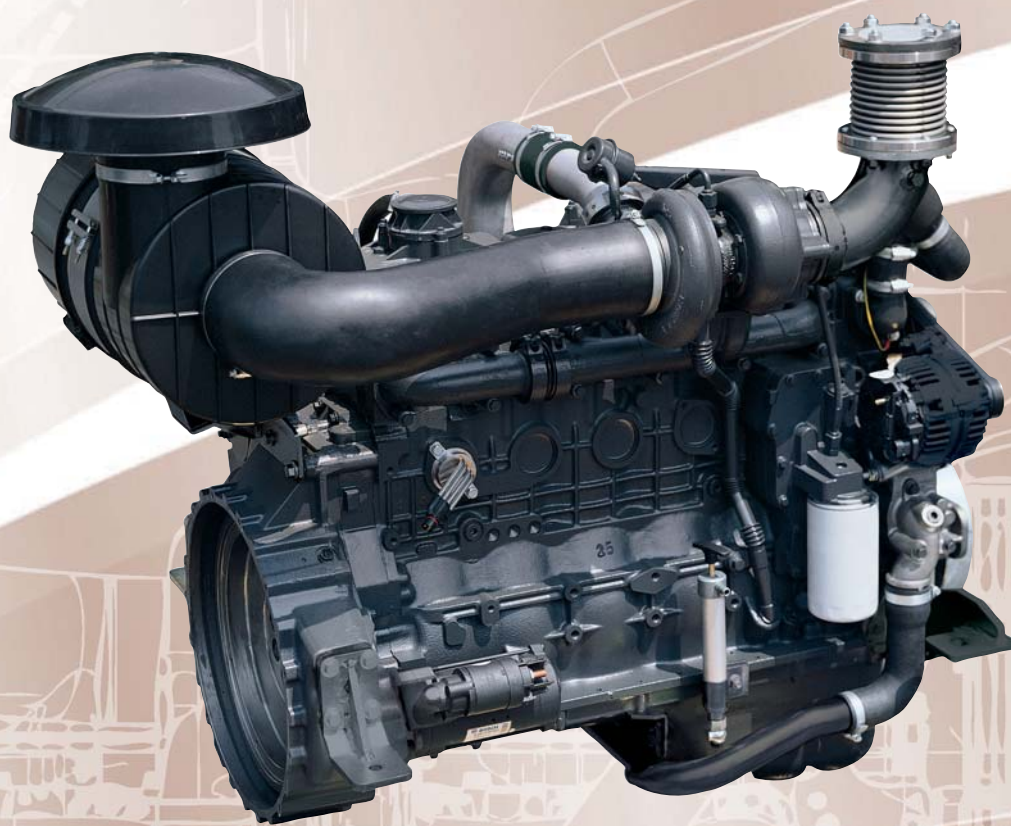


N67 MNT F41

FOR FIRE FIGHTING PUMPS
6 CYLINDERS IN LINE - DIESEL CYCLE
Max 222 kW (302 HP) @ 2940 rpm



SPRINKLER APPLICATIONS

N67 MNS F41 FOR FIRE FIGHTING PUMPS

| | | |
|--|------------------|------------------------|
| Thermodynamic cycle | | Diesel 4 stroke - D.I. |
| Air intake | | TAA |
| Arrangement | | 6L |
| Bore x Stroke | mm | 104 X 132 |
| Total displacement | l | 6.7 |
| Valves per cylinder | | 2 |
| Cooling | | liquid |
| Direction of rotation (viewed facing flywheel) | | CCW |
| Compression ratio | | 17.5 : 1 |
| Rotation mass moment of inertia (without flywheel) | kgm ² | 0.31 |
| Standard flywheel inertia | kgm ² | 0.70 |

Air induction

| | | |
|---|--------------------------|---------------|
| Max suggested intake restriction with clean air filter | kPa (bar) | 3.5 (0.035) |
| Max allowable restriction with dirty air filter | kPa (bar) | 6.5 (0.065) |
| Air requirement for combustion at 100% load/rated speed | kg/h (m ³ /h) | 1410 (1200) |
| Turbocharging pressure at full load/rated speed | kPa (bar) | 160 (1.6) |
| Turbocharging air max temperature (engine inlet) | °C | 55 |
| Heat rejected to intercooler at maximum power | kJ/s (kcal/h) | 44.7 (38,400) |
| Intercooler system max pressure drop | kPa (bar) | 10 (0.10) |

Exhaust system

| | | |
|--|-----------|----------|
| Max allowable backpressure | kPa (bar) | 7 (0.07) |
| Max exhaust temperature at full load/rated speed (after turbo) | °C | 580 |
| Exhaust flow at max output | kg/h | 1460 |

Lubrication system

| | | |
|--|-----------|----------|
| Minimum oil pressure at idle | kPa (bar) | 70 (0.7) |
| Max oil temperature at full load/rated speed | °C | 120 |
| Engine angularity limits continuous operation: max front up and front down | 0/360 | 25 |
| max left hand and right hand | | 0/360 25 |
| Total system capacity including pipes, filters etc. | liters | 12.8 |

Cooling system

| | | |
|---|-------------------|----------------|
| Coolant capacity (engine only) | liters | 8.5 |
| Water pump flow at rated speed | m ³ /h | 15 |
| Heat to reject by heat exchanger at max power | kJ/s (kcal/h) | 105 (90,600) |
| Thermostat (modulating range) | °C | 83 ÷ 95 |
| Cooling liquid max temperature | °C | 103 |
| Min/max inner pressure in the cooling circuit | kPa (bar) | 30/100 (0.3/1) |
| External cooling system max pressure drop | kPa (bar) | 35 (0.35) |

