



World Leader in Rating Technology

## 2018 ORC Club Certificate

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

**Certificate**  
Number **001269**  
Issued On **28/4/2018**  
ORC Ref **GRE01009618**  
VPP Ver. **2018 1.00**  
Valid until **28/2/2019**

**Crew Weight**

Default	615kg
Maximum	<b>615kg</b>
Minimum*	<b>461kg</b>

\*when applied by the NoR and SI  
Non Manual Pwr **No**

**Special Scoring**

ToD	ToT
Non Spin GPH <b>714,0</b>	<b>0,8403</b>
Non Spin OSN <b>688,7</b>	<b>0,8712</b>

**Sails Limitations**

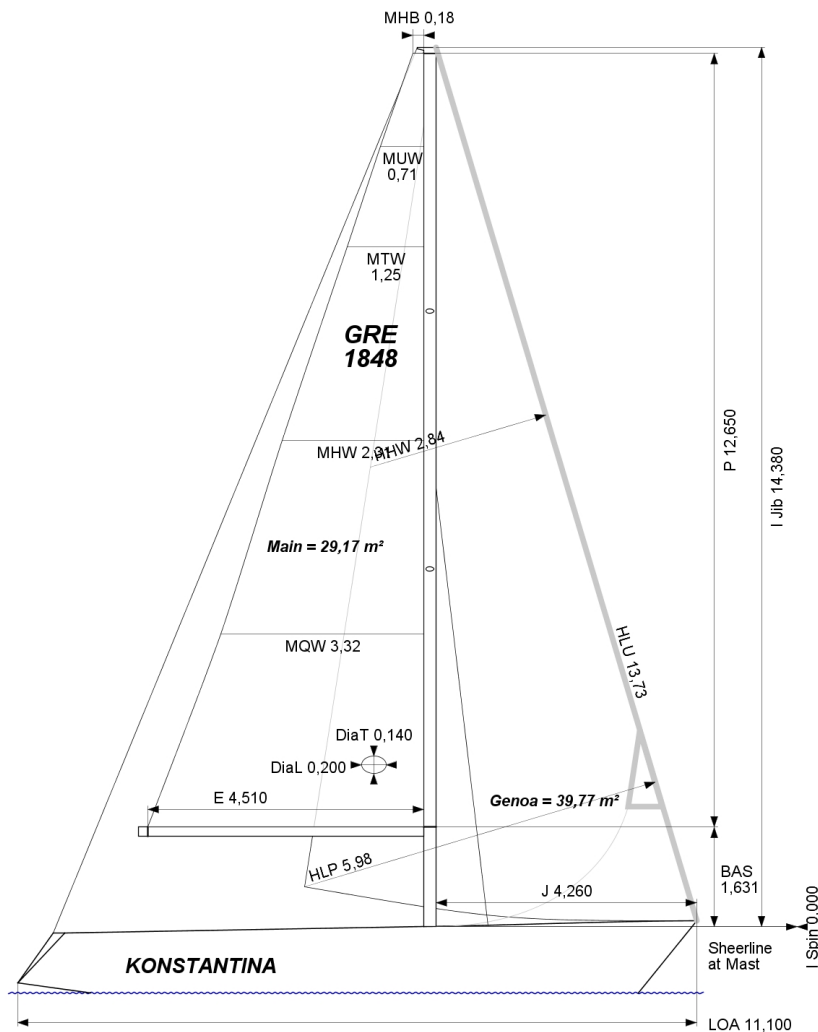
Headsails **1** Spinnakers **0**  
**Dacron Sails**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **No**

