

2806C Electric Power Engines

Power range 1500 rpm 532-584 kWm (engine gross power)

Power range 1800 rpm 568-821 kWm (engine gross power)

Emissions EU Stage II/ EPA Tier 2

The Perkins 2800 Series is a family of well-proven 6 cylinder 18 litre in-line diesel engines, designed to address today's uncompromising demands within the power generation industry with particular aim at the standby market sector. Developed from a proven heavy-duty industrial base, the engine offers superior performance and reliability.



The 2806C are parallel turbocharged and air-to-air charge cooled, 6 cylinder diesel engines of 18 litres capacity. Their premium features provide economic and durable operation, low gaseous emissions and advanced overall performance and reliability.

Features and benefits

- Developed and tested using the latest engineering techniques and finite element analysis for high reliability, low oil usage and low wear rates. High compression ratios also ensure clean rapid starting in all conditions **maximising productivity**.
- Exceptional power to weight ratio and compact size give allows **easier installation**, smaller canopy and cost effective transportation as compared to larger engines. Common engine core allows same mounting locations to lower canopy design cost whilst serving multiple markets.
- Mechanically operated unit fuel injectors with electronic control combined with carefully matched turbocharging give excellent fuel atomisation and combustion with optimum economy to deliver lower **cost of ownership**.
- 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 quality for **lowest possible cost** wherever your Perkins powered machine is operating in the world. Robust engine design results in long service intervals which result in **lowest maintenance cost**.
- 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 productive life** of your engine.
- Perkins takes pride in manufacturing all products globally to the same **high quality standard**. All of our products are manufactured in world class facilities to ensure highest quality for your peace of mind.

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Specification

| | 2806C-E18TA/TTA | | | |
|---|---|------|----------|-------|
| | TAG1A | TAG3 | TTAG6 | TTAG7 |
| Configuration | ElectropaK | | | |
| Cylinders | 6 vertical in-line | | | |
| Displacement, litres (in ³) | 18.1 (1104) | | | |
| Aspiration | Parallel turbocharged and air-to-air chargecooled | | | |
| Bore and stroke, mm (in) | 145 x 183 (5.7 x 7.2) | | | |
| Combustion system | Direct injection | | | |
| Compression ratio | 14.5:1 | | 14.0:1 | |
| Exhaust aftertreatment | N/A | | | |
| Rotation (viewed from flywheel) | Anti-clockwise, viewed on flywheel | | | |
| Total lubricating oil capacity, litres (US gal) | 62 (16.4) | | 68 (18) | |
| Cooling system | Watercooled | | | |
| Total coolant capacity, litres (US gal) | 61 (16.1) | | 110 (29) | |

Technical Information

| Model | Speed | Type of Operation | Engine Power | | Typical Generator Output* (Net) | | Prime Fuel Consumption | | | |
|----------------|-------|-------------------|--------------|------------|---------------------------------|-----|------------------------|-------|-------|-------|
| | | | Gross | Net | | | 110% | 100% | 75% | 50% |
| | rpm | | kWm (hp) | kWm (hp) | kVA | kWe | g/kWh | g/kWh | g/kWh | g/kWh |
| 2806C-E18TAG1A | 1500 | Prime | 532 (713) | 514 (689) | 591 | 473 | 205 | 216 | 214 | 212 |
| | | Standby | 584 (783) | 565 (758) | 650 | 520 | | | | |
| | 1800 | Prime | 568 (762) | 543 (728) | 625 | 500 | 207 | 206 | 212 | 226 |
| | | Standby | 623 (835) | 598 (802) | 687 | 550 | | | | |
| 2806C-E18TAG3 | 1500 | Prime | 540 (724) | 522 (700) | 600 | 480 | 204 | 203 | 211 | 221 |
| | | Standby | 584 (783) | 565 (758) | 650 | 520 | | | | |
| | 1800 | Prime | 618 (829) | 592 (794) | 681 | 545 | 209 | 211 | 217 | 230 |
| | | Standby | 678 (909) | 652 (847) | 750 | 600 | | | | |
| 2806C-E18TTAG6 | 1800 | Prime | 716 (960) | 685 (919) | 813 | 650 | 212 | 212 | 212 | 215 |
| | | Standby | 785 (1053) | 754 (1011) | 895 | 716 | | | | |
| 2806C-E18TTAG7 | 1800 | Prime | 747 (1002) | 716 (960) | 850 | 680 | 208 | 210 | 215 | 214 |
| | | Standby | 821 (1101) | 790 (1059) | 938 | 750 | | | | |

