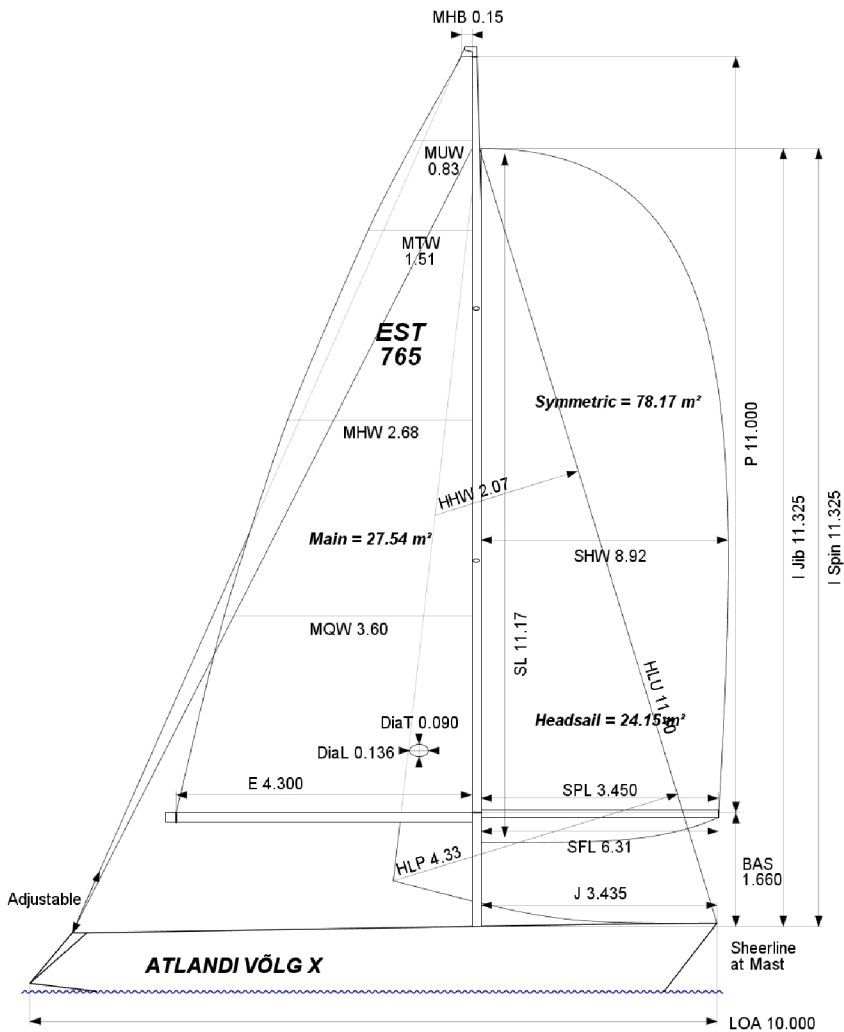




ORC
Offshore Racing Congress
World leader in rating technology

2020
ORC Club
Certificate

Rating Office

Estonian Yachting Union
Purje 8, maja 3
11911 Tallinn
Estonia



ESTONIAN
YACHTING
UNION

Certificate

Number **091/20**
Issued On **02/07/2020**
ORC Ref **03880000LS2**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 539kg
Maximum **550kg**
Minimum* **413kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **676.9 0.8864**
Non Spin OSN **656.1 0.9145**

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

Symmetric: **Yes 78.17**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.402

Stability (Measured)

Limit Positive Stab.: **114.2°**
Stability Index: **111.9**

BOAT		GPH		HULL			
Name	ATLANDI VÖLG X	638.4	Data File	EST765	LOA	10.000m	
Sail Nr	EST765		Offset File	x99.OD.off	MB	2.992m	
			Displacement	2,982kg	Draft	1.788m	
CLASS			IMS Division	Cruiser/Racer	Dynamic All.	0.180%	
Class	X-99		Plan Review		Construction	Cored	
Designer	NIELS JEPPESEN		Fiber Rigging	No	Aramid Core	No	
Builder	X-YACHTS		Crew Arm Ex		Carbon Rudder	No	
Series	04/1985				Light Stanchions	No	
Age Date	01/1990		IMSL	8.673m	VCGD	-0.060m Sink	13.62kg/mm
Age Allowance	0.487%		RL	8.142m	VCGM	-0.008m WS	18.38m
COMMENTS			LSM0	8.422m	Displacement/Length ratio	4.9919	
			Water Ballast		Trim Tab	No	
			BLR Index	0.0000			
PROPELLER			CENTERBOARD				
Installation	Strut	PRD	0.356				
Type	Folding 2 blades	PBW	0.090				
		PIPA	0.0035				
SCORING OPTIONS							
	COASTAL / LONG DISTANCE				WINDWARD / LEEWARD		
Time on Distance	619.7				692.1		
Time on Time	0.9682				0.9753		
Triple Number	Low	Medium	High	Low	Medium	High	
Time on Distance	733.5	564.9	501.3	950.4	692.8	604.5	
Time on Time	0.9202	1.1948	1.3466	0.7102	0.9743	1.1167	

