



**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 **00352**  
Issued On **11/09/2020**  
ORC Ref **03420000Q6L**  
VPP Ver. **2020 1.02**  
Valid until **28/02/2021**

**Crew Weight**

Default	482kg
Maximum	450kg
Minimum*	338kg

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

**Special Scoring**

ToD	ToT
Non Spin GPH <b>746.3</b>	<b>0.8040</b>
Non Spin OSN <b>721.5</b>	<b>0.8316</b>

**Sails Limitations**

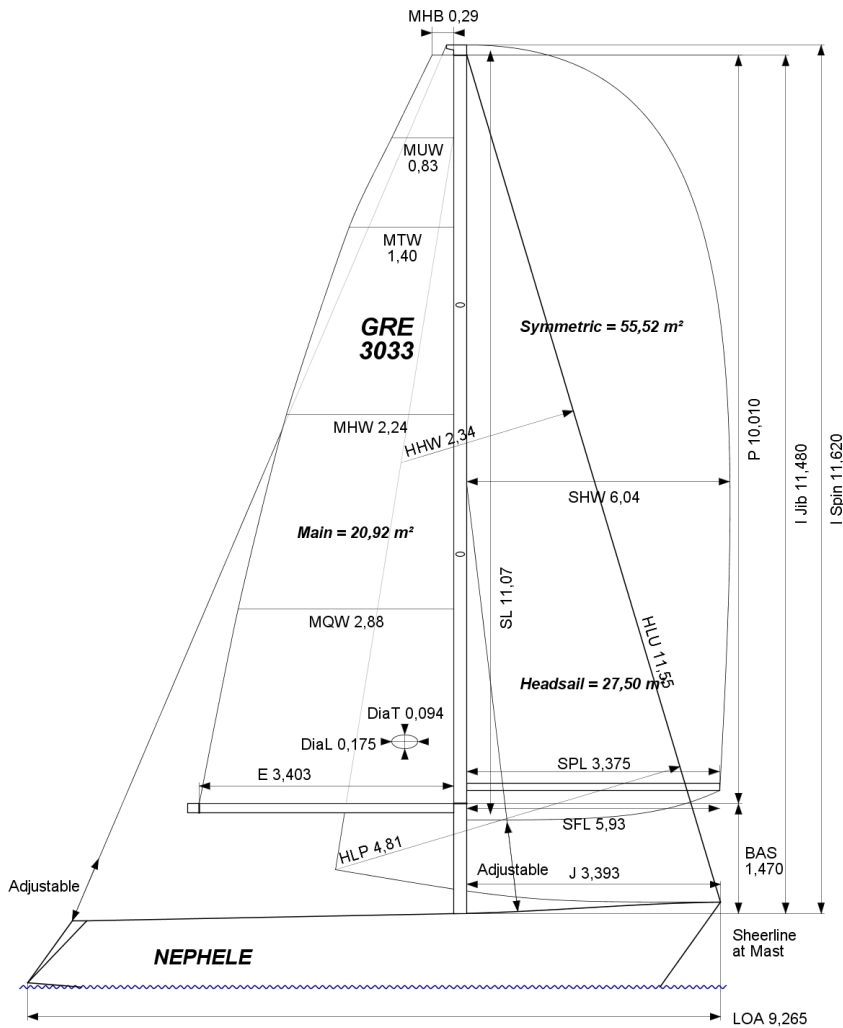
Headsails **5** Spinnakers **4**

**Spinnaker configuration**  
Symmetric: **Yes** **55.52**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**  
**CDL = 7.284**

**Stability (Measured)**  
Limit Positive Stab.: **107.6°**  
Stability Index: **106.8**

**Owner**



<b>BOAT</b>		<b>GPH</b>		<b>HULL</b>					
Name <b>NEPHELE</b> Sail Nr <b>GRE-3033</b>		<b>716.9</b>		Data File <b>GR3033</b>	LOA <b>9.265m</b>		Offset File <b>F021.BOF</b>		
<b>CLASS</b>				Displacement <b>4,094kg</b>	Draft <b>1.758m</b>		Dynamic All. <b>0.429%</b>		
Class <b>FIRST 30E</b>				IMS Division <b>Cruiser/Racer</b>	Construction <b>Solid</b>		Plan Review		
Designer <b>JEAN BERRET</b>				Fiber Rigging <b>No</b>	Aramid Core <b>No</b>		Construction <b>Solid</b>		
Builder <b>BENETEAU</b>				Crew Arm Ex	Carbon Rudder <b>No</b>		Fiber Rigging <b>No</b>		
Series <b>05/1982</b>				Light Stanchions <b>No</b>		Aramid Core <b>No</b>			
Age Date <b>05/1982</b>				IMSL <b>8.075m</b>	VCGD <b>0.143m</b>	Sink <b>13.61kg/mm</b>	Carbon Rudder <b>No</b>		
Age Allowance <b>0.487%</b>				RL <b>6.500m</b>	VCGM <b>0.141m</b>	WS <b>19.22m²</b>	Light Stanchions <b>No</b>		
<b>COMMENTS</b>				LSM0 <b>7.792m</b>	Displacement/Length ratio <b>8.6537</b>		IMS Division <b>Cruiser/Racer</b>		
				Water Ballast <b>0</b>	Trim Tab <b>No</b>		Dynamic All. <b>0.429%</b>		
				BLR Index <b>0.0000</b>			Construction <b>Solid</b>		
<b>PROPELLER</b>				<b>CENTERBOARD</b>					
Installation <b>Shaft exposed</b>	PRD <b>0.429</b>	N/A							
Type <b>Feathering 2 blades</b>	PBW <b>0.139</b>								
	PIPA <b>0.0048</b>								
<b>SCORING OPTIONS</b>									
	<b>COASTAL / LONG DISTANCE</b>				<b>WINDWARD / LEEWARD</b>				
Time on Distance	<b>695.1</b>				<b>772.9</b>				
Time on Time	<b>0.8632</b>				<b>0.8734</b>				
Triple Number	Low	Medium	High	Low	Medium	High			
Time on Distance	<b>824.7</b>	<b>633.9</b>	<b>566.5</b>	<b>1059.0</b>	<b>779.0</b>	<b>674.3</b>			
Time on Time	<b>0.8185</b>	<b>1.0648</b>	<b>1.1915</b>	<b>0.6374</b>	<b>0.8665</b>	<b>1.0011</b>			

