

700 Amps of Heavy-Duty Performance

Lincoln's New Titan 701 is both a rugged three cylinder, diesel engine driven 700 amp DC arc welder and 3.4kW AC power generator. This robust diesel powered field welder has been designed and built specifically for demanding harsh environments and rugged work conditions like mining and construction sites, cross-country pipelines, civil engineering projects, hirefleets and on-site repair applications.



The design of the Titan 701 has especially taken into account the in-field maintenance requirements of remote locations. There are no PCB's used in the Titan 701 for low maintenance, long service life, easy operation and a great arc performance across all welding processes that this machine has been designed for.

The Titan 701 has been designed to meet specific customer requirements. Easy to understand controls, excellent welding characteristics for a wide variety of processes, similar CC arc characteristics to those of the DC400, simple in-field servicing especially when used in remote locations — NO electronics or PCB's, a heavy-duty design to ensure maximum reliability, powered by the Deutz F3L912 air-cooled engine.

Advantage Lincoln

- 30 700 amps DC output
- 600 amps @ 40% duty cycle
- 3,400 watts of AC auxiliary power
- Eight current ranges with overlap. Fine tuning within each range.
- No electronics or printed circuit boards.
- All copper windings for enhanced arc stability
- Powered by the popular Deutz F3L912 air-cooled industrial diesel engine.
- Three-year warranty on parts and labour (engines warranted separately by engine manufacturer).

Processes

Stick Flux-Cored TIG Gouging

Description

Output





Input



Order

K32016-1 Titan 701

TECHNICAL SPECIFICATIONS						
MACHINE SPECIFICATIONS						
Model	Output Range	Rated Output*	OCV	Aux Power	Weight Kg	Dimensions H x W x D mm
Titan 701	30 - 700 DC Amps	500A, 40V @ 100% 600A, 30V @ 40%	88V max.	3,400 watts 60Hz AC 230V @ 15 amps	796	1067 x 800 x 1603mm
		650A, 25V @ 25%				

^{*} Rated Output @ 40°C

	ENGINE SPECIFICATIONS					
Model	Description	Horsepower	Displacement	Capacities	Operating Speeds	Fuel Consumption
Deutz F3L912	3 cyl, air-cooled Diesel Engine 12V Electric Start	33kw (44 HP) @ 1800 RPM	2.83L (173 cu in)	Fuel: 95 litres	500A load 1800 RPM	7.34 litres/hour
	Two-stage Dry Type Air Cleaner Fuel Filter with Water Separator	, ,	Bore x Stroke 100 x 120mm	Oil: 8.0 litres	High Idle 1890 RPM	2.5 litres/hour



FEATURES

- Simple controls Keep training time to a minimum with the coarse output control (eight overlapping ranges) and fine adjustment for the desired output. Scratch-resistant Lexan[®] nameplate.
- Single-sided engine access for routine maintenance. Double hinged door located on the right side of the machine opens easily in tight surroundings.
- Large 95 litre fuel tank provides run time for an extended day
 13 hours of welding at 450A/38V/100% duty cycle or 37 hours at high idle.
- Fuel gauge for monitoring fuel levels avoid running out of fuel
- Engine hour meter for scheduled maintenance.
- Engine watcher protection from high oil temperature.



- Output stud hand nuts provide convenient positive connection of welding leads without tools.
- Two inductance output studs for optimum output for Stick/TIG and Gouging.
- Provision for fork lift truck and crane lifting.



- 1. Run / stop switch
- 2. Start button
- 3. Battery charge light
- 4. Fuel gauge
- 5. Oil temperature light
- 6. Hour meter
- 7. Circuit breakers

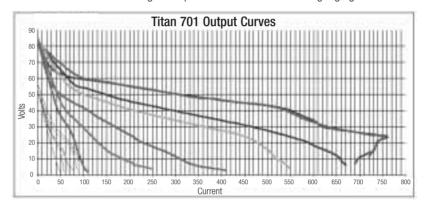
- 8. 230 volt auxiliary power outlet
- 9. Fine output control
- 10. (-) Output terminals
- 11. Earth Stud
- 12. Optional Analogue volt/amp meters
- 13. (+) Output terminal
- 14. 8 position course output control



ARC PERFORMANCE

- 500 amps @ 100% duty cycle and capable of 600 amps @ 40% duty cycle. All ratings are at 40° C.
- Wide operating range 30 to 700 amps to cover most applications.
- OCV 88 volts max.
- CC: stick output delivering excellent welding characteristics for E6010 cellulose, E7018 low hydrogen electrodes.
- CC: wire welding with the LN-25 across-the-arc wire feeder for a variety of Innershield FCAW-SS wires.
- CC: Scratch start TIG welding
- Arc gouging: the Titan 701 is capable of gouging with up to 12.7mm carbons.
- Exceptional CC arc characteristics similar to those of the Lincoln DC400.
- The Titan 701 produces a smooth stable arc for low amperage TIG through to a powerful arc for carbon arc gouging.

