



**PROCESSO N.º 060/AJD/SA/14  
AQUISIÇÃO DE UM GERADOR DE APOIO ÀS ACTIVIDADES A  
REALIZAR NO CASTELO DE POMBAL**

## **RELATÓRIO FINAL**

(Artigo 124.º do CCP)

### **1. PRÉVIA**

- 1.1. Sobre o procedimento em referência foi elaborado o relatório preliminar, a coberto do disposto no Artigo 122.º do CCP, relatório datado de 19 de novembro de 2014.
- 1.2. O júri promoveu a audiência prévia dos interessados em concordância com o Artigo 123.º do CCP, audiência cujo termo ocorreu a 02 de dezembro de 2014.

### **2. OBSERVAÇÕES DOS CONCORRENTES**

- 2.1. No âmbito do procedimento mencionado em epígrafe veio o concorrente ROTARCO – Sociedade Técnica de Ar Comprimido, Lda., a reclamação, que se anexa e, para os devidos efeitos, se dá por integralmente reproduzida.
- 2.2. Ora, no âmbito do procedimento 060\_AJD\_SA\_14 “Aquisição de um gerador de apoio ás actividades a realizar no Castelo de Pombal”, pretende-se o fornecimento de um gerador de 60kVA, amovível, para produção e fornecimento de energia elétrica a todos os eventos que necessitam de iluminação e som, de modo a colmatar as limitações de potência elétrica para a realização de espectáculos no castelo de Pombal. Pelo que será necessário o seu funcionamento em contínuo, durante a preparação e realização dos espectáculos.
- 2.3. Não pretende o Município como o presente procedimento, adquirir um grupo gerador fixo, que funcione em situação de emergência garantido as falhas do fornecimento de energia pela rede de distribuição.
- 2.4. Para garantir a sua mobilidade, o grupo gerador será montado em atrelado, pelo que é considerado uma máquina móvel não rodoviária.
- 2.5. O decreto-lei 236/2005 estabelece os valores limites de emissão de poluentes gasosos e de partículas para determinados motores de

ignição por compressão, designados por motores diesel, bem como os respectivos procedimentos de homologação. Este decreto-lei transpõe para a ordem jurídica nacional a Directiva n.º 2004/26/CE, do Parlamento Europeu e do Conselho, de 21 de Abril, relativa a medidas contra a emissão de poluentes gasosos e de partículas pelos motores de combustão interna a instalar em máquinas móveis não rodoviárias.

- 2.6. Podemos referir que o presente equipamento tem enquadramento no n.º 1 artigo 2.º – Âmbito de aplicação, do já supra mencionado diploma.
- 2.7. Assim, consultada a informação disponibilizada pela PERKINS, no seu site oficial (<http://www.perkins.com>), verifica-se que:
- 2.8. O motor diesel da marca PERKINS modelo 1103A-33TG2, apresentado pelo concorrente STET - Sociedade Técnica de Equipamentos e Tractores, Lda., na sua proposta, não está conforme a legislação vigente na União Europeia para emissão de gases. Estando em clara violação do vertido no Decreto-lei nº 236/2005 de 30 de Dezembro, que determina o âmbito e alcance dos limites de emissões poluentes gasosas, por transposição das Directivas 97/68/CE, 2002/88/CE e 2004/26/CE; e,
- 2.9. O equipamento apresentado pela ROTARCO - Sociedade Técnica de Ar Comprimido, Lda., encontra-se equipado com motor diesel marca PERKINS modelo 1104C-44TG3, em conformidade com a legislação supra indicada.
- 2.10. Da análise da exposição apresentada pela requerente, entendeu o júri assistir razão à reclamante. Assim, tendo em conta todo supra exposto, entendeu o júri propor a exclusão do concorrente STET – Sociedade Técnica de Equipamentos e Tractores, S.A., ordenado em 1.º lugar no relatório preliminar, dando lugar ao concorrente indicado em 2.º lugar do mesmo relatório, nos termos da alínea b) do artigo 70.º do CCP (Código dos Contratos Públicos).

