

BOAT Name Tomcat Sail Nr DEN 7886	GPH 569.2	HULL Length Overall 12.350m Maximum Beam 3.646m Displacement 7,003kg Draft 2.504m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class X-41 Designer N. Jeppesen Builder X-Yachts Series 01/2006 Age 06/2007 Age Allowance 0.422% Offset File X41.OD.OFF - 23/02/2015 18:29:08 Measurement by - 07/04/2019		IMSL 11.160m VCGD 0.011m Sink 23.17kg/mm RL 10.147m VCGM -0.013m WS 31.00m² LSM0 11.063m Displacement/Length ratio 5.1721



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	553.9			618.0		
Time on Time	1.0832			1.0922		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	644.2	506.2	455.3	829.1	620.8	544.7
Time on Time	1.0478	1.3334	1.4825	0.8141	1.0873	1.2393

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	934.6	770.0	690.0	662.9	651.1	640.4	631.9
52°	615.1	517.2	478.6	467.3	462.4	460.0	452.1
60°	582.8	498.1	466.4	455.0	450.0	447.4	438.9
75°	558.3	485.9	457.4	441.5	431.9	426.6	421.5
90°	563.3	487.1	456.9	437.8	421.2	407.8	394.2
110°	579.9	483.5	447.6	427.6	414.2	401.8	381.2
120°	594.3	491.6	451.4	425.1	401.2	386.0	362.5
135°	657.5	531.9	470.5	441.7	415.8	389.8	338.2
150°	776.6	619.3	524.4	471.6	444.1	420.1	372.4
Run VMG	896.7	715.1	605.4	537.7	492.3	458.4	411.9

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Number **35931**
ORC Ref **DEN00000553**
Issued On **05/06/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight
Default **795kg**
Maximum **800kg**
Minimum* **600kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	579.0	1.0362
Double H.OSN	565.3	1.0614
Non Spin GPH	601.7	0.9972
Non Spin OSN	586.1	1.0237

Selected Courses							
Windward / Leeward	915.7	742.5	647.7	600.3	571.7	549.4	521.9
Circular Random	776.9	629.9	552.5	508.4	481.4	463.2	438.4
Coastal / Long Distance	913.8	698.8	586.5	526.1	492.6	464.8	420.8
Non Spinnaker	835.8	671.6	583.3	531.9	500.1	479.0	451.8

Sails Limitations

Headsails	Spinnakers
6	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	42.5°	41.0°	39.7°	38.5°	38.0°	37.6°	38.3°
Beat VMG	3.85	4.68	5.22	5.43	5.53	5.62	5.70
52°	5.85	6.96	7.52	7.70	7.79	7.83	7.96
60°	6.18	7.23	7.72	7.91	8.00	8.05	8.20
75°	6.45	7.41	7.87	8.15	8.33	8.44	8.54
90°	6.39	7.39	7.88	8.22	8.55	8.83	9.13
110°	6.21	7.45	8.04	8.42	8.69	8.96	9.44
120°	6.06	7.32	7.98	8.47	8.97	9.33	9.93
135°	5.48	6.77	7.65	8.15	8.66	9.24	10.64
150°	4.64	5.81	6.87	7.63	8.11	8.57	9.67
Run VMG	4.01	5.03	5.95	6.70	7.31	7.85	8.74
Gybe Angles	143.4°	147.0°	150.1°	156.0°	170.2°	180.0°	180.0°

Class Division Length
CDL = **10.654**

Storm Sails Areas
Heavy Weather Jib **40.18**
Storm Jib (JL=11.22) **14.88**
Storm Trysail **15.23**

Owner

BOAT	
Name Tomcat	Sail Nr DEN 7886
File 35931 - X-41 DEN	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 07/04/2019		SG 1.0100
FFM 1.434	FF 1.442	SFFP 0.200
FAM 1.084	FA 1.088	SAFP 11.995
W1 100.0	PD1 547.7	WD 12.950
W2 100.0	PD2 546.5	GSA 1.0
W3 100.0	PD3 549.2	RSA 1.0
W4 100.0	PD4 546.6	PLM 9000.0
LCF from stem on CL / on sheer		6.937 / 7.145
Maximum beam station from stem		8.432
RM Measured		186.3kg-m
RM Default		204.3kg-m
Limit of positive stability / Stab.Index		120.0° / 123.8
Freeboard at mast at 5.210		1.204



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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 15.850	E 5.490 MDT1 0.134 MW 0.252
IG 17.160	J 4.930 MDL1 0.252 GO 0.278
ISP 18.160	SFJ 0.280 MDT2 0.122 BD 0.192
BAS 1.870	SPL 5.190 MDL2 0.201 MWT 190.00
FSP 0.072	TPS TL 1.260 MCG 5.680

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.430	
Type Folding 2 blades	PBW	
Twin Screw No	PIPA 0.0040	
ST1 0.065	ST3 0.180	ST5 0.316
ST2 0.180	ST4 0.110	EDL 1.890

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.470	1.29	2.13	3.49	4.56	52.13	53.16	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	134.19		SL · (SFL + 4·SHW) / 6	
	17.84	17.84	17.84	9.09	8.77				
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
0.12	0.91	1.63	2.84	4.00	5.26	17.00	47.23	Y		29/04/2016	Carbon	
0.12	0.86	1.55	2.74	3.94	5.22	16.96	46.07	Y		24/03/2017	Carbon	
0.10	0.66	1.27	2.54	3.86	5.17	16.84	43.36	Y			Unknow	

