

BOAT Name KATARIINA II Sail Nr EST 949	GPH 601.5	HULL Length Overall 11.110m Maximum Beam 3.530m Displacement 5,473kg Draft 2.036m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.120% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class ONE OFF Designer COSSUTTI MAURIZIO Builder RIDAS YACHT OÜ Series 07/2017 Age 07/2017 Age Allowance 0.033% Offset File EST949-18.off - 11/05/2018 23:05:32 Measurement by A.Tetsmann - 09/06/2018		IMSL 10.268m VCGD -0.118m Sink 20.82kg/mm RL 9.062m VCGM -0.058m WS 27.58m² LSM0 10.162m Displacement/Length ratio 5.2154



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	583.9			654.9		
Time on Time	1.0275			1.0306		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	693.9	531.4	472.1	898.1	656.9	571.5
Time on Time	0.9728	1.2703	1.4299	0.7516	1.0275	1.1811

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1029.1	844.0	742.8	701.5	686.1	679.6	669.2
52°	671.0	560.0	505.0	484.6	477.9	474.8	468.9
60°	633.8	533.9	489.7	471.2	463.7	460.0	454.9
75°	606.6	516.2	479.3	459.1	444.0	435.7	429.2
90°	613.3	516.4	474.6	457.3	437.7	419.6	398.3
110°	614.4	506.5	464.9	437.6	416.9	403.6	380.5
120°	630.0	516.7	470.1	440.8	412.6	387.7	359.7
135°	695.3	561.3	492.0	460.0	432.5	405.4	351.1
150°	830.1	658.7	552.7	491.1	461.5	436.2	387.2
Run VMG	958.5	760.6	638.3	560.2	510.8	474.9	426.3

Certificate

Number **EST949**
ORC Ref **EST00000267**
Issued On **27/06/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default 704kg
Maximum **663kg**
Minimum* **497kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	604.7	0.9922
Double H.OSN	588.7	1.0192
Non Spin GPH	635.3	0.9444
Non Spin OSN	616.1	0.9739

Selected Courses							
Windward / Leeward	993.8	802.3	690.5	630.8	598.5	577.3	547.7
Circular Random	832.4	670.1	583.2	532.9	501.9	481.2	453.7
Coastal / Long Distance	990.3	753.1	622.4	550.7	512.6	481.3	431.6
Non Spinnaker	892.5	712.7	615.1	557.8	522.3	499.0	469.0

Sails Limitations

Headsails	Spinnakers
5	3

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.4°	42.0°	40.9°	39.8°	40.1°	39.9°	40.1°
Beat VMG	3.50	4.27	4.85	5.13	5.25	5.30	5.38
52°	5.36	6.43	7.13	7.43	7.53	7.58	7.68
60°	5.68	6.74	7.35	7.64	7.76	7.83	7.91
75°	5.93	6.97	7.51	7.84	8.11	8.26	8.39
90°	5.87	6.97	7.58	7.87	8.23	8.58	9.04
110°	5.86	7.11	7.74	8.23	8.64	8.92	9.46
120°	5.71	6.97	7.66	8.17	8.73	9.29	10.01
135°	5.18	6.41	7.32	7.83	8.32	8.88	10.25
150°	4.34	5.47	6.51	7.33	7.80	8.25	9.30
Run VMG	3.76	4.73	5.64	6.43	7.05	7.58	8.45
Gybe Angles	140.2°	148.3°	149.0°	156.0°	171.3°	180.0°	180.0°

Class Division Length

CDL = **9.665**

Storm Sails Areas

Heavy Weather Jib **29.27**
Storm Jib (JL=9.57) **10.84**
Storm Trysail **12.44**

Owner

BOAT		
Name KATARIINA II	Sail Nr EST 949	
File Est0949	Data in meters/kilograms	

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 09/06/2018	SG 1.0000	
FFM 1.402	FF 1.410	SFFP 0.000
FAM 0.636	FA 0.642	SAFP 11.110
W1 90.5	PD1 517.8	WD 11.600
W2 90.5	PD2 513.3	GSA 1.0
W3 90.5	PD3 517.3	RSA 1.0
W4 90.5	PD4 519.5	PLM 9000.0
LCF from stem on CL / on sheer	6.188 / 6.409	
Maximum beam station from stem	7.600	
RM Measured	159.9kg·m	
RM Default	162.2kg·m	
Limit of positive stability / Stab.Index	124.0° / 124.6	
Freeboard at mast at 4.645	1.238	



