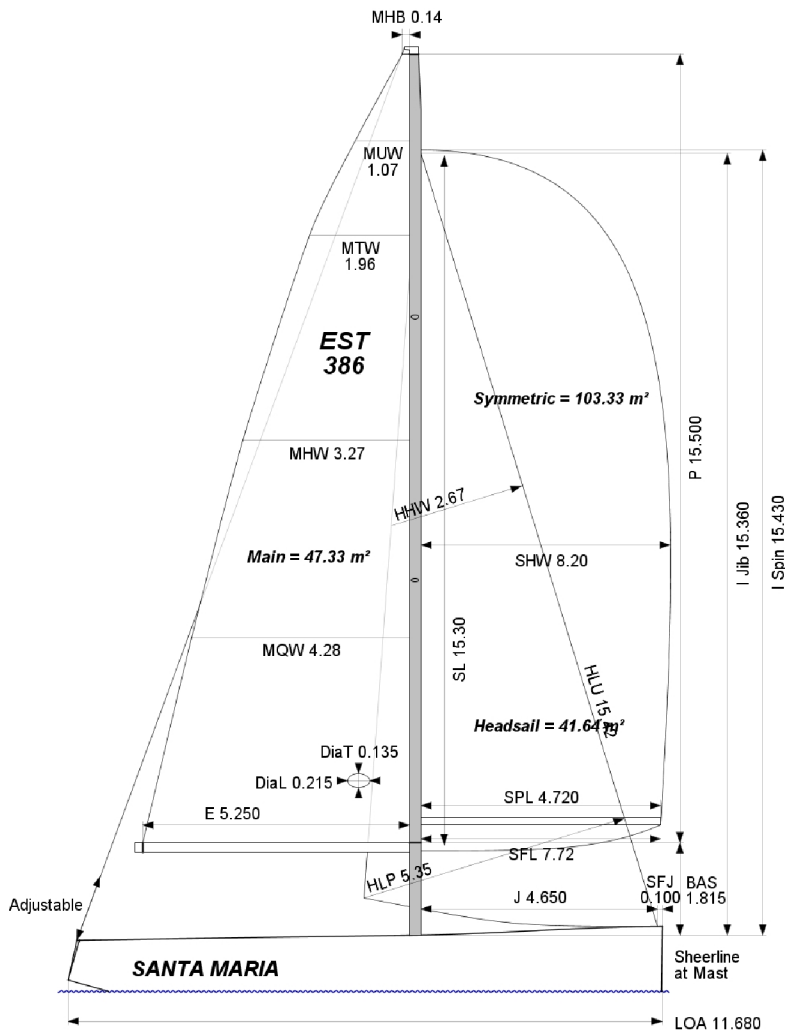




ORC
Offshore Racing Congress
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2020
ORC Club
Certificate

Rating Office

Estonian Yachting Union
Purje 8, maja 3
11911 Tallinn
Estonia



ESTONIAN
YACHTING
UNION

Certificate

Number **075/20**
Issued On **19/06/2020**
ORC Ref **03880000L3E**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 786kg
Maximum **560kg**
Minimum* **420kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **618.1 0.9707**
Non Spin OSN **600.8 0.9986**

Sails Limitations

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

Spinnaker configuration
Symmetric: **Yes 103.33**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length
CDL = 10.413

Stability (Estimated)
Limit Positive Stab.: **129.3°**
Stability Index: **129.8**

BOAT		GPH	HULL	
Name	SANTA MARIA	589.4	Data File	EST386 LOA 11.680m
Sail Nr	EST 386		Offset File	SAMA.OFF MB 3.900m
			Displacement	6,700kg Draft 2.380m
CLASS			IMS Division	Cruiser/Racer Dynamic All. 0.066%
			Plan Review	Construction Cored
			Fiber Rigging	No Aramid Core No
			Crew Arm Ex	Carbon Rudder No
				Light Stanchions
			IMSL	11.037m VCGD -0.172m Sink 20.65kg/mm
			RL	9.789m VCGM -0.248m WS 29.11m²
			LSM0	10.976m Displacement/Length ratio 5.0669
COMMENTS			Water Ballast	Trim Tab No
			BLR Index	0.0000
PROPELLER			CENTERBOARD	
			N/A	
Installation	Strut	PRD 0.410		
Type	Folding 2 blades	PIPA 0.0031		

