



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020**  
**ORC Club**  
**Certificate**

**Rating Office**

**Hellenic Sailing Federation**  
**Offshore Committee**  
Επιτροπή  
Ανοικτής Θαλάσσης  
Ελληνικής  
Ιστιοπλοϊκής Ομοσπονδίας



**Certificate**

Number **00799**  
Issued On **27/05/2020**  
ORC Ref **03420000J0V**  
VPP Ver. **2020 1.02**  
Valid until **28/02/2021**

**Crew Weight**

Default 306kg  
Maximum **320kg**  
Minimum\* **235kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>794.3</b>	<b>0.7554</b>
Non Spin OSN	<b>769.8</b>	<b>0.7794</b>

**Sails Limitations**

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

**Spinnaker configuration**

Symmetric: **Yes** **25.91**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

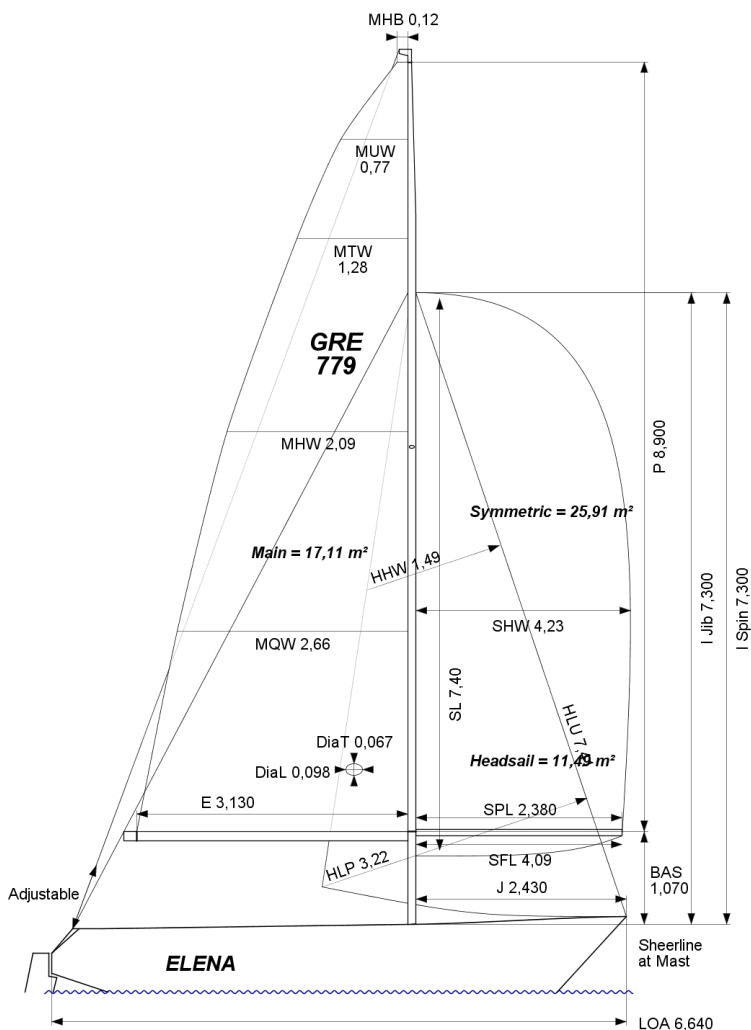
**Class Division Length**

**CDL = 5.627**

**Stability (Measured)**

Limit Positive Stab.: **104.5°**  
Stability Index: **96.3**

**Owner**



BOAT	GPH	HULL
Name <b>ELENA</b> Sail Nr <b>GRE-779</b>	<b>771.8</b>	Data File <b>GR779</b> LOA <b>6.640m</b> Offset File <b>GR0078.off</b> MB <b>2.498m</b> Displacement <b>1,338kg</b> Draft <b>1.422m</b>
<b>CLASS</b> Class <b>AEGEAN 234</b> Designer <b>ED DUBOIS</b> Builder <b>AEGEAN MARINE</b> Series <b>01/1980</b> Age Date <b>05/1980</b> Age Allowance <b>0.487%</b>	<b>IMS Division Performance</b> Dynamic All. <b>0.110%</b> Plan Review Construction <b>Cored</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex Carbon Rudder <b>No</b> Light Stanchions <b>No</b>	IMS L <b>5.666m</b> VCGD <b>0.061m</b> Sink <b>6.83kg/mm</b> RL <b>5.594m</b> VCGM <b>0.132m</b> WS <b>9.60m²</b> LSM0 <b>5.664m</b> Displacement/Length ratio <b>7.3635</b>
<b>COMMENTS</b> ex "MALOU", ex "XENIA", ex "NIKOYANA II", ex "MARIANNA", ex "THALASSITIS"	Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>	
<b>PROPELLER</b> Type <b>No Propeller</b>	<b>CENTERBOARD</b> <b>NA</b>	
<b>SCORING OPTIONS</b>		
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>
Time on Distance	<b>752.3</b>	<b>829.6</b>
Time on Time	<b>0.7975</b>	<b>0.8137</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>859.1 691.0 631.7</b>	<b>1093.3 828.5 748.4</b>
Time on Time	<b>0.7857 0.9769 1.0686</b>	<b>0.6174 0.8147 0.9019</b>

