

GPH = 532.5 **CDL = 11.562**

BOAT

Class **E 44**
Designer **Matteo Polli**
Builder **Alfa Yachts**
Age Date **07/2021**
Series Date **07/2021**
Offset File **E44.off**

HULL

Length Overall **13.395 m**
Maximum Beam **4.266 m**
Draft **2.382 m**
Displacement **7,871 kg**
DLR **5.1218**
IMS Division **Performance**
Dynamic Allowance **0.001%**
Age Allowance **0.000%**

PROPELLER

Installation **Strut**
Type **Folding 2 blades**
Diameter **0.450m**

CREW

Maximum weight **905 kg**
Minimum weight **679 kg** * when applied
Non Manual Power **Sheets**
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	65.47	66.86
Headsail Luffed	55.95	55.95
Headsail Flying		
Symmetric		
Asymmetric	195.31	195.31

* 1 asymmetric(s) with SHW/SFL < 85%

SAIL LIMITATIONS

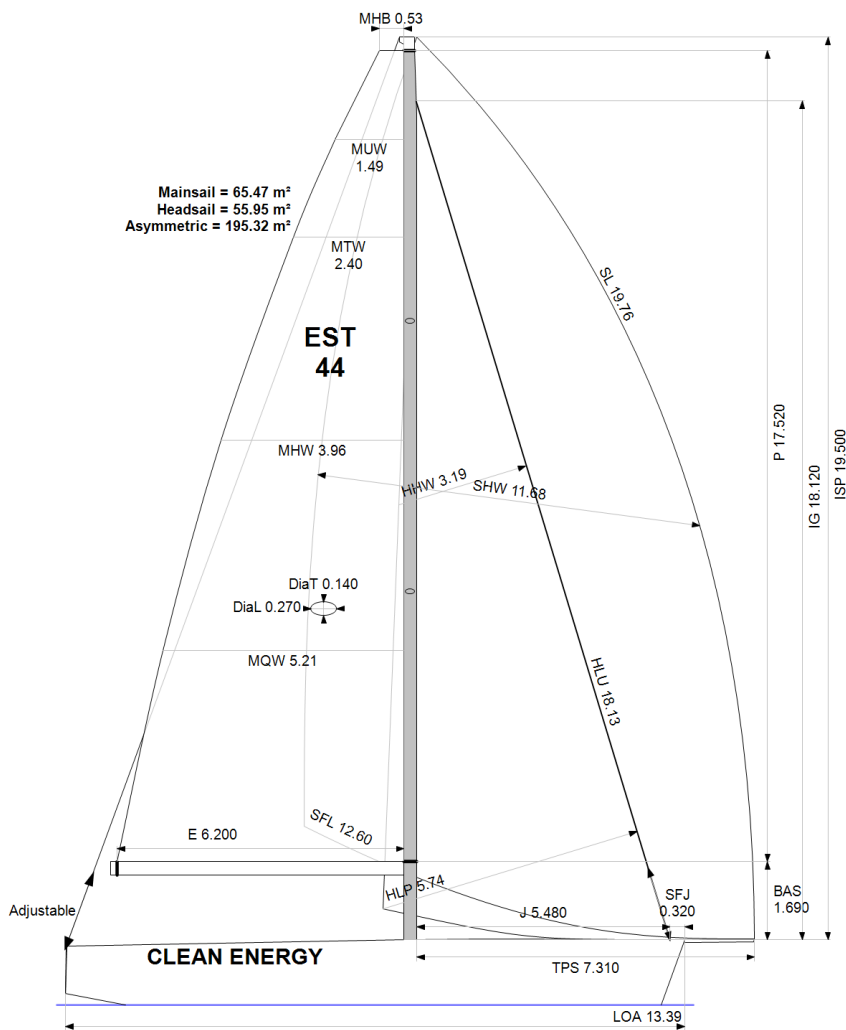
Headsails **6**
Spinnakers **4**

STABILITY

Righting Moment **254.9 kg·m**
Stability Index **129.4**

OWNER

The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.5°	42.0°	40.9°	40.5°	39.8°	39.0°	39.4°
Beat VMG	4.02	4.89	5.43	5.69	5.82	5.93	6.04
52°	6.19	7.37	8.00	8.23	8.35	8.41	8.60
60°	6.58	7.71	8.23	8.50	8.64	8.73	8.92
75°	6.92	7.93	8.42	8.81	9.13	9.32	9.50
90°	6.88	7.95	8.46	8.88	9.35	9.77	10.28
110°	6.78	8.06	8.72	9.25	9.73	10.13	10.88
120°	6.61	7.97	8.65	9.32	9.94	10.49	11.61
135°	5.91	7.43	8.28	8.88	9.55	10.31	12.32
150°	4.97	6.24	7.41	8.24	8.68	9.17	10.57
Run VMG	4.30	5.40	6.41	7.13	7.53	7.97	9.15
Gybe Angles	143.0°	145.0°	147.8°	151.8°	151.0°	176.0°	143.8°

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	894.8	735.5	662.4	632.7	618.2	607.4	596.3
52°	582.0	488.2	450.2	437.3	431.2	428.0	418.8
60°	547.3	467.1	437.3	423.5	416.5	412.4	403.6
75°	520.3	453.9	427.5	408.4	394.2	386.5	379.0
90°	523.5	453.1	425.8	405.5	385.1	368.4	350.1
110°	531.3	446.9	412.9	389.4	370.2	355.3	330.9
120°	544.3	451.8	416.3	386.5	362.2	343.1	310.1
135°	608.7	484.7	434.6	405.6	377.0	349.1	292.3
150°	724.3	577.0	486.2	437.1	414.7	392.6	340.6
Run VMG	836.3	666.3	561.4	504.6	478.1	451.8	393.3
Selected Courses							
Windward / Leeward	865.6	700.9	611.9	568.7	548.1	529.6	494.8
All purpose	662.1	546.1	490.4	461.3	443.3	428.2	401.6

