

# PROVIDING BETTER POWER

# **ROUGHNECK DIESEL: 40KW**

The Roughneck generator was designed with rugged simplicity in mind: Three phase, open or enclosed packages that are designed for emergency applications but built with prime rated liquid-cooled engines that can run for extended periods of time during power outages.





#### **Durable Industrial Engine**

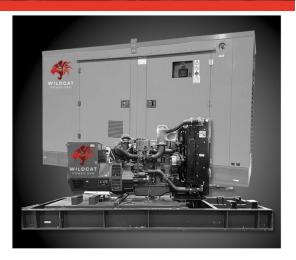
•Planned for emergency applications but built for industrial applications, the Roughneck's power plant is a premier fixed speed (1,800 RPM) engine built to provide strong, reliable power without sacrificing longevity and quiet operation.

#### **Quality Clean Power**

 Voltage regulation ensures that electronics are safely powered with less 2.5% total harmonic distortion (THD) at no load.

#### **NFPA-110**

Wildcat designed the Roughneck to exceed NFPA-110, Level 2
 Emergency Power Supply Systems (EPSS) by providing prime power (PP) to meet EPSS Class 168 Type 10.



#### **Digital Controls**

 Designed for single genset applications, the Roughneck's digital controls monitor the genset's voltage, current, power, frequency, engine speed, oil pressure and coolant temperature on a back-lit LCD display for ease of use.

#### **Industrial Class Alternator**

•Protected with Class H insulation and standard 40°C nominal rating, the Roughneck's standard 12-wire winding and 2/3 pitch meet all key international standards and regulations including UL 1446.

#### Easy to Service

 Preventative maintenance and in-field repairs are made easier with our simplified engineering and non-proprietary parts.

#### **GENERATOR SET RATING**

Model	Voltage	Power Factor	Phase	Hertz	Circuit Breaker Amps	kW / kVA	BMEP (Bar)	BSFC (g/hp*hr)	Emission Compliance	Controller
Roughneck Diesel 37KW RO0040D3A*XE	120/240	1.0	1	60	175	37.5 / 37.5	10.1	163	Tier 3	DeepSea
Roughneck Diesel 40KW RO0040D3B*XE	208 / 120	0.8	3	60	150	40 / 50	10.1	163	Tier 3	DeepSea
Roughneck Diesel 40KW RO0040D3C*XE	240/120	0.8	3	60	125	40 / 50	10.1	163	Tier 3	DeepSea
Roughneck Diesel 40KW RO0040D3D*XE	480 / 277	0.8	3	60	63	40 / 50	10.1	163	Tier 3	DeepSea



#### **ENGINE SPECIFICATIONS**

Engine	
Manufacturer	KOEL
Туре	4R810TA2 Powertrain 4 Stroke, Turbo Charged & Charge Air Cooled
Speed (RPM)	1800
Cylinder Arrangement (	Inline 4
Displacement (L / cc)	3.2L / 3240cc
Bore & Stroke (in / mm)	3.779" x 4.409"/96 x 112
Compression Ratio	16.5:1
Governor Type	Isochronous / Electronic
Frequency Regulation Steady State	+/-0.25%
Frequency Regulation No-loadto Full-load	Isochronous, Constant Speed
Air FilterType	Dry
Limited Warranty	3 Years, 5,000 Hours
Lubrication System	
Туре	Full Pressure
Oil Capacity (qt/L)	12 / 11.5
Oil Filter (Quantity / Type)	1/Spin-On
CoolingSystem	
Radiator Type	Aluminum
Fan Type	Pusher
Sound Rating at 7 Meters, Low	est Side
NoLoad	72 dB(A)
Engine Crankcase Vent System	
Engine Crankcase Vent System	Closed Crankcase Vent

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#### WILDCAT POWER GEN DeepSea Controller

