


Generator Test Report

General information			
Customer:	DIESEL POWER HOLLAND	Customer order number:	107613
Date:	30-4-2024	EMRI order number:	32231698

Generator details			
Make:	CATERPILLER	Power:	2291 kVA
Type:	SR4B	Voltage:	440 V
Serial number:	4GN00595	Current:	3007 A
AVR type:	DVR	Frequency:	60 Hz
Enclosure:		Rotation speed:	1800 rpm
Insulation Class:	H	Excitation:	36,9 V 8 A

Test Results						
Megger test			Heatrun			
Megger voltage:	1000	V	Time	Current (A)	Air-out °C	Ambient °C
Stator:	>2000	MΩ	8:00			
Rotor:	>2000	MΩ	8:30			
Exciter Stator:	>2000	MΩ	9:00			
Exciter Rotor:	>2000	MΩ	9:30			
High voltage test			10:00			
Test voltage:	-	V	10:30			
Duration:	-	Sec.	11:00			
<input type="checkbox"/> U-phase / earth	<input type="checkbox"/> W-phase / earth		11:30			
<input type="checkbox"/> V-phase / earth	<input type="checkbox"/> Rotor / earth		12:00			
Excitation			Temperature rise ΔT			
"NO Load"	6,4	V	A	R ₁ = cold resistance U-V:		Ω
"50% Load"	17,3	V	A	R ₂ = warm resistance U-V:		Ω
"100% Load"	29,2	V	A			
150% load:	-	V	-	A		
"120% Overspeed"	4,8	V	A			
Field resistance:	3,8		Ω	$\Delta T = \frac{R_2}{R_1} - 1 = \frac{0,0043}{0,0043} =$		°C

Analyzer Testdata								
"NO Load"	Power:	0	kVA	"NO Load"	Power:	-	kVA	Overload
	Voltage:	444	V		Voltage:	-	V	
	Current:	0	A		Current:	-	A	
	Frequency:	60,1	Hz		Frequency:	-	Hz	
	Power factor:		φ		Power factor:	-	φ	
"50% Load"	Power:	1160	kVA	"50% Load"	Power:	0	kVA	"120% Overspeed"
	Voltage:	439	V		Voltage:	444	V	
	Current:	1528	A		Current:	0	A	
	Frequency:	60,2	Hz		Frequency:	65,2	Hz	
	Power factor:		φ		Power factor:		φ	
"100% Load"	Power:	2284	kVA	"100% Load"				Remarks
	Voltage:	435	V					
	Current:	3031	A					
	Frequency:	60,0	Hz					
	Power factor:		φ					

Acceptance test approval		
Whitnessed by:	Stamp/Signature:	Certificate number:
EMRI		32231698
Repair Engineer(s):	Test Engineer(s):	
JKO	JMY	