



World Leader in Rating Technology

2018 ORC Club Certificate

Rating Office

EYU
Regati 1
11911, Tallinn
Estonia

Certificate

Number **EST606**
Issued On **4/26/2018**
ORC Ref **EST00000051**
VPP Ver. **2018 1.00**
Valid until **12/31/2018**

Crew Weight

Default 634kg
Maximum **670kg**
Minimum* **503kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	644.3	0.9313
Double H.OSN	627.5	0.9562
Non Spin GPH	677.3	0.8859
Non Spin OSN	655.1	0.9158

Sails Limitations

Headsails **5** Spinnakers **3**

Spinnaker configuration

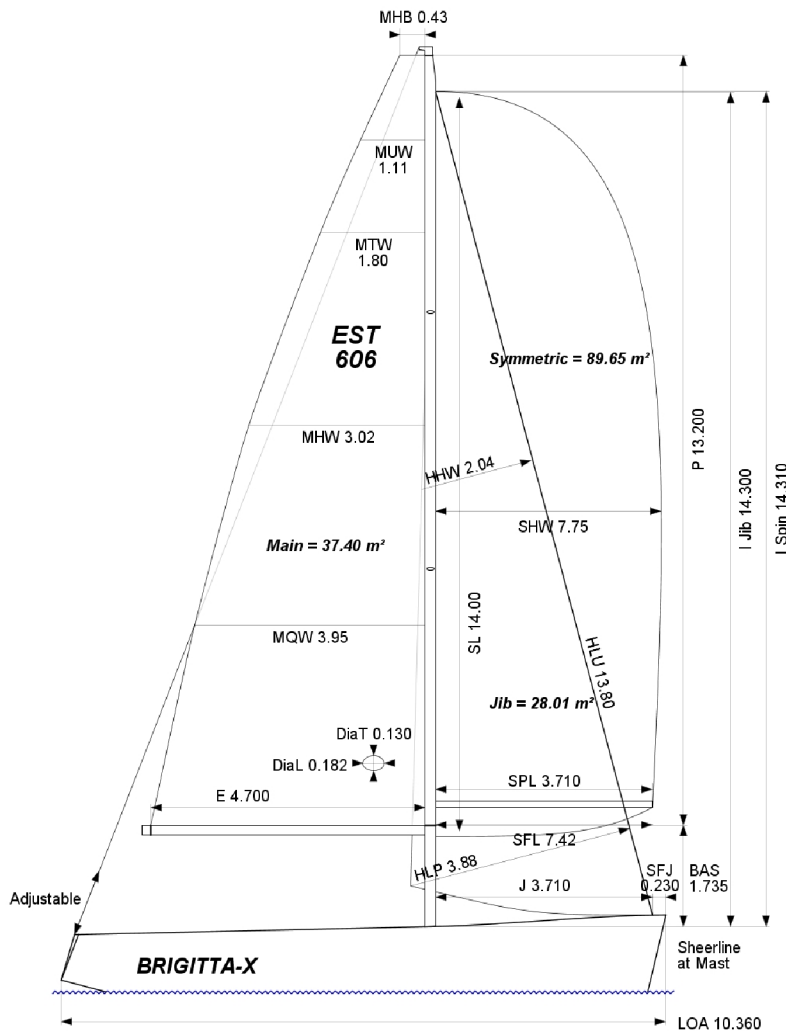
Symmetric: **Yes** 89.65
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.740

Stability (Measured)

Limit Positive Stab.: **117.5°**
Stability Index: **120.2**



BOAT		GPH		HULL			
Name	BRIGITTA-X	641.0	Data File	Est0606	LOA	10.360m	
Sail Nr	EST 606		Offset File	X34.OFF	MB	3.384m	
			Displacement	5,638kg	Draft	1.920m	
CLASS				IMS Division	Cruiser/Racer	Dynamic All.	0.223%
Class	X-34			Fwd Accom.	Yes	Construction	Cored
Designer	JEPPESEN			Fiber Rigging	No	Aramid Core	No
Builder	X YACHTS			Crew Arm Ex		Carbon Rudder	No
Series	11/2007						Light Stanchions
Age Date	04/2009			IMSL	9.469m	VCGD	0.067m
Age Allowance	0.357%			RL	8.009m	VCGM	0.038m
				WS	24.64m²		
				LSM0	9.444m	Displacement/Length ratio	6.6936
COMMENTS				Water Ballast	0	Trim Tab	No
				BLR Index	0.0000		
PROPELLER				CENTERBOARD			
Installation	Strut	PRD	0.430	N/A			
Type	Folding 2 blades	PBW	0.125				
		PIPA	0.0032				
SCORING OPTIONS							
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD			
Time on Distance	622.2			694.0			
Time on Time	0.9643			0.9726			
Triple Number	Low	Medium	High	Low	Medium	High	
Time on Distance	736.9	566.7	507.1	949.8	697.4	605.9	
Time on Time	0.9160	1.1912	1.3312	0.7107	0.9679	1.1140	

BOAT	
Name BRIGITTA-X	Sail Nr EST 606
File Est0606	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 10/08/2009		SG 1.0020	
FFM 1.315	FF 1.326	SFFP 0.325	
FAM 0.990	FA 0.996	SAFP 10.060	
W1 64.6	PD1 563.7	WD 12.805	
W2 64.6	PD2 565.4	GSA 1.0	
W3 64.6	PD3 563.5	RSA 1.0	
W4 64.6	PD4 565.2	PLM 9000.0	
LCF from stem on CL / on sheer		5.831 / 6.049	
Maximum beam station from stem		6.985	
RM Measured		115.4kg·m	
RM Default		126.9kg·m	
Limit of positive stability / Stab.Index		117.5° / 120.2	
Freeboard at mast at 3.940		1.127	



