

BOAT Name MINNI Sail Nr EST 50	GPH 610.5	HULL Length Overall 10.600m Maximum Beam 3.250m Displacement 4,568kg Draft 2.035m Plan Review IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class X-35 mod Designer JEPPESEN Builder X YACHTS Series 09/2005 Age 01/2006 Age Allowance 0.487% Offset File EST50a.off - 11/06/2019 08:54:40 Measurement by - 19/06/2019		IMSL 9.468m VCGD -0.002m Sink 17.68kg/mm RL 8.765m VCGM -0.015m WS 23.54m² LSM0 9.291m Displacement/Length ratio 5.6956



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	594.8			664.6		
Time on Time	1.0088			1.0156		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	691.5	542.9	488.0	891.8	665.4	587.0
Time on Time	0.9762	1.2434	1.3831	0.7569	1.0144	1.1499

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1010.5	836.2	743.3	713.2	702.5	696.8	690.2
52°	661.2	558.8	515.6	502.0	496.9	494.7	487.7
60°	624.2	537.3	503.1	488.6	482.9	479.9	472.1
75°	596.5	523.0	493.7	474.7	461.5	454.9	449.9
90°	603.7	523.2	490.3	471.4	451.5	435.0	418.1
110°	613.9	517.0	480.2	453.0	433.9	420.4	399.0
120°	631.6	525.9	485.4	455.6	427.3	403.8	376.3
135°	699.1	568.0	506.5	475.7	447.2	419.8	362.8
150°	829.2	660.8	559.8	506.0	477.3	450.9	400.3
Run VMG	957.5	763.0	645.6	572.7	521.4	488.9	438.7

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Number **EST050**
ORC Ref **03580000IVF**
Issued On **26/05/2020**
VPP Ver. **2020 1.02**
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Crew Weight

Default 620kg
Maximum **745kg**
Minimum* **559kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	642.0	0.9346
Non Spin OSN	624.6	0.9606

Selected Courses							
Windward / Leeward	984.0	799.6	694.5	643.0	612.0	592.9	564.5
Circular Random	833.0	675.8	592.7	545.2	516.2	496.8	470.1
Coastal / Long Distance	981.4	752.0	629.3	564.5	528.1	497.9	448.6
Non Spinnaker	889.5	715.6	622.3	568.3	535.2	513.4	484.8

Sails Limitations

Headsails	Spinnakers
5	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	42.8°	41.6°	40.1°	39.0°	39.0°	38.8°	39.4°
Beat VMG	3.56	4.31	4.84	5.05	5.12	5.17	5.22
52°	5.44	6.44	6.98	7.17	7.25	7.28	7.38
60°	5.77	6.70	7.16	7.37	7.46	7.50	7.63
75°	6.04	6.88	7.29	7.58	7.80	7.91	8.00
90°	5.96	6.88	7.34	7.64	7.97	8.28	8.61
110°	5.86	6.96	7.50	7.95	8.30	8.56	9.02
120°	5.70	6.85	7.42	7.90	8.43	8.92	9.57
135°	5.15	6.34	7.11	7.57	8.05	8.58	9.92
150°	4.34	5.45	6.43	7.12	7.54	7.98	8.99
Run VMG	3.76	4.72	5.58	6.29	6.90	7.36	8.21
Gybe Angles	142.0°	148.0°	151.0°	158.5°	180.0°	180.0°	180.0°

Class Division Length

CDL = **9.109**

Storm Sails Areas

Heavy Weather Jib **28.66**
Storm Jib (JL=9.48) **10.62**
Storm Trysail **11.51**

Owner

BOAT	
Name MINNI File Est0050	Sail Nr EST 50 Data in meters/kilograms
RIG	
Forestay Tension Aft	Spreaders 2
Inner Stay None Fitted	Runners/Checkstays 0
Carbon Mast No	Jib Furler No
Fiber Rigging No	Main Furler No
Non-Circular Rigging No	
Articulated Bowsprit No	
P 13.780	E 4.770 MDT1 0.125 MW 0.184
IG 14.500	J 4.185 MDL1 0.185 GO 0.204
ISP 14.530	SFJ MDT2 0.125 BD 0.220
BAS 1.745	SPL 4.180 MDL2 0.177 MWT 156.00
FSD 0.034	TPS TL 0.760 MCG 4.600

