

| | | |
|---|----------------------------|--|
| BOAT Name COURRIER DU COEUR Sail Nr RUS-2790 | GPH 565.7 | HULL Length Overall 13.352m Maximum Beam 3.968m Displacement 9,853kg Draft 2.638m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.106% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension |
| GENERAL Class FIRST 44.7 Designer FARR Builder BENETEAU Series 11/2003, CIN BEYD5133A606 Age 01/2006 Age Allowance 0.487% Offset File F222.OFF - 02/04/2004 18:52:00 Measurement by KASSIOTIS - 31/08/2018 | | IMSL 11.966m VCGD -0.092m Sink 27.62kg/mm RL 10.789m VCGM -0.066m WS 36.75m² LSM0 11.911m Displacement/Length ratio 5.8307 |



World Leader in Rating Technology

2018
ORC International
Certificate

| SCORING OPTIONS | | | | | | |
|------------------------|--------------------------------|---------------|---------------|---------------------------|---------------|---------------|
| | COASTAL / LONG DISTANCE | | | WINDWARD / LEEWARD | | |
| Time on Distance | 548.7 | | | 610.8 | | |
| Time on Time | 1.0935 | | | 1.1051 | | |
| Triple Number | Low | Medium | High | Low | Medium | High |
| Time on Distance | 650.4 | 500.3 | 445.7 | 836.9 | 614.4 | 530.0 |
| Time on Time | 1.0378 | 1.3492 | 1.5144 | 0.8065 | 1.0986 | 1.2737 |

Rating Office

Offshore
Racing
Congress



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| TIME ALLOWANCES | | | | | | | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG | 945.6 | 779.4 | 686.0 | 642.9 | 625.3 | 616.9 | 599.0 |
| 52° | 624.8 | 523.1 | 473.6 | 454.6 | 447.4 | 443.7 | 438.0 |
| 60° | 593.6 | 501.1 | 461.0 | 444.3 | 436.3 | 432.3 | 428.9 |
| 75° | 570.9 | 486.8 | 452.5 | 435.4 | 423.5 | 415.0 | 407.4 |
| 90° | 577.5 | 488.8 | 449.5 | 433.3 | 418.7 | 405.1 | 385.0 |
| 110° | 584.2 | 481.3 | 441.2 | 420.1 | 405.5 | 394.8 | 376.2 |
| 120° | 599.6 | 491.8 | 445.9 | 422.3 | 400.9 | 381.9 | 360.6 |
| 135° | 661.8 | 536.2 | 468.0 | 437.8 | 416.3 | 394.4 | 352.7 |
| 150° | 782.1 | 623.1 | 527.3 | 470.1 | 439.9 | 419.7 | 379.5 |
| Run VMG | 903.1 | 719.5 | 608.9 | 537.2 | 490.6 | 454.1 | 412.5 |

Certificate

Number **001310**
ORC Ref **GRE01010394**
Issued On **13/09/2018**
VPP Ver. **2018 1.00**
Valid until **28/02/2019**

| Selected Courses | | | | | | | |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Windward / Leeward | 924.4 | 749.5 | 647.5 | 590.0 | 557.9 | 535.5 | 505.8 |
| Circular Random | 780.6 | 629.4 | 548.6 | 501.9 | 473.2 | 454.2 | 428.8 |
| Coastal / Long Distance | 922.2 | 704.8 | 584.7 | 517.3 | 482.5 | 455.4 | 413.5 |
| Non Spinnaker | 841.2 | 672.4 | 580.4 | 526.1 | 492.3 | 469.7 | 440.2 |

Crew Weight

Default **883kg**
Maximum **883kg**
Minimum* **662kg**
**when applied by the NoR and SI*
Non Manual Pwr **Rig**

| 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 | 42.2° | 40.7° | 39.8° | 38.4° | 37.6° | 37.5° | 36.8° |
| Beat VMG | 3.81 | 4.62 | 5.25 | 5.60 | 5.76 | 5.84 | 6.01 |
| 52° | 5.76 | 6.88 | 7.60 | 7.92 | 8.05 | 8.11 | 8.22 |
| 60° | 6.06 | 7.18 | 7.81 | 8.10 | 8.25 | 8.33 | 8.39 |
| 75° | 6.31 | 7.39 | 7.96 | 8.27 | 8.50 | 8.67 | 8.84 |
| 90° | 6.23 | 7.37 | 8.01 | 8.31 | 8.60 | 8.89 | 9.35 |
| 110° | 6.16 | 7.48 | 8.16 | 8.57 | 8.88 | 9.12 | 9.57 |
| 120° | 6.00 | 7.32 | 8.07 | 8.52 | 8.98 | 9.43 | 9.98 |
| 135° | 5.44 | 6.71 | 7.69 | 8.22 | 8.65 | 9.13 | 10.21 |
| 150° | 4.60 | 5.78 | 6.83 | 7.66 | 8.18 | 8.58 | 9.49 |
| Run VMG | 3.99 | 5.00 | 5.91 | 6.70 | 7.34 | 7.93 | 8.73 |
| Gybe Angles | 143.4° | 147.7° | 150.0° | 154.8° | 164.0° | 180.0° | 180.0° |

