

Invertec® STT® II / LF-33

Featuring Surface Tension Transfer® process



The revolutionary STT® II power source combines high frequency inverter technology with advanced Waveform Control Technology® to provide a better welding solution than traditional short arc MIG.

Processes

MIG-STT®

Output



Input



Recommended Package Includes

- LF-33 wire feeder 4-roll air-cooled, 1,0-1,2mm drive roll
- STT® II power Source on undercarriage, Input cable, Work clamp and cable assembly
- 5m-Interconnection cable, MIG gun and gas regulator

Recommended wire feeders

LF-37



www.lincolnelectric.com/green

- **Controlled penetration and outstanding heat input control**—Ideal for welding joints with open root, gaps, or on thin material with no burnthrough.
- **Reduced spatter and fumes**—Current is controlled to achieve optimal metal transfer.
- **Various shielding gases**—blends of Argon including Helium or 100% CO2 with larger diameter wires.
- **Good bead control and faster travel speeds**—Can replace TIG in many applications.
- **Background and Tailout Current**—accurately control fine and coarse heat input for reduced distortion and burnthrough as well as proper penetration.
- **Adjustable Hot Start** controls the heat at the start of the weld.
- **Continuous control** of wire feed speed and voltage
- **Trigger mode** for 2/4-step.
- **Well featured**; the LF 33 features 2/4 stoke, burnback, gas purge, cold inch, run in.
- **Bright digital** Voltage and Amperes meter.
- **Meet IEC974-1, ROHS and CE** standards for safety and reliability.



Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Fuse size	Output Range	Dimensions H x W x D (mm)	Net Weight (kg)
STT II Package	K1527-1 PSTT2-1-A	200/220/380/400/440/3/50-60	225A/29V/60% 200A/28V/100%	17A	5-450A(peak) 5-125A (background)	589 x 336 x 620 1000 x 700 x 1000	59 115

Product Name	Product Number	Input Power	Wire Feed Speed Range (m/min)	Wire Size Range (mm)		Dimensions H x W x D (mm)	Net Weight (kg)
				Solid	Cored		
LF-33 air/water	K14030-1W	34-44 VAC	1 - 20	0,8 - 1,6	1,0 - 1,6	440 x 270 x 636	17

Power Wave® C300

Pulsed perfection Portable Flexibility



The Power Wave® C300 is a robust small Industrial Compact Pulse welding machine with an extended set of features. As standard the machine is supplied with a full set of CV and Pulse programs.

On top of that advanced welding programs like Power Mode® and Rapid Arc® are included.

The C300 is a user-friendly machine with a clean and easy to understand user interface and an extensive set of features. Job control and remote control on the gun are supported.

Like all new Power Waves the machine is equipped with an Ethernet connector.

Free Lincoln software like Production Monitoring is available to work with the C300. Lincoln Electric is supplying free software updates including weldmodes through powerwavesoftware.com

Processes

Pulse MIG, Pulse-On-Pulse®, MIG, Flux-Cored, Stick, Lift TIG DC

Output



Input



Order

K2676-1

Power Wave® C300



- **Superb arc welding characteristics** in Pulse, Pulse on-Pulse®, CV, Stick and TIG DC.
- **As standard a variety materials are supported;** Steel, Stainless, Aluminium but also High Nickel and CuSi.
- **RapidArc®** for a higher travel speed and less Heat Input with steel and Stainless.
- **PowerMode®** for premium Short Arc welding Steel and Stainless especially with thin plate.
- **S2F** for premium Aluminium welding
- **Clearing Pulse** providing a clean wire tip without a ball, ready to restart.
- **Job control** to store your settings and quick recall. Limits and access through a pass word are standard supported.
- **Remote on the gun** by use of a cross switch allows you to switch to another job of decrease or increase WFS during welding.
- **Water Cooled** version by use of the COOL ARC® 50 water cooler.
- **Meet IEC974-1, ROHS and CE** standards for safety and reliability.



