

MAIN MOTORS													
CLASS	HOLLAND	A1	A2-4	A5-13	B1-11	C1-16	C21-32	C35-38	D1	D2	D3-6	E1-16	
Type – Armature	Single	← Twin →		← Triple →			← Twin →		← Single →				
Number of sets	1	1	1	1	1	1	1	1	2	2	2	2	
Bhp per set (E = ehp)	70	126 E	150 E	150 E	225 (2)	300 E	300 E	300 E	277	277	277	277	
Voltage	120	240	240	240	100	160	160	160	200	200	200	200	
Amps	500	390	466	466	1500	1400	1400	1400	1160	1100	1100	1650	
Rev/Min	800 (1)	450	375	280	280	275	275	275	265	265	265	280	
Winding	← Shunt →		← Compound →			← Shunt →		← Shunt with interpoles →					
Overload) to rev/min) at – amps					← To 300 →						300	330	
Weight per motor, tons	1.94	Approx 5.0	5.65	6.12	12.31	11.54	11.29	11.65	9.3	8.57	8.7	12.35	
Diameter of yoke, ft-in	3-2 ⁷ / ₈	3-9	4-0	4-0	4-9	4.8 ³ / ₄			4.3	4.3	4.4 ¹ / ₂	5.4	
Overall length, ft-in	4-4 ³ / ₄	9-7	11-7	9-9 ¹ / ₂	14-10	12-10 ¹ / ₄			9-3 ³ / ₄	9-7 ³ / ₄	9-0 ¹ / ₂	9-2 ¹ / ₈	
BATTERIES													
Type (4)	←		Chloride				(6)		Exide	Chloride	← Exide →		Mercury
Number of cells	60	120	120	120	159	166	166	166	210	220	220	224	
Voltage, maximum charging	162	324	324	324	143	224	224	224	283	297	297	300	
Amps	500	500	500	500	500	500	500	500	500	600	600	600	
Voltage working (5)	120	240	240	240	100	160	160	160	200	220	220	220	
Duration at full speed, hrs-mins	3-45	4-5	4-5	4-5	3-45	2-20	2-20	3-5	1-0	2-5	2-5	1-10	
Bhp	88	176	176	176	233	244	244	244	308	387	387	395	
Weight, tons	24.75	49.5	49.5	49.5	65.55	68.5	68.5	68.5	84.15	82.0	85.25	93.75	

- 1 NOTES in brackets eg (1) are given in Appendix VII.
- 2 Blank spaces are applicable but details are not known.

		<u>MAIN MOTORS</u>						
CLASS		E17-26	NAUTILUS	V1	V2-4	G8-13	K3-7, 17	M1-2
Type – Armature		←		Single	→			
Number of sets		2	2	2	2	2	2 Tandem	2 Twin
Bhp per set (E = ehp)		420	500	150	190	420	720	800
Voltage		220	340	260	260	200	210	220
Amps		1650	1200	480	610	1720		
Rev/Min		280	210	300	320	280	800 (3)	300
Winding		Shunt with interpoles		Shunt	← Shunt with interpoles →			
Overload) to rev/min		320		350			1020 bhp for 20 min	1000 bhp for ½ hour
) at – amps		2100	1950	750	920			
Weight per motor, tons		11.29	13.75	4.75	5.1	11.26	11.1	19.7
Diameter of yoke, ft-in		5-4	6-0	4-6	4-3½	5-4½	4-4	5-7
Overall length, ft-in		9-0	10-7	7-7⅝	7-9⅝	9-0	6-10¼	16-10
<u>BATTERIES</u>								
Type	(4)	←		Exide Type	→			
Number of cells		3800	3600	3800	3800	4030	4050	1310
Voltage, maximum charging		224	352	132	132	200	336	336
Amps		300						
Voltage working	(5)	600						
Duration at full speed, hrs-mins		220	340	260	260	200	220	220
Bhp							1-30	1-30
Weight, tons		E19 – 89.75 E25 – 86.50	141.9	53.1	52.96	82.3	138.75	137.42

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		<u>MAIN MOTORS</u>										
CLASS	H21	R	L & L50	X1	OBERON	ODIN	PARTHIAN & RAINBOW	THAMES	SWORDFISH	SHARK	PORPOISE	
Type – Armature	Single	Two Single motors on 1 shaft	Twin	Twin	← Tandem →				Single	← Tandem →		
Winding			Shunt		Shunt	Compound	Shunt	Shunt				
Bhp per set	310	1200	800	1200	650	660	660	1250	650	650	815	
Bhp total	620	1200	1600	2400	1300	1320	1320	2500	1300	1300	1630	
Voltage	220	220	220		330	330	330	285	190	190	190	
Rev/Min	375	600	300		300	240	240	245	380	380	272	
Rating of motors, hours	1	2	1½			2	2	1¼	1¼	1¼	2	
Overload etc	Continuous at 320 bhp at 320 rev/min		2000bhp for ½ hour				1880 bhp for ½ hour	3300 bhp for ½ hour	1440 bhp for 1 hour	1600 bhp for 1 hour	1800 bhp for ½ hour	
Motor weight per shaft, tons	5.0	20.2	25.0			19.7-20.0	21.9-24.9	27.8	10.2-11.1	13.4	20.6	
Auxiliary drive	No	Yes	Yes		No	Yes	Yes		No			
<u>BATTERIES</u>												
Type	(4) Exide 3820 LS	Chloride E4400	←				See Chapter 26	Paragraph 26	→			
Number of cells	120	220	336	330	336	336	336	336	224	224	336	
Voltage working in series	220	220	220		330	330	330	330	220	220	330	
Voltage working in parallel	110	110	110		220	220	220	220	110	110	220	
Weight, tons	(7) 49	93.5	135	221	140	138	138	222	97	97	138	

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