<b>BOAT</b>	
Name <b>NEPHELE</b>	Sail Nr <b>GRE-3033</b>
File <b>GR3033</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>
Inner Stay <b>Adjustable</b>	Runners/Checkstays <b>0</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>10.010</b>	E <b>3.403</b> MDT1 <b>0.094</b> MW <b>0.175</b>
IG <b>11.480</b>	J <b>3.393</b> MDL1 <b>0.175</b> GO <b>0.220</b>
ISP <b>11.620</b>	SFJ <b>0.000</b> MDT2 <b>0.094</b> BD <b>0.120</b>
BAS <b>1.470</b>	SPL <b>3.375</b> MDL2 <b>0.175</b> MWT
FSD <b>0.030</b>	TPS TL <b>0.000</b> MCG

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>31/03/2008</b>		SG <b>1.0300</b>	
FFM <b>1.126</b>	FF <b>1.122</b>	SFFP <b>0.520</b>	
FAM <b>0.850</b>	FA <b>0.855</b>	SAFP <b>8.470</b>	
W1 <b>47.5</b>	PD1 <b>281.0</b>	WD <b>9.580</b>	
W2 <b>47.5</b>	PD2 <b>281.0</b>	GSA <b>41.9</b>	
W3 <b>47.5</b>	PD3 <b>281.0</b>	RSA <b>6082.1</b>	
W4 <b>47.5</b>	PD4 <b>281.0</b>	PLM <b>2110.0</b>	
LCF from stem on CL / on sheer		<b>5.185 / 5.422</b>	
Maximum beam station from stem		<b>5.524</b>	
RM Measured		<b>59.4kg-m</b>	
RM Default		<b>67.6kg-m</b>	
Limit of positive stability / Stab.Index		<b>107.6° / 106.8</b>	
Freeboard at mast at 3.393		<b>0.984</b>	



**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2020**  
Measurements  
Datasheet

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

<b>PROPELLER</b>			
Installation <b>Shaft exposed</b>	PRD <b>0.429</b>		
Type <b>Feathering 2 blades</b>	PBW <b>0.139</b>		
Twin Screw <b>No</b>	PIPA <b>0.0048</b>		
PSA <b>23.100</b>	PHL <b>0.098</b>	ST3 <b>0.064</b>	ESL <b>0.880</b>
PSD <b>0.025</b>	ST1 <b>0.016</b>	ST4 <b>0.049</b>	
PHD <b>0.063</b>	ST2 <b>0.064</b>	ST5 <b>0.178</b>	

**Certificate**

Number **00352**  
ORC Ref **03420000Q6L**  
Issued On **11/09/2020**  
VPP Ver. **2020 1.02**  
Valid until **28/02/2021**



<b>COMMENTS</b>	

<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	0.29	0.83	1.40	2.24	2.88	20.92		21/03/2017	QUANTUM	Pentex						
<b>HEADSAILS (1)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.07	0.60	1.17	2.34	3.57	4.81	11.55	142%	27.50		No		26/05/2015	QUANTUM	Pentex	
<b>SYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	11.07	11.07	11.07	6.04	5.93	55.52				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				
Date <b>31/03/2008</b>				
Comment				
<b>Internal Ballast total = 0.0</b>				
Id	Item	Weight	Distance	VCG Description
4	Anchor	40.0	7.20	Danworth
4	Chain	20.0	7.20	15m x 8mm
4	Feels	40.0	3.60	
Id	Item	Maker	Model	
1	Engine	VOLVO PENTA	2002R (18	
Id	Item	Weight	Description	

<b>MEASUREMENT INVENTORY</b>								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank Fuel		Inox	100.0	6.80			0-0
2	Tank Fuel		Inox	30.0	6.70			0-0
3	Tank Water		Inox	200.0	4.40			0-0
4	Tank Water		Inox	200.0	4.40			0-0
Id	Item	Weight	Distance	VCG	Description			
1	Battery	50.0	6.60		2 x 100Ah			
2	Battery	16.0	5.20		1 x 60Ah			
1	Misc	15.0	0.80		Anchor windlass			