<b>BOAT</b>	
Name <b>ELENA</b>	Sail Nr <b>GRE-779</b>
File <b>GR779</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>1</b>
Inner Stay <b>None Fitted</b>	Runners/Checkstays <b>1</b>
Carbon Mast <b>No</b>	Jib Furler <b>No</b>
Fiber Rigging <b>No</b>	Main Furler <b>No</b>
Non-Circular Rigging <b>No</b>	
Articulated Bowsprit <b>No</b>	
P <b>8.900</b>	E <b>3.130</b> MDT1 <b>0.067</b> MW <b>0.000</b>
IG <b>7.300</b>	J <b>2.430</b> MDL1 <b>0.098</b> GO <b>0.000</b>
ISP <b>7.300</b>	SFJ <b>0.000</b> MDT2 <b>0.000</b> BD
BAS <b>1.070</b>	SPL <b>2.380</b> MDL2 <b>0.000</b> MWT
FSD <b>-2.000</b>	TPS TL <b>-2.000</b> MCG

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>		Flotation date <b>04/04/2019</b> SG <b>1.0280</b>	
FFM <b>0.861</b>	FF <b>0.860</b>	SFFP <b>0.535</b>	
FAM <b>0.730</b>	FA <b>0.730</b>	SAFP <b>6.060</b>	
W1 <b>16.2</b>	PD1 <b>243.0</b>	WD <b>6.655</b>	
W2 <b>16.2</b>	PD2 <b>243.0</b>	GSA <b>50.3</b>	
W3 <b>16.2</b>	PD3 <b>243.0</b>	RSA <b>5808.8</b>	
W4 <b>16.2</b>	PD4 <b>243.0</b>	PLM <b>2100.0</b>	
LCF from stem on CL / on sheer		<b>3.722 / 3.897</b>	
Maximum beam station from stem		<b>3.960</b>	
RM Measured		<b>16.2kg-m</b>	
RM Default		<b>21.0kg-m</b>	
Limit of positive stability / Stab.Index		<b>104.5° / 96.3</b>	
Freeboard at mast at 2.430		<b>0.786</b>	



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**2020**  
Measurements  
Datasheet

<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>	
Type <b>No Propeller</b>	

<b>Certificate</b>	
Number <b>00799</b>	
ORC Ref <b>03420000J0V</b>	
Issued On <b>27/05/2020</b>	
VPP Ver. <b>2020 1.02</b>	
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<b>COMMENTS</b>	
ex "MALOU", ex "XENIA", ex "NIKOUANA II", ex "MARIANNA", ex "THALASSITIS"	

<b>MOVABLE BALLAST</b>	
N/A	



<b>COMMENTS</b>	
ex "MALOU", ex "XENIA", ex "NIKOUANA II", ex "MARIANNA", ex "THALASSITIS"	

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (2)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	0.12	0.77	1.28	2.09	2.66	17.12		09/10/2013	ZOUGANELI	Polyester						
1	0.13	0.55	1.01	1.80	2.46	15.34		02/05/2011		Dacron						
<b>HEADSAILS (2)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovr/tp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.07	0.38	0.73	1.49	2.32	3.22	7.41	133%	11.49		No		25/03/2019	QUANTUM	Dacron	BLACK- STAMP ON
2	0.05	0.34	0.67	1.27	1.88	2.51	6.84	103%	8.70		No		02/05/2011	NORTH	Dacron	
<b>SYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	7.40	7.40	7.40	4.23	4.09	25.92		02/05/2011		Unknown						
<b>ASYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

<b>MEASUREMENT INVENTORY</b>				
Measurer <b>GRE-28</b>				
Date <b>04/04/2019</b>				
Comment <b>Outboard on stern bracket</b>				
<b>Internal Ballast total = 0.0</b>				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight	Description	

<b>MEASUREMENT INVENTORY</b>				
Id	Item	Weight	Distance	VCG Description
B	Battery		4.03	-0.25 60 Ah - Port side
OB	Misc	28.4	6.64	0.50 Honda 4-stroke 5 HP Outboard on bracket

