



ORC

Offshore Racing Congress
World leader in rating technology

**2019
ORC Club
Certificate**

Rating Office
Hungarian Yachting
Association
Istvanmezei ut 1-3
H-1146 Budapest
HUNGARY



Certificate

Number **009/19**
Issued On **23/05/2019**
ORC Ref **HUN10025271**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default 603kg
Maximum **605kg**
Minimum* **454kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	628.0	0.9554
Double H.OSN	623.2	0.9627
Non Spin GPH	631.5	0.9501
Non Spin OSN	624.5	0.9608

Sails Limitations

Headsails **1** Spinnakers **3**

Spinnaker configuration
Symmetric: **Yes 116.53**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

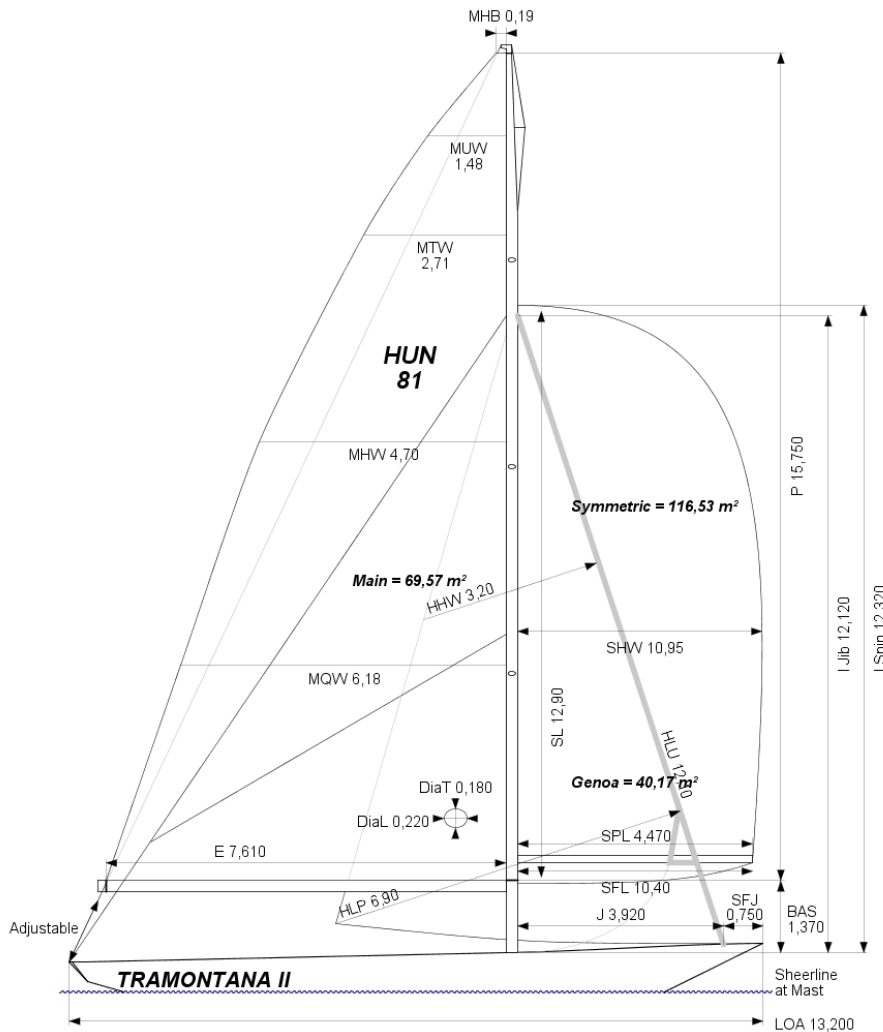
Class Division Length
CDL = **8.562**

Stability (Measured)
Limit Positive Stab.: **180.0°**
Stability Index: **186.6**

Owner
Tramontana Vitorlás Alapítvány
Dr. Ovari Ferenc utca 53
H-8220 Balatonalmád
HUNGARY

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT	GPH	HULL
Name Tramontana II Sail Nr HUN 8-1	612.6	Data File HUN 8-1 LOA 13.200m Offset File TRAMONT- MB 2.246m Displacement 6 903kg Draft 1.677m
CLASS Class 8mR Designer W. Hacht Builder W. Hacht Series 01/1907 Age Date 01/1907 Age Allowance 0.487%		IMS Division Cruiser/Racer Dynamic All. 0.040% Fwd Accom. Yes Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No
COMMENTS		IMSL 9.778m VCGD -0.445m Sink 13.90kg/mm RL 7.345m VCGM -0.374m WS 25.19m² LSM0 9.116m Displacement/Length ratio 9.1122
PROPELLER Installation In Aperture PRD 0.390 Type Folding 3 blades PBW 0.100 PIPA 0.0106		Water Ballast 0 Trim Tab No BLR Index 0.0000
SCORING OPTIONS		CENTERBOARD N/A
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time on Distance	606.4	680.3
Time on Time	0.9895	0.9922
Triple Number	Low Medium High	Low Medium High
Time on Distance	671.5 552.7 506.1	875.7 685.5 606.0
Time on Time	1.0052 1.2212 1.3337	0.7708 0.9847 1.1138

2019

ORC Club Certificate Appendix

BOAT

Name	Tramontana II	Certificate Number	009/19
Sail Nr	HUN 8-1	Issued On	23/05/2019

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	975.9	868.1	811.9	779.1	763.4	747.8	737.5
52°	636.6	568.0	536.4	520.4	511.8	508.7	498.6
60°	595.1	534.1	510.8	499.3	492.6	488.8	481.6
75°	558.6	505.6	487.7	478.5	472.9	468.9	464.9
90°	554.3	497.7	475.7	463.6	456.1	450.7	444.5
110°	581.7	502.1	481.2	466.8	451.4	438.0	420.9
120°	596.8	504.2	472.8	458.2	447.2	435.4	417.4
135°	673.3	538.6	486.4	461.1	438.9	418.7	397.7
150°	796.8	639.9	537.8	486.9	462.4	440.5	398.3
Run VMG	920.1	738.9	621.0	549.8	502.3	473.1	430.2

Selected Courses

Windward / Leeward	948.0	803.5	716.4	664.5	632.8	610.4	583.8
Circular Random	812.8	670.1	596.5	555.1	530.2	513.8	492.7
Coastal / Long Distance	945.2	751.6	642.7	579.2	544.5	515.4	470.2
Non Spinnaker	847.5	694.6	614.3	568.4	540.2	521.9	499.5

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°	42.0°	42.1°	41.8°	42.2°	41.4°	42.6°
Beat VMG	3.69	4.15	4.43	4.62	4.72	4.81	4.88
52°	5.65	6.34	6.71	6.92	7.03	7.08	7.22
60°	6.05	6.74	7.05	7.21	7.31	7.37	7.48
75°	6.45	7.12	7.38	7.52	7.61	7.68	7.74
90°	6.50	7.23	7.57	7.77	7.89	7.99	8.10
110°	6.19	7.17	7.48	7.71	7.98	8.22	8.55
120°	6.03	7.14	7.61	7.86	8.05	8.27	8.63
135°	5.35	6.68	7.40	7.81	8.20	8.60	9.05
150°	4.52	5.63	6.69	7.39	7.79	8.17	9.04
Run VMG	3.91	4.87	5.80	6.55	7.17	7.61	8.37
Gybe Angles	143.9°	146.1°	149.4°	158.1°	180.0°	180.0°	180.0°