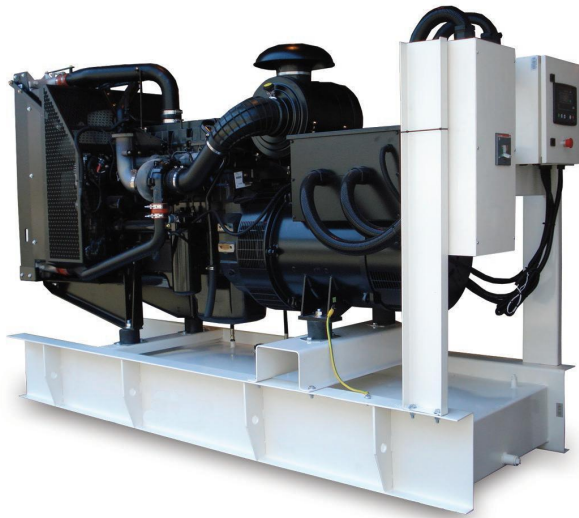




Diesel Generating Sets

60
Hz



Model: **KYP281**

INDUSTRIAL RANGE

Powered by Perkins



STAMFORD

power generation



Generating Rates

POWER RATING		STANDBY	PRIME
POWER	KVA	313	281
	KW	250	225
Rated Speed	R.P.M	1800	
Standard Voltage	V	480	
Available Voltages	V	480/277-440/254-220/127-208/120	
Rated at power factor	Cos Phi	0.8	

Ambient conditions of reference: 1000 mbar, 25°C, 30% relative humidity. Power according to ISO 3046 normative.

P.R.P. Prime Power - ISO 8528 : 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 a 24

Standby Power (ISO 3046 Fuel Stop power): power available for use at variable loads for limited annual time (500h), within the following limits of maximum operating time: 100% load 25h per year – 90% load 200h per year. No overload available. Applicable i



Diesel Generating Sets

60
Hz

Model: **KYP281**

INDUSTRIAL RANGE

Powered by Perkins



Engine Specifications 1800 r.p.m.

ENGINE		STANDBY		PRIME
Rated Output	kW	250		225
Manufacturer		Perkins		
Model		1506A-E88TAG3		
No. of Cylinders and Build		4 Cycle; In-line; 6 Cylinder Diesel		
Aspiration and Cooling		Natural Aspiration		
Bore/Stroke	mm	112 X 149		
Compression ratio		16.1:1		
Cooling system		Water-cooled		
Engine Speed/Frequency	rpm/Hz	1800/60HZ		
Starting System		Electric 24 volt DC		
Displacement	L	8.8		
Lubricant system Capacity	L	41		
Battery Voltage / Capacity		24VDC		
Governing Type	Type	Mechanical		
Air Filter	Type	Dry		
Fuel Consumption	Load of prime power	100%	75%	50%
	L/h	63	48	33

ENGINE--Industrial 4 stroke cooled diesel engine complete with air,fuel and oil filters,electric starting and charging equipment,engine protection against low water level.

COOLING--Radiator and colling fan complete with protection guards,designed to cool engine at specified output in air temperatures upto 45 °C ,radiators suitable for higher temperatures are available.Low water level protection fitted as standard.

ELECTRICAL SYSTEM--12V upto.Axial type starter motor,battery charging alternator,high capacity lead acid battery,and battery tray mounted on the generator base frame,and heavy duty interconnecting cable with terminations.

EXHAUST SYSTEM--Heavy duty industrial exhaust silencer with flexible piping.

1500 Series 1506A-E88TAG3 ElectropaK

278 kWm standby net power @ 1800 rpm

Building upon Perkins proven reputation within the power generation industry the Perkins® 1500 Series ElectropaK engines now fit even closer to our customer's needs.

The 1506A-E88TAG3 ElectropaK is a 6 cylinder, fully electronic, turbocharged, air-to-air charge cooled diesel engine. It is economical, quiet and reliable and provides the high performance that is demanded by our customers for their power generation needs.

Focusing on the Perkins common platform theme, changes to engine envelope dimensions and connection points have been kept to a minimum, making for easy installation across the ratings.



Specification		
Number of cylinders	6 vertical in-line	
Bore and stroke	112 x 149 mm	4.5 x 5.8 in
Displacement	8.8 litres	537 in ³
Aspiration	Turbocharged aftercooled	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	16.1:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	41 litres	9.01 US gal
Cooling system	Liquid	

www.perkins.com

Photographs are for illustrative purposes only and may not reflect final specification. All information in this document is substantially correct at time of printing and may be altered subsequently. Final weight and dimensions will depend on completed specification.

