

<b>BOAT</b> Name <b>GROP III</b> Sail Nr <b>ESP-8623</b>	<b>GPH</b> <b>621.2</b>	<b>HULL</b> Length Overall <b>11.990m</b> Maximum Beam <b>3.786m</b> Displacement <b>7,783kg</b> Draft <b>2.178m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.262%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>GRAND SOLEIL 40 SD</b> Designer <b>PAPERINI</b> Builder <b>DEL PARDO</b> Series <b>12/2000</b> Age <b>05/2003</b> Age Allowance <b>0.487%</b> Offset File <b>GRS40SD.OFF - 13/03/2015 09:43:56</b> Measurement by - <b>18/10/2010</b>		IMSL <b>11.101m</b> VCGD <b>0.308m</b> Sink <b>23.58kg/mm</b> RL <b>8.438m</b> VCGM <b>0.154m</b> WS <b>30.87m<sup>2</sup></b> LSM0 <b>11.165m</b> Displacement/Length ratio <b>5.5920</b>



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

**2019**  
ORC International  
Certificate

**Rating Office**

Offshore  
Racing  
Congress



**Invalid for  
Racing**

**ORC**  
World Leader In Rating Technology

<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>604.2</b>			<b>681.2</b>		
Time on Time	<b>0.9931</b>			<b>0.9909</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>713.2</b>	<b>548.9</b>	<b>495.0</b>	<b>922.8</b>	<b>685.1</b>	<b>600.2</b>
Time on Time	<b>0.9465</b>	<b>1.2298</b>	<b>1.3637</b>	<b>0.7315</b>	<b>0.9853</b>	<b>1.1247</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1057.1</b>	<b>872.4</b>	<b>775.1</b>	<b>726.9</b>	<b>706.1</b>	<b>697.5</b>	<b>694.2</b>
52°	<b>689.3</b>	<b>580.8</b>	<b>520.5</b>	<b>495.7</b>	<b>487.0</b>	<b>483.1</b>	<b>482.2</b>
60°	<b>650.7</b>	<b>552.4</b>	<b>501.2</b>	<b>480.6</b>	<b>472.4</b>	<b>468.6</b>	<b>466.5</b>
75°	<b>621.0</b>	<b>530.3</b>	<b>487.5</b>	<b>468.5</b>	<b>457.2</b>	<b>450.6</b>	<b>445.4</b>
90°	<b>625.0</b>	<b>529.6</b>	<b>481.8</b>	<b>464.5</b>	<b>450.5</b>	<b>439.1</b>	<b>422.2</b>
110°	<b>628.7</b>	<b>519.4</b>	<b>472.9</b>	<b>451.2</b>	<b>436.0</b>	<b>426.1</b>	<b>409.0</b>
120°	<b>646.4</b>	<b>532.7</b>	<b>478.6</b>	<b>453.7</b>	<b>433.9</b>	<b>414.4</b>	<b>391.1</b>
135°	<b>718.6</b>	<b>583.0</b>	<b>504.9</b>	<b>468.8</b>	<b>447.3</b>	<b>426.9</b>	<b>386.1</b>
150°	<b>851.0</b>	<b>674.7</b>	<b>573.3</b>	<b>510.7</b>	<b>479.9</b>	<b>460.2</b>	<b>428.2</b>
Run VMG	<b>982.6</b>	<b>779.1</b>	<b>661.9</b>	<b>589.7</b>	<b>552.7</b>	<b>510.7</b>	<b>459.3</b>

