

SPECIFICATION SHEET

Fuel	Rating	Standby Power	Prime Power
Diesel	Power: hp (kW) 3600 rpm	21.98 (16.4)	19.83 (16.4)
	Power: hp (kW) 1800 rpm	13.4 (10.0)	12.1 (9.0)

Rating Definitions: Power ratings of Emergency Standby and Prime are in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046.

Standby Power Rating - is applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. A standby rated engine should be sized for a maximum of an 80% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the Standby Power rating.

Prime Power Rating - is available for an unlimited number of hours per year in variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 24 hours. The Total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capability is available for a period of 1 hour within a 12 hour period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year..

STANDARD FEATURES:

DT Power Corp Doosan Compact Diesel Engines are designed for efficiency, as well as performance, with the durability and quality you expect. Lower fuel consumption, longer maintenance intervals and maintenance-free after-treatment systems lowers the total cost of ownership over the life of your engine.

With its strong power at small displacement, Doosan Compact Diesel Engines are ideal for a wide variety of compact stationary and mobile generator set systems.

Key System Features are:

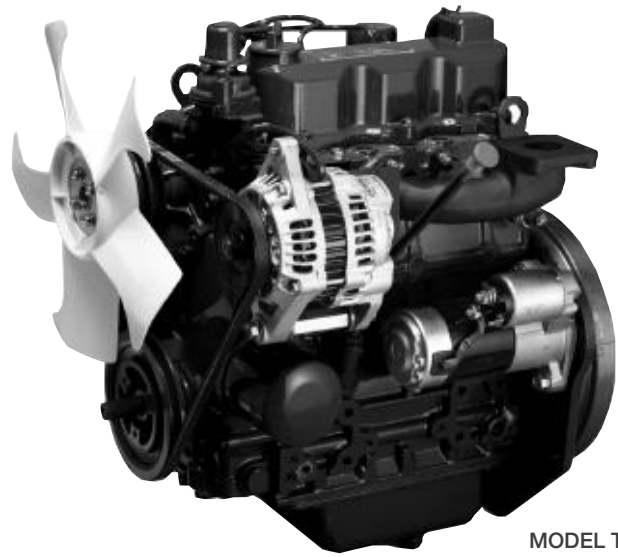
- EPA Tier 4 Engine certified for Industrial applications
- Packaged with flywheel housing to SAE standards
- Flywheel machined to SAE J620 adaptation
- Compact design to adapt to multiple OEM applications
- Adds value to off-highway equipment
- No DPF (Diesel Particulate Filter)
- Strong power and high low-end torque for enhanced performance
- Low total cost of ownership

Engine:

- Doosan SU103N
- Rated for high intermittent power with high torque lower down the power curve for better performance
- Cooling system capable of operation at 120°F ambient
- Overhead valve assembly with 2-intake and 2-exhaust valves
- Diesel direct injection
- Bosch K-type mini pump
- ECU Woodward APECS 4800
- Naturally aspirated
- Compression ratio 21.0:1
- DOC (Diesel Oxidation Catalyst) aftertreatment

Engine Mountings and Drive Configuration:

- SAE #5 flywheel housing
- Fittings for mounting exhaust, radiator, and air cleaner
- All rotating surfaces protected with guards
- Oil and water drain lines



MODEL TPD10-G
G-Drive Diesel Engine

Maintenance:

- Oil filter change 500-hours
- Fuel filter change 500-hours
- Valve adjustment after 1000-hours

After Treatment:

While traditional engine makers are relying on conventional technologies to satisfy the regulations of emission control, Doosan Infracore has developed a unique after-treatment system.

Doosan Compact Diesel engines use a Non-DPF System which is a much simpler system than the DPF-type systems solutions – no concerns on maintenance or quality issues.

Consider the benefits:

- Elimination of unnecessary parts (DPF with complicated sensors, wires, diagnosis lamp and etc)
- Prevention of after-treatment quality issues
- Maintenance – Free (No regeneration process and ash cleaning required)

Advanced Fuel Injection System:

The fuel injection system of Doosan Compact Diesel Engines utilize the most advanced design for fuel mixing and combustion within the cylinder head. The Bosch K-type mini pump provides the latest in small compact diesel direct injection technology.