### **3. REMESSA A DECISÃO**

- 3.1. Assim e pelos motivos supra expostos e da análise efectuada, resulta o provimento da reclamação do concorrente ROTARCO – Sociedade Técnica de Ar Comprimido, Lda., e a consequente alteração do teor do Relatório Preliminar e da ordenação das propostas, nos seguintes termos:



**Município de Pombal**  
Departamento Municipal Administrativo e Financeiro

- 1.º ROTARCO – Sociedade Técnica de Ar Comprimido, Lda.,**  
com um montante global de € 16.490,00 (dezasseis mil quatrocentos e noventa euros) acrescido de IVA, à taxa legal em vigor.
- 3.2. Assim em coerência com os n.os 1 e 2 do Artigo 124.º do CCP, deverá proceder-se à audiência prévia dos concorrentes, fixando-se para o efeito um prazo de 5 dias.

Município de Pombal, 04 de dezembro de 2014.

**O Júri,**

**Presidente,**

(Pedro Murtinho)

**Membro efectivo,**

(Nuno Elias Gomes)

**Membro efectivo,**

(Álvaro Lopes)



## **RESPOSTA(S) DO(S) FORNECEDOR(ES)**

**Referência do Procedimento:**060\_AJD\_SA\_14

**Designação do Procedimento:**Aquisição de um gerador de apoio às actividades a realizar no castelo de Pombal



**Fornecedor:**STET - SOCIEDADE TÉCNICA DE EQUIPAMENTOS E TRACTORES, S.A.

**Sem resposta**

**Fornecedor:**ROTARCO-SOCIEDADE TECNICA DE AR COMPRIMIDO, LDA

**Respondido em:** 2014-11-28 11:29:36

**Resposta:** Ao Exmo. Sr. Presidente do Júri do processo Nº 060/AJD/SA/14 &#8211; Aquisição de um gerador de apoio às actividade a realizar no Castelo de Pombal Perante a divulgação do relatório preliminar do procedimento concursal em epígrafe, no âmbito da audiência prévia nos termos do art. 123 do CCP, vem o concorrente Rotarco &#8211; Sociedade Técnica de Ar Comprimido, Lda., classificado em 2º lugar, discordar de tal classificação, pela razão da proposta do concorrente STET &#8211; Sociedade Técnica de Equipamentos e Tractores, Lda. classificada em 1º lugar apresentar um equipamento em desconformidade com a legislação vigente. O motor diesel da marca Perkins modelo 1103A-33TG2 que equipa o equipamento do concorrente STET &#8211; Sociedade Técnica de Equipamentos e Tractores, Lda. não está conforme a legislação vigente na União Europeia para emissão de gases (cf. Doc. 1 em anexo), estando em clara violação do vertido no Decreto Lei nº 236/2005 de 30 de Dezembro que determina o âmbito e alcance dos limites de emissões poluentes gasosas, por transposição das Directivas 97/68/CE, 2002/88/CE e 2004/26/CE. Ao invés, o equipamento apresentado pela Rotarco &#8211; Sociedade Técnica de Ar Comprimido, Lda. encontra-se equipado com motor diesel marca Perkins modelo 1104C-44TG3 em conformidade com a legislação supra indicada (cf. Doc. 2 em anexo). Destarte é nosso entendimento que deve o júri excluir o concorrente STET-Sociedade Técnica de Equipamentos e Tractores, Lda., por o equipamento proposto não permitir a sua utilização em território nacional, impedindo o desiderato do objecto do concurso. Sem outro assunto de momento e sempre ao vosso inteiro dispor para qualquer esclarecimento adicional, subscrevemo-nos com elevada estima e consideração, Com os melhores cumprimentos,  
Alexandre Oliveira

### **Documentos Anexados**

Doc.\_1.pdf

Doc.\_2.pdf



# 1100 Series 1103A-33TG2

Diesel Engine – ElectropaK

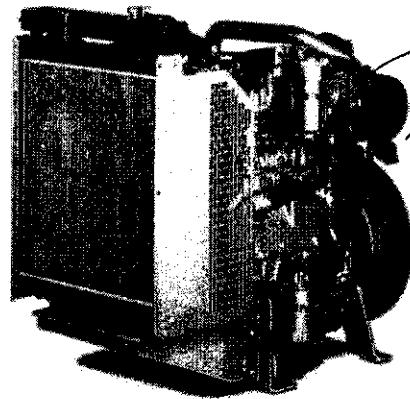
NM

59.3 (79.5 bhp) kWm at 1500 rpm  
67.5 (90.5 bhp) kWm at 1800 rpm

Building upon Perkins proven reputation within the power generation industry, the 1100 Series range of ElectropaK engines now fit even closer to customers needs.

In the world of power generation success is only gained by providing more for less. With the 1103A-33TG2 Perkins has engineered even higher levels of reliability, yet lowered the cost of ownership.

