1104C-44G/TG/TAG Electric Power Engines

Power range 1500 rpm40-103 kW (engine gross power)Power range 1800 rpm45-118 kW (engine gross power)

Emissions

EU Stage II/U.S. EPA Tier 2

Building upon Perkins proven reputation within the power generation industry, the 1104C Series range of ElectropaK engines now fit even closer to customers' needs.

In the world of power generation today, success is only gained by providing more for less. Therefore with the 1104C products, 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, the engine is designed to comply with the required regulations including EU Stage II mobile offhighway legislation and TA Luft (1986) regulations.



Features and benefits

- The Perkins[®] 1104C Series was developed following an intensive period of customer research. The cylinder blocks ensure bore roundness is maintained under the pressures of operation, as well as significantly reducing mechanical and combustion noise. A cross-flow cylinder head design optimises combustion control, and combines with turbocharger and chargecooler technology to achieve the best combination of **power delivery and low exhaust emissions**.
- The refined structure of the 1104C range leads to an exceptionally low noise signature coupled with the compact packaging provides **ease of integration**.
- 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 delivering **high quality as standard**.

- Service intervals are set at 500 hours as standard assuming approved fuels and lubricating oils are used to deliver **low operating costs**.
- 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.
- 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.

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THE HEART OF EVERY GREAT MACHINE

1104C-44G/TG/TAG Electric Power Engines

| Power range 1500 rpm | 40-103 kW (engine gross power) |
|----------------------|--------------------------------|
| Power range 1800 rpm | 45-118 kW (engine gross power) |
| | |

Emissions

EU Stage II/U.S. EPA Tier 2

Specification

| | 1104C-44 | | | | | | | |
|---|------------------------------------|--------------------|-----|-----|-----|---------------------------|------|--|
| | G1 | G2 | TG1 | TG2 | TG3 | TAG1 | TAG2 | |
| Configuration | ElectropaK | | | | | | | |
| Cylinders | | 4 vertical in-line | | | | | | |
| Displacement, litres (in ³) | 4.41 (269) | | | | | | | |
| Aspiration | | | | | | ocharged, chargecooled | | |
| Bore and stroke, mm (in) | 105 x 127 (4.1 x 5.0) | | | | | | | |
| Combustion system | Direct injection | | | | | | | |
| Compression ratio | 19.3:1 18.2:1 | | | | | | | |
| Exhaust aftertreatment | N/A | | | | | | | |
| Rotation (viewed from flywheel) | Anti-clockwise, viewed on flywheel | | | | | | | |
| Total lubricating oil capacity, litres (US gal) | 7 (2) 8.0 (2.1) | | | | | | | |
| Cooling system | Watercooled | | | | | | | |
| Total coolant capacity, litres (US gal) | 12.8 (3.4) 12.6 (3.3) | | | | | | | |

1010

Standard equipment

| | 1104C-44 | | | | | | | | | |
|--|--------------|-----|-----|--------------|-----|------|------|--|--|--|
| | G1 | G2 | TG1 | TG2 | TG3 | TAG1 | TAG2 | | | |
| Electro unit or ElectropaK | | | | ElectropaK | | | | | | |
| Radiator fitted | | | | \checkmark | | | | | | |
| Fuel filter, engine mounted | ✓ | | | | | | | | | |
| Water separator | | | | N/A | | | | | | |
| Fuel priming pump (manual/electric) | | | | Manual | | | | | | |
| Fuel cooler (not required for most installations) | | N/A | | | | | | | | |
| Air filter, engine mounted | | | | \checkmark | | | | | | |
| Engine ECM, engine mounted | | | | N/A | | | | | | |
| Wiring harness to ECM | | | | N/A | | | | | | |
| Wiring harness (all connectors to single customer interface) | N/A | | | | | | | | | |
| Starter motor | | | | \checkmark | | | | | | |
| Battery charging alternator | | | | \checkmark | | | | | | |
| Flywheel housing | | | | \checkmark | | | | | | |
| Flywheel | \checkmark | | | | | | | | | |
| Fan | ✓ | | | | | | | | | |
| Fan guard | \checkmark | | | | | | | | | |
| Temperature and oil pressure for automatic stop/alarm configurable | | | | \checkmark | | | | | | |

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|----------------------|--------------------------------|
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| | |

Emissions

EU Stage II/U.S. EPA Tier 2

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 | 40 (54) | 39 (52) | 44 | 35 | not available | | | | | |
| 1104C-44G1 | 1500 | Standby | 44 (58) | 43 (58) | 48 | 39 | | not av | allaDIE | IIane | | |
| 11040-4401 | 1800 | Prime | 45 (60) | 43 (58) | 49 | 39 | 228 | 226 | 0.05 | 050 | | |
| | 1000 | Standby | 49 (66) | 48 (64) | 43 | 54 | 220 | 220 | 235 | 250 | | |
| 1104C-44G2 | 1800 | Prime | 49 (66) | 47 (63) | 53 | 43 | 235 | 232 | 233 | 250 | | |
| 11040-4462 | 1800 | Standby | 54 (72) | 52 (70) | 59 | 47 | 230 | | | | | |
| 11040 44701 | 1000 | Prime | 64 (86) | 60 (80) | 68 | 54 | 000 | 230 | 233 | 245 | | |
| 1104C-44TG1 | 1800 | Standby | 71 (95) | 67 (90) | 75 | 60 | 232 | | | | | |
| 11040 44700 | 1500 | Prime | 56 (75) | 54 (72) | 60 | 48 | 000 | 226 | 226 | 227 | | |
| 1104C-44TG2 | 1500 | Standby | 62 (83) | 59 (79) | 67 | 53 | 229 | | | | | |
| 11040 44700 | 1500 | Prime | 56 (75) | 54 (72) | 60 | 48 | 000 | 219 | 220 | 225 | | |
| 1104C-44TG3 | 1500 | Standby | 62 (83) | 59 (79) | 67 | 53 | 223 | | | | | |
| | 1500 | Prime | 75 (101) | 72 (96) | 80 | 64 | 210 | | 216 | 222 | | |
| | 1500 | Standby | 83 (111) | 79 (106) | 89 | 71 | 210 | 211 | | | | |
| 1104C-44TAG1 | 1000 | Prime | 86 (115) | 80 (108) | 91 | 72 | 218 | 223 | 229 | 237 | | |
| | 1800 | Standby | 94 (126) | 89 (119) | 100 | 80 | | | | | | |
| | 1500 | Prime | 94 (126) | 90 (121) | 101 | 81 | 0.05 | 0.05 | 007 | 004 | | |
| 11040 447400 | 1500 | Standby | 103 (138) | 100 (133) | 112 | 90 | 205 | 205 | 207 | 204 | | |
| 1104C-44TAG2 | - | Prime | 107 (143) | 102 (136) | 114 | 92 | | 010 | 010 | 228 | | |
| | 1800 | Standby | 118 (157) | 112 (151) | 127 | 101 | 214 | 218 | 218 | | | |

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

Engine package weights and dimensions

| | 1104C-44 | | | | | | | | |
|--------------------------------|---------------------|-------------------------|-----|---------------------------------|-----------------------|------|------|--|--|
| | G1 | G2 | TG1 | TG2 | TG3 | TAG1 | TAG2 | | |
| Configuration | | ElectropaK | | | | | | | |
| Dimensions, H x L x W, mm (in) | | 62 x 622 5.7 x 24.5) | | 51 x 1239 x 6 .4 x 48.8 x 24 | 966 x 12 (38 x 49. | | | | |
| Dry weight, kg (lb) | 386 (851) 401 (884) | | | | | | | | |

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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