

BOAT Name Mareus Sail Nr CRO 13464	GPH 595.6	HULL Length Overall 11.924m Maximum Beam 3.770m Displacement 6,544kg Draft 2.116m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.120% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder Yes Crew Arm Extension IMSL 10.492m VCGD -0.180m Sink 21.63kg/mm RL 9.088m VCGM 0.091m WS 28.99m² LSM0 10.261m Displacement/Length ratio 6.0572
GENERAL Class First 40.7 Designer Farr Builder Beneteau Series 12/1997 Age 06/1999 Age Allowance 0.487% Offset File mareusknr.off - 26/06/2017 10:50:38 Measurement by - 16/04/2013		



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	581.4			653.2		
Time on Time	1.0320			1.0334		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	680.8	528.0	472.5	890.5	655.0	571.1
Time on Time	0.9915	1.2785	1.4287	0.7580	1.0305	1.1820

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1022.1	842.7	741.5	700.5	685.7	680.6	667.6
52°	665.3	558.3	504.1	484.5	478.0	475.1	468.1
60°	626.3	527.6	488.9	471.3	464.1	460.7	455.1
75°	567.1	491.5	465.7	454.9	446.1	438.4	432.3
90°	548.3	483.0	457.4	438.5	423.7	415.3	403.5
110°	596.2	503.3	463.2	439.0	419.4	399.2	375.3
120°	624.1	513.1	468.0	441.2	416.0	395.1	365.1
135°	689.9	558.7	489.6	458.3	433.0	408.3	361.3
150°	818.1	651.8	549.5	489.6	460.2	436.8	391.9
Run VMG	944.7	752.7	634.6	558.8	509.3	473.4	427.4

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Selected Courses							
Windward / Leeward	983.4	797.7	688.0	629.6	597.5	577.0	547.5
Circular Random	817.8	661.3	577.9	530.0	500.6	481.1	455.2
Coastal / Long Distance	979.5	746.9	619.0	548.1	511.1	482.4	434.4
Non Spinnaker	886.6	709.4	613.3	557.0	522.2	499.3	469.5

Crew Weight
Default 714kg
Maximum **800kg**
Minimum* **600kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	633.2	0.9476
Non Spin OSN	615.2	0.9753

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	43.0°	41.8°	40.9°	39.9°	39.4°	39.9°	39.9°
Beat VMG	3.52	4.27	4.86	5.14	5.25	5.29	5.39
52°	5.41	6.45	7.14	7.43	7.53	7.58	7.69
60°	5.75	6.82	7.36	7.64	7.76	7.82	7.91
75°	6.35	7.32	7.73	7.91	8.07	8.21	8.33
90°	6.57	7.45	7.87	8.21	8.50	8.67	8.92
110°	6.04	7.15	7.77	8.20	8.58	9.02	9.59
120°	5.77	7.02	7.69	8.16	8.65	9.11	9.86
135°	5.22	6.44	7.35	7.86	8.31	8.82	9.96
150°	4.40	5.52	6.55	7.35	7.82	8.24	9.19
Run VMG	3.81	4.78	5.67	6.44	7.07	7.60	8.42
Gybe Angles	141.6°	148.1°	149.5°	155.9°	170.7°	180.0°	180.0°

Sails Limitations

Headsails	Spinnakers
5	3

Class Division Length
CDL = **9.791**

Storm Sails Areas

Heavy Weather Jib	33.72
Storm Jib (JL=10.28)	12.49
Storm Trysail	13.62

Owner

BOAT	
Name Mareus	Sail Nr CRO 13464
File CRO13464	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 03/04/2017			SG 1.0253		
FFM	1.395	FF	1.394	SFFP	0.292
FAM	1.140	FA	1.142	SAFP	11.313
W1	100.0	PD1	624.3	WD	12.400
W2	100.0	PD2	618.9	GSA	1.0
W3	100.0	PD3	621.9	RSA	1.0
W4	100.0	PD4	627.3	PLM	9000.0
LCF from stem on CL / on sheer				6.480 / 6.719	
Maximum beam station from stem				7.502	
RM Measured				156.7kg-m	
RM Default				167.8kg-m	
Limit of positive stability / Stab.Index				116.7° / 118.0	
Freeboard at mast at 4.420				1.249	



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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	14.540	E	5.350	MDT1	0.118
IG	15.700	J	4.420	MDL1	0.215
ISP	15.790	SFJ		MDT2	0.118
BAS	1.720	SPL	4.430	MDL2	0.180
FSP	0.066	TPS	4.460	TL	0.700
				MW	0.215
				GO	0.244
				BD	0.190
				MWT	202.00
				MCG	5.680

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Strut	PRD	0.410
Type	Folding 2 blades	PBW	0.110
Twin Screw	No	PIPA	0.0031
ST1	0.048	ST3	0.170
ST2	0.170	ST4	0.098
		ST5	0.275
		EDL	2.230

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.630	1.36	2.18	3.48	4.48	47.65	48.81	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	15.68	15.68	15.68	8.75	8.06	112.53		SL · (SFL + 4·SHW) / 6	
Asymmetric	Not Available								

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
0.02	1.29	2.49	4.59	6.09	7.17	15.30	63.26		Y	26/06/2017	Unknow	Code 0
0.12	0.68	1.27	2.36	3.44	4.50	15.50	36.18			21/05/2019	Carbon	No1
0.12	0.63	1.20	2.33	3.43	4.45	15.34	35.28			21/05/2019	Carbon	No2
0.09	0.57	1.11	2.18	3.34	4.47	15.42	34.31			21/05/2019	Carbon	No3

MEASUREMENT INVENTORY				
Measurer CROAK6				
Date 23/05/2017				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	Volvo	MD20/40	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

