

AIR VANTAGE® 600-I

Powerful. Dependable. Advanced.

POWERFUL

- Welding output IEC rated for 575A at 43V with a 100% duty cycle
- 20kW of power to run all types of industrial tools or an additional inverter welder
- 60 cfm @ 100 psi (1.7 cmm @ 6.9 kPa) of compressed air powered by VMAC®
- Powered by an industry proven 65.7 hp, turbocharged Deutz® diesel engine
- Capable of gouging with up to 3/8 in. (9.5mm) carbons

DEPENDABLE

- Lab tested, field proven ruggedness and durability
- Engineered for outdoor use and harsh environments (IP23 Rated)
- Encapsulated GFCIs, stainless steel paneling, and potted PC boards for added protection and durability

ADVANCED

- Minimal spatter for stick or pipe welding
- Expanded welding capabilities for stainless, aluminum, and steel¹
- Pulse welding capability for better arc control in out-of-position work and low heat input for critical welds¹
- Enhanced gouging performance prevents the engine from stalling, resulting in smooth material removal

(1) Requires ArcLink® Communications accessory.



Shown
K4394-1

Processes

MIG, Pulsed MIG, Flux-Cored, Arc Gouging, Stick, DC TIG

Output



20
kW

Input



Applications

- Heavy Equipment Repair
- Energy Utility Repair
- Construction
- General Fabrication

Product Highlights

- Handy 3-in-1 multifunction machine to tackle all types of jobs
- ArcLink Communications Protocol facilitates advanced welding processes and wire feeders

Key Accessories

- Power Feed® 25M (K2536-4 & K2536-5)
- Remote Output Control (K857-2 & K857-3)
- Large Trailer (K2637-2)
- Fender & Light Kit (K2639-1)
- Cable Rack (K2640-1)

MACHINE SPECIFICATIONS

Product Name	Product Number	Rated Output @ 104°F (40°C)	Output Range	Open Current Voltage	AC Generator Auxiliary Power ⁽¹⁾	Auxiliary Receptacles ⁽²⁾	Dimensions ⁽³⁾ H x W x L in (mm)	Weight lb (kg) ⁽⁴⁾
Air Vantage 600-I	K4394-1	IEC Rating – 575A / 43V / 100% Max Rating – 600A / 40V / 60%	CC-Stick: 30 – 600 Amps Downhill Pipe (CC): 40 – 350 Amps Touch Start® TIG 20 - 350 Amps CV-Wire: 10 – 45 Volts Arc Gouging: 60 – 600 Amps	60 Max OCV @ 1800 RPM	Single Phase: 78 kW Continuous, 120V/240V @ 60Hz Three Phase: 20 kW Continuous, 240V @ 60Hz	NEMA 5-20R (120V / 20A / 1-) NEMA 15-50R (240V / 50A / 3-) IEC 60309 Yellow 2P+Ground (120V / 15A / 1-) IEC 60309 Blue 2P+Ground (240V / 15A / 1-)	Machine Only: 42.0 x 32.9 ⁽³⁾ x 69.0 (1067 x 836 x 1753) To Top of Air Intake: 58.1 (1476)	1737 (788)

ENGINE SPECIFICATIONS

Engine Model	Engine Description	Operating Speed (RPM) @ 65.7 HP	Displacement	Capacities
Deutz® TD2.9L4 ⁽⁵⁾ Tier 3 Compliant	4 Cylinder 65.7HP (49 kW) Turbocharged Water Cooled Diesel Engine	High Idle: 1800 Low Idle: 1500	178 cu. in (2.9 L), Bore x Stroke 3.62 in x 4.33 in (92 mm x 110 mm)	Fuel: 25 US gal (94.6 L) Oil: 2.25 US gal (8.5 L)

AIR COMPRESSOR SPECIFICATIONS

Compressor Model	Compressor Description	Delivery	Maximum System Pressure	Compressor Protection	Capacities
VMAC ⁽⁶⁾ S700162	Belt-Driven Rotary Screw	High Idle, 60CFM @ 100 PSI (28.3 L/s @ 7.0 kg/cm ²)	150 PSI (10.5 kg/cm ²)	Safety Relief Valve: 200 psi (14.1 kg/cm ²) High Temperature Automatic Shutdown: 290 °F (143 °C)	Compressor Oil: 1.1 gal (4.0L) ⁽⁷⁾

(1) When welding, available auxiliary power will be reduced. Output voltage is within +/- 10% at all loads up to rated capacity.

(2) Circuits cannot be wired in parallel to operate the same device.

(3) Includes width of door. Base width is 31.6" (803 mm).

(4) Machine only – Does not include fuel.

(5) Engine warranted separately by engine manufacturer.

(6) Compressor warranted separately by compressor manufacturer.

(7) VMAC® synthetic compressor oil recommended for best operation results, or oil approved by VMAC®.

CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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