BOAT										INCLINING TEST AND FREEBOARDS									
Name ATLANDI VÖLG X					Sail Nr EST765					Inclining Test Current Inclining									
File EST765					Data in meters/kilograms					Flotation date 29/07/2015 SG 1.0250									
RIG Forestay Tension Aft Spreaders 2 Inner Stay None Fitted Runners/Checkstays 1 Carbon Mast No Jib Furler No Fiber Rigging No Main Furler No Non-Circular Rigging No Articulated Bowsprit No										FFM 0.997 FF 0.997 SFFP 0.303 FAM 0.802 FA 0.802 SAFF 9.175 W1 41.0 PD1 222.0 WD 9.370 W2 41.0 PD2 220.0 GSA 12.6 W3 41.0 PD3 223.0 RSA 4298.7 W4 41.0 PD4 220.0 PLM 2005.0 LCF from stem on CL / on sheer 5.445 / 5.615 Maximum beam station from stem 6.027 RM Measured 60.7kg·m RM Default 62.4kg·m Limit of positive stability / Stab.Index 114.2° / 111.9 Freeboard at mast at 3.435 0.946									
MIZZEN RIG AND SAILS N/A										PROPELLER Installation Strut PRD 0.356 Type Folding 2 blades PBW 0.090 Twin Screw No PIPA 0.0035 ST1 0.065 ST3 0.180 ST5 0.256 ST2 0.180 ST4 0.110 EDL 1.075									
COMMENTS 										MOVABLE BALLAST N/A									
										CENTERBOARD N/A									
SAILS INVENTORY										Certificate Number 091/20 ORC Ref 03880000LS2 Issued On 02/07/2020 VPP Ver. 2020 1.02 Valid until 31/12/2020									
MAINSAIL (1)										 ESTONIAN YACHTING UNION									
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment								
2	0.15	0.83	1.51	2.68	3.60	27.55	EST7	30/06/2020	North Sails	Unknown	P-11.00; E-4,3								
HEADSAILS (1)																			
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment			
2	0.07	0.53	1.02	2.07	3.17	4.33	11.40	126%	24.15		No			North Sails	Unknown				
SYMMETRIC SPINNAKERS (1)																			
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment								
1	11.17	11.17	11.17	8.92	6.31	78.18					Unknown								
ASYMMETRIC SPINNAKERS (0)																			
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment							

2020

ORC Club Certificate Appendix

BOAT			
Name	ATLANDI VÖLG X	Certificate Number	091/20
Sail Nr	EST765	Issued On	02/07/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1084.8	891.2	782.9	740.0	724.0	717.2	709.8
52°	705.8	592.9	543.1	524.0	516.6	512.8	509.1
60°	665.7	567.8	529.4	510.9	501.3	496.2	493.0
75°	639.0	551.0	518.4	497.2	479.7	468.1	459.0
90°	649.4	547.5	512.3	494.0	471.9	451.7	426.1
110°	640.0	536.6	497.9	467.7	447.0	432.7	404.9
120°	659.5	544.4	502.1	467.9	436.3	411.2	380.1
135°	738.1	592.7	523.0	489.4	455.9	423.6	356.6
150°	883.8	697.6	582.0	521.9	491.2	460.5	400.8
Run VMG	1020.5	805.5	672.0	590.2	539.1	505.6	449.1
Selected Courses							
Windward / Leeward	1052.6	848.3	727.5	665.1	631.5	611.4	579.4
Circular Random	881.2	710.5	619.3	566.3	533.4	511.2	480.1
Coastal / Long Distance	1049.4	796.5	658.6	585.1	545.1	512.3	459.5
Non Spinnaker	948.6	758.6	655.6	595.1	557.5	532.4	500.0

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°	41.3°	40.1°	38.6°	38.3°	37.9°	37.9°
Beat VMG	3.32	4.04	4.60	4.86	4.97	5.02	5.07
52°	5.10	6.07	6.63	6.87	6.97	7.02	7.07
60°	5.41	6.34	6.80	7.05	7.18	7.26	7.30
75°	5.63	6.53	6.94	7.24	7.51	7.69	7.84
90°	5.54	6.57	7.03	7.29	7.63	7.97	8.45
110°	5.63	6.71	7.23	7.70	8.05	8.32	8.89
120°	5.46	6.61	7.17	7.69	8.25	8.75	9.47
135°	4.88	6.07	6.88	7.36	7.90	8.50	10.09
150°	4.07	5.16	6.19	6.90	7.33	7.82	8.98
Run VMG	3.53	4.47	5.36	6.10	6.68	7.12	8.02
Gybe Angles	145.0°	149.0°	149.0°	157.8°	180.0°	180.0°	180.0°