

BOAT Name KATARIINA II Sail Nr EST 949	GPH 608.8	HULL Length Overall 11.300m Maximum Beam 3.664m Displacement 5,886kg Draft 1.987m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.119% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Yes Crew Arm Extension
GENERAL Class ONE OFF Designer COSSUTTI MAURIZIO Builder RIDAS YACHT OU Series 07/2015 Age 07/2015 Age Allowance 0.000% Offset File KATIic.off - 10/08/2015 18:41:36 Measurement by Tetsmann/Rosme - 28/07/2015		IMSL 10.394m VCGD 0.092m Sink 21.15kg/mm RL 8.943m VCGM 0.091m WS 27.62m²



World Leader in Rating Technology

2015
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



World Leader in Rating Technology

	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	592.1			663.1		
Time On Time	1.0133			1.0180		
Performance Line	0.842	88.3		0.805	165.5	
Triple Number	Low 0.9542	Medium 1.2569	High 1.4285	Low 0.7291	Medium 1.0093	High 1.1873

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1047.8	864.0	759.4	706.1	680.5	666.3	662.6
52°	676.6	565.1	505.0	480.7	471.5	466.7	462.7
60°	633.3	532.7	486.5	466.1	456.8	451.6	447.9
75°	598.7	509.8	474.6	454.0	437.3	426.2	418.1
90°	603.9	511.1	470.4	456.2	436.5	418.9	392.5
110°	621.4	511.3	467.8	441.1	415.7	402.4	382.9
120°	641.6	525.3	475.0	448.3	422.4	397.6	368.7
135°	719.7	581.3	505.0	469.6	445.6	420.9	373.4
150°	866.1	685.4	574.9	504.6	470.6	447.3	401.1
Run VMG	1000.1	791.5	663.5	574.5	513.4	476.7	430.3

Certificate

Number **EST949**
ORC Ref **EST00000940**
Issued On **10/08/2015**
VPP Ver. **2015 1.01**
Valid until **31/12/2015**

Crew Weight

Declared **733kg**
Default* **720kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	639.3	0.9385
Non Spin OSN	619.8	0.9681
N/S Perf. Line	61.6	0.761

Selected Courses							
	1024.0	827.8	711.5	640.3	597.0	571.5	546.5
Windward / Leeward	1024.0	827.8	711.5	640.3	597.0	571.5	546.5
Circular Random	846.7	680.4	590.2	537.2	504.2	482.6	455.7
Ocean for PCS	903.0	710.9	603.1	536.9	493.0	461.3	415.3
Non Spinnaker	901.2	719.0	619.0	559.6	522.4	498.1	468.6

Sails Limitations

Headsails	Spinnakers
6	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	44.2°	43.0°	42.6°	41.0°	40.4°	39.7°	40.3°
Beat VMG	3.44	4.17	4.74	5.10	5.29	5.40	5.43
52°	5.32	6.37	7.13	7.49	7.64	7.71	7.78
60°	5.68	6.76	7.40	7.72	7.88	7.97	8.04
75°	6.01	7.06	7.59	7.93	8.23	8.45	8.61
90°	5.96	7.04	7.65	7.89	8.25	8.59	9.17
110°	5.79	7.04	7.70	8.16	8.66	8.95	9.40
120°	5.61	6.85	7.58	8.03	8.52	9.05	9.76
135°	5.00	6.19	7.13	7.67	8.08	8.55	9.64
150°	4.16	5.25	6.26	7.13	7.65	8.05	8.97
Run VMG	3.60	4.55	5.43	6.27	7.01	7.55	8.37
Gybe Angles	138.7°	148.9°	151.3°	159.3°	173.7°	178.2°	178.1°

Class Division Length

CDL = **9.669**

Storm Sails Areas

Heavy Weather Jib **29.26**
Storm Jib (JL=9.57) **10.84**
Storm Trysail **12.62**

Owner

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

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 28/07/2015	SG	1.0020
FFM 1.363	FF 1.370	SFFP 0.007
FAM 0.678	FA 0.685	SAFP 11.299
W1 83.600	PD1 519.3	WD 11.140
W2 83.600	PD2 519.0	GSA 1.0
W3 83.600	PD3 518.7	RSA 1.0
W4 83.600	PD4 520.4	PLM 9000.0
LCF from stem on CL / on sheer		6.287 / 6.518
Maximum beam station from stem		8.513
RM Measured		141.2kg-m
RM Default		149.5kg-m
Limit of positive stability / Stab.Index		116.4° / 116.8
Freeboard at mast at 4.670		1.239



