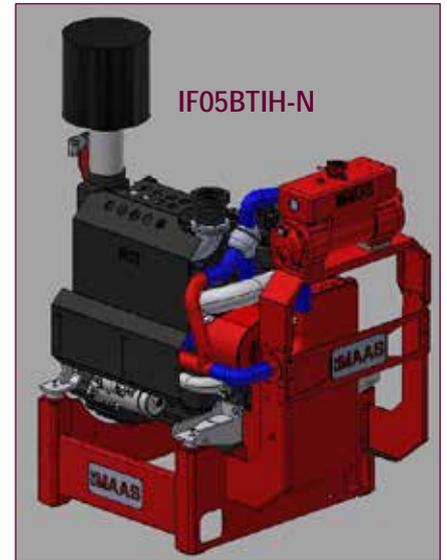
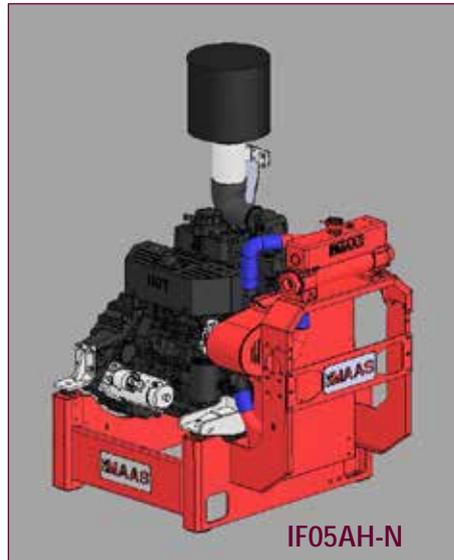


Engine Rating		1,470	1,760	2,100	2,200	2,350	2,600	2,800	2,940
IF05AH-N	kW	49	60	68	69	72	74	73	73
IF05ATH-N	kW	70	82	98	100	105	108	108	109
IF05BATIH-N	kW	-	105	130	134	138	143	144	145
IF05BTIH-N	kW	-	-	-	-	-	158	160	164



		IF05AH-N	IF05ATH-N	IF05ATIH-N	IF05BTIH-N
• Engine Series	FPT IVECO	N45 MNA F40	N45 MNS F40	N45 MNT F41 <sup>Std</sup>	N45 MNT F41 <sup>Plus</sup>
• Engine Type		4 Cylinder In-line, 4 cycle, water cooled			
• Aspiration		Natural	Turbo charged	Turbo charged & Intercooled	
• Combustion Type		Direct injection			
• Bore x Stroke	mm	104 x 132			
• Compression ratio		17.5 : 1			
• Displacement	litre	4.483			
• Rotation		Anti-Clockwise			
• Weight <i>Approximately</i>	kg	580			600
• Valves lashes at cold	mm	Inlet 0.25 ±0.5 Exhaust 0.50 ±0.5			
• Oil pan capacity	litre	High level 9.5 Low level 7.3			
• Battery Minimum Capacity recommended	Ah	180 (battery not included)			
• Cooling capacity	litre	Please contact FFE Manufacturer			

**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.

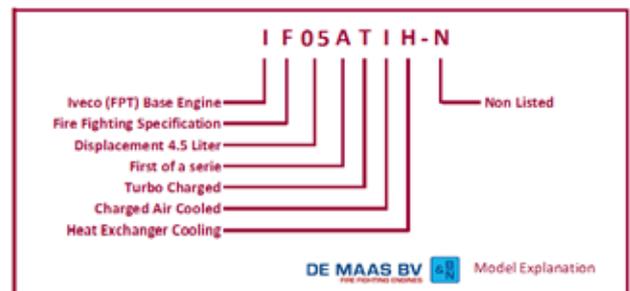
Power at flywheel according to 97/68 EC, after 50 hours running, 3% tolerance, fuel Diesel EN 590

