



3TNV82A

Engine Technical Data

Revision: 0

Unit	3TNV82A-DSA	3TNV82A-DSA2	3TNV82A-DSA3
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General Data

Number of Cylinders	-	3
Engine Type	-	Inline, Water-Cooled, 4 Stroke Diesel
Bore x Stroke	mm x mm	82 x 84
Total Displacement	cc	1.33
Combustion type	-	Direct Injection
Aspiration	-	Natural Aspiration
Valves per Cylinder	-	3
Compression ratio	-	19.2
Firing Order	-	1-3-2

Performance Data

Net Intermittent Power	HP [kW] / rpm]	30.2 [22.5]/3000
Net Continuous Power	HP [kW] / rpm]	--
Net Max Torque	ft-lb [Nm]/rpm	63.9 [86.6]/1200
Low Idle Speed	rpm	1000+/-25
High Idle Speed	rpm	3180+/-25

Physical Data

Direction of rotation	-	Counter Clockwise (view from flywheel)		
Length - Inches	Inches [mm]	22.99 [584]	21.26 [540]	20.94 [532]
Width - Inches	Inches [mm]	20.0 [508]		
Height - Inches	Inches [mm]	24.02 [610]		
Dry Weight	lbs [kg]	313 [142]	288 [131]	273 [124]

PTO System

Flywheel	-	SAE #5	Semi SAE #5	Semi SAE #5
Flywheel Housing	-	SAE #5 (Depth 124)	Sem SAE #5 (Depth 80)	Back Plate
Gear Case	-	with SAE Hydraulic Pump Flange		

Lubrication System

Inclination, Continuous	degrees	30
Inclination, 3 minutes Max.	degrees	30
Lubrication Oil Filter Type	-	Paper Element
Oil Capacity, Effective	Liters	1.9
Total System Capacity	Liters	5.5
Oil Change Interval, Hours	hr	250 (50, initial)
Recommended Oil Type	API	CD, CE, CF or higher grade

Cooling System

Fan Type	-	Puller
Fan Diameter	Inches [mm]	13.19 [335]
Number of Blades	-	5
Fan Pulley Diameter	Inches [mm]	4.33 [110]
Crank Pulley Diameter	Inches [mm]	4.33 [110]

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	1.7