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2020
International
Double Handed

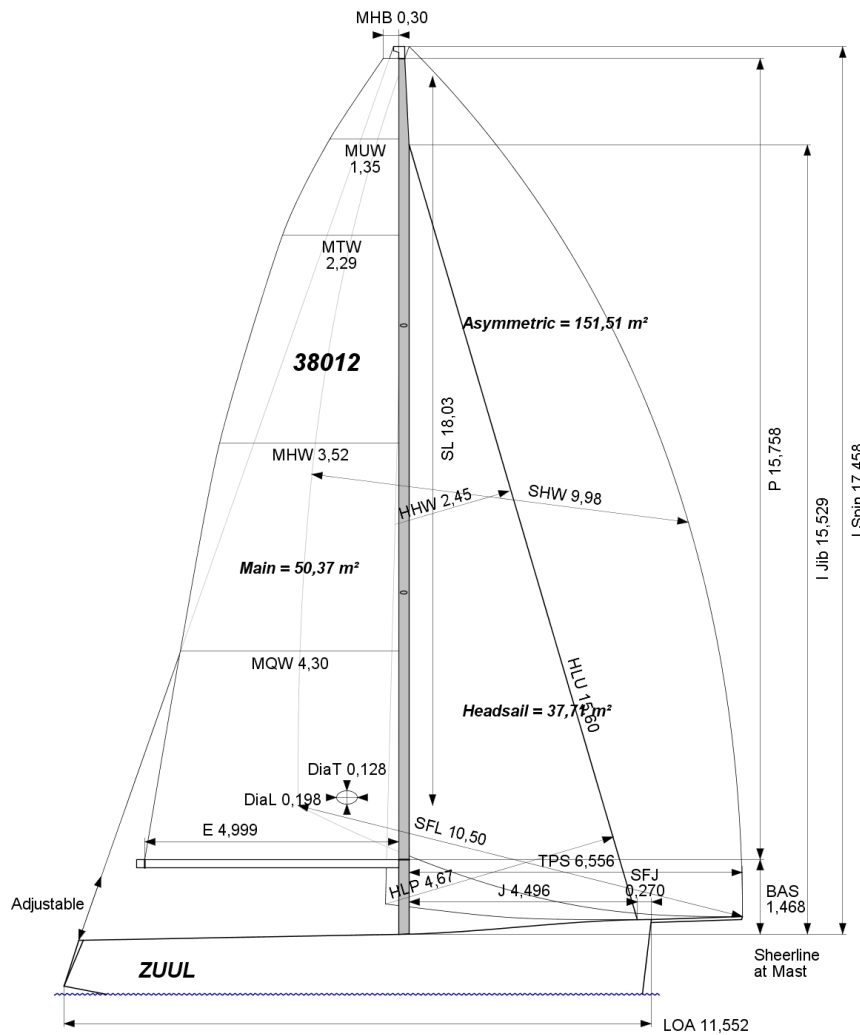
Rating Office

**Offshore
Racing
Congress**

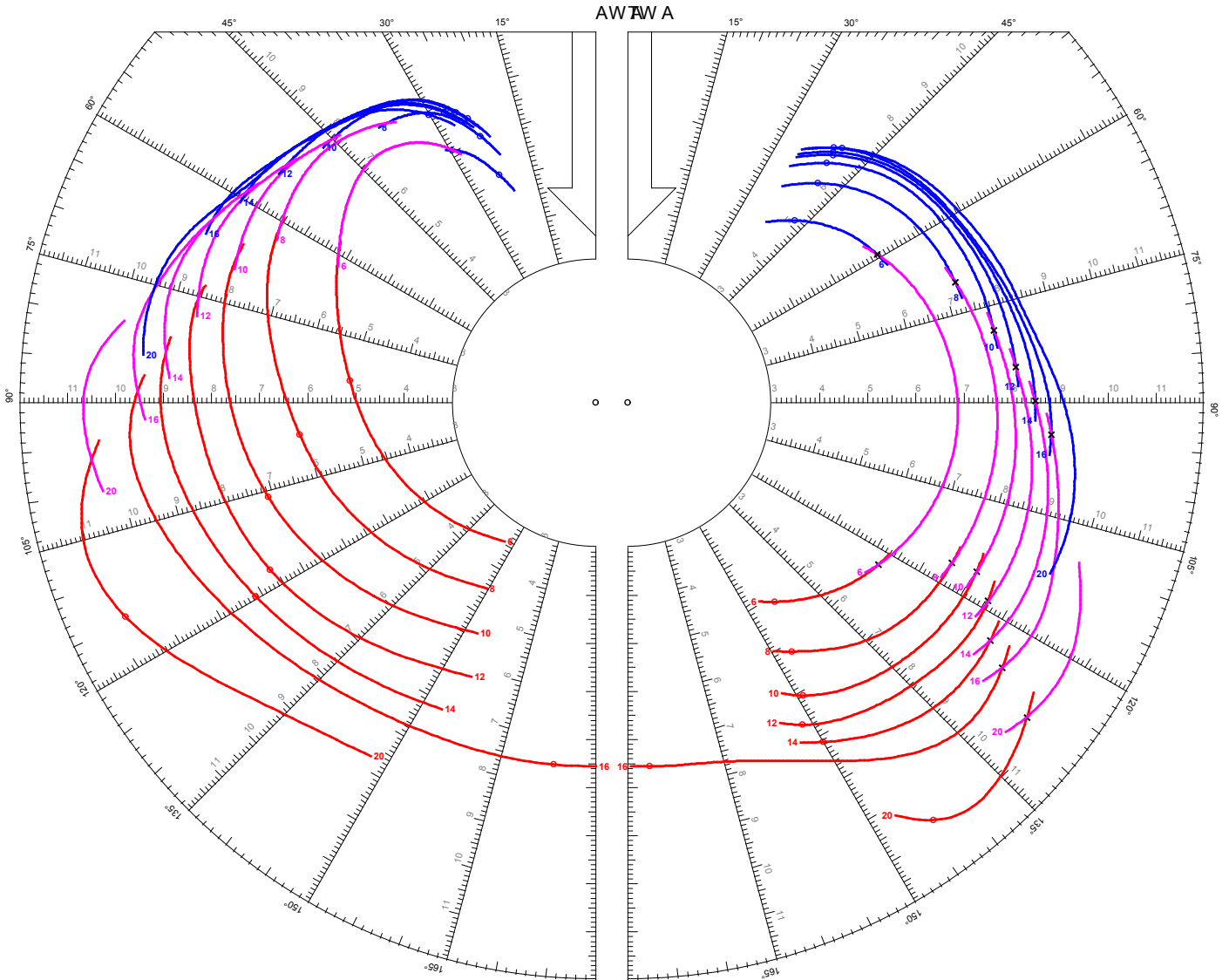


Certificate

Number **US6294**
Issued On **25/09/2020**
ORC Ref **03410000QU8**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**



BOAT Name ZUUL Sail Nr 38012		GPH 574.8	HULL Data File US6294 DH LOA 11.552m Offset File A38a.off MB 3.987m Displacement 5,478kg Draft 2.401m		Crew Weight Default 170kg Maximum 170kg Non Manual Pwr No	
CLASS Class AERODYNE 38 Designer Roger Martin Builder Aerodyne Yachts Series 01/1999 Age Date 01/2001 Age Allowance 0.487%			IMS Division Cruiser/Racer Dynamic All. 0.025% Fiber Rigging No Construction Cored Crew Arm Ex 0.00 Aramid Core No Carbon Rudder Yes Light Stanchions No		Sails Limitations Headsails 6 Spinnakers 4 Asymmetric on centerline Spinnaker configuration Symmetric: No Asymmetric: Yes 151.51 Flying H/S: No Spin. Pole: No	
COMMENTS			IMSL 10.787m VCGD -0.076m Sink 21.65kg/mm RL 9.035m VCGM -0.095m WS 28.31m² LSM0 10.712m Displacement/Length ratio 4.4567 Water Ballast 0 Trim Tab No BLR Index 0.0000		Stability (Measured) Limit Positive Stab.: 118.9° Stability Index: 115.4	
PROPELLER Installation Strut PRD 0.413 Type Folding 2 blades PBW 0.105 PIPA 0.0035		CENTERBOARD N/A		Owner		
SCORING OPTIONS						
	Time on Distance	Time on Time				
Coastal or Long Distance	563.9	1.0640				
Circular Random	574.8	1.0438				
Predominantly Upwind	565.0	1.0620				
Predominantly Downwind	515.2	1.1645				



Polar Plot for Boat	
