



**2020
ORC Club
Certificate**

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number
Issued On **5/30/2020**
ORC Ref **0358000JCD**
VPP Ver. **2020 1.02**
Valid until **31/12/2020**

Crew Weight

Default 551kg
Maximum **480kg**
Minimum* **360kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **705.9 0.8500**
Non Spin OSN **682.2 0.8795**

Sails Limitations

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

Spinnaker configuration

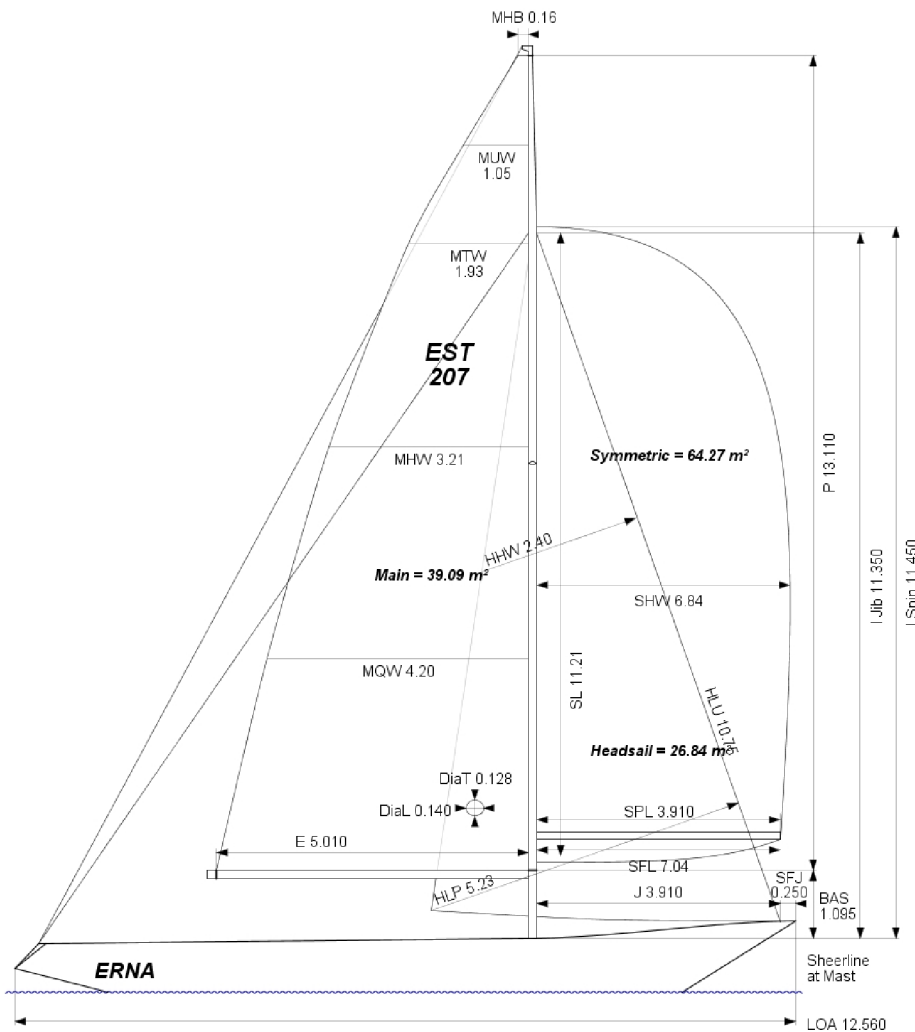
Symmetric: **Yes 64.27**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = 8.183

Stability (Estimated)

Limit Positive Stab.: **133.4°**
Stability Index: **139.9**



BOAT		GPH		HULL					
Name ERNA Sail Nr EST207		679.9		Data File Est0207	LOA 12.560m				
				Offset File L6_UKR.off	MB 2.772m				
				Displacement 7,242kg	Draft 1.851m				
CLASS				IMS Division Cruiser/Racer	Dynamic All. 0.577%				
Class L6				Plan Review	Construction Solid				
Designer				Fiber Rigging No	Aramid Core No				
Builder VSPS				Crew Arm Ex	Carbon Rudder No				
Series 01/1963					Light Stanchions No				
Age Date 01/1966				IMSL 9.213m	VCGD -0.224m	Sink 16.35kg/mm			
Age Allowance 0.487%				RL 7.152m	VCGM -0.260m	WS 27.24m²			
COMMENTS				LSM0 8.559m	Displacement/Length ratio				
				Water Ballast	Trim Tab No				
				BLR Index 0.0000					
PROPELLER				CENTERBOARD					
Installation Shaft exposed	PRD 0.408			N/A					
Type Folding 2 blades	PIPA 0.0016								
SCORING OPTIONS									
	COASTAL / LONG DISTANCE					WINDWARD / LEEWARD			
Time on Distance	658.9					738.1			
Time on Time	0.9105					0.9146			
Triple Number	Low	Medium	High	Low	Medium	High			
Time on Distance	796.0	598.0	526.8	1031.3	746.9	631.2			
Time on Time	0.8480	1.1287	1.2813	0.6545	0.9037	1.0694			

