

2800 Series 2806C/D-E18TTA Industrial Engine

522 kW/700 hp

EU Stage IIIA/U.S. EPA Tier 3/China Nonroad Stage III

571-597 kW/765-800 hp

U.S. EPA Tier 2/China Nonroad Stage III

The ability to power your machine line-up with one engine supplier is truly achievable with Perkins. We have introduced a platform of 9-18 litre industrial engines that completes our market-leading industrial power range and covers 230-597 kW (308-800 hp).

This model is a parallel turbocharged, air-to-air chargecooled, 18.1 litre, 6 cylinder product capable of producing up to 597 kW (800 hp).

The exceptional power density and reliability of these engines make them an ideal choice for applications operating in countries that meet a number of emission standards.

To support the demands of your machine installation we offer a choice of engine configurations and options. The robust technology allows you to integrate these engines into your equipment with the minimum of re-engineering.

Perkins has developed a reputation for designing and building reliable and durable engines for the most demanding applications. Choosing Perkins as your engine supplier means your development costs can be reduced and your machines are future-proofed to meet anticipated emission standards.

The 2806D is designed to meet EU Stage IIIA, U.S. EPA Tier 3 equivalent emission standards and China Nonroad Stage III, whilst the 2806C product is designed to meet U.S. EPA Tier 2 equivalent emission standards and China Nonroad Stage III.



Specification		
Number of cylinders	6 vertical in-line	
Bore and stroke	145 x 183 mm	5.7 x 7.2 in
Displacement	18.1 litres	1104.5 cubic in
Aspiration	Parallel turbocharged aftercooled	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	16.3:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	40-72 litres	10.5-19 US gal
Cooling system	Liquid	

For more information please contact a Perkins distributor: <http://distributorlocator.perkins.com>

All information in this document is substantially correct at time of printing and may be altered subsequently. Photographs are for illustrative purposes only and may not reflect final specification. Final weight and dimensions will depend on completed specification. Information subject to selected configuration, and subject to change without notice. Engine power measured per ISO 14396:2002. Publication No. 3119B/12/20 Produced in England ©2020 Perkins Engines Company Limited

 **Perkins®**

THE HEART OF EVERY GREAT MACHINE

2800 Series 2806C/D-E18TTA Industrial Engine

522 kW/700 hp

EU Stage IIIA/U.S. EPA Tier 3/China Nonroad Stage III

571-597 kW/765-800 hp

U.S. EPA Tier 2/China Nonroad Stage III

Features and benefits

Dependable power

- World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation and many hours of productive life

High performance

- Simple and efficient parallel turbocharger provides optimal air management and improved fuel efficiency

Lifetime of low cost

- Fuel consumption optimised to match operating cycles of a wide range of equipment and applications.
- Capability of 500 hour oil change intervals enables low-cost maintenance

Fuel and oil

- Approved for operation on biodiesel* concentrations of up to 20%*

Package size

- Exceptional power density enables standardisation across numerous applications. Multiple installation options available to minimise total package size

Local support, global coverage

- Perkins recognise that the customer relationship is important to machine manufacturers and we can offer a range of flexible solutions to help provide appropriate support, either to the OEM's network or directly to the machine customer
- With highly trained Perkins distributors in thousands of communities in over 180 countries, you are never far away from expert product knowledge, genuine parts and a range of advanced diagnostic technology for keeping your engine in peak condition
- To find your local distributor: www.perkins.com/distributor

*Subject to conformance with ASTM D6751 and EN14214

For more information please contact a Perkins distributor: <http://distributorlocator.perkins.com>

All information in this document is substantially correct at time of printing and may be altered subsequently.
Photographs are for illustrative purposes only and may not reflect final specification.
Final weight and dimensions will depend on completed specification.
Information subject to selected configuration, and subject to change without notice
Engine power measured per ISO 14396:2002
Publication No. 3119B/12/20 Produced in England ©2020 Perkins Engines Company Limited



THE HEART OF EVERY GREAT MACHINE

2800 Series 2806C/D-E18TTA Industrial Engine

522 kW/700 hp

EU Stage IIIA/U.S. EPA Tier 3/China Nonroad Stage III

571-597 kW/765-800 hp

U.S. EPA Tier 2/China Nonroad Stage III

Technical information

Air inlet

- Turbocharged aftercooled
- Parallel configurations

Control system

- Full electronic control system
- All connectors and wiring looms waterproof and designed to withstand harsh off-highway environments
- Flexible and configurable software features and well supported SAE J1939 CAN bus enables highly integrated machines

