



ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Offshore
Racing
Congress



Certificate

Number **126/20**
Issued On **23/07/2020**
ORC Ref **03880000N25**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 645kg
Maximum **650kg**
Minimum* **488kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	658.2	0.9116
Non Spin OSN	639.6	0.9381

Sails Limitations

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

Spinnaker configuration
Symmetric: **Yes** 96.74
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

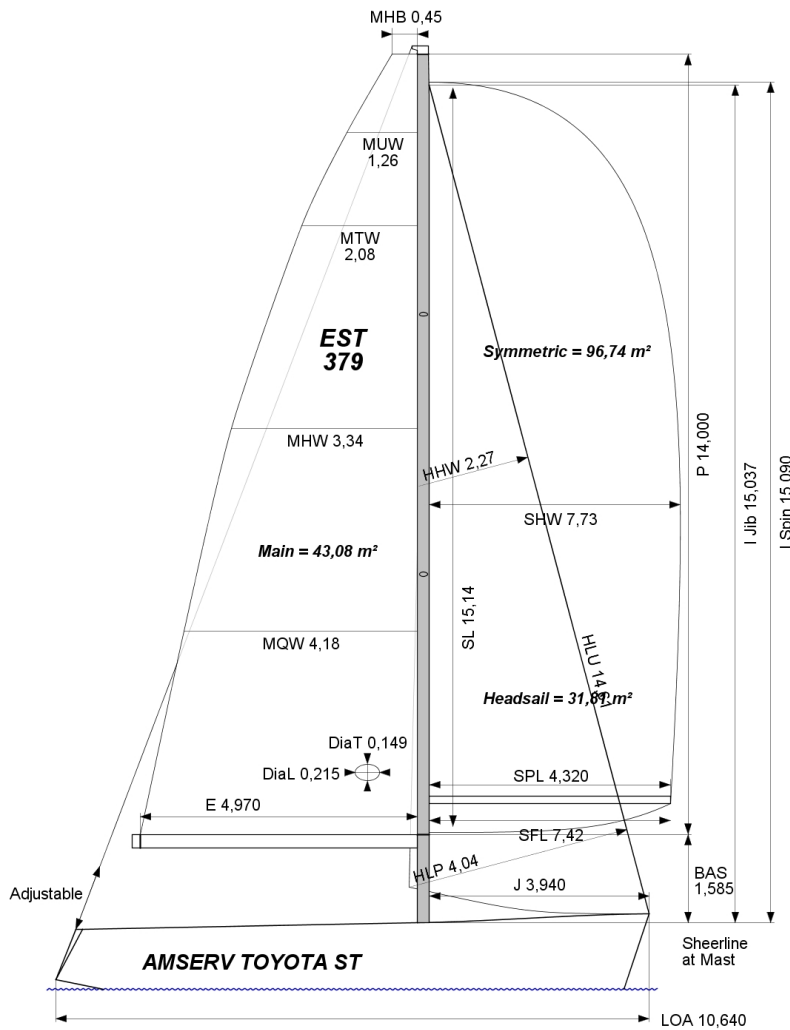
Class Division Length

CDL = 8.922

Stability (Measured)

Limit Positive Stab.: **119.1°**
Stability Index: **121.3**

Owner



BOAT		GPH	HULL			
Name AMSERV TOYOTA ST Sail Nr EST 379		625.5	Data File EST379	LOA 10.640m		
			Offset File EST379-2020.off	MB 3.458m		
			Displacement 5,722kg	Draft 2.034m		
CLASS			IMS Division Cruiser/Racer	Dynamic All. 0.111%		
Class First 36.7 mod			Plan Review	Construction Solid		
Designer B.Farr			Fiber Rigging No	Aramid Core No		
Builder Beneteau S.A.			Crew Arm Ex	Carbon Rudder Yes		
Series 01/2001				Light Stanchions No		
Age Date 05/2005			IMSL 9.596m	VCGD 0.031m		
Age Allowance 0.487%			RL 8.260m	VCGM 0.016m		
COMMENTS			WS 26.16m²			
			LSM0 9.551m	Displacement/Length ratio 6.5675		
			Water Ballast 0	Trim Tab No		
			BLR Index 0.0000			
PROPELLER			CENTERBOARD			
Installation Strut	PRD 0.410		N/A			
Type Folding 2 blades	PBW 0.130					
	PIPA 0.0027					
SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	609.3			680.8		
Time on Time	0.9847			0.9915		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	710.9	555.2	500.9	916.9	682.0	600.2
Time on Time	0.9495	1.2158	1.3477	0.7362	0.9898	1.1247

2020

ORC Club Certificate Appendix

BOAT			
Name	AMSERV TOYOTA ST	Certificate Number	126/20
Sail Nr	EST 379	Issued On	23/07/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1054.0	876.5	775.7	734.7	721.5	718.1	709.1
52°	688.9	582.1	529.1	509.8	503.7	501.1	494.9
60°	650.1	555.3	514.1	496.8	489.6	486.4	481.7
75°	620.3	536.9	503.3	484.9	472.1	464.4	458.9
90°	625.0	533.5	495.8	481.1	464.3	449.0	429.3
110°	626.1	524.7	487.0	463.0	444.1	432.5	413.7
120°	643.4	534.4	491.8	465.8	441.1	419.5	395.7
135°	709.0	578.3	512.7	482.8	458.3	433.8	388.8
150°	836.1	668.1	567.4	511.3	483.5	460.6	416.1
Run VMG	965.4	771.5	654.1	579.2	526.2	493.4	448.5
Selected Courses							
Windward / Leeward	1009.7	824.0	714.9	657.0	623.9	605.8	578.8
Circular Random	855.0	692.9	607.0	558.1	528.7	509.6	484.6
Coastal / Long Distance	1005.3	773.8	645.9	576.5	539.6	510.6	462.6
Non Spinnaker	914.3	734.6	637.9	581.8	547.7	525.6	497.2

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	42.8°	41.6°	40.9°	39.9°	39.4°	39.4°	40.5°
Beat VMG	3.42	4.11	4.64	4.90	4.99	5.01	5.08
52°	5.23	6.18	6.80	7.06	7.15	7.18	7.27
60°	5.54	6.48	7.00	7.25	7.35	7.40	7.47
75°	5.80	6.71	7.15	7.42	7.63	7.75	7.84
90°	5.76	6.75	7.26	7.48	7.75	8.02	8.39
110°	5.75	6.86	7.39	7.78	8.11	8.32	8.70
120°	5.59	6.74	7.32	7.73	8.16	8.58	9.10
135°	5.08	6.23	7.02	7.46	7.86	8.30	9.26
150°	4.31	5.39	6.34	7.04	7.45	7.82	8.65
Run VMG	3.73	4.67	5.50	6.22	6.84	7.30	8.03
Gybe Angles	145.0°	149.5°	151.5°	158.0°	180.0°	180.0°	180.0°