Product Name	Product Number	Input Power	Rated Output Current/Duty Cycle	Fuse size	Output Range	Dimensions H x W x D (mm)	Net Weight (kg)
PW C300	K2676-1	230/400/460/3/50-60	300A/40%	35/20A	5-300A	518 x 356 x 609	41.4

Power Wave® S350

Pulsed perfection, Modular flexibility



The Power Wave® S350 is a robust Pulse welding machine following the new modular concept.

The unit can be completed with different Arclink Wire feeders like the LF45 and PF10(D) and changed to a water cooled package by adding the COOL ARC® 50.

Part of the modular concept is the new STT module which is transferring the package into a professional STT machine.

As standard the machine is supplied with a full set of CV and Pulse programs. On top of it advanced welding programs like Power Mode® and Rapid Arc® are included.

Like all new Power Waves, the S350 CE is equipped with an Ethernet connector.

Free Lincoln software like Production Monitoring are available to work with the S350. Lincoln Electric is supplying free software updates including weldmodes through powerwavesoftware.com

Processes

Pulse MIG, Pulse-On-Pulse®, MIG, Flux-Cored, Stick, Lift TIG DC

Output



Input



Order

K2823-2

Power Wave® S350



THE LINCOLN ELECTRIC GREEN INITIATIVE
Inverter Technology
reduces energy demand
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- **Superb arc welding characteristics** in Pulse, Pulse on-Pulse®, CV, Stick and TIG DC.
- **As standard a variety materials are supported;** Steel, Stainless, Aluminium but also High Nickel and CuSi.
- **RapidArc®** for a higher travel speed and less Heat Input with steel and Stainless.
- **PowerMode®** for premium Short Arc welding Steel and Stainless especially with thin plate.
- **S2F** for premium Aluminium welding
- **Clearing Pulse** providing a clean wire tip without a ball, ready to restart.
- **STT module** available transferring the machine in an STT/Pulse welding machine.
- **Water Cooled** version by use of the COOL ARC® 50 water cooler.
- **Meet IEC974-1, ROHS and CE** standards for safety and reliability.



Product Name	Product Number	Input Power	Rated Output Current/Duty Cycle	Fuse size	Output Range	Dimensions H x W x D (mm)	Net Weight (kg)
PW S350	K2823-2	230/400/460/3/50-60	350A/40%	45/25A	5-350A	518 x 356 x 609	38.6

Power Wave® 405M



Superior arc performance, revolutionary communication

The Power Wave® 405M features some of Lincoln's best performance technologies and processes all rolled into one highly efficient inverter power source designed for high-end semiautomatic welding.

- **Lincoln's® Waveform Control Technology®** gives you the ability to select the right waveform for each application, enabling patented processes like Pulse-On-Pulse® and Power Mode®.
- **Double Pulse** supports thin plate Aluminium welding and high arc stability at low Amps.
- **Fan as needed™** to reduce noise and power consumption.
- **State-of-the-art inverter technology** provides high power efficiency, excellent welding performance and a lightweight, compact design.
- **Excellent arc starting.**
- **Water flow sensing** (water cooled package).
- **Meet IEC974-1, ROHS and CE** standards for safety and reliability.

Processes

Pulse MIG, Pulse-On-Pulse®, MIG, Flux-Cored, Stick, Lift TIG DC

Output



Input



Order

K10272-2-A Power Wave® 405M air cooled
 K10272-2-W Power Wave® 405M water cooled



Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Fuse size	Output Range	Dimensions H x W x D (mm)	Net Weight (kg)
PW405M air	K10372-2-A	230/380/415/440/1/3ph	400A/36V/ 35%	25A	5-425A	700 x 700 x 1000	53
PW405M water	K10372-2-W		350A/34V/60%		10-45V		71

Power Wave® 455M & 455M/STT



Superior arc performance, revolutionary communication

For welding thicker materials in robotics, hard automation and semiautomatic applications, choose the Power Wave® 455M. For those applications where heat input control, minimal distortion, and reduced spatter are essential, opt for the Power Wave® 455M/STT. Both models feature Waveform Control Technology™ for superior arc performance on a variety of materials, including steel, stainless steel, aluminum and nickel alloys. Both deliver custom control of the arc for a given wire type, size and shielding gas configuration for consistent welds time after time.

