



World Leader in Rating Technology

2016 ORC Club Certificate

Rating Office

Žemaites 6
LT-03117 Vilnius
Lithuania
+370 650 28392



Certificate

Number **LT1644**
Issued On **2016-06-11**
ORC Ref **ltu00000378**
VPP Ver. **2016 1.01**
Valid until **2016-12-31**

Crew Weight

Declared **640kg**
Default* **655kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	646,5	0,9281
Non Spin OSN	628,2	0,9551
N/S Perf. Line	4,3	0,597

Sails Limitations

Headsails **6** Spinnakers **3**

Spinnaker configuration

Symmetric: **Yes** **76,91**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **9,155**

Stability

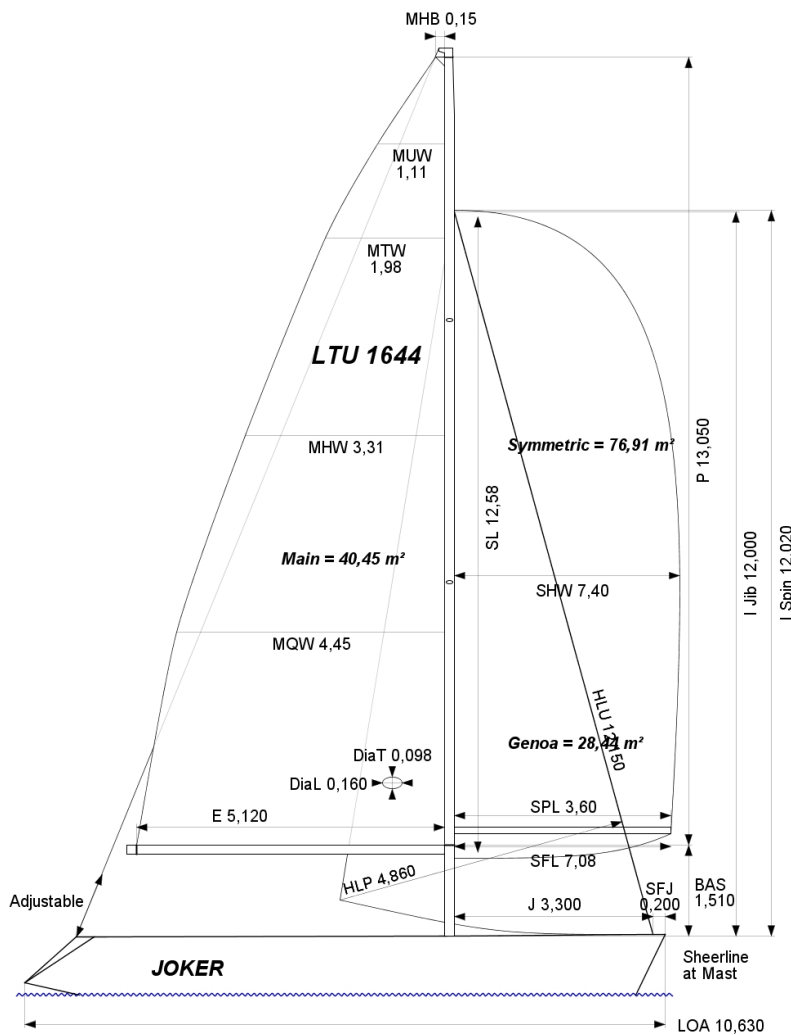
LPS (Estimated): **113,8°**
Stability Index: **110,7**
OSR Category: **N/A**

Owner

VšĮ „AMXSAS“
Klaipėda
Lithuania

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT		GPH	HULL			
Name JOKER		621,5	Data File Joker	LOA 10,630m		
Sail Nr LTU 1644			Offset File J35od.OFF	MB 3,494m		
CLASS			Displacement 4 158kg	Draft 1,998m		
Class JOD 35			IMS Division Cruiser/Racer	Dynamic All. 0,052%		
Designer ANDRIEU Daniel			Fwd Accom. No	Construction Solid		
Builder JEANNEAU SA			Fiber Rigging No	Aramid Core No		
Series 06-1991			Crew Arm Ex	Carbon Rudder No		
Age Date 03-1992				Light Stanchions No		
Age Allowance 0,488%			IMSL 9,672m	VCGD -0,104m		
COMMENTS			Sink 17,17kg/mm	RL 8,636m		
4,89			WS 22,79m²	LSM0 9,653m		
PROPELLER			Displacement/Length ratio 4,6227			
Installation Shaft exposed	PRD 0,352		Water Ballast 0	Trim Tab No		
Type Folding 2 blades	PBW 0,101		CENTERBOARD			
	PIPA 0,0041		N/A			
SCORING OPTIONS						
	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
Time On Distance	604,3			677,1		
Time On Time	0,9929			0,9969		
Performance Line	PLT	PLD		PLT	PLD	
	0,644	18,0		0,805	178,1	
Triple Number	Low	Medium	High	Low	Medium	High
	0,9359	1,2296	1,4056	0,7143	0,9904	1,1590

