



GPH = **597.5** CDL = **9.317**

BOAT

Class **ONE OFF**
Designer **ROBERTO DE BARROS**
Builder **JOAO DE DEUS ASSIS**
Age Date **01/2009**
Series Date **01/2009**
Offset File **BRA2389b.off**

HULL

Length Overall **9.950 m**
Maximum Beam **3.272 m**
Draft **2.452 m**
Displacement **3,065 kg**
DLR **3.9180**
IMS Division **Performance**
Dynamic Allowance **0.000%**
Age Allowance **0.390%**

PROPELLER

Installation **Strut**
Type **Folding 2 blades**
Diameter **0.380m**

CREW

Maximum weight **555 kg**
Minimum weight **416 kg * when applied**
Non Manual Power **No**
Crew Arm Extension

SAIL AREAS (m²)

| | Measured | Rated |
|-----------------|--------------|--------------|
| Mainsail | 35.79 | 36.71 |
| Headsail Luffed | 25.64 | 25.64 |
| Headsail Flying | | |

Symmetric
Asymmetric **111.96 111.96**
** All asymmetric spinnakers with SHW/SFL > 85%*

SAIL LIMITATIONS

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

STABILITY

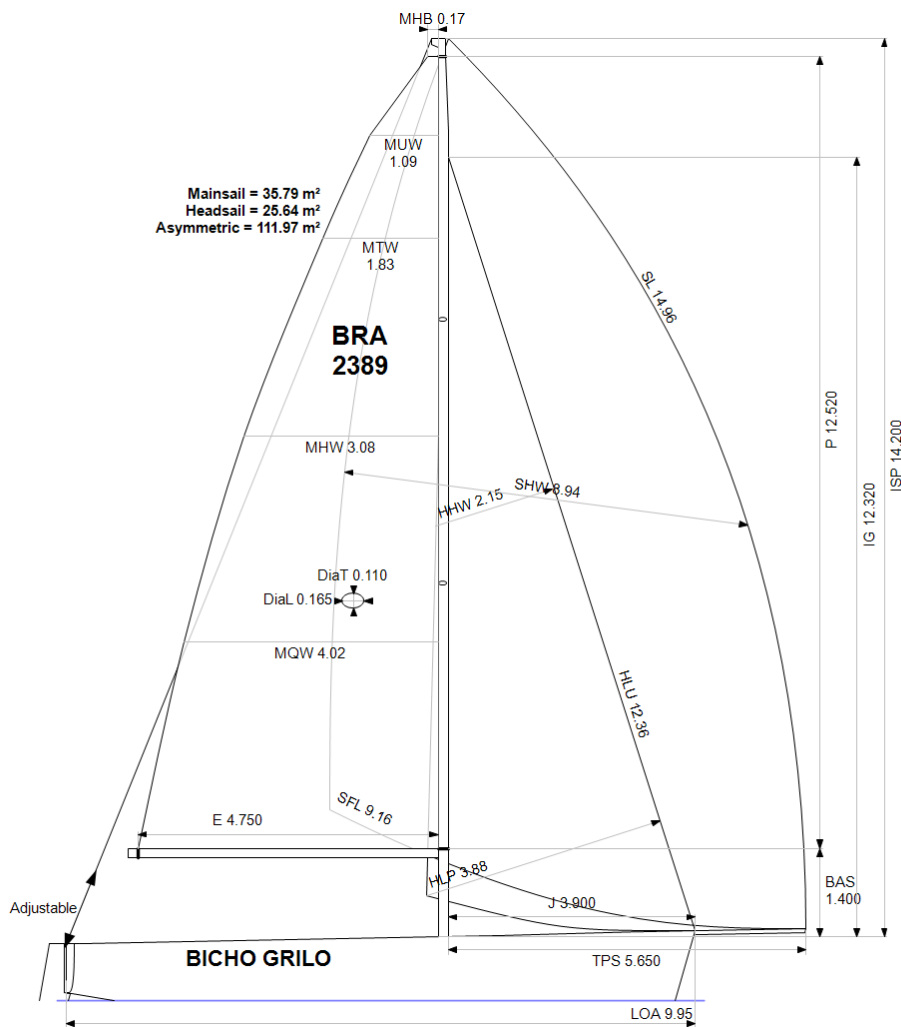
Righting Moment **95.4 kg·m**
Stability Index **110.8**

