

BOAT Name VOLA VOLA ENDEAVOUR Sail Nr ITA-16008	GPH 537.5	HULL Length Overall 12.000m Maximum Beam 4.064m Displacement 5,817kg Draft 2.735m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class MILLENIUM 40° Designer MARCO LOSTUZZI Builder STAR MARINE H.T. Series 06/2004 Age 09/2008 Age Allowance 0.487% Offset File I16008B.off - 23/09/2016 09:33:02 Measurement by - 23/05/2019		IMSL 11.368m VCGD -0.373m Sink 21.98kg/mm RL 11.320m VCGM -0.338m WS 29.30m² LSM0 11.314m Displacement/Length ratio 4.0165



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	523.9			587.6		
Time on Time	1.1453			1.1486		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	600.3	481.7	429.5	769.8	589.7	520.0
Time on Time	1.1245	1.4012	1.5716	0.8768	1.1446	1.2980

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	871.8	721.8	652.1	627.6	616.1	605.2	594.8
52°	576.9	492.2	464.5	454.0	448.3	445.0	434.6
60°	547.1	478.1	454.1	441.4	434.4	429.8	417.9
75°	524.0	468.7	444.5	425.3	410.6	402.3	394.2
90°	528.3	467.8	443.5	420.9	399.2	381.8	362.6
110°	524.9	457.3	427.6	409.2	393.5	377.3	348.3
120°	538.1	460.8	427.0	396.3	376.4	361.0	331.0
135°	600.4	486.3	445.6	412.8	379.3	346.3	296.4
150°	713.6	573.3	490.4	448.2	423.9	394.9	329.6
Run VMG	823.9	661.9	566.3	517.2	489.4	456.0	380.5

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Number **160081**
ORC Ref **ITA00052995**
Issued On **02/06/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight
Default **821kg**
Maximum **875kg**
Minimum* **656kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	549.3	1.0923
Double H.OSN	537.8	1.1156
Non Spin GPH	576.6	1.0406
Non Spin OSN	563.1	1.0655

Selected Courses							
Windward / Leeward	847.9	691.9	609.2	572.4	552.8	530.6	487.7
Circular Random	726.1	592.6	522.6	482.3	456.3	437.2	407.0
Coastal / Long Distance	845.5	652.5	554.4	500.8	470.6	441.3	390.2
Non Spinnaker	796.6	642.7	559.7	510.6	479.2	457.3	426.9

Sails Limitations

Headsails	Spinnakers
6	4

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	41.9°	40.4°	38.0°	36.6°	36.3°	35.6°	35.5°
Beat VMG	4.13	4.99	5.52	5.74	5.84	5.95	6.05
52°	6.24	7.31	7.75	7.93	8.03	8.09	8.28
60°	6.58	7.53	7.93	8.16	8.29	8.38	8.62
75°	6.87	7.68	8.10	8.46	8.77	8.95	9.13
90°	6.81	7.70	8.12	8.55	9.02	9.43	9.93
110°	6.86	7.87	8.42	8.80	9.15	9.54	10.34
120°	6.69	7.81	8.43	9.08	9.56	9.97	10.88
135°	6.00	7.40	8.08	8.72	9.49	10.40	12.15
150°	5.05	6.28	7.34	8.03	8.49	9.12	10.92
Run VMG	4.37	5.44	6.36	6.96	7.36	7.89	9.46
Gybe Angles	143.1°	144.8°	149.6°	152.3°	149.0°	146.5°	143.4°

Class Division Length
CDL = **11.345**

Storm Sails Areas
Heavy Weather Jib **38.47**
Storm Jib (JL=10.98) **14.25**
Storm Trysail **16.92**

Owner

BOAT	
Name VOLA VOLA	Sail Nr ITA-16008
File I16008	Data in meters/kilograms

RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay None Fitted	Runners 0
Carbon Mast Yes	Jumper Struts None
Taper Hollows No	Jib Furler No
Fiber Rigging No	Main Furler No
Lenticular Rigging No	Without Backstay No
Articulated Bowsprit No	
P 16.850	E 5.735 MDT1 0.114 MW 0.227
IG 16.834	J 4.860 MDL1 0.227 GO 0.240
ISP 19.040	SFJ 0.000 MDT2 0.100 BD 0.245
BAS 1.710	SPL 0.000 MDL2 0.170 MWT 199.00
FSP 0.070	TPS 7.100 TL 1.685 MCG 6.598

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 02/04/2018		SG 1.0270	
FFM 1.325	FF 1.323	SFFP 0.200	
FAM 1.023	FA 1.024	SAFP 11.630	
W1 98.4	PD1 529.9	WD 12.480	
W2 98.4	PD2 525.5	GSA 1.0	
W3 98.4	PD3 522.3	RSA 1.0	
W4 98.4	PD4 529.3	PLM 9000.0	
LCF from stem on CL / on sheer		6.725 / 6.994	
Maximum beam station from stem		7.800	
RM Measured		183.6kg-m	
RM Default		173.3kg-m	
Limit of positive stability / Stab.Index		127.6° / 124.9	
Freeboard at mast at 4.860		1.074	



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.420		
Type Folding 2 blades	PBW 0.106		
Twin Screw No	PIPA 0.0026		
ST1 0.042	ST3 0.135	ST5 0.270	
ST2 0.135	ST4 0.088	EDL 1.716	

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COMMENTS	
ACL	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.200	1.25	2.22	3.71	4.81	57.83	58.98	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	21.08	18.15	19.61	11.39	11.05	185.07	AS · (SFL + 4·SHW) / 6		

