



**ORC**

Offshore Racing Congress  
World leader in rating technology

## 2020 ORC Club Certificate

### Rating Office

Estonian Yachting Union  
Purje 8, maja 3  
11911 Tallinn  
Estonia



**ESTONIAN  
YACHTING  
UNION**

### Certificate

Number **087/20**  
Issued On **01/07/2020**  
ORC Ref **03880000LPJ**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

### Crew Weight

Default 1,159kg  
Maximum **1,350kg**  
Minimum\* **1,013kg**  
\*when applied by the NoR and SI  
Non Manual Pwr **No**

### Special Scoring

ToD ToT  
Non Spin GPH **615.8 0.9743**  
Non Spin OSN **594.1 1.0099**

### Sails Limitations

Headsails **7** Spinnakers **5**  
**Woven Polyester**  
**Asymmetric on centerline**

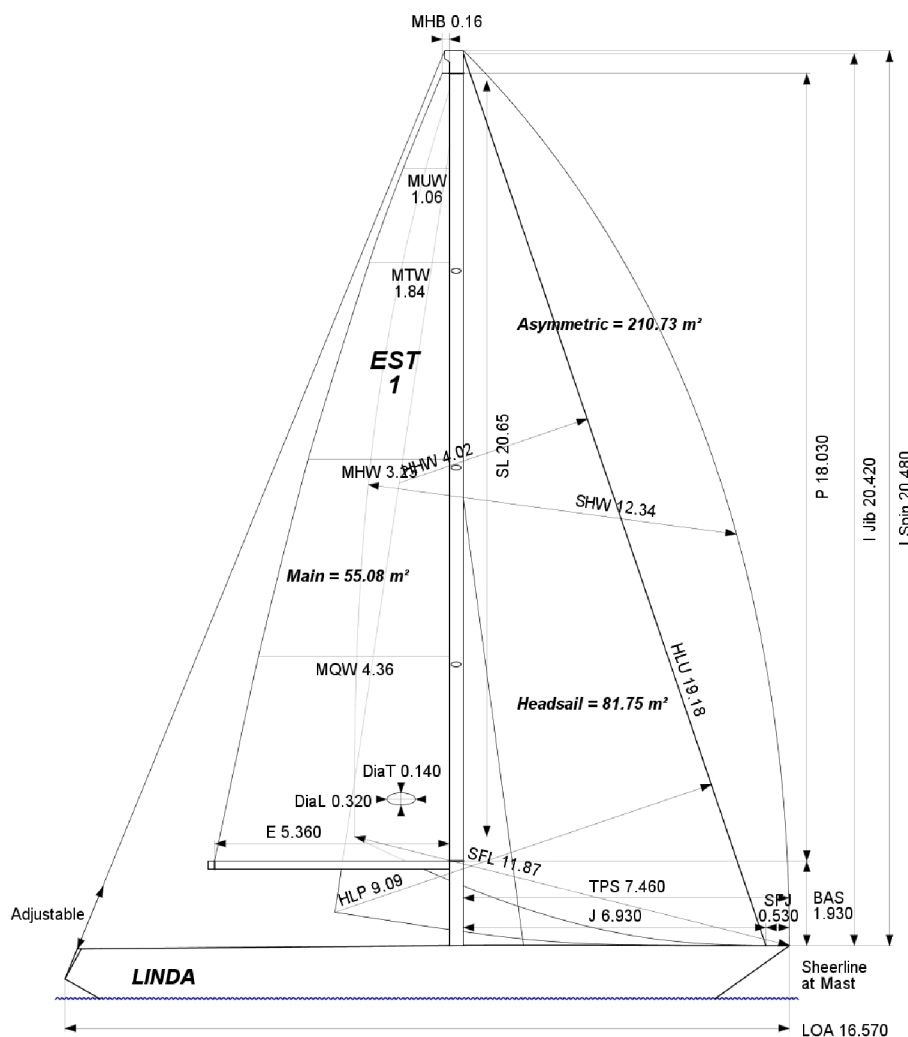
**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 210.73**  
Flying H/S: **No**  
Spin. Pole: **Yes**

