power energy 2016 Special edition



Industry-leading generation technology



THE HEART OF EVERY GREAT MACHINE

The right solutions for telecoms

Today it's estimated that there are more than 1 million diesel engines providing backup power to telecoms sets around the world.

For many years Perkins has supported the telecoms sector, as our 400 Series range of compact and reliable engines are particularly suited to powering small generator sets, often sited in harsh and remote environments.

A shift in the market place in terms of telecoms tower ownership has led many companies to move towards selling space on one large tower. This change is driving a focus on operating expenditure, with increasing demands to minimise engine operating costs.

Instead of a generator set running for hours at a time. the market has seen a move towards hybrid type solutions that integrate batteries charged by

photovoltaic panels and wind. These new solutions however still need backup power from a generator, which is used to trickle charge the batteries, ensuring power is always available.

Perkins offering has been developed from its core 400 Series engine, expanding the range to offer variable speed engines such as the 403D-07 and 403D-11 for generator sets. To maximise the benefits of these engines, generator set manufacturers can work with our highly skilled Applications and Engineering team to develop applications that deliver classleading fuel consumption and extended service intervals to meet the OEM and end user requirements.

To find out more about how we can support vour telecoms requirements contact your local Perkins distributor through distributorlocator.perkins.com



Bringing gas power to the 400 Series

Perkins is bringing its gas engine expertise to the small engine sector with the 404A-22SG1. The 4 cylinder 2.2 litre engine is designed for electric power applications and is powered by liquid petroleum gas (LPG), a mix of propane and butane.

The first gas-powered option in the



proven 400 Series range, the engine is ideal for power generation applications in unregulated gas territories such as Africa, the Middle East and Asia.

Based on the core 400 Series engine, with its proven track record of reliability and durability, the 404A-22SG1 runs at 1500 or 1800 rpm and produces 20 or 23 kVA of prime power respectively.

uses the same electrical ancillaries and alternator interface as our diesel engines.

Customer benefits include enhanced fuel security, excellent fuel consumption, and a 1,000 hour service interval in standard

> configuration. The 404A-22SG1 is supplied as an ElectropaK, with full cooling pack and air cleaner.

Key benefits:

- A water-cooled engine, it's ideal for use in hot climates, with the engine delivering the same power in the most difficult conditions
- The 404A-22SG1 gas engine offers an extended service interval of 1,000 hours in standard configuration
- LPG engines like the 404A-22SG1 reduce the risk of fuel theft as it's more difficult - and dangerous - to steal LPG from a tank.

Where can I see the new 404A-22SG1 at MEE?

- Learn more about the engine at the Perkins stand S1 C10
- See the engine inside Ghaddar Machinery's PT20 application on stand S1 B10

Increasing power and performance

A new 30 litre, 8 cylinder air-to-air turbocharged diesel engine has been added to the successful 4000 Series range.

The 4008-30TAG ElectropaK meets the key power nodes from 900-1250 kVA for prime and standby ratings at 50 Hz. Customers will benefit from the reliability and performance of the current 4008TAG range while enjoying the increased power output of 1250 kVA a power normally expected from a 12 cylinder engine.

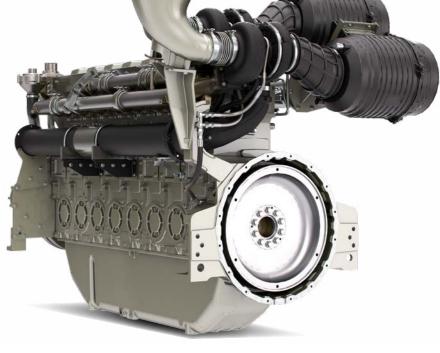
A dependable and cost-effective power solution, the 4008-30TAG1 lowers installation and logistics costs for customers through a smaller and lighter engine whilst delivering improved fuel consumption and load acceptance capabilities.

The 4008-30TAG1 is also capable of running at 3,000 metres without experiencing any loss of power due to altitude.