Publication No. PN3088B/04/15 Produced in England ©2015 Perkins Engines Company Limited

 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

1500 Series 1506A-E88TAG3 Electropak

278 kWm standby net power @ 1800 rpm

Features and benefits

Dependable power

- The 1506A-E88TAG3 delivers greater productivity through an improved power to weight ratio
- The world-class power density has been achieved from an 8.8 litre turbocharged engine using a hydraulic actuated unit injection (HEUI) fuel system; making this engine robust for all markets due to its ability to cope with the variation of fuel quality around the world
- In its class, the 1506A-E88TAG3 has been designed to provide dependable power even in extreme ambient climates

Low operating costs

- Oil change service intervals are set at 500 hours as standard
- Designed to provide low cost of ownership, simple maintenance and reduced downtime
- 12 months unlimited warranty with 24 months on Major items. For low use applications <500 hours per year warranty is extended by a further 12 months. See Perkins Warranty Policy for further details
- Extended Service Contracts – protect and plan the cost of ownership
Go to www.perkins.com/esc for more information

Flexibility

- The 1506-E88TAG3 has been designed to hit the power node requirements of our customers
- Switchability functionality from 50 Hz/1500 rpm to 60 Hz/1800 rpm and vice versa is available to provide greater flexibility for frequency selection

World class product support

- Our experienced global network of distributors and dealers, fully trained engine experts deliver total service support around the clock, 365 days a year. They have a comprehensive suite of web based tools at their disposal, covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Perkins actively pursues product support excellence by insisting our distribution network invest in their territory to provide customers with a consistent quality of support across the globe
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts giving 100% reassurance that you receive the very best in terms of quality for lowest possible cost, wherever your Perkins powered machine is operating in the world
- To find your local distributor: www.perkins.com/distributor

www.perkins.com

Photographs are for illustrative purposes only and may not reflect final specification.
All information in this document is substantially correct at time of printing and may be altered subsequently.
Final weight and dimensions will depend on completed specification.

Publication No. PN3088B/04/15 Produced in England ©2015 Perkins Engines Company Limited

 **Perkins**[®]

THE HEART OF EVERY GREAT MACHINE

1500 Series 1506A-E88TAG3 Electropak

278 kWm standby net power @ 1800 rpm

Technical information

Air inlet system

- Mounted air filter and turbocharger

Fuel system

- HEUI fuel system with full authority electronic control
- Electronic governing to ISO 8528-5 with stand-alone isochronous and load-sharing capabilities
- Fuel filter, fuel transfer pump, fuel priming pump
- Spin on primary, secondary and water filter separator

Lubrication system

- Wet full aluminium sump with filler and dipstick
- Full-flow spin-on filters
- Oil pump, gear driven

Cooling system

- Thermostatically controlled with belt driven, circulating pump and belt-drive fan
- Mounted belt driven pusher fan
- Radiator supplied loose with all guards and pipes
- Air-to-air charge cooler incorporated in radiator

Electrical equipment

- 24V starter motor and 24V, 45 amp alternator with DC output
- Electronic Control Module (ECM) mounted on engine with wiring looms and sensors

Flywheel and housing

- High inertia flywheel to SAE 1 J620 Size 355.6 mm (14 in)
- Aluminium SAE 1 flywheel housing

Mountings

- Front engine mounting bracket

www.perkins.com

Photographs are for illustrative purposes only and may not reflect final specification.
All information in this document is substantially correct at time of printing and may be altered subsequently.
Final weight and dimensions will depend on completed specification.

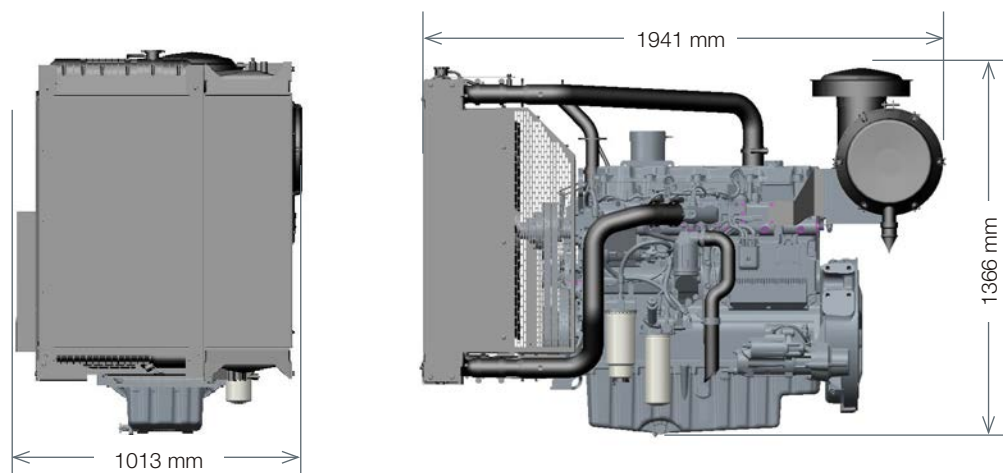
Publication No. PN3088B/04/15 Produced in England ©2015 Perkins Engines Company Limited