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	593.7	1.0106
All purpose	475.7	1.2612

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	519.1	1.1559
Triple Number Coastal/Long Distance Low	604.1	0.9932
Triple Number Coastal/Long Distance Medium	473.6	1.2670
Triple Number Coastal/Long Distance High	422.0	1.4218
Triple Number Windward/Leeward Low	783.3	0.7660
Triple Number Windward/Leeward Medium	589.0	1.0187
Triple Number Windward/Leeward High	521.2	1.1512

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	862.7	658.2	552.1	493.1	460.9	431.9	381.5



Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	E 44	LOA	13.395	VCGD	-0.264
Measurement		Max. Beam	4.266	VCGM	-0.261
Measurer		Draft	2.382	RM Measured (kg·m)	254.9
HIN		Displacement	7,871	RM Default (kg·m)	260.0
Plan review		Wetted area	35.58	Limit of positive stability(°)	129.6
Hull construction	Cored	IMS L	11.989	Stability Index	129.4
Carbon Rudder	Yes	LSM0	11.540		
Light stanchions	No	Acc. length	13.395		
Trim tab	No	Sink (kg/mm)	25.51		

PROPELLER

Propeller Type	Folding 2 blades	PRD	0.450	EDL	0.990	ST3	0.170
Installation	Strut	PBW	0.112	ST1	0.040	ST4	0.100
Twin screw	No			ST2	0.170	ST5	0.290
PIPA	0.0031						

RIG

Forestay tension	Aft & Forward	P	17.520	E	6.200
Inner stay	None Fitted	IG	18.120	J	5.480
Carbon mast	Yes	ISP	19.500	BAS	1.690
Headsail furler	No	MDT1	0.140	FSD	0.050
Mainsail furler	No	MDL1	0.270	SFJ	0.320
Articulated bowsprit	No	MDT2	0.100	SPL	
Non-circular rigging	No	MDL2	0.220	TPS	7.310
Fiber rigging	Yes	TL	1.390	BD	0.290
Runners/Checkstays	0	MW	0.270	MWT	213.00
Spreaders	2	GO	0.300	MCG	7.550

FLOTATION AND STABILITY

Inclining Test	Boom Inclining	SFFP	0.000	SAFP	13.367	W1	140.3	PD1	252.3	WD	5.850
Flotation Date	08/08/2021	FFM	0.335	FAM	0.669	W2	140.3	PD2	252.0	PLM	9000.00
Measurer		FF	0.345	FA	0.675	W3	140.3	PD3	253.9	GSA	1.0
Comment	WORLD CHAMPIONSHIP 2021	LCFcl	7.360	LCFsh	7.630	W4	140.3	PD4	256.3	RSA	1.0
						LCFD	8.265				
		SG	1.0010	HBI	1.404						

MEASUREMENT INVENTORY

Id	Tank Type	Capacity	LCG	VCG	Condition	Description
1	Water Plastic	50.0	7.50	-0.20	0-0	
2	Hydrogen Steel	20.0	6.50	0.35	0-0	2 pcs 1 in port side and 1 in SP side
3	Hydrogen Steel	20.0	7.40	0.35	0-0	4 pcs 2 in port side and 2 in SP side
4	Hydrogen Steel	20.0	8.20	0.35	0-0	2 pcs 1 in port side and 1 in SP side
1	Ballast 9 pcs	325.5	6.85	-0.20		(37+37+36+35+36+37+36+35,5) SP
2	Ballast 9 pcs	327.5	6.85	-0.20		(34+35+37+36,5+37+36,5+36,5+37+36) port
3	Ballast 5 pcs (36 +36,5+35+36+34)	177.5	7.50	-0.20		port
4	Ballast 5 pcs (36+34,5+37,5+37,5+36,5)	181.5	7.50	-0.20		SP
Total ballast		1012.0				
Id	Item Description	Weight	LCG	VCG		
1	Battery 8X45ah engine Port		8.10			
2	Battery 8X45ah engine SP		8.10			
3	Battery 2x100ah Matervolt		8.80			
1	Miscellaneous Autopilot		12.00	0.10		



MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
1	0.53	1.49	2.40	3.96	5.21	65.47		26/07/2021		Unknown	
2	0.52	1.52	2.41	3.94	5.17	65.29		29/07/2021		Unknown	

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
2	0.15	0.99	1.81	3.19	4.49	5.74	18.13	No	No		55.95		26/07/2021		Unknown	Light
6	0.15	0.99	1.80	3.15	4.45	5.72	18.13	No	No		55.53				Unknown	
1	0.15	0.94	1.73	3.17	4.51	5.74	18.02	No	No		55.27		26/07/2021		Unknown	Jib-Top
5	0.40	0.91	1.55	2.85	4.23	5.58	16.45	No	No		47.48		29/07/2021		Unknown	
4	0.06	1.09	2.07	3.78	4.10	5.29	14.53	No	No		45.16		26/07/2021		Unknown	Staysail
3	0.08	0.68	1.33	2.70	4.12	5.58	15.03	No	No		41.28		26/07/2021		Unknown	J-4

ASYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Ratio	Area	Measurer	Meas.Date	Maker	Material	Comment
1	22.29	17.22	19.76	11.68	12.60	93%	195.31		26/07/2021		Unknown	
2	21.93	18.92	20.43	11.23	12.41	90%	195.16		26/07/2021		Unknown	
3	22.29	17.88	20.09	11.47	12.40	93%	195.09				Unknown	
4	21.63	16.49	19.06	8.68	10.51	83%	143.68				Unknown	