VANTAGE 520 SD VANTAGE 600 SD AIR VANTAGE 600 SD

ENGINE-DRIVEN WELDERS/GENERATORS







Utility Machine for the Outdoors

When the job calls for structural steel welding and other rugged outdoor work, you need an engine-driven welder that covers all your process needs – stick, MIG, TIG, flux-cored and gouging – and also meets the latest diesel fuel emissions standards. Upgraded for Tier 4 Final (T4F) compliance, the Vantage[®] series has been re-engineered to deliver smoother arc characteristics and improved pipe welding capabilities.

Select the 520 SD for 400A/36VDC 100% duty cycle welding performance and gouging with up to 5/16 inch (8 mm) carbons. Choose the 600 SD for 575A/43VDC 100% duty cycle welding and gouging with up to 3/8 inch (9.5 mm) carbons. The Air Vantage 600 SD includes a belt-driven compressor with separate gauges to monitor compressor hours and pressure.





A Superior Arc with a Superior Engine

Optimal arc performance

Take control of the arc and maximize the quality of your welds. These Vantage models deliver the best arc in the industry with minimal spatter for stick or pipe welding. Expand your welding capabilities with customized modes for stainless, aluminum, steel and pulse welding. Pulsing enables better arc control in out-of-position work and can lower heat input for critical welds. Enhanced gouging performance prevents the engine from stalling, resulting in smooth material removal.

Cleaner, more reliable engine

Equipped with a Tier 4 Final Deutz engine, these Vantage models deliver a 90% reduction in particulate and nitrous oxide emissions, making them the cleanest diesel power available. Along with lower emissions, these models also provide exceptional fuel efficiency by burning every last drop of fuel out of the engine instead of sending it out as particulate matter. The Vantage SD series is also built for more reliable cold-weather starts.

Low maintenance, reliable operations

The Vantage SD engine-driven welders contain less wiring and fewer connections than previous designs. The printed circuit boards are environmentally shielded using Lincoln Electric's engineered encapsulation and protective frame trays. Standard stainless steel roof, side panels and engine-access door deliver bulletproof protection, durability and corrosion resistance from the elements.

MACHINE SPECIFICATIONS

		Rated Output @ 104°F(40°C)	Output @	104°F(40°C) - Welder an	HxWxD	Net Weight	
Product Name	Product Number	Current/Voltage/Duty Cycle	Output Range	Open Circuit Voltage	Auxiliary Power ⁽¹⁾	in (mm)	lbs (kg)
Vantage" 520 SD Deutz [®] T4F	K4107-1	400A/36V/100% 450A/32V/100% 520A/30V/60%	30 - 520 Amp CC/CV 20 - 250 Amps TIG	- 60 Max OCV @ 1800 RPM	Single Phase: 39	Machine only 39.1 x 28.4 x 65.1 (994 x 721 x 1654)	1526 (692)
Vantage [®] 600 SD Deutz [®] T4F	K3239-1	575A/43V/100% 600A/40V/60%	30 - 600 Amps CC/CV 20 - 350 Amps TIG		120/240 VAC ⁽²⁾ Single Phase: 12,000 WATTS, 60Hz.	Machine only 42.0 x 32.9 x 69.0 (1067 x 836 x 1753)	1662 (753)
Air Vantage [™] 600 SD Deutz® T4F	K3242-1				Three Phase: 20,000 WATTS, 60 Hz.	To top of exhaust tube: 50.8 (1290)	1737 (787)

