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O3BWTMD_PRO1

Automatic Generator DOUBLE Output





Study instruction manuals and observe the warnings before installation, operation, service and maintenance.

Not following the instructions can result in serious accidents with fatal injuries.

In order to make the information clear only foreseeable conditions have been considered. No warnings are given, therefore, for situations arising from unintended usage of the machine and its tools.

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1. Function description

1.1 General Description

The O3BWTMDPRO is a chem. free and it is a high voltage “silent corona discharge” type ozone generator. The ozone is generated inside of, for all intent and purposes, a capacitor, that uses atmospheric air or pure oxygen as dielectric between a cathode and anode formed by a stainless steel net on a ceramic plate.

The O3BWT MIDI in this instance uses atmospheric air as the process gas. When air pass through the chamber, in the ceramic surface ozone is generated from the oxygen contained in the process gas stream.

The process gas input stream, be it atmospheric or oxygen, must be high quality, which simply means as cool and as dry as possible. Heat and moisture reduce the amount of ozone produced in the chamber. For this reason installation of the system is suggested to be in a air conditioned zone of the boat and/or building.

Maximum theoretical O3 production: 1,00 grams nom. per hour of runtime.

Total Power consumption: 70 Watt

O3Tech

1.2 Design

Combo Ozone system is composed by three units:

- a) Control Unit: Switch on/off, Timer and Running Light
- b) Pump Unit: composed by one air pump flow rate 1,8 l/min
- c) Ozone Unit: composed by two ozone reactors – O₃ production 1,0 g/h nom.

Dimensions:

- Control Unit: 150x255x105 mm
- 1 X Pump&Ozone Unit: 236x318x128 mm



Control Unit



Pump & OzoneUnit

----- DO NOT COVER OZONIZER UNIT -----

---- IMPORTANT SWITCH OFF POWER BEFORE OPEN THE OZONE UNIT ----

2. Technical data

2.1 Specification

- Power supply: 230V 50/60Hz
- Power consumption: 70 Watt
- Maximum ambient temperature: 45 °C
- Cabinet material: ABS
- Total Weight: Approx. 1,8 kg
- Ozone Output: 2 x 0,5 g/h (theoretical @ 20°C - 60% Humidity)
- Ozone Generation: Silent Pulse Injection Cold Corona Discharge; a low voltage, cold process that involves no heat, no arcing, no sparking and no metal in contact with the ozone.
- Installation: Easy! Connect Current Supply. Ozone hose to the vent pipe of the tank to be treated. Set timer and go!
- Control: By timer – ON/OFF – Manual - Automatic

a) CU1 - Control Unit

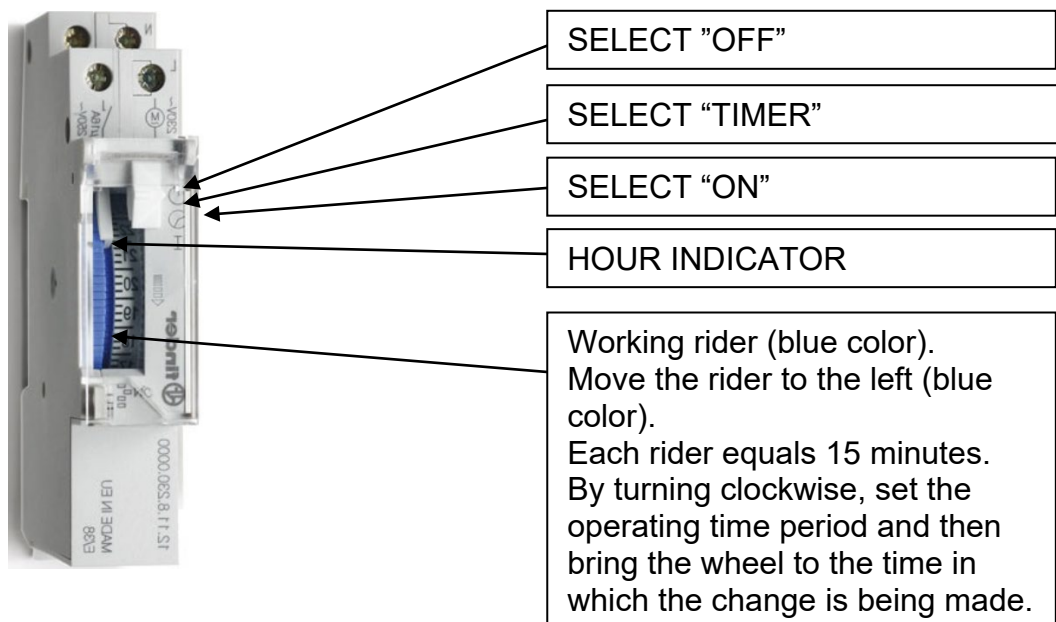
Control unit is composed by a switch, a timer and a red lamp.

