





TNV/TN Common Rail Series



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A SUSTAINABLE FUTURE

YANMAR is engaged in the relentless pursuit of high efficiency, low emission diesel engines.

With technology that meets the stringent environmental emissions standards,

YANMAR is providing sustainable solutions towards a new era of prosperity.

Over 600,000 YANMAR DPF engines at work around the world

. No need to cease the working while DPF regeneration

2012 : World's first certification by CARB Tier4 (19-56 kW)

100 hours : DPF reset regeneration interval







6,000 hours: DPF scheduled maintenance interval

2013: World's first certification by Swiss Ordinance on Air Pollution Control (18-37kW)

LINE-UP

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| 4TNV94FHT | 69.8-88.4kW | ▶P.16 |
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| 21 | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 11/1// |

20kW 40kW 60kW 80kW 100kW 120kW 140kW 160kW

For Power Gen Application



20kW 40kW 60kW 80kW 100kW 120kW 140kW 160kW Rated Output (Gross)

Common Rail Series

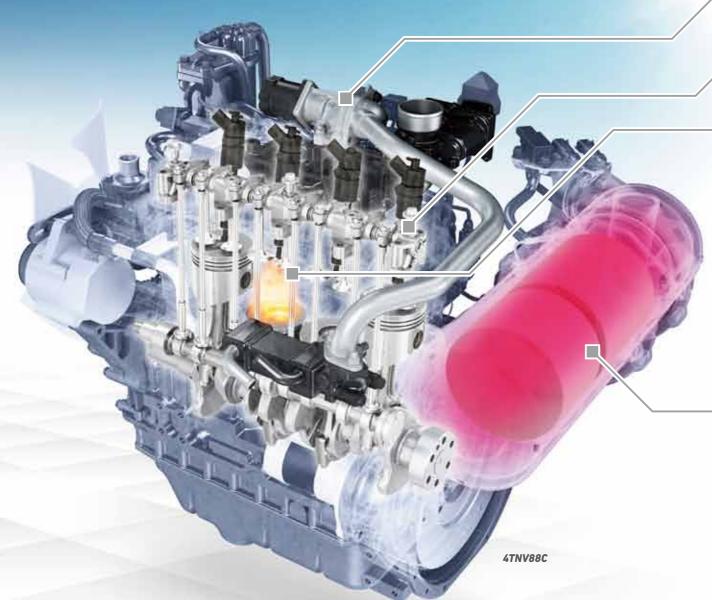
2

Perfect Technology for Clean Power

YANMAR smart diesel technology from a future where all devices operate under constant electronic control delivers unparalleled levels of efficient combustion.

By monitoring a host of factors from the temperature and oxygen level of the surrounding air to the current engine loading, the engine itself can determine the optimum running conditions to deliver maximum combustion efficiency, in any environment.

Through moment by moment feedback and control a powerful and cleanest engine in its category is born, the likes of which the world has never seen.



- □ High Power Density
- □ No Scheduled Maintenance DPF* for 6,000 hours

 Seamless operation in the field
- □ Tough and Reliable Power
- □ Best in Class Fuel Consumption
- □ Compliant to EU StageV/EPA·CARB Final Tier4



COOLED EGR SYSTEM

The cooled Exhaust Gas Recirculation (EGR) system cools a portion of the emission gas, mixing it with intake air and circulating it in the cylinders, to lower the combustion temperature within the cylinders and reduce NOx. The EGR valve makes precise adjustments to the EGR circulation volume to match the air temperature and oxygen concentration depending on altitude of the intake air, enabling stable fuel combustion control in any operating conditions.



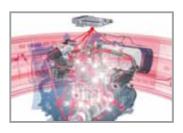
COMMON RAIL SYSTEM

The Tier 4 engine uses a fully electronically controlled common rail and fuel injection system. At ignition, the system instantaneously collects and analyzes information such as the outside temperature and altitude (the airs oxygen concentration level), engine load conditions and DPF temperature for precise control of the fuel injection timing, fuel quantity and number of injection times for combustion control down to the millisecond that in turn reduces PM and NOx emissions.



DIRECT INJECTION COMBUSTION

In 1980, YANMAR was one of the first companies to implement direct injection combustion into its small diesel engines. Since then, YANMAR has used its in-house FIE parts manufacturing process to further develop its unique direct injection combustion technology that boasts low emissions, increased fuel economy and high power output. Tier 4 takes this technology to its limit in pursuit of optimal fuel injection for minimal particulate matter (PM) in the exhaust gas.



ECU

The ECU, which provides integrated control of the engine, collects information about the work environment and load via engine sensors and electronic devices, and instantaneously feeds this information back for the reproduction of ideal operating conditions. Furthermore, using CAN communication, the machine also sends a wide variety of information to the ECU to achieve ideal control of the engine and entire machine. Should something happen unexpectedly, the ECUs service history can be extracted directly or via telecommunications using SMARTASSIST (YANMAR's diagnosis system) for faster servicing.



DIESEL PARTICULATE FILTER (DPF)

The minuscule amount of PM in the emissions gas, which has also been reduced to an absolute minimum, is finally captured by the Diesel Particulate Filter (DPF), preventing its escape into the atmosphere, resulting in unparalleled environmental performance. Moreover, the installation of the DPF allows for consistent power output and response even under rapidly changing loads and in low temperatures or high altitudes, factors which could inhibit good combustion, all without any added stress to the operator.

Automatic DPF regeneration operates without the operator ever noticing, so there is no need to stop operation. The DPF remains unclogged and no scheduled maintenance for 6,000 hours.

