

Generator Test Report



General information			
Customer:	Diesel Power Holland	Customer order number:	105118
Date:	31-8-2020	EMRI order number:	32181612

Generator details			
Make:	CATERPILLAR	Power:	563 kVA
Type:	SR4B	Voltage:	440 V
Serial number:	8HG01610	Current:	740 A
AVR type:	VR2.3	Frequency:	60 Hz
Enclosure:	IP22	Rotation speed:	1800 rpm
Insulation Class:	F	Excitation:	35,6 V 6,5 A

Test Results							
Megger test				Heatrun			
Megger voltage:	1000	V	Time	Current (A)	Air-out °C	Ambient °C	
Stator:	1000	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:	1500	V	10:30				
Duration:	60	Sec.	11:00				
<input checked="" type="checkbox"/> U-phase / earth	<input checked="" type="checkbox"/> W-phase / earth		11:30				
<input checked="" type="checkbox"/> V-phase / earth	<input type="checkbox"/> Rotor / earth		12:00				
Excitation				Temperature rise ΔT			
"NO Load"	7,20	V	A	R ₁ = cold resistance U-V:		Ω	
"50% Load"	20,40	V	A	R ₂ = warm resistance U-V:		Ω	
"100% Load"	34,8	V	A				
"150% Load"	52,9	V	A				
"120% Overspeed"	6,3	V	A				
Field resistance:	4,80	Ω		$\Delta T = \frac{R_2}{R_1} - 1$	=	°C	
				0,0043			

Analyzer Testdata								
"NO Load"	Power:	0	kVA	"NO Load"	"150% Load"	Power:	839	kVA
	Voltage:	448	V			Voltage:	435	V
	Current:	0	A			Current:	1115	A
	Frequency:	60,1	Hz			Frequency:	60,1	Hz
	Power factor:		φ			Power factor:		φ
"50% Load"	Power:	284	kVA	"50% Load"	"120% Overspeed"	Power:	0	kVA
	Voltage:	440	V			Voltage:	466	V
	Current:	373	A			Current:	0	A
	Frequency:	60,1	Hz			Frequency:	65,2	Hz
	Power factor:		φ			Power factor:		φ
"100% Load"	Power:	560	kVA	"100% Load"	Remarks			
	Voltage:	436	V					
	Current:	742	A					
	Frequency:	60,1	Hz					
	Power factor:		φ					
								Remarks

Acceptance test approval		
Whitnessed by:	Stamp/Signature:	Certificate number:
DNV/GL	 Witnessed <input checked="" type="checkbox"/> Reviewed <input type="checkbox"/> And signed to comply with: Verification Date: 31-08-2020 Sign: L. Kleijwegt	08 REP 20 N14215 NN
Repair Engineer(s): DBR	Test Engineer(s): DBR	