



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

**2020  
ORC Club  
Certificate**

**Rating Office**

**Offshore  
Racing  
Congress**



**Certificate**

Number **056/20**  
Issued On **04/08/2020**  
ORC Ref **03850000NV3**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 534kg  
Maximum **400kg**  
Minimum\* **300kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>674.1</b>	<b>0.8901</b>
Non Spin OSN	<b>656.9</b>	<b>0.9134</b>

**Sails Limitations**

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

**Spinnaker configuration**  
Symmetric: **Yes** **65.45**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

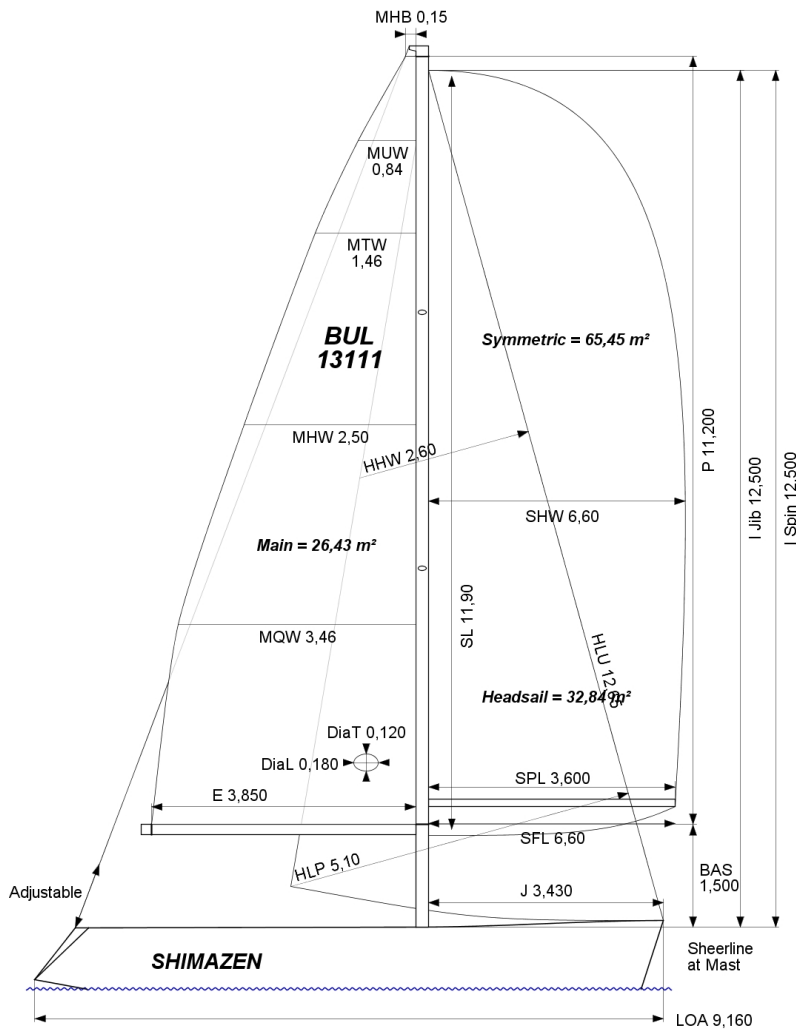
**Class Division Length**

**CDL = 7.958**

**Stability (Estimated)**

Limit Positive Stab.: **114.6°**  
Stability Index: **108.8**

**Owner**



BOAT	GPH	HULL
Name <b>SHIMAZEN</b> Sail Nr <b>BUL 13111</b>	<b>648.3</b>	Data File <b>BUL13111</b> LOA <b>9.160m</b> Offset File <b>E216.OFF</b> MB <b>3.202m</b> Displacement <b>2,796kg</b> Draft <b>1.801m</b>
<b>CLASS</b> Class <b>FIRST CL CHALLENGE</b> Designer <b>FINOT</b> Builder <b>BENETEAU</b> Series <b>05/1992</b> Age Date <b>05/1992</b> Age Allowance <b>0.487%</b>		IMS Division <b>Performance</b> Dynamic All. <b>0.000%</b> Plan Review 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>
<b>COMMENTS</b>		IMSL <b>8.372m</b> VCGD <b>-0.063m</b> Sink <b>13.49kg/mm</b> RL <b>7.543m</b> VCGM <b>-0.046m</b> WS <b>17.99m<sup>2</sup></b> LSM0 <b>8.364m</b> Displacement/Length ratio <b>4.7785</b>
<b>PROPELLER</b> Installation <b>Shaft exposed</b> PRD <b>0.355</b> Type <b>Folding 2 blades</b> PBW <b>0.126</b> PIPA <b>0.0042</b>		Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>
		<b>CENTERBOARD</b> <b>N/A</b>
<b>SCORING OPTIONS</b>		
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>
Time on Distance	<b>632.1</b>	<b>709.8</b>
Time on Time	<b>0.9492</b>	<b>0.9510</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>731.1 577.4 520.2</b>	<b>942.5 710.5 632.7</b>
Time on Time	<b>0.9233 1.1691 1.2976</b>	<b>0.7162 0.9500 1.0669</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>SHIMAZEN</b>	Certificate Number	<b>056/20</b>
Sail Nr	<b>BUL 13111</b>	Issued On	<b>04/08/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1053.5</b>	<b>874.2</b>	<b>793.6</b>	<b>768.8</b>	<b>760.9</b>	<b>760.3</b>	<b>761.1</b>
52°	<b>689.0</b>	<b>586.2</b>	<b>547.2</b>	<b>535.2</b>	<b>530.4</b>	<b>528.4</b>	<b>526.0</b>
