

M.V. "EMPIRE TADRTA"
(A&J. Ingles Yd. No 1314P.)

STEERING GEAR MOTOR. D. C. TEST SHEET.

Customer **Messrs. Brown Bros. & Co. Ltd.**

Customer's Order No. **A.9376/8**

Design No.

Machine No. D **73119**

Frame Size **KS5A**

Enclosure **D.P.**

Rating. **(Fields) (1 Arm)**
Continuous **(2 Hour)**

B.H.P. **5**

R.P.M. **FL.600 N.L.625**

Volts **110**

Amperes **43**

Resistance. Arm + Int + Series.

.198 Ohms.

Brushes: **1" x 3/4" 1M3**

Brush Drop/Pair **3.6** Volts.

Remarks	Time	R.P.M.	SHUNT		Ohms. Ext.	LINE	
			Volts	Amps.		Volts	Amps
No Load. Cold		610				110	5
		585				110	43
		560				110	64.5
	12.0	585				110	43
	12.30	595				110	43
		585				110	54
No Load. Hot		630				110	4.1

No Load Calculations

Armature Amps **40.64**

Total Amps Fe + Fr + Shunt

Shunt Brush Losses

Arm. C²R. Arm/Int/Ser

Total Watts Total Losses

Shunt Input Watts

Arm. Output Watts

Arm/Int/Ser. C²R. B.H.P.

Fe + Fr. Efficiency %

5.02

78.41%

Overload Tests :-

100% for 1/2 Min.

50% " 1 "

25% " 5 "

Temperatures °F @ Full Load

Resistances in Ohms

Where taken	Temp.	Air	Rise	Part	Cold	Hot	Temp. Rise
Armature Core	130	67	63	Shunt Coils	46.5		
Winding	128	67	61	Armature Winding	.14		
Commutator	115	67	48	Interpole	.058		
Interpoles	121	67	54	Series Winding	-		
Shunt Coils	122	67	55	High Voltage Test			
Series Coils				Volts 2000			
				Time 1 Minute			
				Commutation sparkless @			

Insulation to Earth

15 Megohms.

65 Amperes.

Tested **A. McMinn**

Date **21.9.45.**

Approved **JH Harper**

Date **5.11.45.**



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