



World Leader in Rating Technology

2009 ORC Club Certificate

Rating Office

Estonian Yachting Union
Veiko Rosme
Regati 1, 11911, Tallinn
Estonia

Certificate

Number **EST251**
Issued On **25.05.2009**
ORC Ref **EST00000262**
VPP Ver. **1.11**
Valid until **31.12.2009**

Comments

Boat weight with engine Mariner FS4

Crew Weight

Declared **400 kg**
Default* **339 kg**

Special Scoring

	ToD	ToT
Double	732,4	0,8192
Non Spinnaker	758,8	0,7907

Sails Limitations

Genoas **2** Spinnakers **3**
Jibs **2** Dacron Sails

Spinnaker configuration

Symmetric: **Yes** **30,27**
Asymmetric: **No**
Code Zero: **No**
Spin. Pole: **Yes**

Stability

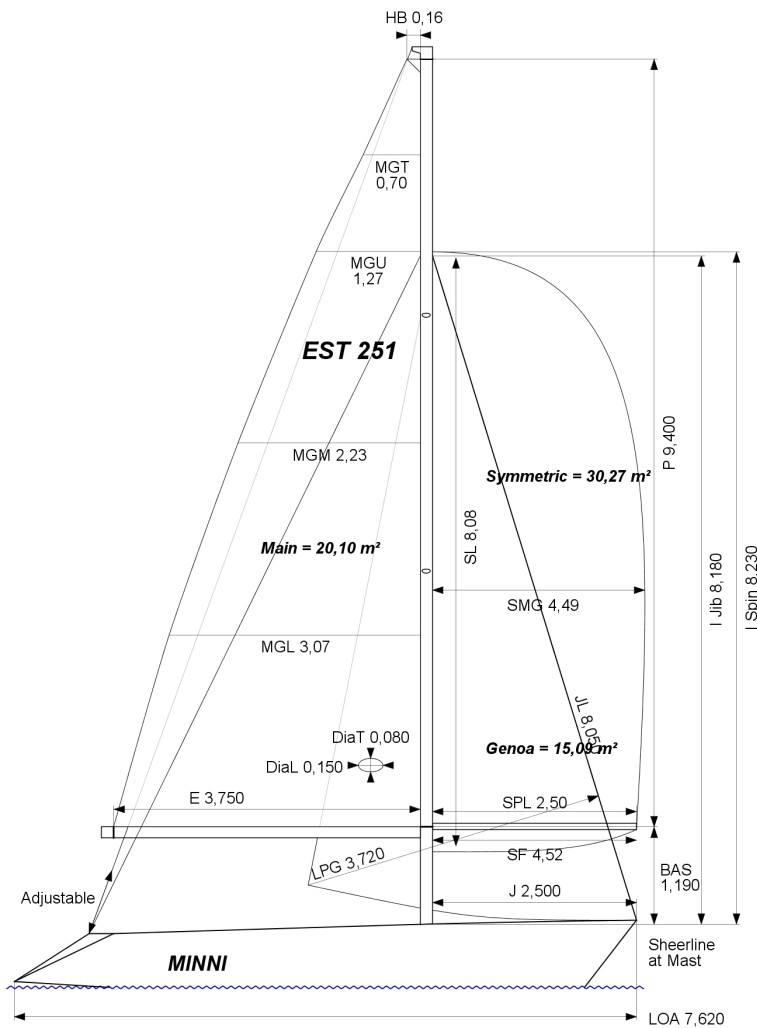
LPS (Estimated): **114,1°**
Stability Index: **106,3**
OSR Category: **N/A**

Owner

Andres Aavik
Meeliku 24/5-328
Haapsalu, Estonia
ESS Kalev JK

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT	GPH	HULL
Name MINNI Sail Nr EST 251	727,6	Data File Est0251.dxt LOA 7,620 m Offset File POLARI90.OFF MB 2,709 m Displacement 1 610 kg Draft 1,597 m
CLASS Class Polaris Designer SET Builder SET Series 06.1984 Age Date 01.1992 Age Allowance 1,300%		IMS Regulations Division Dynamic Allowance 0,108% Forward Accommodation No Hull Construction Solid Carbon Mast No Carbon Rudder No
HEAVY ITEMS N/A		IMS L 6,216 Wetted Area 10,86 m² VCGM -0,040
Total Gyradius Adjustment 0,0220		PROPELLER Type No Propeller

SCORING OPTIONS	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	727,6			800,1		
Time On Time	0,8246			0,8437		
Performance Line	0,743	115,9		0,947	356,9	
Triple Number	Low 0,8172	Medium 1,0410	High 1,1802	Low 0,6315	Medium 0,8529	High 0,9839



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ORC Club Certificate Appendix

BOAT

Name	MINNI	Certificate Number	EST251
Sail Nr	EST 251	Issued On	25.05.2009

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1185,3	974,0	889,1	839,5	811,8	794,7	781,3
52°	764,2	669,0	620,1	589,7	576,8	568,5	560,4
60°	725,0	645,9	602,3	573,5	555,4	545,1	534,3
75°	700,8	627,8	582,6	548,6	528,5	510,6	499,9
90°	690,1	613,4	573,0	535,8	505,7	496,0	474,8
110°	713,3	631,7	586,1	551,1	515,3	489,3	443,8
120°	750,7	653,4	599,8	564,9	528,2	500,2	446,5
135°	871,5	706,0	634,3	590,6	558,1	523,3	473,5
150°	1027,2	805,5	689,1	626,8	587,2	556,0	498,5
Run VMG	1186,1	930,1	774,7	687,7	629,9	591,4	530,2

Selected Courses

Windward / Leeward	1207,9	969,4	844,7	773,6	729,5	700,5	661,4
Circular Random	994,9	807,4	707,0	647,7	609,9	583,8	548,1
Ocean for PCS	1060,6	842,5	721,3	646,6	596,4	559,8	506,7
Non Spinnaker	1050,3	846,3	736,3	671,3	630,1	602,0	564,2

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	43,3°	40,6°	38,5°	38,2°	37,3°	36,6°	36,2°
Beat VMG	3,04	3,70	4,05	4,29	4,43	4,53	4,61
52°	4,71	5,38	5,81	6,10	6,24	6,33	6,42
60°	4,97	5,57	5,98	6,28	6,48	6,60	6,74
75°	5,14	5,73	6,18	6,56	6,81	7,05	7,20
90°	5,22	5,87	6,28	6,72	7,12	7,26	7,58
110°	5,05	5,70	6,14	6,53	6,99	7,36	8,11
120°	4,80	5,51	6,00	6,37	6,82	7,20	8,06
135°	4,13	5,10	5,68	6,10	6,45	6,88	7,60
150°	3,50	4,47	5,22	5,74	6,13	6,47	7,22
Run VMG	3,04	3,87	4,65	5,24	5,71	6,09	6,79
Gybe Angles	146,6°	147,9°	163,5°	172,2°	174,9°	176,6°	175,4°