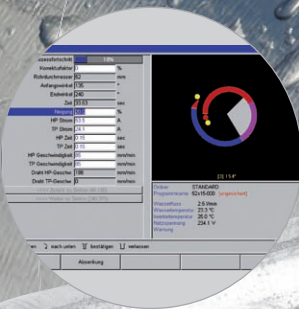


Auto-programming
and multi-language
operation



Unique new design with single
knob operation, highly visible
10.5" colour monitor and built-in
mini printer

ORBIMAT® 165 CA^{Advanced} ORBIMAT® 300 CA^{Advanced}

Compact computer controlled
orbital welding power sources with
unique features Flow Force and
BUP Control.

Easy to use Auto-Programming which
requires only input of:

- Tube diameter
- Wall thickness
- Material
- Welding gas

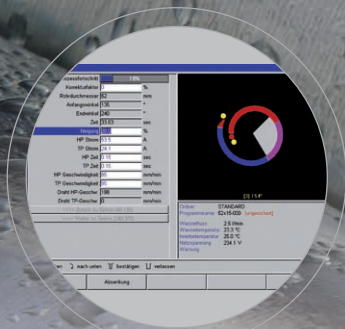
Unique features:

- Exclusive new design with single knob operation
- Swivel mount 10.5" colour monitor
- Graphical operator guidance
- Flow force programmable arc gas flow
- BUP CONTROL programming (sectional programming of internal purging pressure with optional BUP CONTROL module)
- Clear procedure organisation with folder structure



- Compact design
- Built-in mini printer
- Storage capacity for more than 5000 welding procedures
- Extensive data logging with multi-language system
- Data transfer via integral MultiCard-Reader (suitable for nearly all common cards)
- PC offline software (optional) with simple conversion of data log files into pdf-files
- WIDE RANGE input voltage 85 - 260 V, 50/60 Hz
- Integral water cooler
- Total weight only 26 kg (165 CA) and/or 46 kg (300 CA), including full water cooler
- Maintenance friendly with PSS (Pro-Service-System)





Data logging:
Offers a wide range of data-logging options for documentation and archiving



PSS Pro-Service-System:
Easily detecting failures on the system which permits rapid maintenance on site



BUP Control Box



ORBITWIN
Parallel Switching Box

ORBIMAT 165 CA and ORBIMAT 300 CA – worldwide unique in performance and size!

The ORBIMAT CA-series is designed with an exclusive new operational concept. A graphical operation menu system allows the flexible control system to be navigated using a single knob and five function keys. The swivelling, highly visible monitor allows the operator to select the optimum viewing position.

Folders can be created to organise the 5000 welding procedures, that the machine can hold, in a systematic filing system.

The **ORBIMAT CA-series** includes the well proven **ORBIMATIC AUTOPROGRAMMING** with easy weld procedure generation, which requires input of diameter, wall thickness, material and gas. The standard version includes the control system for cold wire feeding and is therefore able to run the complete range of ORBIMATIC Weld heads.

Data-Logging

A wide range of data-logging options are available for documentation and archiving. With the use of the full function keyboard (supplied with the machine) additional information can be added to the data log file such as electrode type, welder's name, detailed application description and so on.

Since printing after every weld maybe impractical under some conditions, the data log files can be saved temporarily on a FLASH-Card.

ORBIMATIC offers even an OFFLINE soft-/hardware-package (DATA LOGGIN Package) to allow transfer of data log files and and procedures to any PC for archiving, administration and conversion into pdf-files.

Flow Force and BUP Control System

A new feature the so called Flow Force makes the arch gas rate adjustable. This allows pre-purge times to be reduced on enclosed weld heads down to approx. 7 seconds!

The optional BUP Control module is a unique feature which allows the internal purge pressure to be optimised during the weld cycle thus compensating the sinking of the welding pool.

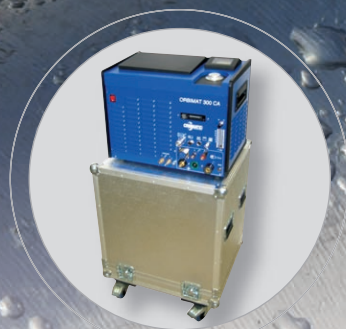
The BUP Control allows the internal purge pressure to be adjusted during the welding cycle to take into account the physical welding position.

PSS Pro Service System

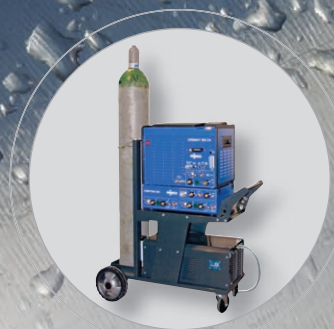
The new PSS (Pro Service System) brings a new dimension to orbital welding. PSS allows the operator to easily detect any failures on the system, which permits rapid maintenance on site. With a very systematic order of each component, all parts are easy to locate and exchange.

Key components are connected by simple plugs. An LED panel is located on the rear side of the machine and this allows the operator to identify any future problems without having any technical knowledge, or the need for any other instruments.

