



Base Engine - NEF 45 Mechanic Gdrive

Customer Management

June 2017

LATAM – Customer Management

Base Engine Project

Engine pivot reference

- F1 Family (n.2)
 - F1A
 - F1C
- NEF Family (n.6)
 - NEF 45 Electronic On Road
 - NEF 67 Electronic On Road
 - NEF 45 Mechanical Off Road
 - NEF 67 Mechanical Off Road
 - NEF 45 Electronic Off Road
 - NEF 67 Electronic Off Road
- Cursor Family (n.6)
 - CURSOR 9 On Road
 - CURSOR 10 On Road
 - CURSOR 13 On Road
 - CURSOR 9 Off Road
 - CURSOR 10 Off Road
 - CURSOR 13 Off Road
- S8000 Family (n.2)
 - S8000 3 Cyl. Off Road
 - S8000 4 Cyl. Off Road
- G - Drive Family (n.6)
 - S8000 G - Drive
 - NEF 4 G - Drive**
 - NEF 6 MEC. G – DRIVE
 - NEF 6 ELE. G – DRIVE
 - CURSOR 9 G - Drive
 - CURSOR 13 G - Drive



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Base Engine Matrix

Block 1 – Engine Type

Engine Family	NEF
Number Cylinder	4
Displacement (cm3)	4500
Emission	Non Emissioned
Mission (Off-Road or On-Road)	Industrial
Current Vehicle Application	Gdrive
Segment Application	Industrial

Block 2 – Base Engine

Power (kVA@rpm)	60@1500
Injection Type@Brand	Injection pump
Engine Speed(rpm)	1800
Voltage (V)	12
Crankcase	500
Overhead Cylinder	Steel
Dry weight (Including cooling package)	Iron Cast 4 Valves
Driven Type	Gear
EGR System (Yes or No@Type)	NA

Block 3 – Dressing

Turbocharger	WG
Flywheel to Clutch Assembly (Inch)	11' 1/2
Flywheel Housing (SAE)	SAE
Oil Sump	YES
Starter Mounting	YES
Alternator (Brand@Am)	90
HWT and LOP sensors	YES
WT and OP Transmitters for instruments	YES
Front Mounted engine support	YES
Front Mounted radiator support	YES
Mounted Radiator	YES
Fuel Filter	YES
Oil Drain plug	YES
Fan Protection	YES
Fan air mounted with a belt tensioner	YES
Starter	YES