1100A units are designed for territories that do not require compliance to EPA or EU emissions legislation. These units are able to meet TA Luft legislation.



## Compact, efficient power

- 1100 Series is the result of an intensive period of customer research that has guided the development of the range
- The new 3.3 litre cylinder block ensures bore roundness is maintained under the pressures of operation. It also ensures combustion and mechanical noise is lowered
- A new cylinder head has re-established Perkins mastery of air control

## Quality by design

- Product design and Class A manufacturing improvements enhance product reliability while maintaining Perkins legendary reputation for durability

## Cost effective power

- Compact size and low noise
- Lower fuel consumption and oil use
- 500 hour service intervals
- Two year warranty

## Product support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory – strengthening relationships and providing more value to you, our customer
- Through an 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 fingertips covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 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

Discover more  
[www.perkins.com](http://www.perkins.com)  
[www.perkins.com/esc](http://www.perkins.com/esc)

[www.perkins.com/distributor](http://www.perkins.com/distributor)  
To find your local distributor

Engine Speed rpm	Type of Operation	Typical Generator Output (Net)		Engine Power			
		kVA	kWe	Gross kWm	bhp	kWm	bhp
1500	Prime Power	60.0	48.0	55.0	73.8	53.8	72.1
	Standby Power	66.0	52.8	60.5	81.1	59.3	79.5
1800	Prime Power	68.1	54.5	63.3	84.9	61.2	82.1
	Standby Power	75.1	60.1	69.6	93.3	67.5	90.5

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

Generator powers are typical and are based on an average alternator efficiency and a power factor (cos. θ) of 0.8. Fuel specification: BS 2869: Part 2 1998 Class A2 or DIN EN 590. Lubricating oil: 15W40 to API CG4.

### Rating Definitions

Prime Power: Variable load. Unlitrated hours usage with an average load factor of 80% of the published prime power over each 24 hour period. A 10% overload is available for 1 hour in every 12 hours of operation. Standby Power: Variable load. Limited to 500 hours annual usage, up to 300 hours of which may be continuous running. No overload is permitted.

Photographs are for illustrative purposes only and may not reflect final specification.

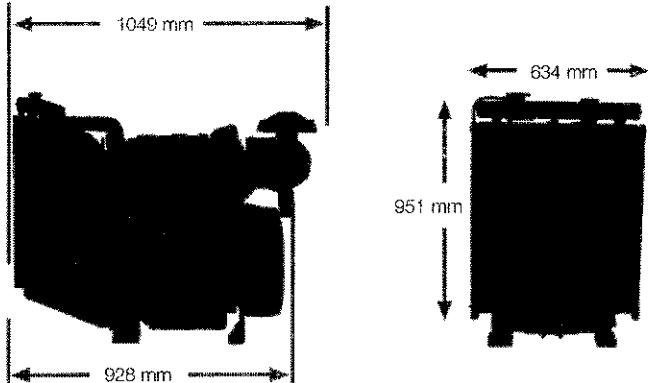
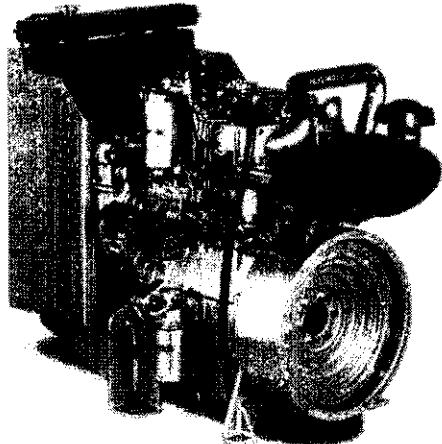
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# 1100 Series 1103A-33TG2

Diesel Engine – ElectropaK

59.3 (79.5 bhp) kWm at 1500 rpm  
67.5 (90.5 bhp) kWm at 1800 rpm



## Standard ElectropaK specification

### Air inlet

- Mounted air filter

### Fuel system

- Rotary type pump
- Next generation fuel filter

### Lubrication system

- Wet sump with filler and dipstick
- Spin-on oil filter

### Cooling system

- Thermostatically controlled system with gear-driven circulation pump and belt-driven pusher fan
- Mounted radiator and piping

### Electrical equipment

- 12 volt starter motor and 12 volt 65 amp alternator with DC output
- 12 volt shutdown solenoid energised to run