Turn on the switch to give power to the system.

Timer is a 15'/24H settable. Timer mode can be "Off", "Manual running" and "timer"

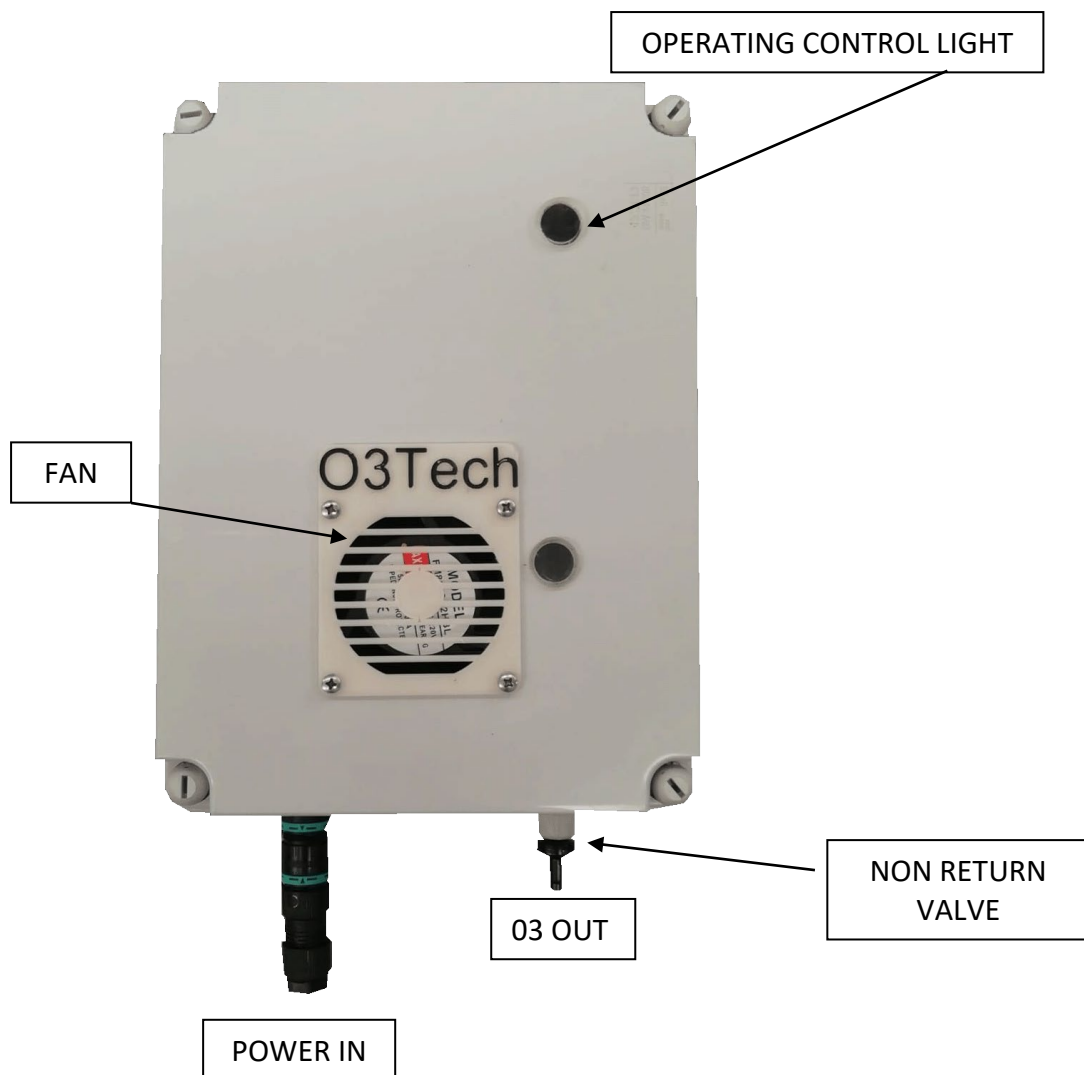


1. Switch ON/OFF of the ozone system.
2. TIMER – It allows to change the state of the system, from OFF to ON or Timed.
 If ON the system will continuously produce ozone.
 If "Clock" the system will produce ozone every 15 minutes for 15 minutes, if previously set 15'/15'
 If OFF the system won't produce but the fan continue to run.
3. LED RED is lighting the system is running and producing ozone