Variant Engine Matrix



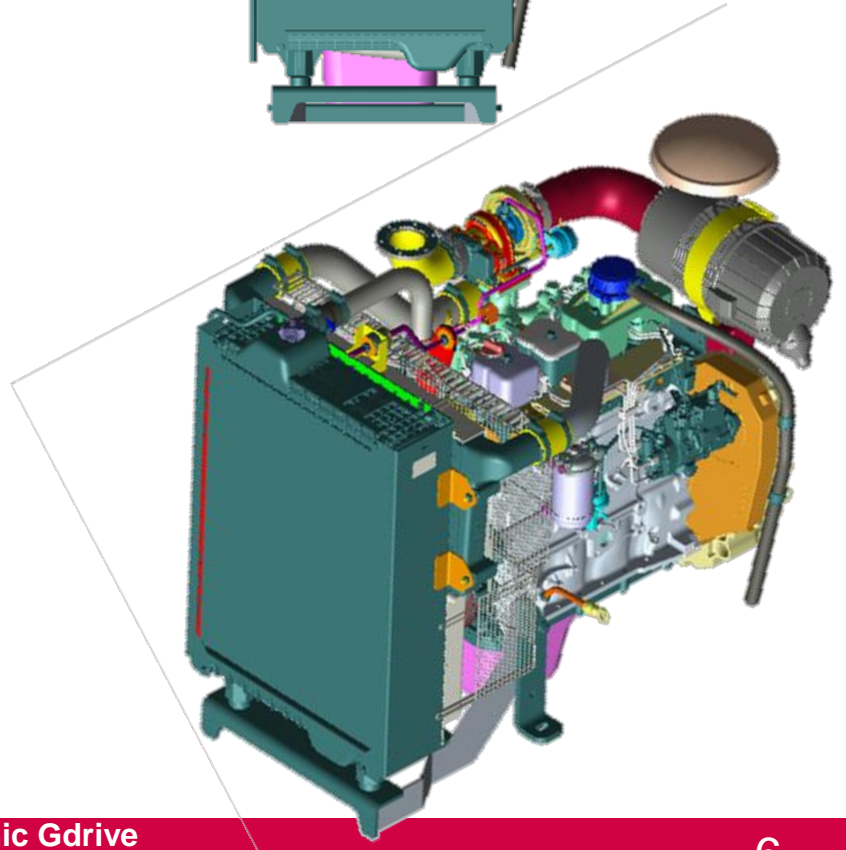
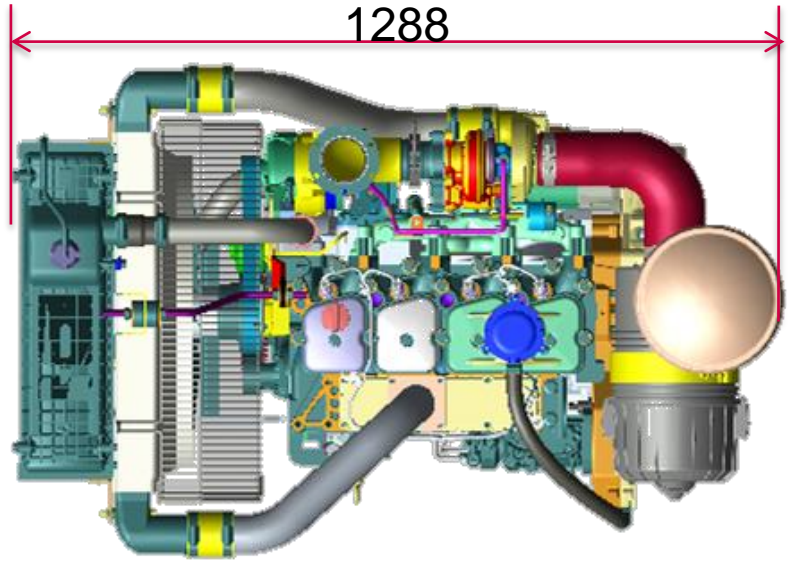
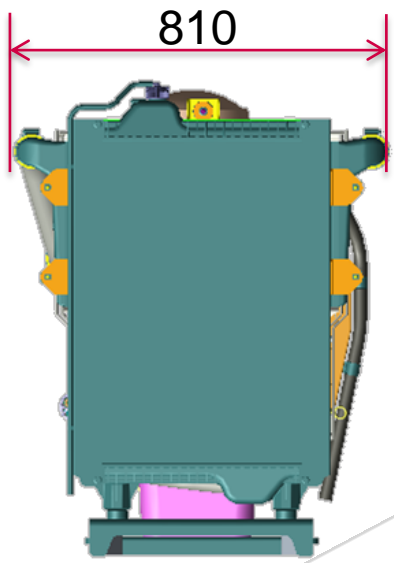
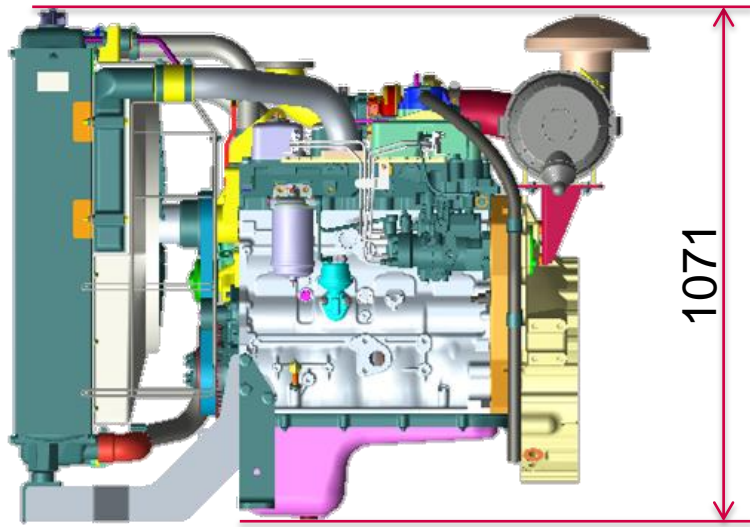
CNH Currents Application
Power Generation