**Certificate**  
Number **862301**  
ORC Ref **ESP00003322**  
Issued On **13/03/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**  
Default **806kg**  
Maximum **270kg**  
Minimum\* **185kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>623.2</b>	<b>0.9628</b>
Double H.OSN	<b>606.3</b>	<b>0.9896</b>
Non Spin GPH	<b>652.2</b>	<b>0.9200</b>
Non Spin OSN	<b>633.6</b>	<b>0.9470</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1019.8</b>	<b>825.8</b>	<b>718.5</b>	<b>658.3</b>	<b>629.4</b>	<b>604.1</b>	<b>576.8</b>
Circular Random	<b>855.7</b>	<b>690.3</b>	<b>602.2</b>	<b>552.1</b>	<b>522.3</b>	<b>503.6</b>	<b>481.3</b>
Coastal / Long Distance	<b>1016.1</b>	<b>775.1</b>	<b>644.8</b>	<b>569.8</b>	<b>532.5</b>	<b>502.1</b>	<b>457.0</b>
Non Spinnaker	<b>915.0</b>	<b>731.5</b>	<b>631.6</b>	<b>572.9</b>	<b>537.1</b>	<b>514.4</b>	<b>488.4</b>

**Sails Limitations**

Headsails	Spinnakers
<b>5</b>	<b>3</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>43.4°</b>	<b>41.6°</b>	<b>41.0°</b>	<b>41.0°</b>	<b>40.3°</b>	<b>40.0°</b>	<b>40.0°</b>
Beat VMG	<b>3.41</b>	<b>4.13</b>	<b>4.64</b>	<b>4.95</b>	<b>5.10</b>	<b>5.16</b>	<b>5.19</b>
52°	<b>5.22</b>	<b>6.20</b>	<b>6.92</b>	<b>7.26</b>	<b>7.39</b>	<b>7.45</b>	<b>7.47</b>
60°	<b>5.53</b>	<b>6.52</b>	<b>7.18</b>	<b>7.49</b>	<b>7.62</b>	<b>7.68</b>	<b>7.72</b>
75°	<b>5.80</b>	<b>6.79</b>	<b>7.38</b>	<b>7.68</b>	<b>7.87</b>	<b>7.99</b>	<b>8.08</b>
90°	<b>5.76</b>	<b>6.80</b>	<b>7.47</b>	<b>7.75</b>	<b>7.99</b>	<b>8.20</b>	<b>8.53</b>
110°	<b>5.73</b>	<b>6.93</b>	<b>7.61</b>	<b>7.98</b>	<b>8.26</b>	<b>8.45</b>	<b>8.80</b>
120°	<b>5.57</b>	<b>6.76</b>	<b>7.52</b>	<b>7.93</b>	<b>8.30</b>	<b>8.69</b>	<b>9.21</b>
135°	<b>5.01</b>	<b>6.17</b>	<b>7.13</b>	<b>7.68</b>	<b>8.05</b>	<b>8.43</b>	<b>9.32</b>
150°	<b>4.23</b>	<b>5.34</b>	<b>6.28</b>	<b>7.05</b>	<b>7.50</b>	<b>7.82</b>	<b>8.41</b>
Run VMG	<b>3.66</b>	<b>4.62</b>	<b>5.44</b>	<b>6.10</b>	<b>6.51</b>	<b>7.05</b>	<b>7.84</b>
Gybe Angles	<b>144.2°</b>	<b>147.9°</b>	<b>147.8°</b>	<b>148.8°</b>	<b>151.0°</b>	<b>175.7°</b>	<b>178.3°</b>

**Class Division Length**  
CDL = **9.771**

**Storm Sails Areas**  
Heavy Weather Jib **28.69**  
Storm Jib (JL=9.48) **10.63**  
Storm Trysail **12.91**

**Owner**

<b>BOAT</b>	
Name <b>GROP III</b>	Sail Nr <b>ESP-8623</b>
File <b>E8623</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>18/10/2010</b>		SG <b>1.0250</b>	
FFM <b>1.430</b>	FF <b>1.442</b>	SFFP <b>0.540</b>	
FAM <b>1.024</b>	FA <b>1.019</b>	SAFP <b>11.255</b>	
W1 <b>93.8</b>	PD1 <b>511.4</b>	WD <b>11.956</b>	
W2 <b>93.8</b>	PD2 <b>512.0</b>	GSA <b>1.0</b>	
W3 <b>93.8</b>	PD3 <b>510.8</b>	RSA <b>1.0</b>	
W4 <b>93.8</b>	PD4 <b>511.2</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>6.789 / 7.038</b>	
Maximum beam station from stem		<b>8.051</b>	
RM Measured		<b>172.7kg-m</b>	
RM Default		<b>190.3kg-m</b>	
Limit of positive stability / Stab.Index		<b>109.1° / 113.1</b>	
Freeboard at mast at 4.590		<b>1.215</b>	



