

| | | |
|--|----------------------------|--|
| BOAT Name MC38 Sail Nr SWE 38100 | GPH 505.7 | HULL Length Overall 11.275m Maximum Beam 3.500m Displacement 3,339kg Draft 2.796m IMS Reg. Division Performance Dynamic Allowance 0.000% Fwd Accommodation No Hull Construction Carbon, Aramid, Light Carbon Rudder Yes Crew Arm Extension |
| GENERAL Class MC 38 Designer DUNNING Builder McCONAGHY Series 10/2011 Age 11/2011 Age Allowance 0.130% Offset File MC38C_SWE38100.OFF - 02/06/2015 Measurement by MIKAEL LINDQVIST - 19/05/2015 | | IMSL 11.092m VCGD -0.597m Sink 20.61kg/mm RL 12.175m VCGM -0.600m WS 26.25m² |



World Leader in Rating Technology

2015
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



World Leader in Rating Technology

| SCORING OPTIONS | OFFSHORE COASTAL / LONG DISTANCE | | | INSHORE WINDWARD / LEEWARD | | |
|------------------|-------------------------------------|----------------------|--------------------|-------------------------------|----------------------|--------------------|
| | PLT | PLD | | PLT | PLD | |
| Time On Distance | 493.5 | | | 559.0 | | |
| Time On Time | 1.2159 | | | 1.2076 | | |
| Performance Line | 1.010 | 82.9 | | 1.108 | 245.7 | |
| Triple Number | Low 1.1747 | Medium 1.4920 | High 1.7377 | Low 0.9035 | Medium 1.1879 | High 1.4142 |

| TIME ALLOWANCES | | | | | | | |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG | 848.6 | 691.6 | 635.3 | 605.2 | 590.0 | 584.8 | 573.8 |
| 52° | 549.1 | 468.3 | 448.0 | 435.5 | 425.5 | 417.7 | 406.6 |
| 60° | 513.3 | 451.3 | 430.9 | 416.1 | 405.4 | 395.8 | 383.8 |
| 75° | 488.9 | 435.4 | 402.4 | 384.9 | 373.7 | 365.8 | 348.2 |
| 90° | 492.7 | 440.8 | 393.2 | 361.7 | 346.4 | 335.6 | 323.0 |
| 110° | 484.5 | 431.7 | 400.3 | 367.6 | 345.7 | 316.3 | 281.4 |
| 120° | 505.2 | 436.6 | 388.2 | 356.0 | 334.0 | 312.1 | 280.3 |
| 135° | 574.1 | 466.0 | 417.9 | 369.0 | 323.8 | 292.8 | 265.3 |
| 150° | 696.5 | 557.5 | 481.4 | 430.9 | 387.3 | 338.7 | 263.7 |
| Run VMG | 804.2 | 643.7 | 555.9 | 501.2 | 447.2 | 391.1 | 304.5 |

Certificate

Number **6250**
ORC Ref **SSF00001330**
Issued On **31/08/2015**
VPP Ver. **2015 1.01**
Valid until **31/12/2015**

Crew Weight

Declared **665kg**
Default* **749kg**
Non Manual Pwr

Special Scoring

| | | |
|----------------|--------------|---------------|
| | ToD | ToT |
| Non Spin GPH | 548.9 | 1.0931 |
| Non Spin OSN | 535.8 | 1.1199 |
| N/S Perf. Line | 45.2 | 0.859 |

| Selected Courses | | | | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Windward / Leeward | 826.4 | 667.7 | 595.6 | 553.2 | 518.6 | 487.9 | 439.2 |
| Circular Random | 693.0 | 562.5 | 491.9 | 448.9 | 419.6 | 397.5 | 364.3 |
| Ocean for PCS | 739.6 | 587.3 | 501.5 | 446.9 | 408.4 | 379.3 | 337.6 |
| Non Spinnaker | 769.2 | 616.3 | 532.4 | 481.5 | 447.9 | 423.7 | 388.2 |

