



3TNV70

Engine Technical Data

Revision: 0

Unit	3TNV70-ASA	3TNV70-ASA3
General Data		
Number of Cylinders	-	3
Engine Type	-	Inline, Water-Cooled, 4 Stroke Diesel
Bore x Stroke	mm x mm	70x74
Total Displacement	cc	854
Combustion type	-	Indirect Injection
Aspiration	-	Natural Aspiration
Valves per Cylinder	-	2
Compression ratio	-	23.4
Firing Order	-	1-3-2
Performance Data		
Net Intermittent Power	HP [kW] / rpm	21.9 [16.3]/3600
Net Continuous Power	HP [kW] / rpm	--
Net Max Torque	ft-lb [Nm]/rpm	37.6 [51.0]/2600
Low Idle Speed	rpm	1000+/-25
High Idle Speed	rpm	3815+/-25
Physical Data		
Direction of rotation	-	Counter Clockwise (view from flywheel)
Length - Inches	Inches [mm]	20.8 [528] 19.8 [504]
Width - Inches	Inches [mm]	16.8 [427]
Height - Inches	Inches [mm]	21.5 [545]
Dry Weight	lbs [kg]	220 [100] 198 [90]
PTO System		
Flywheel	-	SAE #5
Flywheel Housing	-	SAE #5 (124 mm Depth) Back Plate
Gear Case	-	with SAE Hydraulic Pump Flange
Lubrication System		
Inclination, Continuous	degrees	25
Inclination, 3 minutes Max.	degrees	30
Lubrication Oil Filter Type	-	Paper Element
Oil Capacity, Effective	Liters	1.3
Total System Capacity	Liters	2.8
Oil Change Interval, Hours	hr	250 (50, initial)
Recommended Oil Type	API	CD, CE, CF or higher grade
Cooling System		
Fan Type	-	Suction
Fan Diameter	Inches [mm]	11.8 [300]
Number of Blades	-	5
Fan Pulley Diameter	Inches [mm]	3.9 [100]
Crank Pulley Diameter	Inches [mm]	4.3 [110]
Fuel System		
Fuel Filter Type	-	Paper Element
Fuel Injection Pump Type	-	Inline 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 (Pull Coil Timer: 1 sec.)
Alternator	-	12V-40A
Starting Aid Device	-	Glow Plug, 12V
Standard pre-heat time	Seconds	3
Starting Motor Type	-	Conventional
Starting Motor Power	kW	1.4 ± 0.3