

BOAT Name Senza Freni Sail Nr ITA 13911	GPH 593.5	HULL Length Overall 11.924m Maximum Beam 3.770m Displacement 7,513kg Draft 2.434m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.026% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder Yes Crew Arm Extension
GENERAL Class First 40.7 Designer Farr Builder Beneteau Series 02/1997 Age 01/2001 Age Allowance 0.487% Offset File EFRST407.OFF - 06/09/2000 17:34:00 Measurement by Bertone - 27/04/2000		IMSL 10.709m VCGD -0.159m Sink 22.64kg/mm RL 9.777m VCGM 0.066m WS 30.20m² LSM0 10.640m Displacement/Length ratio 6.2372



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	576.9			641.6		
Time on Time	1.0400			1.0520		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	678.7	525.9	471.5	874.7	644.9	560.5
Time on Time	0.9945	1.2835	1.4316	0.7717	1.0467	1.2042

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	969.7	805.0	713.3	675.3	659.1	651.3	644.3
52°	643.4	541.0	495.2	478.8	472.6	469.4	468.1
60°	612.7	520.0	483.3	468.0	461.3	457.7	455.0
75°	590.4	507.0	474.9	458.3	446.7	439.7	433.2
90°	597.0	509.4	471.4	455.3	440.2	426.9	409.1
110°	611.0	505.7	465.9	443.7	424.2	411.1	392.6
120°	629.7	519.2	472.2	447.3	424.9	404.3	375.2
135°	698.1	567.2	494.9	463.2	440.9	418.2	375.6
150°	831.0	662.0	557.7	494.1	464.5	443.6	402.3
Run VMG	959.5	764.5	644.0	564.6	514.1	477.1	434.7

Certificate

Number **200118**
ORC Ref **ISR00000081**
Issued On **16/07/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default **752kg**
Maximum **752kg**
Minimum* **564kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	596.8	1.0054
Double H.OSN	581.8	1.0312
Non Spin GPH	621.4	0.9656
Non Spin OSN	603.5	0.9942

Selected Courses							
Windward / Leeward	964.6	784.7	678.7	619.9	586.6	564.2	539.5
Circular Random	815.4	659.1	575.8	528.0	499.0	480.1	456.5
Coastal / Long Distance	964.1	738.3	613.4	544.2	508.8	480.9	437.5
Non Spinnaker	865.1	694.4	602.2	548.4	515.3	493.8	466.9

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	42.2°	40.7°	39.9°	38.4°	37.5°	37.5°	37.3°
Beat VMG	3.71	4.47	5.05	5.33	5.46	5.53	5.59
52°	5.59	6.65	7.27	7.52	7.62	7.67	7.69
60°	5.88	6.92	7.45	7.69	7.80	7.87	7.91
75°	6.10	7.10	7.58	7.86	8.06	8.19	8.31
90°	6.03	7.07	7.64	7.91	8.18	8.43	8.80
110°	5.89	7.12	7.73	8.11	8.49	8.76	9.17
120°	5.72	6.93	7.62	8.05	8.47	8.90	9.59
135°	5.16	6.35	7.27	7.77	8.17	8.61	9.58
150°	4.33	5.44	6.45	7.29	7.75	8.12	8.95
Run VMG	3.75	4.71	5.59	6.38	7.00	7.55	8.28
Gybe Angles	140.5°	149.1°	149.3°	155.6°	170.1°	180.0°	180.0°

Class Division Length

CDL = **10.244**

Storm Sails Areas

Heavy Weather Jib **31.96**
Storm Jib (JL=10.00) **11.84**
Storm Trysail **14.04**

Owner

BOAT		
Name Senza Freni	Sail Nr ITA 13911	
File ITA13911	Data in meters/kilograms	