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

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Standard Equipment

| | 2806C-E18TA/TTA | | | |
|--|-----------------|------------|------------|------------|
| | TAG1A | TAG3 | TTAG6 | TTAG7 |
| Electro Unit or ElectropaK | ElectropaK | ElectropaK | ElectropaK | ElectropaK |
| Radiator fitted | ✓ | ✓ | ✓ | ✓ |
| Fuel filter, engine mounted | ✓ | ✓ | ✓ | ✓ |
| Water separator | ✓ | ✓ | ✓ | ✓ |
| Fuel priming pump (manual/electric) | ✓ | ✓ | ✓ | ✓ |
| Fuel cooler (not required for most installations) | ✓ | ✓ | ✓ | ✓ |
| Air filter, engine mounted | ✓ | ✓ | ✓ | ✓ |
| Engine ECM, engine mounted | ✓ | ✓ | ✓ | ✓ |
| Wiring harness to ECM | ✓ | ✓ | ✓ | ✓ |
| Wiring harness (all connectors to single customer interface) | ✗ | ✗ | ✗ | ✗ |
| Starter motor | ✓ | ✓ | ✓ | ✓ |
| Battery charging alternator | ✓ | ✓ | ✓ | ✓ |
| Flywheel housing | ✓ | ✓ | ✓ | ✓ |
| Flywheel | ✓ | ✓ | ✓ | ✓ |
| Fan | ✓ | ✓ | ✓ | ✓ |
| Fan guard | ✓ | ✓ | ✓ | ✓ |
| Temp and oil pressure for automatic stop/alarm configurable | ✓ | ✓ | ✓ | ✓ |

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.
 Information subject to selected configuration, and subject to change without notice.

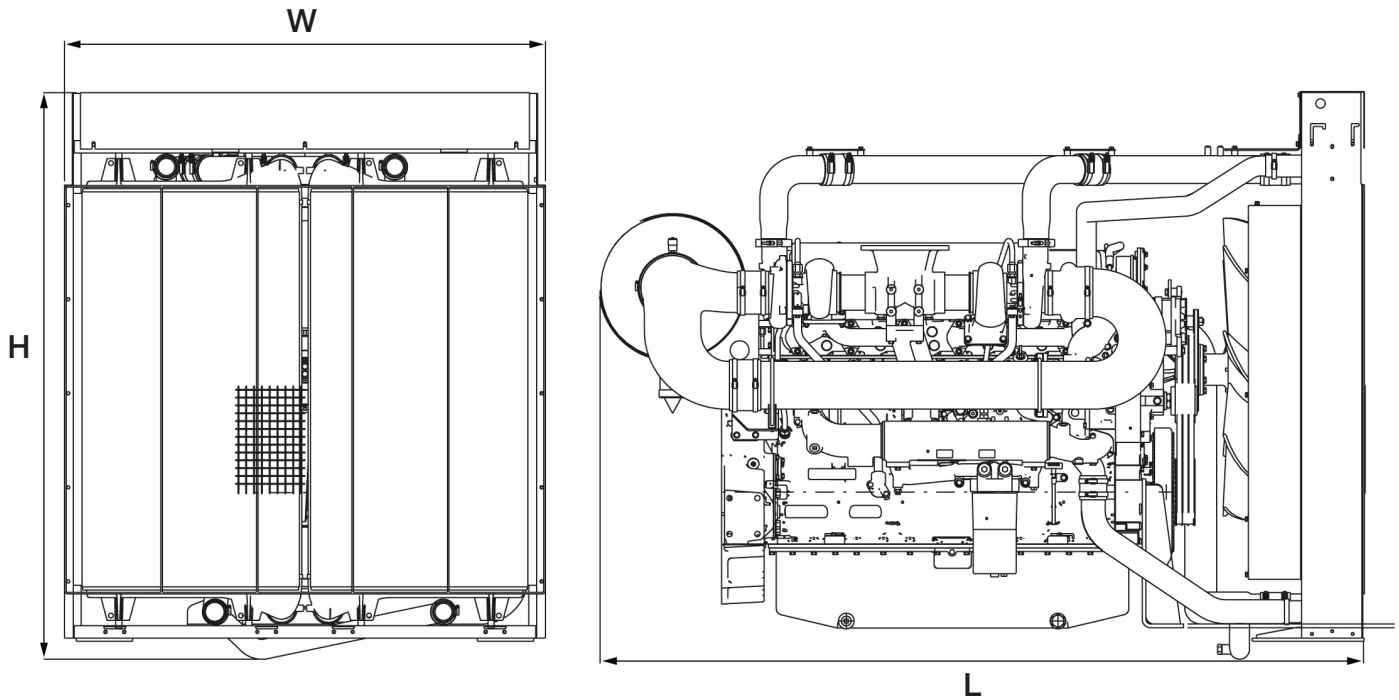
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Engine Package Weights and Dimensions



| | 2806C-E18TA/TTA | | | |
|-----------------------------------|------------------------------------|------|------------------------------------|-------|
| | TAG1A | TAG3 | TTAG6 | TTAG7 |
| Configuration | ElectropaK | | | |
| Dimensions, H x L x W, mm (in) | 1808 x 2545 x 1536 (71 x 100 x 60) | | 2126 x 2538 x 1691 (84 x 100 x 67) | |
| Dry weight, kg (lb) | 2050 (4520) | | 2361 (5206) | |

Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for one 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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