FUEL CONSUMPTION				
Fuel Consumption	Approx. running time for 95 litre (Hours)			
2.5 litres / hour	37.8 hours			
7.34 litres / hour	12.9 hours			
3.3 litres / hour	28.8 hours			
	Fuel Consumption 2.5 litres / hour 7.34 litres / hour			



GENERATOR PERFORMANCE

- 1-phase 230V, 15A, AC generator power rated at 3.4kW continuous output for industrial power tools, grinders, lighting and stand-by power. Simultaneously weld & use auxiliary power.
- Weather resistant 230V outlet, IP44 rated, Circuit breaker protected.
- Auxiliary power rating is continuous, provided the engine manufacturer's lubrication and maintenance schedules are adhered to.

	Permissible	Permissible Auxiliary Current		
Welding Output	power-watts	in Amperes		
	(unity Power Factor)	@ 230V +/-10%		

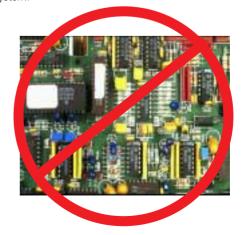
TITAN SIMULTANEOUS WELDING AND POWER LOADS

Welding Output	power-watts (unity Power Factor)	in Amperes @ 230V +/-10%
450A/38V	0	0
Up to 350A/34V	3,400	15

QUALITY AND RELIABILITY

- Three cylinder Duetz air-cooled diesel engine. Eliminates the need for regular monitoring of water levels, no radiator hoses to break half way through a job.
- Automatic shutdown for high oil temperature.
- Conventional transformer design with NO printed circuit board or electronics. Design also incorporates a modular assembly minimizing spare part requirements.
- Designed for easy servicing even in the remotest location.
- Single-side engine access for easy routine maintenance.
- Three-year parts and labour warranty. (Engine warranted separately by the manufacturer)

• Manufactured under a ISO 9001 Certified Quality Management System.





STICK OPTIONS

Accessory Kit



Includes (10m) 70mm² electrode cable with lug, (9m) 70mm² work cable with lugs, helmet, work clamp, electrode holder, wire brush, chipping hammers. 400 amp capacity.

Order Kit1700 Lead Kit Kit400 Accessory Kit

Remote Output Control

Consists of a control box with 20m cable length. Permits remote adjustment of output. **Refer to Lincoln Electric for details**

WIRE FEEDER OPTIONS



LN-25 Wire Feeder

Portable CC/CV unit for flux-cored and MIG welding. Includes Gas Solenoid & Internal Contactor.

Order K449



Magnum[®] 350 Innershield Gun (for LN-25) For self-shielded wire with 4.5m cable. For 1.7 - 2.4mm wire.

Order K126



Drive Roll and Guide Tube Kit (for LN-25)

For 1.7 - 2.4mm cored or solid steel wire. **Order KP653-3/32**

GENERAL OPTIONS



Roll Frame

Heavy-duty tube frame designed to protect the machine when being moved around the site

Order K32002

Spill Tray

Designed to bolt into K32002 roll frame. Provides environmental protection from fluid spills. Includes drain plug.

Order K32003-1

GENERAL OPTIONS



Meter Kit

Analogue volt and amp meter kit.

Order K32019-1

Medium Welder Trailer

For heavy-duty road, off-road, plant and yard applications. Includes wheeled jack, safety chains, 350mm wheels and large rear bumper. Stiff 5mm steel frame, E-coated and powder painted for rust & corrosion resistance. Low sway suspension gives outstanding stability with manageable tongue weight. E-Z Lube Axle-pack wheel bearings with a grease gun. 1.4m max. width for stability with easy tracking.

Order K953-1 Trailer

K958-1 50mm Ball Hitch

K958-2 Lunette Eye Hitch

K959-1 Fender & Light Kit

K965-1 Cable Rack



Power Plug Kit (15A)

230V plug rated at 15 amps.

Order AS4352-4



Spark Arrestor Kit

Easily mounts to exhaust pipe.

Order K889-1



Lockable Fuel Cap/Flash Arrestor Kit

Lockable fuel cap prevents tampering with fuel. Green cap colour provides a visual reminder to use diesel when refueling.

Order K2340-1



Ether Start Kit

Provides maximum cold weather starting assistance for frequent starting below -12° C. Required ether tank is not provided with kit

Order K887-1

Cold Weather Kit

Air recirculation system maintains Deutz engine temperature in extremely cold weather.

Order K1751-1

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 advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice and assumes no responsibility, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change - This information is accurate to the best of our knowledge at the time of printing $\frac{1}{2}$



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