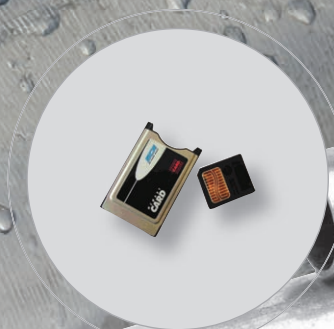
Furthermore specific control functions of the system can be temporarily switched off in order to complete, with extreme care, an immediate application on site. The machine can then be taken to a workshop to be serviced and repair the fault.



Heavy-duty transport case
(here with ORBITWIN 300 CA)



ORBICAR W trolley
with integrated water
cooling system



CompactFlash Card
32 MB



DATA-LOGGING
package

Accessories

ORBITWIN Parallel Switching Box

For maximum production the ORBITWIN can be used to allow simultaneous connection of 2 weld heads.

The ORBITWIN will allow the connection of 2 different head models. Each weld head can be assigned a separate welding procedure and the ORBITWIN will automatically transfer all services to the weld head in use and recall the associated procedure.

While one head is in use the other is isolated, allowing the operator to set one head while the other is welding.

Article	To use with ORBITWIN	Code
ORBITWIN 165 CB	165 CB	860 000 001
ORBITWIN 165 CA	165 CA	861 000 001
ORBITWIN 300	300 CA, 300 CB, 300 CA-AC/DC	876 000 001

Heavy-duty transport case on stable wheels

Suitable for power sources including ORBICOOL 3004.

Article	To use with ORBITWIN	Code
Transport case	165 CB, 165 CA	875 050 002
Transport case	300 CB, 300 CA, 300 CA-AC/DC	874 050 001

ORBICAR Trolley

The ORBICAR is a practical trolley with a tray and a mounting possibility for the gas bottle. The ORBICAR W additionally includes an integrated water cooling system and therefore is an alternative to the compact-water-circulator ORBICOOL 3004.

Article	To use with ORBITWIN	Code
ORBICAR S trolley	165 CB, 165 CA	884 000 001
ORBICAR W trolley	300 CB, 300 CA, 300 CA-AC/DC	884 000 002

DATA-LOGGING Package, CompactFlash Card

Applicable with all ORBITWIN power sources.

For external programming and archiving.

Consisting of:

- 1 CompactFlash Card 32 MB for about 2000 welding procedures or log-files.
- 1 Multi-Card Reader with Standard USB.
- Software for external editing and storing of welding procedures, software ORBIPROT for converting data-log-files into PDF files within selection of 11 different languages incl. English, Polish, French, Italian, German.

Operation can practically be done with nearly each standard PC.

Article	Code
DATA-LOGGING Package (incl. CompactFlash Card 32 MB)	875 050 003
CompactFlash Card 32 MB	875 012 056

More innovative products for orbital welding:



ORBIWELD

Totally enclosed, extra thin orbital tube welding heads yet with extremely high duty cycle because of powerful water cooling.

Because of its extremely small dimensions, the ORBIWELD S series is the perfect solution for applications with tight access restrictions an frequently found in pharmaceutical and similar areas.



ORBIWELD TP

Open-Arc weld heads with or without cold-wire-feeding.

The new ORBIWELD TP series are completely unique in design, making it very versatile.

Locating the motor inside the main housing, results in the ORBIWELD TP series being very compact in design and the revolutionary design of the drive system makes large & bulky drive mechanisms a thing of the past.



P 16 / P 20

These orbital weld heads have been designed to enable the welding of boiler tubes fitted to tube sheets in heat exchangers.

They allow this task to be carried out using a precision orbital welding power supply, such as the ORBIMAT C-range. This means that the rotation of the torch is consistent and the delivery of the welding current is also kept constant and can be varied around the circumference of the tube.



ORBIPURGE Stopper Kit

Contains all you need for your external purging needs. The stoppers can be used purging and blanking of tubes and fittings. Two hollow plugs of each size are supplied as well as some smaller solid plugs for blanking. The kit is supplied in an attractive ABS case with a range of hose fittings for most applications. All plugs are made from white nylon and are lightweight and durable.

Technical data

	ORBIMAT 165 CA	ORBIMAT 300 CA
Code	871 000 001	872 000 001
Input Power, WIDE-RANGE	85 - 260 V, 50/60 Hz, 1 phase	3 x 400 VAC +/- 15%
Output Range	2 - 160 A at input voltage > 160 V 2 - 110 A at input voltage > 160 V	3 - 300 A
Output Range	100% at 100 A 40% at 160 A	100% at 200 A 60% at 300 A
Weight without ORBICOOL	*	34 kg
with ORBICOOL	26 kg	46 kg
Dimensions without ORBICOOL	*	530 x 400 x 400 mm
with ORBICOOL	510 x 360 x 220 mm	530 x 575 x 400 mm

* the ORBIMAT 165 CA already comes with the ORBICOOL system.

The ORBIMAT CA-series is working with all weld-heads from ORBIMATIC.

The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult our general conditions of supply.

Compact computer controlled orbital welding power sources



ORBIMAT 165 CA



ORBIMAT 300 CA

Stamp of distributor:

© Orbitalum Tools GmbH (09.2009)

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