

Invertec® V350 PRO

Processes

Stick, DC TIG, MIG, Pulsed⁽¹⁾,
Flux-Cored, Gouging

⁽¹⁾ Advanced Process model only.

Product Number

K1728-5, K1728-6, K1728-7
K1728-13, K1728-12, K2437-2

See back for complete specs

Input Power

see chart on back

Input Current at Rated Output

see chart on back

Rated Output

350A/34V/60% Duty Cycle

Output Range

5-425A Max OCV: 80V DC

Weight/Dimensions (H x W x D)

81 lbs. (36.7 kg)

14.8 x 13.3 x 27.8 in.

(373 x 338 x 706 mm)

Designed Smart. Built Tough.

The multi-process Invertec® V350 PRO is an efficient, lightweight and portable choice for training, fabrication or construction applications. Available in Construction, Factory, Factory (Tweco®) and Advanced Process models, the versatile V350 PRO is ready for almost any welding job in shop or outdoor environments.

FEATURES

- ▶ **Exceptional Multi-Process Fabrication Welding** -
 - CC - Stick Soft
 - CC - Stick Crisp
 - DC TIG
 - CV - Wire – For MIG and Metal-Cored
 - CV - Innershield® and Outershield® Flux-Cored
 - Arc Gouging – Accessible from All Modes – Plenty of power to handle a 5/16 in. (7.9 mm) carbon
- ▶ **All input voltages and frequencies are both single and three phase rated** - No output derating necessary on single phase.
- ▶ **5-425 amp output range** - For all recommended processes from DC TIG to arc gouging.
- ▶ **Input voltage from 208-575 and 50 and 60 Hz operation** - One machine runs on virtually any input power supply.
- ▶ **Touch Start TIG®** - For contamination-free starts.
- ▶ **Low power consumption for energy savings** - 88% efficiency.
- ▶ **Parallel two units** - For 700A carbon arc gouging.
- ▶ **Bright, large digital amp and volt meters are easy to monitor** - Even in sunlight – and presettable for precise procedure control.
- ▶ **Rugged skid and tube handles** - For convenience and added protection.

APPLICATIONS

- ▶ Metal Fabrication
- ▶ Construction
- ▶ Structural Fabrication
- ▶ Schools and Training Facilities
- ▶ Maintenance and Repair



Shown K1728-6

RECOMMENDED FEEDERS

- ▶ LF-72
- ▶ LF-74
- ▶ LN-10
- ▶ DH-10
- ▶ LN-25 PRO
- ▶ LN-25 PRO Dual Power

ADVANCED PROCESS MODEL INCLUDES

- ▶ Pulsed MIG – Varies weld current to reduce warping and burnthrough on thin materials.
- ▶ Pulse-On-Pulse® – Controls arc length and heat input to achieve excellent appearance and penetration on aluminum.
- ▶ Power Mode® – Delivers a responsive arc when MIG welding to reduce spatter, improve bead wetting and control penetration. Great for thin steel, stainless, silicon bronze and nickel alloys.

INPUT



OUTPUT



Two Year Extended
Warranty Available in
the U.S.A. and Canada.



Construction Model (K1728-5)

Our lightest, most portable model at a value price for conventional MIG, cored, stick, arc gouging and non-remote output control DC TIG applications.

Great For:

- Construction, maintenance or shop welding.

Compatible with:

- LN-25 PRO model wire feeders.
- 6-pin and 14-pin MS connector not included.



- 1) Large, bright, easy to read meters
- 2) Local/remote output control
- 3) Mode selection switch
- 4) Negative and Positive Twist Mate™ Output Terminals
- 5) Wire Feeder Voltmeter Polarity Switch
- 6) Circuit Breaker Reset Buttons
- 7) On/Off Switch
- 8) Hot Start Control
- 9) Arc Control Knob
- 10) Weld Terminals on or remotely controlled
- 11) Preset Output Amps and Voltage Control
- 12) Thermal Overload Indicator Light

Factory Model (K1728-6 with Twist Mate™ Cable Receptacles) (K1728-13 with Tweco® Cable Receptacles)

- Adds full remote capabilities and auto-detect local/remote override control.
- Versatile multi-process machine for MIG, cored, stick, TIG and arc gouging applications.
- Optional Advanced Process Panel adds:
 - Pulsed MIG
 - Lincoln Electric Power Mode®
 - Lincoln Electric Pulse-on-Pulse®

Great For:

- Construction or large-scale production factory applications.

Compatible with:

- LF-72, LF-74, LN-10, DH-10, and LN-25 PRO wire feeders.
- 6-pin and 14-pin MS-type connectors.