COMMENTS

OI2018

OWNER

EDUARDO HAMOND REGUA



Rated boat velocities in knots

| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
|---------------|--------|--------|--------|--------|--------|--------|--------|
| Beat Angles | 42.8° | 40.9° | 39.4° | 37.5° | 37.1° | 37.1° | 36.8° |
| Beat VMG | 3.53 | 4.31 | 4.92 | 5.19 | 5.29 | 5.33 | 5.43 |
| 52° | 5.37 | 6.41 | 7.01 | 7.25 | 7.35 | 7.40 | 7.55 |
| 60° | 5.67 | 6.67 | 7.17 | 7.46 | 7.60 | 7.68 | 7.88 |
| 75° | 5.92 | 6.84 | 7.30 | 7.72 | 8.06 | 8.24 | 8.39 |
| 90° | 6.03 | 7.07 | 7.39 | 7.74 | 8.22 | 8.68 | 9.17 |
| 110° | 6.15 | 7.19 | 7.81 | 8.27 | 8.61 | 8.99 | 9.76 |
| 120° | 6.00 | 7.10 | 7.75 | 8.47 | 9.05 | 9.51 | 10.47 |
| 135° | 5.30 | 6.63 | 7.36 | 8.00 | 8.75 | 9.67 | 11.75 |
| 150° | 4.46 | 5.61 | 6.64 | 7.29 | 7.77 | 8.37 | 10.12 |
| Run VMG | 3.86 | 4.86 | 5.75 | 6.32 | 6.73 | 7.25 | 8.77 |
| Gybe Angles | 143.0° | 147.0° | 148.5° | 151.0° | 147.5° | 145.0° | 141.0° |

The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.



International
Certificate
2021

Boat
BICHO GRILO
BRA 2389

ABVO ORC BRASIL



Certificate number: 238902

Time Allowances in secs/NM

| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
|--------------------|--------|-------|-------|-------|-------|-------|-------|
| Beat VMG | 1018.8 | 835.4 | 732.0 | 694.0 | 680.7 | 675.2 | 663.1 |
| 52° | 669.9 | 561.3 | 513.4 | 496.5 | 490.0 | 486.7 | 476.8 |
| 60° | 634.5 | 540.0 | 501.8 | 482.5 | 473.5 | 468.6 | 456.9 |
| 75° | 608.1 | 525.9 | 492.8 | 466.6 | 446.6 | 437.1 | 429.2 |
| 90° | 596.7 | 509.3 | 487.1 | 465.2 | 437.8 | 414.9 | 392.5 |
| 110° | 585.6 | 500.6 | 460.7 | 435.5 | 418.1 | 400.3 | 368.8 |
| 120° | 599.5 | 506.9 | 464.6 | 425.2 | 397.9 | 378.6 | 343.7 |
| 135° | 679.6 | 542.7 | 488.9 | 449.8 | 411.3 | 372.3 | 306.4 |
| 150° | 807.5 | 641.9 | 542.3 | 493.9 | 463.6 | 429.9 | 355.7 |
| Run VMG | 932.4 | 741.2 | 626.1 | 569.9 | 535.3 | 496.4 | 410.7 |
| Selected Courses | | | | | | | |
| Windward / Leeward | 975.6 | 788.3 | 679.1 | 631.9 | 608.0 | 585.8 | 536.9 |
| All purpose | 748.4 | 616.7 | 550.1 | 516.4 | 494.8 | 476.3 | 442.4 |

Single Number Scoring Options

| Course | Time On Distance | Time On Time |
|--------------------|------------------|--------------|
| Windward / Leeward | 660.0 | 0.9090 |
| All purpose | 532.7 | 1.1263 |



Data in meters/kilograms (Metric)

HULL AND APPENDAGES

| | | | | | |
|-------------------|---------------------|--------------|--------------|--------------------------------|---------------|
| Class | ONE OFF | LOA | 9.950 | VCGD | -0.085 |
| Measurement | 13/09/2017 | Max. Beam | 3.272 | VCGM | -0.098 |
| Measurer | RALBUQUERQUE | Draft | 2.452 | RM Measured (kg·m) | 95.4 |
| HIN | | Displacement | 3.065 | RM Default (kg·m) | 93.1 |
| Plan review | | Wetted area | 21.09 | Limit of positive stability(°) | 116.1 |
| Hull construction | Cored | IMS L | 9.401 | Stability Index | 110.8 |
| Carbon Rudder | Yes | LSM0 | 9.214 | | |
| Light stanchions | | Acc. length | 9.950 | | |
| Trim tab | No | Sink (kg/mm) | 16.45 | | |