"This is a powerful package which gives generator set manufacturers the benefit of more power from a smaller engine," said Simon Gray, electric power

Customer benefits - 4008-30 **ElectropaK**

- Key power nodes from 900-1250 kVA for prime and standby ratings at 50 Hz
- Lowers insulation and logistics costs as it's a smaller and lighter engine
- Improved fuel consumption and load acceptance
- Built on a proven, reliable
- 4008-30TAG1 runs at 3,000 metres without any loss of power due to altitude



marketing manager. "This new engine, which is already in production, builds on a proven, reliable core, so end users can be confident the 4008-30 is another dependable Perkins engine.

"In the electric power sector this is a very important consideration as the engine is ideally suited for 1 megawatt prime power application. It can also supply back-up power up to 1250 kVA for standby applications in health facilities and airports, among many other applications."

Benefiting from Perkins® 4000 Series electric power warranty of one year unlimited hours or two years 6,000 hours for prime and three years up to 500 hours per year for standby, the 4008-30 is supported in the market by Perkins highly trained global distributor network, ensuring it is kept running whenever and wherever it is used.

Perkins distributor network will provide easy access to advice, servicing and genuine parts, so whether the engine is operating in Europe, the Middle East, South America or China, this engine will meet our customers' critical power requirements.

Where can I see the new 4008-30TAG at MEE?

- Learn more about the engine at the Perkins stand S1 C10
- See the engine inside a Jubaili Bros generator set on stand S1 E30



Engines benefit from good quality oil – Perkins Diesel Engine Oil

You might think that engine oils are all the same. In fact oil quality varies greatly. Lower quality oil will have a shorter working life and its impact on your engine will be higher fuel consumption and ultimately it will shorten your engine's life.

Using a good quality oil is genuinely better for your engine, as it will maximise engine life, control emissions and reduce the cost of maintenance. The correct oil will give you significant benefits such as smoother running, longer engine life and better return on your investment. To address our customers' needs, the company has launched a new Perkins diesel engine oil (DEO), the only oil formulated specifically to match the

formulated specifically to match the conditions in Perkins engines.

Oil's key role is to lubricate the engine and remove heat. With increasing emissions standards and demands for power efficiency, engine oil has to work harder than ever to protect your diesel engine. Ever more sophisticated engine design and demands for reduced emissions means smaller working tolerances inside the engine, so the quality and performance of the oil becomes more important.

The oil also reduces engine wear by preventing the build-up of deposits and sludge. With lower-quality engine oils, the levels and quality of additives can be significantly lower, dispersant levels may mean ash and deposits may not be kept in suspension, allowing them to stick to piston and rings. These deposits can attach to pistons and rings, causing cylinder wear, resulting in reduced performance, increased fuel



consumption and potentially increased emissions.

Perkins custom formulation

Perkins DEO has been formulated specifically for the long operating life, and performance of Perkins engines. Resulting from more than 28 years of experience from across our wider business, thousands of hours in the field and many hundreds of hours testing. This unique engine oil is comprised of a mix of additives, designed specifically to prevent the build-up of conditions which can impair the oil performance, reduce operating life and potentially damage engine components.

Made up of three base oils that deliver the right viscosity across the working temperature ranges, Perkins DEO includes a combination of 12 beneficial additives, such as:

- Viscosity stabilisers to ensure a long and stable operating life
- Dispersants and detergents to prevent the build-up of sludge and ash

 Anti-wear agents and friction modifiers to ensure good lubrication and prevent wear.

A custom formulation specially designed to meet the needs of our hard working off-highway engines, Perkins approves and recommends Perkins DEO 15W-40 API CI-4 as the only oil to use in Perkins engines, EU Stage IIIA/U.S. EPA Tier 3 equivalent and below.

"We've created Perkins DEO to give you unbeatable protection and unrivalled engine performance and the results have been proven in elevated condition testing," said Julian Wood, product marketing manager, service and maintenance products.

How can I purchase Perkins oil?

The formulation of Perkins DEO is unique to Perkins. To gain the benefits from Perkins DEO, which is available in 20 or 208 litre quantities, talk to your local Perkins distributor.

