke           Compression Ratio         14.5:1           Rotation         Anti-clockwise, viewed on flywheel           Cooling System         Water - cooled           Frequency and Engine Speed         50Hz & 1500rpm           Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         66         -         66         -         60         -           @ 100% load L/hr         97         -         95         -          97         -	380-415 V, 3 ph, 50 H	z, 1500 rpm	650 KVA	0 KVA		700 KVA	
500 KW     550 KW       Alternators ratings may change at different voltages.     Ratings at 0.8 Pow       ENGINE / TECHNICAL DATA     Perkins       Engine Make     Perkins       Engine Model     2806A-E18TAG2       Governing Class     ISO 8528-5 G2       Number of Cylinders     6       Cylinder Arrangement     Vertical in line       Bore and Stroke mm     145 x 183       Displacement / Cubic Capacity litres     18.1       Induction System     Turbocharged and air to air charge cooled       Cycle     4 stroke       Combustion System     Direct Injection       Cooling System     14.5:1       Rotation     Anti-clockwise, viewed on flywheel       Cooling System     Water - cooled       Frequency and Engine Speed     50Hz & 1500rpm       Gross Engine Power kW (hp)     584 (783)       628 (842)     568 (762)       6304 L/hr     623 (8       @ 100% load L/hr     132       @ 100% load L/hr     62       @ 100% load L/hr     132       @ 100% load L/hr     61       @ 100			520 KW	20 KW		560 KW	
Alternators ratings may change at different voltages.       Ratings at 0.8 Pow         ENGINE / TECHNICAL DATA       Perkins         Engine Make       Perkins         Engine Model       2806A-E18TAG2         Governing Class       ISO 8528-5 G2         Number of Cylinders       6         Cylinder Arrangement       Vertical in line         Bore and Stroke mm       1445 x 183         Displacement / Cubic Capacity litres       18.1         Induction System       Turbocharged and air to air charge cooled         Cycle       4 stroke         Combustion System       Direct Injection         Conding System       Vater - cooled         Frequency and Engine Speed       50Hz & 1500rpm       60Hz & 1800rpm         Gross Engine Power kW (hp)       584 (783)       628 (842)       568 (762)       623 (8         Fuel Consumption @ 50% load L/hr       60/2       60/2       60/2       62       62       62       62       62       62       62	480 V, 3 ph, 60 Hz, 18	00 rpm	625 KVA		68	7 KVA	
ENGINE / TECHNICAL DATA         Engine Make       Perkins         Engine Model       2806A-E18TAG2         Governing Class       ISO 8528-5 G2         Number of Cylinders       6         Cylinder Arrangement       Vertical in line         Bore and Stroke mm       145 x 183         Displacement / Cubic Capacity litres       18.1         Induction System       Turbocharged and air to air charge cooled         Cycle       4 stroke         Combustion System       Direct Injection         Conding System       14.5:1         Rotation       Anti-clockwise, viewed on flywheel         Cooling System       Water - cooled         Frequency and Engine Speed       50Hz & 1500rpm         Gross Engine Power kW (hp)       584 (783)       628 (842)       568 (762)       623 (8         Fuel Consumption @ 50% load L/hr       66       -       66       -         @ 100% load L/hr       132       143       127       141         Total Lubrication System Capacity litres       62       62       62       62       62       62         Gross Engine Power kW (hp)       584 (783)       622       62       62       62       62       62       62       62 <t< th=""><th></th><th></th><th>500 KW</th><th colspan="2">00 KW</th><th colspan="2">550 KW</th></t<>			500 KW	00 KW		550 KW	
Engine MakePerkinsEngine Model2806A-E18TAG2Governing ClassISO 8528-5 G2Number of Cylinders6Cylinder ArrangementVertical in lineBore and Stroke mm145 x 183Displacement / Cubic Capacity litres18.1Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheetCooling SystemWater - cooledFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)Gross Engine Power kW (hp)584 (783)Gross Engine Power kW (hp)6661<					Ratin	gs at 0.8 Power Facto	
Engine Model2806A-E18TAG2Governing ClassISO 8528-5 G2Number of Cylinders6Cylinder ArrangementVertical in lineBore and Stroke mm145 x 183Displacement / Cubic Capacity litres18.1Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheetCooling SystemWater - cooledFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)Gross Engine Power kW (hp)584 (783)Gross Engine Power kW (hp)584 (783)Gab L/hr97-95-6100% load L/hr132143127141Total Lubrication System Capacity litres62626262626361 <t< th=""><th>ENGINE / TECHNICAL</th><th>DATA</th><th></th><th></th><th></th><th></th></t<>	ENGINE / TECHNICAL	DATA					
Governing ClassISO 8528-5 G2Number of Cylinders6Cylinder ArrangementVertical in lineBore and Stroke mm145 x 183Displacement / Cubic Capacity litres18.1Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling System60Hz & 1500rpmCooling System97HzerCooling SystemStandbyFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)666-66-66-66-66-66-66-66-66-66-66-66-66-66-66-66-62Gold L/hr132143127141Total Lubrication System Capacity litres6261616161616161616161616161616161<							
Number of Cylinders6Cylinder ArrangementVertical in lineBore and Stroke mm145 x 183Displacement / Cubic Capacity litres18.1Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling System60Hz & 1500rpmFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Colonsumption @ 50% load L/hr62Gast Consumption Weith Coolad L/hrGast Coolant Capacity litresGast Pressure Ratio3.04Boost Pressure Ratio3.04Stando </th <th></th> <th></th> <th></th> <th colspan="4">2806A-E18TAG2</th>				2806A-E18TAG2			
Cylinder ArrangementVertical in lineBore and Stroke mm145 x 183Displacement / Cubic Capacity litres18.1Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling SystemOHz & 1500rpmFrequency and Engine Speed50Hz & 1500rpmFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)628 (842)568 (762)623 (842)568 (762)660-@ 100% load L/hr6661616161616161616161603.043.043.222.973.14	•			ISO 8528-5 G2			
Bore and Stroke mm145 x 183Displacement / Cubic Capacity litres145 x 183Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling SystemOutputFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)628 (842)568 (762)623 (8Fuel Consumption @ 50% load L/hr66-@ 100% load L/hr132143127141Total Lubrication System Capacity litres66262262626262Boost Pressure Ratio3.043.043.222.973.14							