- 1) Large, bright, easy to read meters
- 2) Local/remote output control
- 3) Mode selection switch
- 4) Remote Output Control Receptacles – 6- & 14-pin
- 5) Negative and Positive Twist Mate™ or Tweco® Output Terminals
- 6) Wire Feeder Voltmeter Polarity Switch
- 7) Circuit Breaker Reset Buttons
- 8) On/Off Switch
- 9) Hot Start Control
- 10) Arc Control Knob
- 11) Weld Terminals on or remotely controlled
- 12) Preset Output Amps and Voltage Control
- 13) Thermal Overload Indicator Light

Advanced Process Model (K1728-7)

- Standard Advanced Process Panel adds:
 - Pulsed MIG
 - Lincoln Electric Power Mode®
 - Lincoln Electric Pulse-on-Pulse®
- Standard full remote capabilities and auto-detect local/remote override control.
- Advanced multi-process machine for pulsed MIG, cored, stick, TIG and arc gouging applications.

Great For:

- High-end pulsed MIG applications.

Compatible with:

- LF-72, LF-74, LN-10, DH-10, and LN-25 PRO wire feeders.
- 6-pin and 14-pin MS-type connectors.



- 1) Large, bright, easy to read meters
- 2) Local/remote output control
- 3) Mode selection switch
- 4) Remote Output Control Receptacles – 6- & 14-pin
- 5) Negative and Positive Twist Mate™ Output Terminals
- 6) Wire Feeder Voltmeter Polarity Switch
- 7) Circuit Breaker Reset Buttons
- 8) On/Off Switch
- 9) Arc Control Knob
- 10) Weld Terminals on or remotely controlled
- 11) Preset Output Amps and Voltage Control
- 12) Thermal Overload Indicator Light

Tweco® is a registered trademark of Thermadyne corporation.

SYSTEM SELECTION

Ready-Pak® Packages

Fully assembled and ready to weld—just add wire and gas.

V350 PRO Factory Model / LF-72 Heavy Duty Wire Feeder (for non-pulsed MIG Welding)

Order K2437-2

- V350 PRO Factory Model
- LF-72 Heavy Duty Wire Feeder
- 15 ft. (4.5 m) Magnum® PRO 350 gun and cable assembly w/ .035-.045 in. (0.9-1.2 mm) liner.
- Work and Wire Feeder 2/0 Welding Cable Package
- Harris® Flowmeter Regulator and Hose
- Heavy Duty Inverter and Wire Feeder Cart



Shown:
Invertec® V350 PRO Factory Model/
LF-72 Heavy Duty Wire Feeder Ready-Pak®

V350 PRO Inverter Racks

- An ideal system to group several inverter power sources in an industrial portable package. Entire system meets National Electric Code (NEC) Standards.
- Includes Invertec® V350 PRO Factory (Tweco®) Model (K1728-13). This special rack version has all the same features as the factory model with added IP23S rating for outdoor use and Tweco® cable receptacles.

Order:

K2667-1 4-Pack Inverter Rack with 4 Invertec® V350 PRO Factory (Tweco®) Power Sources

K2667-2 6-Pack Inverter Rack with 6 Invertec® V350 PRO Factory (Tweco®) Power Sources



RECOMMENDED ACCESSORIES

GENERAL OPTIONS



Advanced Process Panel

Includes Pulsed MIG, Pulse-On-Pulse® and Power Mode® capabilities. Alpha-numeric display for accurate setting. For V350-PRO Factory Model only.
Order K1763-1



Deluxe Adjustable Gas Regulator & Hose Kit

Accommodates CO₂, Argon, or Argon-blend gas cylinders. Includes a cylinder pressure gauge, dual scale flow gauge and 4.3 ft. (1.3 m) gas hose.
Order K586-1



Work and Wire Feeder 2/0 Weld Cable Package

Includes Twist Mate™ connectors, work clamps, 15 ft. (4.5 m) work cable and 10 ft. (3.0 m) electrode cable. Rated 350 amps, 60% duty cycle.
Order K1803-1



Twist Mate™ Cable Plug

For connecting welding cable to output terminal receptacles. For 1/0-2/0 (50-70 mm²) cable.
Order K852-70



Twist Mate™ Cable Plug

For connecting welding cable to output terminal receptacles. For 2/0-3/0 (70-95 mm²) cable.
Order K852-95



Twist Mate™ Cable Receptacle

For connecting welding cable to Twist Mate™ Cable Plug.
Order K1759-70 for 1/0-2/0 (50-70 mm²) cable
Order K1759-95 for 2/0-3/0 (70-95 mm²) cable



Twist Mate™ to Lug Adapter

For connection of lugged cable to Twist Mate™ connectors. 18 in. (457 mm) long.
Order K2176-1



Inverter and Wire Feeder Cart

Rear-wheeled cart includes front casters and no-lift gas bottle platform. Convenient handles allow for easy cable storage while full length side trays store parts and tools. Shipped fully assembled. Small footprint fits through 30 in. (762 mm) door.
Order K1764-1



Dual Cylinder Kit

Permits side-by-side mounting of two full size gas cylinders, with easy loading. For use with K1764-1 cart.
Order K1702-1



STICK OPTIONS

Accessory Kit

For stick welding. Includes 35 ft. (10.7 m) 2/0 electrode cable with lug, 30 ft. (9.1 m) 2/0 work cable with lugs, headshield, filter plate, cover plate, work clamp and electrode holder. 400 amp capacity.
Order K704