REGENERATION MODES



ASSIST
REGENERATION
[No Post Fuel Injection]

During low load and low temperature operation when it is difficult to obtain the temperature required for DPF regeneration, rather than using oxidation heat via the post fuel injection, YANMAR assist regeneration is able to elevate the DPF temperature via the intake throttle valve and combustion control. Therefore, DPF regeneration is possible without sacrificing high fuel economy.

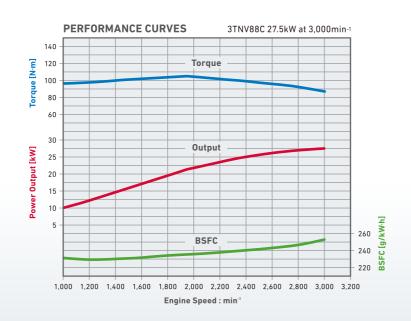


RESET
REGENERATION
[100 Hour Intervals]

The PM accumulated in the DPF is predicted and monitored based on the operating and working conditions of the engine. Assist regeneration is repeated until PM reaches a certain level, then it automatically switches to reset regeneration, completely regenerating and combusting the captured PM in the DPF without ceasing the engine's operation. Operating efficiency doesn't suffer as the operator continues working without ever noticing the reset regeneration process.



3TNV88C

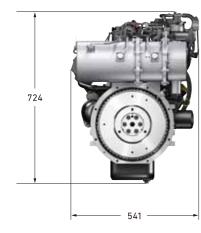


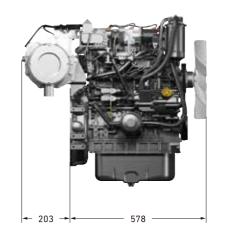
SPECIFICATION

| Model | | | | 3TNV88C | | |
|-----------------------------------|-----------------------|-----------------------|------------|----------------------|------------|------------|
| Emission Compliance | | | EU Sta | ge V / EPA•CARB Fina | al Tier4 | |
| Aspiration | | | | Naturally Aspirated | | |
| Fuel Injection | | Direct Injection (DI) | | | | |
| Fuel Injection System | | Common Rail | | | | |
| Intake Throttle Valve | | Standard | | | | |
| Exhaust Throttle Valve | | - | | | | |
| EGR | | Cooled EGR | | | | |
| ATS (After Treatment System) | | | | DOC + DPF | | |
| No. of Cylinders | | | | 3 | | |
| Bore × Stroke | mm | | | 88 × 90 | | |
| Displacement | L | | | 1.642 | | |
| Data d Outrout (Casas) | kW/min ⁻¹ | 21.8/2,400 | 22.8/2,500 | 23.7/2,600 | 25.5/2,800 | 27.5/3,000 |
| Rated Output (Gross) | hp/min ⁻¹ | 29.2/2,400 | 30.6/2,500 | 31.8/2,600 | 34.2/2,800 | 36.9/3,000 |
| Max.Torque | N∙m/min ⁻¹ | 105/1,560 | 105/1,625 | 105/1,690 | 105/1,820 | 105/1,950 |
| Overall Length × Width × Height * | mm | 781 × 541 × 724 | | | | |
| Dry Weight (w/ATS) * | kg | 170 | | | | |

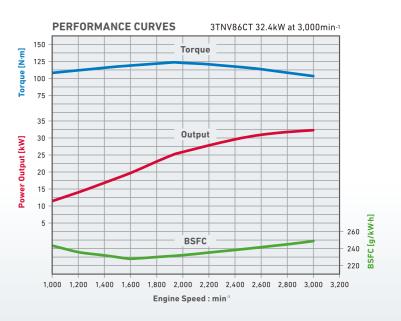
* : DPF on Flywheel Housing

DIMENSIONS (mm)





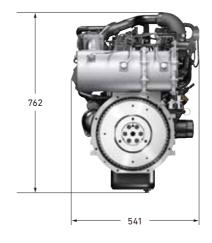


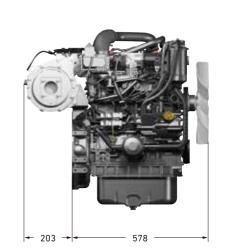


SPECIFICATION

| Model | | | 3TN\ | /86CT | | |
|-----------------------------------|----------------------|-----------------------------------|-------------|-------------|------------|--|
| Emission Compliance | | EU Stage V / EPA-CARB Final Tier4 | | | | |
| Aspiration | | | Turboo | harged | | |
| Fuel Injection | | | Direct Inj | ection (DI) | | |
| Fuel Injection System | | | Common Rail | | | |
| Intake Throttle Valve | | Standard | | | | |
| Exhaust Throttle Valve | | - | | | | |
| EGR | | Cooled EGR | | | | |
| ATS (After Treatment System) | | | DOC | + DPF | | |
| No. of Cylinders | | | | 3 | | |
| Bore × Stroke | mm | | 86 | × 90 | | |
| Displacement | L | | 1.! | 568 | | |
| Datad Outant (Casas) | kW/min ⁻¹ | 27.4/2,500 | 28.5/2,600 | 31.0/2,800 | 32.4/3,000 | |
| Rated Output (Gross) | hp/min ⁻¹ | 36.7/2,500 | 38.2/2,600 | 41.6/2,800 | 43.4/3,000 | |
| Max.Torque | N•m/min⁻¹ | 127/1,625 | 127/1,690 | 127/1,820 | 124/1,950 | |
| Overall Length × Width × Height * | mm | 781 × 541 × 762 | | | | |
| Dry Weight (w/ATS) * | kg | 175 | | | | |

