

THE SUNDERLAND FORGE & ENGINEERING COMPANY, LIMITED.



TEST OF DIRECT CURRENT GENERATOR, SIZE 12 x 7.
and ENGINE, Size 7 x 5.

Customer's Order No. 6971

Ship No. 654
H Apollo

For MESSRS. The Humber Shipwright Company Ltd.

OUTPUT PLATE } 100 Volts 100 Amps 10 K.W. 360 Revs.
STAMPED } Continuous Rating Compound Wound, No. F.7362 Date 1940.

Engine No. F.7361 Steam Pressure 100 lbs./sq. in. Exhaust.

Time	Speed R.P.M.	LINE		SHUNT		Stm. Pres. lbs./sq. in.	DATE OF TEST 25-1-40.
		Volts	Amps.	Volts	Amps.		Remarks
<u>Temperature Run.</u>							
7-30	351	100	101	83	3.0	100	Temperatures taken (A)
8-0	348	100	101	85	2.8	100	
8-30	348	100	101	85	2.75	100	
9-0	348	100	101	84	2.70	100	
9-30	348	100	101	85	2.70	100	
10-0	348	100	101	85	2.70	100	
10-30	348	100	101	85	2.70	100	
11-0	348	100	101	84	2.65	100	
11-30	348	100	101	84	2.65	100 $\frac{1}{2}$	
<u>25% Overload.</u>							
2-45	342	100	124	94.5	3.05	105	Temperatures taken (B)
3-15	345	100	124	95	2.95	105	
3-45	345	100	124	95	2.9	105	
4-15	345	100	124	93	2.9	105	
4-45	348	100	124	93.5	2.9	107	
	368	100	0	82	3.0	105	No load.
	355	103	100	85	3.05	100	Full load.
<u>Test of Spare Armatures No.F.7371.</u>							
6-0	352	100	100	95	3.0	100	
8-0	350	100	103	94	2.85	100	

Temperature Rise (1) of Comm. 46°F (2) of Armature 65°F

Temperatures taken by thermometers ...	Armature		Commutator		Shunt Coils		Series Coils		Interpole Coils	
	A	B	A	B	A	B	A	B	A	B
Maximum Temperature recorded ...	125	155	114	136	110	117	120	143		
Air Temperature ...	65	67	65	67	65	67	65	67		
Temperature Rise in °F	65	88	49	69	45	50	55	76		

Before Temperature Run

After Temperature Run

High Pressure Test on Generator... 2000 Volts for one min.

2000 Volts for one min.

Insulation Resistance of Generator ... 50 Megohms

100 Megohms

Date 12/7/40

Signed M.D.

Lloyd's Register
Foundation

W1183-0117