Orbital welding power supplies

ORBIMAT CA

Features, application range, technical data, see from page 7.

Scope of delivery:

- 1 Orbital welding power supply of the ORBIMAT CA series
- 1 Hose connection set ORBIMAT (Code 875 030 018)
- 1 Dummy plug for remote control socket (Code 875 050 006))
- 1 Bottle of OCL-15 coolant, 2 liters (Code 875 030 015) (165 CA only)
- 1 External keyboard (Code 875 012 075)
- 2 Keys for the key switch (for reordering of 1 key: Code 875 012 058)
- 1 Operating instructions with calibration certificate
- 1 QuickStart guide

ARTICLE	VERSION	CODE		WEIGHT OF MACHINE KG	DISPATCH WEIGHT KG
ORBIMAT 165 CA	Wide-Range 90 - 260 V, 50/60 Hz, 1 phase	**871 000 001**		26.000	41.000
ORBIMAT 300 CA	400 - 480 V +/- 10%, 50/60 Hz, 3 phase	**872 000 010**		33.000	48.000
ORBIMAT 300 CA AC/DC	400 V +/- 15%, 50/60 Hz, 3 phase	**877 000 001**		41.400	57.000
ORBIMAT 300 CA AVC/OSC	400 - 480 V +/- 10%, 50/60 Hz, 3 phase	**872 000 020**		37.300	53.000

Suitable accessories (available option):

- ORBICAR W trolley with integrated water cooling, see page 10
- ORBICOOL Active compressor cooling device, see page 10
- ORBICAR S trolley, see page 11
- Durable storage and shipping case, see page 11
- ORBITWIN switching device, see page 11
- Remote control with cable, see page 12
- Soft-/Hardware package, see page 12
- BUP control box (purging gas pressure regulator), see page 12
- ORBmax residual oxygen meter, see page 68
- TIG manual welding torch, see page 72
- Pressure regulator, see page 71

ORBIMAT 165 CA

ORBIMAT 300 CA

ORBIMAT 300 CA AC/DC

ORBIMAT 300 CA AVC/OSC

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Water cooling systems for ORBIMAT

ORBICAR W trolley with integrated water cooling

ORBICAR W trolley with integrated water cooling

The ORBICAR W trolley is the perfect accessory for the Orbitalum 300 A power supplies due to the integrated water cooling. Beside the water coolant, the trolley is equipped with a practical holder for gas bottles.

The tank already contains 8 liters (2.11 gal) of the OCL-15 coolant at delivery (see page 13).

TECHNICAL DATA	ORBICAR W TROLLEY
Water tank contents	8 l / 2.11 gal
Cooling type	Convection cooling
Dimensions (lxwxh)	107 x 52.5 x 113 cm 42.1" x 20.7" x 44.5"

ARTICLE	SUITABLE FOR ORBIMAT	CODE		KG
ORBICAR W trolley with integrated water cooling	300 CA, 300 CA AC/DC, 300 CB, 300 CA AVC/OSC	**884 000 002**		58.200
ORBICAR W trolley with integrated water cooling*	165 CA*, 165 CB*	**884 000 004**		58.200

* ORBIMAT 165 power sources must be retrofitted at the factory

ORBICOOL Active

ORBICOOL Active

Very efficient compressor cooling device with constant and adjustable water temperature. Particularly suitable for welding units in series production.

2 cans, each with 2 liters (0.53 gal) of the OCL-15 coolant are already included in the scope of delivery (see page 13).

Suitable for all* ORBIMAT orbital welding power supplies.
Not suitable for use in combination with the ORBICAR S trolley.

TECHNICAL DATA	ORBICOOL ACTIVE
Coolant capacity	0.81 kW / 1.09 hp
Connected load	0.58 kW / 0.78 hp
Maximum power consumption	6.2 A
Mains voltage	230 V, 50 Hz
Water tank contents	6 l / 1.59 gal
Cooling type	Compressor cooling
Dimensions (lxwxh)	565 x 440 x 335 mm 22.2" x 17.3" x 13.2"

ARTICLE	CODE		KG
ORBICOOL Active for ORBIMAT 165 CA/CB*	**889 000 001**		40.000
ORBICOOL Active for ORBIMAT 300 CA/CB	**889 000 002**		40.000

* ORBIMAT 165 power sources must be retrofitted at the factory

Other accessories for ORBIMAT

ORBITWIN switching devices

To increase productivity, the switching unit ORBITWIN is available which allows the alternately operation with 2 weld heads on the ORBIMAT.
The previously assigned program is recalled automatically when the start key of the weld head is actuated. The weld head that is not being used is locked and can be prepared for the next welding operation

Including all connecting cables and hoses.

ORBITWIN 300 switching device

ARTICLE	SUITABLE FOR ORBIMAT	CODE		KG
ORBITWIN 165 CB switching device	165 CB	**860 000 001**		8.800
ORBITWIN 165 CA switching device	165 CA	**861 000 001**		8.800
ORBITWIN 300 switching device	300 CA, 300 CA AC/DC, 300 CB	**876 000 001**		8.800

ORBICAR S trolley

The ORBICAR S is a practical trolley with storage shelf and an option of securing a gas cylinder. The ORBICAR S trolley can be combined with all power supplies of the ORBIMAT series. This trolley is often used in combination with the ORBITALUM 165 A orbital welding power supplies.