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

**2019**  
IMS Measurement  
Certificate

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>3</b>		
Inner Stay <b>None Fitted</b>	Runners <b>0</b>		
Carbon Mast <b>No</b>	Jumper Struts <b>None</b>		
Taper Hollows <b>No</b>	Jib Furler <b>No</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>13.800</b>	E <b>5.345</b>	MDT1 <b>0.125</b>	MW <b>0.220</b>
IG <b>14.520</b>	J <b>4.590</b>	MDL1 <b>0.220</b>	GO <b>0.238</b>
ISP <b>15.310</b>	SFJ	MDT2 <b>0.125</b>	BD <b>0.125</b>
BAS <b>1.680</b>	SPL <b>0.000</b>	MDL2 <b>0.220</b>	MWT
FSP <b>0.073</b>	TPS <b>5.140</b>	TL	MCG

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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.404</b>		
Type <b>Feathering 3 blades</b>	PBW <b>0.112</b>		
Twin Screw <b>No</b>	PIPA <b>0.0040</b>		
ST1 <b>0.049</b>	ST3 <b>0.180</b>	ST5 <b>0.340</b>	
ST2 <b>0.180</b>	ST4 <b>0.111</b>	EDL <b>2.512</b>	

<b>Certificate</b>	
Number <b>862301</b>	
ORC Ref <b>ESP00003322</b>	
Issued On <b>13/03/2019</b>	
VPP Ver. <b>2019 1.01</b>	
Valid until <b>31/12/2019</b>	

<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
N/A	



**Invalid for Rating**  
ORC  
World Leader In Rating Technology

<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.160	1.11	2.00	3.37	4.44	43.39	44.41	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	16.52	14.62	15.57	8.31	7.89	106.73	AS · (SFL + 4·SHW) / 6		

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.06	0.76	1.47	2.99	4.60	6.30	13.84	42.47					RI
0.08	0.57	1.15	2.31	3.59	4.90	14.18	33.84	Y		11/02/2015	Unknow	remedicion
0.08	0.28	0.50	1.06	1.75	2.45	11.75	13.53	Y		06/03/2014	Unknow	

<b>MEASUREMENT INVENTORY</b>				
Measurer				
Date <b>18/10/2010</b>				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
4	Anchor	39.0	9.50	ancla + cadena
4	Tools	8.0	9.40	
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	YANMAR	40 cv	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