Displacement / Cubic Capacity litres18.1Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression RatioAnti-clockwise, viewed on flywheelCooling SystemAnti-clockwise, viewed on flywheelCooling System60Hz & 1500rpmFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Gass Engine Power kW (hp)584 (783)Gass Engine Power kW (hp)66Gass Engine Power kW (hp)66<		ıt		Vertical in line			
Induction SystemTurbocharged and air to air charge cooledCycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling SystemWater - cooledFrequency and Engine Speed50Hz & 1500rpmGross Engine Power kW (hp)584 (783)Gaross Engine Power kW (hp) <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Cycle4 strokeCombustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling SystemWater - cooledFrequency and Engine Speed50Hz & 1500rpm60Hz & 1800rpmGross Engine Power kW (hp)584 (783)628 (842)568 (762)623 (8Fuel Consumption @ 50% load L/hr66-66-@ 100% load L/hr97-95-@ 100% load L/hr132143127141Total Lubrication System Capacity litres62626262Boost Pressure Ratio3.043.222.973.18	•	c Capacity litres					
Combustion SystemDirect InjectionCompression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling SystemWater - cooledFrequency and Engine Speed50Hz & 1500rpm60Hz & 1800rpmGross Engine Power kW (hp)584 (783)628 (842)568 (762)623 (8Fuel Consumption @ 50% load L/hr66-66-@ 100% load L/hr97-95-@ 100% load L/hr132143127141Total Lubrication System Capacity litres62626262Boost Pressure Ratio3.043.222.973.18	-		Turbo	Turbocharged and air to air charge cooled			
Compression Ratio14.5:1RotationAnti-clockwise, viewed on flywheelCooling SystemWater - cooledFrequency and Engine Speed50Hz & 1500rpm60Hz & 1800rpmGross Engine Power kW (hp)584 (783)628 (842)568 (762)623 (8Fuel Consumption @ 50% load L/hr66-66-@ 100% load L/hr97-95-@ 100% load L/hr132143127141Total Lubrication System Capacity litres62626262Boost Pressure Ratio3.043.222.973.18							
Rotation         Anti-clockwise, viewed on flywheel           Cooling System         Water - cooled           Frequency and Engine Speed         50Hz & 1500rpm         60Hz & 1800rpm           Prime         Standby         Prime         Standby           Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         666         -         666         -           @ 100% load L/hr         97         -         95         -           @ 100% load L/hr         622         622         622         622         62           Total Lubrication System Capacity litres         62         62         62         62         62           Boost Pressure Ratio         3.04         3.22         2.97         3.14				-			
Cooling System         Water - cooled           Frequency and Engine Speed         50Hz & 1500rpm         60Hz & 1800rpm           Prime         Standby         Prime         Standby           Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         66         -         66         -           @ 100% load L/hr         97         -         95         -           @ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62           Boost Pressure Ratio         3.04         3.22         2.97         3.18	•						
Frequency and Engine Speed         50Hz & 1500rpm         60Hz & 1800rpm           Prime         Standby         Prime         Standby           Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         66         -         66         -           @ 75% load L/hr         97         -         95         -           @ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62           Total Coolant Capacity litres         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.14			An				
Prime         Standby         Prime         Stand           Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         66         -         66         -           @ 75% load L/hr         97         -         95         -           @ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62           Total Coolant Capacity litres         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.14		• •					
Gross Engine Power kW (hp)         584 (783)         628 (842)         568 (762)         623 (8           Fuel Consumption @ 50% load L/hr         66         -         66         -           @ 75% load L/hr         97         -         95         -           @ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62           Total Coolant Capacity litres         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.18	Frequency and Engin	e Speed				-	
Fuel Consumption @ 50% load L/hr         66         -         66         -           @ 75% load L/hr         97         -         95         -           @ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62           Total Coolant Capacity litres         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.18				-		Standby	
@ 75% load L/hr         97         95         95           @ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62         62           Total Coolant Capacity litres         61         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.18	•		. ,	628 (842)	. ,	623 (835)	
@ 100% load L/hr         132         143         127         141           Total Lubrication System Capacity litres         62         62         62         62         62           Total Coolant Capacity litres         61         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.18	•			-		-	
Total Lubrication System Capacity litres         62         63         63         63         63 <td>-</td> <th></th> <td></td> <td></td> <td></td> <td></td>	-						
Total Coolant Capacity litres         61         61         61         61           Boost Pressure Ratio         3.04         3.22         2.97         3.18				-			
Boost Pressure Ratio         3.04         3.22         2.97         3.18			-			-	
						÷ .	
				-			
•	Radiator Cooling Air Flow (Min): m <sup>3</sup> /sec		555	553	_	489	
	Combustion Air Flow: m <sup>3</sup> /min				=	45	
			-			45 118	
	Fuel Tank Capacity: litres					645	
			040	040	040	040	
DIMENSIONS AND WEIGHT			11,21,1	ht one	M/_!. !	htt lege (usset)	
Length cm Width cm Height cm Weight* kg (we	Lengtn cm	wiath cm	Heig	Height cm		Weight* kg (wet)	
384 153.5 223 4929	004	152 5	2	223		4929	

