



2020
ORC Club
Certificate

Rating Office
Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate
Number **00024**
Issued On **06/06/2020**
ORC Ref **03420000K2A**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

| | |
|----------|--------------|
| Default | 512kg |
| Maximum | 512kg |
| Minimum* | 384kg |

**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

| | |
|---------------------------|---------------|
| ToD | ToT |
| Non Spin GPH 793.4 | 0.7562 |
| Non Spin OSN 762.8 | 0.7866 |

Sails Limitations

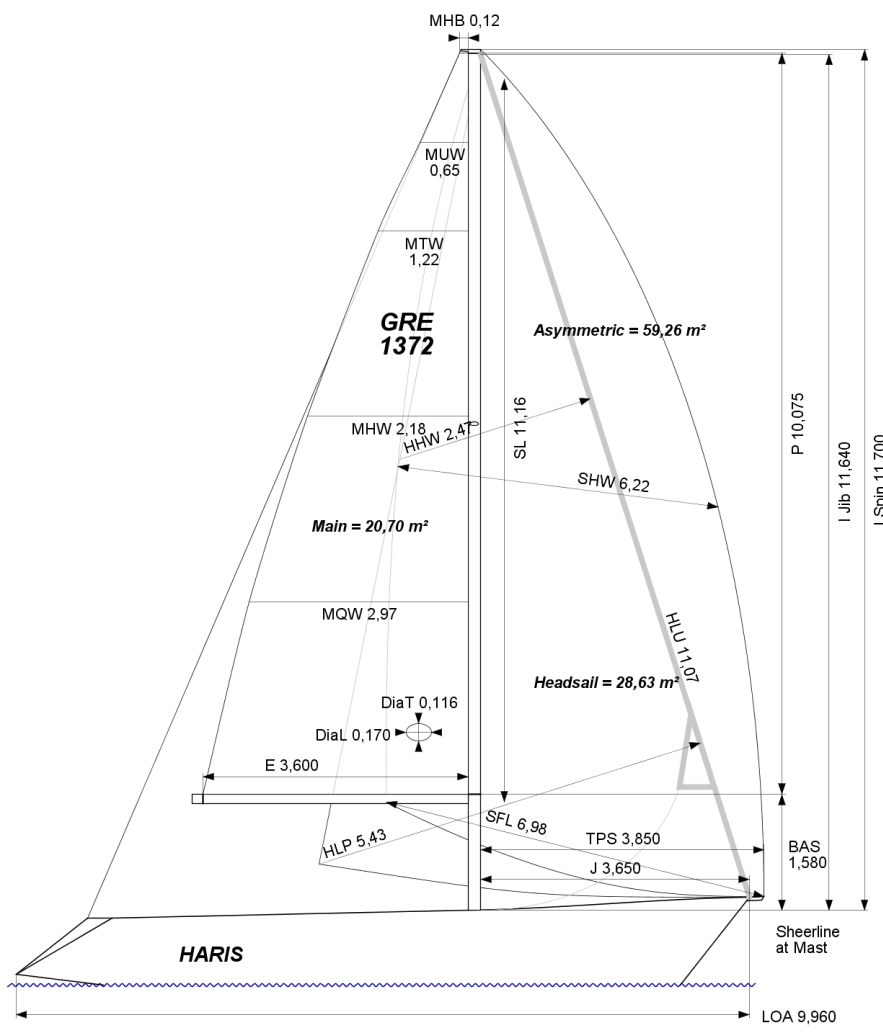
Headsails **1** Spinnakers **4**
Woven Polyester
Asymmetric on centerline

Spinnaker configuration
Symmetric: **No**
Asymmetric: **Yes 59.26**
Flying H/S: **No**
Spin. Pole: **No**

Class Division Length
CDL = **6.927**

Stability (Estimated)
Limit Positive Stab.: **107.0°**
Stability Index: **109.5**

Owner



| | | | | | | | | |
|---|--------------------------------|----------------------------|---|---------------------------|---------------|---------------|--|--|
| BOAT Name HARIS Sail Nr GRE-1372 | | GPH 758.0 | HULL Data File GR1372 LOA 9.960m Offset File Dr3000xt.off MB 3.240m Displacement 5,204kg Draft 1.714m | | | | | |
| CLASS Class DISCOVERY 3000 XT Designer ED DUBOIS Builder DROMOR Series 01/1985 Age Date 01/1985 Age Allowance 0.487% | | | IMS Division Cruiser/Racer Dynamic All. 0.566% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No | | | | | |
| COMMENTS | | | IMSL 8.419m VCGD 0.112m Sink 16.02kg/mm RL 5.434m VCGM 0.146m WS 21.98m² LSM0 8.123m Displacement/Length ratio 9.7093 Water Ballast 0 Trim Tab No BLR Index 0.0000 | | | | | |
| PROPELLER Installation Strut PRD 0.400 Type Solid 3 blades PIPA 0.0194 | | | CENTERBOARD NA | | | | | |
| SCORING OPTIONS | | | | | | | | |
| | COASTAL / LONG DISTANCE | | | WINDWARD / LEEWARD | | | | |
| Time on Distance | 733.7 | | | 832.3 | | | | |
| Time on Time | 0.8178 | | | 0.8110 | | | | |
| Triple Number | Low | Medium | High | Low | Medium | High | | |
| Time on Distance | 905.2 | 663.2 | 569.7 | 1183.0 | 846.7 | 698.9 | | |
| Time on Time | 0.7457 | 1.0178 | 1.1848 | 0.5706 | 0.7972 | 0.9658 | | |