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 19/06/2019	SG 1.0000	
FFM 1.313	FF 1.324	SFFP 0.075
FAM 0.969	FA 0.978	SAFP 10.275
W1 70.0	PD1 544.2	WD 11.400
W2 70.0	PD2 544.9	GSA 1.0
W3 70.0	PD3 545.0	RSA 1.0
W4 70.0	PD4 545.1	PLM 9000.0
LCF from stem on CL / on sheer		5.979 / 6.175
Maximum beam station from stem		7.300
RM Measured		115.3kg-m
RM Default		121.5kg-m
Limit of positive stability / Stab.Index		119.5° / 120.4
Freeboard at mast at 4.185		1.104



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.420	
Type Folding 2 blades	PBW 0.128	
Twin Screw No	PIPA 0.0033	
ST1 0.042	ST3 0.182	ST5 0.255
ST2 0.178	ST4 0.112	EDL 2.390

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COMMENTS

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



SAILS (Maximum Areas)						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.40	1.09	1.88	3.15	4.02	40.00 40.85 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	
	14.30	14.30	14.30	7.94	7.39	93.31 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	Flying	Meas.Date	Material	Comment
0.10	0.65	1.21	2.28	3.34	4.40	14.60	33.04	No	30/10/2018	Carbon	3di 2019 Light	
0.13	0.67	1.24	2.31	3.34	4.40	14.46	32.95	No	04/05/2018	Technor	Light 2016	
0.10	0.64	1.20	2.29	3.34	4.35	14.60	32.91	No	16/10/2018	Carbon	3di 2019 Medium	
0.10	0.63	1.20	2.27	3.30	4.36	14.31	32.07	No	04/05/2018	Spectra	Medium 2016	
0.14	0.59	1.11	2.16	3.28	4.44	13.42	29.62	No	01/06/2017	Technor	OS 2017 Heavy	
0.10	0.51	0.90	1.69	2.50	3.37	12.47	21.27	No	19/06/2019	Unknow	Staysail 2019	

MEASUREMENT INVENTORY				
Measurer EST 7				
Date 19/06/2019				
Comment Pirita				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	Yanmar	3YM20C	
Id	Item	Weight Description		