Not suitable for use in combination with the compressor cooling device ORBICOOL Active.

ORBICAR S trolley

TECHNICAL DATA	ORBICAR S TROLLEY
Dimensions (lxwxh)	107 x 52.5 x 113 cm 42.1" x 20.7" x 44.5"

ARTICLE	CODE		KG
ORBICAR S trolley	**884 000 001**		19.100

Durable storage and shipping case

With castors. Protects the power supply during transport.
Perfect for the use on construction sites.

Durable storage and shipping case
(ORBIMAT 300 CA not included in the scope of delivery)

ARTICLE	SUITABLE FOR ORBIMAT	CODE		KG
Durable storage and shipping case 165	165 CA, 165 CB	**875 050 002**		17.500
Durable storage and shipping case 300	300 CA, 300 CA AC/DC, 300 CB	**874 050 001**		20.800

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BUP control box (incl. ORBIPURGE forming set)

BUP control box

The power supplies of the ORBIMAT CA series offer the option in conjunction with the BUP control attachment (BUP = Backup Pressure Control) to adjust the forming gas pressure in the inner tube via a pressure sensor, which compensates almost entirely the often undesirably occuring of the seam weld into the sump position. At the same time, the gas pressure is modified automatically during welding by the system between a programmable minimum and maximum value depending on the position of the electrodes.

Including ORBIPURGE forming set for tube ID 12 - 110 mm (0.472" - 4.331"), see page 70.

ARTICLE	SUITABLE FOR ORBIMAT	CODE		KG
BUP control box	165 CA, 300 CA	**886 000 001**		2.700

Soft-/Hardware package

Soft-/Hardware package

Suitable for all ORBIMAT orbital welding power supplies.

For external programming and data documentation, consisting of:

- 1 CompactFlash card for transferring data between the machine and PC. For storing weld data protocols or for extending the program memory. Capacity to store over 5.000 welding programs.
- 1 USB card reader for exporting the CompactFlash card on the PC.
- Software ORBIPROG_CA. ORBIPROG_CA software allows programs and protocols to be stored on the PC. The parameters of the CA programs can be edited using the software and can be transferred back to CA models and used there after processing. Additionally, programs from C-series machines (e.g. OM 160 C) can be converted to CA format with the help of software. The parameters of the CA programs can be edited using the software and can be transferred back to CA models and used there after processing.

ARTICLE	CODE		KG
Soft-/Hardware package	**875 050 003**		0.488

CompactFlash Card

CompactFlash Card

For storing weld data protocols or for extending the program memory.
1 CompactFlash Card is already included in the scope of delivery of the Soft-/Hardware package.

Capacity to store over 5.000 welding programs.

ARTICLE	CODE		KG
CompactFlash Card	**875 012 056**		0.010

Remote control with cable

Remote control with cable

Suitable for all ORBIMAT orbital welding power supplies.
1 remote control with cable is already included in the scope of delivery of the ORBIMAT 300 CA AVC/OSC.

The remote control is not required when working with enclosed orbital weld heads.

ARTICLE	CABLE LENGTH [M]	CABLE LENGTH [INCH]	CODE		KG
Remote control with cable	7.5	24.6	**875 050 001**		1.350

Consumables for ORBIMAT

Paper rolls and ribbon cartridges

For integrated system printer. Suitable for all ORBIMAT orbital welding power supplies.

1 paper roll and 1 ribbon cartridge are already included in the scope of delivery of the ORBIMAT orbital welding power supplies.

ARTICLE	CODE		KG
Paper rolls for integrated printer, pack of 3	**875 050 017**		0.150
Ribbon cartridge for integrated printer CA	**875 030 004**		0.010
Ribbon cartridge for integrated printer CB	**875 030 002**		0.020

Paper rolls and ribbon cartridges for integrated printer

OCL-30 coolant

Anti-freeze pre-mix for ORBIMAT power supplies and cooling units to avoid freezing of the cooling water. Applicable up to -30 °C (-22 F) outside temperature. Increased service life of components of the cooling system through very high corrosion protection and high pH-value. For even better ignition characteristics due to low conductivity. Clear coolant liquid.

Applicable with ORBICAR W, ORBICOOL Active, ORBIMAT 165 CB and 165 CA.

1 can is already included in the scope of delivery of the ORBIMAT 165 CA orbital welding power supply.

ARTICLE	VERSION	CODE		KG
OCL-30 coolant	Canister with 2 l (67.6 fl oz)	**875 030 015**		2.220

OCL-30 coolant

Hose connection set ORBIMAT

1 hose connection set is already included in the scope of delivery of the ORBIMAT orbital welding power supplies.

Set, consisting of:
- Teflon gas hose
- Ear clamps with insert
- Hose clips 3/8"
- Water hose for tank ventilation
- Gas input connector
- Swivel nuts 3/8"
- Hose clips 1/4"
- Swivel nuts 1/4"
- Funnel

ARTICLE	CODE		KG
Hose connection set ORBIMAT	**875 030 018**		0.445

Hose connection set ORBIMAT

Other accessories for orbital welding

- ESG tungsten grinders, see page 63
- ORBmax residual oxygen meter, see page 68
- ORBIPURGE forming set, see page 70
- Pressure regulator, see page 71
- Inspection set, see page 71
- WS2 tungsten electrodes, see page 71
- TIG manual welding torch for ORBIMAT, see page 72