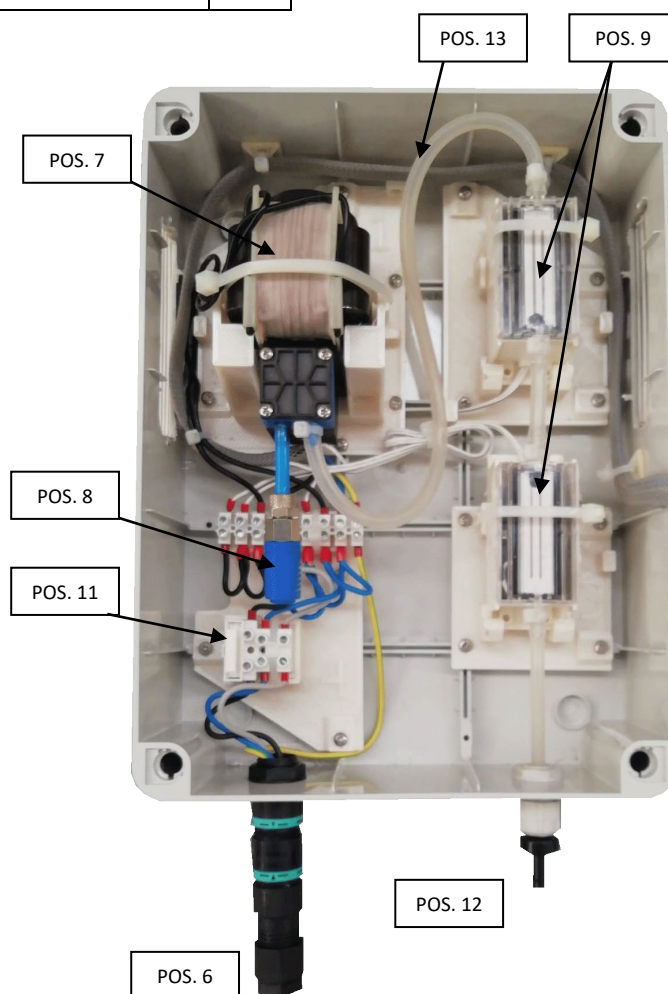
b) O3BWTMDPRO - Ozone Unit

- Generation capacity (O3 concentration): 2x500mg/hr on oxygen
- Power supply: 220V/50~60Hz
- Power consumption: <15
- Net weight:



2.2 Spare parts

Pos.	Art. #	Description	Qty
1	TCFC881C6	Circuit breaker	1
2	FD121182300000	Timer	1
3	ABBM093929	LED 220V	1
4	2A.THB.387.N4A	Quick plug connector	1
5	2A.THB.387.N4A	Quick plug connector	1
6	2A.THB.387.N4A	Quick plug connector	1
7	O3pump	Pump	1
8	1SPL-F-1/8	Pump silencer	1
9	Boost500	Ozone reactor	2
10		Fan	1
11		Fuse	1
12	CK89	Non return Valve	1
13	SIL25459	Silicon Tube	2mt



2.4 Maintenance

Suggested operation for maintenance

PUMP UNIT

Periodically check the operation of the pump. If pump is not running, this may affect the the cooling of ozone generators, causing them to break.

OZONE UNIT

Every 6 months verify the Ozone unit and replace if not lamp. Change of silicon pipe internal to the ozone unit.

Every 12 months replace silicon pipe from ozone unit to injection point.

Ozone generators has to be considered a consumable.