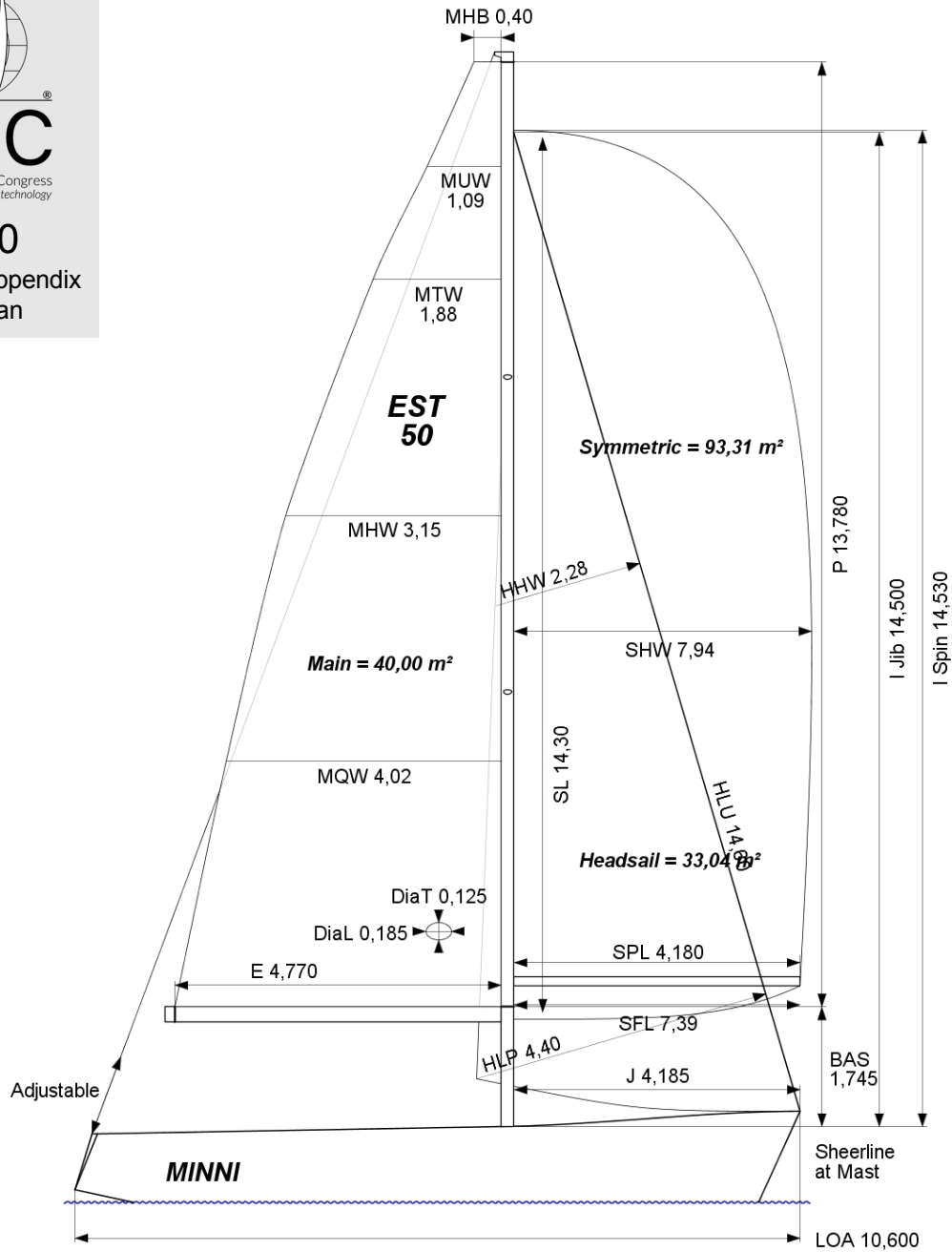
MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank fuel		st.stl	60.0	6.15	60.0 fuel
2	Tank H2O		pvc	120.0	5.52	0.0 Water
Id	Item	Weight	Distance	VCG Description		
1	Battery	44.3	4.85	170 Ah gel - services		
2	Battery	17.4	5.18	55 Ah - engine		
1	Misc	20.0	5.52	Table		
2	Misc	15.0	7.60	Boiler		
3	Misc	7.0	9.60	Autopilot		



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Sail Plan



SAILS INVENTORY

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
4	0.40	1.09	1.88	3.15	4.02	40.00		16/10/2018		Carbon	3di 2019					
3	0.36	1.09	1.80	2.97	3.85	38.55		04/05/2018	OneSails	Unknown	P13,25;E4,60					
HEADSAILS (6)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
9	0.10	0.65	1.21	2.28	3.34	4.40	14.60	105%	33.04		No		30/10/2018		Carbon	3di 2019 Light
7a	0.13	0.67	1.24	2.31	3.34	4.40	14.46	105%	32.95		No		04/05/2018		Technor	Light 2016
10	0.10	0.64	1.20	2.29	3.34	4.35	14.60	104%	32.91		No		16/10/2018		Carbon	3di 2019 Medium
6a	0.10	0.63	1.20	2.27	3.30	4.36	14.31	104%	32.07		No		04/05/2018		Spectra	Medium 2016
8	0.14	0.59	1.11	2.16	3.28	4.44	13.42	106%	29.62		No		01/06/2017	OneSails	Technor	OS 2017 Heavy
11	0.10	0.51	0.90	1.69	2.50	3.37	12.47	81%	21.27		No		19/06/2019		Unknow	Staysail 2019
SYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
10	14.30	14.30	14.30	7.94	7.39	93.31		04/05/2018		Unknown	S2					
9	14.14	14.14	14.14	7.92	7.80	93.05		04/05/2018		Unknown	S1					
3	14.20	14.20	14.20	7.70	7.40	90.41		01/07/2015		Unknown	S4 0,75oz					
8	14.07	14.07	14.07	6.54	6.78	77.25		01/06/2017		Unknown	R					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				