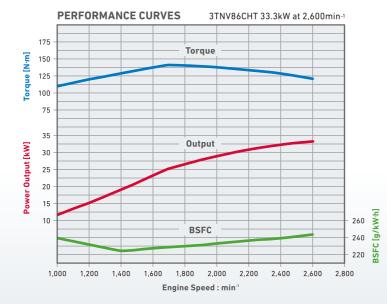
DIMENSIONS (mm)







3TNV86CHT

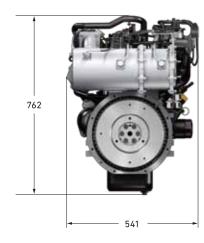


SPECIFICATION

| SPECIFICATION | | |
|-----------------------------------|-----------------------|-----------------------------------|
| Model | | 3TNV86CHT |
| Emission Compliance | | EU Stage V / EPA•CARB Final Tier4 |
| Aspiration | | Turbocharged with CAC |
| Fuel Injection | | Direct Injection (DI) |
| Fuel Injection System | | Common Rail |
| Intake Throttle Valve | | Standard |
| Exhaust Throttle Valve | | - |
| EGR | | Cooled EGR |
| ATS (After Treatment System) | | DOC + DPF |
| No. of Cylinders | | 3 |
| Bore × Stroke | mm | 86 × 90 |
| Displacement | L | 1.568 |
| Dated Output (Casas) | kW/min ⁻¹ | 33.3/2,600 |
| Rated Output (Gross) | hp/min ⁻¹ | 44.7/2,600 |
| Max.Torque | N•m/min ⁻¹ | 142/1,690 |
| Overall Length × Width × Height * | mm | 781 × 541 × 762 |
| Dry Weight (w/ATS) * | kg | 175 |
| | | |

*: DPF on Flywheel Housing

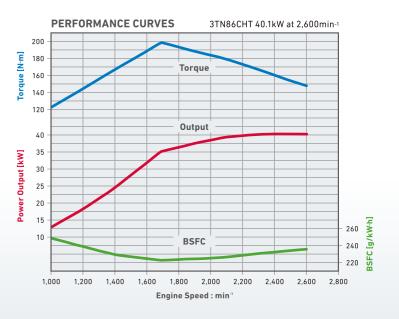
DIMENSIONS (mm)





3TN86CHT



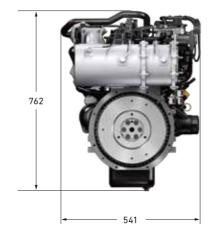


SPECIFICATION

| Model | | 3TN86CHT |
|-----------------------------------|----------------------|-----------------------------------|
| Emission Compliance | | EU Stage V / EPA·CARB Final Tier4 |
| Aspiration | | Turbocharged with CAC |
| Fuel Injection | | Direct Injection (DI) |
| Fuel Injection System | | Common Rail |
| Intake Throttle Valve | | Standard |
| Exhaust Throttle Valve | | - |
| EGR | | Cooled EGR |
| ATS (After Treatment System) | | DOC + DPF |
| No. of Cylinders | | 3 |
| Bore × Stroke | mm | 86 × 90 |
| Displacement | L | 1.568 |
| D. I. (1 0 1 - 1 (0) | kW/min ⁻¹ | 40.1/2,600 |
| Rated Output (Gross) | hp/min ⁻¹ | 53.8/2,600 |
| Max.Torque | N•m/min⁻¹ | 197/1,690 |
| Overall Length × Width × Height * | mm | 775 × 541 × 762 |
| Dry Weight (w/ATS) * | kg | 175 |

* : DPF on Flywheel Housing

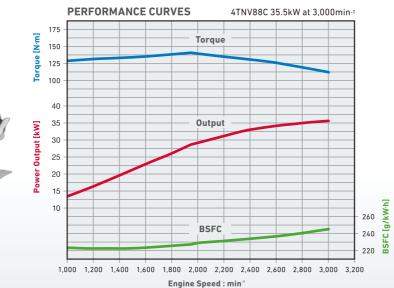
DIMENSIONS (mm)







4TNV88C

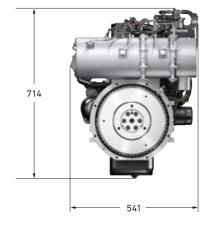


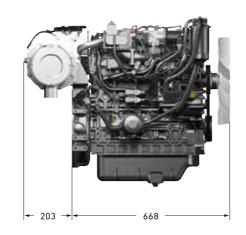
SPECIFICATION

| SPECIFICATION | | | | | | | |
|-----------------------------------|----------------------|-----------------------------------|-----------------------|------------|------------|------------|------------|
| Model | | | 4TNV88C | | | | |
| Emission Compliance | | EU Stage V / EPA-CARB Final Tier4 | | | | | |
| Aspiration | | | | Naturally | Aspirated | | |
| Fuel Injection | | | Direct Injection (DI) | | | | |
| Fuel Injection System | | | Common Rail | | | | |
| Intake Throttle Valve | | Standard | | | | | |
| Exhaust Throttle Valve | | - | | | | | |
| EGR | | Cooled EGR | | | | | |
| ATS (After Treatment System) | | | | DOC - | + DPF | | |
| No. of Cylinders | | | | 4 | 4 | | |
| Bore × Stroke | mm | | | 88 | × 90 | | |
| Displacement | L | | | 2.1 | 90 | | |
| Data (O 1 - 1 (C) | kW/min ⁻¹ | 26.7/2,200 | 29.1/2,400 | 30.5/2,500 | 31.7/2,600 | 34.3/2,800 | 35.5/3,000 |
| Rated Output (Gross) | hp/min ⁻¹ | 35.8/2,200 | 39.0/2,400 | 40.9/2,500 | 42.5/2,600 | 46.0/2,800 | 47.6/3,000 |
| Max.Torque | N•m/min⁻¹ | 139/1,430 | 139/1,560 | 140/1,625 | 140/1,690 | 140/1,820 | 140/1,950 |
| Overall Length × Width × Height * | mm | 871 × 541 × 714 | | | | | |
| Dry Weight (w/ATS) * | kg | 20 | 200 205 | | | | |