### Class Division Length

**CDL = 12.363**

### Stability (Estimated)

Limit Positive Stab.: **114.1°**  
Stability Index: **126.2**



|              |                  |       |             |               |               |                                  |                         |
|--------------|------------------|-------|-------------|---------------|---------------|----------------------------------|-------------------------|
| BOAT         |                  | GPH   |             | HULL          |               |                                  |                         |
| Name         | LINDA            | 578.4 |             | Data File     | EST1          | LOA                              | 16.570m                 |
| Sail Nr      | EST1             |       | Offset File | C54_G6.off    | MB            | 4.624m                           |                         |
|              |                  |       |             | Displacement  | 20,552kg      | Draft                            | 2.920m                  |
| CLASS        |                  |       |             | IMS Division  | Cruiser/Racer | Dynamic All.                     | 0.475%                  |
|              |                  |       |             | Plan Review   |               | Construction                     | Solid                   |
|              |                  |       |             | Fiber Rigging | No            | Aramid Core                      | No                      |
|              |                  |       |             | Crew Arm Ex   |               | Carbon Rudder                    | No                      |
|              |                  |       |             |               |               | Light Stanchions                 | No                      |
|              |                  |       |             | IMSL          | 14.248m       | VCGD                             | -0.100m Sink 39.59kg/mm |
|              |                  |       |             | RL            | 10.471m       | VCGM                             | -0.028m WS 57.93m       |
|              |                  |       |             | LSM0          | 14.407m       | Displacement/Length ratio 6.8728 |                         |
| COMMENTS     |                  |       |             | Water Ballast |               | Trim Tab                         | No                      |
|              |                  |       |             | BLR Index     | 0.0000        |                                  |                         |
| PROPELLER    |                  |       |             | CENTERBOARD   |               |                                  |                         |
|              |                  |       |             |               |               |                                  |                         |
| Installation | Strut            | PRD   | 0.456       |               |               |                                  |                         |
| Type         | Folding 3 blades | PIPA  | 0.0008      | N/A           |               |                                  |                         |

### SCORING OPTIONS

|                  | COASTAL / LONG DISTANCE |        |        | WINDWARD / LEEWARD |        |        |
|------------------|-------------------------|--------|--------|--------------------|--------|--------|
| Time on Distance | 558.9                   |        |        | 629.1              |        |        |
| Time on Time     | 1.0735                  |        |        | 1.0730             |        |        |
| Triple Number    | Low                     | Medium | High   | Low                | Medium | High   |
| Time on Distance | 688.9                   | 505.8  | 438.6  | 895.6              | 634.9  | 529.3  |
| Time on Time     | 0.9798                  | 1.3345 | 1.5391 | 0.7537             | 1.0631 | 1.2753 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|--------|----------|-----------|-------------|-------------|----------|----------|------------|-------------|----------|---------|