Special Scoring

| | |
|---------------------------|---------------|
| ToD | ToT |
| Non Spin GPH 599.2 | 1.0013 |
| Non Spin OSN 581.3 | 1.0321 |

Sails Limitations

| | |
|-----------|------------|
| Headsails | Spinnakers |
| 6 | 4 |

Class Division Length

CDL = **11.378**

Storm Sails Areas

Heavy Weather Jib **40.98**
Storm Jib (JL=11.33) **15.18**
Storm Trysail **18.76**

Owner

| | |
|--|--|
| BOAT | |
| Name COURRIER DU File RUS2790 | Sail Nr RUS-2790 Data in meters/kilograms |

| | | |
|--|------------------|-----------------------|
| INCLINING TEST AND FREEBOARDS | | |
| Inclining Test Current Inclining | | |
| Flotation date 30/08/2018 | SG 1.0285 | |
| FFM 1.513 | FF 1.510 | SFFP 0.322 |
| FAM 1.165 | FA 1.167 | SAFP 12.761 |
| W1 131.7 | PD1 223.0 | WD 12.150 |
| W2 131.7 | PD2 223.0 | GSA 78.5 |
| W3 131.7 | PD3 223.0 | RSA 6361.7 |
| W4 131.7 | PD4 223.0 | PLM 2210.0 |
| LCF from stem on CL / on sheer | | 7.354 / 7.593 |
| Maximum beam station from stem | | 8.675 |
| RM Measured | | 274.1kg-m |
| RM Default | | 266.5kg-m |
| Limit of positive stability / Stab.Index | | 122.5° / 128.6 |
| Freeboard at mast at 4.850 | | 1.332 |



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2018
IMS Measurement
Certificate

| | |
|-------------------------------|----------------------------|
| Certificate | |
| Number 001310 | ORC Ref GRE01010394 |
| Issued On 13/09/2018 | VPP Ver. 2018 1.00 |
| Valid until 28/02/2019 | |

| | |
|--------------------------------|----------------------------|
| RIG | |
| Forestay Tension Aft | Spreaders 2 |
| Inner Stay None Fitted | Runners 0 |
| Carbon Mast Yes | Jumper Struts None |
| Taper Hollows No | Jib Furler No |
| Fiber Rigging No | Main Furler No |
| Lenticular Rigging No | Without Backstay No |
| Articulated Bowsprit No | |
| P 17.150 | E 6.250 |
| IG 17.305 | J 4.850 |
| ISP 18.955 | SFJ 0.000 |
| BAS 1.805 | SPL 5.240 |
| FSP 0.720 | TPS |
| MDT1 0.118 | MW 0.212 |
| MDL1 0.212 | GO 0.245 |
| MDT2 0.108 | BD 0.200 |
| MDL2 0.172 | MWT |
| TL 1.500 | MCG |

| | |
|-----------------------------|--|
| MIZZEN RIG AND SAILS | |
| N/A | |

| | | |
|-----------------------------------|--------------------|------------------|
| PROPELLER | | |
| Installation Strut | PRD 0.480 | |
| Type Folding 3 or 4 blades | PBW 0.120 | |
| Twin Screw No | PIPA 0.0039 | |
| ST1 0.046 | ST3 0.177 | ST5 0.272 |
| ST2 0.175 | ST4 0.110 | EDL 3.000 |

| | |
|-----------------|--|
| COMMENTS | |
| | |

| | |
|------------------------|--|
| MOVABLE BALLAST | |
| N/A | |

| | |
|--------------------|--|
| CENTERBOARD | |
| N/A | |



| | | | | | | | | | |
|------------------------------|-------|-------|-------|------|------|--------|----------|---|--|
| SAILS (Maximum Areas) | | | | | | | | | |
| Mainsail | MHB | MUW | MTW | MHW | MQW | Area | Area (r) | Formula | |
| | 0.210 | 1.14 | 2.08 | 3.69 | 4.99 | 59.97 | 60.82 | P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB) | |
| Symmetric | SLU | SLE | SL | SHW | SFL | 147.49 | | SL · (SFL + 4·SHW) / 6 | |
| | 18.78 | 18.78 | 18.78 | 9.52 | 9.04 | | | | |
| Asymmetric Not Available | | | | | | | | | |

| | | | | | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------------|-----------------|----------------|
| HEADSAILS | | | | | | | | | | | | |
| Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB) | | | | | | | | | | | | |
| HHB | HUW | HTW | HHW | HQW | HLP | HLU | Area | Btn | Fly | Meas.Date | Material | Comment |
| 0.14 | 0.80 | 1.46 | 2.70 | 3.84 | 5.02 | 17.05 | 44.87 | | | 20/08/2018 | Unknow | |
| 0.14 | 0.78 | 1.41 | 2.61 | 3.76 | 5.04 | 17.12 | 44.27 | | | 20/08/2018 | Unknow | |

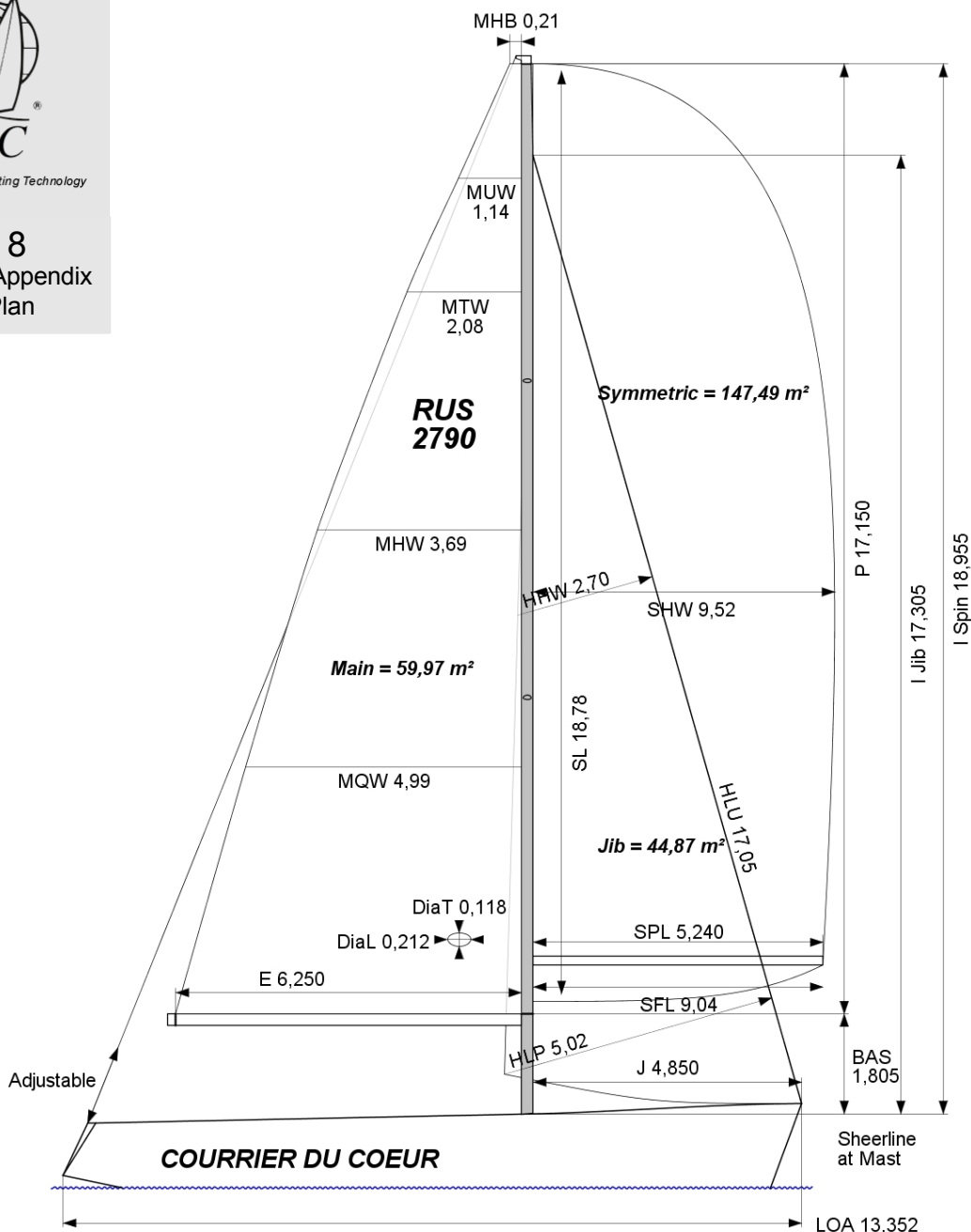
| | | | | |
|-----------------------------------|-------------|---------------------------|-----------------|------------------------|
| MEASUREMENT INVENTORY | | | | |
| Measurer KASSIOTIS GRE-116 | | | | |
| Date 30/08/2018 | | | | |
| Comment | | | | |
| Id | Item | Weight | Distance | VCG Description |
| Id | Item | Maker | Model | |
| 1 | Engine | YANMAR | 4JH4E | |
| Id | Item | Weight Description | | |