BOAT	
Name ERNA	Sail Nr EST207
File Est0207	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 15/10/2019		SG	
FFM	FF	1.121	SFFP 0.500
FAM	FA	0.638	SAFP 12.059
LCF from stem on CL / on sheer		6.530 / 6.679	
Maximum beam station from stem		6.651	
RM Measured		93.8kg·m	
RM Default		91.1kg·m	
Limit of positive stability / Stab.Index		133.4° / 139.9	
Freeboard at mast at 4.160		0.863	



ORC
Offshore Racing Congress
World leader in rating technology

2020
Measurements
Datasheet

RIG			
Forestay Tension	Fixed	Spreaders	1
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		
P	13.110	E	5.010
MDT1	0.128	MW	0.140
IG	11.350	J	3.910
MDL1	0.140	GO	0.210
ISP	11.450	SFJ	0.250
MDT2		BD	0.130
BAS	1.095	SPL	3.910
MDL2		MWT	
FSD		TPS	
TL	-2.000	MCG	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation	Shaft exposed	PRD	0.408
Type	Folding 2 blades	PBW	
Twin Screw		PIPA	0.0016
PSA	PHL	ST3	ESL
PSD	ST1	ST4	
PHD	ST2	ST5	

Certificate	
Number	
ORC Ref	03580000JCD
Issued On	5/30/2020
VPP Ver.	2020 1.02
Valid until	31/12/2020

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	0.16	1.05	1.93	3.21	4.20	39.10										
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.07	0.59	1.14	2.40	3.75	5.23	10.75	134%	26.84		No					
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	11.21	11.21	11.21	6.84	7.04	64.28										
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



2020

ORC Club Certificate Appendix

BOAT	
Name ERNA	Certificate Number
Sail Nr EST207	Issued On 5/30/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1168.2	965.1	853.7	789.6	760.1	744.3	733.1
52°	763.3	644.6	568.1	532.9	518.6	511.9	506.2
60°	721.9	611.4	544.6	516.4	502.6	496.3	490.8
75°	692.1	585.6	529.1	504.2	489.5	479.5	470.0
90°	699.1	579.9	518.5	495.5	485.3	472.2	452.2
110°	701.0	576.2	515.1	488.5	469.8	455.3	440.3
120°	726.7	596.6	524.4	494.1	474.4	456.5	426.9
135°	810.8	664.6	564.0	514.5	489.7	470.6	435.0
150°	965.5	760.2	641.6	557.9	514.2	490.5	455.0
Run VMG	1114.9	877.0	739.7	640.0	570.6	523.5	478.5
Selected Courses							
Windward / Leeward	1141.6	921.0	796.7	714.8	665.3	633.9	605.8
Circular Random	949.6	761.4	658.8	598.5	561.4	537.9	511.3
Coastal / Long Distance	1138.9	864.2	712.2	617.7	570.1	536.2	486.6
Non Spinnaker	995.8	794.4	683.5	617.5	576.4	549.9	518.9

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	43.5°	40.9°	41.3°	42.0°	41.3°	40.9°	40.1°
Beat VMG	3.08	3.73	4.22	4.56	4.74	4.84	4.91
52°	4.72	5.58	6.34	6.76	6.94	7.03	7.11
60°	4.99	5.89	6.61	6.97	7.16	7.25	7.33
75°	5.20	6.15	6.80	7.14	7.35	7.51	7.66
90°	5.15	6.21	6.94	7.27	7.42	7.62	7.96
110°	5.14	6.25	6.99	7.37	7.66	7.91	8.18
120°	4.95	6.03	6.86	7.29	7.59	7.89	8.43
135°	4.44	5.42	6.38	7.00	7.35	7.65	8.28
150°	3.73	4.74	5.61	6.45	7.00	7.34	7.91
Run VMG	3.23	4.10	4.87	5.62	6.31	6.88	7.52
Gybe Angles	147.0°	152.0°	153.5°	155.0°	172.0°	180.0°	180.0°