| <b>BOAT</b><br>Name <b>LINDA</b> Sail Nr <b>EST1</b><br>File <b>EST1</b> Data in <b>meters/kilograms</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       | <b>INCLINING TEST AND FREEBOARDS</b><br>Inclining Test <b>Enter VCG directly</b><br>Flotation date <b>01/10/2019</b> SG <b>1.0250</b><br>VCGDe <b>-0.100</b><br>FFM <b>1.197</b> FF <b>1.197</b> SFFP <b>1.674</b><br>FAM <b>1.134</b> FA <b>1.134</b> SAFB <b>16.195</b><br>LCF from stem on CL / on sheer <b>9.748 / 10.003</b><br>Maximum beam station from stem <b>9.734</b><br>RM Measured <b>491.2kg·m</b><br>RM Default <b>431.4kg·m</b><br>Limit of positive stability / Stab.Index <b>114.1° / 126.2</b><br>Freeboard at mast at 7.460 <b>1.215</b> |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| <b>RIG</b><br>Forestay Tension <b>Aft</b> Spreaders <b>3</b><br>Inner Stay <b>Fixed</b> Runners/Checkstays <b>0</b><br>Carbon Mast <b>No</b> Jib Furler <b>No</b><br>Fiber Rigging <b>No</b> Main Furler <b>No</b><br>Non-Circular Rigging <b>No</b><br>Articulated Bowsprit <b>No</b><br>P <b>18.030</b> E <b>5.360</b> MDT1 <b>0.140</b> MW<br>IG <b>20.420</b> J <b>6.930</b> MDL1 <b>0.320</b> GO<br>ISP <b>20.480</b> SFJ <b>0.530</b> MDT2 <b>0.140</b> BD<br>BAS <b>1.930</b> SPL <b>6.860</b> MDL2 <b>0.320</b> MWT<br>FSD <b>0.045</b> TPS <b>7.460</b> TL      MCG |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| <b>MIZZEN RIG AND SAILS</b><br><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       | <b>PROPELLER</b><br>Installation <b>Strut</b> PRD <b>0.456</b><br>Type <b>Folding 3 blades</b> PBW<br>Twin Screw <b>No</b> PIPA <b>0.0008</b><br>ST1      ST3      ST5<br>ST2      ST4      EDL                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| <b>COMMENTS</b><br><br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       | <b>MOVABLE BALLAST</b><br><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       | <b>CENTERBOARD</b><br><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| <b>SAILS INVENTORY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| <b>MAINSAIL (1)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| Id                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | MHB   | MUW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | MTW   | MHW   | MQW   | Area   | Measurer | Meas.Date | Manufacture | Material    | Comment  |          |            |             |          |         |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.16  | 1.06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.84  | 3.23  | 4.36  | 55.09  |          |           |             |             |          |          |            |             |          |         |
| <b>HEADSAILS (2)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| Id                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | HHB   | HUW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | HTW   | HHW   | HQW   | HLP    | HLU      | Ovrlp     | Area        | Btn         | Flying   | Measurer | Meas.Date  | Manufacture | Material | Comment |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.10  | 1.04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.99  | 4.02  | 6.32  | 9.09   | 19.18    | 131%      | 81.75       | No          | No       |          | 18/06/2020 | WB          |          | Unknown |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.03  | 0.62                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.33  | 2.80  | 4.50  | 5.89   | 19.50    | 85%       | 56.47       | No          | No       |          |            |             |          |         |
| <b>SYMMETRIC SPINNAKERS (0)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| Id                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SLU   | SLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SL    | SHW   | SFL   | Area   | Measurer | Meas.Date | Manufacture | Material    | Comment  |          |            |             |          |         |
| <b>ASYMMETRIC SPINNAKERS (1)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |       |       |        |          |           |             |             |          |          |            |             |          |         |
| Id                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | SLU   | SLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SL    | SHW   | SFL   | Area   | Kind     | Measurer  | Meas.Date   | Manufacture | Material | Comment  |            |             |          |         |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 22.15 | 19.15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20.65 | 12.34 | 11.87 | 210.74 | asym     |           |             |             |          |          |            |             |          |         |