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 22/12/2017			SG 1.0290		
FFM 1.334	FF 1.330	SFFP 0.292			
FAM 1.105	FA 1.109	SAFP 11.313			
W1 91.0	PD1 457.5	WD 11.520			
W2 91.0	PD2 490.3	GSA 1.0			
W3 91.0	PD3 465.3	RSA 1.0			
W4 91.0	PD4 483.8	PLM 9000.0			
LCF from stem on CL / on sheer		6.493 / 6.735			
Maximum beam station from stem		7.502			
RM Measured		174.2kg-m			
RM Default		184.6kg-m			
Limit of positive stability / Stab.Index		115.9° / 119.3			
Freeboard at mast at 4.370		1.198			



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RIG					
Forestay Tension Aft	Spreaders 3				
Inner Stay None Fitted	Runners 0				
Carbon Mast No	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 14.860	E 5.400	MDT1 0.120	MW 0.220		
IG 15.280	J 4.370	MDL1 0.220	GO 0.250		
ISP 15.600	SFJ	MDT2 0.114	BD 0.190		
BAS 1.730	SPL 4.490	MDL2 0.118	MWT		
FSP 0.065	TPS 4.910	TL 0.700	MCG		

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.440		
Type Folding 2 blades	PBW 0.113		
Twin Screw No	PIPA 0.0036		
ST1 0.042	ST3 0.180	ST5 0.308	
ST2 0.180	ST4 0.112	EDL 2.245	

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COMMENTS	
trysail =11m^2	

MOVABLE BALLAST	
N/A	



CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.150	1.11	2.00	3.46	4.47	47.26	48.25	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	115.42		SL · (SFL + 4·SHW) / 6	
	15.75	15.75	15.75	8.85	8.57				
Asymmetric	SLU	SLE	SL	SHW	SFL	111.26		AS · (SFL + 4·SHW) / 6	
	17.00	14.10	15.55	8.97	7.05				

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
0.10	0.80	1.54	3.08	4.64	6.29	15.57	48.49			29/12/2017	Dyneem	109994-001
0.08	0.75	1.47	3.03	4.71	6.41	15.37	47.96			29/12/2017	Kevlar	
0.04	0.27	0.55	1.13	1.80	2.56	6.26	7.52			29/06/2018	Dacron	Storm Sail