Turbocharges Available
West Gate (WG)

Engine Dress-Up (Optional)
Oil extraction pump
Oil extractwith resorvoir
Resistance to water preheating 120Vca or 230Vca
Protection to the exhaust monifold and turbine
Flexible exhaust pipe
Eletric System to 24 Vdc

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Base Engine Max. Dimensions/Views



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General Engine Portfolio Variants

FPTi Engines Potfolio												
Description	Characteristics	Variant 1	Variant 2	Variant 3	Variant 4	Variant 5	Variant 6	Variant 7	Variant 8	Variant 9	Variant 10	Variant 11
GENERAL ENGINE CHARACTERISTICS												
Engine Family	NEF	NEF	NEF	NEF	NEF	NEF	NEF	NEF	NEF	NEF	NEF	NEF
Number Cylinder	4	4	4	4	4	4	4	4	4	4	4	4
Displacement l	4.5	4.5	4.6	4.7	4.8	4.9	4.10	4.11	4.12	4.13	4.14	4.15
Emission	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned	Non Emissioned
Mission (Off-Road or On-Road)	Industrial	Off Road	Off Road	Off Road	Off Road	Off Road	Off Road	Off Road	Off Road	Off Road	Off Road	Off Road
Current Vehicle Application	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive	Gdrive
Segment Application	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial	Industrial
Footprint	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas	Sete Lagoas
ENGINE BASE CONFIGURATION												
Power (kVA@rpm)	60@1500	131@1800	125@1500	112@1500	110@1500	98@1800	98@1500	85@1500	80@1800	70@1500	60@1800	58@1500
Injection Type@Brand	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump	Injection pump
Engine Speed(rpm)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Voltage (V)	12	12	12	12	12	12	12	12	12	12	12	12
Crankcase	500	500	500	500	500	500	500	500	500	500	500	500
Overhead Cylinder	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Steel
Dry weight (Including cooling package)	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves	Iron Cast 4 Valves
Driven Type	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear
EGR System (Yes or No@Type)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENGINE DRESS UP												
Turbocharger	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG	NA
Flywheel to Clutch Assembly (Inch)	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2	11' 1/2
Flywheel Housing (SAE)	SAE	SAE	SAE	SAE	SAE	SAE	SAE	SAE	SAE	SAE	SAE	SAE
Oil Sump	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Starter Mounting	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Alternator (Brand@Am)	90	90	90	90	90	90	90	90	90	90	90	90
HWT and LOP sensors	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
WT and OP Transmitters for instruments	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Front Mounted engine support	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Front Mounted radiator support	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Airheat Exchanger	Yes	YES	YES	YES	YES	NA	NA	NA	NA	NA	NA	NA
Mounted Radiator	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Fuel Filter	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Oil Drain plug	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Fan Protection	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Fan air mounted with a belt tensioner	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Starter	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
ENGINE PART NUMBER	5801395388	5801395387	5801395332	5801395386	5801395331	5801395385	5801395330	5801395327	5801395384	5801395325	5802184263	5802185302

FPTi Engines Portfolio – NEF45 Mechanic Gdrive Industrial Application

Main Features & Competitive Advantages

MAIN FEATURES

- ❑ In-line 4-cylinders
- ❑ Iron cast cylinder block
- ❑ Iron cast cylinder head
- ❑ 2 valve, gear driven OHV
- ❑ Mechanical pump system - Delphi
- ❑ Turbocharger Wastegate
- ❑ Fuel consumption optimized

COMPETITIVE ADVANTAGES

- ❑ Intake manifold integrated with cylinder head
- ❑ Standard G2 class (ISO 8528-5)
- ❑ Predisposition to apply electronic actuator to increase top level G3 class (ISO 8528-5)
- ❑ temperature cold-start without auxiliary up to -10 °C
- ❑ Engine documentation
- ❑ Production custom-made
- ❑ Interface standard SAE 3 generator
- ❑ small engines
- ❑ complete range of power
- ❑ Compatibility with standard and alternative fuels in accordance with the regulations.