To find your nearest Perkins distributor visit distributorlocator.perkins.com

Genuinely the best value cover available for your Perkins engine

Perkins has re-launched its Extended Service Contracts as Perkins Platinum Protection.

For more than 80 years Perkins has invested time and knowledge into its products to ensure that every Perkins engine offers the quality, reliability and low cost of ownership our customers have come to expect.

To support our customers beyond the standard warranty period, we have



launched the Perkins Platinum Protection which covers up to five years, 15,000 hours and the repair and replacement of 100 percent of engine components.

What will I get?

- Cost effective, comprehensive cover on up to 100 percent of your engine components
- Access to, and support from, the Perkins global network including our fully trained certified technicians
- Genuine parts that have been rated and tested specifically for your engine
- No excess to pay we cover you in exactly the same way we cover you during our standard warranty period*
- Unbeatable value for money and inflation-free protection.

When to buy your Perkins Platinum Protection

You need to buy your cover before your standard factory warranty expires via your local Perkins distributor. It only take minutes to do and will protect your engine for years.

* Terms and conditions apply

Special standby pricing for 2016 with up to 80 percent reduction on 2015 prices

For one year only Perkins is offering up to an 80 percent reduction on standby Platinum Protection cover.

At an average of 5 percent of the engine price* Perkins is offering its customers 5 years, 2,500 hours standby cover taken out during 2016. For more information on how you can purchase Platinum Protection at a fraction of the engine cost, contact your local Perkins distributor or visit www. perkins.com/platinumprotection

*Global average selling prices have been used to calculate this figure, and will vary depending on region, added engine extras (e.g., cooling packs etc.), and exchange rates used at the time of calculation.

Genuinely better value parts from Perkins

Every day around the world, our compact Perkins 400 Series engines are used to power small construction machines, power generation sets and agricultural equipment.

Our customers depend on their 400 Series engine whatever the conditions and we, along with our distributors, are here to ensure you get the support you need. Our network of highly trained Perkins technicians are available to service, repair or overhaul your engine. And with over 3,500 outlets worldwide, Perkins can also support you with the genuine parts you need, wherever you are in the world.

Why it's genuinely best to buy parts and service from Perkins?

- With 80 years of experience, Perkins genuine parts are meticulously designed, precision engineered and extensively tested over 5,000 hours to provide your Perkins engine with the very best components
- We keep a full range of Perkins parts in stock for you, available with fast delivery. Don't put your engine at risk by fitting non-genuine parts. You'll get the best value for money from your 400 Series engine by always using Perkins Genuine Parts and Service, to maximise your productivity and minimise your downtime.

To see for yourself the difference Perkins genuine parts can make to your engine watch the Genuinely Perkins 400 Series video here

Contact your local Perkins distributor to find out more about Perkins aftersales servicing with genuine parts at distributorlocator.perkins.com





Reliable standby power

A prestigious Indonesian university has selected the Perkins 4012-46TWG2A to provide standby power for its new campus facility.

Indonesia's Binus University is a private learning and research institute which was founded in Jakarta in 1981. Today the organisation hosts over 28,796 undergraduates, and is expanding to offer high quality education programs across the region.

Opened in October 2014, the campus was developed with energy efficiency and a cohesive learning experience in mind.

With power outages a common occurrence, Binus University needed a reliable source of standby power to the campus which covers a total of 60,000 square metres.

With low running costs and quick start-up high on the university's list of requirements, the 4012-46TWG2A was selected for installation in a 1250 kVA generator set, located on the campus. In the event of a power failure, the 1250 kVA generator set supports the campus' critical functions. Read the full case study **here**

Customer

Binus University Alam Sutera Campus Location

Tangerang, Banten, Indonesia

Engine Specification 4012-46TWG2A

Application

Standby power

Date of Installation

2014

Average Running Hours

Up to 100 hours per year



Durable power solution for Cairo car park

Perkins 4000 Series engines provide standby power to a major underground car park beneath Egypt's Tahrir Square.

