

Engine Technical Data

Physical Data	
Manufacturer:	Perkins
Model:	1106A-70TAG3
No. of Cylinders/Alignment:	6 / In Line
Cycle:	4 Stroke
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Mechanical
Governing Class:	ISO 8528 G2
Compression Ratio:	16.0:1
Displacement: l (cu.in)	7.0 (427.8)
Bore/Stroke: mm (in)	105.0 (4.1)/135.0 (5.3)
Moment of Inertia: kg m ² (lb. in ²)	1.26 (4306)
Engine Electrical System:	
-Voltage/Ground:	12/Negative
-Battery Charger Amps:	85
Weight: kg (lb) - Dry:	788 (1737)
- Wet:	822 (1812)

Air System	50 Hz	60 Hz
Air Filter Type:	Paper Element	
Combustion Air Flow:		
m ³ /min (cfm) -Standby:	11.7 (413)	13.4 (473)
-Prime:	11.3 (399)	13.3 (470)
Max. Combustion Air Intake		
Restriction: kPa (in H ₂ O)	8.0 (32.1)	8.0 (32.1)
Radiator Cooling Air Flow:		
m ³ /min (cfm)	309.0 (10912)	385.0 (13596)
External Restriction to		
Cooling Air Flow: Pa (in H ₂ O)	125 (0.5)	125 (0.5)

Cooling System	50 Hz	60 Hz
Cooling System Capacity:		
l (US gal)	27.0 (7.1)	27.0 (7.1)
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil: kW (Btu/min)		
-Standby:	79.8 (4538)	89.5 (5090)
-Prime:	72.8 (4140)	82.2 (4675)
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min) -Standby:	29.9 (1700)	31.7 (1803)
-Prime:	25.9 (1473)	27.8 (1581)
Radiator Fan Load: kW (hp)	6.3 (8.5)	14.7 (19.7)
Cooling system designed to operate in ambient conditions up to 50°C (122°F).		

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity l (US gal):	16.5 (4.4)
Oil Pan l (US gal):	14.9 (3.9)
Oil Type:	API CH4 / CI4 15W-40
Cooling Method:	Water

Performance	50 Hz	60 Hz
Engine Speed: RPM	1500	1800
Gross Engine Power: kW (hp)		
-Standby:	185.5 (249.0)	199.7 (268.0)
-Prime:	167.6 (225.0)	180.5 (242.0)
BMEP: kPa (psi)		
-Standby:	2116.0 (306.9)	1898.0 (275.3)
-Prime:	1912.0 (277.3)	1715.0 (248.8)
Regenerative Power: kW	0.0	0.0

Fuel System				
Fuel Filter Type:	Replaceable Element			
Recommended Fuel:	Class A2 Diesel or BSEN590			
Fuel Consumption: l/hr (US gal/hr)				
	110% Load	100% Load	75% Load	50% Load
Prime				
50 Hz	43.3 (11.4)	40.1 (10.6)	31.0 (8.2)	21.2 (5.6)
60 Hz	48.7 (12.9)	45.2 (11.9)	36.0 (9.5)	27.7 (7.3)
Standby				
50 Hz	43.3 (11.4)	33.6 (8.9)	23.1 (6.1)	
60 Hz	48.7 (12.9)	38.3 (10.1)	29.1 (7.7)	
(based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)				

Exhaust System	50 Hz	60 Hz
Silencer Type:	Industrial	
Silencer Model & Quantity:	EXSY1 (1)	
Pressure Drop Across		
Silencer System: kPa (in Hg)	0.24 (0.070)	0.30 (0.087)
Silencer Noise Reduction		
Level: dB	15	13
Max. Allowable Back		
Pressure: kPa (in. Hg)	10.0 (3.0)	10.0 (3.0)
Exhaust Gas Flow:		
m ³ /min (cfm) -Standby:	31.0 (1095)	34.8 (1229)
-Prime:	29.4 (1038)	33.4 (1180)
Exhaust Gas Temperature: °C (°F)		
-Standby:	498 (928)	509 (948)
-Prime:	498 (928)	509 (948)