



# 4TNV88

## Engine Technical Data

Revision: 0

		Unit	4TNV88-GGE
<b>General Data</b>			
Number of Cylinders	-		4
Engine Type	-		Inline, Water-Cooled, 4 Stroke Diesel
Bore x Stroke	mm x mm		88 x 90
Total Displacement	cc		2.189
Combustion type	-		Direct Injection
Aspiration	-		Natural Aspiration
Valves per Cylinder	-		2
Compression ratio	-		19.1
Firing Order	-		1-3-4-2
<b>Performance Data</b>			
Net Intermittent Power	HP [kW] / rpm		29.0 [21.6]/1800, 23.6 [17.6]/1500
Net Continuous Power	HP [kW] / rpm		26.3 [19.6]/1800, 22.0 [16.4]/1500
Net Max Torque	ft-lb [Nm]/rpm		-
Low Idle Speed	rpm		1500+/-25
High Idle Speed	rpm		1895+/-25
<b>Physical Data</b>			
Direction of rotation	-		Counter Clockwise (view from flywheel)
Length - Inches	Inches [mm]		27.17 [690]
Width - Inches	Inches [mm]		20.20 [513]
Height - Inches	Inches [mm]		25.47 [647]
Dry Weight	lbs [kg]		439 [199]
<b>PTO System</b>			
Flywheel	-		Semi SAE #4
Flywheel Housing	-		Semi SAE #4 ( 105 mm Depth )
Gear Case	-		without SAE Hydraulic Pump Flange
<b>Lubrication System</b>			
Inclination, Continuous	degrees		30
Inclination, 3 minutes Max.	degrees		35
Lubrication Oil Filter Type	-		Paper Element
Oil Capacity, Effective	Liters		3.4
Total System Capacity	Liters		7.4
Oil Change Interval, Hours	hr		250 (50, initial)
Recommended Oil Type	API		CD, CE, CF or higher grade
<b>Cooling System</b>			
Fan Type	-		Pusher
Fan Diameter	Inches [mm]		14.96 [380]
Number of Blades	-		6
Fan Pulley Diameter	Inches [mm]		3.54 [90]
Crank Pulley Diameter	Inches [mm]		4.72 [120]
<b>Fuel System</b>			
Fuel Filter Type	-		Paper Element
Fuel Injection Pump Type	-		Distributor Type
Water Separator (Standard)	-		Mesh size: 100-mesh/inch, water reservoir 150 cc
<b>Electrical System</b>			
System Voltage	Volts		12 V
Electric Stop Device	-		Stop Solenoid
Alternator	-		12V-40A
Starting Aid Device	-		Air Heater, 12V 400W
Standard pre-heat time	Seconds		15
Starting Motor Type	-		Reduction
Starting Motor Power	kW		1.4