

M/c. No. 13082/3.

CLARKE, CHAPMAN & Co., Ltd.,

ELECTRICAL ENGINEERS,

Victoria Works, :: :: Gateshead-on-Tyne.

B1/243

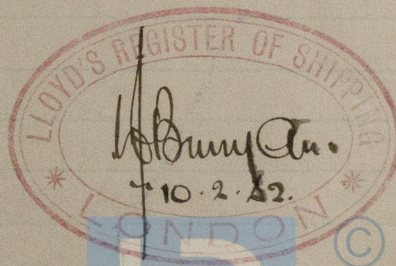
TEST RECORD OF D.C. GENERATOR.

Customer **R. & H. Green & Silley Weir Ltd.** C/o. **3438R.** S/o. **2543R.** Test O/No. **2544R.**
Size **11½x7** Type **E.V.** Volts. **110** Amps. **136.5** K.W. **15** R.P.M.F.L. **650** N.L. **675.**
Protection Winding **Compound.** Temp. Rise.
63 °F. after. **Continuous.** F.L.
Resistance of Shunt Winding **24.1** Ohms. cold. Compounding **Level.**
No. of Brush Spindles **4.** Brushes per Spindle **3.** Size **1" x ½"** Grade **E.G.O.A.**
Cummutator **8½"** Shunt Amp. no load **3.26** Shunt Regulator **Wh. & B.**
Inspection Date of Official Tests **Size 1B, B.O.B. Type.**
25 ohms. 4/2 amps.

Dynamo coupled to Engine No. Type **Enclosed Single.**
Cylinder **7** " × **4** " stroke. Steam Pressure at S.V. **120** lbs. square in.
Steam Pressure at Ex. Valve **18** lbs. square in. Oil Pressure lbs. square in.
Temp. of Oil at start °F. At end of test °F.
Condensing or Non-Condensing.

REMARKS AND TESTS REQUIRED:—

**6 Hours Temperature Test on F.L., 2 hours run on 125%
and Compounding.**



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W32-0006 (1/3)

TEMPERATURE AND PERFORMANCE RUN. COMPOUNDING AND GOVERNING TESTS.

Time.	Volts.	Amp.	Revs.	Shunt Amp.	Steam Press.	Reg.	Load.	Volts.	Amp.	Revs.	Shunt Amp.	Reg.
7-45	110	136	650	3.4	120	⁵ 16 In	0	110	0	675	3.5	$\frac{1}{2}$ In.
8-15	110	136	650	3.4	120	"	$\frac{1}{4}$	109.5	34	665	3.5	"
8-45	110	136	650	3.5	120	$\frac{1}{4}$ In	$\frac{1}{2}$	110	66	660	"	"
9-15	110	136	650	3.5	120	"	$\frac{3}{4}$	110	102	653	"	"
9-45	110	136	650	3.5	120	"	1	110	136	650	"	"
10-15	110	136	650	3.55	120	³ 16 In	$\frac{3}{4}$	111	103.5	655	"	"
10-45	110	136	650	3.6	120	"	$\frac{1}{2}$	111.0	67.5	660	"	"
11-15	110	136	650	3.6	120	"	$\frac{1}{4}$	111	36	665	"	"
11-45	110	136	650	3.6	120	"	0	111	0	675	"	"
12-15	110	136	650	3.6	120	Out						
12-45	110	136	650	3.65	120	"	O	Steady		Revs. 675	Volts. 110	
1-15	110	136	650	3.65	120	"	Full	Momentary	"	630	"	105
1-45	110	136	650	3.7	120	"	"	Steady	"	650	"	110
							O	Momentary	"	690	"	117
							O	Steady	"	675	"	110

Parallel Running. 2 Hours 25% O.L.

M/c No.	Volts.	Amp.	Revs.	M/c No.	Volts.	Amp.	Revs.
Time				Shunt Amps.	Reg.	Steam	
2-30	110	171	645	3.5	3/16 In	120	
3-0	110	171	645	3.5	"	120	
3-30	110	171	645	3.55	$\frac{1}{2}$ In	120	
4-0	110	171	645	3.55	"	120	
4-30	110	171	645	3.6	"	120	

	No Load	Full Load.
Reg. all in	12	74
Reg. all out	117	115

Temperature of air at start of 6 hr. Run = °F.

" " " end " " = °F.

	Arm Core	Arm Front.	Arm Back.	Shunt.	Series.	Comm.	Interpoles.
Temperature °F.	110	115		115	110	98	110
Air Temp. °F.							
Rise in Temp. °F.	42	47		47	42	30	42

REMARKS :—

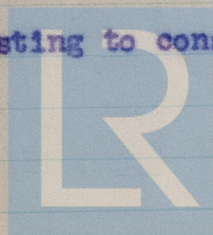
Resistance of Shunt Field Cold - 23.7 ohms.

" " " " Hot - 30 "

2000 Volts A.C. applied for 2 minutes - O.K.

Insulation Resistance - 50 megohms.

Compounding taken with engine exhausting to consider (21" vacuum).



TEMPERATURE AND PERFORMANCE RUN. COMPOUNDING AND GOVERNING TESTS.

Time.	Volts.	Amp.	Revs.	Shunt Amp.	Steam Press.	Reg.	Load.	Volts.	Amp.	Revs.	Shunt Amp.	Reg.
8-00	110	136.5	650	3.1	100	1/3 In	0	110	0	675	3.26	1/8 In.
8-30	110	136.8	650	3.1	100	"	1/4	110.5	33	670	"	"
9-00	110	137.5	650	3.1	100	1/2 In	1/2	110.5	69	662	"	"
9-30	110	138	650	3.1	100	1/6 In	3/4	110.5	101	660	"	"
10-0	110	138	650	3.15	100	"	F.L.	110.5	137	657	"	"
10-30	110	137.5	650	3.1	100	"	1/4	111.5	102	662	"	"
11-0	110	138	650	3.2	100	"	1/2	111.5	72	667	"	"
11-30	110	130	650	3.2	100	"	1/4	111.5	34.5	670	"	"
12-0	110	138	650	3.2	100	"	0	110.5	0	675	3.31	"
12-30	110	138	650	3.2	100	"						
1-0	110	138	650	3.2	100	"	O	Steady	Revs 675	Volts. 110		
1-30	110	138	650	3.2	100	"	Full	Momentary	" 640	" 103		
2-0	110	138	650	3.2	100	"	"	Steady	" 655	" 110		
							O	Momentary	" 700	" 120		
							O	Steady	" 675	" 110		

Parallel Running. 2 Hours 25% O.L.

M/c No.	Volts.	Amp.	Revs.	M/c No.	Volts.	Amp.	Revs.
Time						Shunt	
1-45	110	170	650			3.78	
2-15	110	170	650			3.78	
2-45	110	170	650			3.7	
3-15	110	170	650			3.7	
3-45	110	170	650			3.65	

	No Load	Full Load.
Reg. all in ...	13.5	68
Reg. all out ...	117	115

Temperature of air at start of 6 hr. Run = °F.

" " " end " " = 70 °F.

	Arm Core	Arm Front	Arm Back.	Shunt.	Series.	Comm.	Interpoles.
Temperature °F.	114	112		115	104	98	116
Air Temp. °F.	70	70		70	70	70	70
Rise in Temp. °F.	44	42		45	34	28	46

REMARKS:—

Shunt Resistance Cold 23.9 ohms.

" " Hot 29.7 "

Compound taken with engine exhausting to condenser (21" vacuum).

2000 volts A.C. applied for 2 minutes - O.K.

Insulation Resistance 20 megohms.



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W32-0006 (3/3)