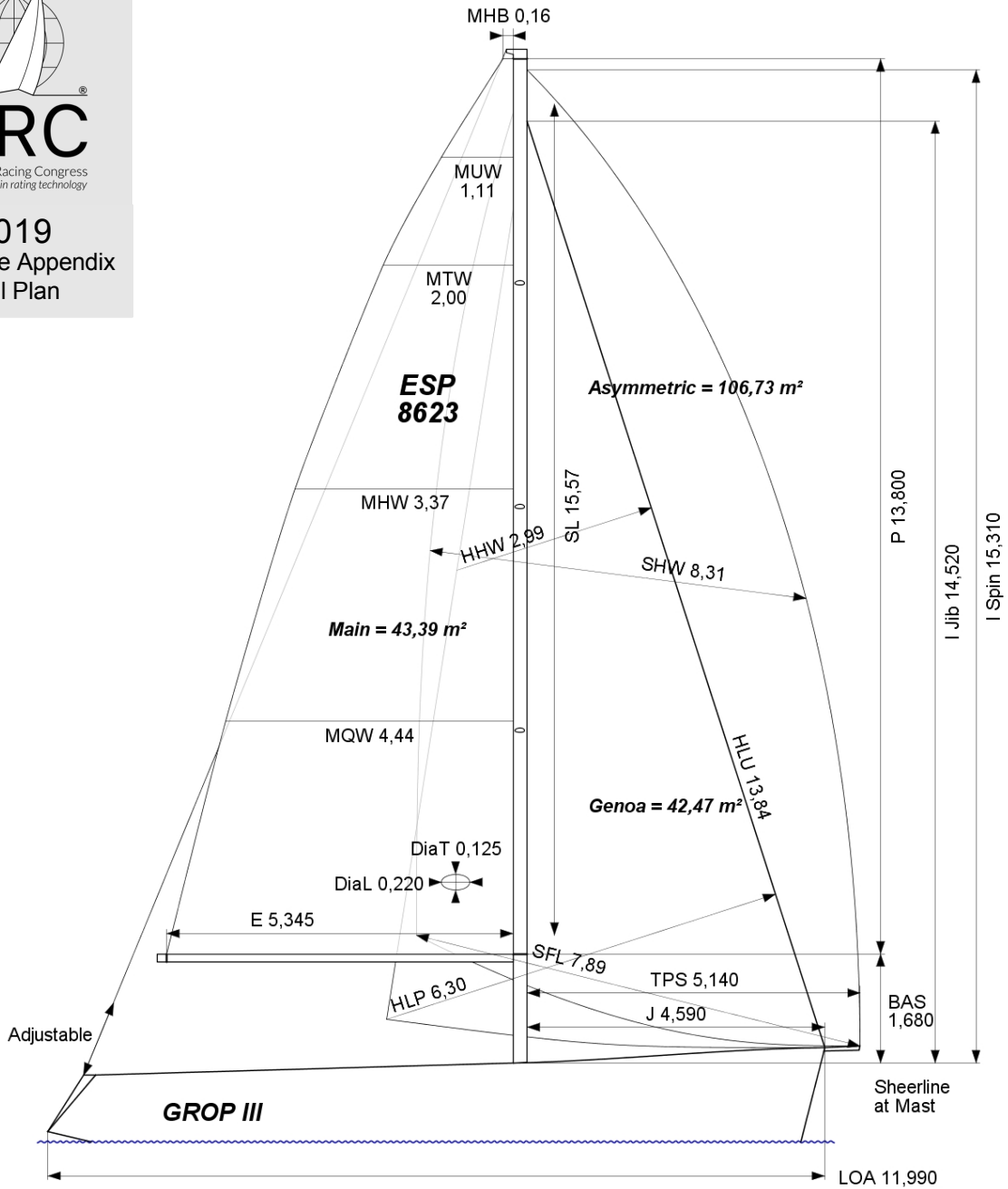
<b>MEASUREMENT INVENTORY</b>								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank	Gasoil	INOX	180.0	9.40		0-0	
2	Tank	Agua	PVC	160.0	9.40		0-0	
3	Tank	agua	pvc	210.0	6.70		0-0	
4	Tank	tanque			9.20			tanque aguas sucias
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2019**  
Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
002	0.16	1.11	2.00	3.37	4.44	43.40		20/03/2017		Unknown						
HEADSAILS (3)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.06	0.76	1.47	2.99	4.60	6.30	13.84	137%	42.47							RI
3	0.08	0.57	1.15	2.31	3.59	4.90	14.18	107%	33.84	Y			11/02/2015			Unknow remedicion
2	0.08	0.28	0.50	1.06	1.75	2.45	11.75	53%	13.53	Y			06/03/2014			Unknow
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	16.52	14.62	15.57	8.31	7.89	106.74	asym				Unknown	RI				
3	16.10	14.10	15.10	8.02	7.83	100.45	asym		11/06/2013		Unknown					
2	13.54	12.64	13.09	6.73	7.16	74.36	asym		06/03/2014		Unknown					