Fuel system

| | | |
|--------------------------------------|-----------|-------------------|
| Injection system | | Rotary pump |
| Gas oil max intake restriction | kPa (bar) | 0 (positive head) |
| Gas oil intake reference temperature | °C | 30 |

Electrical system

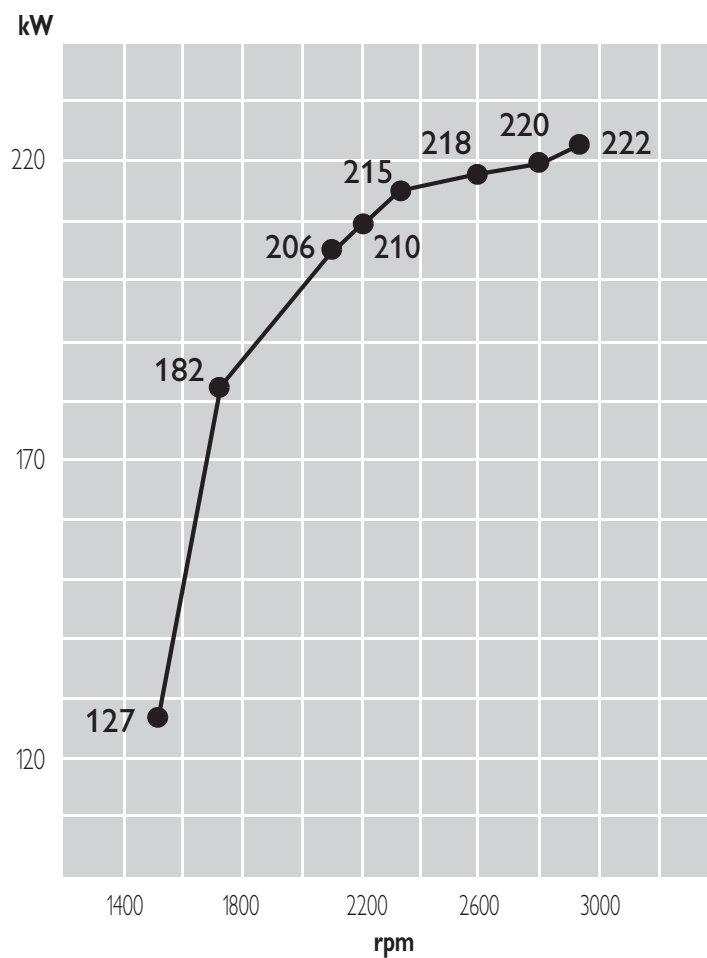
| | | |
|---------|---|----|
| Voltage | V | 24 |
|---------|---|----|

N67 MNS F41 FOR FIRE FIGHTING PUMPS

| | | | | | | | | | |
|--|-------------------------|------------|------|------|------|------|------|------|------|
| Engine gross power ratings * | rpm | 1470 | 1760 | 2100 | 2200 | 2350 | 2600 | 2800 | 2940 |
| | kW | 127 | 182 | 206 | 210 | 215 | 218 | 220 | 222 |
| | HP | 173 | 247 | 280 | 285 | 292 | 296 | 299 | 302 |
| Specific fuel consumption at maximum rating | g/kWh @ rpm | 235 @ 2940 | | | | | | | |
| Oil consumption at max rating | (% of fuel consumption) | 0.1 | | | | | | | |
| Minimum starting temperature without auxiliaries | °C | -15 | | | | | | | |
| Dry weight (standard configuration) | kg | 530 | | | | | | | |

* **Gross Power** at flywheel according to ISO POWER 3046. Applicable also to DIN 6271, B.S. 5514 and SAE J 1349.

Test conditions: ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity.



Dimensions

L = 1046 mm

W = 670 mm

H = 1003 mm

N67 MNS F41 FOR FIRE FIGHTING PUMPS

Engine selection

In order to select an engine determine the maximum power absorbed by the pump at the top of the appropriate impellor curve and add a 10% margin to this power requirement. This now determines the minimum power requirement for fire pump duty. An appropriate selection should then be made using the engine gross power output after deduction of the fan absorption.

Standard configuration (version N67 MNT F41.10)

| | | |
|---|--------|--|
| Flywheel housing prearranged for pick-up | type | SAE 3 |
| Flywheel size | inch | 11" 1/2 |
| Intake manifold location | | left side / upward inlet |
| Exhaust manifold / turbocharger location | | right side |
| Turbocharger | | adjusted, with waste gate |
| Turbocharger location | | high position |
| Fan transmission ratio | | 1.12 to 1 |
| Distance between fan - crankshaft centers | mm | 296 |
| Fuel filter | n° | 1 - left side |
| Fuel prefilter | | – |
| Fuel pump | | included |
| Oil filter | n° | 1 - right side |
| Oil sump | | sheet steel / front well |
| Oil vapours blow-by circuit | | on timing cover |
| Oil heat exchanger | | included |
| Oil filler | | on timing cover 1 st cylinder |
| Exhaust counter flange | | included |
| Starting motor | | 24 V - 4 kW |
| Alternator | | 24 V - 90 A with W contact |
| Engine stop device | | electrical excitation |
| Wiring harness | | – |
| Painting | colour | grey |

Not included in the standard configuration

| | |
|--|---------------|
| Battery - minimum capacity recommended | 180 Ah (24 V) |
| Battery - minimum cold cranking capacity recommended | 800 A (24 V) |

Standard configuration (version N67MNT F41.01)

Differs from the version N67 MNT F41.10 for:

- Turbocharging air / water heat exchanger
- without fuel pump.

FPT OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE, CONTACT THE FPT SALES NETWORK.

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