Sails Limitations

| | |
|-----------|------------|
| Headsails | Spinnakers |
| 7 | 4 |

| 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 | 43.7° | 41.1° | 38.5° | 36.4° | 35.4° | 35.5° | 35.1° |
| Beat VMG | 4.24 | 5.21 | 5.67 | 5.95 | 6.10 | 6.16 | 6.27 |
| 52° | 6.56 | 7.69 | 8.03 | 8.27 | 8.46 | 8.62 | 8.85 |
| 60° | 7.01 | 7.98 | 8.35 | 8.65 | 8.88 | 9.09 | 9.38 |
| 75° | 7.36 | 8.27 | 8.95 | 9.35 | 9.63 | 9.84 | 10.34 |
| 90° | 7.31 | 8.17 | 9.16 | 9.95 | 10.39 | 10.73 | 11.15 |
| 110° | 7.43 | 8.34 | 8.99 | 9.79 | 10.41 | 11.38 | 12.79 |
| 120° | 7.13 | 8.25 | 9.27 | 10.11 | 10.78 | 11.54 | 12.84 |
| 135° | 6.27 | 7.72 | 8.62 | 9.76 | 11.12 | 12.29 | 13.57 |
| 150° | 5.17 | 6.46 | 7.48 | 8.36 | 9.30 | 10.63 | 13.65 |
| Run VMG | 4.48 | 5.59 | 6.48 | 7.18 | 8.05 | 9.20 | 11.82 |
| Gybe Angles | 138.0° | 138.6° | 147.1° | 152.9° | 141.8° | 139.6° | 145.6° |

Class Division Length

CDL = **11.635**

Storm Sails Areas

Heavy Weather Jib **34.05**
Storm Jib (JL=10.32) **12.61**
Storm Triesail **14.45**

Owner

| | |
|----------------------|---------------------------------|
| BOAT | |
| Name MC38 | Sail Nr SWE 38100 |
| File 6250.dxt | Data in meters/kilograms |

| | | |
|--|------------------|-----------------------|
| INCLINING TEST AND FREEBOARDS | | |
| Inclining Test Current Inclining | | |
| Flotation date 19/05/2015 | SG 1.0050 | |
| FFM 1.018 | FF 1.023 | SFFP 0.341 |
| FAM 0.715 | FA 0.717 | SAFP 11.265 |
| W1 101.00 | PD1 490.0 | WD 10.390 |
| W2 101.00 | PD2 491.6 | GSA 1.0 |
| W3 101.00 | PD3 489.7 | RSA 1.0 |
| W4 101.00 | PD4 491.2 | PLM 9000.0 |
| LCF from stem on CL / on sheer | | 6.186 / 6.426 |
| Maximum beam station from stem | | 7.428 |
| RM Measured | | 168.4kg·m |
| RM Default | | 145.0kg·m |
| Limit of positive stability / Stab.Index | | 130.3° / 125.7 |
| Freeboard at mast at 4.777 | | 0.940 |

| | | | | |
|--------------------------------|---------------------------|-------------------|-------------------|--|
| RIG | | | | |
| Forestay Tension Aft | Spreaders 2 | | | |
| Inner Stay None Fitted | Runners 0 | | | |
| Carbon Mast Yes | Jumper Struts None | | | |
| Taper Hollows | Jib Furler | | | |
| Fiber Rigging Yes | Main Furler | | | |
| Lenticular Rigging | Without Backstay | | | |
| Articulated Bowsprit No | | | | |
| P 16.510 | E 5.000 | MDT1 0.115 | MW 0.197 | |
| IG 15.881 | J 4.589 | MDL1 0.195 | GO 0.197 | |
| ISP 17.900 | SFJ 0.188 | MDT2 0.078 | BD 0.200 | |
| BAS 1.291 | SPL | MDL2 0.110 | MWT 137.20 | |
| FSP 0.066 | TPS 7.170 | TL 2.060 | MCG 6.070 | |



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2015 Measurements Datasheet

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

| | | |
|------------------------------|--------------------|------------------|
| PROPELLER | | |
| Installation Strut | PRD 0.330 | |
| Type Folding 2 blades | PBW 0.110 | |
| Twin Screw | PIPA 0.0035 | |
| ST1 0.042 | ST3 0.180 | ST5 0.260 |
| ST2 0.180 | ST4 0.112 | EDL 1.158 |

| | |
|-------------------------------|--|
| Certificate | |
| Number 6250 | |
| ORC Ref SSF00001330 | |
| Issued On 31/08/2015 | |
| VPP Ver. 2015 1.01 | |
| Valid until 31/12/2015 | |

