



ORC

Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **111/20**
Issued On **07/07/2020**
ORC Ref **0388000M5W**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 625kg
Maximum **563kg**
Minimum* **422kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	662.7	0.9054
Non Spin OSN	642.0	0.9346

Sails Limitations

Headsails **5** Spinnakers **4**

Asymmetric on centerline

Spinnaker configuration
Symmetric: **Yes** **69.90**
Asymmetric: **Yes** **59.00**
Flying H/S: **No**
Spin. Pole: **Yes**

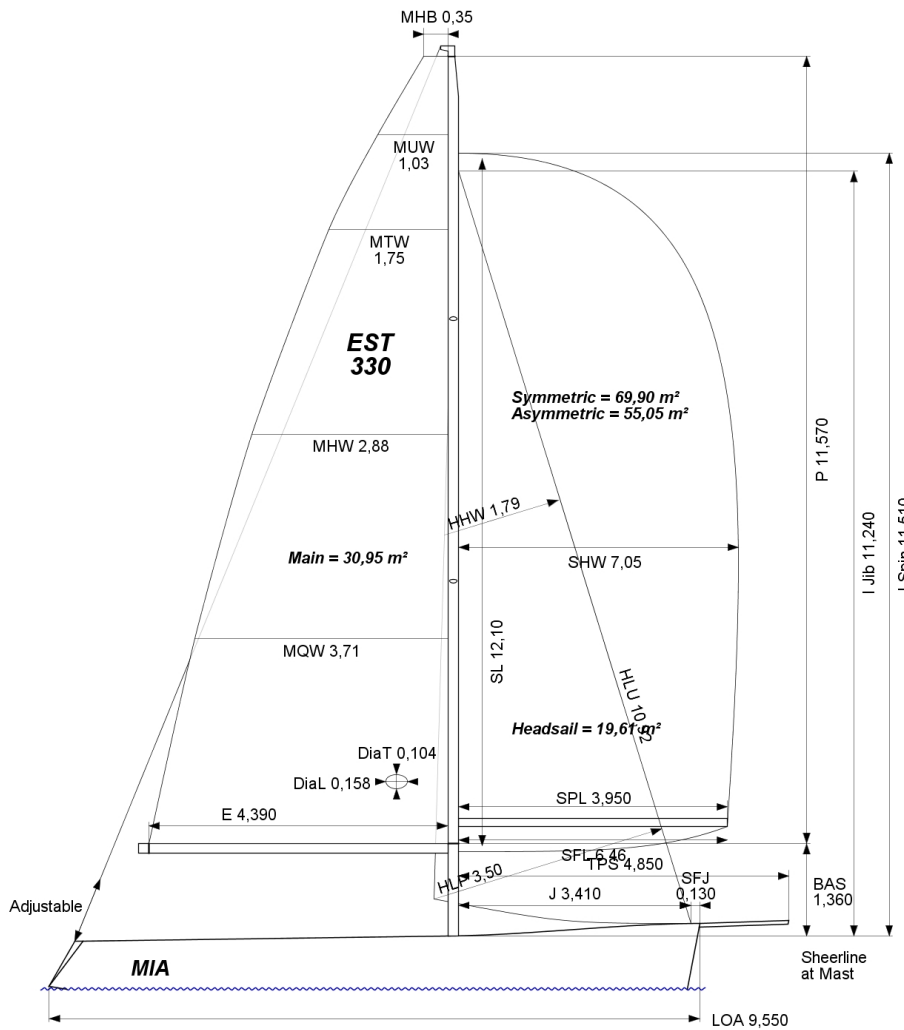
Class Division Length

CDL = 8.935

Stability (Estimated)

Limit Positive Stab.: **104.9°**
Stability Index: **101.7**

Owner



BOAT		GPH	HULL			
Name MIA		619.9	Data File EST330	LOA 9.550m		
Sail Nr EST 330			Offset File GDSURP.BOF	MB 2.984m		
			Displacement 2,784kg	Draft 2.081m		
CLASS			IMS Division Performance	Dynamic All. 0.000%		
Class Grand-Surprise			Plan Review	Construction Solid		
Designer Joubert-Nivelt			Fiber Rigging No	Aramid Core No		
Builder Archambault			Crew Arm Ex	Carbon Rudder No		
Series 06/2000				Light Stanchions		
Age Date 01/2003			IMSL 9.357m	VCGD 0.036m	Sink 14.68kg/mm	
Age Allowance 0.487%			RL 8.519m	VCGM -0.001m	WS 18.94m²	
COMMENTS			LSM0 9.346m	Displacement/Length ratio 3.4103		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Shaft exposed	PRD 0.410		N/A			
Type Folding 2 blades	PBW 0.111					
	PIPA 0.0024					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	604.0			679.6		
Time on Time	0.9933			0.9932		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	711.6	549.5	483.5	931.8	681.0	592.9
Time on Time	0.9485	1.2283	1.3962	0.7244	0.9912	1.1385

2020

ORC Club Certificate Appendix

BOAT	
Name MIA	Certificate Number 111/20
Sail Nr EST 330	Issued On 07/07/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1060.9	873.8	768.0	723.5	710.0	705.5	696.3
52°	695.2	582.7	531.1	511.9	505.0	501.7	494.6
60°	657.8	557.1	517.6	498.6	489.2	484.3	477.4
75°	608.1	525.8	499.7	484.0	464.9	452.9	443.8
90°	580.3	510.7	479.3	455.9	440.4	428.1	405.0
110°	601.5	516.1	481.0	445.3	412.8	387.4	358.2
120°	635.9	531.5	490.6	453.9	418.5	385.2	335.3
135°	720.5	579.1	513.4	479.4	443.3	406.9	337.8
150°	867.2	685.0	576.0	513.3	481.8	449.1	383.3
Run VMG	1001.4	791.0	665.1	582.5	530.9	496.2	436.6
Selected Courses							
Windward / Leeward	1031.1	832.4	716.6	653.0	620.5	600.9	566.4
Circular Random	854.8	690.2	601.6	549.6	516.5	493.5	460.2
Coastal / Long Distance	1028.2	780.1	646.1	569.9	530.0	496.2	435.8
Non Spinnaker	932.3	744.2	641.8	581.3	543.1	517.3	482.6

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	42.9°	41.3°	40.3°	38.6°	37.9°	37.9°	38.1°
Beat VMG	3.39	4.12	4.69	4.98	5.07	5.10	5.17
52°	5.18	6.18	6.78	7.03	7.13	7.18	7.28
60°	5.47	6.46	6.95	7.22	7.36	7.43	7.54
75°	5.92	6.85	7.20	7.44	7.74	7.95	8.11
90°	6.20	7.05	7.51	7.90	8.17	8.41	8.89
110°	5.99	6.98	7.48	8.09	8.72	9.29	10.05
120°	5.66	6.77	7.34	7.93	8.60	9.35	10.74
135°	5.00	6.22	7.01	7.51	8.12	8.85	10.66
150°	4.15	5.26	6.25	7.01	7.47	8.02	9.39
Run VMG	3.59	4.55	5.41	6.18	6.78	7.25	8.25
Gybe Angles	143.5°	147.0°	148.0°	156.5°	180.0°	180.0°	180.0°