



3TNV88

Engine Technical Data

Revision: 0

Unit	3TNV88-DSA	3TNV88-DSA2	3TNV88-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	88 x 90	
Total Displacement	cc	1.642	
Combustion type	-	Direct Injection	
Aspiration	-	Natural Aspiration	
Valves per Cylinder	-	3	
Compression ratio	-	19.1	
Firing Order	-	1-3-2	

Performance Data

Net Intermittent Power	HP [kW] / rpm]	35.9 [26.8]/3000	
Net Continuous Power	HP [kW] / rpm]	--	
Net Max Torque	ft-lb [Nm]/rpm	81.8 [110.9]/1200	
Low Idle Speed	rpm	1000+/-25	
High Idle Speed	rpm	3210+/-25	

Physical Data

Direction of rotation	-	Counter Clockwise (view from flywheel)		
Length - Inches	Inches [mm]	24.69 [627]	22.95 [583]	22.64 [575]
Width - Inches	Inches [mm]	20.20 [513]		
Height - Inches	Inches [mm]	26.18 [665]		
Dry Weight	lbs [kg]	375 [170]	351 [159]	335 [152]

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	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	-	Puller	
Fan Diameter	Inches [mm]	14.17 [360]	
Number of Blades	-	7	
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	