

DUAL FUEL/GASOLINE & NATURAL GAS

1.5 Liter

For Industrial Application

ZPP 415



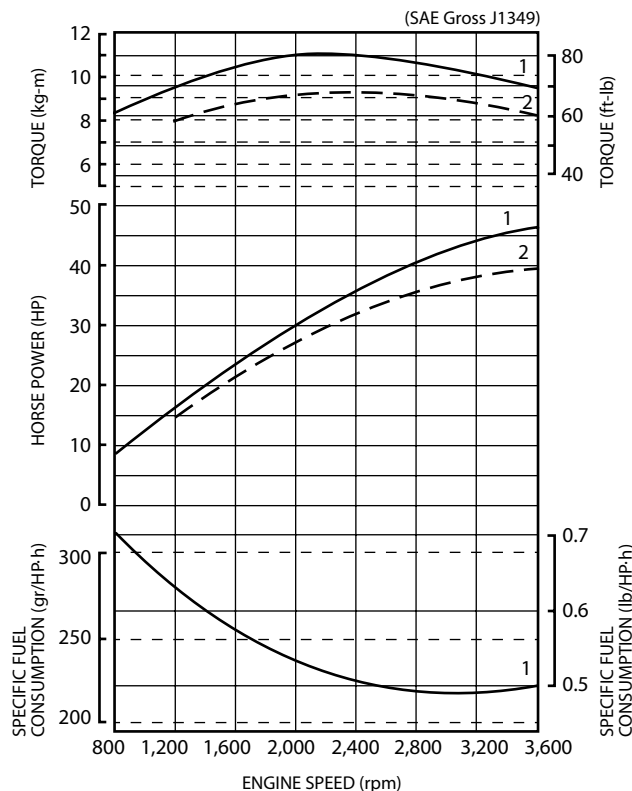
(Some parts optional)

SPECIFICATION DATA

Intermittent output (SAE Gross J1349)	46 Hp/3,600 rpm
Continuous output (SAE Gross J1349)	39 Hp/3,600 rpm
Peak torque (SAE Gross J1349)	11 kg-m (80 ft-lb)/2,200 rpm
Minimum fuel consumption	225 g/Hp-hr (0.496 lb/Hp-hr)/3,200 rpm
Fuel and type	Gasoline, 4-cycle, O.H.V.
Cylinder arrangement	4 in-line
Combustion chamber	Wedge shape
Bore x stroke	76 mm x 82 mm (2.99 x 3.23 in)
Total piston displacement	1,487 cc (90.74 cu in)
Compression ratio	9.0 : 1
Length x width x height (standard model)	527.8 x 530.8 x 576.3 mm (20.78 x 20.90 x 22.69 in)
Dry weight (standard model)*	103 kg (227 lb)

*Excl. ship loose parts.

PERFORMANCE CURVE



Curve 1; Intermittent Gross Output

This is the highest output obtainable at SAE standard ambient conditions from a basic engine equipped only with the built-in accessories essential to its operation. These levels may be only maintained for operating period of short duration.

Applications: Scissorlifts, Aerial platforms, Scrubber/sweepers, Utility vehicles, Construction equipment

Curve 2; Continuous Gross Output

This is the output which can be obtained at SAE standard ambient conditions from a basic engine, operating in a continuous duty mode.

Applications: Generators, Welders, Water pumps, Air compressors, etc.

ZENITH
POWER PRODUCTS LLC

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STANDARD EQUIPMENT

EQUIPMENT	FEATURES
Exhaust manifold	Downward outlet, flat type, 3 studs, exhaust gasket, and nuts included
Intake manifold	Cooling water-heated
Cylinder head gasket	Carbon graphite
EFI	Electronic Fuel Injection
Fuel pump	Electric
Fuel tube	Metal tube
Flywheel	For 7. clutch
Rear plate	Nissan original
Fan pulley (W/P pulley)	Water pump to crank pulley ratio; 1:1.08
Water pump	Centrifugal type, driven by V belt, pump to engine speed; 1.08:1
Oil pan	Pressed steel plate, capacity high 2.7ℓ (2-7/8 US qt)
Oil filter	Replaceable paper element type
Crankshaft pulley	Two groove, effective dia. 134 mm (5.28 in)
Thermostat	Wax pellet type, 82° C (180° F)
Distributor	Electronic (IC)
Ignition coil (Ship loose)	Remote location
Resistor (Ship loose)	N/A
Spark plug	Grade B4ES (NGK)
Alternator, Voltage regulator (Ship loose)	N/A

*Cooling fan and Starter motor standard equipment.

OPTIONS

EQUIPMENT	FEATURES
Electronic fuel injection	Includes electronic governor
Governor	Electronic *Governed speed can be changed upon customer request
Exhaust manifold	Down swept outlet
Exhaust manifold end kit	3 hole flat fixing plate, exhaust nuts, and gasket included
Flywheel & Housing	SAE flywheel for 7.5. o/c clutch & SAE #5 housing Nissan original flywheel for 10. clutch & original housing
Engine shut down	Low oil pressure/overheat
Cooling fan	Pusher: 320 mm (14.20 in) dia. x 6 Sucker: 360 mm (14.20 in) dia. x 7
Fan spacer	20 mm (0.79 in)
Thermostat	88° C (190° F)
Water outlet	Right outlet (From fan side view)
Fan pulley (W/P pulley)	Fan to crank pulley ratio; 1:1.3
Air cleaner	Air horn for remote air cleaner
Crankshaft pulley	Two grooves
Ignition system	Electronic ignition (IC ignition)
Alternator	12V-50A IC regulator built-in type
Starter motor	12V-1.2kw reduction type
Engine mounting bracket & insulator	Consult your local Engine Distributor
Oil pan	Deep type
Engine assy with side P.T.O. (For hydraulic pump)	N/A

* Please consult with Zenith Power Products Engine Distributors, when you need other items

Design and specifications are subject to change without notice.

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