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.14	0.85	1.54	2.73	3.88	5.03	16.72	44.61	Y	N	23/05/2019	Carbon	JL
0.15	0.82	1.49	2.66	3.81	4.98	16.70	43.71	Y	N	23/05/2019	Carbon	JM
0.13	0.66	1.23	2.37	3.60	3.25	16.17	34.94	N	N	05/07/2010	Unknow	

MEASUREMENT INVENTORY				
Measurer 174				
Date 02/04/2018				
Comment MARGINAL CONDITIONS				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
A	Engine	LOMBARDINI 40	27,2 Kw	
Id	Item	Weight Description		

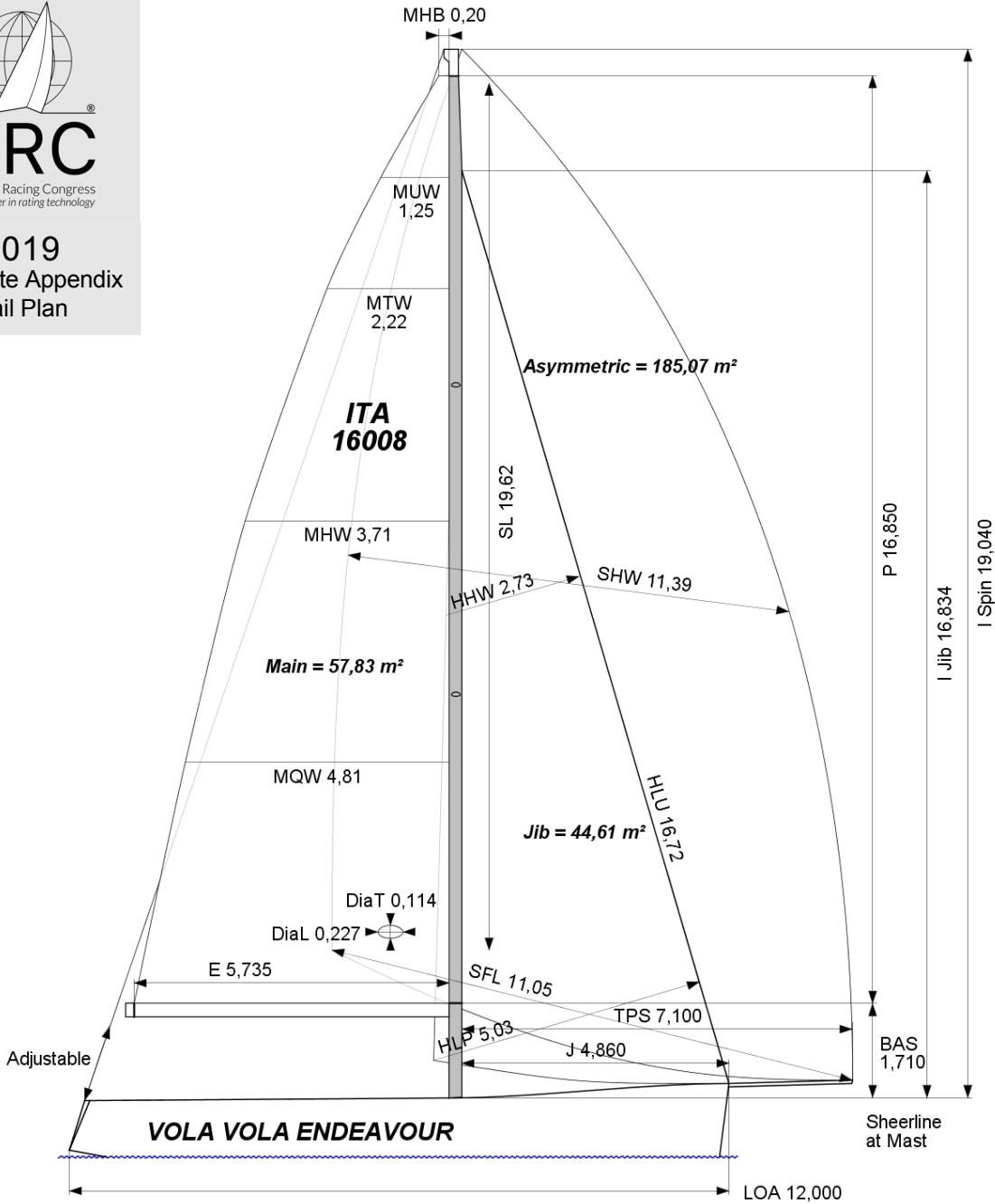
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
A	Tank	WATER	PVC	150.0	6.10	0.15	0-0 2x75 L
B	Tank	FUEL	PVC	120.0	9.25	0.20	45-0 L
Id	Item	Weight	Distance	VCG Description			
A	Battery	24.0	8.52	0.00 1x100 Ah DX			
B	Battery	24.0	8.84	0.00 1x100 Ah DX			



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SAILS INVENTORY

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
B	0.20	1.25	2.22	3.71	4.81	57.83		15/04/2019	ONE SAIL	Unknown						
A	0.23	1.31	2.25	3.63	4.76	57.54		15/04/2019	ONE SAIL	Unknown						
HEADSAILS (3)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
C	0.14	0.85	1.54	2.73	3.88	5.03	16.72	103%	44.61	Y	N		23/05/2019	H	Carbon	JL
D	0.15	0.82	1.49	2.66	3.81	4.98	16.70	102%	43.71	Y	N		23/05/2019	H	Carbon	JM
H	0.13	0.66	1.23	2.37	3.60	3.25	16.17	67%	34.94	N	N		05/07/2010		Unknow	
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
E	21.08	18.15	19.61	11.39	11.05	185.07	asym		15/04/2019	H	Nylon	NS-A2				
F	20.58	18.43	19.50	11.01	11.27	179.81	asym		15/04/2019	H	Nylon	NS-A1,5				