Processes

Pulsed MIG, Pulse-On-Pulse®, MIG, MIG-STT, Flux-Cored, Stick, TIG, Gouging

Output



Input



Order

K2458-2
K2459-2

Power Wave® 455M
Power Wave® 455M STT®



- **Lincoln's® Waveform Control Technology®** gives you the ability to select the right waveform for each application, enabling patented processes like Pulse-On-Pulse® and Power Mode®.
- **Choose from over 60 standard welding waveform programs** that offer a broad range of electrode size, type and shielding gas combinations to give you optimal appearance, penetration, beadshape and travel speed for each application.
- **Optional communication modules** provide networking and process monitoring capabilities via DeviceNet or Ethernet.
- **STT welding mode.**
- **Dual-head** for more versatility.
- **Split wire guide** system.
- **Powerful wire drive motor** for large wire diameters and high speeds.
- **Meet IEC974-1, ROHS and CE** standards for safety and reliability.

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Fuse size	Output Range	Dimensions H x W x D (mm)	Net Weight (kg)
PW 455M	K2458-2	380/415/3/50/60	500A/40V/60% 400A/36V/100%	44A	5-500A Max. OCV:75V	663 x 505 x 835	114
PW 455M/STT	K2459-2	380/415/3/50/60	500A/40V/60% 400A/36V/100% STT : 325A/33V/100X	48A	5-500A Max. OCV:75V	663 x 505 x 835	121



INTERCONNECTION CABLES

Fast-mate (x2), gas hose, protection, (2,5 ; 5 ; 10 ; 15 ; 20 ; 25 & 30m)

Item n° :

K10347-PG-xM (air cooled)
K10347-PGW-xM (water cooled)



GAS PRESSURE REGULATOR

Accommodates CO₂, argon or argon-blended gas cylinders. Includes a cylinder pressure gauge, dual scale flow gauge and 1,3m gas hose

Item n° : consult us

WATER COOLERS

COOL ARC° 25

Item n° : **K14037-1**



COOL ARC° 40

Item n° : **K2187-2**

COOL ARC° 50

Item n° : **K14050-1**



COOLANT ACOROX (2X5L)

Item n° : **K10420-1**

MIG TORCHES

LINC GUN™ RANGE

As standard these guns come with an ergonomic grip, springs on both sides of the cable, retractable pins and a "rotating ball joint" at the end of the gun grip



AIR COOLED

LG 150G, 150A @ 60%
K10413-15-xM 3m, 4m or 5m

LG 250G, 200A @ 60%
K10413-25-xM 3m, 4m or 5m

LG 240G, 220A @ 60%
K10413-24-xM 3m, 4m or 5m

LG 260G, 260A @ 60%
K10413-26-xM 3m, 4m or 5m

LG 360G, 320A @ 60%
K10413-36-xM 3m, 4m or 5m

LG420G, 380A @ 60%
K10413-42-xM 3m, 4m or 5m



WATER COOLED

LG410W, 350A @ 100%
K10413-410-xM 3m, 4m or 5m

LG500W, 500A @ 100%
K10413-500-xM 3m, 4m or 5m



LG52F ALU, 400A, 100%
K10413-ALU-4M 4m

PUSH-PULL TORCHES

LGPP300G, (air cooled)
K10413-PPA 8m, standard
K10413-PPAR 8m, with remote ctrl

LGPP400W, water cooled
K10413-PPW 8m, standard
K10413-PPWR 8m, with remote ctrl