World Leader in Rating Technology

2015 Measurements Datasheet

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 14.180	E 5.085	MDT1 0.120	MW	0.208
IG 14.640	J 4.430	MDL1 0.208	GO	0.233
ISP 14.750	SFJ 0.240	MDT2 0.108	BD	0.290
BAS 1.715	SPL 4.645	MDL2 0.135	MWT	136.00
FSP 0.068	TPS	TL 1.030	MCG	4.380

Certificate	
Number	EST949
ORC Ref	EST00000940
Issued On	10/08/2015
VPP Ver.	2015 1.01
Valid until	31/12/2015

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	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



Invalid for Racing

World Leader In Rating Technology

SAILS (Maximum Areas)						
Mainsail	HB	MGT	MGU	MGM	MGL	
	0.510	1.25	2.03	3.27	4.23	
	Area		Area (r)		Formula	
	43.67		44.64		P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Symmetric	SL	SMG	SF			
	14.46	8.40	8.25	100.86		
	SL · (SF + 4·SMG) / 6					
Asymmetric						
Not Available						

HEADSAILS												
Area = 0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)												
JH	JGT	JGU	JGM	JGL	LPG	JL	Area	Btn	Fly	Meas.Date	Material	Comment
0.13	0.79	1.47	2.60	3.64	4.73	14.37	36.17			26/07/2015	Unknow	#1L
0.11	0.77	1.46	2.61	3.63	4.72	14.35	36.03			26/07/2015	Unknow	#1XL
0.12	0.77	1.43	2.55	3.60	4.67	14.35	35.55			26/07/2015	Unknow	#1M
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	33.95			01/04/2015	Unknow	#1H
0.06	0.44	0.84	1.69	2.56	3.50	13.15	22.62			16/05/2015	Unknow	Spi Stay sail

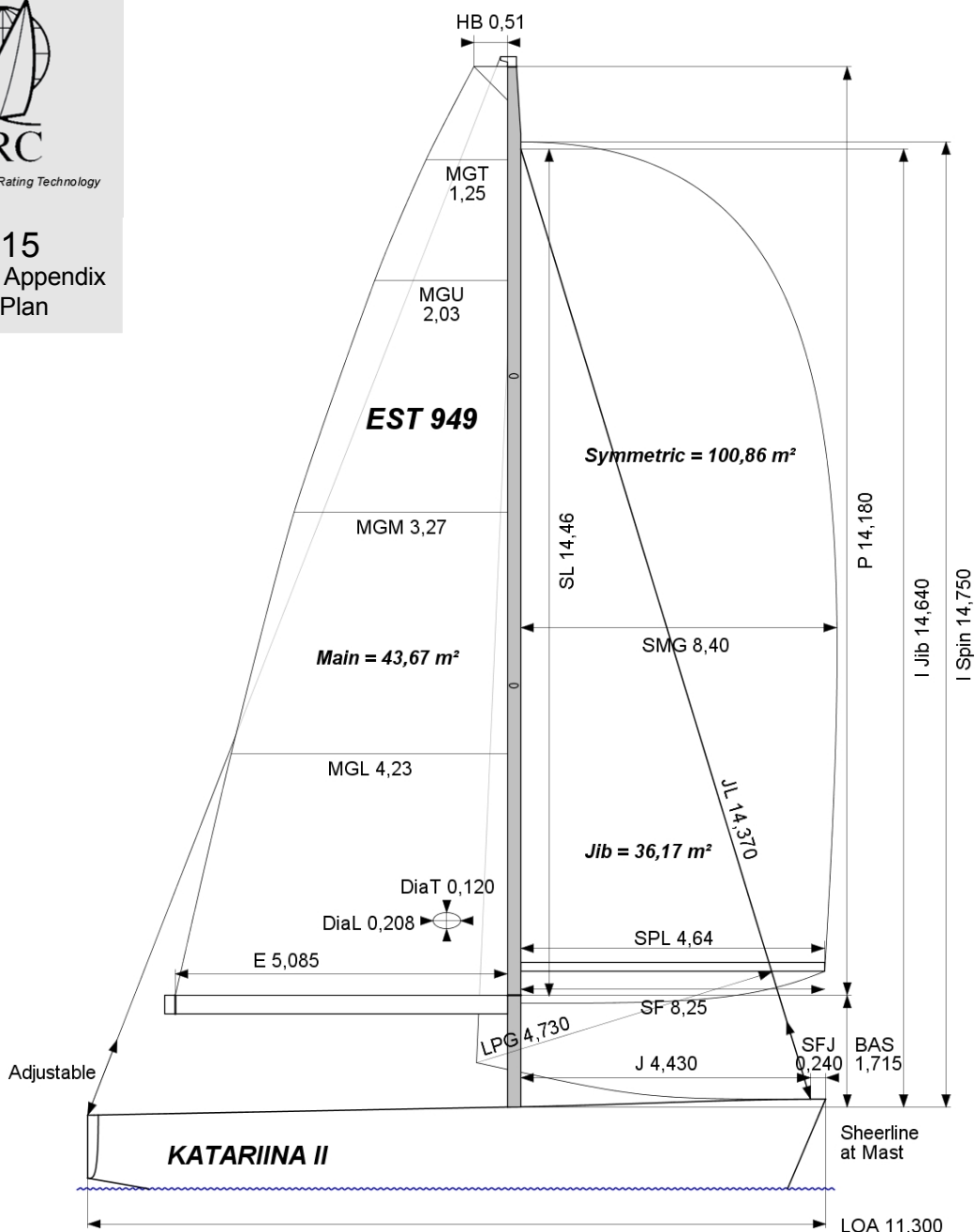
MEASUREMENT INVENTORY				
Measurer Veiko Rosme EST 2				
Date 28/07/2015				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	Yanmar	3YM30	
Id	Item	Weight Description		

