



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 **073/20**
Issued On **10/07/2020**
ORC Ref **03880000MB8**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 503kg
Maximum **320kg**
Minimum* **235kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **715.2 0.8389**
Non Spin OSN **690.6 0.8688**

Sails Limitations

Headsails **5** Spinnakers **4**
Woven Polyester

Spinnaker configuration

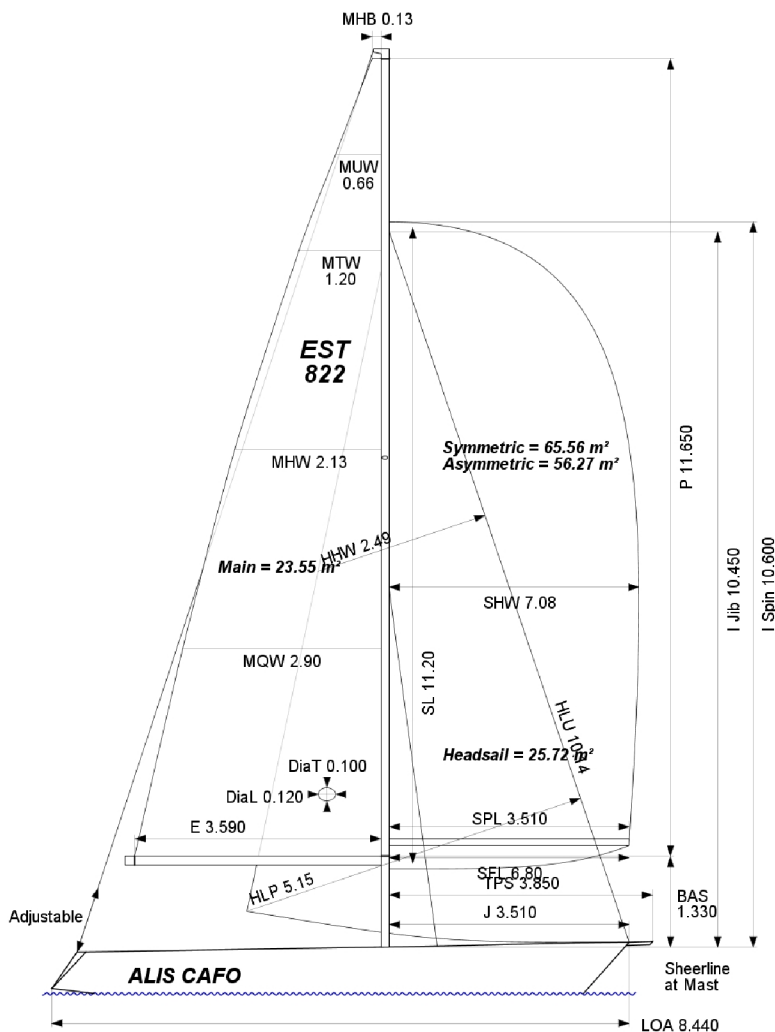
Symmetric: **Yes 65.56**
Asymmetric: **Yes 56.27**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 7.830

Stability (Estimated)

Limit Positive Stab.: **99.9°**
Stability Index: **101.4**



BOAT				GPH		HULL			
Name ALIS CAFO				682.3		Data File EST822		LOA 8.440m	
Sail Nr EST822						Offset File GUYLINE822db.		MB 2.950m	
						Displacement 3,800kg		Draft 1.830m	
CLASS						IMS Division Cruiser/Racer			
Class GUYLINE 822						Dynamic All. 0.255%			
Designer						Construction			
Builder						Fiber Rigging No			
Series 05/1990						Aramid Core No			
Age Date						Crew Arm Ex			
Age Allowance 0.487%						Carbon Rudder No			
						Light Stanchions No			
						IMSL 8.360m		VCGD 0.065m	
						RL 7.299m		VCGM 0.016m	
						LSM0 8.029m		Displacement/Length ratio 7.3417	
COMMENTS						Water Ballast			
						Trim Tab No			
						BLR Index 0.0000			
PROPELLER						CENTERBOARD			
Installation Shaft exposed		PRD 0.380				ECM 1.200		CBDA 0.600	
Type Folding 2 blades		PIPA 0.0014				KCDA		WCBB	
						WCBA 1100.0		CBDB	
								CBRC 0.550	
								CBMC 0.740	
								CBTC 0.900	
SCORING OPTIONS									
		COASTAL / LONG DISTANCE				WINDWARD / LEEWARD			
Time on Distance		661.0				732.2			
Time on Time		0.9077				0.9219			
Triple Number		Low	Medium	High	Low		Medium	High	
Time on Distance		789.8	602.9	531.5	1019.3		738.8	628.8	
Time on Time		0.8547	1.1195	1.2701	0.6622		0.9137	1.0735	

