

APEX™ 2100 Orbital Controller

Processes

TIG

Product Number

K52073-1

See back for complete specs

Input Power

115/1/50/60

Input Current

50/60 Hz: 5A @115 volts

Weight/Dimensions (H x W x D)

78 lb. (35.4 kg)

34.5 x 9.5 x 26.25 in.

(876.3 x 241.3 x 668 mm)

See back for complete specs

The APEX™ 2100 Controller

The APEX™ 2100 Controller is a fully integrated and synchronized system for controlling mechanical oscillation, torch height control (AVC) and wire and gas delivery. With the weld data delivered between the control and pendant instantly, the operator has immediate access to monitor, adjust and control weld parameters throughout the welding process. Simple menus for operation and intuitive controls allow the user to easily operate the system and produce consistent welds for a wide range of applications. The controller is designed to be quickly serviced in a production environment and to withstand harsh environmental factors.

FEATURES

▶ Synchronized System

- Captures all welding data in real-time accuracy.
- Operator has immediate access to monitor, adjust and control welding parameters throughout the welding process.
- Up to 90 welding programs can be stored on the controller or a USB for effortless operator selection and set up.
- All weld information and data is stored and can be used for future analytical and statistical reporting.
- USB port for quick transfer of data and information from system-to-system or system-to-PC.

- ▶ **Ergonomic** – Pendant is lightweight and balanced for one-handed operation, with large buttons and controls for easy operation while wearing protective gloves.

- ▶ **Durability** – Designed to withstand operator and environmental abuse.



Shown:
K52003-1 APEX™
Orbital Controller

- ▶ **Integration Capability** – Analog control system provides easy integration with existing fleet of equipment.

- ▶ **Service and Maintenance** – If necessary, operators can access and replace PC boards quickly and easily while in the field.

▶ Easy to Operate

- Simple and logical navigation is easy for operators to learn.
- Illuminated display with clear type for trouble-free reading.

APPLICATIONS

- ▶ Nuclear Energy
- ▶ Thermal Energy
- ▶ Petroleum Processing
- ▶ Pressure Vessel
- ▶ Contractors

KEY CONTROLS

APEX™ 2100 Pendant



1. Emergency Stop
2. LCD Screen
3. Selection Keys – LCD screen navigation
4. Adjustment Knob
5. Wire On/Off
6. Travel Forward/Reverse – Track Ring travel position
7. Stop/Start
8. System Set up/Program Screen
9. Wire Feed Speed
10. Mechanical Oscillation
11. Arc Voltage
12. Welding Amperage
13. Weld Screen – Basic weld screen parameters

APEX™ 2100 ORBITAL CONTROL

Part Number	Description
K52082-1	Orbital Standard System One-Pak® (APEX™ Orbital Controller System and HELIX™ T55 [HELIX™ track ring not included - select track ring size to complete system])
K52003-1	APEX™ Orbital Controller System (Control, Pendant, Cabinet, Power Wave® S500, Cool Arc® 55 and cables. Weld head not included.)
K52073-1	APEX™ 2100 Controller
K52074-1	APEX™ 2100 Pendant
K52075-1	APEX™ Cabinet
K52076-25	APEX™ 2100 Pendant Cable, 25 ft (7.6 m)
K52076-50	APEX™ 2100 Pendant Cable, 50 ft (15.2 m)
K52076-75	APEX™ 2100 Pendant Cable, 75 ft (23 m)
K52076-100	APEX™ 2100 Pendant Cable, 100 ft (30.5 m)
K3170-1	Power Wave® S500
K3086-1	Cool Arc® 55

PRODUCT SPECIFICATIONS

Product Name	Part Number	Input Power	Rated Output	Input Current	Dimensions H X W x D - in (mm)	Net Weight lbs (kg)
APEX™ 2100 Controller	K52073-1	115/1/50/60	N/A	50/60 Hz: 5A @115 volts	34.5 x 9.5 x 26.25 (876.3 x 241.3 x 668)	78 (35.4)
APEX™ 2100 Pendant	K52074-1	24V	N/A	1A	11.5 x 8 x 3.75 (292.1 x 203.2 x 96.5)	6 (2.7) (with cable)
APEX™ Cabinet	K52075-1	N/A	N/A	N/A	49 x 27.5 x 29 (1244 x 699 x 736.6)	175 (79.4)
Power Wave® S500	K3170-1	200/208/220/ 230/380/400/ 415/460/575/ 3/50/60	GTAW-DC: 550A/32V/40% GTAW-DC: 450A/28V/100%	3 PH/40% Duty Cycle: 81/73/41/37/29A 3 Ph/100% Duty Cycle: 60/54/31/27/21A	22.5 x 14 x 24.8 (571 x 355 x 630)	150 (68)
Cool Arc® 55	K3086-1	115/1/60	N/A	60HZ: 3.8A @ 115 volts	25.4 x 13.9 x 11.5 (645.2 x 353 x 292.1)	Empty: 62.6 (28.5) Full: 77.3 (35.1)

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