

DIRECT CURRENT GENERATOR TEST RECORD - - FAIRBANKS, MORSE & CO. - - BELOIT, WIS.

Series No. 66199 *Comp* Wound Arm Data 703025 M. O. 64073 Date 5-12-44
 Type OGZM Frame LA-284 Shunt Data 702128 Main Pole Shim 7/16 Comm. Pole Shim
 Kv. 5 Amp. 40 Speed 1750 Series Data 702312 Rheostat No. WL-66186 Res. 80 Ω
 Volts No Load 125 Volts Full Load 125 Comm. Data 702290 Comm. Diag. 91064 Arm. Wt.
 Comm. Enclosed 40 *Cont.* S. F. 1.15 Spec. No. 8978-22 Rotation C.W. ✓ Mac. Wt.
 Generator Ran 2 Hrs. With 40 Amps. Load At 1750 R.P.M. With 1.9 Amps Shunt Current

GENERATOR		MOTOR		Volts Line	Amps Line	Amps Shunt	Speed	Brush Pos. & Comm'n.	
No Load, Full Field Cold	Full Load, Cold C.W.	<div>X</div>		164	0	4.7	1840	1 Neutral	
No Load, Rheostat All In, Cold	Full Load, Cold, C.C.W.		35	0	.3	1840	1		
No Load, Normal Voltage, Cold	No Load, Cold, C.W.		125	0	1.87	1840	1		
Full Load, Normal Voltage, Cold	No Load, Cold, C.C.W.		125	40	1.87	1750	1		
No Load, Normal Voltage, Hot	Full Load, Hot, C.W.		125	0	1.9	1840	1		
No Load, 110% Normal Voltage, Hot	Full Load, Hot, C.C.W.		1375	0	2.45	1840	1		
No Load, Full Field, Hot	No Load, Hot, C.W.		156	0	3.9	1840	1		
No Load, Rheostat All In, Hot	No Load, Hot, C.C.W.		33	0	.3	1840	1		
Full Load, Normal Voltage, Hot			125	40	1.9	1750	1		
Full Load, Full Series, Brushes On Neutral					105	40	.92	1750	1
<i>min E</i>					144	40	3.7	1750	1
<i>max E</i>									
Commutation, Absolutely Sparkless From 0 To 65 Amps, Harmless From 65 To 90 Amps.									

LOAD CHARACTERISTIC - BRUSH POSITION <u>Neutral</u>								Insulation Resistance - Hot	
Line Volts	125	128	125	126	125	123		Machine	3.5
Line Amps	40	20	0	20	40	50		Armature	3.7
Shunt Amps	1.9	1.95	1.9	1.95	1.9	1.82		Shunt Field	150
Speed	1750	1790	1840	1790	1750	1728		Series Field	200
Commutation	1	1	1	1	1	1		Comm. Field	20

SATURATION - BRUSH POSITION <i>Neutral</i>											Comm. Time	20
Line Volts	25	45	67	84	95	110	122	130	138	145	Between Shunt And Series Field	200
Field Amps	.27	.54	.82	1.1	1.28	1.68	2.1	2.5	3.05	3.65		
Field Volts											Dielectric Test For One Minute	
Speed	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	Machine	1250 Volts A.C.

STRAY POWER										Between Shunt And Series Field		
Line Volts										Machine	1250	Volts. A.C.
Line Amps										Between Shunt And Series Field	1250	Volts. A.C.
Field Amps										Main Pole Air Gap	.069	
Speed										Comm. Pole Air Gap	.190	

Arm. Res. At 25°C			Shunt Field Res. At 25°C			Series Field Res. At 25°C			Comm. Field Res. At 25°C		
Volts	Amps	Ohms	Volts	Amps	Ohms	Volts	Amps	Ohms	Volts	Amps	Ohms
1.51	18	.084	125	3.6	34.7	.73	18	.0405	.70	19	.0368
2.5	30	.0835				1.22	30	.0407	1.1	30	.0366

TEMPERATURE TEST - BRUSH POSITION												
Time	Line Volts	Line Amps	Shunt Field Volts	Shunt Field Amps	Series Field Volts	Series Field Amps	Comm. Field Volts	Comm. Field Amps	Speed	Shunt Temp.	Air Temp.	Exhaust Air

Final Temp. °C, Core	Arm. Copper	Commutator	Shunt Coil	Series Coil	Comm. Coil	Bearing P.E.	C.E.
Final Temp. Rise, Core	Arm. Copper	Commutator	Shunt Coil	Series Coil	Comm. Coil	Bearing P.E.	C.E.
Air Temp	28	End Play	18	Balance	.001-.001	Noise in Running	40
Remarks	Lead Bar # 21362						

Tested by Spitz Approved by E.B.F. Date 5-12-44

CERTIFIED COPY OF
Original Test
FAIRBANKS, MORSE & CO.

G. R. Anderson Chief Engr.
SEP 13 1945 *rs*
Date.....



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