



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020**  
**ORC Club One**  
**Design Certificate**

**Rating Office**

**Hungarian Yachting Association**  
Istvanmezei ut 1-3  
H-1146 Budapest  
HUNGARY



**Certificate**

Number **002/20**  
Issued On **10/01/2020**  
ORC Ref **038800010T**  
VPP Ver. **2020 1.00**  
Valid until **31/12/2020**

**Crew Weight**

Default 393kg  
Maximum **375kg**  
Minimum\* **281kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **670.7 0.8946**  
Non Spin OSN **648.4 0.9253**

**Sails Limitations**

Headsails **5** Spinnakers **4**  
**Asymmetric on centerline**  
**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 56.18**  
Flying H/S: **No**  
Spin. Pole: **No**

**Class Division Length**

CDL = **7.475**

**Stability (Estimated)**

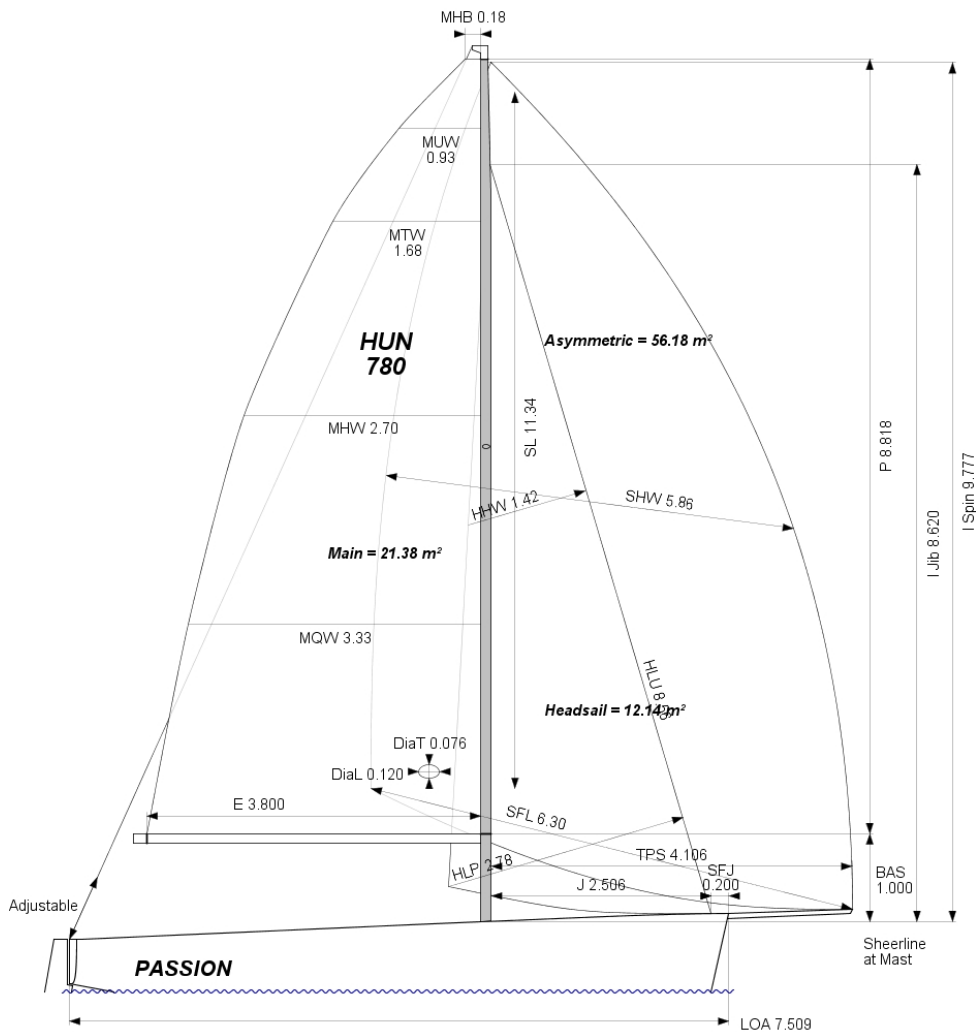
Limit Positive Stab.: **103.9°**  
Stability Index: **95.4**

**Owner**

Kilian Zoltan  
1194 Budapest  
Vas Gereben utca 169

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



<b>BOAT</b> Name <b>PASSION</b> Sail Nr <b>HUN-780</b>		<b>GPH</b> <b>620.2</b>	<b>HULL</b> Data File <b>HUN780</b> LOA <b>7.509m</b> Offset File <b>melg24.OD</b> MB <b>2.490m</b> Displacement <b>821kg</b> Draft <b>1.522m</b>					
<b>CLASS</b> Class <b>MELGES 24 OD</b> Designer <b>REICHEL/PUGH</b> Builder <b>ROWEN</b> Series <b>12/1992</b> Age Date <b>11/1999</b> Age Allowance <b>0.487%</b>			IMS Division <b>Sportboat</b> Dynamic All. <b>0.000%</b> Plan Review Construction <b>Cored</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex <b>0.50</b> Carbon Rudder <b>Yes</b> Light Stanchions <b>No</b>					
<b>COMMENTS</b> LIFELINE TENSION ACC CLASSRULE			IMSL <b>7.240m</b> VCGD <b>0.050m</b> Sink <b>8.70kg/mm</b> RL <b>7.719m</b> VCGM <b>0.030m</b> WS <b>10.46m<sup>2</sup></b> LSM0 <b>6.754m</b> Displacement/Length ratio					
<b>PROPELLER</b> Type <b>No Propeller</b>			Water Ballast Trim Tab <b>No</b> BLR Index <b>0.0000</b>					
<b>SCORING OPTIONS</b>			<b>CENTERBOARD</b>  N/A					
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>				
Time on Distance	<b>602.5</b>			<b>688.4</b>				
Time on Time	<b>0.9958</b>			<b>0.9805</b>				
Triple Number	Low	Medium	High	Low	Medium	High		
Time on Distance	<b>711.1</b>	<b>553.2</b>	<b>469.8</b>	<b>913.6</b>	<b>695.4</b>	<b>590.3</b>		
Time on Time	<b>0.9493</b>	<b>1.2201</b>	<b>1.4369</b>	<b>0.7388</b>	<b>0.9707</b>	<b>1.1434</b>		

