

BOAT Name ZEFYROS Sail Nr GRE-295	GPH 679.9	HULL Length Overall 9.184m Maximum Beam 2.954m Displacement 3,765kg Draft 1.815m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.271% Fwd Accommodation Yes Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class ELAN 295 Designer ROD HUMPHREYS Builder ELAN YACHT Series 01/1995 Age 01/1997 Age Allowance 0.487% Offset File CRO004.OFF - 18/04/1999 03:49:22 Measurement by KALATZIS - 25/04/2010		IMSL 8.579m VCGD 0.104m Sink 14.42kg/mm RL 7.258m VCGM 0.171m WS 18.69m² LSM0 8.512m Displacement/Length ratio 6.1048



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	660.6			734.8		
Time on Time	0.9083			0.9187		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	778.5	601.7	540.2	1004.3	737.9	642.0
Time on Time	0.8670	1.1218	1.2496	0.6721	0.9148	1.0514

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1141.8	949.0	839.0	783.8	766.3	760.1	750.7
52°	758.5	639.4	575.3	551.6	543.2	539.7	535.6
60°	722.6	610.9	559.1	538.6	529.0	525.0	523.1
75°	696.1	591.5	548.1	527.2	513.5	504.0	497.0
90°	675.2	567.9	530.7	513.0	503.9	491.7	469.2
110°	678.3	568.1	527.9	503.3	480.7	462.2	442.7
120°	704.3	584.6	535.7	509.5	484.4	460.6	423.4
135°	784.9	644.3	561.9	527.5	503.5	478.8	431.3
150°	928.5	740.0	626.6	557.7	526.8	504.1	458.0
Run VMG	1072.2	854.4	721.8	630.5	568.7	534.0	489.1

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VPP Ver. **2018 1.00**
Valid until **28/02/2019**

Selected Courses							
Windward / Leeward	1107.0	901.7	780.3	707.1	667.5	647.1	619.9
Circular Random	934.6	755.2	659.5	604.5	571.3	550.0	522.7
Coastal / Long Distance	1103.5	846.5	704.1	621.9	582.0	551.9	500.2
Non Spinnaker	995.2	797.4	690.4	628.2	590.3	566.1	536.0

Crew Weight

Default 547kg
Maximum **470kg**
Minimum* **353kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	712.8	0.8418
Non Spin OSN	688.3	0.8717

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	41.9°	40.3°	40.1°	39.2°	38.5°	38.4°	38.3°
Beat VMG	3.15	3.79	4.29	4.59	4.70	4.74	4.80
52°	4.75	5.63	6.26	6.53	6.63	6.67	6.72
60°	4.98	5.89	6.44	6.68	6.81	6.86	6.88
75°	5.17	6.09	6.57	6.83	7.01	7.14	7.24
90°	5.33	6.34	6.78	7.02	7.14	7.32	7.67
110°	5.31	6.34	6.82	7.15	7.49	7.79	8.13
120°	5.11	6.16	6.72	7.07	7.43	7.82	8.50
135°	4.59	5.59	6.41	6.82	7.15	7.52	8.35
150°	3.88	4.86	5.75	6.45	6.83	7.14	7.86
Run VMG	3.36	4.21	4.99	5.71	6.33	6.74	7.36
Gybe Angles	146.0°	151.5°	152.3°	160.2°	180.0°	180.0°	180.0°

Sails Limitations

Headsails	5	Spinnakers	3
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Class Division Length

CDL = **7.919**

Storm Sails Areas

Heavy Weather Jib **16.65**
Storm Jib (JL=7.22) **6.17**
Storm Trysail **8.53**

Owner

BOAT	
Name ZEFYROS File GR295	Sail Nr GRE-295 Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining		Flotation date 25/04/2010 SG 1.0250	
FFM 1.227	FF 1.227	SFFP 0.673	
FAM 0.884	FA 0.889	SAFP 8.162	
W1 54.0	PD1 278.0	WD 8.630	
W2 54.0	PD2 278.0	GSA 41.9	
W3 54.0	PD3 278.0	RSA 6082.1	
W4 54.0	PD4 278.0	PLM 2100.0	
LCF from stem on CL / on sheer		5.160 / 5.377	
Maximum beam station from stem		6.181	
RM Measured		61.2kg·m	
RM Default		67.2kg·m	
Limit of positive stability / Stab.Index		107.5° / 108.6	
Freeboard at mast at 3.234		1.059	

