



ORC
Offshore Racing Congress
World leader in rating technology

**2020
ORC Club
Certificate**

Rating Office

**EYU
Purje 8
11911, Tallinn
Estonia**

Certificate

Number **Est877**
Issued On **5/23/2020**
ORC Ref **03580001N0**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default	357kg
Maximum	354kg
Minimum*	266kg
*when applied by the NoR and SI	
Non Manual Pwr	No

Special Scoring

	ToD	ToT
Non Spin GPH	830.9	0.7221
Non Spin OSN	800.9	0.7491

Sails Limitations

Headsails **1** Spinnakers **4**
Woven Polyester

Spinnaker configuration

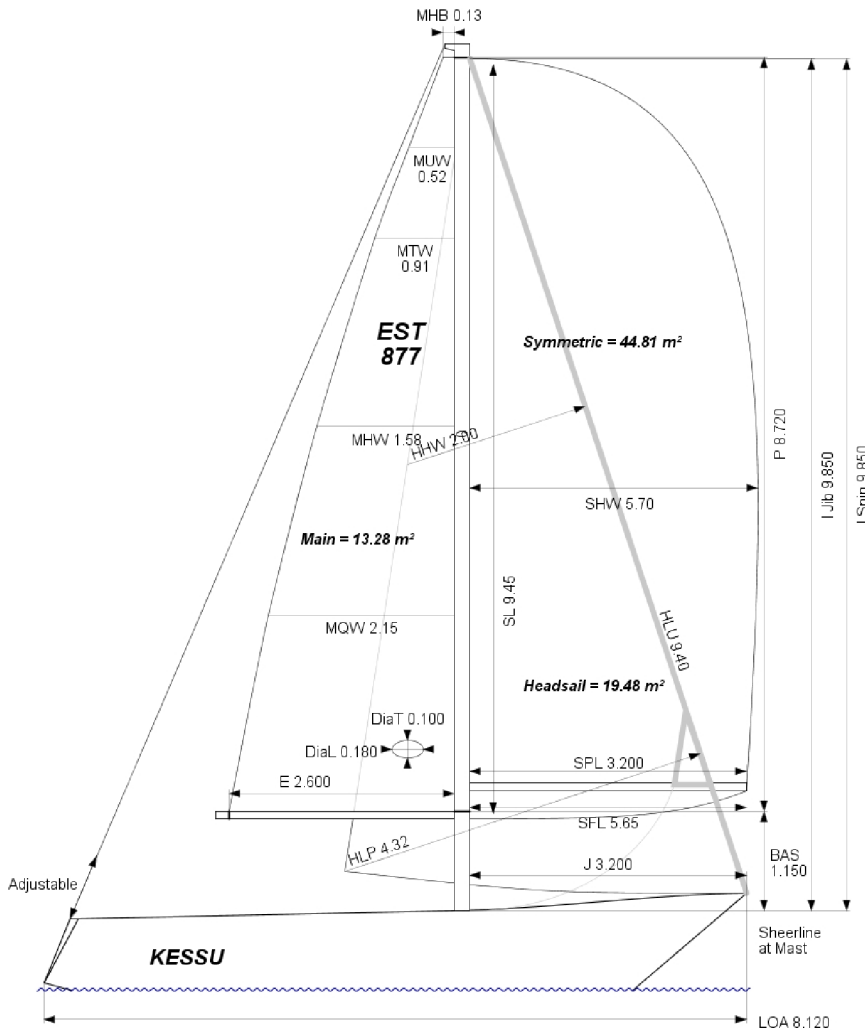
Symmetric: **Yes** **44.81**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 5.742

Stability (Estimated)

Limit Positive Stab.: **113.5°**
Stability Index: **112.2**



BOAT		GPH		HULL						
Name KESSU		790.4		Data File Est0877	LOA 8.120m					
Sail Nr EST 877				Offset File Becker27 2013-	MB 2.774m					
				Displacement 2,730kg	Draft 1.429m					
CLASS				IMS Division Cruiser/Racer	Dynamic All. 0.633%					
Class BECKER 27				Plan Review	Construction Solid					
Designer				Fiber Rigging No	Aramid Core No					
Builder BK Marin				Crew Arm Ex	Carbon Rudder No					
Series 01/1974				Light Stanchions No						
Age Date 01/1978				IMSL 6.495m	VCGD -0.028m	Sink 10.21kg/mm				
Age Allowance 0.487%				RL 4.989m	VCGM 0.023m	WS 14.59m²				
COMMENTS				LSM0 6.316m	Displacement/Length ratio					
				Water Ballast	Trim Tab No					
				BLR Index 0.0000						
PROPELLER				CENTERBOARD						
Installation Shaft exposed	PRD 0.340			N/A						
Type Folding 2 blades	PIPA 0.0011									
SCORING OPTIONS										
	COASTAL / LONG DISTANCE					WINDWARD / LEEWARD				
Time on Distance	766.1					850.6				
Time on Time	0.7832					0.7935				
Triple Number	Low	Medium	High	Low	Medium	High				
Time on Distance	912.9	699.3	615.6	1172.9	861.3	730.8				
Time on Time	0.7394	0.9652	1.0965	0.5755	0.7837	0.9237				