PROPELLER

| | | | | | | | |
|----------------|-------------------------|-----|--------------|-----|--------------|-----|--------------|
| Propeller Type | Folding 2 blades | PRD | 0.380 | EDL | 1.760 | ST3 | 0.180 |
| Installation | Strut | PBW | 0.095 | ST1 | 0.042 | ST4 | 0.112 |
| Twin screw | No | | | ST2 | 0.180 | ST5 | 0.250 |
| PIPA | 0.0033 | | | | | | |

RIG

| | | | | | |
|----------------------|--------------------|------|---------------|-----|---------------|
| Forestay tension | Aft | P | 12.520 | E | 4.750 |
| Inner stay | None Fitted | IG | 12.320 | J | 3.900 |
| Carbon mast | No | ISP | 14.200 | BAS | 1.400 |
| Headsail furler | No | MDT1 | 0.110 | FSD | 0.028 |
| Mainsail furler | No | MDL1 | 0.165 | SFJ | -0.002 |
| Articulated bowsprit | No | MDT2 | 0.105 | SPL | 0.000 |
| Non-circular rigging | No | MDL2 | 0.115 | TPS | 5.650 |
| Fiber rigging | No | TL | 1.200 | BD | 0.145 |
| Runners/Checkstays | 0 | MW | 0.165 | MWT | |
| Spreaders | 2 | GO | 0.180 | MCG | |

FLOTATION AND STABILITY

| | | | | | | | | | | | |
|----------------|------------------------|-------|---------------|-------|--------------|----|-------------|-----|--------------|-----|----------------|
| Inclining Test | Poles Inclining | SFFP | 0.720 | SAFP | 9.750 | W1 | 70.0 | PD1 | 525.5 | WD | 9.100 |
| Flotation Date | 13/09/2017 | FFM | 1.085 | FAM | 0.802 | W2 | 70.0 | PD2 | 525.5 | PLM | 9000.00 |
| Measurer | | FF | 1.085 | FA | 0.802 | W3 | 70.0 | PD3 | 526.6 | GSA | 1.0 |
| Comment | | LCFcl | 5.410 | LCFsh | 5.645 | W4 | 70.0 | PD4 | 526.6 | RSA | 1.0 |
| | | SG | 1.0250 | HBI | 1.008 | | | | | | |



International
Certificate
2021

Boat
BICHO GRILLO
BRA 2389

ABVO ORC BRASIL



Certificate number: 238902

MAINSAIL

| Id | MHB | MUW | MTW | MHW | MQW | Area | Measurer | Meas.Date | Maker | Material | Comment |
|----|------|------|------|------|------|-------|--------------|------------|---------|----------|-----------|
| M | 0.17 | 1.09 | 1.83 | 3.08 | 4.02 | 35.79 | RALBUQUERQUE | 22/05/2021 | QUANTUM | Kevlar | REMEDICAO |

HEADSAIL

| Id | HHB | HUW | HTW | HHW | HQW | HLP | HLU | Btn | Flying | FT | Area | Measurer | Meas.Date | Maker | Material | Comment |
|----|------|------|------|------|------|------|-------|-----|--------|----|-------|--------------------|------------|---------|----------|-----------|
| Q1 | 0.07 | 0.61 | 1.18 | 2.15 | 3.06 | 3.88 | 12.36 | No | No | | 25.64 | RALBUQUERQUE | 22/05/2021 | QUANTUM | Kevlar | REMEDICAO |
| G | 0.09 | 0.52 | 0.97 | 1.87 | 2.75 | 3.62 | 11.43 | No | No | | 21.20 | MAURITY BORGES JR. | 30/05/2015 | UK | Kevlar | |

ASYMMETRIC SPINNAKER

| Id | SLU | SLE | SL | SHW | SFL | Ratio | Area | Measurer | Meas.Date | Maker | Material | Comment |
|------|-------|-------|-------|------|------|-------|--------|--------------|------------|---------|----------|-----------|
| A1.5 | 16.08 | 13.83 | 14.96 | 8.94 | 9.16 | 98% | 111.96 | FREITAS | 07/05/2021 | QUANTUM | Nylon | NEW |
| A2 | 16.05 | 13.84 | 14.95 | 8.87 | 9.18 | 97% | 111.24 | FREITAS | 07/05/2021 | QUANTUM | Nylon | NEW |
| A4 | 15.91 | 14.05 | 14.98 | 8.35 | 8.89 | 94% | 105.58 | Manolo Bunge | 19/10/2015 | Olimpic | Nylon | Balão C30 |
| A0 | 14.34 | 12.73 | 13.54 | 6.30 | 7.32 | 86% | 73.36 | FREITAS | 07/05/2021 | QUANTUM | Nylon | NEW |