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank Fuel		st.steel	80.0	9.00	5-0 Fuel tank
2	Tank Water		st.steel	80.0	5.83	0-0 Water tank, starb.
Id	Item	Weight	Distance	VCG Description		
1	Ballast	63.7	5.78	2 lead ballasts		
2	Ballast	79.7	7.12	2 lead ballasts ports.		
3	Ballast	75.8	7.12	2 lead ballasts, stb.		
4	Ballast	174.8	7.05	4 lead ballasts, center		
5	Ballast	192.3	7.46	3 lead b. starb.(96,9kg) & 3 ports.(95,4kg)		
1	Battery		8.00	2 x 105 Ah portside		
1	Misc			Webasto		



World Leader in Rating Technology

2015
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL

Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.510	1.25	2.03	3.27	4.23	43.67	EST 1	26/07/2015	NorthSails	Unknown	

HEADSAILS

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.13	0.79	1.47	2.60	3.64	4.73	14.37	107%	36.17			EST 1	26/07/2015	NorthSails	Unknown	#1L
1	0.11	0.77	1.46	2.61	3.63	4.72	14.35	107%	36.03			EST 1	26/07/2015	NorthSails	Unknown	#1XL
3	0.12	0.77	1.43	2.55	3.60	4.67	14.35	105%	35.55			EST 1	26/07/2015	NorthSails	Unknown	#1M
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%	33.95			Sisil	01/04/2015	NorthSails	Unknown	#1H
5	0.06	0.44	0.84	1.69	2.56	3.50	13.15	79%	22.62			Sisil	16/05/2015	NorthSails	Unknown	Spi Stay sail

SYMMETRIC SPINNAKERS

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	14.46	8.40	8.25	100.86	EST 1	26/07/2015	NorthSails	Unknown	S1.5
3	14.20	8.52	8.18	100.02	EST 1	26/07/2015	NorthSails	Unknown	S2
1	14.65	8.05	8.26	98.79	EST 1	26/07/2015	NorthSails	Unknown	S1
4	14.45	8.16	8.26	98.50	EST 2	11/07/2015	NorthSails	Unknown	S4
5	14.62	7.65	8.20	94.54	EST 1	26/07/2015	NorthSails	Unknown	S5

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
----	-----	-----	-----	-----	-----	------	------	----------	-----------	-------------	----------	---------