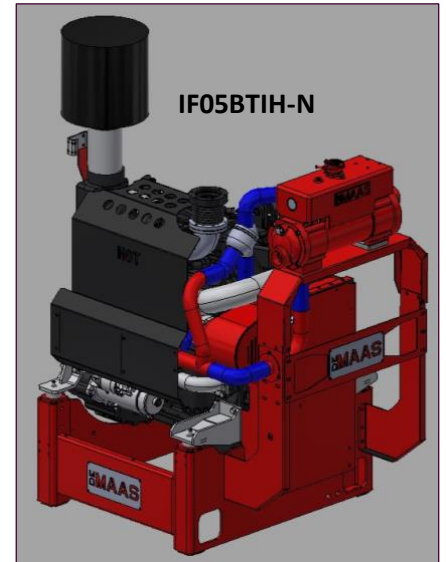
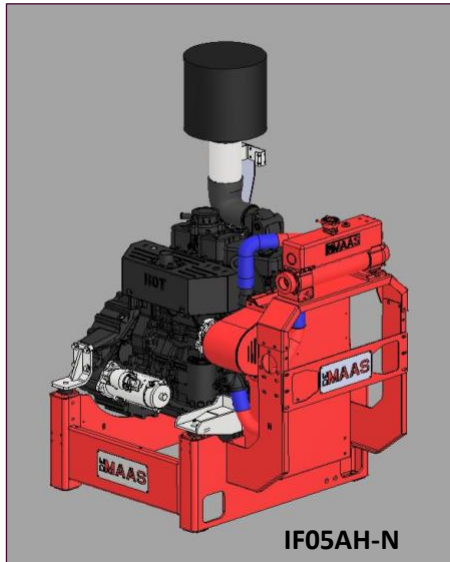
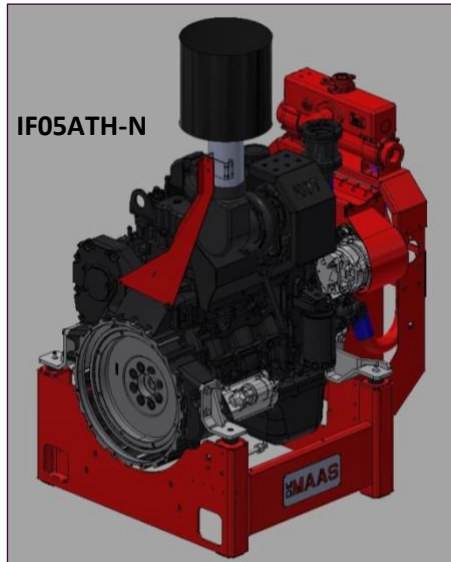


| Engine Rating | | 1,470 | 1,760 | 2,100 | 2,200 | 2,350 | 2,600 | 2,800 | 2,940 |
|---------------|----|-------|-------|-------|-------|-------|-------|-------|-------|
| IF05AH-N | kW | 49 | 60 | 68 | 69 | 72 | 74 | 73 | 73 |
| IF05ATH-N | kW | 70 | 82 | 98 | 100 | 105 | 108 | 108 | 109 |
| IF05BATIH-N | 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 ^{Std} | N45 MNT F41 ^{Plus} |
| • 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 (<i>battery not included</i>) | | | |
| • 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.

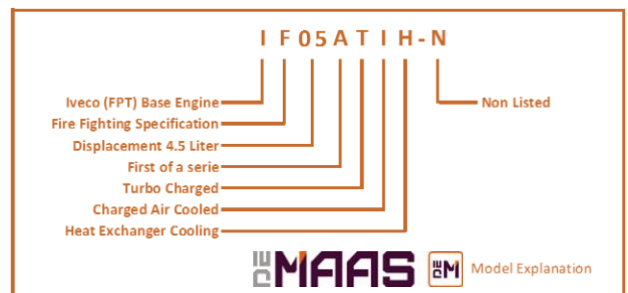
Power at flywheel according to 97/68 EC, after 50 hours running, 3% tolerance, fuel Diesel EN 590

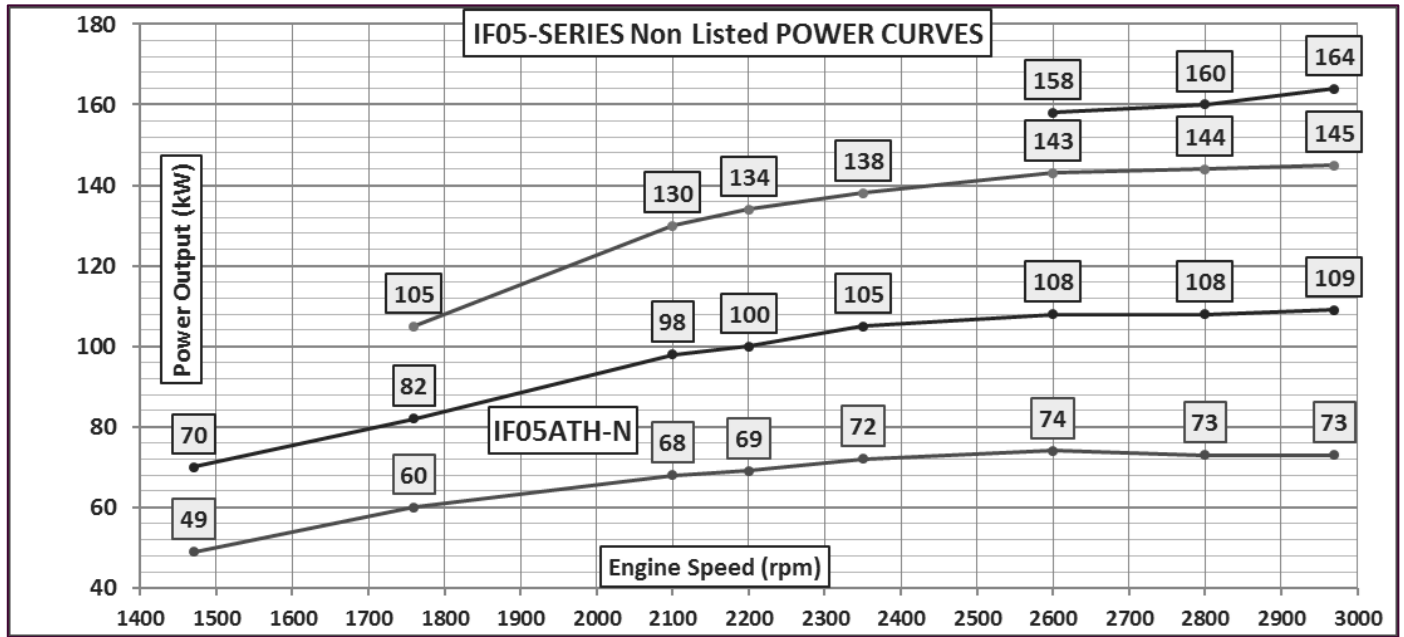
Engines rated at standard ISO 3046/1, 25 ° Celsius air temperature, 100 kPa atmospheric pressure, 30 % relative humidity – Applicable also to DIN 6271, BS 5514, SAE J1349 Standards.

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.