Name	ZUUL
Sail Number	38012
Class	AERODYNE 38
Designer	Roger Martin
Builder	Aerodyne Yachts
Issued On	25/09/2020 - VPP 2020 1.02

2020

Double Handed Certificate Appendix

BOAT	
Name ZUUL	Certificate Number US6294
Sail Nr 38012	Issued On 25/09/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	954.9	792.6	725.7	702.5	694.0	682.3	682.9
52°	629.0	531.9	495.6	484.8	480.2	476.7	471.0
60°	595.4	510.0	479.7	469.3	464.5	462.2	454.2
75°	545.8	488.3	466.8	451.2	442.0	436.4	430.5
90°	526.8	471.1	450.7	437.0	426.0	412.1	398.6
110°	543.4	474.2	444.3	417.9	396.0	382.1	361.6
120°	572.0	483.4	448.5	422.0	396.9	373.3	340.3
135°	639.3	517.2	465.6	434.4	403.0	372.9	329.6
150°	757.5	606.0	515.0	468.3	444.4	420.6	361.2
Run VMG	874.7	699.7	594.7	540.4	513.1	478.7	417.1
Selected Courses							
Windward / Leeward	914.8	746.2	660.2	621.4	603.5	580.5	550.0
Circular Random	774.4	632.4	558.7	517.3	491.9	474.4	449.5
Coastal / Long Distance	910.8	700.4	595.7	539.4	508.3	476.3	424.4
Non Spinnaker	857.5	689.9	600.0	547.8	515.6	494.3	467.6

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	42.6°	40.9°	39.8°	39.8°	39.4°	39.0°	40.1°
Beat VMG	3.77	4.54	4.96	5.12	5.19	5.28	5.27
52°	5.72	6.77	7.26	7.43	7.50	7.55	7.64
60°	6.05	7.06	7.51	7.67	7.75	7.79	7.93
75°	6.60	7.37	7.71	7.98	8.15	8.25	8.36
90°	6.83	7.64	7.99	8.24	8.45	8.74	9.03
110°	6.63	7.59	8.10	8.62	9.09	9.42	9.96
120°	6.29	7.45	8.03	8.53	9.07	9.64	10.58
135°	5.63	6.96	7.73	8.29	8.93	9.65	10.92
150°	4.75	5.94	6.99	7.69	8.10	8.56	9.97
Run VMG	4.12	5.15	6.05	6.66	7.02	7.52	8.63
Gybe Angles	143.5°	146.5°	149.0°	151.5°	150.0°	176.5°	143.8°