

BOAT Name TEAM ANDELSTANKEN Sail Nr ITA-3078	GPH 599.0	HULL Length Overall 9.435m Maximum Beam 3.038m Displacement 2,507kg Draft 2.157m IMS Reg. Division Performance Dynamic Allowance 0.000% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder Yes Crew Arm Extension IMSL 9.005m VCGD -0.261m Sink 12.29kg/mm RL 8.828m VCGM -0.230m WS 16.51m² LSM0 8.801m Displacement/Length ratio 3.6775
GENERAL Class FARR 30 Designer FARR Builder CARROLL MARINE Series 03/1996 Age 03/1996 Age Allowance 0.487% Offset File FARR30.OD.OFF - 24/05/2009 23:54:20 Measurement by - 20/05/2019		



ORC
Offshore Racing Congress
World leader in rating technology

2019
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	584.0			651.0		
Time on Time	1.0274			1.0369		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	666.1	538.2	479.3	849.5	653.9	577.0
Time on Time	1.0133	1.2542	1.4084	0.7946	1.0323	1.1698

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	967.8	805.1	734.1	710.7	700.9	689.5	684.7
52°	642.9	552.7	524.6	514.1	508.6	505.7	496.8
60°	610.1	537.7	512.7	499.4	492.3	488.1	476.3
75°	584.9	527.2	500.8	479.7	464.0	455.6	447.7
90°	590.0	521.1	498.8	472.5	448.0	429.0	409.2
110°	584.7	513.9	479.2	452.3	433.4	415.9	384.5
120°	597.7	517.8	479.5	444.7	414.5	394.8	363.6
135°	660.8	543.7	499.7	460.8	421.1	383.0	326.4
150°	779.6	627.7	541.0	500.0	464.4	427.4	352.8
Run VMG	900.2	724.7	621.4	561.2	516.6	484.0	407.4

Certificate
Number **30781**
ORC Ref **ITA00052743**
Issued On **23/05/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight
Default 574kg
Maximum **495kg**
Minimum* **371kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	614.7	0.9761
Double H.OSN	602.0	0.9966
Non Spin GPH	638.6	0.9396
Non Spin OSN	621.7	0.9651

Selected Courses							
Windward / Leeward	934.0	764.9	677.8	635.9	608.8	586.8	546.1
Circular Random	806.6	659.8	582.8	538.1	509.2	488.3	456.8
Coastal / Long Distance	930.6	722.2	618.6	561.2	524.2	491.4	436.3
Non Spinnaker	878.8	710.2	619.9	567.1	533.4	509.8	476.6

Sails Limitations

Headsails	Spinnakers
5	3

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	41.6°	40.1°	37.9°	36.8°	36.4°	35.8°	36.4°
Beat VMG	3.72	4.47	4.90	5.07	5.14	5.22	5.26
52°	5.60	6.51	6.86	7.00	7.08	7.12	7.25
60°	5.90	6.70	7.02	7.21	7.31	7.37	7.56
75°	6.15	6.83	7.19	7.50	7.76	7.90	8.04
90°	6.10	6.91	7.22	7.62	8.04	8.39	8.80
110°	6.16	7.01	7.51	7.96	8.31	8.66	9.36
120°	6.02	6.95	7.51	8.10	8.69	9.12	9.90
135°	5.45	6.62	7.20	7.81	8.55	9.40	11.03
150°	4.62	5.74	6.65	7.20	7.75	8.42	10.20
Run VMG	4.00	4.97	5.79	6.41	6.97	7.44	8.84
Gybe Angles	143.3°	146.3°	153.5°	162.0°	180.0°	180.0°	147.1°