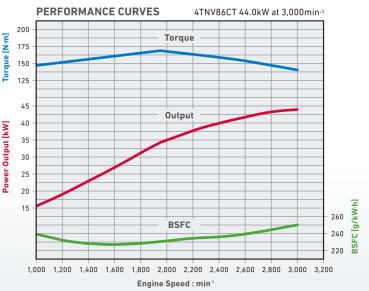
*: DPF on Flywheel Housing

DIMENSIONS (mm)







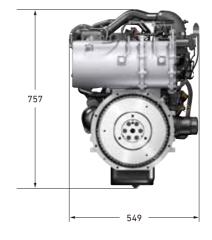


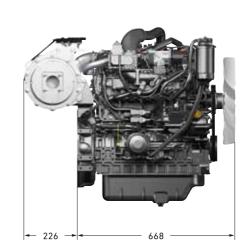
SPECIFICATION

| Model | | | 4TN\ | /86CT | | |
|-----------------------------------|----------------------|-----------------------|------------------|-------------------|------------|--|
| Emission Compliance | | | EU Stage V / EPA | •CARB Final Tier4 | | |
| Aspiration | | Turbocharged | | | | |
| Fuel Injection | | Direct Injection (DI) | | | | |
| Fuel Injection System | | Common Rail | | | | |
| Intake Throttle Valve | | Standard | | | | |
| Exhaust Throttle Valve | | - | | | | |
| EGR | | Cooled EGR | | | | |
| ATS (After Treatment System) | | | DOC | + DPF | | |
| No. of Cylinders | | | | 4 | | |
| Bore × Stroke | mm | | 86 | × 90 | | |
| Displacement | L | | 2.0 |)91 | | |
| Datad Outant (Casas) | kW/min ⁻¹ | 35.5/2,400 | 37.9/2,600 | 41.1/2,800 | 44.0/3,000 | |
| Rated Output (Gross) | hp/min ⁻¹ | 47.6/2,400 | 50.8/2,600 | 55.1/2,800 | 59.0/3,000 | |
| Max.Torque | N•m/min⁻¹ | 170/1,560 | 168/1,690 | 168/1,820 | 168/1,950 | |
| Overall Length × Width × Height * | mm | 894 × 549 × 757 | | | | |
| Dry Weight (w/ATS) * | kg | 210 | | | | |

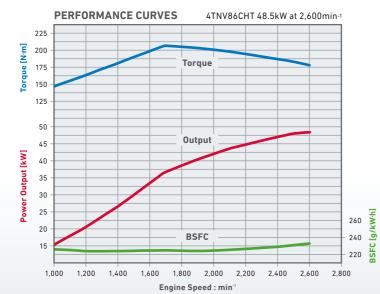
*: DPF on Flywheel Housing

DIMENSIONS (mm)







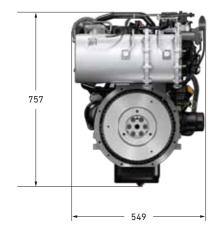


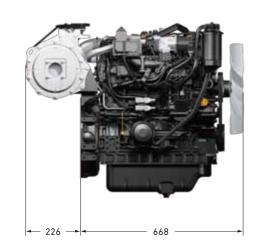
SPECIFICATION

| Model | | 4TNV86CHT |
|-----------------------------------|----------------------|-----------------------------------|
| Emission Compliance | | EU Stage V / EPA•CARB Final Tier4 |
| Aspiration | | Turbocharged with CAC |
| Fuel Injection | | Direct Injection (DI) |
| Fuel Injection System | | Common Rail |
| Intake Throttle Valve | | Standard |
| Exhaust Throttle Valve | | - |
| EGR | | Cooled EGR |
| ATS (After Treatment System) | | DOC + DPF |
| No. of Cylinders | | 4 |
| Bore × Stroke | mm | 86 × 90 |
| Displacement | L | 2.091 |
| Dated Output (Crees) | kW/min ⁻¹ | 48.5/2,600 |
| Rated Output (Gross) | hp/min ⁻¹ | 65.0/2,600 |
| Max.Torque | N•m/min⁻¹ | 207/1,690 |
| Overall Length × Width × Height * | mm | 894 × 549 × 757 |
| Dry Weight (w/ATS) * | kg | 210 |

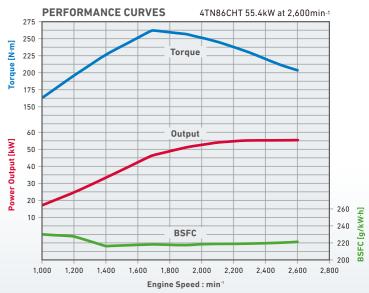
* : DPF on Flywheel Housing

DIMENSIONS (mm)