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>NEPHELE</b>
Certificate Number	<b>00352</b>
Sail Nr	<b>GRE-3033</b>
Issued On	<b>11/09/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1204.1</b>	<b>1006.8</b>	<b>894.9</b>	<b>828.3</b>	<b>802.2</b>	<b>791.9</b>	<b>796.4</b>
52°	<b>788.8</b>	<b>671.9</b>	<b>604.3</b>	<b>575.7</b>	<b>562.8</b>	<b>557.7</b>	<b>556.1</b>
60°	<b>748.1</b>	<b>638.4</b>	<b>585.1</b>	<b>561.6</b>	<b>548.6</b>	<b>542.1</b>	<b>538.9</b>
75°	<b>721.7</b>	<b>614.5</b>	<b>570.9</b>	<b>549.4</b>	<b>534.6</b>	<b>523.1</b>	<b>511.1</b>
90°	<b>731.5</b>	<b>618.8</b>	<b>565.0</b>	<b>540.3</b>	<b>528.3</b>	<b>514.6</b>	<b>490.0</b>
110°	<b>741.2</b>	<b>610.9</b>	<b>557.6</b>	<b>531.2</b>	<b>509.2</b>	<b>489.4</b>	<b>468.1</b>
120°	<b>763.9</b>	<b>628.1</b>	<b>564.1</b>	<b>535.3</b>	<b>512.4</b>	<b>489.9</b>	<b>453.6</b>
135°	<b>838.9</b>	<b>686.0</b>	<b>592.8</b>	<b>552.6</b>	<b>528.1</b>	<b>505.2</b>	<b>461.6</b>
150°	<b>978.5</b>	<b>775.9</b>	<b>660.8</b>	<b>586.0</b>	<b>551.4</b>	<b>528.6</b>	<b>486.1</b>
Run VMG	<b>1129.9</b>	<b>894.9</b>	<b>760.0</b>	<b>665.3</b>	<b>597.7</b>	<b>559.3</b>	<b>515.0</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1167.0</b>	<b>950.8</b>	<b>827.5</b>	<b>746.8</b>	<b>700.0</b>	<b>675.6</b>	<b>655.7</b>
Circular Random	<b>988.7</b>	<b>797.9</b>	<b>695.3</b>	<b>635.9</b>	<b>599.9</b>	<b>577.4</b>	<b>551.6</b>
Coastal / Long Distance	<b>1163.3</b>	<b>893.7</b>	<b>745.6</b>	<b>654.7</b>	<b>609.7</b>	<b>577.2</b>	<b>525.9</b>
Non Spinnaker	<b>1041.9</b>	<b>835.4</b>	<b>723.1</b>	<b>657.2</b>	<b>617.1</b>	<b>591.8</b>	<b>562.9</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>42.8°</b>	<b>41.3°</b>	<b>40.9°</b>	<b>40.5°</b>	<b>39.8°</b>	<b>39.4°</b>	<b>39.8°</b>
Beat VMG	<b>2.99</b>	<b>3.58</b>	<b>4.02</b>	<b>4.35</b>	<b>4.49</b>	<b>4.55</b>	<b>4.52</b>
52°	<b>4.56</b>	<b>5.36</b>	<b>5.96</b>	<b>6.25</b>	<b>6.40</b>	<b>6.46</b>	<b>6.47</b>
60°	<b>4.81</b>	<b>5.64</b>	<b>6.15</b>	<b>6.41</b>	<b>6.56</b>	<b>6.64</b>	<b>6.68</b>
75°	<b>4.99</b>	<b>5.86</b>	<b>6.31</b>	<b>6.55</b>	<b>6.73</b>	<b>6.88</b>	<b>7.04</b>
90°	<b>4.92</b>	<b>5.82</b>	<b>6.37</b>	<b>6.66</b>	<b>6.81</b>	<b>7.00</b>	<b>7.35</b>
110°	<b>4.86</b>	<b>5.89</b>	<b>6.46</b>	<b>6.78</b>	<b>7.07</b>	<b>7.36</b>	<b>7.69</b>
120°	<b>4.71</b>	<b>5.73</b>	<b>6.38</b>	<b>6.73</b>	<b>7.03</b>	<b>7.35</b>	<b>7.94</b>
135°	<b>4.29</b>	<b>5.25</b>	<b>6.07</b>	<b>6.51</b>	<b>6.82</b>	<b>7.13</b>	<b>7.80</b>
150°	<b>3.68</b>	<b>4.64</b>	<b>5.45</b>	<b>6.14</b>	<b>6.53</b>	<b>6.81</b>	<b>7.41</b>
Run VMG	<b>3.19</b>	<b>4.02</b>	<b>4.74</b>	<b>5.41</b>	<b>6.02</b>	<b>6.44</b>	<b>6.99</b>
Gybe Angles	<b>147.5°</b>	<b>152.0°</b>	<b>154.0°</b>	<b>158.5°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>