BOAT Name ALIS CAFO Sail Nr EST822 File EST822 Data in meters/kilograms		INCLINING TEST AND FREEBOARDS Inclining Test Club Estimated VCG Flotation date 10/07/2020 SG 1.0248 FFM 0.743 FF 0.743 SFFP 0.521 FAM 0.564 FA 0.564 SAFF 7.939 LCF from stem on CL / on sheer 4.902 / 5.119 Maximum beam station from stem 4.714 RM Measured 88.0kg·m RM Default 85.4kg·m Limit of positive stability / Stab.Index 99.9° / 101.4 Freeboard at mast at 3.510 0.676	
RIG Forestay Tension Aft Spreaders 1 Inner Stay Fixed Runners/Checkstays 0 Carbon Mast No Jib Furler No Fiber Rigging No Main Furler No Non-Circular Rigging No Articulated Bowsprit			
P 11.650 E 3.590 MDT1 0.100 MW IG 10.450 J 3.510 MDL1 0.120 GO ISP 10.600 SFJ MDT2 BD BAS 1.330 SPL 3.510 MDL2 MWT FSD TPS 3.850 TL MCG			
MIZZEN RIG AND SAILS N/A		PROPELLER Installation Shaft exposed PRD 0.380 Type Folding 2 blades PBW Twin Screw PIPA 0.0014 PSA PHL ST3 ESL PSD ST1 ST4 PHD ST2 ST5	
COMMENTS		MOVABLE BALLAST N/A	
		CENTERBOARD ECM 1.200 CBDA 0.600 CBRC 0.550 KCDA WCBB CBMC 0.740 WCBA 1100.0 CBDB CBTC 0.900	

SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.13	0.66	1.20	2.13	2.90	23.56										
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.07	0.64	1.23	2.49	3.80	5.15	10.14	147%	25.72		No					
2	0.07	0.56	1.09	2.24	3.45	4.73	10.12	135%	23.28		No					
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	11.20	11.20	11.20	7.08	6.80	65.56				Unknown	S1,5					
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	11.32	10.15	10.74	6.32	6.17	56.27	asym									


ORC
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2020
Measurements
Datasheet


EJL
ESTONIAN
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UNION

2020

ORC Club Certificate Appendix

BOAT			
Name	ALIS CAFO	Certificate Number	073/20
Sail Nr	EST822	Issued On	10/07/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1179.2	977.4	859.7	781.6	742.8	728.4	721.9
52°	773.3	653.2	584.1	551.5	535.4	527.3	522.5
60°	733.2	622.4	565.7	539.7	524.3	514.1	507.2
75°	705.5	600.8	553.2	530.2	513.6	499.3	481.4
90°	706.1	588.8	539.1	515.2	497.7	488.6	467.7
110°	678.2	570.4	529.7	504.4	480.5	460.3	433.6
120°	699.7	582.3	535.7	509.3	484.2	460.4	422.9
135°	776.6	639.6	558.2	526.3	502.2	477.7	432.8
150°	924.5	738.7	623.5	556.1	526.9	504.5	459.9
Run VMG	1067.6	853.1	720.0	628.7	570.1	536.1	491.7
Selected Courses							
Windward / Leeward	1123.4	915.3	789.9	705.2	656.4	632.3	606.8
Circular Random	945.3	761.6	661.9	603.1	566.5	542.8	513.4
Coastal / Long Distance	1117.8	858.8	711.8	621.1	574.7	543.2	493.4
Non Spinnaker	1001.9	802.3	693.0	628.0	587.4	560.9	528.6

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	43.1°	41.3°	40.5°	39.0°	37.5°	37.5°	37.5°
Beat VMG	3.05	3.68	4.19	4.61	4.85	4.94	4.99
52°	4.66	5.51	6.16	6.53	6.72	6.83	6.89
60°	4.91	5.78	6.36	6.67	6.87	7.00	7.10
75°	5.10	5.99	6.51	6.79	7.01	7.21	7.48
90°	5.10	6.11	6.68	6.99	7.23	7.37	7.70
110°	5.31	6.31	6.80	7.14	7.49	7.82	8.30
120°	5.15	6.18	6.72	7.07	7.43	7.82	8.51
135°	4.64	5.63	6.45	6.84	7.17	7.54	8.32
150°	3.89	4.87	5.77	6.47	6.83	7.14	7.83
Run VMG	3.37	4.22	5.00	5.73	6.31	6.72	7.32
Gybe Angles	146.5°	151.0°	150.0°	160.0°	180.0°	180.0°	180.0°