BOAT	
Name KESU	Sail Nr EST 877
File Est0877	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 17/10/2019		SG	
FFM	FF	1.107	SFFP 0.356
FAM	FA	0.647	SAFP 7.724
LCF from stem on CL / on sheer		4.627 / 4.812	
Maximum beam station from stem		4.888	
RM Measured		42.1kg·m	
RM Default		40.9kg·m	
Limit of positive stability / Stab.Index		113.5° / 112.2	
Freeboard at mast at 3.200		0.915	



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Measurements
Datasheet

RIG			
Forestay Tension	Aft	Spreaders	1
Inner Stay	None Fitted	Runners/Checkstays	0
Carbon Mast	No	Jib Furler	Yes
Fiber Rigging	No	Main Furler	No
Non-Circular Rigging	No		
Articulated Bowsprit	No		
P	8.720	E	2.600
IG	9.850	J	3.200
ISP	9.850	SFJ	
BAS	1.150	SPL	3.200
FSD		TPS	
MDT1	0.100	MW	
MDL1	0.180	GO	
MDT2		BD	
MDL2		MWT	
TL		MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Shaft exposed	PRD	0.340
Type	Folding 2 blades	PBW	
Twin Screw	No	PIPA	0.0011
PSA	PHL	ST3	ESL
PSD	ST1	ST4	
PHD	ST2	ST5	

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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					
1	0.13	0.52	0.91	1.58	2.15	13.10										
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.05	0.45	0.92	2.00	3.16	4.32	9.40	135%	19.48		No					
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	9.45	9.45	9.45	5.70	5.65	44.81										
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



2020

ORC Club Certificate Appendix

BOAT			
Name	KESU	Certificate Number	Est877
Sail Nr	EST 877	Issued On	5/23/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1390.5	1163.0	1036.5	945.4	886.4	859.6	859.4
52°	903.8	765.2	684.1	642.7	620.5	607.6	601.9
60°	854.4	724.3	655.7	624.4	605.5	592.1	582.1
75°	821.4	696.6	636.8	609.9	591.5	575.5	551.9
90°	813.5	673.1	614.3	587.2	571.2	562.9	538.1
110°	794.3	659.0	606.5	576.9	550.5	528.5	506.1
120°	815.4	672.9	612.5	581.9	554.8	529.6	493.7
135°	893.6	730.9	638.3	599.8	572.5	546.0	501.8
150°	1029.8	824.1	702.7	630.9	597.9	572.8	525.7
Run VMG	1189.1	949.4	806.4	706.4	639.9	604.7	556.1
Selected Courses							
Windward / Leeward	1289.8	1056.2	921.5	825.9	763.1	732.1	707.8
Circular Random	1094.0	882.0	766.9	698.8	656.3	629.0	597.6
Coastal / Long Distance	1279.7	989.7	827.7	723.9	665.7	627.1	570.7
Non Spinnaker	1166.0	933.3	805.3	728.5	680.3	649.0	612.9

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	43.9°	42.0°	42.4°	42.0°	40.1°	39.6°	40.1°
Beat VMG	2.59	3.10	3.47	3.81	4.06	4.19	4.19
52°	3.98	4.70	5.26	5.60	5.80	5.92	5.98
60°	4.21	4.97	5.49	5.77	5.95	6.08	6.18
75°	4.38	5.17	5.65	5.90	6.09	6.26	6.52
90°	4.43	5.35	5.86	6.13	6.30	6.40	6.69
110°	4.53	5.46	5.94	6.24	6.54	6.81	7.11
120°	4.41	5.35	5.88	6.19	6.49	6.80	7.29
135°	4.03	4.93	5.64	6.00	6.29	6.59	7.17
150°	3.50	4.37	5.12	5.71	6.02	6.29	6.85
Run VMG	3.03	3.79	4.46	5.10	5.63	5.95	6.47
Gybe Angles	148.5°	153.0°	154.0°	168.0°	180.0°	180.0°	180.0°