



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**Offshore
Racing
Congress**



Certificate

Number **EST400**
Issued On **31/05/2020**
ORC Ref **03580000JHH**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 847kg
Maximum **950kg**
Minimum* **713kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	598.2	1.0030
Non Spin OSN	581.9	1.0312

Sails Limitations

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

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

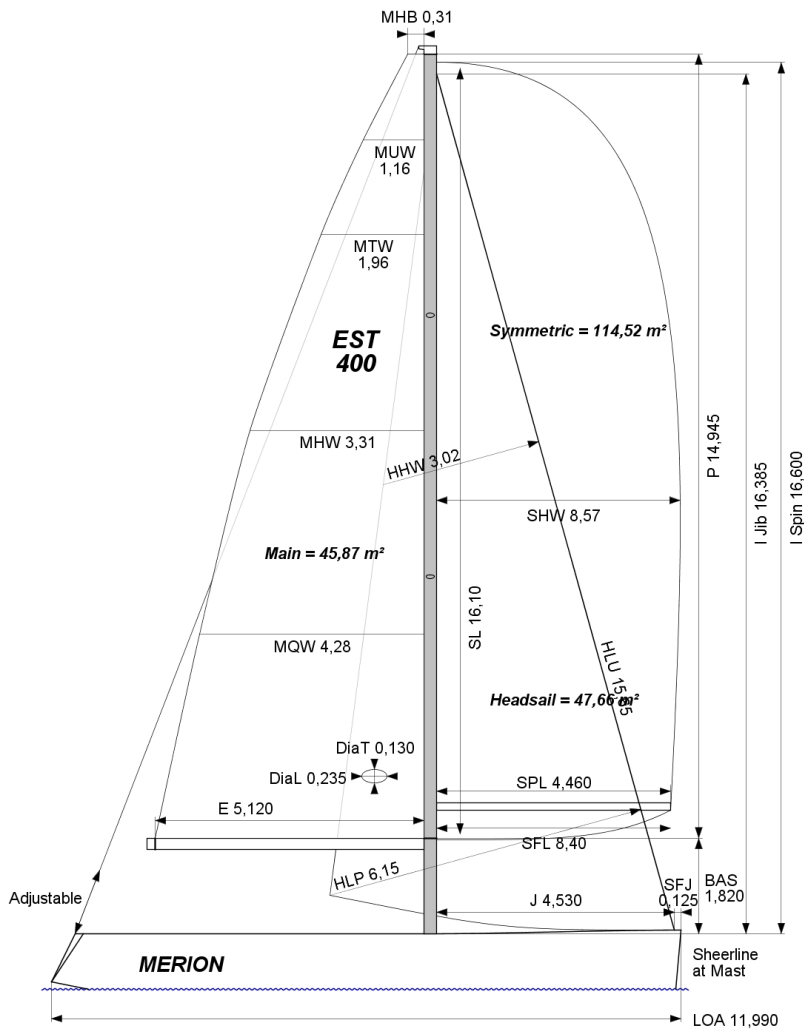
Class Division Length

CDL = 11.096

Stability (Estimated)

Limit Positive Stab.: **116.6°**
Stability Index: **118.0**

Owner



BOAT	GPH	HULL
Name MERION Sail Nr EST 400	568.8	Data File Est0400 LOA 11.990m Offset File F223+.OFF MB 3.762m Displacement 6,420kg Draft 2.402m
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. 0.038% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions
COMMENTS TPS6,43		IMSL 11.490m VCGD -0.023m Sink 23.14kg/mm RL 10.701m VCGM -0.043m WS 29.87m² LSM0 11.560m Displacement/Length ratio 4.1559
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	552.4	617.1
Time on Time	1.0862	1.0939
Triple Number	Low Medium High	Low Medium High
Time on Distance	652.9 503.7 446.8	844.7 619.7 537.8
Time on Time	1.0338 1.3400 1.5108	0.7991 1.0892 1.2552

2020

ORC Club Certificate Appendix

BOAT	
Name	MERION
Certificate Number	EST400
Sail Nr	EST 400
Issued On	31/05/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	938.6	770.9	679.8	645.5	631.1	623.9	613.7
52°	614.9	515.9	473.8	459.3	453.3	450.1	446.3
60°	580.8	495.9	462.7	448.0	441.0	436.9	433.7
75°	555.1	482.7	454.6	436.6	422.5	413.9	405.7
90°	562.9	483.1	453.1	433.7	414.5	397.4	376.1
110°	594.5	489.0	448.5	423.3	402.9	388.8	364.2
120°	611.8	499.0	453.5	426.3	398.7	374.2	345.4
135°	679.9	546.5	475.8	444.4	418.5	391.2	336.5
150°	807.0	638.9	538.1	478.2	447.3	423.5	373.7
Run VMG	931.8	737.8	621.4	546.8	499.0	462.1	415.1
Selected Courses							
Windward / Leeward	935.2	754.3	650.6	596.1	565.0	543.0	514.4
Circular Random	784.6	632.9	551.8	504.8	475.5	455.5	428.4
Coastal / Long Distance	934.8	709.3	588.2	521.9	486.0	456.4	410.3
Non Spinnaker	836.7	670.1	579.6	526.3	492.8	470.2	439.9

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°	38.3°	37.5°	37.1°	36.9°
Beat VMG	3.84	4.67	5.30	5.58	5.70	5.77	5.87
52°	5.86	6.98	7.60	7.84	7.94	8.00	8.07
60°	6.20	7.26	7.78	8.04	8.16	8.24	8.30
75°	6.48	7.46	7.92	8.25	8.52	8.70	8.87
90°	6.40	7.45	7.95	8.30	8.68	9.06	9.57
110°	6.06	7.36	8.03	8.50	8.93	9.26	9.88
120°	5.88	7.21	7.94	8.44	9.03	9.62	10.42
135°	5.29	6.59	7.57	8.10	8.60	9.20	10.70
150°	4.46	5.63	6.69	7.53	8.05	8.50	9.63
Run VMG	3.86	4.88	5.79	6.58	7.21	7.79	8.67
Gybe Angles	142.5°	147.0°	149.0°	154.5°	165.0°	180.0°	180.0°