



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **102/20**
Issued On **03/07/2020**
ORC Ref **03880000LVD**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 859kg
Maximum **950kg**
Minimum* **713kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	594.6	1.0091
Non Spin OSN	578.6	1.0370

Sails Limitations

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

Spinnaker configuration
Symmetric: **Yes 114.52**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

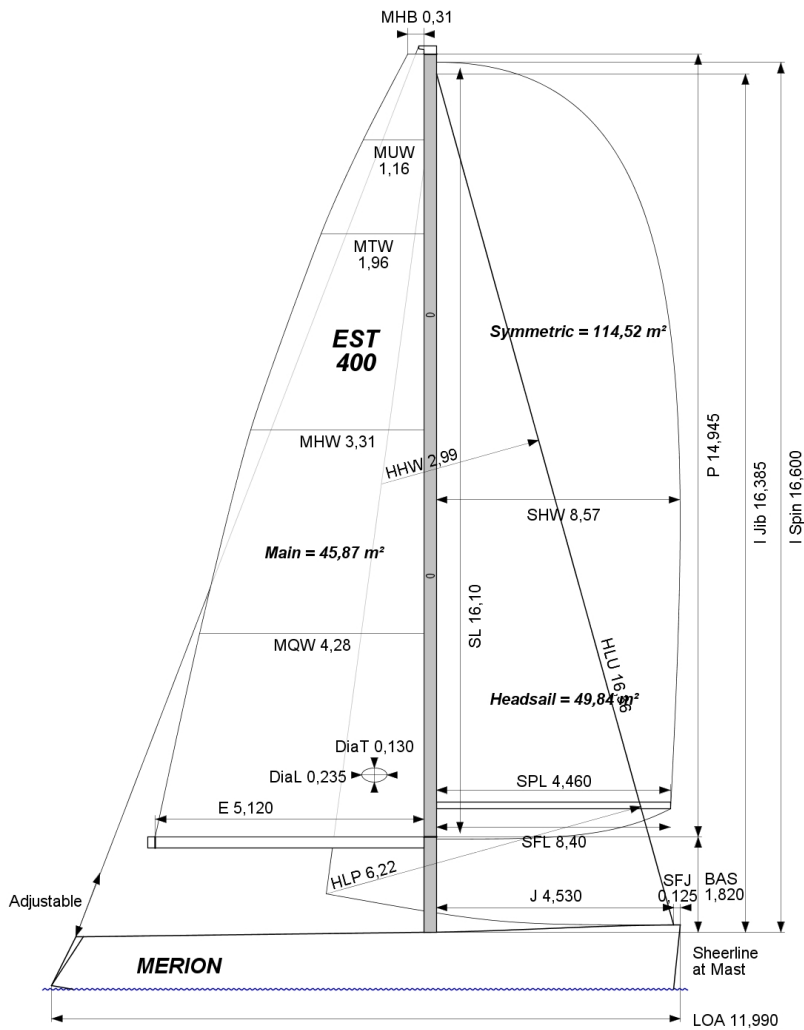
Class Division Length

CDL = 11.228

Stability (Estimated)

Limit Positive Stab.: **120.6°**
Stability Index: **121.8**

Owner



BOAT	GPH	HULL
Name MERION Sail Nr EST 400	566.5	Data File EST400 LOA 11.990m Offset File F223.OFF MB 3.762m Displacement 6,292kg Draft 2.389m
CLASS Class A 40 Designer B.NIVELT Builder ARCHAMBAULT Series 12/2003 Age Date 08/2005 Age Allowance 0.487%		IMS Division Cruiser/Racer Dynamic All. 0.016% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions
COMMENTS TPS6,43		IMSL 11.630m VCGD -0.150m Sink 23.74kg/mm RL 10.832m VCGM -0.157m WS 30.17m² LSM0 11.682m Displacement/Length ratio 3.9467
PROPELLER Installation Strut PRD 0.410 Type Folding 2 blades PBW 0.111 PIPA 0.0040		Water Ballast 0 Trim Tab No BLR Index 0.0000
		CENTERBOARD NA
SCORING OPTIONS		
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	550.1	614.8
Time on Time	1.0907	1.0980
Triple Number	Low Medium High	Low Medium High
Time on Distance	650.3 501.9 444.0	841.2 617.5 535.8
Time on Time	1.0380 1.3449 1.5201	0.8024 1.0931 1.2597

2020

ORC Club Certificate Appendix

BOAT	
Name	MERION
Sail Nr	EST 400
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	930.6	764.9	675.3	641.6	627.2	619.9	611.4
52°	610.2	512.2	471.8	457.6	451.5	448.2	444.8
60°	576.7	492.9	461.0	446.2	439.0	434.7	431.1
75°	551.4	480.4	452.9	434.5	419.6	410.6	401.9
90°	558.5	480.7	451.5	431.5	411.3	393.6	371.4
110°	594.6	488.8	448.0	421.7	398.7	384.3	358.2
120°	611.8	499.0	453.2	425.4	396.7	370.6	339.2
135°	679.7	546.6	475.7	444.1	417.6	389.3	333.1
150°	806.8	638.9	538.2	478.0	447.0	422.7	371.4
Run VMG	931.7	737.8	621.5	546.6	498.7	461.8	414.1
Selected Courses							
Windward / Leeward	931.1	751.3	648.4	594.1	562.9	540.9	512.7
Circular Random	781.5	630.5	549.6	502.6	473.1	452.9	425.3
Coastal / Long Distance	931.2	706.6	586.4	520.1	483.8	453.7	406.6
Non Spinnaker	831.1	665.9	576.3	523.3	490.0	467.4	436.9

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°	41.3°	39.8°	37.9°	37.1°	36.8°	36.8°
Beat VMG	3.87	4.71	5.33	5.61	5.74	5.81	5.89
52°	5.90	7.03	7.63	7.87	7.97	8.03	8.09
60°	6.24	7.30	7.81	8.07	8.20	8.28	8.35
75°	6.53	7.49	7.95	8.28	8.58	8.77	8.96
90°	6.45	7.49	7.97	8.34	8.75	9.15	9.69
110°	6.05	7.36	8.04	8.54	9.03	9.37	10.05
120°	5.88	7.21	7.94	8.46	9.08	9.71	10.61
135°	5.30	6.59	7.57	8.11	8.62	9.25	10.81
150°	4.46	5.63	6.69	7.53	8.05	8.52	9.69
Run VMG	3.86	4.88	5.79	6.59	7.22	7.80	8.69
Gybe Angles	142.5°	147.0°	149.0°	154.5°	166.0°	180.0°	180.0°