


Generator Test Report

General information			
Customer:	DIESEL POWER HOLLAND	Customer order number:	DPH 107685
Date:	12-09-23	EMRI order number:	32230817

Generator details			
Make:	CATERPILLAR	Power:	2600 kVA
Type:	SR4	Voltage:	400 V
Serial number:	2GZ00583	Current:	3732 A
AVR type:	CATAVR	Frequency:	50 Hz
Enclosure:		Rotation speed:	1500 rpm
Insulation Class:	H	Excitation:	37 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"	8,80	V	A	R ₁ = cold resistance U-V:		Ω
"50% Load"	17,00	V	A	R ₂ = warm resistance U-V:		Ω
"100% Load"	25,5	V	A			
"120% Load"	35,4	V	A			
"120% Overspeed"	4,7	V	A			
Field resistance:	4,00		Ω	$\Delta T = \frac{R_2}{R_1} - 1 = \frac{0,0043}{0,0043} =$		°C

Analyzer Testdata								
"NO Load"	Power:	0	kVA	"NO Load"	"120% Load"	Power:	2128	kVA
	Voltage:	409	V			Voltage:	401	V
	Current:	0	A			Current:	3061	A
	Frequency:	50,1	Hz			Frequency:	50,1	Hz
	Power factor:		φ			Power factor:		φ
"50% Load"	Power:	709	kVA	"50% Load"	"120% Overspeed"	Power:	0	kVA
	Voltage:	408	V			Voltage:	405	V
	Current:	1005	A			Current:	0	A
	Frequency:	50,0	Hz			Frequency:	60,2	Hz
	Power factor:		φ			Power factor:		φ
"100% Load"	Power:	1409	kVA	"100% Load"	Remarks			
	Voltage:	403	V					
	Current:	2018	A					
	Frequency:	50,0	Hz					
	Power factor:		φ					

Acceptance test approval		
Whitnessed by:	Stamp/Signature:	Certificate number:
EMRI		32230817
Repair Engineer(s):	Test Engineer(s):	
JKO	MMO	