Worth over EGP 675m (\$88 million) of investment, the four level underground car park occupies a total area of 21,000 m² and contains space for 1,700 cars and 24 tourist buses. Should a disruption to the mains supply occur, it's vital for this underground facility to access a reliable source of standby power.

Delta, the appointed Perkins distributor in Egypt, provided an economic and durable solution by installing a

End User

Tahrir Square Underground Car Park

Location

Tahrir Square, Cairo, Egypt

Engine Specification

1 x 4008TAG2A

1 x 4012-46TAG2A **Application**

Standby power

Date of Installation

December 2013

Average Running Hours Up to 500 hours per year

4008TAG2A and a 4012-46TAG2A in the generator sets. Read the full case

Prime power solutions from Perkins

Forward Operating Base (FOB) Delaram is a key location in the effort to maintain stability in this area of Afghanistan, a task made possible with the use of six Perkins 4012 engines producing up to 7500 kVA for prime power generation on the site. The only viable source of power generation in this remote area of Afghanistan is from a diesel-fuelled independent plant, as there is no grid



or mains supply of power. The 4012-46TWG2A's power containerised 1250 kVA diesel generators which provide heat, light and hot water for the base and light for an operational runway. Read the full case study **here**

Customer

Macro Vantage Levant (MVL)

Forward Operating Base Delaram II, Nimroz Province, Afghanistan

Engine Specification

6 x 4012-46TWG2A

Application

Prime nower Date of Installation

November 2014

Average Running Hours

Over 1,000 hours per year



Customer

Salesforce Tower

Location

110 Bishopsgate, London, UK

Engine Specification

3 x 4016-61 TRG3

Application

Standby power

Date of Installation

January 2011

Average Running Hours

Up to 50 hours per year

Supporting the Salesforce Tower

The Perkins 4016-61 TRG3 provides standby power to the first 'six star' office development in London. Combining luxury with environmental sustainability, Salesforce Tower (formerly known as The Heron Tower) incorporates extensive open plan office space and two premium restaurants.

The biggest challenge was getting the 20 ton equipment to the top of the skyscraper and making it fully operational. To overcome this, a crane lift was used to raise the equipment, including the 4000 Series engine, to the top of the 230 metre high building. The components were then offloaded, positioned and re-assembled in the high-rise generator room. Read the full case study here

Perkins powered generator sets keep Andean gold and silver flowing

The Peruvian Andes are the world's highest mountains outside of Asia and are a rich source of precious metals. Today these are extracted by sophisticated mining technology powered by electricity and diesel engines.

A major feature of the site is the 5,000 ton-per-day gold concentrator

Customer

Inmaculada mine

Location

Peruvian Andes

Engine Specification

Permanently installed -1 x 1104A-44TG2

3 x 1006-TG2A, 1 x 1006TAG

Application

Prime nower

Date of Installation

March 2014

Average Running Hours

Continuous use

plant built by Grupo Graña y Montero (GyM). GyM undertook extensive earthwork and other construction at the site support mining and logistical requirements, which required up to 2.2 mW of electric power. Temperatures drop to -15°C at night and reach 11°C on the warmest of days, while the thin air required some special features on the engines. Today five sets permanently provide 0.4 mW of power 24/7 at the mine. Read the full case study here



Reliable power for MVSU

Whatever the weather, Mississippi Valley State University (MVSU) in the U.S. stages American football games at its Rice-Totten Stadium thanks to the standby power provided by a 400 kW generator using a Perkins 2206D-E13TAG3 ElectropaK.