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>ELENA</b>
Sail Nr	<b>GRE-779</b>
Certificate Number	<b>00799</b>
Issued On	<b>27/05/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1210.9</b>	<b>1027.5</b>	<b>926.1</b>	<b>892.8</b>	<b>885.4</b>	<b>885.8</b>	<b>897.1</b>
52°	<b>810.3</b>	<b>702.8</b>	<b>665.3</b>	<b>648.2</b>	<b>641.5</b>	<b>638.8</b>	<b>637.6</b>
60°	<b>773.2</b>	<b>683.9</b>	<b>652.7</b>	<b>633.7</b>	<b>623.3</b>	<b>618.7</b>	<b>617.9</b>
75°	<b>750.1</b>	<b>672.4</b>	<b>641.5</b>	<b>618.1</b>	<b>598.3</b>	<b>585.7</b>	<b>578.3</b>
90°	<b>753.1</b>	<b>662.6</b>	<b>626.1</b>	<b>597.8</b>	<b>581.3</b>	<b>567.6</b>	<b>544.8</b>
110°	<b>762.5</b>	<b>665.8</b>	<b>626.0</b>	<b>590.5</b>	<b>559.4</b>	<b>536.2</b>	<b>512.7</b>
120°	<b>793.5</b>	<b>678.6</b>	<b>635.8</b>	<b>601.4</b>	<b>567.7</b>	<b>539.3</b>	<b>498.0</b>
135°	<b>887.2</b>	<b>731.7</b>	<b>660.1</b>	<b>624.9</b>	<b>591.3</b>	<b>560.0</b>	<b>508.3</b>
150°	<b>1026.8</b>	<b>826.0</b>	<b>706.0</b>	<b>652.6</b>	<b>620.1</b>	<b>588.3</b>	<b>533.4</b>
Run VMG	<b>1185.7</b>	<b>948.9</b>	<b>803.1</b>	<b>701.2</b>	<b>652.9</b>	<b>621.1</b>	<b>561.9</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1198.3</b>	<b>988.2</b>	<b>864.6</b>	<b>797.0</b>	<b>769.2</b>	<b>753.4</b>	<b>729.5</b>
Circular Random	<b>1037.2</b>	<b>848.7</b>	<b>750.3</b>	<b>695.0</b>	<b>662.2</b>	<b>641.3</b>	<b>615.3</b>
Coastal / Long Distance	<b>1197.1</b>	<b>933.1</b>	<b>791.4</b>	<b>715.9</b>	<b>677.1</b>	<b>644.3</b>	<b>587.2</b>
Non Spinnaker	<b>1075.7</b>	<b>876.2</b>	<b>771.5</b>	<b>712.5</b>	<b>677.3</b>	<b>654.9</b>	<b>626.8</b>

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>40.5°</b>	<b>40.9°</b>	<b>38.3°</b>	<b>37.1°</b>	<b>37.3°</b>	<b>37.5°</b>	<b>39.0°</b>
Beat VMG	<b>2.97</b>	<b>3.50</b>	<b>3.89</b>	<b>4.03</b>	<b>4.07</b>	<b>4.06</b>	<b>4.01</b>
52°	<b>4.44</b>	<b>5.12</b>	<b>5.41</b>	<b>5.55</b>	<b>5.61</b>	<b>5.64</b>	<b>5.65</b>
60°	<b>4.66</b>	<b>5.26</b>	<b>5.52</b>	<b>5.68</b>	<b>5.78</b>	<b>5.82</b>	<b>5.83</b>
75°	<b>4.80</b>	<b>5.35</b>	<b>5.61</b>	<b>5.82</b>	<b>6.02</b>	<b>6.15</b>	<b>6.23</b>
90°	<b>4.78</b>	<b>5.43</b>	<b>5.75</b>	<b>6.02</b>	<b>6.19</b>	<b>6.34</b>	<b>6.61</b>
110°	<b>4.72</b>	<b>5.41</b>	<b>5.75</b>	<b>6.10</b>	<b>6.44</b>	<b>6.71</b>	<b>7.02</b>
120°	<b>4.54</b>	<b>5.30</b>	<b>5.66</b>	<b>5.99</b>	<b>6.34</b>	<b>6.68</b>	<b>7.23</b>
135°	<b>4.06</b>	<b>4.92</b>	<b>5.45</b>	<b>5.76</b>	<b>6.09</b>	<b>6.43</b>	<b>7.08</b>
150°	<b>3.51</b>	<b>4.36</b>	<b>5.10</b>	<b>5.52</b>	<b>5.81</b>	<b>6.12</b>	<b>6.75</b>
Run VMG	<b>3.04</b>	<b>3.79</b>	<b>4.48</b>	<b>5.13</b>	<b>5.51</b>	<b>5.80</b>	<b>6.41</b>
Gybe Angles	<b>150.0°</b>	<b>156.0°</b>	<b>170.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>