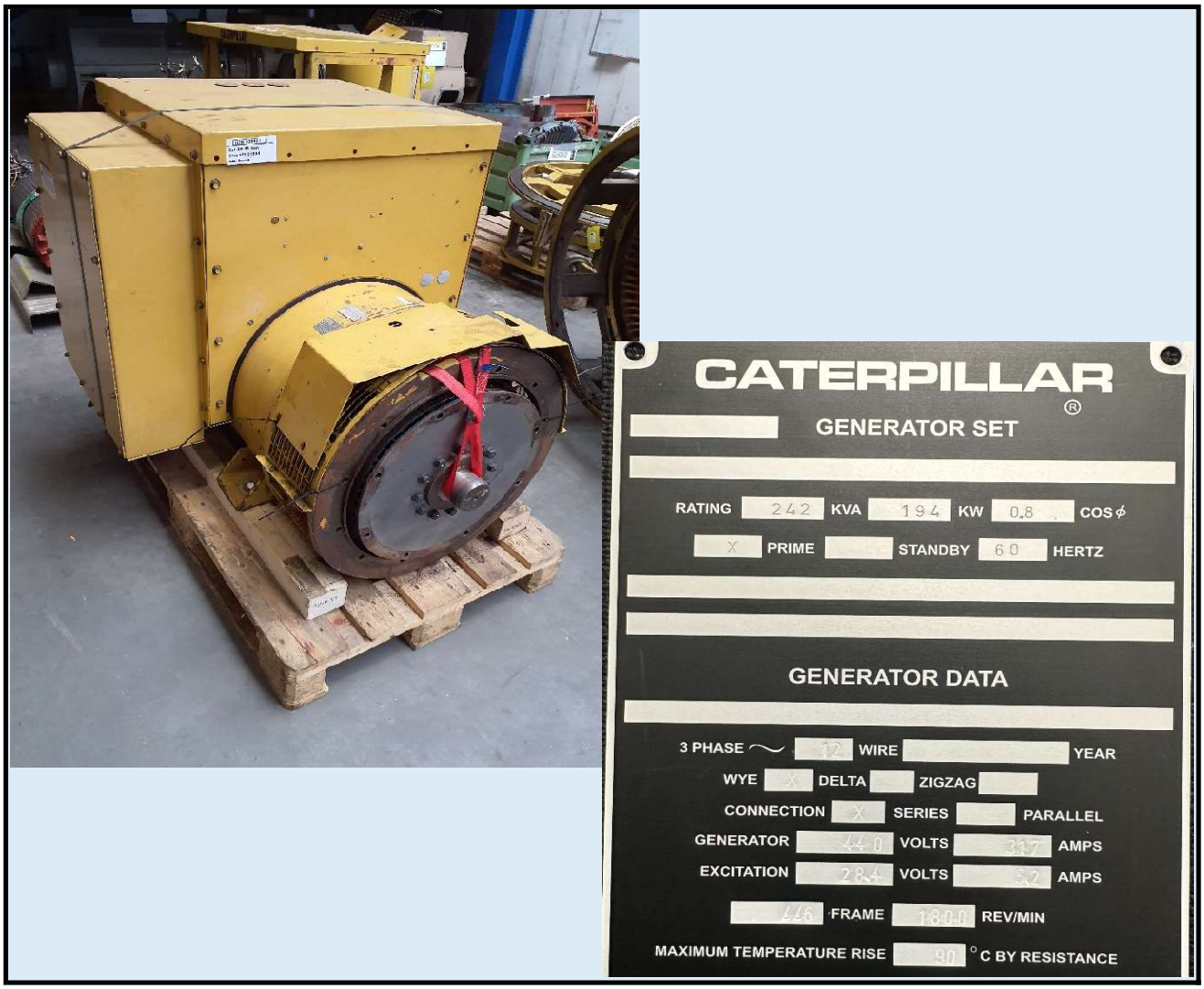
32260454



Customer:	Diesel Power Holland B.V.
Project:	
Order number:	DPH108821
EMRI reference:	32260454
Date:	5-5-2026

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Conditionform

			Note:
Stator windings	Pass		
Exciter field	Pass		
PMG stator windings	Pass		
Rotor windings	Pass		
Exciter rotor	Pass		
Diodes	Failed		GELIJKM50100CAT
Type (diodes)	Standard		
Number (diodes)	1		
Varistor	n/a		
Drooptrafo	n/a		Not present, 500/1A
Cos Phi trafo	n/a		
Terminal box	Failed		Delivered by DPH
PTC elementen	n/a		
PT100 windings	n/a		
PT100 bearings	n/a		
Space heater	Pass		
Single / Dubble bearing	Single		
Bearing seating shaft DE	n/a		
Bearing seating shaft NDE	Pass		
Bearing bore DE	n/a		
Isolated	No		
Bearing bore NDE	Pass		
Isolated	No		
Type bearing DE	n/a		
Type bearing NDE	6220 ZZ C3		Default replaced
Type bearinggrease	n/a		
Coupling position	n/a		
Coupling pos. distance	mm		
Shaft / key way	n/a		
Bore of coupling / hub	n/a		
Coupling rubber	n/a		
Coupling rubber brand	n/a		
Coupling rubber type	n/a		
Flexplates	Pass		
Cooling fan	Pass		
AVR / Wiring	Failed		Delivered by DPH
Outside color	CAT yellow		
Several parts			Rust removal + coating
Additional work	Yes		
General overhaul	Yes		
	Total Price:		