**Class Division Length**  
CDL = **8,282**

**Stability (Estimated)**  
Limit Positive Stab.: **114,5°**  
Stability Index: **116,0**

**Owner**



<b>BOAT</b> Name <b>KONSTANTINA</b> Sail Nr <b>GRE-1848</b>		<b>GPH</b> <b>714,0</b>	<b>HULL</b> Data File <b>GR1848</b> LOA <b>11,100m</b> Offset File <b>GR0001.OFF</b> MB <b>3,644m</b> Displacement <b>6,300kg</b> Draft <b>1,933m</b>			
<b>CLASS</b> Class <b>APOLLO 12</b> Designer <b>JUDEL/VROELIJK</b> Builder <b>DROMOR</b> Series <b>04/1989</b> Age Date <b>04/1989</b> Age Allowance <b>0,487%</b>		IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0,413%</b> Fwd Accom. <b>Yes</b> Construction <b>Solid</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex Carbon Rudder <b>No</b> Light Stanchions <b>No</b>		IMSL <b>9,332m</b> VCGD <b>-0,095m</b> Sink <b>18,71kg/mm</b> RL <b>7,231m</b> VCGM <b>0,039m</b> WS <b>25,95m²</b> LSM0 <b>9,245m</b> Displacement/Length ratio <b>7,9730</b>		
<b>COMMENTS</b> Builder's displacement.		Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0,0000</b>		<b>CENTERBOARD</b>  <b>N/A</b>		
<b>PROPELLER</b> Installation <b>Shaft exposed</b> PRD <b>0,350</b> Type <b>Solid 3 blades</b> PIPA <b>0,0153</b>						
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>688,7</b>			<b>767,2</b>		
Time on Time	<b>0,8712</b>			<b>0,8798</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>857,0</b>	<b>623,3</b>	<b>535,9</b>	<b>1120,0</b>	<b>777,4</b>	<b>639,9</b>
Time on Time	<b>0,7876</b>	<b>1,0830</b>	<b>1,2596</b>	<b>0,6027</b>	<b>0,8683</b>	<b>1,0548</b>

<b>BOAT</b>	
Name <b>KONSTANTINA</b>	Sail Nr <b>GRE-1848</b>
File <b>GR1848</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Club Estimated VCG</b>			
Flotation date <b>11/04/2018</b>		SG	
FFM	FF	1,177	SFFP 0,390
FAM	FA	0,979	SAFP 10,323
LCF from stem on CL / on sheer		5,968 / 6,230	
Maximum beam station from stem		6,676	
RM Measured		129,2kg·m	
RM Default		125,4kg·m	
Limit of positive stability / Stab.Index		114,5° / 116,0	
Freeboard at mast at 4,260		1,081	

<b>RIG</b>			
Forestay Tension <b>Fixed</b>	Spreaders <b>2</b>		
Inner Stay <b>Fixed</b>	Runners <b>0</b>		
Carbon Mast <b>No</b>	Jumper Struts <b>None</b>		
Taper Hollows <b>No</b>	Jib Furler <b>Yes</b>		
Fiber Rigging <b>No</b>	Main Furler <b>No</b>		
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>		
Articulated Bowsprit <b>No</b>			
P <b>12,650</b>	E <b>4,510</b>	MDT1 <b>0,140</b>	MW
IG <b>14,380</b>	J <b>4,260</b>	MDL1 <b>0,200</b>	GO
ISP	SFJ <b>0,000</b>	MDT2	BD <b>0,150</b>
BAS <b>1,631</b>	SPL	MDL2	MWT
FSP <b>-3,000</b>	TPS	TL <b>-3,000</b>	MCG



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Measurements Datasheet

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

<b>PROPELLER</b>			
Installation	<b>Shaft exposed</b>	PRD	<b>0,350</b>
Type	<b>Solid 3 blades</b>	PBW	
Twin Screw	<b>No</b>	PIPA	<b>0,0153</b>
PSA	PHL	ST3	ESL
PSD	ST1	ST4	
PHD	ST2	ST5	

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<b>COMMENTS</b>	
Builder's displacement.	

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

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (1)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0,180	0,71	1,25	2,31	3,32	29,17		11/04/2018		Dacron						
<b>HEADSAILS (1)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,08	0,68	1,38	2,84	4,32	5,98	13,73	140%	39,77				11/04/2018		Dacron	
<b>SYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
<b>ASYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				