Class Division Length
CDL = **8.917**

Storm Sails Areas

Heavy Weather Jib	18.28
Storm Jib (JL=7.57)	6.77
Storm Trysail	9.56

Owner

BOAT	
Name TEAM	Sail Nr ITA-3078
File I3078	Data in meters/kilograms

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 12.300	E 4.440 MDT1 0.087 MW 0.145
IG 11.635	J 3.320 MDL1 0.145 GO 0.145
ISP 13.600	SFJ 0.100 MDT2 0.067 BD 0.134
BAS 1.235	SPL 4.140 MDL2 0.105 MWT 64.30
FSP 0.054	TPS TL 1.980 MCG 4.755

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 29/05/2017		SG 1.0250	
FFM 1.029	FF 1.029	SFFP 0.222	
FAM 0.739	FA 0.741	SAFP 8.685	
W1 32.0	PD1 531.3	WD 10.950	
W2 32.0	PD2 534.6	GSA 1.0	
W3 32.0	PD3 537.0	RSA 1.0	
W4 32.0	PD4 537.8	PLM 9000.0	
LCF from stem on CL / on sheer		5.362 / 5.554	
Maximum beam station from stem		5.825	
RM Measured		51.6kg-m	
RM Default		55.1kg-m	
Limit of positive stability / Stab.Index		125.4° / 119.7	
Freeboard at mast at 3.420		0.924	



ORC
Offshore Racing Congress
World leader in rating technology

2019
IMS Measurement
Certificate

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.360		
Type Folding 2 blades	PBW 0.093		
Twin Screw No	PIPA 0.0032		
ST1 0.042	ST3 0.178	ST5 0.248	
ST2 0.178	ST4 0.112	EDL 1.278	

Certificate	
Number 30781	
ORC Ref ITA00052743	
Issued On 23/05/2019	
VPP Ver. 2019 1.01	
Valid until 31/12/2019	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



World Leader In Rating Technology

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.180	1.08	1.94	3.14	3.91	34.78	35.84	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	13.74	13.74	13.74	7.60	7.10	85.88		SL · (SFL + 4·SHW) / 6	
Asymmetric	SLU	SLE	SL	SHW	SFL				
	12.88	12.50	12.69	5.24	6.86	58.84		Area (r) 66.07 AS · (SFL + 4·SHW) / 6	

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
0.07	0.49	0.93	1.76	2.55	3.39	11.53	20.03	Y	N	29/05/2017	Unknow	
0.06	0.48	0.93	1.73	2.55	3.33	11.34	19.49	N	N	20/10/2011	Unknow	

MEASUREMENT INVENTORY				
Measurer 149				
Date 29/05/2017				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
1	Engine	VOLVO	9 HP	
Id	Item	Weight Description		