ENGINE SPECIFICATIONS

Product Name	Make/Model	Description	Speed (RPM)	HP @ Speed (RPM)	Displacement	Starting System	Capacities
Vantage [*] 520 SD Duetz [*] T4F	Deutz ⁽³⁾ D2.9L4 Naturally Aspirated Diesel Engine EPA TIER 4 Final Compliant	4 Cylinder 34.8HP (25.9 kw) Naturally Aspirated Water Cooled Diesel Engine	High Idle 1800 Low Idle 1500	34.8 @ 1800	177 cu. in (2.9 L) Bore x Stroke 3.6 in x 4.3 in (92 mm x 110 mm)	12VDC battery and Starter with Automatic Glow Plugs	Fuel: 20 US gal (94.6 L) Oil: 2.35 US gal (8.5 L)
Vantage" 600 SD Deutz® T4F	Deutz Turbo Charged ⁽³⁾ TD2.9L4 Diesel Engine EPA TIER 4 Final Compliant	4 Cylinder 64HP (48 kw) Turbo Charged Water Cooled Diesel Engine	High Idle 1800 Low Idle 1400	64 @ 1800	178 cu. in (2.9 L) Bore x Stroke 3.62 in x 4.33 in	12VDC battery and Starter with Automatic Glow Plugs	Fuel: 25 US gal (94.6 L) Oil: 2.25 US gal (8.5 L)
Air Vantage [®] 600 SD Deutz [®] T4F					(92 mm x 110 mm)		

COMPRESSOR SPECIFICATIONS

Product Name	Compressor Model	Description	Delivery	Maximum System Pressure	Compressor Protection	Capacities
Air Vantage [®] 600 SD Deutz [®] T4F	VMAC ^{* (4)} (S700162)	Belt-Drive Rotary Screw S700162	High Idle Mode: 60 SCFM @ 100PSI (28.3 LTR/SEC. @ 7.0 KG/CM)	150 PSI (10.5 kg/cm²)	Safety Relief Valve 200 PSI (14.1 kg/cm²) High Temperature Automatic Shutdown 290 °F (143 °C)	Compressor Oil: 1.1 gal (4.0 L) ⁽⁵⁾

(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) Deutz's regime warranty is 3 years.
(4) Warranty is 3 years/3000 hours whichever comes first for the compressor and 1 year/1,000 hours whichever comes first for the clutch, idler roll and automatic belt tensioner.
(5) VMAC* synthetic compressor oil recommended for best operation results, or oil approved by VMAC*.

VANTAGE 520 SD PACKAGES	Product Number	One-Pak (Unassembled) (K4173-1)	Ready-Pak 1 (shipped fully assembled) (K4138-1)	Ready-Pak 3 (shipped fully assembled) (K4138-12)	Ready-Pak 6 (shipped fully assembled) (K4138-129)
Medium Welder Trailer	K2636-2	•	•	•	•
Fender and Light Kit	K2639-1	•	•	•	•
Cable Rack	K2640-1	•	•	•	•
Electrode Cable 3/0, two 50 ft. (15.3 m) lengths	K2485-3 (QTY 2)	•	•		
Electrode Cable 3/0, 10 ft. (3 m)	K2483-3	•	•		
Work Cable 3/0, 50 ft. (15.3 m)	K2484-3	•	•		
Cable Connectors - two	K2487-1 (QTY 2)	•	•		
400A Electrode Holder	K909-8	•	•		
500A Work Clamp	K910-2	•	•		
LoJack® Device LO/JACK	K3006-1				•



VANTAGE 600 SD PACKAGES	Product Number	One-Pak (Unassembled) (K3245-5)	Ready-Pak 1 (shipped fully assembled) (K4136-1)	Ready-Pak 3 (shipped fully assembled) (K4136-12)	Ready-Pak 6 (shipped fully assembled) (K4136-129)
Large Welder Trailer	K2637-2	•	•	•	•
Fender and Light Kit	K2639-1	•	•	•	•
Cable Rack	K2640-1	•	•	•	•
Electrode Cable 3/0, two 50 ft. (15.3 m) lengths	K2485-3 (QTY 2)	•	•		
Electrode Cable 3/0, 10 ft. (3 m)	K2483-3	•	•		
Work Cable 3/0, 50 ft. (15.3 m)	K2484-3	•	•		
Cable Connectors - two	K2487-1 (QTY 2)	•	•		
400A Electrode Holder	К909-8	•	•		
500A Work Clamp	K910-2	•	•		
LoJack [®] Device LO/JACK	K3006-1				•