SPECIFICATION

| Model | | 4TN86CHT |
|-----------------------------------|-----------------------|-----------------------------------|
| Emission Compliance | | EU Stage V / EPA-CARB Final Tier4 |
| Aspiration | | Turbocharged with CAC |
| Fuel Injection | | Direct Injection (DI) |
| Fuel Injection System | | Common Rail |
| Intake Throttle Valve | | Standard |
| Exhaust Throttle Valve | | - |
| EGR | | Cooled EGR |
| ATS (After Treatment System) | | DOC + DPF |
| No. of Cylinders | | 4 |
| Bore × Stroke | mm | 86 × 90 |
| Displacement | L | 2.091 |
| Rated Output (Gross) | kW/min ⁻¹ | 55.4/2,600 |
| Rated Output (01055) | hp/min ⁻¹ | 74.3/2,600 |
| Max.Torque | N·m/min ⁻¹ | 263/1,690 |
| Overall Length × Width × Height * | mm | 911 × 546 × 760 |
| Dry Weight (w/ATS) * | kg | 247 |

* : DPF on Flywheel Housing

DIMENSIONS (mm)



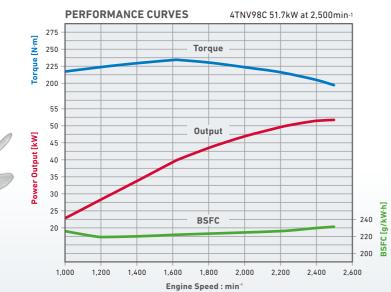


42.4-51.7kW

4TNV98CT



4TNV98C

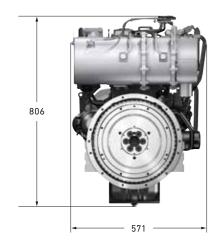


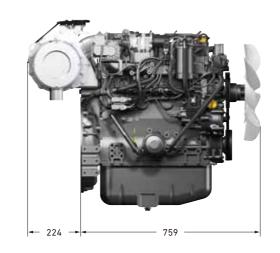
SPECIFICATION

| Model | | | | 4TN\ | V98C | | |
|-----------------------------------|----------------------|-----------------|-----------------------|------------------|-------------------|------------|------------|
| Emission Compliance | | | | EU Stage V / EPA | ·CARB Final Tier4 | | |
| Aspiration | | | | Naturally | Aspirated | | |
| Fuel Injection | | | Direct Injection (DI) | | | | |
| Fuel Injection System | | | Common Rail | | | | |
| Intake Throttle Valve | | Standard | | | | | |
| Exhaust Throttle Valve | | - | | | | | |
| EGR | | Cooled EGR | | | | | |
| ATS (After Treatment System) | | | | DOC - | + DPF | | |
| No. of Cylinders | | | | 4 | 4 | | |
| Bore × Stroke | mm | | | 98 × | 110 | | |
| Displacement | L | | | 3.3 | 319 | | |
| D-110 11 (C) | kW/min ⁻¹ | 42.4/2,000 | 44.3/2,100 | 46.2/2,200 | 48.1/2,300 | 49.9/2,400 | 51.7/2,500 |
| Rated Output (Gross) | hp/min ⁻¹ | 56.9/2,000 | 59.4/2,100 | 62.0/2,200 | 64.5/2,300 | 66.9/2,400 | 69.3/2,500 |
| Max.Torque | N•m/min⁻¹ | 235/1,300 | 235/1,365 | 235/1,430 | 235/1,495 | 235/1,560 | 235/1,625 |
| Overall Length × Width × Height * | mm | 983 × 571 × 806 | | | | | |
| Dry Weight (w/ATS) * | kg | | 270 | | | | |

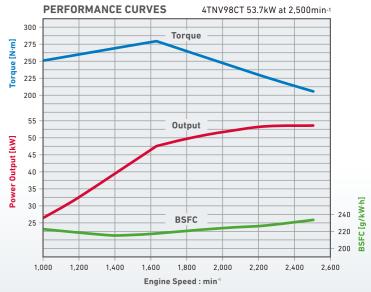
* : DPF on Flywheel Housing

DIMENSIONS (mm)







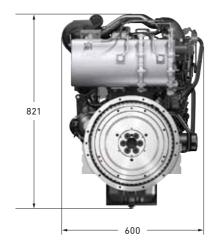


SPECIFICATION

| Model | | | 4TN\ | /98CT | | |
|-----------------------------------|----------------------|-----------------------|------------------|-------------------|------------|--|
| Emission Compliance | | | EU Stage V / EPA | •CARB Final Tier4 | | |
| Aspiration | | | Turboo | harged | | |
| Fuel Injection | | Direct Injection (DI) | | | | |
| Fuel Injection System | | Common Rail | | | | |
| Intake Throttle Valve | | Standard | | | | |
| Exhaust Throttle Valve | | - | | | | |
| EGR | | Cooled EGR | | | | |
| ATS (After Treatment System) | | | DOC | + DPF | | |
| No. of Cylinders | | | | 4 | | |
| Bore × Stroke | mm | | 98 > | < 110 | | |
| Displacement | L | | 3.: | 319 | | |
| D-110 11(C) | kW/min ⁻¹ | 51.6/2,000 | 53.7/2,100 | 53.7/2,400 | 53.7/2,500 | |
| Rated Output (Gross) | hp/min ⁻¹ | 69.2/2,000 | 72.0/2,100 | 72.0/2,400 | 72.0/2,500 | |
| Max.Torque | N•m/min⁻¹ | 296/1,300 | 296/1,365 | 280/1,560 | 280/1,625 | |
| Overall Length × Width × Height * | mm | 963 × 600 × 821 | | | | |
| Dry Weight (w/ATS) * | kg | 275 | | | | |