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## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>KONSTANTINA</b>
Sail Nr	<b>GRE-1848</b>
Certificate Number	<b>001269</b>
Issued On	<b>28/4/2018</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1205,4</b>	<b>988,0</b>	<b>867,2</b>	<b>785,3</b>	<b>742,5</b>	<b>727,0</b>	<b>723,6</b>
52°	<b>780,2</b>	<b>651,1</b>	<b>572,1</b>	<b>532,7</b>	<b>515,2</b>	<b>507,4</b>	<b>503,6</b>
60°	<b>734,3</b>	<b>616,1</b>	<b>546,9</b>	<b>517,1</b>	<b>502,0</b>	<b>493,2</b>	<b>487,6</b>
75°	<b>700,2</b>	<b>588,6</b>	<b>530,5</b>	<b>505,3</b>	<b>489,8</b>	<b>477,9</b>	<b>462,3</b>
90°	<b>706,9</b>	<b>593,1</b>	<b>530,7</b>	<b>503,9</b>	<b>486,9</b>	<b>472,2</b>	<b>447,5</b>
110°	<b>780,7</b>	<b>637,2</b>	<b>552,8</b>	<b>513,5</b>	<b>492,1</b>	<b>474,8</b>	<b>441,8</b>
120°	<b>831,3</b>	<b>675,1</b>	<b>580,9</b>	<b>526,5</b>	<b>500,3</b>	<b>482,2</b>	<b>448,4</b>
135°	<b>957,5</b>	<b>753,7</b>	<b>642,1</b>	<b>565,8</b>	<b>522,6</b>	<b>499,4</b>	<b>466,4</b>
150°	<b>1134,5</b>	<b>869,0</b>	<b>723,2</b>	<b>630,9</b>	<b>563,6</b>	<b>523,3</b>	<b>483,8</b>
Run VMG	<b>1301,7</b>	<b>984,9</b>	<b>805,7</b>	<b>694,1</b>	<b>615,5</b>	<b>557,1</b>	<b>499,8</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1253,5</b>	<b>986,4</b>	<b>836,5</b>	<b>739,7</b>	<b>679,0</b>	<b>642,0</b>	<b>611,7</b>
Circular Random	<b>1017,5</b>	<b>807,3</b>	<b>690,7</b>	<b>620,8</b>	<b>577,2</b>	<b>549,3</b>	<b>518,1</b>
Coastal / Long Distance	<b>1258,3</b>	<b>926,8</b>	<b>750,0</b>	<b>641,3</b>	<b>583,4</b>	<b>545,5</b>	<b>494,2</b>
Non Spinnaker	<b>1017,5</b>	<b>807,3</b>	<b>690,7</b>	<b>620,8</b>	<b>577,2</b>	<b>549,3</b>	<b>518,1</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>44,2°</b>	<b>42,5°</b>	<b>42,2°</b>	<b>41,9°</b>	<b>40,7°</b>	<b>40,2°</b>	<b>40,4°</b>
Beat VMG	<b>2,99</b>	<b>3,64</b>	<b>4,15</b>	<b>4,58</b>	<b>4,85</b>	<b>4,95</b>	<b>4,97</b>
52°	<b>4,61</b>	<b>5,53</b>	<b>6,29</b>	<b>6,76</b>	<b>6,99</b>	<b>7,10</b>	<b>7,15</b>
60°	<b>4,90</b>	<b>5,84</b>	<b>6,58</b>	<b>6,96</b>	<b>7,17</b>	<b>7,30</b>	<b>7,38</b>
75°	<b>5,14</b>	<b>6,12</b>	<b>6,79</b>	<b>7,12</b>	<b>7,35</b>	<b>7,53</b>	<b>7,79</b>
90°	<b>5,09</b>	<b>6,07</b>	<b>6,78</b>	<b>7,14</b>	<b>7,39</b>	<b>7,62</b>	<b>8,04</b>
110°	<b>4,61</b>	<b>5,65</b>	<b>6,51</b>	<b>7,01</b>	<b>7,32</b>	<b>7,58</b>	<b>8,15</b>
120°	<b>4,33</b>	<b>5,33</b>	<b>6,20</b>	<b>6,84</b>	<b>7,20</b>	<b>7,47</b>	<b>8,03</b>
135°	<b>3,76</b>	<b>4,78</b>	<b>5,61</b>	<b>6,36</b>	<b>6,89</b>	<b>7,21</b>	<b>7,72</b>
150°	<b>3,17</b>	<b>4,14</b>	<b>4,98</b>	<b>5,71</b>	<b>6,39</b>	<b>6,88</b>	<b>7,44</b>
Run VMG	<b>2,77</b>	<b>3,66</b>	<b>4,47</b>	<b>5,19</b>	<b>5,85</b>	<b>6,46</b>	<b>7,20</b>
Gybe Angles	<b>167,8°</b>	<b>168,5°</b>	<b>169,7°</b>	<b>170,7°</b>	<b>171,0°</b>	<b>172,5°</b>	<b>176,2°</b>