# ΧΞΛΜΟS

### **Dimensions & options Zero Soot EHS**

Туре	DPF volume	E-heater	Flanges EN	1092 PN10	Hot surface	L1	W1	H1	11	01	Weight
	liter	kw	in	out	m2	mm	mm	mm	mm	mm	kg
EHS-19	19	13,3	100	100	1,7	1125	335	340	160	160	140
EHS-28	28	20	100	100	2,3	1195	507	340	245	245	210
EHS-28 flat	28	20	100	100	2,3	1350	600	268	134	134	225
EHS-38	38	30	125	125	2,6	1300	507	415	258	415	250
EHS-38 flat	38	38	30	125	2,6	1400	750	268	134	134	270
EHS-50	50	40	150	150	3,2	1300	655	415	320	320	330
EHS-50 flat	50	40	150	150	3,2	1400	990	268	134	134	395
EHS-60	60	45	150	150	3,4	1300	750	415	365	365	300
EHS-60 flat	60	45	150	150	3,4	1400	850	342	171	171	355
EHS-75	75	60	200	200	4,4	1300	993	415	490	490	430
EHS-100	100	60	200	250	5,0	1350	898	584	443	443	500

Notes: All values are preliminary. Custom dimensions available on request.



### System selection

To configure your system we ask you to submit the following information

Engine model and power Engine certification Exhaust Available pressure budget Running hours per year Average engine load Lube oil consumption Fuel type

kW IMO I / II / other System wet / dry mbar hours % l/h

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# **XEVMOS**

# Zero Soot E

**Reducing emissions together** 



# **Zero Soot EHS**

Our Zero Soot EHS (Electrical Heater) offers reliable reduction of harmful emissions of your auxiliary diesel engine under all circumstances. Your generators will be clean, without soot!

The particle filters of the Electrical Zero Soot System collect the soot particles from the exhaust stream. An extra powerful catalytic coating minimizes the regeneration temperature and reduces Hydro Carbons and Carbon Monoxide.

- A unique internal bypass electrical operated allows 100% engine availability.
- In practice VIP guests will not experience particulates on deck, common diesel fuel in swimming water and the smell of diesel fuel.
- Our system range has been designed especially to form a perfect match with generators up to 250 kWm engine power, for either dry or wet exhaust configurations. The Electrical Zero Soot System allows diesel with low sulphur content.
- The intelligent PLC controlled regeneration system ensures a trouble-free operation of your filter system.
- The electrical heater element allows integrated load bank functionality, and keeps your engine clean by utilizing higher loads.

# **Main Features**

- Compact design.
- Active regeneration by electric heater.
- Integrated bypass.
- Load bank and 'harbour' mode function. The e-heater is activated to run the generator at higher rating and also modulation of e-heater is possible, balance is searched for by the smart system in several steps to find optimum heating vs used power
- Maximum flexibility by different in/outlet positions.
- Rectangular housing to reduce overall volume.
- All service on one side possible

# ΧΞΛΜΟS



Lay-out of a Zero Soot EHS.



# ΧΞΛΜΟS

# **Operational conditions**

Application	Superyachts and Inland navigation
Exhaust system	Suitable for dry or wet systems
Environment	Engine room, clean
Ambient temperature	-10°C/+55°C
Degree of protection	IP55
Relative humidity	5 to 95% non-condensing
Inspection & service interval	Approximately 1x per year (normal
	conditions)
Network	TNC recommended

# **Supplies**

Fuel	Max. 1000 ppm Sulphur		
AC Power supply	400 VAC +10% / -15%		
DC Power supply	Heater power depending on model 24VDC, 5A		

# **Design data**

Material housing Temperature	Stainless steel Regeneration temperature up to 520°C
Pressure drop ( $\Delta P$ )	Approximately 25-35 mbar, clean without soot and ash
DPF type	SiSiC
Coating	SX, ZX (ULSF only)
Regeneration strategy	Based on actual Soot Load
	To prevent over-powering of the
	generator the electrical regeneration is
	limited by engine load signal
Supports	Top or bottom
Thermal insulation	Blankets or cladding (optional)

# Legal requirements and standards

Standards	EMC directive 2014/30/EU
	Machinery directive 2006/42/EC
	Low voltage directive 2014/35/EU
Classification	Lloyds Register

# **Zero Soot EHS**



# System parts

Controller	PLC with full colour HMI, super yacht standard (acc. to LR requirements) - Inputs: engine load, engine on - Outputs: System ON, Alarm, MOD bus - Datalogging - Remote access prepared
Heater	Electric heater with modulating control
Housing	Containing DPF module(s), flat rectangular shape to reduce overall volume
Bypass Sensors	Internal, electrically operated Temperature & pressure transmitter

# Performance

>97% reduction ca. 25 dB(A) PM (measured as PM10) Sound attenuation HC/CO Up to 70%

# Optional

- Various catalytic coating for increased HC reduction at low exhaust temperatures
- <u>Remote access</u> via LAN accessible for diagnostics/remote Services
- Alternative power suppliesAlternative in- and outlet positions and flanges
- Mirrored version
- Anti-vibration dampers
- Extended warranty
- Complete exhaust system

\* Ask Xeamos for advice regarding available catalytic DPF coatings

For indication only, please contact us for exact unit selection or custom solutions. Bar in graph corresponds with 15 -25 mbar pressure drop.