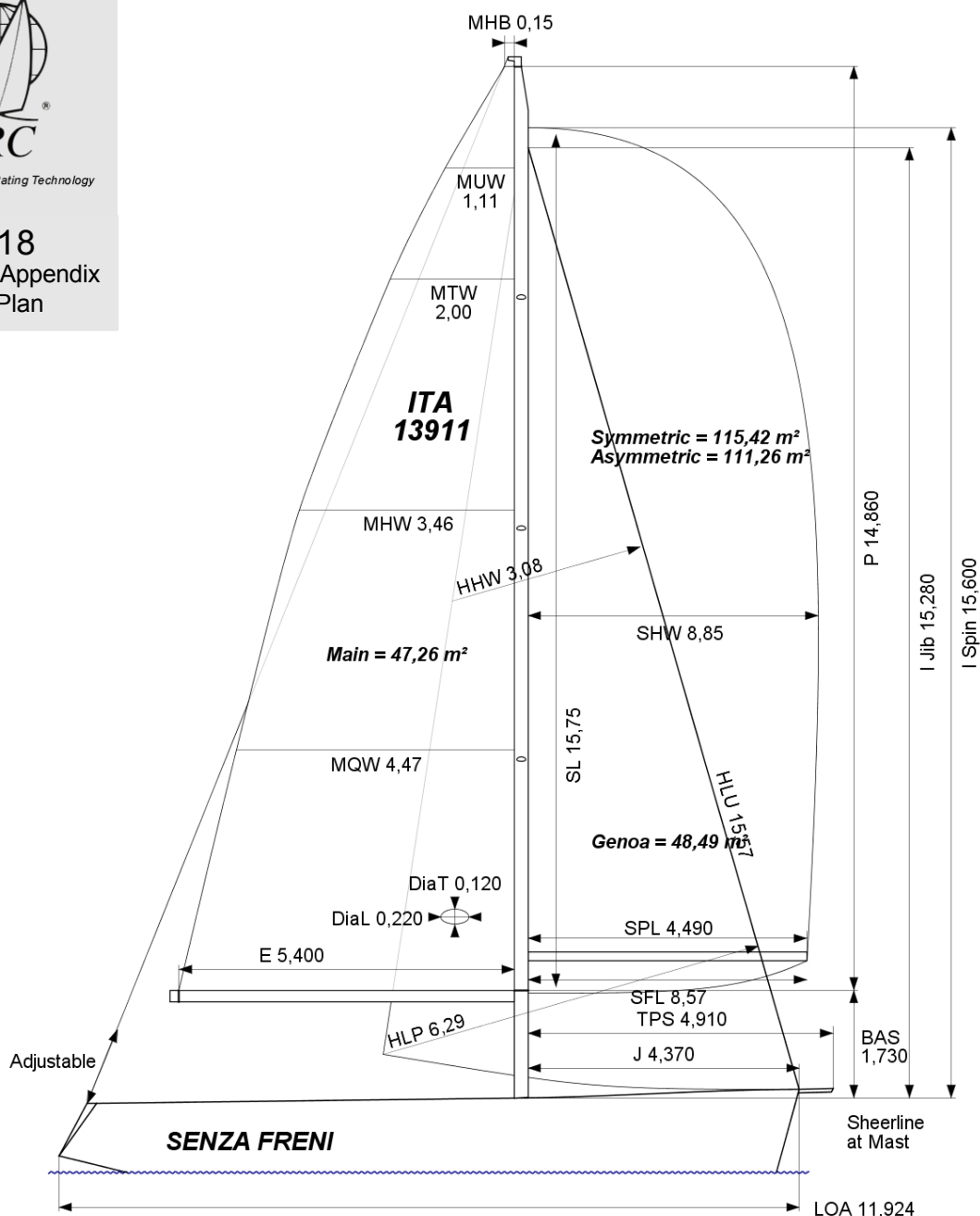
MEASUREMENT INVENTORY				
Measurer Roni Raviv ISR1				
Date 22/12/2017				
Comment measured without Table.				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight Description		

MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
4	Tank	black water	Rigid	70.0	2.91		0-0
3	Tank	Diesel	Rigid	90.0	9.00		36-0
2	Tank	WATER	Rigid	150.0	5.21		0-0
1	Tank	Water	Rigid	150.0	5.21		0-0
Id	Item	Weight	Distance	VCG Description			
1	Battery		7.41	2 Batteries 75Ah +1 small			
1	Misc	25.0	9.00	Airconditioner			



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
12021601	0.150	1.11	2.00	3.46	4.47	47.26	Amit Y.	12/02/2016	UK Halsey	Carbon	ITA13911

HEADSAILS (3)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2912170	0.10	0.80	1.54	3.08	4.64	6.29	15.57	144%	48.49			Amit Y.	29/12/2017	North Sails	Dyneem	109994-001
2912170	0.08	0.75	1.47	3.03	4.71	6.41	15.37	147%	47.96			Amit Y.	29/12/2017	Banks	Kevlar	
290618	0.04	0.27	0.55	1.13	1.80	2.56	6.26	59%	7.52			Amit Y.	29/06/2018	N/A	Dacron	Storm Sail

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1201187	15.72	15.79	15.75	8.85	8.57	115.46	Amit Y.	12/01/2018	North Sails	Nylon	Blue
1201188	15.55	15.54	15.54	7.87	7.58	101.20	Amit Y.	12/01/2018		Nylon	Yellow

ASYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1	17.00	14.10	15.55	8.97	7.05	111.26	asym	Hemamali	07/07/2010	North Sails	Nylon	Blue
2	15.59	15.35	15.47	6.80	8.94	93.18	asym	Aviram	12/05/2018	North Sails	Kevlar	