- Low exhaust gas emission
- Low noise vibration
- Better fuel efficiency
- Optimized governing for each application

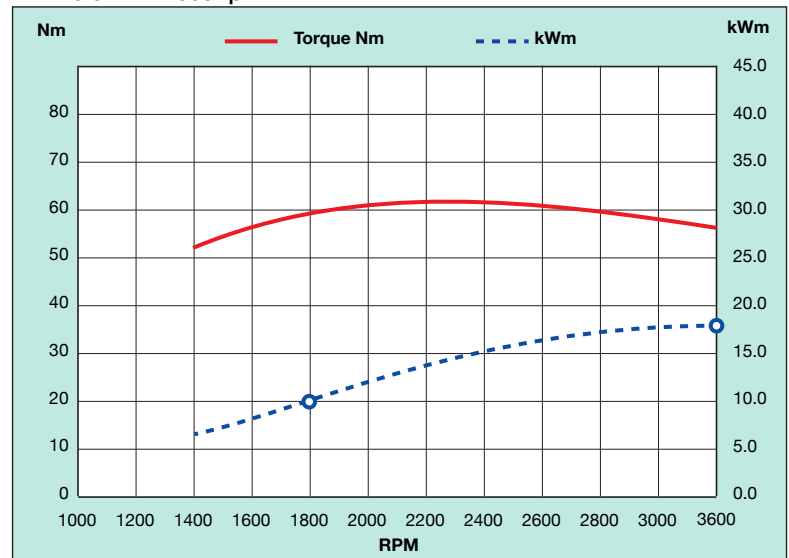
WARRANTY:

- Engine covered under the original equipment manufacturer's warranty - consult DT Power Corp for details

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

DRIVE ASSEMBLY:	
Configuration	Bare engine with mounting points
Drive connections	SAE housing
Configuration	G-Drive constant speed
Drive shaft speed rpm	1800 or 3600 rpm
ENGINE SPECIFICATION:	
Manufacturer	Doosan
Model	SU103N
Emissions	Tier 4 - Final & Stage IIIB
Crankshaft speed	1,800 or 3,600 rpm
Engine Type & Combustion	Diesel Direct Injection
Fuel Injection System	Bosch K-type mini pump
Fuel Pressure	Mechanical centrifugal
Aspiration	Naturally Aspirated
Diesel fuel grade	EN590 : 2009 Diesel
Cylinder Arrangement	In-line 3
Displacement in ³ (liters)	61.45 (1.001)
Bore and stroke ins (mm)	2.95 X 2.99 (75 X 76)
Peak power hp (kW) @ 3600 rpm	21.98 (16.4)
Cooling	Water Cooled
Engine Control	Woodward APECS 4800
Compression ratio	21.0:1
Air cleaner type	Canister air cleaner
Aftertreatment	Diesel Oxidation Catalyst DOC
Ventilation System	Closed-Circuit Ventilation
Max. back pressure - ins H ₂ O (kPa)	39.39 (9.8)
Rotation viewed on flywheel	Counter clockwise
Flywheel housing	SAE No.5
Sound at 1m from engine block dB(A)	TBA
Max. Exh. Temp at full load degrees °F (°C)	932 (500)
Exhaust Gas Flow - ft ³ /min (m ³ /min)	54.0 (1.53) 3000rpm
COOLING SYSTEM FOR OPERATING AT 120°F AMBIENT:	
Water pump belt driven	Centrifugal type
Eng. Cooling air flow - ft ³ /min (m ³ /min)	51.9 (1.47) 3000rpm
Engine Coolant Capacity gallons (Liters)	0.42 (1.6)

FUEL CONSUMPTION	Continuous / {Intermittent}
100%	1.35 (5.0)/{1.51 (5.7)}
75%	TBA
50%	TBA
25%	TBA
LUBRICATION SYSTEM	
Oil pan capacity with filter - quarts	4.02 (3.8)
Recommended lubricating oil grade	15W 40
Oil pump	Gear type driven by crankshaft
Oil consumption at full load	< 0.1% of fuel consumption
Oil Filter	Full flow, cartridge type
Oil pressure min. - psi (kPa)	35.5 (245)
ELECTRICAL SYSTEM	
Battery charger	12 volt x 75A Alternator
Starting motor	12 volt x 2.7kW
Wet cell battery	Lead Acid
Battery Capacity recommended	64AH, 950CCA
Starting Aid	Glow Plugs

**16.4kWm 3600 rpm
10.0kWm 1800 rpm**
DTP10-G Power Curves

ARRANGEMENT DRAWING & DIMENSIONS MODEL: DTP10-G G-Drive Diesel Engine

KEY DIMENSIONS AND WEIGHT with DOC + SCR		
Description	Key	Inches
Height	H	21.8
Length	L	20.2
Width	W	19.0
Shaft Height	SH	TBA
Dry Weight lbs (Kg)		222 (101)
DT Power Corp 5820 NW 84 th Avenue Miami, Florida 33166 Call: 305.592.9745		