 **Perkins**[®]

THE HEART OF EVERY GREAT MACHINE

1500 Series 1506A-E88TAG3 Electropak

278 kWm standby net power @ 1800 rpm



Engine package weights and dimensions

Length (including air cleaner)	1941 mm	76 in
Width	1013 mm	40 in
Height	1366 mm	54 in
Weight (dry)	1136 kg	2502 lb

www.perkins.com

Photographs are for illustrative purposes only and may not reflect final specification.
All information in this document is substantially correct at time of printing and may be altered subsequently.
Final weight and dimensions will depend on completed specification.

Publication No. PN3088B/04/15 Produced in England ©2015 Perkins Engines Company Limited

 **Perkins**[®]

THE HEART OF EVERY GREAT MACHINE

1500 Series 1506A-E88TAG3 Electropak

278 kWm standby net power @ 1800 rpm

Speed rpm	Type of operation	Typical generator output		Engine power (Net)	
		kVA	kWe	kWm	hp
1800	Prime power	281	225	250	335
	Standby power	313	250	278	373

Percent of prime power	Fuel consumption at 1800 rpm g/kWh	Fuel consumption at 1800 rpm l/hr
Standby power	200	70
Prime power	199	63
75%	199	48
50%	208	33

www.perkins.com

Photographs are for illustrative purposes only and may not reflect final specification.
All information in this document is substantially correct at time of printing and may be altered subsequently.
Final weight and dimensions will depend on completed specification.

Publication No. PN3088B/04/15 Produced in England ©2015 Perkins Engines Company Limited



THE HEART OF EVERY GREAT MACHINE



Diesel Generating Sets



Model: KYP281

INDUSTRIAL

RANGE Powered

by Perkins



Alternator Technical Specifications

ALTERNATOR BRAND		STAMFORD	LEROY SOMER
Model			LSA 46.2 L6
Exciter System		Self-excited, brushless	
Poles	Num	4	
Cooling Fan		Cast alloy aluminum	
Bearing		Single, double shielded	
Windings		100% copper	
Connection Type		Reconnectable	
Insulation Type	Class	Class H	
Pitch		2/3	
Amortisseur Winding		Full	
Voltage Regulator		A.V.R. (Electronic)	
Steady Voltage Precision		± 1%	
Underspeed Protection		Standard	
Overexcitation Protection		IP23	
TIF (1960 Weightings)		<50	

ALTERNATOR--Brushless, self exciting, self regulation, screen protected, drip proof rated in accordance with IEC60034.Voltage regulation maintained within ±0.5% from no load to full load. between 0.8 lagging and unity. All standard voltages available



Diesel Generating Sets

60 Hz

Model: **KYP281**

INDUSTRIAL RANGE Powered by Perkins

Control Panel Technical Specifications



DSE Genset



DSE6110

AUTO START & AUTO MAINS FAILURE CONTROL MODULES

FEATURES

DSE6110



KEY FEATURES

- Back-lit text LCD display
- Front panel editing
- LED and LCD alarm indication
- Power Save mode
- CAN and Magnetic Pick-up/Alt. versions available (specify on ordering)
- PC and front panel configuration
- 6 Digital inputs
- 3 Analogue inputs
- 6 Outputs (4 configurable on Magnetic Pick-up/Alt., 6 configurable on CAN version)
- Configurable timers and alarms
- Alternative configuration
- Event Log(10)
- Remote Start input
- 3 Phase generator monitoring

- Current Monitoring and protection
- Battery voltage monitoring
- Engine pre-heat
- Hours counter
- Comprehensive shutdown or warning on fault condition

KEY BENEFITS

- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout

- Multiple engine parameters are monitored simultaneously
- Module can be configured to suit individual applications
- Compatible with a wide range of CAN engines
- Tier 4 engine support
- Uses DSE Configuration Suite PC software for simplified configuration
- IP65 rating (with optional gasket) offers increased resistance to water ingress
- Licence-free PC software

SPECIFICATION

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

178 mA at 12 V, 95 mA at 24 V

MAXIMUM STANDBY CURRENT

88 mA at 12 V, 50 mA at 24 V

CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

MAINS (UTILITY) DSE6120 ONLY

VOLTAGE RANGE
15 V - 333 V AC (L-N)