Read the full case study here

Customer

Rice-Totten Stadium, Mississippi Valley State University (MVSU)

Location

Itta Bena, Mississippi

Engine Specification

1 x 2206D-E13TAG3

Application

Standby power

Date of Installation

Average Running Hours

When required

Belgium hospital relies on Perkins

One of Belgium's most important training and research hospitals relies on the Perkins 4012-TAG3A for a dependable power solution. Antwerp University Hospital (UZA) in Belgium is a leading centre for patient friendly clinical care. Read the case study in full here

Customer

Antwerp University Hospital (UZA)

Location

Edegem, Antwerp, Belgium

Engine Specification 3 x 4012-TAG3A

Application

Standby power

Date of Installation

2007 (2 x 4012-TAG3A) 2012 (1 x 4012-TAG3A)

Average Running Hours

Up to 200 hours per year



Associated Power Solutions (ME) FZC – appointed new OEM for Perkins engines

Power Systems Gulf LLC has officially appointed Associated Power Solutions (APS), a leading European company manufacturing generators as their new OEM in the Middle East. APS has worked in power generation in Ireland and in 2011 expanded into the Middle East becoming a subsidiary of United Engineering Services (UES) based in Oman. Offering a turnkey solution using the highest quality products and sales and technical support, APS is building a new state-of-the-art generator manufacturing facility which will open in early 2016. The facility will manufacture world class UK specification generators to cater for the Middle East and the Africa region.

Perkins 4000 Series gas powered set on show

A recognised supplier, installer and maintenance provider of CHP (combined heat and power) applications for natural gas and biogas, Edina Group will be attending MEE 2016 as part of a joint initiative with Grupel and Perkins.

"We'll be showcasing a cost effective packaged containerised CHP 384 kVA gas engine exclusive to the Middle Eastern market," said Andrew Wild, marketing executive at Edina.

The CHP is powered by a dependable spark ignited 6 cylinder Perkins 4006-23TRS gas engine.

Edina was appointed as the Perkins distributor for Ireland in 1996 and became an official gas partner in 2014. With offices in Spain and Portugal,



Grupel has over 35 years' industry experience in the manufacture of equipment with power rating from 8 to 3500 kVA.

 Visit Edina and Grupel at MEE on show stand #OS2, located outside the main entrance adjacent to the Trade Centre Metro Station

Al Faddaghi & Partners Co. at MEE

Established in 1997, Al Faddaghi
& Partners Co, a leading member
of the Al Faddaghi Group of
Companies, manufactures generator
sets from 10 to 3000 kVA under
its BRAVOTM brand. BRAVOTM
generators use the complete range of
Perkins engines as the company prides
itself on using high quality components.
Exhibiting at MEE 2016 the company will
display a 53 kVA Perkins 1103A-33TG1 in

its PRM59 generator set.

Over the years, the company, which has a strong cooperation with Aramco to manufacture soundproof canopies and enclosures, has sold thousands of generator sets catering to banks, hospitals, construction companies, resorts and food manufacturing. Export markets include The GCC, Egypt, Yemen and South Africa.

 Visit Al Faddaghi & Partners Co. at MEE on stands: 6G20/21

UK based Allam Marine will be exhibiting a range of Perkins powered generator sets at MEE 2016

The company which designs, manufactures and assembles in-house to ensure customers receive the right equipment specification to meet their needs will display generating sets powered by Perkins 403-11 variable speed engine, the 1106A-70TAG4, the 1506A-E88TAG3 and the 4008-TAG2A.

● For more information visit Allam Marine at MEE on stand S1 E10





Ghaddar Machinery Co. enhances its telecom hybrid power solution with solar energy

In a continuation of its efforts to upgrade its Hybrid Power solution for telecom applications, Ghaddar Machinery Co. has expanded its hybrid application with a solar panels source. The system now consists of a variable speed generator set, deep cycle batteries bank and photovoltaic panels with a dedicated solar MPPT charge controller. Ghaddar Machinery Co. says this combination allows minimal and optimised operation of the variable speed DC generating set thereby reducing fuel consumption, resulting in lower overall operating costs, longer time for service team interference, longer battery life and reduced emissions.

The DC generator set is powered by Perkins 403A-15G2 engine with Leroy-Somer DC alternator's latest technology. This combination, which over the years has demonstrated its durability and reliability with standard AC generators, is now the core of the hybrid DC power system for Telecom BTS (base transceiver station) sites. The hybrid power solution is ideally suited to the needs of telecom companies as Ghaddar Machinery Co. says its benefits include reduced operational costs.