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IMS Measurement Certificate

RIG				
Forestay Tension Aft & Forward	Spreaders 2			
Inner Stay None Fitted	Runners 0			
Carbon Mast Yes	Jumper Struts None			
Taper Hollows No	Jib Furler No			
Fiber Rigging No	Main Furler No			
Lenticular Rigging No	Without Backstay No			
Articulated Bowsprit No				
P 14.050	E 5.060	MDT1 0.120	MW 0.208	
IG 14.640	J 4.410	MDL1 0.208	GO 0.233	
ISP 14.750	SFJ 0.235	MDT2 0.108	BD 0.290	
BAS 1.715	SPL 4.645	MDL2 0.135	MWT 136.00	
FSP 0.068	TPS	TL 0.900	MCG 4.380	

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.406	
Type Folding 2 blades	PBW 0.113	
Twin Screw No	PIPA 0.0036	
ST1 0.050	ST3 0.180	ST5 0.307
ST2 0.180	ST4 0.112	EDL 1.945

COMMENTS

MOVABLE BALLAST	
N/A	



Invalid for Racing

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CENTERBOARD	
N/A	

SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	
	0.385	1.20	2.01	3.29	4.24	
	Area	Area (r)	Formula			
	43.08	44.07	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)			
Symmetric	SLU	SLE	SL	SHW	SFL	
	14.89	14.89	14.89	8.65	8.46	
	Area	Formula				
	106.86	SL · (SFL + 4·SHW) / 6				
Asymmetric	Not Available					

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.11	0.81	1.49	2.62	3.65	4.73	14.46	36.56			09/06/2018	Unknow	SuperLight-18
0.13	0.80	1.48	2.60	3.64	4.71	14.40	36.24			09/06/2018	Unknow	Light-18
0.11	0.78	1.45	2.60	3.62	4.69	14.28	35.70			16/07/2016	Unknow	WC 2016
0.13	0.74	1.38	2.53	3.64	4.73	14.30	35.47			26/07/2015	Unknow	JibTop
0.07	0.64	1.23	2.38	3.50	4.60	14.42	33.94			01/04/2015	Unknow	#1H
0.06	0.44	0.84	1.69	2.56	3.50	13.15	22.61			16/05/2015	Unknow	Spi Staysail