FREQUENCY RANGE

3.5 Hz to 75 Hz

OUTPUTS

OUTPUT A (FUEL)
2 A DC at supply voltage

OUTPUT B (START)
2 A DC at supply voltage

AUXILIARY OUTPUTS C, D, E & F
2 A DC at supply voltage

GENERATOR

VOLTAGE RANGE
15 V - 333 V AC (L-N)

FREQUENCY RANGE
3.5 Hz to 75 Hz

MAGNETIC PICK UP
VOLTAGE RANGE
+/- 0.5 V to 70 V

FREQUENCY RANGE
10,000 Hz (max)

DIMENSIONS

OVERALL
215 mm x 158 mm x 42 mm
8.5" x 6.2" x 1.6"

PANEL CUT-OUT
182 mm x 137 mm
7.2" x 5.4"

MAXIMUM PANEL THICKNESS
8 mm
0.3"

STORAGE TEMPERATURE RANGE

-40 °C to +85 °C



Diesel Generating Sets

60
Hz

Model: **KYP281**

INDUSTRIAL RANGE

Powered by Perkins

Generating Sets Standard Features

Three phase four wire, output voltage 480V/277V,60HZ,between 0.8 lagging, protection capability according with the standard of NAME1 and IP23.

General Features:

- Composed of Perkins diesel engine and Stamford or Leroy Somer alternator Oil and fuel filter fitted, water separator
- Lube-oil drain valve fitted
- Electric Starter Charge motor 12
- VD.C Water-cooled
- 8-hours operation base tank
- Auto start
- Optional soundproof and weatherproof canopy
- 3 pole MCCB Delixi breaker
- Operation & Maintenance manual
- Special Integrated Steel Base tank and sprayed overall in gloss enamel paint

Voltage Regulation:

- Voltage regulation maintained within $\pm 0.5\%$
- Between 0.8 and 1.0 lagging and unity
- From no load to full load
- At speed droop variation upto 4.5%

Frequency Adjustable Ratio:

Change load from 0-100%,within 1.0%(electric speed regulator),within 4.5%(mechanical speed regulator)

Frequency Undulation:

- load from 0-100%,frequency undulation within 0.25%
- No load wire volts max undulation ration\ within 1.8%
- Three Phrase balanced load in the order of 5%
- Effect factor of Telecom
- TIF better than 50
- THF to IEC60034 Part 40 better than 2%



Diesel Generating Sets

**60
Hz**

Model: KYP281

INDUSTRIAL RANGE

Powered by Perkins

Soundproofed Version Features

Robust Corrosion Resistant Construction

Black finish stainless steel lock and hinges

Body made from steel components treated with polyester powder coating

Excellent Access for Maintenance

Two large doors on each

side Radiator fill access plate

lube oil and cooling water drains pipes to exterior of the enclosure

Security and Safety

Control panel viewing window in a lockable access door

Emergency stop push button (red) mounted on enclosure interior

Cooling fan and battery charging alternator fully guarded

Exhaust silencing system totally enclosed for operator safety



Diesel Generating Sets

60
Hz

Model: **KYP281**

INDUSTRIAL RANGE

Powered by Perkins

Generating Sets other Features

Generating Sets Optional Features

- Low fuel level alarm shutdown
- Automatic Fuel Filling System
- Engine oil feeding and drain pump
- Auto Transfer Switch(ATS)
- Parallel control panels
- Circuit Breaker MCCB & ACB
- Remote Control Panel
- weatherproof/soundproof
- Canopy Trailer type Gensets

Quality Standards

- ISO9001:2000,ISO14000,ISO3046
- ISO8528 BS4999
- BS5514,AS1359,ICE34
- CE Compliance

Gensets Dimensions

Silence type: LxWxH (mm) - Weight in kg
4050*1430*1980 - 2982

Kingdom of Saudi Arabia - Riyadh - P.O.Box 3049 Riyadh 14264
Tel. : +966 11 4718383 - Fax : +966 11 4718989
Lebanon - Beirut - Telefax : +9611280821

المملكة العربية السعودية - الرياض - ص.ب ٣٠٤٩ الرياض ١٤٢٦٤
هاتف : +٩٦٦ ١١ ٤٧١٨٣٨٣ - فاكس : +٩٦٦ ١١ ٤٧١٨٩٨٩
لبنان - بيروت - تلفاكس : +٩٦١١٢٨٠٨٢١ جوال: +٩٦١ ٣٤٥١٥١٤

www.kynnco.com

www.megapower.com.sa info@kynnco.com