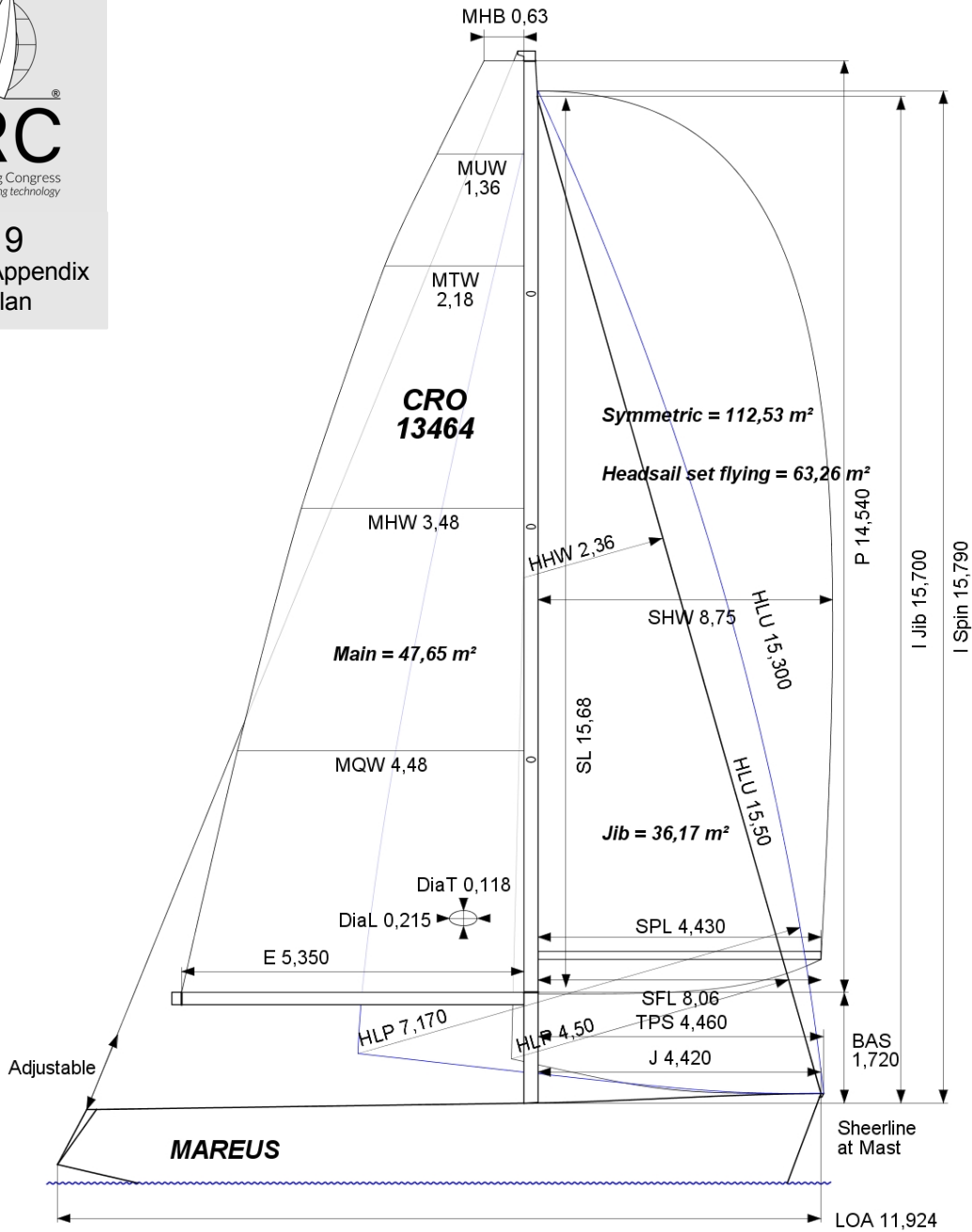
MEASUREMENT INVENTORY						
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG Condtm Description</i>
1	Tank	Diesel	Solid	135.0	9.60	40-0 CL
2	Tank	Water	Solid	180.0	5.70	0-0 P
3	Tank	Water	Solid	180.0	5.70	0-0 S
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>		
1	Ballast	187.5	6.74	5 pieces in CL each 37.5		
2	Ballast	80.0	6.87	2 pieces P/S		
3	Ballast	75.0	6.92	2 pieces P/S		
4	Ballast	37.5	6.92	2 pieceS CL		
5	Ballast	18.3	6.63	1 piece CL		
1	Battery	18.5	2.80	Starter EB740		
2	Battery	29.0	3.00	Service ER 550		



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SAILS INVENTORY

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.63	1.36	2.18	3.48	4.48	47.65		21/05/2019	North sails	Carbon						
HEADSAILS (4)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
4	0.02	1.29	2.49	4.59	6.09	7.17	15.30	162%	63.26		Y		26/06/2017	North sails	Nylon	Unknow Code 0
1	0.12	0.68	1.27	2.36	3.44	4.50	15.50	102%	36.18				21/05/2019	North sails	Carbon	No1
2	0.12	0.63	1.20	2.33	3.43	4.45	15.34	101%	35.28				21/05/2019	North sails	Carbon	No2
3	0.09	0.57	1.11	2.18	3.34	4.47	15.42	101%	34.31				21/05/2019	North sails	Carbon	No3
SYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	15.68	15.68	15.68	8.75	8.06	112.54		26/06/2017	North sails	Nylon						
2	15.40	15.40	15.40	8.70	8.70	111.65		11/04/2019	North sails	Nylon						
3	15.54	15.54	15.54	8.08	8.04	104.54		31/10/2013	North sails	Nylon						
4	15.37	15.37	15.37	8.20	7.80	104.01		16/10/2007	North sails	Nylon						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				