



3TNV88

Engine Technical Data

Revision: 0

		Unit	3TNV88-GGE
General Data			
Number of Cylinders	-		3
Engine Type	-		Inline, Water-Cooled, 4 Stroke Diesel
Bore x Stroke	mm x mm		88 x 90
Total Displacement	cc		1.642
Combustion type	-		Direct Injection
Aspiration	-		Natural Aspiration
Valves per Cylinder	-		2
Compression ratio	-		19.1
Firing Order	-		1-3-2

Performance Data

Net Intermittent Power	HP [kW] / rpm		21.7 [16.2]/1800, 17.7 [13.2]/1500
Net Continuous Power	HP [kW] / rpm		19.7 [14.7]/1800, 16.4 [12.2]/1500
Net Max Torque	ft-lb [Nm]/rpm		-
Low Idle Speed	rpm		1500+/-25
High Idle Speed	rpm		1895+/-25

Physical Data

Direction of rotation	-		Counter Clockwise (view from flywheel)
Length - Inches	Inches [mm]		23.46 [596]
Width - Inches	Inches [mm]		20.20 [513]
Height - Inches	Inches [mm]		26.18 [665]
Dry Weight	lbs [kg]		373 [169]

PTO System

Flywheel	-		Semi SAE #4
Flywheel Housing	-		Semi SAE #4 (105 mm Depth)
Gear Case	-		without SAE Hydraulic Pump Flange

Lubrication System

Inclination, Continuous	degrees		30
Inclination, 3 minutes Max.	degrees		35
Lubrication Oil Filter Type	-		Paper Element
Oil Capacity, Effective	Liters		2.8
Total System Capacity	Liters		6.7
Oil Change Interval, Hours	hr		250 (50, initial)
Recommended Oil Type	API		CD, CE, CF or higher grade

Cooling System

Fan Type	-		Pusher
Fan Diameter	Inches [mm]		14.17 [360]
Number of Blades	-		6
Fan Pulley Diameter	Inches [mm]		3.54 [90]
Crank Pulley Diameter	Inches [mm]		4.72 [120]

Fuel System

Fuel Filter Type	-		Paper Element
Fuel Injection Pump Type	-		Distributor Type
Water Separator (Standard)	-		Mesh size: 100-mesh/inch, water reservoir 150 cc

Electrical System

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		1.2