384 15 \* For skid mounted genset without enclosure

wet weight = with lube oil and coolant



# STANDARD SPECIFICATIONS

# 1. ENGINE

Perkins four stroke heavy duty high performance industrial type diesel engine.

- 2. ENGINE FILTRATION SYSTEM
- Cartridge type dry air filter.
- Two Cartridge type fuel filters.Full flow lube oil filter.
- All filters have replaceable elements.

# 3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors)

### 4. EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level	14 (dB)
Maximum allowable back pressure	6.9 (kPa)

### 5. CIRCUIT BREAKER TYPE

3 pole ACB / MCCB (supplied disconnected and without cables)\*

```
(contd
```

ALTERNATOR DATA		
Make	Leroy Somer	
Model	TAL 047F / TAL 0473	
No. of bearings	1	
Insulation class	Н	
Total Harmonic Content	<3.5%	
Wires	6	
Ingress Protection	IP23	
Excitation System	SHUNT	
Winding Pitch	2/3 (n° 6)	
AVR Model	R150	
Overspeed	2250 mn <sup>-1</sup>	
Voltage Regulation (steady)	± 1%	
Short Circuit Capacity	-	
AREP & PMG Excitation System	Available as Optiona	

CONTROL PANEL

Make	Deep Sea
Model	DSE6110

The DSE6110 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suite PC software.

#### Metering and Alarm indications:

- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown) Optional
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage/frequency
- Charge fail
- · Loss of magnetic pick-up signal Optional
- Low DC voltage
- · CAN diagnostics and CAN fail/error
  - AN UIAYHUSUUS AHU CAN TAII/EITUI
    - (Please refer to DSE6110 brochure for more details)







## **POWERED BY:**



### **RATINGS DEFINITION**

### **Prime Power**

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

### **Standby Power**

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

# **STANDARD REFERENCE CONDITIONS**

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes. De-ration may apply, please consult your dealer for specific site ratings.

Some of the specifications are not standard on all Genset models.

# **AVAILABLE OPTIONS & ACCESSORIES**

We offer a range of optional features and accessories to tailor our generating sets to meet your power needs.

#### **OPTIONS**

- A variety of generating set control and synchronizing panels
- Additional protection alarms and shutdowns
- · Water fuel seperator
- Water jacket heater
- · Battery charger

Distributed and Serviced by:



- · Genuine spare parts
- Load banks
- Auxiliary fuel tanks
- Manual & automatic transfer

switches



For further information on all of the standard and optional features accompanying this product please contact your local dealer or visit www.JubailiBros.com



JET Generators are assembled in facilities certified to ISO 9001

All information in this document is substantially correct at time of printing and may be altered subsequently.

0408/2020

# AN INSPIRED DESIGN TO MEET YOUR NEEDS

# STANDARD SPECIFICATIONS

#### 6. FUEL SYSTEM

On Generating Sets up to 700 KVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

# 7. ALTERNATOR

- 7.1 INSULATION SYSTEM
- The insulation system is Class H.

• All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.

• Heavy coat of antitracking varnish additional protection against moisture or condensation.

### 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at  $\pm 1\%$ . Nominal adjustment by means of a trim pot incorporated on the AVR.

# 7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when PMG option is fitted.

# 8. MOUNTING ARRANGEMENT

**8.1 BASE FRAME** The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

### 8.2 COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

#### **8.3 ANTI-VIBRATION MOUNTING PADS**

Anti-Vibration pads are affixed between the Engine / Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

# **8.4 SAFETY GUARDS**

The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

### 9. FACTORY TESTS

The Generating set is load tested before dispatch
All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

## **10. EQUIPMENT FINISHING**

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

### 11. DOCUMENTATIONS

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets are accompanied with the Generator.

#### **12. QUALITY STANDARDS**

The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

#### **13. WARRANTY**

All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions. (check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the

right to change specifications without notice.