- Be careful do not touch condensate you may find in the ozone hose!!! -

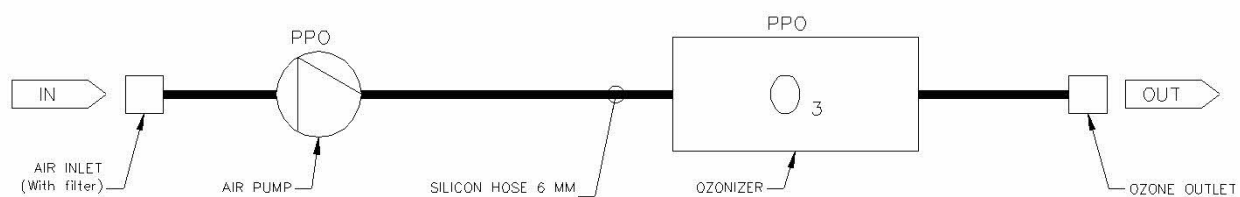
Attention: USE PLASTIC GLOVES AND PROTECTING GLASSES TO DISCONNECT THE PIPE FROM OZONIZER UNIT.

Periodically check the integrity of the ozone output hose, if it is discovered broken replace it.

Type of pipe Silicon: 6x4mm

SWITCH OFF MAIN POWER SUPPLY BEFORE OPEN THE OZONE UNIT !!!

2.5 Flow chart



2.6 Connection Diagram

POWER TO CONTROL UNIT CU1

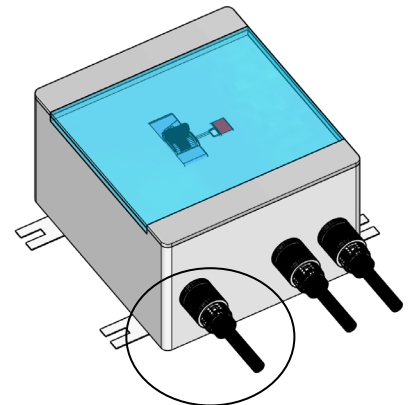
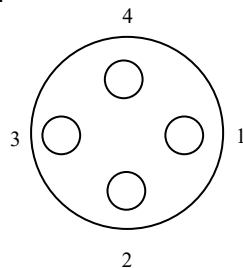
Control unit has two quick plug connection. Left side for Power IN and the right side to the O3PRO ozone unit.

Power connection (RED CIRCLE) is obtained by a female plug connector delivered loose.

Connector can accommodate wire from 0,5 up to 4 mm²

Wire the plug as follow:

- 1 – LANE (L)
- 2 – NEUTRAL (N)
- 3 – FREE
- 4 – GROUND (PE)



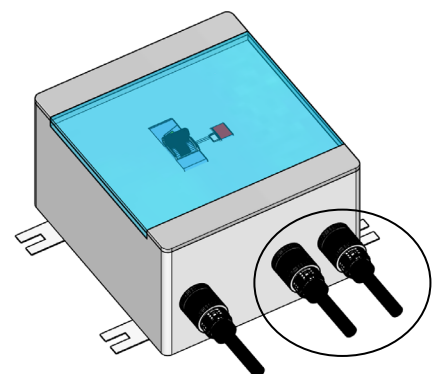
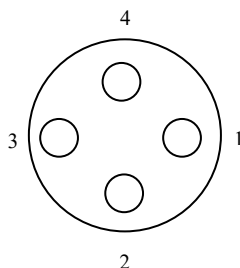
POWER TO O3BWTMDPRO

Power connection (GREEN CIRCLE) is obtained by a male plug connector delivered loose.

Connector can accommodate wire from 0,5 up to 4 mm²

Wire the plug as follow:

- 1 – LANE (L1)
- 2 – NEUTRAL (N)
- 3 – LANE (L2)
- 4 – GROUND (PE)



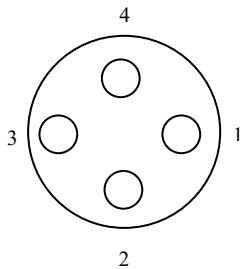
POWER FROM CU1 TO O3BWTMDPRO

Power connection (BLUE CIRCLE) is obtained by a female plug connector delivered loose.

Connector can accommodate wire from 0,5 up to 4 mm²

Wire the plug as follow:

- 1 – LANE (L1)
- 2 – NEUTRAL (N)
- 3 – LANE (L2)
- 4 – GROUND (PE)



DO NOT COVER THE AIR VENTS
RIGHT AND LEFT SIDE