•User-friendly control panel for troubleshooting

•Conveniently monitors diagnostic

conditions, displays system fault codes and sets weekly exercise cycle

Easy-to-read alpha-numeric scrolling display

•Single & 3 Phase generator applications

ULrecognized

#### **Electrical System**

Battery Quantity	1
Battery Voltage (VDC)	12
Battery CCA (A)	900
Battery Charging Alternator	
Ground (Negative/Positive)	Negative
Voltage (VDC)	12
Amperage (A)	32
Starter Motor Voltage (VDC)	12
ExhaustSystem	
Exhaust Manifold Type	Dry
Exhaust Flow at Rated Load (gal/hr)	70
Exhaust Temperature at Rated Load (°F / °C)	1,256 /680
Maximum Allowable Back Pressure (in Hg / kPa)	2.95 ±1.0
FuelSystem	
Fuel Type	Ultra-Low Sulfur Diesel
Fuel Injection Pump	Mechanical Fuel Inline Pump
Fuel Filter	0.6 liter Single bowl Spin-on
Combustion System	Direct Injection

#### **Fuel Consumption**

Optional Fuel Tank Capacity: 140 Gallons – 24 Hour Run Time

 Full Load:
 3.62 GAL / HR

 50% Load:
 1.90 GAL / HR

 No Load:
 0.85 GAL / HR

## **Engine Output Deratings**

Rated Temperature (°F/°C)	77 / 25			
Rated Altitude	328 ft (100 m) Above Sea Level			
Temperature Derate	1.5% for Each 10°F (5.6°C) Above Rated Temperature			
Altitude Derate	2.5% for Each 1000 ft (305 m) Above Rated Altitude			



ALTERNATOR SPECIFICATIONS						
	Roughneck 37KW Single Phase Tier 3	Roughneck 40KW 3-Phase Tier 3	Roughneck 40KW 3-Phase Tier 3	Roughneck 40KW 3-Phase Tier 3		
Model	RO0040D3A*XE	RO0040D3B*XE	RO0040D3C*XE	RO0040D3D*XE		
Alternator Model	UCI224D	UCI224D	UCI224D	UC1224D		
Manufacturer	Stamford	Stamford	Stamford	Stamford		
Туре	Brushless, 12-Lead	Brushless, 12-Lead	Brushless, 12-Lead	Brushless, 12-Lead		
Frequency (Hz)	60	60	60	60		
Phase	1	3	3	3		
Winding Configuration	Double Delta	Parallel Star	Series Delta	Series Star		
Exciter Type	Self Exciter	Self Exciter	Self Exciter	Self Exciter		
Number of Poles	4	4	4	4		
Voltage Regulator	MX341	MX341	MX341	MX341		
Insulation Rating	Class H	Class H	Class H	Class H		
Designed Temperature Rise Limit	125 °C	125°C	125 °C	125 °C		
Bearing (Quantity / Type)	1/Sealed	1/Sealed	1/Sealed	1/Sealed		
Coupling	Flexible Disk	Flexible Disk	Flexible Disk	Flexible Disk		
Amortisseur Windings	Full	Full	Full	Full		
Voltage Regulation, NL to FL	+/- 1.0%	+/-1.0%	+/-1.0%	+/- 1.0%		
One Step Load Acceptance	100% ofRating	100% ofRating	100% ofRating	100% ofRating		
Total Harmonic Distortion (THD), NL to FL	<5%	< 5%	< 5%	< 5%		

<sup>•</sup>Complete winding protection for non-harsh environment with relative humidity ≤95%. IP23 Protection

### Weight &Dimensions

Assembled Weight (lbs/kg) 3207 LBS / 1455 KG

Overall Dimensions (in / mm) 108.78" L x 41.78" W x 71.34" H 2763mm L x 1061mm W x 1812mm H

 ${\tt Need\ help?Visit}\ \textbf{wildcatpowergen.com}$ 

Complete the web form and a local dealer will contact you to answer questions on our generators and accessories.

Never Lose Power Again With Wildcat Power Gen

620-500-5111

<sup>•</sup>Manufactured according to the following standards: ISO 3046, ISO 8528-1, ISO 8528-3, ISO 8528-5, IEC 60034-1, BS 5000-3