| | | | | | | |
|------------------------------|-------------|-----------------|------------------|-----------------------------|--------------|-------------------------------|
| MEASUREMENT INVENTORY | | | | | | |
| Id | Item | Tank Use | Tank Type | Capcty | Dist. | VCG Condtn Description |
| 1 | Tank | HOLDING | PVC | 90.0 | 8.40 | 0.60 0-0 |
| 2 | Tank | FUEL | PVC | 200.0 | 10.35 | -0.05 30-0 |
| 3 | Tank | FUEL | STEEL INOX | 70.0 | 11.25 | 0.15 0-0 |
| 4 | Tank | WATER | PVC | 200.0 | 10.35 | -0.05 0-0 |
| 5 | Tank | WATER | GRP | 100.0 | 6.85 | -0.32 0-0 |
| Id | Item | Weight | Distance | VCG Description | | |
| 1 | Ballast | 88.2 | 5.35 | -0.37 2*(0,18*0,08*0,27) PB | | |
| 2 | Ballast | 88.2 | 5.65 | -0.37 2*(0,18*0,08*0,27) PB | | |
| 3 | Ballast | 57.1 | 5.65 | -0.26 2*(0,07*0,08*0,45) PB | | |
| 1 | Battery | 20.0 | 7.28 | -0.40 70Ah BOSCH | | |
| 2 | Battery | 40.0 | 8.13 | -0.40 2*(70Ah BOSCH) | | |
| 3 | Battery | 40.0 | 8.38 | -0.40 2*(70Ah BOSCH) | | |
| Misc | | | | | | |



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2018
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

| Id | MHB | MUW | MTW | MHW | MQW | Area | Measurer | Meas.Date | Manufacture | Material | Comment |
|----|-------|------|------|------|------|-------|----------|------------|-------------|----------|---------|
| 1 | 0.210 | 1.14 | 2.08 | 3.69 | 4.99 | 59.97 | KALATZIS | 20/08/2018 | | Unknown | |

HEADSAILS (2)

| Id | HHB | HUW | HTW | HHW | HQW | HLP | HLU | Ovrlp | Area | Btn | Fly | Measurer | Meas.Date | Manufacture | Material | Comment |
|----|------|------|------|------|------|------|-------|-------|-------|-----|-----|----------|------------|-------------|----------|---------|
| 1 | 0.14 | 0.80 | 1.46 | 2.70 | 3.84 | 5.02 | 17.05 | 104% | 44.87 | | | KALATZIS | 20/08/2018 | | Unknown | |
| 2 | 0.14 | 0.78 | 1.41 | 2.61 | 3.76 | 5.04 | 17.12 | 104% | 44.27 | | | KALATZIS | 20/08/2018 | | Unknown | |

SYMMETRIC SPINNAKERS (3)

| Id | SLU | SLE | SL | SHW | SFL | Area | Measurer | Meas.Date | Manufacture | Material | Comment |
|----|-------|-------|-------|------|------|--------|----------|------------|-------------|----------|---------|
| 3 | 18.78 | 18.78 | 18.78 | 9.52 | 9.04 | 147.49 | ESP-520 | 03/06/2015 | | Unknown | |
| 1 | 18.56 | 18.56 | 18.56 | 9.54 | 8.99 | 145.85 | KALATZIS | 20/08/2018 | | Unknown | |
| 2 | 18.64 | 18.64 | 18.64 | 9.41 | 9.03 | 144.99 | KALATZIS | 20/08/2018 | | Unknown | |

ASYMMETRIC SPINNAKERS (0)

| Id | SLU | SLE | SL | SHW | SFL | Area | Kind | Measurer | Meas.Date | Manufacture | Material | Comment |
|----|-----|-----|----|-----|-----|------|------|----------|-----------|-------------|----------|---------|
|----|-----|-----|----|-----|-----|------|------|----------|-----------|-------------|----------|---------|