

# PROVIDING BETTER POWER

## **ROUGHNECK NG-LPG: 40KW**

The Roughneck generator was designed with rugged simplicity in mind. Choose from options on phase, voltage, fuel and enclosure packages that are all designed to run for extended periods of time with prime rated liquid cooled engine platforms.





#### **Durable Industrial Engine**

 Usually reserved for industrial applications, the Roughneck's power plant is a premier industrial fixed speed (1,800 RPM) engine built to provide strong, reliable power without giving up quiet operation and engine longevity.

#### Quality Clean Power

 Voltage regulation ensures that electronics are safely powered with less 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<br>Factor | Phase | Hertz | Circuit<br>Breaker<br>Amps | kW / kVA | ВНР | Voltage<br>Regulation | Controller |
|------------------------------------|-------------------------------------|-----------------|-------|-------|----------------------------|----------|-----|-----------------------|------------|
| Roughneck NG 40KW<br>RO0045NGA*XP  | 120/240                             | 1.0             | 1     | 60    | 175A                       | 40 /40   | 64  | Digital               | Deepsea    |
| Roughneck LPG 45KW<br>RO0045PLA*XP | 120 /240                            | 1.0             | 1     | 60    | 200A                       | 44 / 44  | 70  | Digital               | Deepsea    |
| Roughneck NG 45KW<br>RO0045NG**XP  | 208 / 110<br>240 / 120<br>480 / 277 | 0.8             | 3     | 60    | 175A<br>150A<br>75A        | 43 / 54  | 64  | Digital               | Deepsea    |
| Roughneck LPG 45KW<br>RO0045PL**XP | 208 / 110<br>240 / 120<br>480 / 277 | 0.8             | 3     | 60    | 200A<br>175A<br>80A        | 47 / 59  | 70  | Digital               | Deepsea    |



## **ENGINE SPECIFICATIONS**

| Engine                                      |   |
|---|---|
| Manufacturer                                | ARROW   |
| Туре  | 5.4L Industrial Powertrain<br>Naturally Aspirated |
| Speed (RPM)                                 | 1800  |
| Cylinder Arrangement                        | In-Line 6   |
| Displacement (L)                            | 5.4L  |
| Bore & Stroke (in / mm)                     | 3.9" x 4.7"/98 x 118                              |
| Compression Ratio                           | 8:1   |
| Governor Type                               | Electronic  |
| Frequency Regulation Steady State           | +/-0.5%   |
| Frequency Regulation<br>No-loadto Full-load | Isochronous                                       |
| Air FilterType                              | Dry   |
| Limited Warranty                            | 3 Years, 5,000 Hours                              |
| Lubrication System                          |   |
| Туре  | Full Pressure                                     |
| Oil Capacity (qt/L)                         | 17.5 / 16.6                                       |
| Oil Filter (Quantity / Type)                | 1/Spin-On   |
| CoolingSystem                               |   |
| Radiator Type                               | Aluminum  |
| Fan Type                                    | Pusher  |
| Sound Rating at 7 Meters, Lov               | west Side   |
| NoLoad                                      | 70 dB(A)  |
| Air Induction System                        |   |
| Air Filter                                  | Dry Type  |

| 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)  | 35                          |
| Starter Motor Voltage (VDC)                                     | 12                          |
| ExhaustSystem   |                             |
| Exhaust Manifold Type   | Dry                         |
|   |                             |
| Exhaust Temperature at Rated Load (°F / °C)                     | 1238 / 670                  |
|   |                             |
| FuelSystem  |                             |
| Fuel Type   | LPV or NG                   |
| Fuel Supply Line Inlet  | 1 %" NPT                    |
| Recommended Fuel, Lower Heating Value Minimum (BTU/ft³ / MJ/m³) | NG - 700-1600<br>LPV - 2338 |

| Fuel Supply Pressure (in H <sub>2</sub> O/ mbar) |           |          | 8-16 / 20-40 |  |  |
|--|-----------|----------|--------------|--|--|
| Fuel Consumptio                                  | n         |          |              |  |  |
| BSFC   | Full Load | 50% Load | No Load      |  |  |
| Pipeline NG                                      | 11.3 CFM  | 7.7 CFM  | 3.4 CFM      |  |  |
| LPG  | 7.9 GPH   | 5.3 GPH  | 2.1 GPH      |  |  |
|  |           |          |              |  |  |

## STANDARD CONTROLLER



#### 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

## **Engine Output Deratings**

| Rated Temperature (°F/°C) | 77 /25  |
|---------------------------|---|
| Rated Altitude            | 1200 ft (366 m) Above Sea Level                       |
| Temperature Derate        | 1.5% for Each 10°F (5.6°C) Above<br>Rated Temperature |
| Altitude Derate           | 2.5% for Each 1000 ft (305 m) Above<br>Rated Altitude |



|  | Roughneck 40KW<br>Single Phase NG-LPG | Roughneck 45KW<br>3-Phase NG-LPG | Roughneck 45KW<br>3-Phase NG-LPG | Roughneck 45KW<br>3-Phase NG-LPG |  |
|--|---------------------------------------|----------------------------------|----------------------------------|----------------------------------|--|
| Model                                    | RO0045**A*XP                          | RO0045**B*XP                     | RO0045**C*XP                     | RO0045**D*XP                     |  |
| Alternator Model                         | UC224F                                | UC224F                           | UC224F                           | UC224F                           |  |
| Manufacturer                             | Stamford                              | Stamford                         | Stamford                         | Stamford                         |  |
| Гүре                                     | Brushless, 12-Lead                    | Brushless, 12-Lead               | Brushless, 12-Lead               | Brushless, 12-Lead               |  |
| requency (Hz)                            | 60                                    | 60                               | 60                               | 60                               |  |
| Phase                                    | 1                                     | 3                                | 3                                | 3                                |  |
| Winding Configuration                    | Double Delta                          | Parallel Star                    | Series Delta                     | Series Star                      |  |
| xciter Type                              | Self Exciter                          | Self Exciter                     | Self Exciter                     | Self Exciter                     |  |
| Number of Poles                          | 4                                     | 4                                | 4                                | 4                                |  |
| oltage Regulator                         | MX341                                 | MX341                            | MX341                            | MX341                            |  |
| nsulation 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                    |  |
| otal Harmonic Distortion (THD), NL to FL | < 5%                                  | < 5%                             | <5%                              | < 5%                             |  |

 $<sup>{}^{\</sup>bullet}\text{Complete}$  winding protection for non-harsh environment with relative humidity  ${\leq}95\%.$  IP23 Protection

### Weight &Dimensions

Assembled Weight (lbs/kg) 3207 LBS / 1655 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

Manufactured according to the following standards ISO 3046, ISO 8528-1, ISO 8528-3, ISO 8528-5, IEC 60034-1, BS 5000-3