



**AIR N ARC<sup>®</sup> 300 HYDRAULIC  
ALL-IN-ONE POWER SYSTEM<sup>®</sup>  
ROTARY SCREW AIR COMPRESSOR/WELDER/  
GENERATOR/BATTERY BOOSTER/BATTERY CHARGER  
BID SPECIFICATION  
REVISED: June 26, 2019**

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<b>Type:</b>	Vanair <sup>®</sup> Air N Arc <sup>®</sup> 300 Hydraulic Series. New and in current production.
<b>Welder:</b>	High frequency DC/CC welding, 270 AMP at 100% duty cycle, CC: 40-300 AMP operating range, CV: 15 – 30V
<b>Generator:</b>	Totally brushless with capacitor, copper windings, bi-directional rotation, <6% distortion
<b>Generator Capacity:</b>	7 kW peak, 6.8 kW continuous, AC power, 60 Hz, single phase, 120V and 240V outlets.
<b>Compressor:</b>	Vanair <sup>®</sup> encapsulated 40 CFM rotary screw air compressor system.
<b>Compressor Capacity:</b>	40 CFM free air at up to 175 PSIG
<b>Charger/Booster:</b>	300 AMP 12V/24V boost, 50 AMP 12V charge
<b>Hydraulic Motor:</b>	Gear type hydraulic motor with flow control valve to regulate flow to a designed flow of 19 GPM or 14.5 GPM on reduced flow models
<b>Hydraulic Requirements:</b>	Multifunction - 19 GPM @ 2800 PSI, single function - 14.5 GPM @ 2500 PSI
<b>Hydraulic Cooler:</b>	Hydraulic cooling system shall allow rated functions up to 110 °F ambient temperatures. Hydraulic fan and cooler are to operate when PTO is engaged and hydraulic temperature is over 100 °F to provide hydraulic cooling when unit and hydraulic system are loaded or unloaded.
<b>Air Storage Tank:</b>	4 gallon integrated
<b>Air Intake Filters:</b>	Heavy duty, dry-type air filter shall be provided for air compressor.
<b>Air/Fluid Separator:</b>	Separator to be externally mounted spin-on design. Vanair separator shall provide for enhanced air quality, reduced operating and maintenance cost and optimized compressor performance.
<b>Protective Circuit:</b>	Machine will shut down by bypassing hydraulic flow in case of high compressor temperature or over pressurization. Additional protective features provided include automatic blow down valve, receiver relief valve and minimum pressure valve. Additional protections include a hydraulic flow bypass when belt access panel is opened, and when hydraulic fluid is over temperature. After any automatic safety shutdown, system reset must be pressed to re- engage.
<b>Compressor Cooling System:</b>	Compressor cooling system shall allow rated air delivery and pressure operation continuously in 110 degree Fahrenheit ambient temperatures. Cooler to be mounted in a powder-coated galvanized sheet metal enclosure with a blower type fan assembly. Compressor fluid shall be filtered by a 25 micron full flow spin-on replaceable filter canister. A thermal valve and fan temperature switch are included to regulate compressor cooling.

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<b>Inlet Controls:</b>	Electric inlet control valve shall be integrated into compressor system and automatically modulate output from 0 to 100% in response to air demand.
<b>Weight:</b>	Dry weight with control panel (Lbs.): 621
<b>Dimensions:</b>	48.7L x 21.0W x 30.9H (In.)
<b>Instrument Panel:</b>	Panel to have quick disconnects and be capable of being remotely mounted. Panel to include display for AC generator displaying hertz and volts, hour meter, air pressure gauge, generator on/off switch, thermal breakers, 120V and 240V receptacles, weld cable connections, weld mode selector switch, digital display for welder amperage and welder and boosting voltage output, potentiometer for adjustment of amperage and voltage for weld mode, battery boost mode selector switch, battery booster cable connection, mode indicator lights and system fault lights.
<b>Drive System:</b>	Heavy duty belt-drive system. Belt to drive the generators to be poly-V serpentine belt with quiet channel technology. Belt for compressor to be poly-V serpentine belt with quiet channel technology and tensioner.
<b>Metal and Tanks:</b>	Fully powder-coated with galvanized sheet metal enclosure, ¼" plate steel main frame, integrated lift hook and full service access.
<b>Warranty:</b>	When following the prescribed maintenance schedule, the rotary screw compressor unit is warranted by Vanair for the lifetime of the air end with adherence to the prescribed maintenance schedule, and all other major components are warranted for three (3) years. Consumable products such as filters and electrodes are not covered. This warranty does not cover damage caused by accident, misuse or negligence. If the unit is disassembled the warranty is void.
<b>Service Centers:</b>	Manufacturer MUST have factory authorized service centers located in each state of the United States of America and Canadian provinces.
<b>Options:</b>	Welding Cables - 25', 50' Welding Helmet with Auto Darkening Lens Cable Extensions Battery Boost Cables Remote Air Tank – 30 Gallon Remote Condensation Drain Welding Rods Compressor Air Inlet Heater