| | |
|--------------------|---------------------------------|
| BOAT | |
| Name HARIS | Sail Nr GRE-1372 |
| File GR1372 | Data in meters/kilograms |

| | | | |
|--|-----------------|-----------------------|--|
| INCLINING TEST AND FREEBOARDS | | | |
| Inclining Test Club Estimated VCG | | | |
| Flotation date 06/05/2009 | | SG | |
| FFM 1.152 | FF 1.178 | SFFP 0.580 | |
| FAM 0.850 | FA 0.849 | SAFP 8.658 | |
| LCF from stem on CL / on sheer | | 5.279 / 5.522 | |
| Maximum beam station from stem | | 5.400 | |
| RM Measured | | 91.2kg-m | |
| RM Default | | 88.5kg-m | |
| Limit of positive stability / Stab.Index | | 107.0° / 109.5 | |
| Freeboard at mast at 3.650 | | 1.014 | |



ORC
Offshore Racing Congress
World leader in rating technology

2020
Measurements
Datasheet

| | | | |
|--------------------------------|-----------------------------|-------------------|-----|
| RIG | | | |
| Forestay Tension Fixed | Spreaders 1 | | |
| Inner Stay None Fitted | Runners/Checkstays 0 | | |
| Carbon Mast No | Jib Furler Yes | | |
| Fiber Rigging No | Main Furler No | | |
| Non-Circular Rigging No | | | |
| Articulated Bowsprit No | | | |
| P 10.075 | E 3.600 | MDT1 0.116 | MW |
| IG 11.640 | J 3.650 | MDL1 0.170 | GO |
| ISP 11.700 | SFJ 0.000 | MDT2 | BD |
| BAS 1.580 | SPL | MDL2 | MWT |
| FSD -3.000 | TPS 3.850 | TL -3.000 | MCG |

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

| | | | |
|----------------------------|--------------------|-----|--|
| PROPELLER | | | |
| Installation Strut | PRD 0.400 | | |
| Type Solid 3 blades | PBW | | |
| Twin Screw No | PIPA 0.0194 | | |
| ST1 | ST3 | ST5 | |
| ST2 | ST4 | EDL | |

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

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

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

| SAILS INVENTORY | | | | | | | | | | | | | | | | |
|----------------------------------|-------|-------|-------|------|------|-------|----------|------------|-------------|-------------|----------|----------|------------|-------------|----------|---------|
| MAINSAIL (1) | | | | | | | | | | | | | | | | |
| Id | MHB | MUW | MTW | MHW | MQW | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| 1 | 0.12 | 0.65 | 1.22 | 2.18 | 2.97 | 20.71 | | 06/05/2009 | | Dacron | | | | | | |
| HEADSAILS (2) | | | | | | | | | | | | | | | | |
| Id | HHB | HUW | HTW | HHW | HQW | HLP | HLU | Ovrlp | Area | Btn | Flying | Measurer | Meas.Date | Manufacture | Material | Comment |
| 1 | 0.07 | 0.60 | 1.19 | 2.47 | 3.89 | 5.43 | 11.07 | 149% | 28.63 | | No | | 06/05/2009 | | Dacron | |
| 2 | 0.07 | 0.55 | 1.10 | 2.45 | 3.89 | 5.28 | 11.13 | 145% | 28.23 | | No | | 06/05/2009 | | Dacron | |
| SYMMETRIC SPINNAKERS (0) | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | SL | SHW | SFL | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| ASYMMETRIC SPINNAKERS (1) | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | SL | SHW | SFL | Area | Kind | Measurer | Meas.Date | Manufacture | Material | Comment | | | | |
| 1 | 10.90 | 11.42 | 11.16 | 6.22 | 6.98 | 59.26 | asym | | 21/02/2014 | | Unknown | | | | | |