BOAT	
Name JOKER	Sail Nr LTU 1644
File Joker LTU1644.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Club Estimated VCG			
Flotation date 02-06-2005		SG	
FFM	FF	1,001	SFFP 0,335
FAM	FA	0,956	SAFP 9,488
LCF from stem on CL / on sheer		5,724 / 5,962	
Maximum beam station from stem		7,310	
RM Measured		98,6kg·m	
RM Default		95,8kg·m	
Limit of positive stability / Stab.Index		113,8° / 110,7	
Freeboard at mast at 3,500		0,971	

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	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 13,050	E 5,120	MDT1 0,098	MW 0,160
IG 12,000	J 3,300	MDL1 0,160	GO 0,180
ISP 12,020	SFJ 0,200	MDT2 0,098	BD 0,148
BAS 1,510	SPL 3,600	MDL2 0,140	MWT 121,00
FSP -3,000	TPS	TL 0,960	MCG 4,780



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2016 Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD	0,352	
Type Folding 2 blades	PBW	0,101	
Twin Screw No	PIPA	0,0041	
PSA 16,000	PHL 0,115	ST3 0,085	ESL 0,845
PSD 0,024	ST1 0,022	ST4 0,051	
PHD 0,068	ST2 0,076	ST5 0,185	

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COMMENTS	
4,89	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,150	1,11	1,98	3,31	4,45	40,45	41,57	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	76,91		SL · (SFL + 4·SHW) / 6	
	12,58	12,58	12,58	7,40	7,08				
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
0,06	0,54	1,08	2,26	3,54	4,86	12,15	28,45				Unknow	
0,08	0,62	1,18	2,31	3,52	4,85	11,77	27,94				Pentex	grey
0,15	0,59	1,04	1,92	2,78	3,53	11,60	21,83	Y			Kevlar	yellow



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2016

ORC Club Certificate Appendix

BOAT	
Name	JOKER
Certificate Number	LT1644
Sail Nr	LTU 1644
Issued On	2016-06-11

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1064,0	875,0	769,8	718,6	694,0	680,6	672,2
52°	688,2	573,5	517,8	496,5	487,4	482,1	477,8
60°	643,7	542,2	500,8	481,6	471,4	464,8	458,3
75°	606,6	520,3	488,1	466,0	447,1	434,8	423,8
90°	608,3	521,4	485,5	466,0	442,6	421,3	394,4
110°	633,5	524,6	483,6	453,3	423,8	407,5	380,6
120°	656,2	538,3	491,0	461,7	430,8	400,4	361,1
135°	737,3	594,0	515,8	482,4	454,7	425,8	368,0
150°	892,4	701,9	585,1	514,5	483,3	457,5	404,6
Run VMG	1030,5	810,5	675,6	585,8	530,3	493,8	443,4

Selected Courses							
Windward / Leeward	1047,2	842,8	722,7	652,2	612,2	587,2	557,8
Circular Random	864,3	694,6	602,7	548,4	514,0	490,7	460,0
Ocean for PCS	1069,4	820,1	678,9	591,9	534,6	493,9	436,3
Non Spinnaker	907,1	725,5	626,4	567,5	530,2	505,0	471,5

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	44,0°	42,7°	42,1°	40,2°	39,4°	38,8°	38,6°
Beat VMG	3,38	4,11	4,68	5,01	5,19	5,29	5,36
52°	5,23	6,28	6,95	7,25	7,39	7,47	7,53
60°	5,59	6,64	7,19	7,48	7,64	7,75	7,85
75°	5,93	6,92	7,38	7,73	8,05	8,28	8,49
90°	5,92	6,90	7,42	7,72	8,13	8,54	9,13
110°	5,68	6,86	7,44	7,94	8,49	8,83	9,46
120°	5,49	6,69	7,33	7,80	8,36	8,99	9,97
135°	4,88	6,06	6,98	7,46	7,92	8,45	9,78
150°	4,03	5,13	6,15	7,00	7,45	7,87	8,90
Run VMG	3,49	4,44	5,33	6,15	6,79	7,29	8,12
Gybe Angles	137,2°	149,5°	148,5°	157,0°	174,9°	180,0°	180,0°