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**2020**  
**Measurements**  
**Datasheet**

**Certificate**  
 Number **087/20**  
 ORC Ref **03880000LPJ**  
 Issued On **01/07/2020**  
 VPP Ver. **2020 1.02**  
 Valid until **31/12/2020**



**EJL**  
ESTONIAN  
YACHTING  
UNION

# 2020

## ORC Club Certificate Appendix

| BOAT    |              |                    |                   |
|---------|--------------|--------------------|-------------------|
| Name    | <b>LINDA</b> | Certificate Number | <b>087/20</b>     |
| Sail Nr | <b>EST1</b>  | Issued On          | <b>01/07/2020</b> |

| TIME ALLOWANCES         |               |              |              |              |              |              |              |
|-------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity           | 6 kt          | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG                | <b>1022.0</b> | <b>829.3</b> | <b>724.0</b> | <b>652.6</b> | <b>608.4</b> | <b>587.0</b> | <b>568.0</b> |
| 52°                     | <b>661.5</b>  | <b>552.8</b> | <b>487.1</b> | <b>447.0</b> | <b>428.6</b> | <b>419.1</b> | <b>411.7</b> |
| 60°                     | <b>623.0</b>  | <b>526.6</b> | <b>465.9</b> | <b>434.5</b> | <b>419.3</b> | <b>410.4</b> | <b>401.8</b> |
| 75°                     | <b>598.0</b>  | <b>507.3</b> | <b>451.7</b> | <b>425.7</b> | <b>411.7</b> | <b>402.1</b> | <b>388.4</b> |
| 90°                     | <b>608.0</b>  | <b>507.4</b> | <b>443.6</b> | <b>417.2</b> | <b>408.1</b> | <b>399.8</b> | <b>382.3</b> |
| 110°                    | <b>604.8</b>  | <b>494.9</b> | <b>434.1</b> | <b>409.4</b> | <b>394.5</b> | <b>382.4</b> | <b>367.8</b> |
| 120°                    | <b>621.1</b>  | <b>508.1</b> | <b>442.0</b> | <b>413.1</b> | <b>396.4</b> | <b>381.8</b> | <b>355.5</b> |
| 135°                    | <b>705.5</b>  | <b>559.2</b> | <b>477.4</b> | <b>430.9</b> | <b>408.8</b> | <b>393.3</b> | <b>363.3</b> |
| 150°                    | <b>840.4</b>  | <b>658.7</b> | <b>551.4</b> | <b>483.2</b> | <b>444.0</b> | <b>423.1</b> | <b>398.4</b> |
| Run VMG                 | <b>970.5</b>  | <b>760.6</b> | <b>636.7</b> | <b>558.0</b> | <b>512.6</b> | <b>488.5</b> | <b>432.0</b> |
| Selected Courses        |               |              |              |              |              |              |              |
| Windward / Leeward      | <b>996.2</b>  | <b>795.0</b> | <b>680.3</b> | <b>605.3</b> | <b>560.5</b> | <b>537.8</b> | <b>500.0</b> |
| Circular Random         | <b>818.5</b>  | <b>651.8</b> | <b>559.8</b> | <b>505.0</b> | <b>470.9</b> | <b>448.9</b> | <b>421.6</b> |
| Coastal / Long Distance | <b>993.6</b>  | <b>746.0</b> | <b>607.7</b> | <b>520.8</b> | <b>476.5</b> | <b>448.1</b> | <b>405.6</b> |
| Non Spinnaker           | <b>886.7</b>  | <b>700.2</b> | <b>595.5</b> | <b>531.4</b> | <b>490.2</b> | <b>462.9</b> | <b>430.0</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>41.3°</b>  | <b>40.1°</b>  | <b>40.1°</b>  | <b>39.4°</b>  | <b>38.3°</b>  | <b>37.1°</b>  |
| Beat VMG                                          | <b>3.52</b>   | <b>4.34</b>   | <b>4.97</b>   | <b>5.52</b>   | <b>5.92</b>   | <b>6.13</b>   | <b>6.34</b>   |
| 52°                                               | <b>5.44</b>   | <b>6.51</b>   | <b>7.39</b>   | <b>8.05</b>   | <b>8.40</b>   | <b>8.59</b>   | <b>8.74</b>   |
| 60°                                               | <b>5.78</b>   | <b>6.84</b>   | <b>7.73</b>   | <b>8.29</b>   | <b>8.59</b>   | <b>8.77</b>   | <b>8.96</b>   |
| 75°                                               | <b>6.02</b>   | <b>7.10</b>   | <b>7.97</b>   | <b>8.46</b>   | <b>8.74</b>   | <b>8.95</b>   | <b>9.27</b>   |
| 90°                                               | <b>5.92</b>   | <b>7.10</b>   | <b>8.11</b>   | <b>8.63</b>   | <b>8.82</b>   | <b>9.01</b>   | <b>9.42</b>   |
| 110°                                              | <b>5.95</b>   | <b>7.27</b>   | <b>8.29</b>   | <b>8.79</b>   | <b>9.12</b>   | <b>9.41</b>   | <b>9.79</b>   |
| 120°                                              | <b>5.80</b>   | <b>7.09</b>   | <b>8.14</b>   | <b>8.71</b>   | <b>9.08</b>   | <b>9.43</b>   | <b>10.13</b>  |
| 135°                                              | <b>5.10</b>   | <b>6.44</b>   | <b>7.54</b>   | <b>8.35</b>   | <b>8.81</b>   | <b>9.15</b>   | <b>9.91</b>   |
| 150°                                              | <b>4.28</b>   | <b>5.47</b>   | <b>6.53</b>   | <b>7.45</b>   | <b>8.11</b>   | <b>8.51</b>   | <b>9.04</b>   |
| Run VMG                                           | <b>3.71</b>   | <b>4.73</b>   | <b>5.65</b>   | <b>6.45</b>   | <b>7.02</b>   | <b>7.37</b>   | <b>8.33</b>   |
| Gybe Angles                                       | <b>143.0°</b> | <b>147.0°</b> | <b>146.5°</b> | <b>147.0°</b> | <b>148.5°</b> | <b>150.0°</b> | <b>176.0°</b> |