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

| | |
|-------------------------|--|
| MOVEABLE BALLAST | |
| N/A | |

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



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Invalid for Racing

| | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|--|
| SAILS (Maximum Areas) | | | | | | |
| Mainsail | HB | MGT | MGU | MGM | MGL | Area Area (r) Formula |
| | 1.300 | 1.90 | 2.65 | 3.68 | 4.40 | 57.13 58.54 P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB) |
| Symmetric | | | | | | |
| Not Available | | | | | | |
| Asymmetric | SLU | SLE | ASL | AMG | ASF | Area Formula |
| | 20.10 | 17.90 | 19.00 | 11.28 | 12.00 | 180.88 ASL · (ASF + 4·AMG) / 6 |

| | | | | | | | | | | | | |
|---|------|------|------|------|------|-------|-------|-----|-----|------------|----------|---------|
| HEADSAILS | | | | | | | | | | | | |
| Area = 0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH) | | | | | | | | | | | | |
| JH | JGT | JGU | JGM | JGL | LPG | JL | Area | Btn | Fly | Meas.Date | Material | Comment |
| 0.12 | 0.73 | 1.35 | 2.54 | 3.62 | 4.65 | 16.15 | 39.71 | Y | | 26/03/2015 | Unknow | |
| 0.12 | 0.65 | 1.20 | 2.32 | 3.47 | 4.65 | 16.14 | 37.78 | Y | | 26/03/2015 | Unknow | |
| 0.12 | 0.64 | 1.16 | 2.28 | 3.45 | 4.68 | 16.20 | 37.66 | Y | | 26/03/2015 | Unknow | |
| 0.10 | 0.71 | 1.29 | 2.43 | 3.50 | 4.55 | 14.30 | 33.99 | Y | | 26/03/2015 | Unknow | |

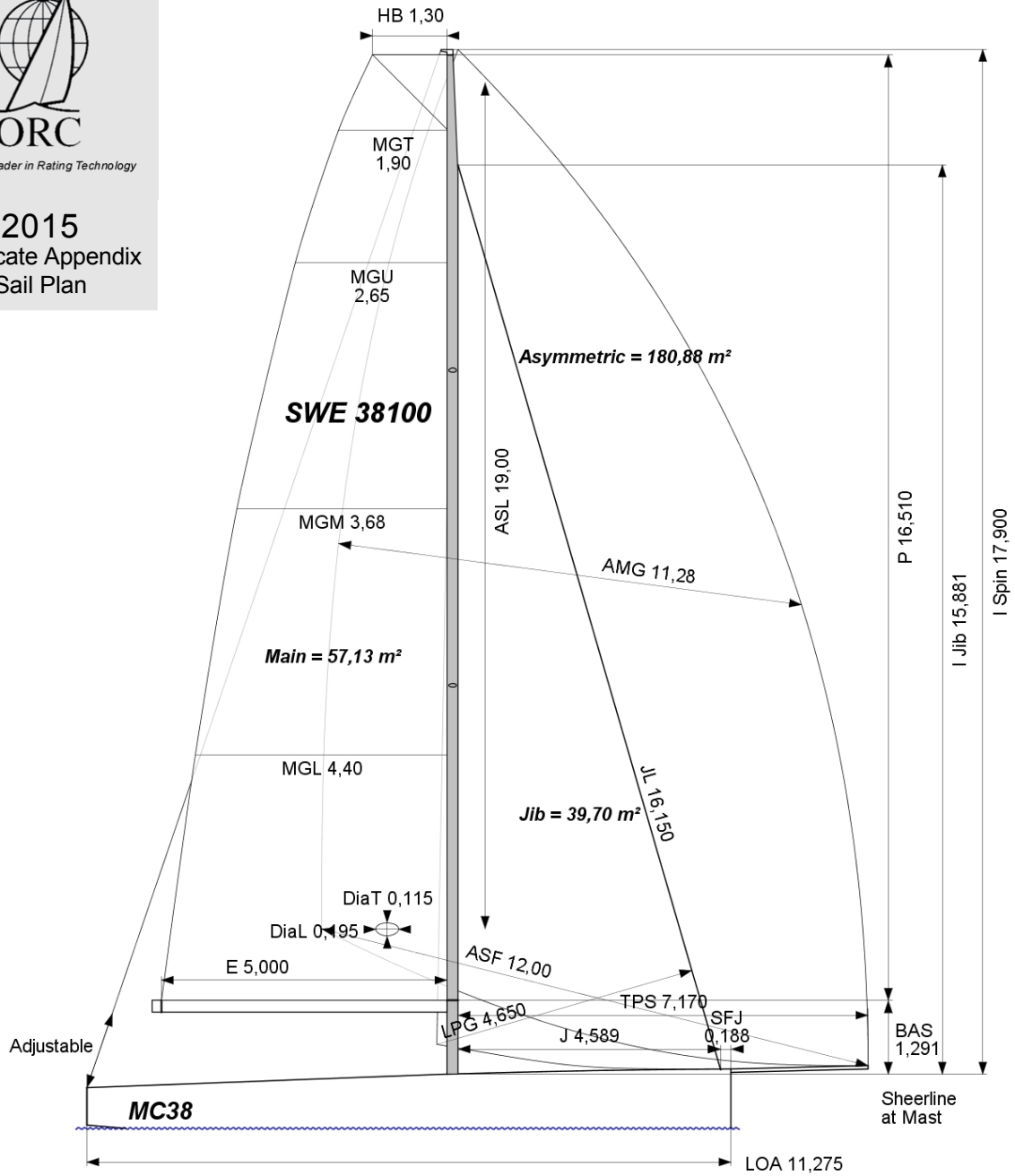
| | | | | |
|---------------------------------------|--------|--------|-------------|-----------------|
| MEASUREMENT INVENTORY | | | | |
| Measurer MIKAEL IINDQVIST 1129 | | | | |
| Date 19/05/2015 | | | | |
| Comment | | | | |
| Id | Item | Weight | Distance | VCG Description |
| Id | Item | Maker | Model | |
| E1 | Engine | YANMAR | 2YM15 | |
| Id | Item | Weight | Description | |