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## ORC Club Certificate Appendix

**BOAT**Name **PASSION**  
Sail Nr **HUN-780**Certificate Number **002/20**  
Issued On **10/01/2020****TIME ALLOWANCES**

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1068.2</b>	<b>876.9</b>	<b>785.9</b>	<b>760.0</b>	<b>753.6</b>	<b>751.8</b>	<b>746.4</b>
52°	<b>695.6</b>	<b>593.6</b>	<b>553.6</b>	<b>534.4</b>	<b>525.9</b>	<b>521.9</b>	<b>507.2</b>
60°	<b>655.0</b>	<b>574.4</b>	<b>533.6</b>	<b>505.3</b>	<b>494.1</b>	<b>488.4</b>	<b>470.5</b>
75°	<b>623.6</b>	<b>560.0</b>	<b>514.1</b>	<b>466.6</b>	<b>446.2</b>	<b>435.9</b>	<b>417.4</b>
90°	<b>620.1</b>	<b>543.9</b>	<b>506.2</b>	<b>460.3</b>	<b>412.1</b>	<b>390.3</b>	<b>371.0</b>
110°	<b>609.3</b>	<b>531.0</b>	<b>464.4</b>	<b>429.9</b>	<b>399.0</b>	<b>375.8</b>	<b>314.7</b>
120°	<b>623.8</b>	<b>540.7</b>	<b>472.4</b>	<b>410.4</b>	<b>378.2</b>	<b>355.7</b>	<b>302.3</b>
135°	<b>697.6</b>	<b>577.0</b>	<b>512.8</b>	<b>448.5</b>	<b>388.9</b>	<b>335.0</b>	<b>266.8</b>
150°	<b>826.3</b>	<b>654.0</b>	<b>571.8</b>	<b>516.3</b>	<b>457.3</b>	<b>403.9</b>	<b>285.4</b>
Run VMG	<b>954.1</b>	<b>755.1</b>	<b>660.9</b>	<b>596.2</b>	<b>528.1</b>	<b>466.4</b>	<b>329.6</b>

**Selected Courses**

Windward / Leeward	<b>1011.2</b>	<b>816.0</b>	<b>723.4</b>	<b>678.1</b>	<b>640.8</b>	<b>609.1</b>	<b>538.0</b>
Circular Random	<b>854.5</b>	<b>691.9</b>	<b>603.1</b>	<b>548.5</b>	<b>510.7</b>	<b>481.1</b>	<b>432.5</b>
Coastal / Long Distance	<b>1005.5</b>	<b>768.5</b>	<b>652.5</b>	<b>578.3</b>	<b>527.2</b>	<b>485.0</b>	<b>403.5</b>
Non Spinnaker	<b>937.3</b>	<b>752.0</b>	<b>650.6</b>	<b>589.4</b>	<b>548.8</b>	<b>518.7</b>	<b>472.0</b>

**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	<b>43.5°</b>	<b>42.0°</b>	<b>39.2°</b>	<b>37.9°</b>	<b>37.9°</b>	<b>37.9°</b>	<b>38.4°</b>
Beat VMG	<b>3.37</b>	<b>4.11</b>	<b>4.58</b>	<b>4.74</b>	<b>4.78</b>	<b>4.79</b>	<b>4.82</b>
52°	<b>5.18</b>	<b>6.07</b>	<b>6.50</b>	<b>6.74</b>	<b>6.85</b>	<b>6.90</b>	<b>7.10</b>
60°	<b>5.50</b>	<b>6.27</b>	<b>6.75</b>	<b>7.12</b>	<b>7.29</b>	<b>7.37</b>	<b>7.65</b>
75°	<b>5.77</b>	<b>6.43</b>	<b>7.00</b>	<b>7.72</b>	<b>8.07</b>	<b>8.26</b>	<b>8.63</b>
90°	<b>5.81</b>	<b>6.62</b>	<b>7.11</b>	<b>7.82</b>	<b>8.73</b>	<b>9.22</b>	<b>9.70</b>
110°	<b>5.91</b>	<b>6.78</b>	<b>7.75</b>	<b>8.37</b>	<b>9.02</b>	<b>9.58</b>	<b>11.44</b>
120°	<b>5.77</b>	<b>6.66</b>	<b>7.62</b>	<b>8.77</b>	<b>9.52</b>	<b>10.12</b>	<b>11.91</b>
135°	<b>5.16</b>	<b>6.24</b>	<b>7.02</b>	<b>8.03</b>	<b>9.26</b>	<b>10.75</b>	<b>13.49</b>
150°	<b>4.36</b>	<b>5.50</b>	<b>6.30</b>	<b>6.97</b>	<b>7.87</b>	<b>8.91</b>	<b>12.61</b>
Run VMG	<b>3.77</b>	<b>4.77</b>	<b>5.45</b>	<b>6.04</b>	<b>6.82</b>	<b>7.72</b>	<b>10.92</b>
Gybe Angles	<b>144.0°</b>	<b>148.0°</b>	<b>151.5°</b>	<b>148.3°</b>	<b>145.0°</b>	<b>144.3°</b>	<b>141.6°</b>