* : DPF on Flywheel Housing

DIMENSIONS (mm)

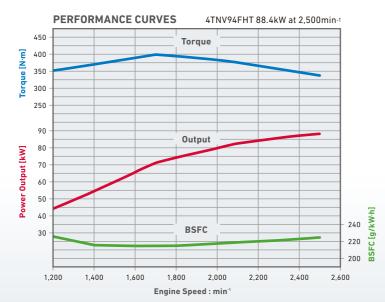




4TNV94FHT

69.8-88.4kW



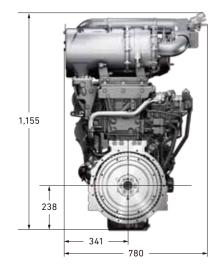


SPECIFICATION

| Model | | | 4TNV94FHT | | |
|-----------------------------------|-----------------------|-------------------|-----------------------------------|-------------|--|
| Emission Compliance | | | EU Stage V / EPA•CARB Final Tier4 | | |
| Aspiration | | | Turbocharged with CAC | | |
| Fuel Injection | | | Direct Injection (DI) | | |
| Fuel Injection System | | | Common Rail | | |
| Intake Throttle Valve | | Standard | | | |
| xhaust Throttle Valve - | | | | | |
| EGR | | Cooled EGR | | | |
| ATS (After Treatment System) | | DOC + DPF + SCR | | | |
| No. of Cylinders | | | 4 | | |
| Bore × Stroke | mm | | 94 × 110 | | |
| Displacement | L | | 3.054 | | |
| Dated Output (Cross) | kW/min ⁻¹ | 69.8/2,000 | 77.2/2,200 | 88.4/2,500 | |
| Rated Output (Gross) | hp/min ⁻¹ | 93.6/2,000 | 103.5/2,200 | 118.5/2,500 | |
| Max.Torque | N∙m/min ⁻¹ | 394/1,475 | 394/1,475 | 394/1,700 | |
| Overall Length × Width × Height * | mm | 752 × 780 × 1,155 | | | |
| Dry Weight (w/ATS) * | kg | 370 | | | |
| | | | | | |

* : DPF on top of the engine

DIMENSIONS (mm)





TNV Common Rail Series For Power Gen Application **TNV Common Rail Series**



- ☐ Compliant with EU StageV / EPA•CARB Final Tier4
- □ Low Fuel Consumption
- □ Low Noise and Low Vibration
- ☐ Outstanding Cold Startability
- ☐ Standard Exhaust Throttle Valve for Firm DPF Regeneration

4TNV86CT-I/G 4TNV98C-I/G 4TNV98CT-I/G







SPECIFICATION

| Model | | 4TNV86CT-I | 4TNV98C-I | 4TNV98CT-I | 4TNV86CT-G | 4TNV98C-G | 4TNV98CT-G |
|-----------------------------------|-----------------------|-----------------|------------------------|----------------------|-----------------|------------------------|--------------|
| Emission Compliance | EU Stage V | | | EPA•CARB Final Tier4 | | | |
| Aspiration | | Turbocharged | Naturally Aspirated | Turbocharged | Turbocharged | Naturally Aspirated | Turbocharged |
| Fuel Injection | Direct Injection (DI) | | | | | | |
| Fuel Injection System | Common Rail | | | | | | |
| Intake Throttle Valve | Standard | | | | | | |
| Exhaust Throttle Valve | | Standard | | | | | |
| EGR | | Cooled EGR | | | | | |
| ATS (After Treatment System) | | DOC + DPF | | | | | |
| No. of Cylinders | | 4 | | | | | |
| Bore × Stroke | mm | 86 × 90 | 98 > | : 110 | 86 × 90 | 98 × | : 110 |
| Displacement | L | 2.091 | 3.3 | 319 | 2.091 | 3.319 | |
| Rated Output (Gross) | kW/min ⁻¹ | 22.5/1,500 | 35.5/1,500 | 43.7/1,500 | 27.7/1,800 | 41.5/1,800 | 51.0/1,800 |
| | hp/min ⁻¹ | 30.2/1,500 | 47.6/1,500 | 58.6/1,500 | 37.1/1,800 | 55.7/1,800 | 68.4/1,800 |
| Overall Length × Width × Height * | mm | 892 × 599 × 742 | 944×632×809 | 944×632×809 | 892 × 599 × 742 | 944×632×809 | 944×632×809 |
| Dry Weight (w/ATS) * | kg | 235 | 300 | 305 | 235 | 300 | 305 |

* : DPF on Flywheel Housing

4TN101/4TN107

Best Choice for Off-Road Mobile Machinery

Our industrial diesel engines are renowned for their superb environmental performance and fuel-efficient technology. Superior reliability and durability derived of YANMAR's large marine diesel engine technology.

A new power solution born from the fusion of two technologies.

Realize new value with functionality, quality and reliability that exceeds expectations for professional machinery working in the demanding off-road industrial domain.



Best in Class Low Fuel Consumption

By implementing our advanced combustion technology, cultivated through years of manufacturing industrial and large marine diesel engines, our new engines achieve best in class low fuel consumption for wide range of actual operating conditions. The excellent fuel efficiency of the 4TN101 & 4TN107 contributes to significant cost savings throughout the life-cycle of the engine.



High Power Density

To achieve high-power output, the engines are designed to have a high-rigidity and excellent cooling performance. The 4TN107 features a two-stage turbocharger that gives it a class-leading power density of 34kW/L.