| | | | | | | | | |
|------------------------------|---------|----------|------------|--------|-------------|------|--------|--------------|
| MEASUREMENT INVENTORY | | | | | | | | |
| Id | Item | Tank Use | Tank Type | Capcty | Dist. | VCG | Condtn | Description |
| F1 | Tank | FUEL | PLASTIC | | | 0.00 | 0-0 | |
| W1 | Tank | WATER | INFLATIBLE | 100.0 | 8.20 | 0.00 | 0-0 | 2 X 50 LITER |
| Id | Item | Weight | Distance | VCG | Description | | | |
| N1 | Ballast | | | | NONE | | | |
| B1 | Battery | | 6.00 | 0.00 | 32 Ah | | | |
| B2 | Battery | | 6.00 | 0.00 | 75 Ah | | | |



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2015
Certificate Appendix
Sail Plan



| SAILS INVENTORY | | | | | | | | | | | | | | | | |
|-----------------------|-------|-------|-------|-------|----------|-----------|-------------|------------|-------------|-------------|----------|----------|------------|-------------|----------|---------|
| MAINSAIL | | | | | | | | | | | | | | | | |
| Id | HB | MGT | MGU | MGM | MGL | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| MAIN 2014 | 1.300 | 1.90 | 2.65 | 3.68 | 4.40 | 57.13 | SWE967 | 26/03/2015 | NORTH | Unknown | 3DI | | | | | |
| HEADSAILS | | | | | | | | | | | | | | | | |
| Id | JH | JGT | JGU | JGM | JGL | LPG | JL | Ovrlp | Area | Btn | Fly | Measurer | Meas.Date | Manufacture | Material | Comment |
| LIGHT | 0.12 | 0.73 | 1.35 | 2.54 | 3.62 | 4.65 | 16.15 | 101% | 39.71 | Y | | SWE957 | 26/03/2015 | NORTH | Unknown | |
| MEDI | 0.12 | 0.65 | 1.20 | 2.32 | 3.47 | 4.65 | 16.14 | 101% | 37.78 | Y | | SWE957 | 26/03/2015 | NORTH | Unknown | |
| MEDI | 0.12 | 0.64 | 1.16 | 2.28 | 3.45 | 4.68 | 16.20 | 102% | 37.66 | Y | | SWE957 | 26/03/2015 | NORTH | Unknown | |
| ORC | 0.10 | 0.71 | 1.29 | 2.43 | 3.50 | 4.55 | 14.30 | 99% | 33.99 | Y | | SWE957 | 26/03/2015 | NORTH | Unknown | |
| SYMMETRIC SPINNAKERS | | | | | | | | | | | | | | | | |
| Id | SL | SMG | SF | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | | | |
| ASYMMETRIC SPINNAKERS | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | ASL | AMG | ASF | Area | Kind | Measurer | Meas.Date | Manufacture | Material | Comment | | | | |
| A2 2015 | 20.10 | 17.90 | 19.00 | 11.28 | 12.00 | 180.88 | asym | swe957 | 01/06/2015 | north | Unknown | | | | | |
| A2 2012 | 20.17 | 17.30 | 18.73 | 11.44 | 11.80 | 179.73 | asym | SWE957 | 26/03/2015 | NORTH | Unknown | | | | | |
| A2,5 2013 | 20.00 | 16.98 | 18.49 | 10.63 | 10.97 | 164.84 | asym | SWE957 | 26/03/2015 | NORTH | Unknown | | | | | |
| A3 75% 2013 | 18.54 | 16.90 | 17.72 | 7.71 | 10.24 | 121.32 | asym | SWE957 | 26/03/2015 | NORTH | Unknown | | | | | |