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 11.820	E 4.125	MDT1 0.095	MW 0.138
IG 11.105	J 3.234	MDL1 0.138	GO 0.138
ISP 11.145	SFJ 0.000	MDT2 0.078	BD 0.143
BAS 1.420	SPL 3.235	MDL2 0.091	MWT
FSP 0.052	TPS 3.635	TL 2.205	MCG



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Shaft exposed	PRD 0.376		
Type Folding 2 blades	PBW 0.099		
Twin Screw No	PIPA 0.0049		
PSA 18.790	PHL 0.110	ST3 0.090	ESL 0.968
PSD 0.025	ST1 0.015	ST4 0.050	
PHD 0.072	ST2 0.080	ST5 0.205	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.155	0.87	1.56	2.68	3.50	29.21	29.82	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	53.55		SL · (SFL + 4·SHW) / 6	
Asymmetric	SLU	SLE	SL	SHW	SFL	57.28		AS · (SFL + 4·SHW) / 6	
	11.98	10.72	11.35	6.02	6.20				

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
0.08	0.53	0.99	1.83	2.67	3.50	10.83	19.63			01/03/2014	Kevlar	NEW 1
0.00	0.46	0.89	1.79	2.72	3.61	10.68	19.30			10/04/2009	Pentex	OLD 2
					3.30	10.30	17.30	N		03/03/2010	Kevlar	NEW 3

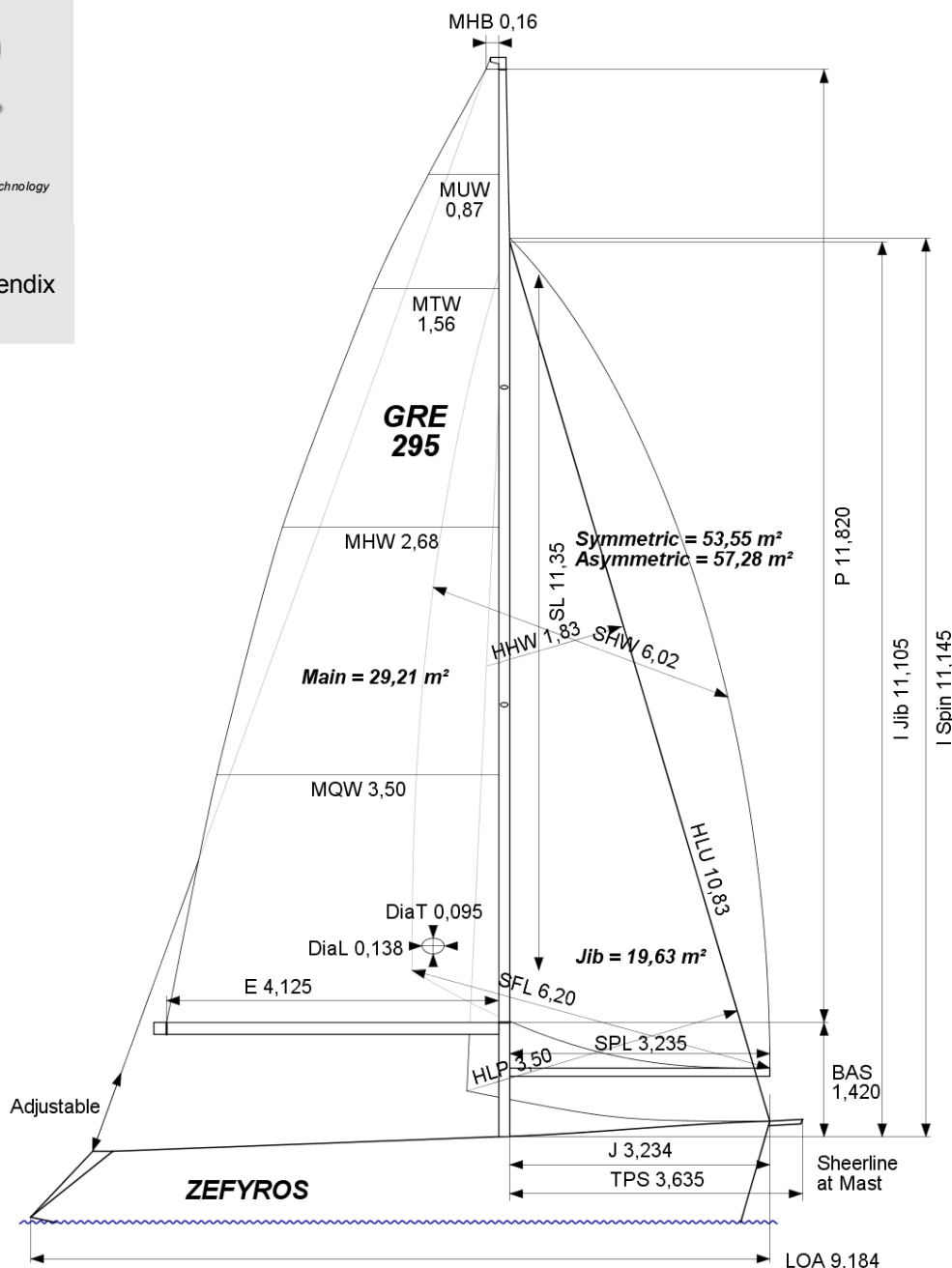
MEASUREMENT INVENTORY				
Measurer KALATZIS GRE-21				
Date 25/04/2010				
Comment				
Id	Item	Weight	Distance	VCG Description
4	Anchor	7.0	6.70	Danforth
4	Chain	21.0	6.70	15m 8mm
4	Tools	40.0	4.40	
Id	Item	Maker	Model	
1	Engine	YANMAR	2GM20	
Id	Item	Weight Description		

MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank	WATER	INOX	80.0	3.70	0-0
2	Tank	WATER	INOX	80.0	3.70	0-0
3	Tank	FUEL	INOX	75.0	7.30	0-0
4	Tank	WASTE	INOX	20.0	7.20	0-0
Id	Item	Weight	Distance	VCG Description		
1	Battery		6.70	2 x 63Ah		
2	Battery		6.70	1 x 62Ah		
1	Misc		0.00	GENOA FURLING		
2	Misc	18.0	0.80	WINDLASS		



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Sail Plan



SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.155	0.87	1.56	2.68	3.50	29.21	AFENDRAS	01/03/2014	QUANTUM	Kevlar	NEW
2	0.150	0.87	1.57	2.60	3.43	28.79	NAKIS	10/04/2009	KAKITSIS	Dacron	OLD

HEADSAILS (3)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.08	0.53	0.99	1.83	2.67	3.50	10.83	108%	19.63			AFENDR	01/03/2014	QUANTUM	Kevlar	NEW 1
3	0.00	0.46	0.89	1.79	2.72	3.61	10.68	112%	19.30			NAKIS	10/04/2009	UK	Pentex	OLD 2
4						3.30	10.30	102%	17.30	N		KALATZIS	03/03/2010	QUANTUM	Kevlar	NEW 3

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	10.80	10.80	10.80	6.00	5.75	53.55	NAKIS	10/04/2009	VICTRON	Nylon	OLD
2	10.94	10.94	10.94	5.87	5.64	53.10	AFENDRAS	16/05/2014	QUANTUM	Nylon	NEW

ASYMMETRIC SPINNAKERS (4)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
3	11.98	10.72	11.35	6.02	6.20	57.28	asym	AFENDRAS	14/05/2015	QUANTUM	Nylon	
4	11.51	9.93	10.72	6.13	6.65	55.69	asym	AFENDRAS	14/05/2015	QUANTUM	Nylon	
1	11.06	9.50	10.28	5.05	5.70	44.38	asym	NAKIS	10/04/2009	KAKITSIS	Nylon	
2	11.15	10.30	10.73	4.21	5.58	40.08	asym	AFENDRAS	06/06/2012	QUANTUM	Nylon	