Outstanding Torque over entire speeds

Thanks to Yanmar's cutting-edge combustion technology and application of the turbocharger, both engines deliver superior torque to meet the requirements of a wide variety of industrial applications, including construction, agriculture and material-handling. Furthermore, the 4TN107 with two-stage turbocharger can achieve a maximum torque of 805Nm.



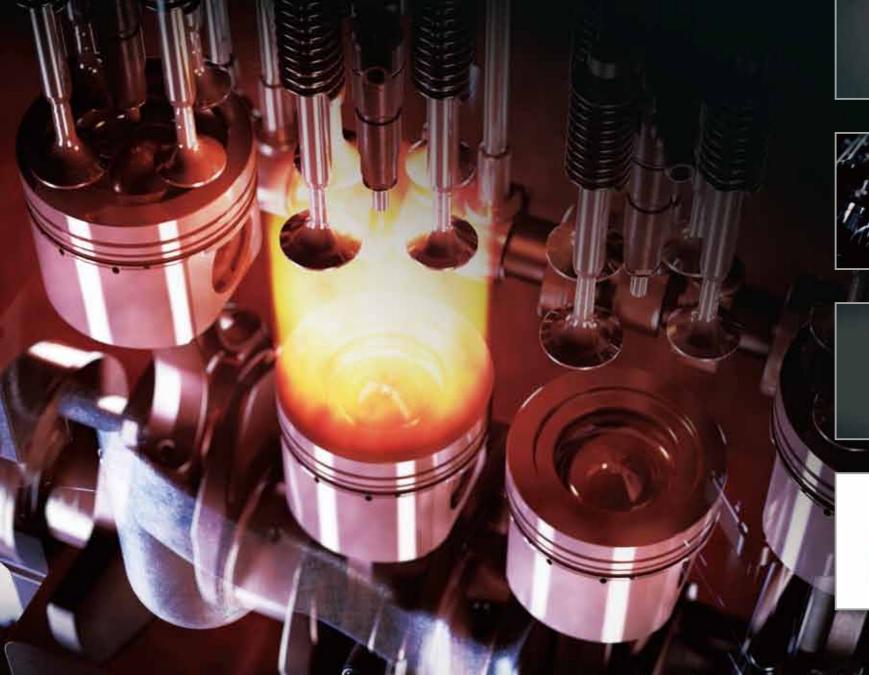
Compact Size

The compact profile of both engines allows for a range of flexible engine installation configurations. Yanmar's proprietary exhaust-gas reduction technology results in a more compact exhaust-gas after-treatment system markedly improving the outward visibility and comfort level for machine operators.



Compact and Reliable ATS

The 4TN101&4TN107 adopt DPF to reduce PM and a mixer-less SCR solution to reduce NOx. These technologies, which have been refined from our experience developing small industrial engines, allow the 4TN101 and 4TN107 to comply with the latest stringent emission regulations. These technologies keep our customers working, even at high-altitude or in low-temperature environments, or when working with light or heavy loads.



77.0-85.0kW

4TN101FDT (High Output)



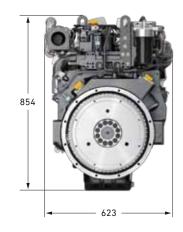


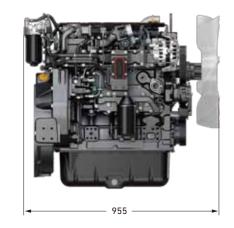
SPECIFICATION

| SPECIFICATION | | | | |
|-----------------------------------|-----------------------|-----------------------------------|-----------------|--|
| Model | | 4TN101FHT [St | andard Output] | |
| Emission Compliance | | EU Stage V / EPA•CARB Final Tier4 | | |
| Aspiration | | Turbocharged with CAC | | |
| Fuel Injection | | Direct Injection (DI) | | |
| Fuel Injection System | | Commo | on Rail | |
| Intake Throttle Valve | | Stan | dard | |
| Exhaust Throttle Valve | | - | - | |
| EGR | | Coole | d EGR | |
| ATS (After Treatment System) | | DOC + DPF + SCR | | |
| No. of Cylinders | | 4 | | |
| Bore × Stroke | mm | 101 × 120.03 | | |
| Displacement | L | 3.847 | | |
| Rated Output (Gross) | kW/min ⁻¹ | 77.0/2,000 | 85.0/2,200 | |
| | hp/min ⁻¹ | 103.3/2,000 | 114.0/2,200 | |
| Max.Torque | N∙m/min ⁻¹ | 445/1,500 | | |
| Low Speed Torque | N∙m/min ⁻¹ | 370/1,000 | | |
| Overall Length × Width × Height * | mm | 955 × 623 × 854 | | |
| Dry Weight * | kg | 464 | | |

*: W/0 ATS

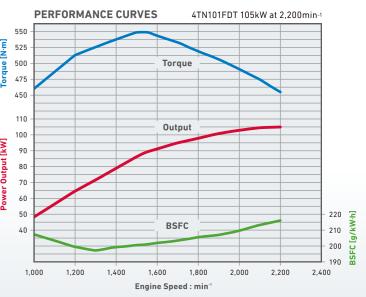
DIMENSIONS (mm)