60°	<b>651.8</b>	<b>564.9</b>	<b>533.0</b>	<b>519.6</b>	<b>513.7</b>	<b>511.0</b>	<b>508.3</b>
75°	<b>623.7</b>	<b>550.7</b>	<b>521.0</b>	<b>500.9</b>	<b>487.2</b>	<b>479.8</b>	<b>474.6</b>
90°	<b>628.0</b>	<b>549.4</b>	<b>517.7</b>	<b>493.7</b>	<b>471.5</b>	<b>453.9</b>	<b>436.8</b>
110°	<b>661.5</b>	<b>553.2</b>	<b>511.4</b>	<b>479.6</b>	<b>453.8</b>	<b>438.8</b>	<b>413.0</b>
120°	<b>681.2</b>	<b>563.4</b>	<b>516.8</b>	<b>483.0</b>	<b>450.8</b>	<b>422.7</b>	<b>388.4</b>
135°	<b>753.7</b>	<b>609.6</b>	<b>540.0</b>	<b>505.2</b>	<b>472.6</b>	<b>441.4</b>	<b>377.9</b>
150°	<b>890.9</b>	<b>704.3</b>	<b>596.1</b>	<b>537.5</b>	<b>505.7</b>	<b>475.6</b>	<b>418.2</b>
Run VMG	<b>1028.7</b>	<b>813.3</b>	<b>686.7</b>	<b>607.9</b>	<b>551.7</b>	<b>516.9</b>	<b>460.7</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1041.1</b>	<b>843.8</b>	<b>740.2</b>	<b>688.3</b>	<b>656.3</b>	<b>638.6</b>	<b>610.9</b>
Circular Random	<b>882.7</b>	<b>716.8</b>	<b>629.5</b>	<b>579.9</b>	<b>549.6</b>	<b>529.4</b>	<b>502.0</b>
Coastal / Long Distance	<b>1039.9</b>	<b>794.1</b>	<b>670.0</b>	<b>602.2</b>	<b>562.8</b>	<b>529.9</b>	<b>475.5</b>
Non Spinnaker	<b>928.5</b>	<b>749.2</b>	<b>653.8</b>	<b>599.0</b>	<b>565.6</b>	<b>543.6</b>	<b>514.7</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>43.1°</b>	<b>41.6°</b>	<b>40.5°</b>	<b>39.8°</b>	<b>39.4°</b>	<b>40.5°</b>	<b>41.2°</b>
Beat VMG	<b>3.42</b>	<b>4.12</b>	<b>4.54</b>	<b>4.68</b>	<b>4.73</b>	<b>4.73</b>	<b>4.73</b>
52°	<b>5.22</b>	<b>6.14</b>	<b>6.58</b>	<b>6.73</b>	<b>6.79</b>	<b>6.81</b>	<b>6.84</b>
60°	<b>5.52</b>	<b>6.37</b>	<b>6.75</b>	<b>6.93</b>	<b>7.01</b>	<b>7.05</b>	<b>7.08</b>
75°	<b>5.77</b>	<b>6.54</b>	<b>6.91</b>	<b>7.19</b>	<b>7.39</b>	<b>7.50</b>	<b>7.59</b>
90°	<b>5.73</b>	<b>6.55</b>	<b>6.95</b>	<b>7.29</b>	<b>7.64</b>	<b>7.93</b>	<b>8.24</b>
110°	<b>5.44</b>	<b>6.51</b>	<b>7.04</b>	<b>7.51</b>	<b>7.93</b>	<b>8.20</b>	<b>8.72</b>
120°	<b>5.28</b>	<b>6.39</b>	<b>6.97</b>	<b>7.45</b>	<b>7.99</b>	<b>8.52</b>	<b>9.27</b>
135°	<b>4.78</b>	<b>5.91</b>	<b>6.67</b>	<b>7.13</b>	<b>7.62</b>	<b>8.16</b>	<b>9.53</b>
150°	<b>4.04</b>	<b>5.11</b>	<b>6.04</b>	<b>6.70</b>	<b>7.12</b>	<b>7.57</b>	<b>8.61</b>
Run VMG	<b>3.50</b>	<b>4.43</b>	<b>5.24</b>	<b>5.92</b>	<b>6.53</b>	<b>6.96</b>	<b>7.81</b>
Gybe Angles	<b>145.0°</b>	<b>149.0°</b>	<b>152.0°</b>	<b>159.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>