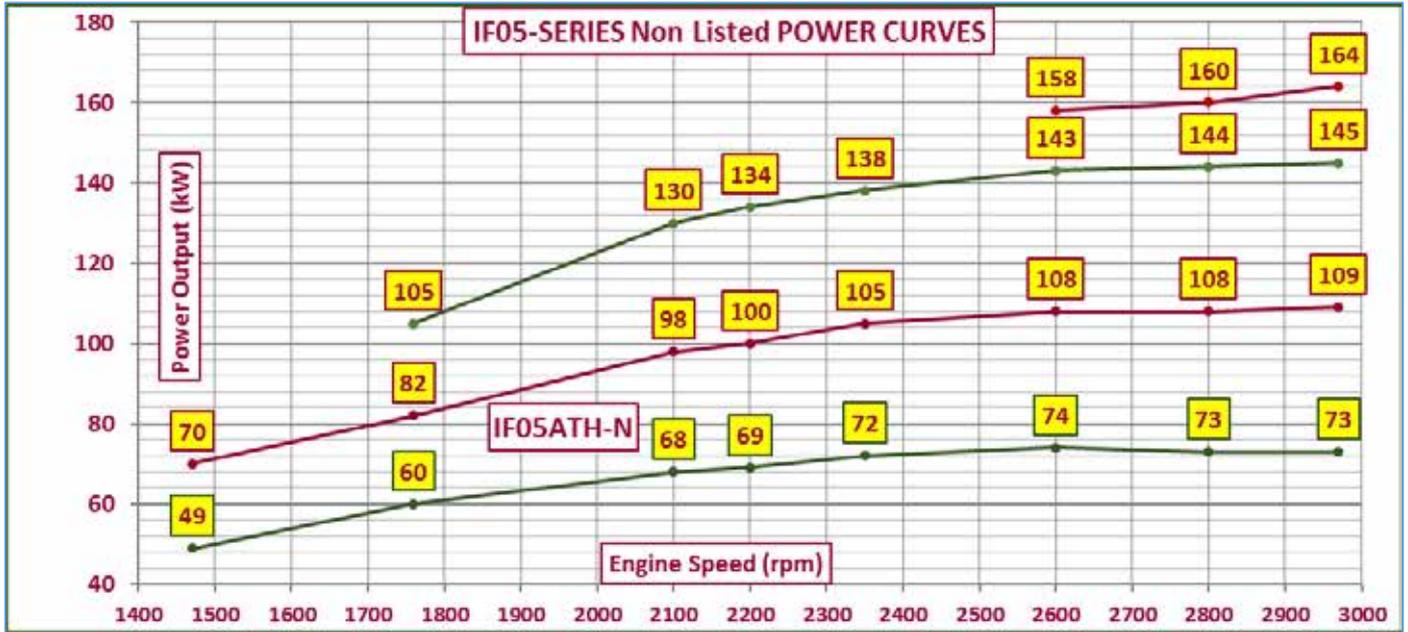
Engines rated at standard ISO 3046/1, 25 ° Celsius air temperature, 100 kPa atmospheric pressure, 30 % relative humidity – Applicable also to DIN 6271, BS 5514, SAE J1349 Standards.

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°F (5.6°C) above 77°F (25°C) ambient temperature.

**Restrictions:** Use ratings only for stand-by fire pump applications





Engine Equipment	Standard	Optional
Air cleaner	Drip proof, disposable	Heavy Duty Dry Air Filter Version
Alternator	24 Volts x 90 Amps with belt guard	-
Exhaust protection	Heat Shield, Elbow Matrass	-
Exhaust flex. connection <i>mm (inch)</i>	75 (3")	IF05AH-N Optional
Flywheel housing	SAE 3	DRIVE LINE
Flywheel connection	SAE 11½ " with 125 number of teeth	STUB SHAFT
Fuel filter	Full flow, cartridge type	Pre filter with water separator
Fuel Lines by flex. hoses acc. ISO15540	-	Fix connections for Ø10 Pipes
Fuel Lift Pump	Not included	Electrical 24 Volts version
Engine heater	230 Volts 1,500 Watt	-
Governor speed	Constant speed, mechanical	-
Mechanical stop lever	-	Built in fuel pump
Heat Exchanger DE MAAS model	1½ " IN and 1½ " OUT (BSP)	20 Bar pressure end-caps (TIH)
Instrument panel	-	Build on Engine
Junction box	-	Integral with instrument panel
Lube Oil filter	-	Full flow, cartridge type
Lube Oil pump	-	Gear type, driven by crankshaft
Manual start	-	Built on
Overspeed control	-	Test on instrument panel
Run-stop control	-	On instrument panel
Starter motor	24 Volts x 3 kW	12 Volts
Throttle Control	Adjustable speed control	Test (low speed) provision with cable
Water pump	Centrifugal type driven by gear	-
Mountings	Pedestal type (Centre Line 400 mm)	-
Exhaust system	-	Complete standard assembly Kits
Cooling Loop	-	Diversity of specifications
Sea worthy packing	-	Crate or case

As part of our policy of on-going improvement resulting from continuing test and development programs, we reserve the right to alter design or specification without notice. Please check the latest information at De Maas to inform yourself of any changes.