### Flywheel and housing

- High inertia flywheel to SAE J620 Size 10/11½
- SAE 3 flywheel housing

### Mountings

- Front engine mounting bracket

### Literature

- User's Handbook
- Workshop manual (optional)
- Parts book (optional)

### Optional equipment

- Woodward electronic governor (LOG2)

Engine Speed	1500 rpm		1800 rpm		Minc
	SFC	UK g/hr	I/hr	UK g/hr	
Standby	216.8	3.5	15.9	4.0	18.2
Prime Power	217.7	3.21	14.6	3.6	16.6
75% of Prime Power	215.4	2.38	10.8	2.7	12.5
50% of Prime Power	224.0	1.66	7.56	1.9	8.8
25% of Prime Power	252.0	0.92	4.2	-	-

## General data

Number of cylinders .....	3 vertical in-line
Bore and stroke.....	105 x 127 mm (4.1 in x 5 in)
Displacement .....	3.3 litres (201 cubic in)
Aspiration .....	Turbocharged
Cycle.....	4 stroke
Combustion system.....	Direct injection
Compression ratio .....	17.25:1
Rotation.....	Anti-clockwise viewed from flywheel
Cooling system.....	Water-cooled
Total lubrication system capacity.....	8.3 litres (2.2 US gals)
Total coolant capacity.....	10.2 litres (2.7 US gals)
Dimensions -- Length .....	1049 mm (41.3 in)
Width .....	634 mm (24.9 in)
Height .....	951 mm (37.4 in)
Dry weight (approx).....	420 kg 926 lb
Final weight and dimensions will depend on completed specification	

## Option groups

A selection of optional items is available to enable the customer to prepare a specification precisely matched to the needs.

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## Perkins Engines Company Limited

Peterborough PE1 5FQ  
United Kingdom  
Telephone +44 (0)1733 583000  
Fax +44 (0)1733 582240  
[www.perkins.com](http://www.perkins.com)

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THE HEART OF EVERY GREAT MACHINE

# 1100 Series 1104C-44TG3

Diesel Engine – ElectropaK

59 kWm 1500 rev/min

Building upon Perkins proven reputation within the power generation industry, the newly introduced 1100 Series range of ElectropaK engines now fit even closer to the needs of their customers.

In the world of power generation today, success is only gained by providing more for less. Therefore with this new 1104C-44TG3 unit, Perkins has engineered for its customers even higher levels of reliability, yet lowered the cost of ownership. Crucially, bare engine noise is lower than ever before.

Rapid starting and pick-up are naturally built-in especially for cold operation, but where legislation or local markets demand an emissions capability, then the 1104C-44TG3 satisfies EU2007 Stage II mobile off-highway legislation.

1100 Series see the marriage of technology to customer need. A 4.4 litre unit very quietly setting a new standard in prime power supply and standby for the power generation industry.

## Compact and efficient power

The Perkins 1100 Series family was developed following an intensive period of customer research. The 3.3 and 4.4 litre engines feature new cylinder blocks which ensure bore roundness is maintained under the pressures of operation, as well as significantly reducing mechanical and combustion noise. A new cross-flow cylinder head design optimises combustion control, and combines with turbocharger and charge cooler technology to achieve the best combination of power delivery and low exhaust emissions.

## Cleaner and quieter power

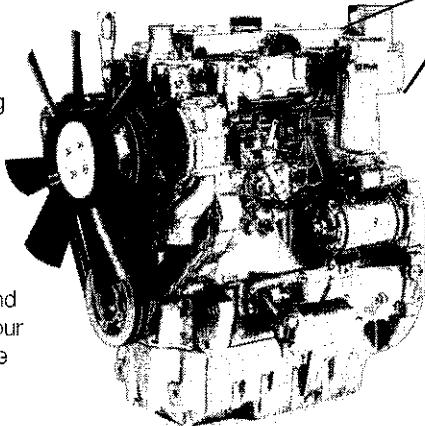
The refined structure of the 1100C range leads to an exceptionally low noise signature. To meet environmental needs swirl conditioned air is delivered through the new cross-flow cylinder head, and burns cleanly with the high pressure fuel from an advanced technology rotary pump.

## Quality by design

Class A manufacturing improvements ensure that product reliability meets the high standards demanded by customers. Product design is focused on maintaining Perkins' legendary reputation for durability.

