



VMAC Diesel Drive D60 – Bid Specifications

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All specifications are subject to change without notice.

AIR COMPRESSOR, Limited Engine Run Time, 60 CFM Diesel Engine Driven Standalone Above Deck Mounted Rotary Screw with Engine Standby Mode

60 CFM and 150 PSI rotary screw air compressor system mounted above deck on a truck chassis or skid. Air compressor output will be to ASME standards.

Compressor Air End:

The air compressor will be an oil flooded rotary screw capable of 100% duty cycle. Compressor will provide 60 CFM and 150 PSI. A high temperature cut off sensor is integrated on the compressor unit. The compressor is equipped with a low profile integrated air inlet control. The compressor is direct driven from the engine's fly wheel without the use of a belt.

Engine:

The air compressor will be powered by a 3-cylinder diesel, naturally aspirated, Tier Four Final Compliant, liquid cooled, 23.5 HP engine. The engine will include an automated glow plug control.

Digital Control System:

A 12 volt digital control box with LCD display will be included that will show system hours, service reminders and safety/functional messages. The control system will integrate with the diesel engine to automatically start and stop the engine in response to air usage. Adjustable settings within the control system to include delay to stand-by, air use rate, restart pressure, system pressure, auto-restart disable and system top up pressure. Compressor and engine over-temperature shutdown, failed temperature probe, fan control, high idle activation and error messages will all be controlled by the control system. The controller will also provide for unload and stand-by functions; and auto restart when engine temperature drops below set point or when battery charge drops below set point.

Air / Oil Separator Tank:

It will be a vertical tank, mounted within the enclosure of the compressor. Material will be of high-grade aluminum material and will include a spin-on coalescing oil separator element and a replaceable spin on 25-micron oil filter with safety bypass feature. It will contain an 8 seconds or less integral pneumatically piloted blow down valve and minimum pressure check valve. A 200 PSI pressure relief valve will be integrated into the tank.

Air Receiver Tank:

A secondary tank will be installed with a minimum of 5 gallons of capacity, and it will be rated to 150 PSI working pressure.



Heat Exchanger:

The heat exchanger will be the air-to-liquid type with a 11" 12 volt electric fan. The fan will cycle on/off to meet cooling demands of the compressor.

Throttle Control:

Throttle control will be a 2 speed control and will automatically modulate engine RPM with air demand.

Package:

The overall package size will be no greater than 18" (w) x 34.5"(l) x 28" (h) – with optional fuel tank adding 5" to the length. Total dry weight will not exceed 418 lb. The sheet metal enclosure will be aluminum for the base material and 12 gauge aluminum for the sides and top cover. All sheet metal is to be powder coated.

Fuel Supply Options:

Fuel supply may be supplied by one of two options, the truck's fuel tank or compressor-mounted fuel tank.

1. Fuel from the truck's fuel tank requires an optional remote 12 volt activated diesel fuel priming pump.
2. Fuel from a compressor-mounted fuel tank requires an optional 7 gallon fuel tank with low fuel sensor and fuel gauge.

Optional Wheel Kit:

An optional factory-installed wheel kit will include three wheels for the package including a front caster wheel with friction brake. Wheel kit will include factory installed 7 gallon fuel tank and digital display panel. Wheel kit components will be rated for temperatures between 13°F (-25°C) and 104°F (+40°C).

Safety Features

The air compressor system will include an LED safety light and alarm to notify the user the system is in standby mode. An alarm will be included to notify the user that the diesel engine and air compressor are about to re-start. A 200 PSI pressure relief valve will be integrated into the tank and the control system includes compressor and engine over-temperature shutdown.

Installation:

Installation of air compressor must be completed only by the factory authorized distributor of the air compressor manufacturer.