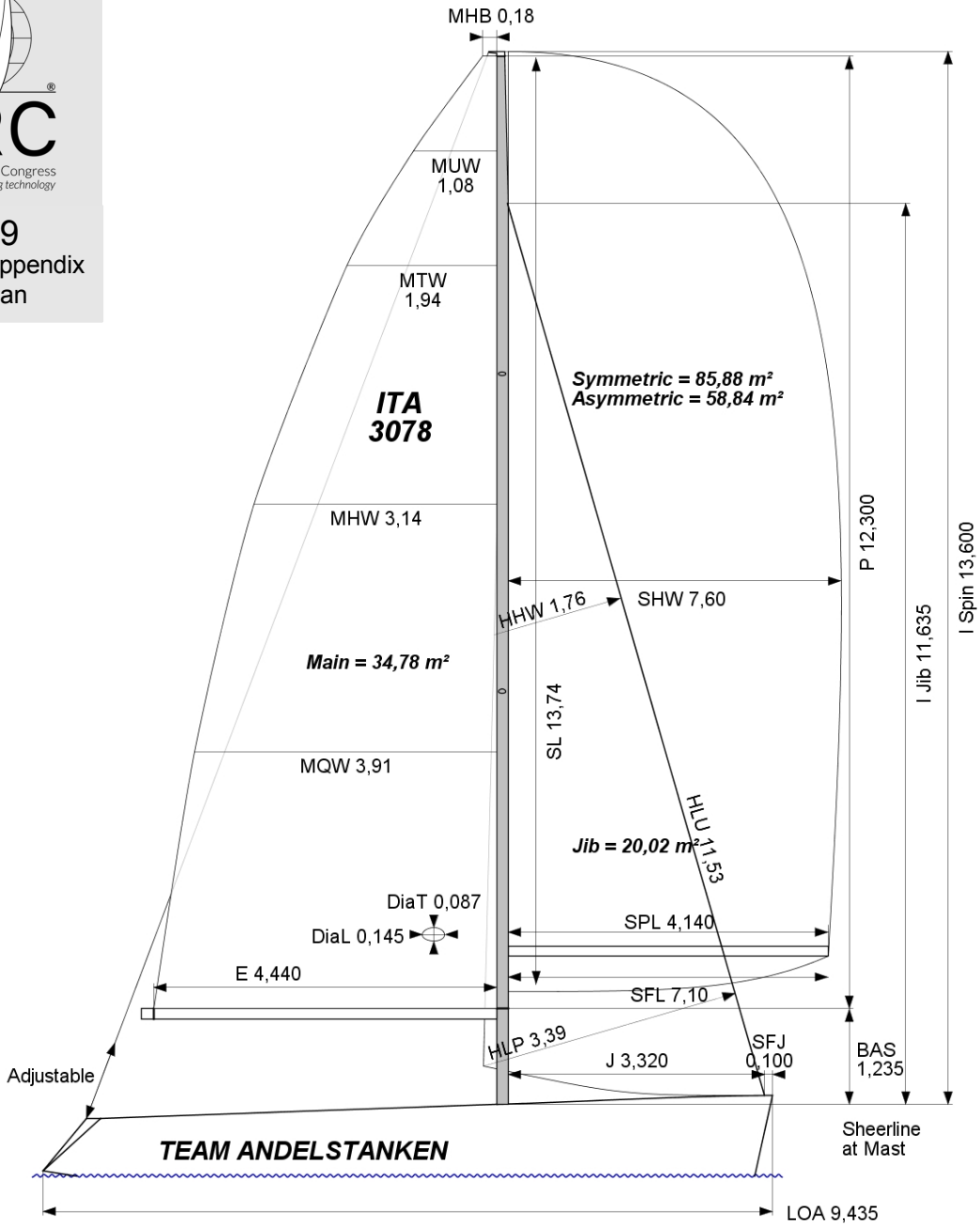
MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
B	Tank	ACQUA	PVC	60.0	6.00	0.00	0-0 VUOTO
A	Tank	GASOLIO	INOX	40.0	6.20	0.00	12-0 LT
Id	Item	Weight	Distance	VCG Description			
C	Ballast	43.9	5.10	0.00 8 PANI DI PB A SX MOTORE			
B	Ballast	43.1	5.10	0.00 7 PANI DI PB A DX MOTORE			
A	Ballast	19.3	5.00	0.00 2 PANI DI PB CENTRO BARCA			
A	Battery	47.0	6.00	0.00 2X 70 AH			



ORC

Offshore Racing Congress
World leader in rating technology

2019
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
B	0.18	1.08	1.94	3.14	3.91	34.78		29/05/2017	NORTH	Unknown						
A	0.15	1.04	1.89	3.11	3.85	34.31		20/10/2011		Unknown						
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
C	0.07	0.49	0.93	1.76	2.55	3.39	11.53	102%	20.03	Y	N		29/05/2017		Unknown	
B	0.06	0.48	0.93	1.73	2.55	3.33	11.34	100%	19.49	N	N		20/10/2011		Unknown	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
A	13.74	13.74	13.74	7.60	7.10	85.88		20/10/2011		Unknown						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A	12.88	12.50	12.69	5.24	6.86	58.84	asym		20/05/2019		Unknown					