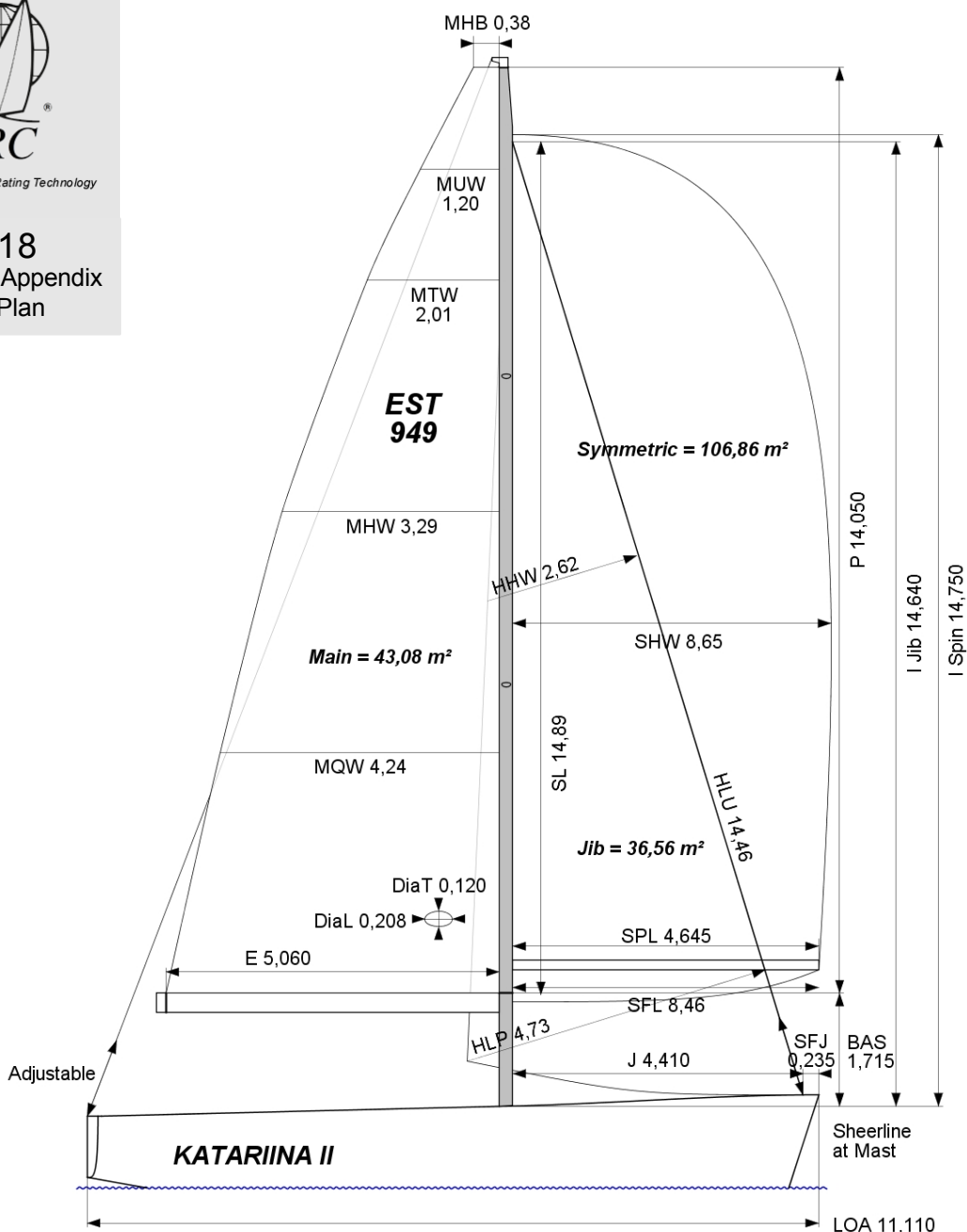
MEASUREMENT INVENTORY				
Measurer EST 1 A.Tetsmann				
Date 09/06/2018				
Comment Tallinn- Pirta				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	Yanmar	3YM30	
Id	Item	Weight Description		

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank Fuel		st.steel	80.0	8.80	5.0 Fuel tank
2	Tank Water		neopr.	55.0	5.60	0.0 Water tank
Id	Item	Weight	Distance	VCG Description		
1	Battery		7.80	2 x 105 Ah portside		
1	Misc		9.60	Air heater Eberspächer		



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
5	0.385	1.20	2.01	3.29	4.24	43.08	EST 1	09/06/2018	NorthSails	Unknown	

HEADSAILS (6)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
11	0.11	0.81	1.49	2.62	3.65	4.73	14.46	107%	36.56			EST 1	09/06/2018	NorthSails	Unknown	SuperLight-18
10	0.13	0.80	1.48	2.60	3.64	4.71	14.40	107%	36.24			EST 1	09/06/2018	NorthSails	Unknown	Light-18
7	0.11	0.78	1.45	2.60	3.62	4.69	14.28	106%	35.70				16/07/2016		Unknown	WC 2016
6	0.13	0.74	1.38	2.53	3.64	4.73	14.30	107%	35.47			EST 1	26/07/2015	NorthSails	Unknown	JibTop
4	0.07	0.64	1.23	2.38	3.50	4.60	14.42	104%	33.94			Sisil	01/04/2015	NorthSails	Unknown	#1H
5	0.06	0.44	0.84	1.69	2.56	3.50	13.15	79%	22.61			Sisil	16/05/2015	NorthSails	Unknown	Spi Staysail

SYMMETRIC SPINNAKERS (5)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
8	14.89	14.89	14.89	8.65	8.46	106.86	Hemamali	25/04/2018		Unknown	S 1,5
6	14.82	14.82	14.82	8.66	8.42	106.36	Hemamali	13/04/2018		Unknown	S2
7	14.96	14.96	14.96	8.50	8.54	106.07	Hemamali	17/04/2018		Unknown	S1
4	14.45	14.45	14.45	8.16	8.26	98.50	EST 2	11/07/2015	NorthSails	Unknown	S4
5	14.62	14.62	14.62	7.65	8.20	94.54	EST 1	26/07/2015	NorthSails	Unknown	S5

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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