Cooling system

- Vertical outlet thermostat housing, centrifugal water pump
- Detailed guidance on cooling system design and validation available to ensure machine reliability

Flywheel and housing

- Wide choice of drivetrain interfaces, SAE0 and SAE1 configurations

Fuel and fuel system

- Mechanical Unit Injector Fuel system, controlled electronically

Oil system

- Choice of sumps for different applications
- Open crankcase ventilation system with fumes disposal (optional OCV filter system)
- Oil cooler, oil filler, oil filter, oil dipstick, oil pump (gear-driven)

Power take-off

- SAE1 power take-off available with optional SAE A, SAE B and SAE C power take-off drives
- Engine power can also be taken from the front of the engine on some applications

For more information please contact a Perkins distributor: <http://distributorlocator.perkins.com>

All information in this document is substantially correct at time of printing and may be altered subsequently.
Photographs are for illustrative purposes only and may not reflect final specification.
Final weight and dimensions will depend on completed specification.
Information subject to selected configuration, and subject to change without notice
Engine power measured per ISO 14396:2002
Publication No. 3119B/12/20 Produced in England ©2020 Perkins Engines Company Limited



THE HEART OF EVERY GREAT MACHINE

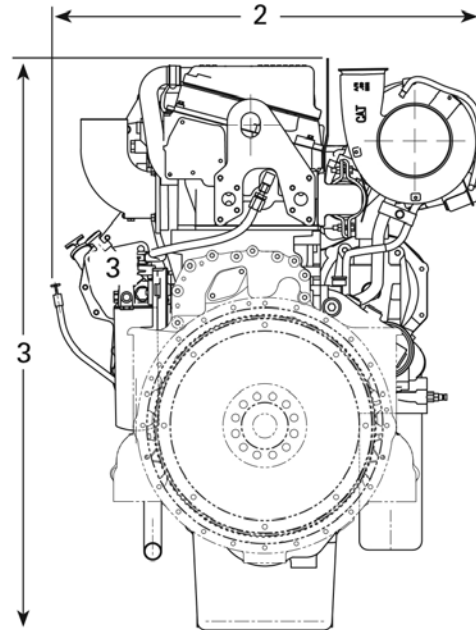
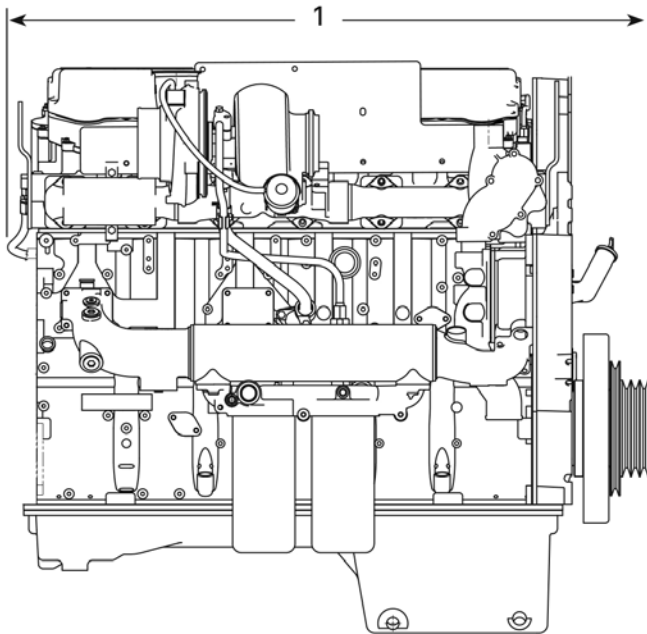
2800 Series 2806C/D-E18TTA Industrial Engine

522 kW/700 hp

EU Stage IIIA/U.S. EPA Tier 3/China Nonroad Stage III

571-597 kW/765-800 hp

U.S. EPA Tier 2/China Nonroad Stage III



Engine package dimensions and weight

1	Length	1414 mm	55.7 in
2	Width	974 mm	38.3 in
3	Height	1257 mm	49.5 in
	Weight	1673 kg	3688 lb

For more information please contact a Perkins distributor: <http://distributorlocator.perkins.com>