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	573.1			639.2		
Time on Time	1.0469			1.0561		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	673.4	522.7	466.1	870.5	642.6	557.7
Time on Time	1.0024	1.2913	1.4481	0.7754	1.0505	1.2103

BOAT Name SANTA MARIA Sail Nr EST 386 File EST386 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Club Estimated VCG Flotation date 04/07/2014 SG 1.0258 FFM 1.274 FF 1.274 SFFP 0.193 FAM 1.015 FA 1.015 SAFF 11.452 LCF from stem on CL / on sheer 6.442 / 6.719 Maximum beam station from stem 7.233 RM Measured 168.0kg·m RM Default 163.1kg·m Limit of positive stability / Stab.Index 129.3° / 129.8 Freeboard at mast at 4.750 1.112	
RIG Forestay Tension Aft Spreaders 2 Inner Stay None Fitted Runners/Checkstays 0 Carbon Mast Yes Jib Furler No Fiber Rigging No Main Furler No Non-Circular Rigging No Articulated Bowsprit No P 15.500 E 5.250 MDT1 0.135 MW 0.215 IG 15.360 J 4.650 MDL1 0.215 GO 0.215 ISP 15.430 SFJ 0.100 MDT2 0.130 BD BAS 1.815 SPL 4.720 MDL2 0.180 MWT 159.00 FSD 0.000 TPS TL 1.100 MCG 6.200			
MIZZEN RIG AND SAILS N/A		PROPELLER Installation Strut PRD 0.410 Type Folding 2 blades PBW Twin Screw No PIPA 0.0031 ST1 0.050 ST3 ST5 0.270 ST2 ST4 0.097 EDL 3.280	
COMMENTS 6700		MOVABLE BALLAST N/A	
		CENTERBOARD N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	0.14	1.07	1.96	3.27	4.28	47.34				Unknown						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.10	0.70	1.32	2.67	4.10	5.35	15.42	115%	41.64		No				Unknown	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	15.30	15.30	15.30	8.20	7.72	103.33				Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



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2020
Measurements
Datasheet

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UNION

2020

ORC Club Certificate Appendix

BOAT			
Name	SANTA MARIA	Certificate Number	075/20
Sail Nr	EST 386	Issued On	19/06/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	970.4	803.6	714.1	674.9	659.0	652.1	640.9
52°	638.9	538.3	493.3	476.1	469.1	465.4	461.7
60°	605.5	516.3	480.5	464.9	456.5	452.1	448.8
75°	579.7	501.6	471.2	454.2	441.3	431.1	421.7
90°	585.3	502.9	469.8	451.9	435.7	420.3	396.8
110°	604.3	501.3	462.3	438.8	418.2	405.8	385.0
120°	621.7	511.8	467.3	442.1	417.5	394.7	366.6
135°	690.8	559.6	490.4	459.7	436.2	411.4	362.9
150°	824.0	655.3	552.7	491.1	461.4	439.3	393.3
Run VMG	951.5	756.6	638.2	561.1	510.0	473.2	428.9
Selected Courses							
Windward / Leeward	960.9	780.1	676.2	618.0	584.5	562.6	534.9
Circular Random	809.7	654.6	571.9	524.2	494.7	474.9	448.6
Coastal / Long Distance	960.0	733.4	610.7	541.5	505.1	476.0	429.5
Non Spinnaker	861.6	691.2	599.0	545.0	511.5	489.4	460.7

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	42.4°	40.9°	40.1°	38.8°	38.3°	37.9°	37.5°
Beat VMG	3.71	4.48	5.04	5.33	5.46	5.52	5.62
52°	5.63	6.69	7.30	7.56	7.67	7.74	7.80
60°	5.95	6.97	7.49	7.74	7.89	7.96	8.02
75°	6.21	7.18	7.64	7.93	8.16	8.35	8.54
90°	6.15	7.16	7.66	7.97	8.26	8.57	9.07
110°	5.96	7.18	7.79	8.20	8.61	8.87	9.35
120°	5.79	7.03	7.70	8.14	8.62	9.12	9.82
135°	5.21	6.43	7.34	7.83	8.25	8.75	9.92
150°	4.37	5.49	6.51	7.33	7.80	8.19	9.15
Run VMG	3.78	4.76	5.64	6.42	7.06	7.61	8.39
Gybe Angles	141.5°	148.0°	150.0°	156.0°	171.0°	180.0°	180.0°