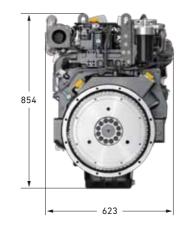


SPECIFICATION

| | 4TN101FDT [High Output] | | | |
|-----------------------|---|--|--|--|
| | EU Stage V / EPA•CARB Final Tier4 | | | |
| | Turbocharged with CAC | | | |
| | Direct Injection (DI) | | | |
| | Common Rail | | | |
| | Standard | | | |
| | - | - | | |
| | Cooled EGR | | | |
| | DOC + DPF + SCR | | | |
| | 4 | | | |
| mm | 101 × 1 | × 120.03 | | |
| L | 3.8 | 47 | | |
| kW/min ⁻¹ | 96.0/2,000 | 105.0/2,200 | | |
| hp/min ⁻¹ | 128.7/2,000 | 140.8/2,200 | | |
| N·m/min ⁻¹ | 550/1,500 | | | |
| N·m/min ⁻¹ | 455/1,000 | | | |
| mm | 955 × 623 × 854 | | | |
| kg | 464 | | | |
| | L kW/min-1 hp/min-1 N·m/min-1 N·m/min-1 mm | EU Stage V / EPA Turbocharg Direct Inju Comm Stan Coole DOC + Di mm 101 × L kW/min ⁻¹ p6.0/2,000 hp/min ⁻¹ 128.7/2,000 N·m/min ⁻¹ 550/ N·m/min ⁻¹ 455/ mm 955 × 66 | | |

*: W/0 ATS

$\textbf{DIMENSIONS} \; (\text{mm})$



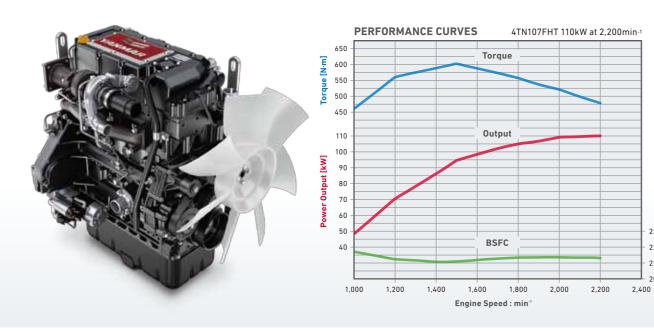




4TN107FHT (Single Turbo)

90.0-110.0kW

4TN107FTT (2 Stage Turbo)



4TN107FTT 155kW at 2,200min-1 PERFORMANCE CURVES Torque 700 Output 150 -130 110 90 **BSFC** و 200 -1,000 1,400 2,200 2,400 For Excavator Application 1,200 1,600 1,800 2.000 Engine Speed: min

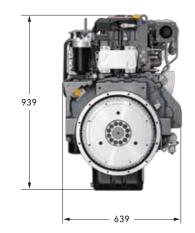
SPECIFICATION

| Model | | 4TN107FHT [Single Turbo] | | | |
|-----------------------------------|-----------------------|-----------------------------------|-------------|-------------|--|
| Emission Compliance | | EU Stage V / EPA•CARB Final Tier4 | | | |
| Aspiration | | Single Turbocharged with CAC | | | |
| Fuel Injection | Direct Injection (DI) | | | | |
| Fuel Injection System | | Common Rail | | | |
| Intake Throttle Valve | | Standard | | | |
| Exhaust Throttle Valve - | | | | | |
| EGR | | Cooled EGR | | | |
| ATS (After Treatment System) | | DOC + DPF + SCR | | | |
| No. of Cylinders | | 4 | | | |
| Bore × Stroke | mm | 107 × 127.09 | | | |
| Displacement | L | 4.571 | | | |
| Rated Output (Gross) | kW/min ⁻¹ | 90.0/1,800 | 100.0/2,000 | 110.0/2,200 | |
| | hp/min ⁻¹ | 120.7/1,800 | 134.1/2,000 | 147.5/2,200 | |
| Max.Torque | N•m/min⁻¹ | 602/1,350 602/1,500 | | | |
| Low Speed Torque | N•m/min⁻¹ | 460/1,000 | | | |
| Overall Length × Width × Height * | mm | 972 × 639 × 939 | | | |
| Dry Weight * | kg | 545 | | | |

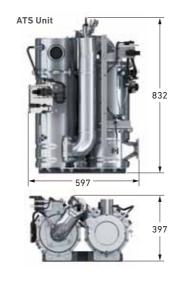
*: W/0 ATS

- 210

DIMENSIONS (mm)







SPECIFICATION

| Model | | 4TN107FTT [2 Stage Turbo] | | | |
|-----------------------------------|-----------------------|-----------------------------------|-------------|-------------|--|
| Emission Compliance | | EU Stage V / EPA•CARB Final Tier4 | | | |
| Aspiration | | 2 Stage Turbocharged with CAC | | | |
| Fuel Injection | | Direct Injection (DI) | | | |
| Fuel Injection System | | Common Rail | | | |
| Intake Throttle Valve | | Standard | | | |
| Exhaust Throttle Valve | | - | | | |
| EGR | | Cooled EGR | | | |
| ATS (After Treatment System) | | DOC + DPF + SCR | | | |
| No. of Cylinders | | 4 | | | |
| Bore × Stroke | mm | 107 × 127.09 | | | |
| Displacement | L | 4.571 | | | |
| Rated Output (Gross) | kW/min ⁻¹ | 127.0/1,800 | 141.0/2,000 | 155.0/2,200 | |
| | hp/min ⁻¹ | 170.3/1,800 | 189.1/2,000 | 207.9/2,200 | |
| Max.Torque | N·m/min ⁻¹ | 805/1,350 805/1,500 | | | |
| Low Speed Torque | N·m/min ⁻¹ | 604/1,000 | | | |
| Overall Length × Width × Height * | mm | 977 × 743 × 939 | | | |
| Dry Weight * | kg | 560 | | | |

*: W/0 ATS

$\textbf{DIMENSIONS} \; (\text{mm})$