## Cost effective power

The compact packaging and low noise performance of the 1100C range bring clear benefits to the Genset packager. Low cost of operation is assured by lower fuel and oil consumption, 500 hour service intervals, and the two year warranty.



## Product support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory – strengthening relationships and providing more value to you, our customer
- Through an 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 fingertips covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 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

Certified against the requirements of EU 2007 (EU 97/68/EC Stage II) legislation for non-road mobile machinery, powered by constant speed engines

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (Net)		Engine Power			
		kVA	kWe	Gross kWm	brp	Net kWm	bhp
1500	Prime Power	60	48	56	75	53	72
	Standby (maximum)	66	53	62	83	59	79

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

Generator powers are typical and are based on typical alternator efficiencies and a power factor ( $\cos \theta$ ) of 0.8. Fuel specification: BS 2869 Class 2 or ASTM D976 D2. Lubricating oil: API CH4/ACEA E5.

### Rating Definitions

Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% permitted for 1 hour in every 12 hours operation.

Standby (maximum): Power available at variable load in the event of a main power network failure. Maximum use 500 hours per year. No overload is permitted.

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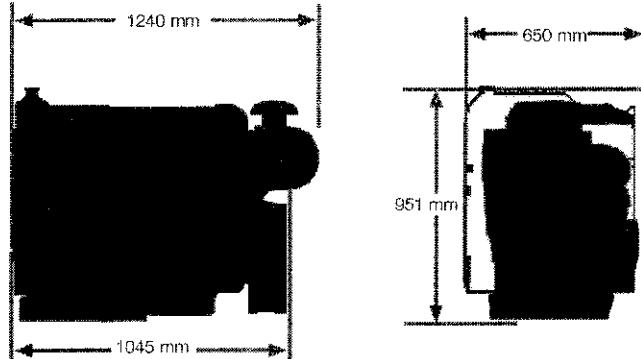
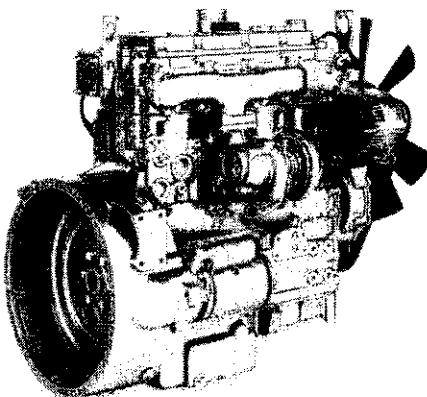
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# 1100 Series 1104C-44TG3 Diesel Engine – ElectropaK

59 kWm 1500 rev/min



## Standard ElectropaK specification

### Air inlet

- Mounted air filter

### Fuel system

- Rotary type pump
- Ecoplus fuel filter

### Lubrication system

- Cast iron sump with filler and dipstick
- Spin-on oil filter

### Cooling system

- Thermostatically-controlled system with gear-driven circulation pump and belt-driven pusher fan
- Mounted radiator and piping

### Electrical equipment

- 12 volt starter motor and 12 volt 65 amp alternator with DC output
- 12 volt shutdown solenoid energised to run
- Glow plug cold start aid

### Flywheel and housing

- Flywheel to SAE J620 size 10/11½
- SAE 3 flywheel housing

### Literature

- User's Handbook

### Optional equipment

- Workshop manual
- Parts book

Engine Speed	Fuel Consumption	
	1500 rev/min	g/kWh × 10³ / hr

Standby	219	17.8
Prime Power	219	16.2
75% of Prime Power	214	11.9
50% of Prime Power	217	8.0

### General data

Number of cylinders .....	4 vertical in-line
Bore and stroke.....	105 x 127 mm
Displacement .....	4.41 litres
Aspiration .....	Turbocharged
Cycle.....	4 stroke
Combustion system.....	Direct injection
Compression ratio .....	18.2:1
Rotation.....	Anti-clockwise viewed on flywheel
Cooling system.....	Water-cooled
Total lubrication system capacity.....	8.5 litres
Total coolant capacity .....	12.6 litres
Dimensions – Length .....	1240 mm
Width .....	650 mm
Height .....	951 mm
Dry weight .....	420 kg
Final weight and dimensions will depend on completed specification	

Photographs are for illustrative purposes only and may not reflect final specification.

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### Perkins Engines Company Limited

Peterborough PE1 5FQ  
United Kingdom  
Telephone +44 (0)1733 583000  
Fax +44 (0)1733 582240  
[www.perkins.com](http://www.perkins.com)

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