Accessory Kit

For stick welding. Includes 20 ft. (6.1 m) #6 electrode cable with lug, 15 ft. (4.6 m) #6 work cable with lugs, headshield, work clamp, electrode holder and sample pack of mild steel electrode. 150 amp capacity.
Order K875

RECOMMENDED ACCESSORIES



Remote Output Control
For remote output of welding voltage. Consists of control box with four conductor cable and 6-pin MS-type connector.
Order K857 for 25 ft. (7.6 m)
Order K857-1 for 100 ft. (30 m)



Hand Amptrol™
Provides 25 ft. (7.6 m) of remote current control for TIG welding. (6-pin plug connection).
Order K963-3



Twist Mate™ Torch Adapter
For connection of PTA-9 or PTA-17V torches (1 piece cable) to power sources without gas passing through the Twist Mate™ connection.
Order K960-1



TIG OPTIONS
Pro-Torch™ TIG Torches
A full line of air-cooled and water-cooled torches available. Request Lincoln publication E12.150



Foot Amptrol™
Provides 25 ft. (7.6 m) of remote current control for TIG welding. (6-pin plug connection).
Order K870



TIG-Mate™ 17V Air-Cooled TIG Torch Starter Kit
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17V torch, parts kit, Harris® flowmeter/regulator, 10 ft. (3.0 m) gas hose, and work clamp and cable.
Order K2265-1



TIG Module
Portable, high frequency unit with gas valve for TIG welding. Rated at 300 amps/60% duty cycle. Requires TIG Module Control Cable.
Order K930-2



Arc Start Switch
May be used in place of the Foot or Hand Amptrol™. Comes with a 25 ft. (7.6 m) cable. Attaches to the TIG torch for convenient finger control to start and stop the weld cycle at the current set on the machine.
Order K814



TIG-Mate™ 17 Air-Cooled TIG Torch Starter Kit
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTA-17 torch, parts kit, Harris® flowmeter/regulator, 10 ft. (3.0 m) gas hose, Twist Mate™ adapter, and work clamp and cable.
Order K2266-1



TIG Module Control Cable
(For Factory and Advanced Process Models only) 9-pin connector at the TIG Module to 14-pin MS type connector at the power source. (Contains input power, remote control, contactor control, and ground circuits). For machines having a 14-pin remote control and power receptacle.
Order K936-1



Invertec® TIG Solenoid Kit
Mounts inside the back of the V350 PRO. Switches gas flow in the V350 PRO through the Twist Mate™ connector. Includes gas hose and solenoid. [Not compatible with construction and factory (Tweco®) models].
Order K1762-2



TIG-Mate™ 20 Water-Cooled TIG Torch Starter Kit
Get everything you need for TIG welding in one complete easy-to-order kit packaged in its own portable carrying case. Includes: PTW-20 torch, parts kit, Harris® flowmeter/regulator, 10 ft. (3.0 m) gas hose, Twist Mate™ adapter, work clamp and cable and 10 ft. (3.0 m) water hose.
Order K2267-1



TIG Module Control Cable
(For Construction Model only) 9-pin connector at the TIG Module to a grounded 115V plug. (Contains input power, and ground circuits). For machines having no remote control capability.
Order K936-4



Twist Mate™ Torch Adapter
For connection of Pro-Torch™ TIG torches (1 piece cable) to power sources with gas passing through the Twist Mate™ connection. For use with K1762-2.
Order K1622-1 For air-cooled PTA-9 or PTA-17 torches.
Order K1622-3 For air-cooled PTA-26 torches.
Order K1622-4 For water-cooled torches.

PRODUCT SPECIFICATIONS

Product Name	Product Number	Model	Input Power	Rated Output Current/Voltage/ Duty Cycle	Input Current @ Rated Output	Output Range	H x W x D inches (mm)	Net Weight lbs. (kg)
Invertec® V350 PRO	K1728-5	Construction	200-208/230/380-415/	350A/34V/60%	3ph: 50/42/28-26/23/18	5-425A Max OCV: 80V DC	14.8 x 13.3 x 27.8 (376 x 338 x 709)	81 (36.7)
	K1728-6	Factory	460/575/1/3/50/60	300A/32V/100%	1ph: 94/85/54/42/37			
	K1728-7	Advanced Process	208/230/415/		3ph: 41-39/36/23-22/19/16			
	K1728-13	Factory (Tweco®)	460/575/1/3/50/60		1ph: 76/69/41/36/31			
	K1728-12	CE	200-220/380-400/ 415-440/1/3/50/60	350A/34V/60% (3ph) 320A/33V/60% (1ph) 300A/32V/100% (3ph) 275A/31V/100% (1ph)	3ph: 48/28-27/26-24 1ph: - 82/55-50/48-45 3ph: 41-37/28-22/22-21 1ph: - 64/44-43/38-35			
LF-72 Ready-Pak®	K2437-2	Factory	200-208/230/380-415/ 460/575/1/3/50/60	350A/34V/60% 300A/32V/100%	3ph: 50/42/28-26/23/18 1ph: 94/85/54/42/37		370 (167.8)	

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details.

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, 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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