The system is already operational at the Alfa (Orascom) site in Lebanon where it has optimised the operation and enabled the customer to achieve its goals.

At MEE, Ghaddar will be exhibiting a range of Perkins gas and diesel powered generator sets including its PT15 model variable speed with DC 48V output using the Perkins 403A-15G2; its gas PT20 model using a Perkins 404A-22SGI engine; its PT250 model powered by the Perkins 1506A-E88TAG3, and its PT45 model utilising a Perkins 1103-33TG1.

For more information, visit
 Ghaddar at MEE on stand: S1 B10

PRAMAC's new GRW series

PRAMAC has extensive experience in the field of power generation, offering solutions for every kind of power supply demand.

The company designs, manufactures and installs a complete range of portable, mobile and stationary generators from 1 to 3360 kVA. To meet the needs of rental companies, Pramac has developed a new range of mobile diesel generators. The GRW series works in a variety of applications where temporary power supply is needed. PRAMAC says it is the ideal solution for rental companies, thanks to its versatility, high efficiency and high structural resistance. Covering a power range from 20 to 560 kVA, the generators sets feature Perkins engines, such as the 1104D and 1106D models which meet EU Stage IIIA emissions standards and quality brushless alternators. PRAMAC will exhibit its **GRW115P** generator set powered by the 1104D-E44TAG2 at MEE, along with its GSW45P generator set powered by the 1103A-33TG1 and a LSW6P light tower which uses the 403D-11G.

 For more information visit PRAMAC at MEE on stand S1 F40





Volta Generators power new innovation

Volta Generators FZC, a Perkins
OEM through Power Systems
Gulf LLC, Dubai, manufactures of
diesel generating sets and power
systems from 9 to 2250 kVA.
A preferred supplier for major
oil and gas customers such
as Halliburton and PDO, Volta
has the capability to produce
custom generator sets built
to Zone II specifications with
features such as automatic
CO2 fire detection and
suppression system.

A focus on customers

Power Systems Gulf is working with generator OEM, Jengan Industrial Est., to explore new options to meets its customers' needs. Over the next five years, Jengan is aiming to be among the top three choices of generator set customers in the Gulf area and the Middle East. With a focus on quality, durability and reliability, in addition to standard units, Jengan offers specialised generator sets to market segments such as rental, oil and gas, military and telecommunication. Exhibiting at MEE 2016 the company will be showing its Al Bareq open type JGB0080 powered by Perkins 80kVA 1104A-44TG2 engine and the portable Al Bareq close type JGB0020 with trolley which uses a Perkins 404D-22G to deliver 20kVA. Visit Jengan Industrial Est., at



Special status awarded for training centre

Power Systems Gulf LLC training facility for Perkins products in Jebel Ali, has recently been awarded Perkins District Training Centre (DTC) status by Perkins. The training facility includes two dedicated classrooms which hold up to 20 participants each, as well as an indoor office for training administration. It has a practical area equipped with Perkins special tooling, training aids, runner and stripper engines, and sectioned components, general tools among others, for delivering the best training using leading-edge engineering, product and process learning development. Trainees get hands-on training on disassembly/assembly of engines while understanding the procedures and at the same time determining the usability of the components in line with the minimum/ maximum wear limits specified by Perkins.

They also undergo training on how to study performance characteristics, diagnostics and fault-finding of a running engine. For those who successfully complete the courses, completion certificates from Perkins will be issued online.

All training is supported using schematics, wiring diagrams, technical literature and service bulletins, so they have a comprehensive knowledge grasp and are up to date on the product.

The DTC caters to the training needs of OEM's, OEM Dealers, their customers and end-users of Perkins engines and will in turn, help these groups to address their customer aftermarket needs in UAE, Saudi Arabia, Bahrain, Kuwait, Qatar, Oman and Yemen.

 For more information contact psgtrd@psgulf.com or call on 00971-4-8015106.

