

ULTRASEG

Anaesthetic
Gas
Scavenging
Systems



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The Anaesthetic Gas Scavenging ULTRASEG system is an active system based on suction of anaesthetic gas mixtures from operating rooms and others fitted with nitrous oxide terminal units.

ULTRASEG design provides a very high levels of capture of "pollution" at the source, protecting medical staff against long term hazards due to exposure to anaesthetic gases.

This is done by connecting the anaesthetic breathing circuit via a receiver unit to the terminal unit, generally installed close to the point of use.

Compatibility

The ULTRASEG system is fully compatible with any anaesthetic gas scavenging receiver unit.

Our terminal unit incorporate an adjustable orifice, which enables the flow rate to be adjusted in line with any standard including ISO 7396-2 and BS 6834, high-flow and low-flow systems.

Operating method

The ULTRASEG system is activated by remote switches that are installed at any convenient location either in or close by the operating and anaesthetic room or through the connection of a terminal. In this case the system is operated when a low vacuum level is detected in the suction line.

Regulatory Compliance

Anaesthetic Gas Scavenging ULTRASEG systems complies the requirements of international harmonized standards EN ISO 7396-2.

ULTRASEG systems are designed and manufactured under an ISO 13485:2003 and ISO 9001:2008 Quality Management Systems.



Example of Anaesthetic Gas Scavenging System with Variable Speed Units for energy saving

Reliable Construction

ULTRASEG systems are equipped with the latest vacuum pumps technology from the well-known worldwide brand, **Elmo-Rietschle**. Ultra-Controlo has always used this brand of vacuum pumps that have a unique design of running thousands of hours in continuous regime without losing the initial properties.

Not even the adverse external running conditions use to interfere with the good pump operation, ensuring an endless lifetime.

ULTRASEG standard version



the smart choice

Modular construction

Our anesthetics gas scavenging ULTRASEG system are usually built taking into account the physical space available.

The suction pump has a modular construction allowing one pump to be in operation while the other is in standby or in maintenance without stop on the suction gas.

In automatic mode the system allows for turnover between the suction pump or the boot in ladder. Our electrical control box meet all the requirements of ISO 7396-2 for anesthetic gas suction systems.

Basic Configuration

- 1 or 2 suction pumps
- 1 or 2 electrical control boxes
- 1 or 2 condensate collectors
- 1 set of valves and safety devices for good operation and long-life of the equipment

Opcionals

- Systems with variable speed for energy saving
- Supplementary information for Building Management Systems BMS or remote information
- Claw rotary pumps for high vacuum centralized systems to use for combined suction purposes or dedicated anaesthetic gas suction system

Safe and simplified assembly

ULTRASEG systems are delivered fully connected and pre-assembled, including interconnecting cables and hoses, so the installation turns very easy.

The system is parameterized, and factory tested, ready to install on site. Medium and large plants, pre-installation, commissioning, initial start-up and training of staff, is supervised by factory skilled technicians.

They will keep your suction system working in perfect conditions.

Technical Features

- Suction level: - 0.2 bar (see performance table)
- Capacities per pump: 50 to 300 m³/h (50Hz)
- Motor power: 0.2 to 2,2 kW, 400V, 50 Hz
Other voltages and frequencies according to the country regulations. Other capacities under request.



Control Box for one suction pump Simplex system



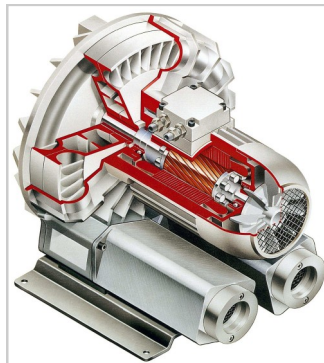
Building Management System with QuVAc

ULTRASEG

Raising medical gases quality standards

Preventive maintenance extremely easy

The maintenance of the plant is limited to an annual operating inspection and eventual replacement of the protective filter element on the suction side.



With Elmo-Rietschle vacuum pumps, preventive maintenance is made in a snap, saving a lot in service and parts.

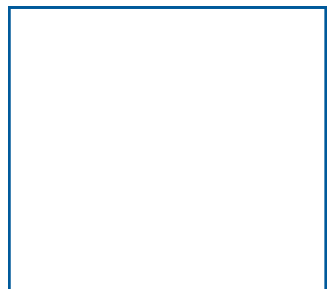
QUALITY PROVEN YEAR AFTER YEAR

- ▶ Hundreds of Elmo-Rietschle suction pumps installed in anaesthetic gas scavenging systems healthcare units
- ▶ A thousand of Rietschle vacuum pumps applied in the medical vacuum systems in the portuguese healthcare units
- ▶ The largest vacuum pumps installed in Portuguese hospitals are Rietschle pumps
- ▶ The **ULTRASEG** has a **full warranty** of **2 years or 16,000 hours** of continuous duty

Model	Capacity m ³ /h		Motor power KW		Dif Press./ Connections		Weight Simplex	Weight Duplex
	50 Hz	60 Hz	3 phase 400V / 380V		dP(kPa)	IN/OUT		
			50 Hz	60 Hz				
H 50	50	58	0,55	0,63	23 / 27	1 1/4"	61	112
H 65	65	80	0,55	0,63	28 / 34	1 1/4"	62	114
H 90	90	105	1,1	1,3	30 / 38	1 1/4"	77	124
H 120	120	145	1,5	1,75	31 / 34	1 1/4"	84	138
H 170	170	195	2,2	2,55	30 / 32	1 1/4"	89	148
E 50	50	60	0,2	0,23	9 / 12	1 1/4"	54	98
E 80	79	98	0,4	0,5	12 / 15	1 1/4"	55	100
E 100	103	120	0,4	0,5	12 / 15	1 1/4"	56	102
E 140	143	174	0,85	0,95	16 / 16	1 1/2"	58	106
E 180	180	220	1,3	1,5	18 / 18	1 1/2"	63	116
E 200	210	251	1,6	2,05	20 / 22	2"	68	126
E 300	315	376	2,2	2,55	19 / 19	2"	72	134
Ex. Duplex: E300D		Dimensions (C x L x A) Simplex: 800x1100x650 mm Duplex: 1000x1100x650 mm						
		Motor voltage (V) at 50 Hz: 200 - 240 Δ / 345 - 415 Y						
		Motor voltage (V) at 60 Hz: 220 - 275 Δ / 380 - 480 Y						

We design and build medical gas plants with the desired capacity. If the capacity or flowrate required is not listed in the table, please contact our Engineering Department.

Authorized Distributor:



Catalogue and configuration subget to changes without previous note. In case of doubts please confirm with us.

ULTRA-CONTROLO - Projectos Industriais, Lda
Parque Industrial Quinta Lavi, Armz 8
Abrunheira
2710-089 SINTRA - PORTUGAL

Tel: +351 219154350
Fax: +351 219259002
Email: international@ultra-controlo.com
Web: www.ultracontrolo.com