| MEASUREMENT INVENTORY | | | | |
|-------------------------------------|--------|--------|-------------|-----------------|
| Measurer GRE-18 | | | | |
| Date 06/05/2009 | | | | |
| Comment | | | | |
| Internal Ballast total = 0.0 | | | | |
| Id | Item | Weight | Distance | VCG Description |
| 4 | Anchor | 42.0 | 0.60 | GQR |
| 2 | Anchor | 8.0 | 9.50 | DANFORTH |
| 4 | Chain | 80.0 | 0.60 | 60m * 8mm |
| 2 | Chain | 54.0 | 9.50 | 40m * 8mm |
| 4 | Tools | 40.0 | 4.50 | |
| Id | Item | Maker | Model | |
| 1 | Engine | YANMAR | 3YM20 22H | |
| Id | Item | Weight | Description | |

| MEASUREMENT INVENTORY | | | | | | | | | |
|------------------------------|---------|--------|----------|-----------------|--------|-------|-----|--------|-------------|
| Id | Item | Tank | Use | Tank Type | Capcty | Dist. | VCG | Condtn | Description |
| 1 | Tank | W | | PL | 120.0 | 4.00 | | | 0-0 |
| 2 | Tank | W | | PL | 120.0 | 4.00 | | | 0-0 |
| 3 | Tank | F | | IN | 80.0 | 6.50 | | | 0-0 |
| Id | Item | Weight | Distance | VCG Description | | | | | |
| 1 | Battery | 25.0 | 6.50 | 100 A | | | | | |
| 2 | Battery | 25.0 | 6.50 | 100 A | | | | | |
| 1 | Misc | 12.0 | | windlass | | | | | |

2020

ORC Club Certificate Appendix

| BOAT | |
|-------------------------|---------------------------------|
| Name HARIS | Certificate Number 00024 |
| Sail Nr GRE-1372 | Issued On 06/06/2020 |

| TIME ALLOWANCES | | | | | | | |
|-------------------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG | 1413.6 | 1144.2 | 1001.8 | 905.8 | 836.6 | 803.6 | 795.4 |
| 52° | 896.3 | 736.8 | 650.6 | 591.5 | 558.4 | 543.5 | 537.3 |
| 60° | 831.9 | 690.8 | 610.6 | 563.6 | 539.7 | 526.9 | 519.0 |
| 75° | 789.4 | 658.7 | 581.6 | 544.2 | 524.8 | 511.5 | 494.3 |
| 90° | 788.6 | 642.9 | 560.7 | 525.5 | 507.7 | 498.4 | 481.1 |
| 110° | 777.0 | 633.5 | 553.6 | 520.0 | 498.7 | 479.5 | 449.4 |
| 120° | 807.3 | 655.1 | 565.6 | 525.8 | 503.0 | 482.7 | 446.0 |
| 135° | 899.1 | 717.7 | 610.9 | 548.5 | 518.9 | 498.3 | 460.6 |
| 150° | 1055.1 | 827.5 | 702.3 | 619.1 | 570.9 | 539.2 | 502.6 |
| Run VMG | 1218.4 | 955.5 | 811.0 | 714.9 | 659.2 | 600.6 | 530.7 |
| Selected Courses | | | | | | | |
| Windward / Leeward | 1316.0 | 1049.8 | 906.4 | 810.3 | 747.9 | 702.1 | 663.1 |
| Circular Random | 1076.6 | 855.8 | 733.6 | 660.1 | 613.9 | 584.0 | 550.2 |
| Coastal / Long Distance | 1306.2 | 980.7 | 803.6 | 687.8 | 623.1 | 578.3 | 520.3 |
| Non Spinnaker | 1145.0 | 902.9 | 767.0 | 683.8 | 630.8 | 596.5 | 559.0 |

| 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 | 46.1° | 45.0° | 43.5° | 43.5° | 42.9° | 42.0° | 42.8° |
| Beat VMG | 2.55 | 3.15 | 3.59 | 3.97 | 4.30 | 4.48 | 4.53 |
| 52° | 4.02 | 4.89 | 5.53 | 6.09 | 6.45 | 6.62 | 6.70 |
| 60° | 4.33 | 5.21 | 5.90 | 6.39 | 6.67 | 6.83 | 6.94 |
| 75° | 4.56 | 5.47 | 6.19 | 6.61 | 6.86 | 7.04 | 7.28 |
| 90° | 4.57 | 5.60 | 6.42 | 6.85 | 7.09 | 7.22 | 7.48 |
| 110° | 4.63 | 5.68 | 6.50 | 6.92 | 7.22 | 7.51 | 8.01 |
| 120° | 4.46 | 5.50 | 6.36 | 6.85 | 7.16 | 7.46 | 8.07 |
| 135° | 4.00 | 5.02 | 5.89 | 6.56 | 6.94 | 7.22 | 7.82 |
| 150° | 3.41 | 4.35 | 5.13 | 5.82 | 6.31 | 6.68 | 7.16 |
| Run VMG | 2.95 | 3.77 | 4.44 | 5.04 | 5.46 | 5.99 | 6.78 |
| Gybe Angles | 145.0° | 145.5° | 145.3° | 145.3° | 147.5° | 171.5° | 178.0° |