Aksa Generators shares its expertise

Aksa Generators manufactures gasoline, diesel, natural gas and marine generating sets from 1 kVA up to 3000 kVA, along with lighting towers and generator hardware.

Drawing on its sector expertise, Aksa is contributing to the North Renfrew Flood Prevention Scheme in Glasgow, Scotland. Its work is part of a project designed to protect 350 homes from

surge tides, which can add over two metres to the normal high tide on the River Clyde.

Aksa's APD1100P model containerised generator set powered by a Perkins 4008TAG2A engine has been installed to power up three 115 kW pumps and a 12.5 kW sump pump.

 To find out more visit Aksa at MEE on stand S1 K10 and outside #0S9

Perkins powered sets on show

A number of Turkish OEMs, each of who use Perkins engines to power their generator sets, will be exhibiting at MEE 2016.

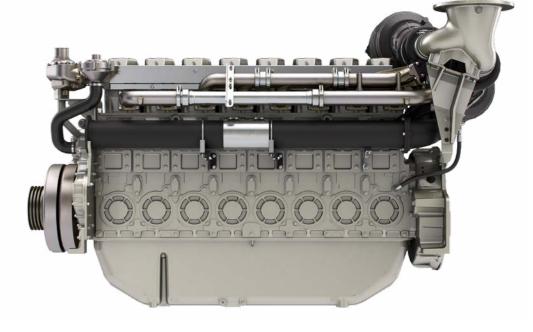
Arken Jenerator, which uses the complete range of Perkins engines, will be displaying a 50 kVA standby ARK-P 50 set powered by the 1103A-33TG1 on stand number \$1 J01.

Emsa Jenerator, which uses the complete range of Perkins engines, will be displaying a 700 kVA standby set powered by the 2806A-E18TAG2 on

stand number S1 E60.

KJ Power Generators, which uses the complete range of Perkins engines, will be displaying a 110 kVA standby KJP110 set powered by the 1104C-44TAG2 on stand number S2 B60.

Güçbir Jenerator, which uses the complete range of Perkins engines in its GJP Series, will be displaying a 15 kVA standby set powered by the 403A-15G1 on **stand number SA D38**.



Jubaili Bros exhibits powerful 1250 kVA offering

Perkins latest diesel engine for the electric power market, the 4008-30TAG3, will take centre stage on Jubaili Bros s.a.I stand at MEE 2016.

Jubaili Bros will exhibit a Jet branded diesel generator set, model JP1100
Open, powered by the new
4008-30TAG3 engine at 1100 kVA prime power and 1250 kVA standby power.
The 30 litre, 8 cylinder air-to-air turbocharged diesel engine is a powerful

package built on a proven, reliable core. The Perkins 1104C-44TAG2 features in the Jet branded JP100 LSAC model, delivering 100 kVA prime and 110 kVA standby power, while the 1103A-33TG1, which gives 45 kVA prime and 50 kVA standby will be on show in the Marapco branded MP50E Open model.

 See Jubaili Bros at MEE on stand \$1 E30

Teksan to exhibit new products



For more than 22 years Teksan has been providing innovative power solutions for its customers. A leading engineering company for diesel, natural gas and biogas generator sets, as well as cogeneration and trigeneration solutions in more than 120 countries, Teksan is aiming to triple its production capacity and increase sales and exports by opening a second factory during the first half of 2016.

At MEE 2016 Teksan will exhibit three products powered by Perkins engines. The Hybrid Power Generator Set TJ 1500 HD-PE uses a 403D-11G

engine, while the TJ50PE5A is powered by a 1103A-33TG1 engine and the supersilent canopied set TJ560PE5A utilises a 2506A-E15TAG2 engine

Teksan's Hybrid Power System consists of a diesel generator set powered by the Perkins 403D-11G engine that powers a battery bank which can be operated together with PV panels and a wind turbine. The power electronic devices were specifically designed for telecom towers.

● For more information visit Teksan at MEE at stand S3 D40 and OS2

MEE on stand S1 J40



The engine of choice for the power generation market

Our engines make a difference.