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Measurement (incoming condition)

			Note:
Stator defect	No		
Stator windings Meggertest (to earth)	2000	MΩ	
Between U - V Meggertest	2000	MΩ	
Between U - W Meggertest	2000	MΩ	
Between V - W Meggertest	2000	MΩ	
Stator windings surge test	Passed		
Aux windings megger test	N/A	MΩ	
Between Main & Aux megger test	N/A	MΩ	
Exciter field defect	No		
Exciter field megger test	370	MΩ	
Exciter field resistance	5,3	Ω	
Exciter rotor defect	No		
Exciter rotor megger test	821	MΩ	
Exciter rotor surge test	Passed		
Main rotor defect	No		
Main rotormegger test	1427	MΩ	
Main rotor inductive test	Passed		
Heater resistance	57,3	Ω	

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Bearingseating

			Note:
Shaft NDE nominal size	100	mm	
Shaft NDE tolerance	k5 (0-100)		
Shaft NDE visuel condition	no remarks		
Shaft NDE measurement	100,01	mm	
Shaft NDE result	Passed		
Bore NDE nominal size	180	mm	
Bore NDE tolerance	Moving side (H7)		
Bore NDE visuel condition	no remarks		
Bore NDE measurement	180,015	mm	
Bore NDE result	Passed		

Additional info		
Else		

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The generator was received in our workshop for inspection and repairs. The measurements of the inspections are shown above. These resulted in the following scope of work:

The following works are advised/required:
-General overhaul:
- o Incoming inspection and dismantling generator
- o Complete cleaning and overhaul of generator parts
- o Measure and check of all windings (before and after cleaning process)
- o High-pressure cleaning and oven-drying of windings
- o Impregnation of windings (rotor and exciter)
- o Measure and check of DE / NDE bearing seating (shaft and bores)
- o Renewal of DE / NDE bearings (including supply of standard bearings)
- o Cleaning of bearing housings / covers and renewal of bearing grease
- o Check and overhaul excitation system
- o Overhaul of connection box / terminals
- o Assembly of generator
- o Measuring, check and adjustment of voltage regulator
- o Perform dynamic load-test and prepare test report
- o Spray painting (outside)
- o Prepare for shipment

Additional repairs:
-Rust removal and coating of several parts
- VR6 AVR installed and delivered by DPH
- Diodes replaced
- New Droop transformer installed
- Terminal box delivered by DPH

Generator Test Report

General information			
Customer:	**Diesel Power Holland B.V.**	Customer order number:	**DPH108821**
Date:	**5-1-2026**	EMRI order number:	**32260454**

Generator details						
Make:	**CATERPILLAR**	Power:	**242**			kVA
Type:	**SR4B**	Voltage:	**440**			V
Serial number:	**6EG01584**	Current:	**317**			A
AVR type:	**VR6**	Frequency:	**60**			Hz
Enclosure:		Rotation speed:	**1800**			rpm
Insulation Class:	**H**	Excitation:	**28,4**	V	**5,2**	A

Test Results

Megger test		
Megger voltage:	**1000**	V
Stator:	**>2000**	MΩ
Rotor:	**>2000**	MΩ
Exciter Stator:	**>2000**	MΩ
Exciter Rotor:	**>2000**	MΩ

High voltage test		
Test voltage:	**-**	V
Duration:	**-**	Sec.
☐ U-phase / earth	☐ W-phase / earth	
☐ V-phase / earth	☐ Rotor / earth	

Heatrun			
Time	**Current (A)**	**Air-out °C**	**Ambient °C**
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			
11:00			
11:30			
12:00			

Excitation				
"NO Load"	**7,5**	V		A
"50% Load"	**17,8**	V		A
"100% Load"	**28,7**	V		A
"120% Load"	**33,6**	V		A
"120% Overspeed"	**6,4**	V		A
Field resistance:	**5,0**			Ω

Temperature rise ΔT		
R_1 = cold resistance U-V:		Ω
R_2 = warm resistance U-V:		Ω
$\Delta T = \frac{\frac{R_2}{R_1} - 1}{0{,}0043} =$		°C

Analyzer Testdata

"NO Load"			
Power:	**0**	kVA	"NO Load"
Voltage:	**446**	V	
Current:	**0**	A	
Frequency:	**60,0**	Hz	
Power factor:		φ	

"120% Load"			
Power:	**288**	kVA	"120% Load"
Voltage:	**433**	V	
Current:	**385**	A	
Frequency:	**60,2**	Hz	
Power factor:		φ	

"50% Load"			
Power:	**123**	kVA	"50% Load"
Voltage:	**440**	V	
Current:	**161**	A	
Frequency:	**60,2**	Hz	
Power factor:		φ	

"120% Overspeed"			
Power:	**0**	kVA	"120% Overspeed"
Voltage:	**446**	V	
Current:	**0**	A	
Frequency:	**65,1**	Hz	
Power factor:		φ	

"100% Load"			
Power:	**243**	kVA	"100% Load"
Voltage:	**435**	V	
Current:	**322**	A	
Frequency:	**60,2**	Hz	
Power factor:		φ	

Remarks

Acceptance test approval		
Whitnessed by:	**Stamp/Signature:**	**Certificate number:**
EMRI		**32260454**

Repair Engineer(s):	Test Engineer(s):		
JMY	**RSC**		

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