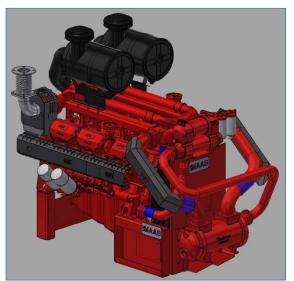


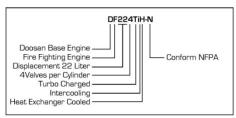


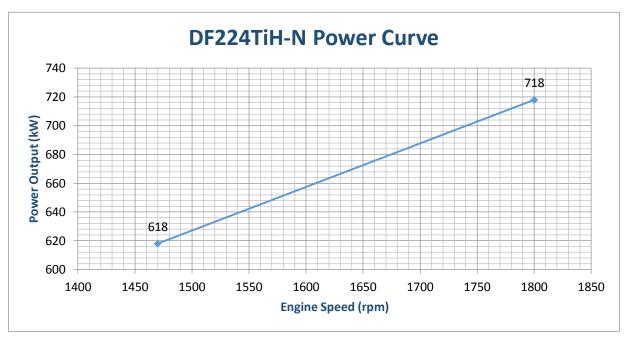


MODEL	Approved Ratings kW (hp) @ Rated speed rpm	
	1,470	1,800
DF224TiH-N	623 (835)	724 (971)

ENGINE SPECIFICATIONS				
• Engine Series		DOOSAN P222FE		
• Engine Type		V-type 4 cycle, water cooled 12 cylinder		
Aspiration		Turbo charged & Intercooled		
 Combustion Type 		Direct injection		
• Bore x Stroke	nm (inch)	128 (5.04) x 142 (5.59)		
Compression ratio		14.2:1		
• Displacement lit	re (Inch³)	21.927 (1.338)		
Rotation		Anti-Clockwise		
• Weight A	pprox. kg	1850		
Valves lashes at cold mm (inch)		Intake 0.35 (0.0138) Exhaust 0.45 (0.0177)		
Wiring Diagram (Optional)		No. 01.900.07WDEN.03		
Panel Diagram (Optional)		No. 01.900.07PDEN.03		
Oil pan capacity	itre (gal.)	High level 40 (10.6)		
		Low level 33 (8.7)		
Battery Capacity	Ah	200 recommend (battery not incl.)		
• Coolant capacity	itre (gal.)	35 (9.2)		







ENGINE RATINGS BASELINES

Engines are not to be used for continuous duty. Engines are to be used only for stationary emergency standby fire pump service. According to NFPA 25 engines are to be tested 30 minutes per week at no pump flow and full pump flow once per year.

Engines are rated at standard SAE conditions of 29.61 in. (7,521 mm) Hg barometer and $77^{\circ}F$ (25°C) inlet temperature (approximates 300ft. (91.4m) above sea level) by the testing laboratory (see SAE Standard J1349).

A deduction of 3 percent from engine horsepower rating at standard SAE conditions shall be made for diesel engines for each 1,000ft. (305m) altitude above 300ft. (91.4m).

A deduction of 1 percent from engine horsepower rating as corrected to standard SAE conditions shall be made for diesel engines for every $10^{\circ}F$ (5.6°C) above $77^{\circ}F$ (25°C) ambient temperature.

To determine the maximum allowable pump load, a deduction of 10% must be made.

Restricted: Use ratings only for stand-by fire pump applications

Copyright and ownership of this Power Curve is vested in De Maas B.V., whose prior written consent is required for its use, reproduction or for publication to any third party.

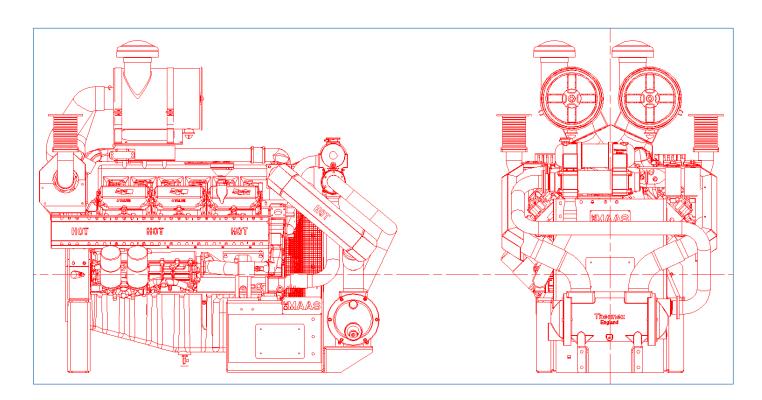
All rights reserved.

Tested at standard SAE conditions of 29.61 in. (7,521 mm) Hg barometer and 77°F (25°C) inlet temperature (approximates 300ft. (91.4m) above sea level) by the testing laboratory (see SAE Standard J1349). Used Diesel fuel ASTM 2D.





Engine Equipment	Standard	Optional	
Air cleaner	Drip proof	Heavy Duty Models	
Alternator	24 Volts x 45 Amps / with belt guard	-	
Exhaust protection	Sheet Steel Guarding	Elbow Matrasses	
Exhaust flex connection mm (inch)	138.4 (5")	-	
Flywheel housing	SAE 1	DRIVE LINE	
Flywheel connection	SAE 14	STUB SHAFT	
Fuel filter	Full flow, cartridge type	-	
Fuel lines	-	Flexible hoses according ISO 15540	
Water pump	Centrifugal type driven by gear	-	
Engine heater	230 Volts – 3,000 Watt	-	
Governor speed	Constant speed, mechanical	-	
Heat exchanger	Tube Stack Type	-	
Lube Oil filter	Full flow, cartridge type	-	
Lube Oil pump	Gear type, driven by crankshaft	-	
Control / Instrument panel	-	Build on Engine	
Junction box	-	Integrated in control panel	
Manual start	-	On instrument panel	
Overspeed control	-	Electronic instrument panel, test on instrument panel	
Run-stop control	-	On instrument panel	
Starters	Single 24 Volts x 7 kW	Twin Starters	
Throttle Control	Adjustable speed control,	Remote Control	
Further Optional	-	ON REQUEST	



Molenvliet 51, 3335 LH Zwijndrecht, The Netherlands Date: 11 November 2016 Tel: +31 (0)10 4196530 Fax: +31 (0)10 4194789 We reserve the right to change the information without prior notice! Web: www.demaasffe.nl Mail: info@demaasbv.nl Doc.: 02.07.01SPEN.03