AIR VANTAGE 600 SD PACKAGES	Product Number	One-Pak (Unassembled) (K3958-5)	Ready-Pak 1 (shipped fully assembled) (K4137-1)	Ready-Pak 3 (shipped fully assembled) (K4137-12)	Ready-Pak 6 (shipped fully assembled) (K4137-129)
Large Welder Trailer	K2637-2	•	•	•	•
Fender and Light Kit	K2639-1	•	•	•	•
Cable Rack	K2640-1	•	•	•	•
Electrode Cable 3/0, two 50 ft. (15.3 m) lengths	K2485-3 (QTY 2)	•	•		
Electrode Cable 3/0, 10 ft. (3 m)	K2483-3	•	•		
Work Cable 3/0, 50 ft. (15.3 m)	K2484-3	•	•		
Cable Connectors - two	K2487-1 (QTY 2)	•	•		
400A Electrode Holder	K909-8	•	•		
500A Work Clamp	К910-2	•	•		
LoJack® Device LO/JACK	K3006-1				•



		Vantage 520 SD Base Unit	Vantage 600 SD Base Unit	Air Vantage 600 SD Base Unit
ADDITIONAL ACCESSORIES	Product Number	(K4107-1)	(K3239-1)	(K3242-1)
GENERAL		1	1	1
Medium Welder Trailer	K2636-1	•		
Large Welder Trailer	K2637-2		•	•
Power Plug Kit - 20 amp	K802N	•	•	•
Full-KVA Power Plug (1-phase)	T12153-9	•	•	•
Full-KVA Power Plug (3-phase)	T12153-10	•	•	•
Full-KVA Adapter Kit (1-Phase)	K1816-1	•	•	٠
Four-Wheeled Steerable Yard Trailer	K2641-2	•	۰	٠
Spark Arrestor Kit	K3985-1	•	•	٠
Air Filter Kit	K3088-1			•
STICK				
Remote Output Control - 25 ft (6 pin connector)	K857	•	٠	٠
Remote Output Control - 100 ft (6 pin connector)	K857-1	•	•	٠
Remote Output Control - 25 ft (12 pin connector)	K857-2	0	0	٠
Remote Output Control with 120V AC Receptacles - 100ft	K2627-2	•	٠	٠
TIG				
Pro-Torch [™] PTA-26V TIG Torch	K1783-9	•	٠	٠
Magnum [®] Parts Kit for PTA-26V TIG Torch	KP509	•	٥	٠
Foot Amptrol™	K870	•	0	٠
Hand Amptrol [≈]	К963-3	•	٥	٠
MULTI-PROCESS				
Invertec [®] V350 PRO Multi-Process Welder (Construction Model)	K1728-5	•	٠	٠
WIRE FEEDER				
LN-25 Ironworker® Wire Feeder	K2614-9	٠	•	•
K126 [™] PRO Innershield® Gun	K126-12	•	۰	٠
Magnum [®] SG Spool Gun	K487-25	•	٠	٠
SG Control Module	K488	•	٠	•
Input Cable	K691-10	0	٥	٠
Drive Roll and Guide Tube Kit	KP1697-068	0	۰	٠
Magnum [®] PRO 350 Ready-Pak [®] 15 ft., .035-5/64 in.	K2652-2-10-45	0	0	٠

ADVANCED PROCESS WIRE FEEDERS	Product Number	Vantage 520 SD Base Unit (K4107-1)	Vantage 600 SD Base Unit (K3239-1)	Air Vantage 600 SD Base Unit (K3242-1)
Power Feed® 25M Plastic Case Wire Feeder	K2536-5	•	•	•
Power Feed® 25M Aluminum Case Wire Feeder	K2536-4	•	•	•
Deluxe Adjustable Gas Regulator & Hose Kit	K586-1	•	•	•
Micro Wire Straightener	K1733-4	•	•	•
ArcLink® "T" Connector Kit	K2429-1	•	•	•
Heavy Duty ArcLink® Control Cable - 25 ft.	K2683-25	•	•	•
Heavy Duty ArcLink® Control Cable - 50 ft.	K2683-50	•	•	•
Heavy Duty ArcLink® Control Cable - 100 ft.	K2683-100	0	0	•



Optional





CUSTOMER ASSISTANCE POLICY

The business of 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, area too in a position to verify the information provided to the expende or alter any warranty on function or advice. Moreover, the provision of such 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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