All information in this document is substantially correct at time of printing and may be altered subsequently.
Photographs are for illustrative purposes only and may not reflect final specification.
Final weight and dimensions will depend on completed specification.
Information subject to selected configuration, and subject to change without notice
Engine power measured per ISO 14396:2002
Publication No. 3119B/12/20 Produced in England ©2020 Perkins Engines Company Limited

 **Perkins®**

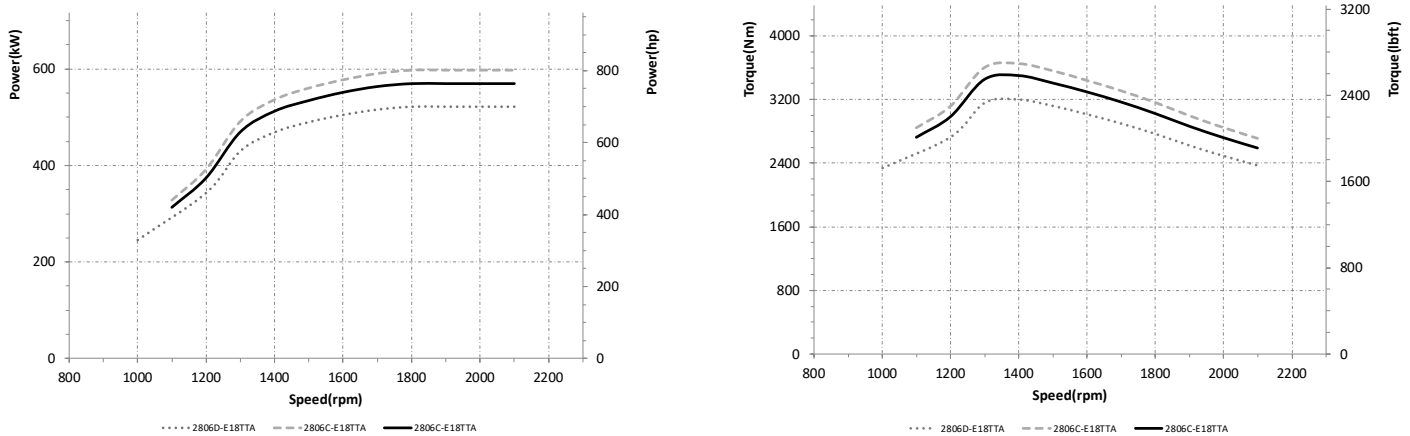
THE HEART OF EVERY GREAT MACHINE

2800 Series 2806C/D-E18TTA Industrial Engine

522 kW/700 hp
571-597 kW/765-800 hp

EU Stage IIIA/U.S. EPA Tier 3/China Nonroad Stage III
U.S. EPA Tier 2/China Nonroad Stage III

TTA Ratings Curve



Engine	Speed rpm	Power kW	Power hp	Speed rpm	Torque Nm	Torque lb-ft	Rating type
2806D-E18TTA	2100	522	700	1400	3496	2579	C
2806C-E18TTA	2100	571	765	1400	3469	2578	D
		597	800		3656	2696	E

Rating definitions and conditions

IND-A (Continuous) for heavy duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

IND-B for service where power and/or speed are cyclic (time at full load not to exceed 80%).

IND-C (Intermittent) is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

IND-D for service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

IND-E for service where maximum power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable (time at full load not to exceed 5% of the duty cycle).

Rating Conditions for Diesel Engines – 7 litre and higher

All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in. Hg) dry barometer and 25°C (77°F) temperature. Performance is measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with a density of 838.9 g/L.

For more information please contact a Perkins distributor: <http://distributorlocator.perkins.com>



THE HEART OF EVERY GREAT MACHINE

All information in this document is substantially correct at time of printing and may be altered subsequently. Photographs are for illustrative purposes only and may not reflect final specification. Final weight and dimensions will depend on completed specification. Information subject to selected configuration, and subject to change without notice. Engine power measured per ISO 14396:2002. Publication No. 3119B/12/20 Produced in England ©2020 Perkins Engines Company Limited