2018
Measurements
Datasheet

RIG			
Forestay Tension Aft	Spreaders 2		
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 13.200	E 4.700	MDT1 0.130	MW 0.182
IG 14.300	J 3.710	MDL1 0.182	GO 0.200
ISP 14.310	SFJ 0.230	MDT2 0.124	BD
BAS 1.735	SPL 3.710	MDL2 0.134	MWT 159.50
FSP 0.064	TPS	TL 0.440	MCG 4.600

Certificate	
Number EST606	
ORC Ref EST00000051	
Issued On 4/26/2018	
VPP Ver. 2018 1.00	
Valid until 12/31/2018	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.430		
Type Folding 2 blades	PBW 0.125		
Twin Screw No	PIPA 0.0032		
ST1 0.060	ST3 0.180	ST5 0.325	
ST2 0.180	ST4 0.092	EDL 1.800	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
5	0.430	1.11	1.80	3.02	3.95	37.40				Unknown	P13.20;E4,70					
HEADSAILS (6)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
5	0.12	0.65	1.23	2.04	2.90	3.88	13.80	105%	28.01			EST1	26/05/2014		Unknown	Unknow
2n	0.12	0.68	1.22	2.03	2.90	3.86	13.80	104%	27.96			EST1	24/04/2013		Unknown	Unknow
6	0.12	0.64	1.21	2.02	2.90	3.86	13.80	104%	27.84			EST1	26/05/2014		Unknown	Unknow
1n	0.12	0.62	1.12	2.01	2.90	3.90	13.87	105%	27.80			EST1	24/04/2013		Unknown	Unknow
4n2	0.12	0.62	1.12	1.95	2.83	3.88	13.77	105%	27.15			EST	22/04/2013		Unknown	Unknow
3	0.09	0.47	0.90	1.76	2.65	3.60	14.00	97%	25.02						Unknown	Unknow
SYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
4	14.00	14.00	14.00	7.75	7.42	89.65				Unknown						
1	14.00	14.00	14.00	7.13	6.65	82.06				Unknown						
2	14.00	14.00	14.00	7.00	6.62	80.78				Unknown						
3	13.76	13.76	13.76	7.02	6.50	79.30	EST1	26/05/2014		Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

MEASUREMENT INVENTORY				
Measurer V.Rosme EST 2				
Date 10/08/2009				
Comment				
Id	Item	Weight	Distance	VCG Description
4	Anchor	40.0	2.80	Anchor
4	Tools	3.0	6.20	Toolbox
Id	Item	Maker	Model	
1	Engine	Yanmar	20YM	
Id	Item	Weight	Description	

MEASUREMENT INVENTORY								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank	Septic	Plastic	40.0	8.20		0-0	
2	Tank	Fuel	Alum	90.0	4.85		0-0	starboard
3	Tank	Water	Plastic	210.0	4.40		0-0	portside
Id	Item	Weight	Distance	VCG Description				
1	Battery		4.00	180 Ah starboard				
2	Battery		7.80	70 Ah				
1	Misc		4.90	Boiler Isotherm				



World Leader in Rating Technology

2018

ORC Club Certificate Appendix

BOAT			
Name	BRIGITTA-X	Certificate Number	EST606
Sail Nr	EST 606	Issued On	4/26/2018

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1100.5	914.1	805.7	746.1	726.2	719.6	711.7
52°	722.5	608.2	543.4	517.4	507.1	503.3	500.2
60°	685.0	578.1	525.9	504.4	493.5	489.0	486.7
75°	656.6	556.6	514.1	493.6	479.7	469.4	460.4
90°	655.6	544.2	502.7	487.5	475.5	460.5	436.6
110°	645.8	535.5	494.7	471.4	451.2	438.7	419.8
120°	663.1	547.1	500.2	474.7	451.2	429.1	401.5
135°	729.0	594.3	521.9	490.8	467.7	444.3	400.4
150°	860.0	685.5	580.6	519.6	491.1	469.6	426.8
Run VMG	993.1	791.7	669.9	589.9	535.3	501.0	458.3
Selected Courses							
Windward / Leeward	1046.8	852.9	737.8	668.0	630.8	610.3	585.0
Circular Random	884.0	713.1	621.7	568.9	537.0	516.6	490.9
Coastal / Long Distance	1041.4	800.0	664.6	585.9	546.9	517.1	469.0
Non Spinnaker	949.4	759.4	655.9	595.2	558.0	534.1	504.8

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	42.9°	41.5°	41.3°	40.4°	39.6°	39.5°	39.9°
Beat VMG	3.27	3.94	4.47	4.82	4.96	5.00	5.06
52°	4.98	5.92	6.62	6.96	7.10	7.15	7.20
60°	5.26	6.23	6.85	7.14	7.29	7.36	7.40
75°	5.48	6.47	7.00	7.29	7.50	7.67	7.82
90°	5.49	6.62	7.16	7.38	7.57	7.82	8.25
110°	5.57	6.72	7.28	7.64	7.98	8.21	8.58
120°	5.43	6.58	7.20	7.58	7.98	8.39	8.97
135°	4.94	6.06	6.90	7.34	7.70	8.10	8.99
150°	4.19	5.25	6.20	6.93	7.33	7.67	8.44
Run VMG	3.63	4.55	5.37	6.10	6.72	7.19	7.86
Gybe Angles	145.6°	150.1°	150.9°	157.7°	180.0°	180.0°	180.0°