MEASUREMENT INVENTORY				
Measurer	Date 07/04/2019			
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
01	Engine	Volvo Penta	D2-40B	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

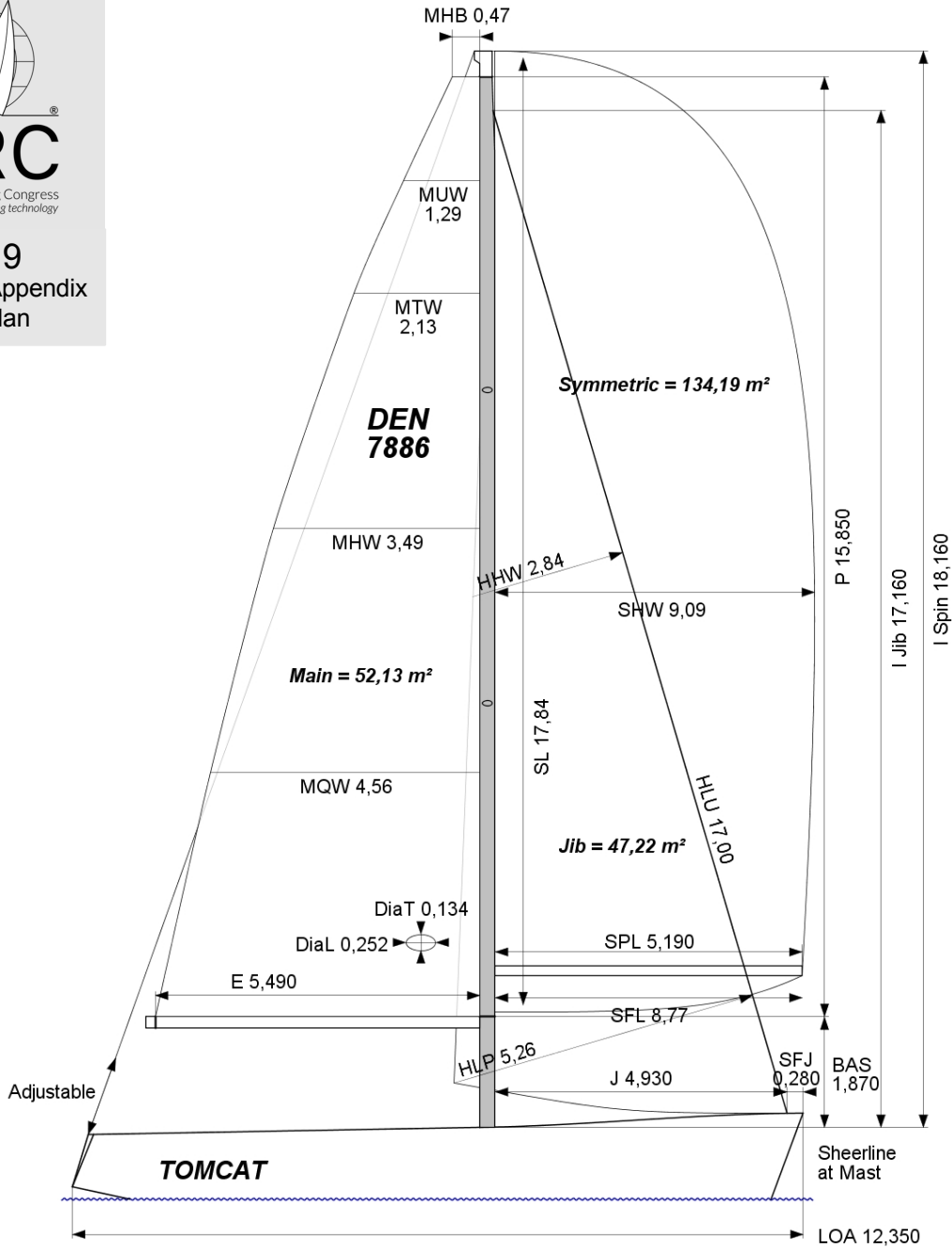
MEASUREMENT INVENTORY							
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn Description</i>
01	Tank	Water	Plastic	210.0	5.45	0.00	0-0 Empty
02	Tank	Full	Stell	90.0	6.00	0.00	22.5 1/4 Full
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>			
01	Battery	50.0	4.96	0.00 Service 2x155 Ah			
02	Battery	20.0	7.60	0.00 Motor Exide depp Cyde			
01	Misc	15.0	9.10	0.00 Isotemp Boiler			



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
91157	0,47	1,29	2,13	3,49	4,56	52,13		28/04/2016	Elvstroem	Carbon	

HEADSAILS (3)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
91156	0,12	0,91	1,63	2,84	4,00	5,26	17,00	107%	47,23	Y			29/04/2016	Elvstroem	Carbon	
92316	0,12	0,86	1,55	2,74	3,94	5,22	16,96	106%	46,07	Y			24/03/2017	Elvstroem	Carbon	
01	0,10	0,66	1,27	2,54	3,86	5,17	16,84	105%	43,36	Y				hagoort	Unknown	

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
92804	17,84	17,84	17,84	9,09	8,77	134,19		29/03/2019	Elvstroem	Nylon	S1, 4oz
90749	17,37	17,37	17,37	8,75	8,44	125,76		07/07/2016	Quantum	Nylon	S2, 5oz

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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