1103A-33 Electric Power Engines

Power range 1500 rpm	28-61 kW (engine gross power)
Power range 1800 rpm	33-71 kW (engine gross power)

Emissions

Fuel optimised

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 products Perkins has engineered even higher levels of reliability, yet lowered the cost of ownership.

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

Features and benefits

- **Compact, efficient power** is achieved from the 3.3 cylinder block maintaining bore roundness under the pressures of operation. Combustion and mechanical noise are also lowered, whilst the cylinder head delivers optimised air control.
- Compact size, low noise, lower fuel consumption and oil use and service intervals of 500 hours as standard deliver **cost effective power**.
- **Quality by design** and Class A manufacturing improvements enhance product reliability while maintaining Perkins reputation for durability.



• 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 finger tips, covering technical information, parts identification and ordering systems, all dedicated to **maximising the productivity** of your engine.

Perkins actively pursues product support excellence with our distribution network investing in their territory to provide you with a consistent quality of support across the globe.

• Throughout the entire life of a Perkins engine, we provide access to genuine factory specification parts giving reassurance that you receive excellent quality for the **lowest possible cost**, wherever your Perkins powered machine is operating in the world.

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THE HEART OF EVERY GREAT MACHINE

1103A-33 Electric Power Engines

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Power range 1800 rpm	33-71 kW (engine gross power)
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Emissions

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Specification

		Model		
	1103A-33G	1103A-33TG1	1103A-33TG2	
Configuration	ElectropaK			
Cylinders		3 vertical in-line		
Displacement, litres (in ³)	3.3 (201)			
Aspiration	Naturally aspirated	Turbocharged		
Bore and stroke, mm (in)	105 x 127 (4.1 x 5.0)			
Combustion system	Direct injection			
Compression ratio	19.25:1 17.25:1			
Exhaust aftertreatment	N/A			
Rotation (viewed from flywheel)	Anti-clockwise, viewed from flywheel			
Total lubricating oil capacity, litres (US gal)	8.3 (2.2)			
Cooling system	Watercooled			
Total coolant capacity, litres (US gal)	10.2 (2.7)			

Technical information

			Engine Power		Typical		Prime Fuel Consumption						
Model	Speed	Type of Operation	Gross	Net		erator t* (Net)	110%	100%	75%	50%			
	rpm		kW (hp)	kW (hp)	kVA	kWe	g/kWh	g/kWh	g/kWh	g/kWh			
	1500	Prime	28.2 (38)	27.7 (37)	30	24	212	211	216	231			
1103A-33G	1500	Standby	31 (42)	30 (41)	33	26		211	210				
1103A-33G	1800	Prime	33 (45)	32 (43)	35	28	221	0.0.1	223	226	240		
	1000	Standby	37 (49)	35 (48)	38	31		223	220	240			
	1500	Prime	42 (57)	41 (55)	45	36	211	007	209	220			
1103A-33TG1	1500	Standby	47 (62)	46 (61)	50	40		211	211	207	209	220	
1103A-331G1	1800	Prime	51 (68)	49 (66)	53	43	215	215	015	212	218	237	
	1000	Standby	55 (73)	54 (72)	59	47				210	237		
	1500	Prime	55 (74)	54 (72)	60	48	217	010	215	224			
11024 22700	1500	Standby	61 (81)	59 (80)	66	53		218					
1103A-33TG2	1900	Prime	63 (85)	61 (82)	68	55	- 216	213	010	220			
	1800	Standby	71 (94)	68 (91)	75	60		210		210	210	213	218

*Generator powers are typical and based on typical alternator efficiencies and a power factor ($\cos \theta$) or 0.8.

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Standard equipment

	Model			
	1103A-33G	1103A-33TG1	1103A-33TG2	
Electro unit or ElectropaK	ElectropaK	ElectropaK	ElectropaK	
Radiator fitted	\checkmark	✓	✓	
Fuel filter, engine mounted	\checkmark	✓	√	
Water separator	N/A	N/A	N/A	
Fuel priming pump (manual/electric)	Manual	Manual	Manual	
Fuel cooler (not required for most installations)	N/A	N/A	N/A	
Air filter, engine mounted	\checkmark	√	√	
Engine ECM, engine mounted	N/A	N/A	N/A	
Wiring harness to ECM	N/A	N/A	N/A	
Wiring harness (all connectors to single customer interface)	N/A	N/A	N/A	
Starter motor	\checkmark	√	✓	
Battery charging alternator	\checkmark	√	√	
Flywheel housing	\checkmark	✓	✓	
Flywheel	\checkmark	✓	✓	
Fan	\checkmark	✓	✓	
Fan guard	\checkmark	✓	✓	
Temperature and oil pressure for automatic stop/alarm configurable	\checkmark	✓	√	

Engine package weights and dimensions

	Model				
	1103A-33G 1103A-33TG1 1103A-33TG2				
Configuration	ElectropaK				
Dimensions, H x L x W, mm (in)	951 x 1000 x 629 (34.7 x 39.3 x 24.7) 951 x 1049 x 634 (34.7 x 41.3 x 24.9)				
Dry weight, kg (lb)	412 (908)	908) 420 (926)			

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

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

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