

INSPECTION REPORT

UNIT #1

Project : 3 x JMS 620 GS.N-L GE Jenbacher Gas Engine Generator Set



A. NAME PLATE

1. Gas Engine Generating Set



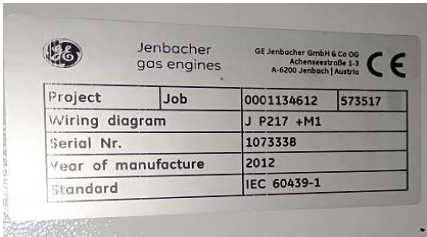
Type	: JMS 620 GS-F
Serial No.	: 1073336
Year of manufacturer	: 2012
Operating hours	: 22,778
Rated power (COP)	: 3349 kW
Rated power factor	: 1
Max. site altitude	: 500 m
Max. ambient temp. (intake air)	: 40°C
Rated frequency	: 50 Hz
Rated voltage	: 11000 V
Rated current	: 176 A
Mass	: 21300
Performance	: G2
SO number	: 11346 JP 217

2. Engine



Engine type	: J 620 GS-F111
Engine no,	: 1073336
ISO standard power	: 3431 kW
Speed	: 1500 rpm
Weight	: 16100 kg

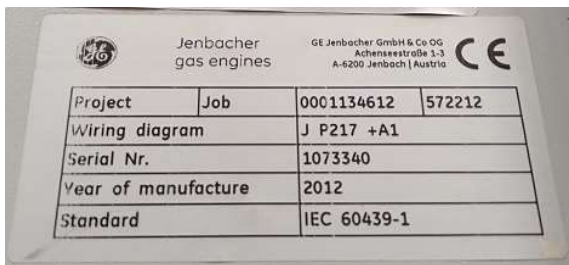
3. Interface Panel

 Project Job 0001134612 573517 Wiring diagram J P217 +M1 Serial Nr. 1073338 Year of manufacture 2012 Standard IEC 60439-1	Project : 0001134612/573517 Wiring diagram : J P217 +M1 Serial No. : 1073338 Year of manufacturer : 2012 Standard : IEC 60439-1
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4. Generator

 Machine ID No. : 84 31365 B204 Frame/Core : DIG 142 e/4 Year of Manufacturer : 2012 KVA Base Rate (BR) : 4450 kVA Frequency (HZ) : 50 Speed (rpm) : 1500 Over Speed (rpm) : 1800 Voltage (volt) : 10500 Phase : 3 Connection : Y Amps Base Rate (BR) : 245 A Power Factor (PF) : 0.80 Rating : S1 Excitation (volt) : 48.4 Excitation (amps) : 4.97 Ambient Temp. : 40°C Enclosure : IP 23 Insulation Class : F/F Weight : 9700 kg	Machine ID No. : 84 31365 B204 Frame/Core : DIG 142 e/4 Year of Manufacturer : 2012 KVA Base Rate (BR) : 4450 kVA Frequency (HZ) : 50 Speed (rpm) : 1500 Over Speed (rpm) : 1800 Voltage (volt) : 10500 Phase : 3 Connection : Y Amps Base Rate (BR) : 245 A Power Factor (PF) : 0.80 Rating : S1 Excitation (volt) : 48.4 Excitation (amps) : 4.97 Ambient Temp. : 40°C Enclosure : IP 23 Insulation Class : F/F Weight : 9700 kg
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5. Module Control Panel

 Project Job 0001134612 572212 Wiring diagram J P217 +A1 Serial Nr. 1073340 Year of manufacture 2012 Standard IEC 60439-1	Project : 0001134612/572212 Wiring diagram : J P217 +A1 Serial No. : 1073340 Year of manufacturer : 2012 Standard : IEC 60439-1
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B. INSPECTION

1. Engine

Top view



Bank A side view



Bank B side view



Flywheel side view



Cooling side view



Bank A (Above)



Bank A (Below)



Bank B (Above)



Bank B (Below)



Bank A side block



Bank B side block



Bypass throttle valves



Gas inlet



Throttle servo motor



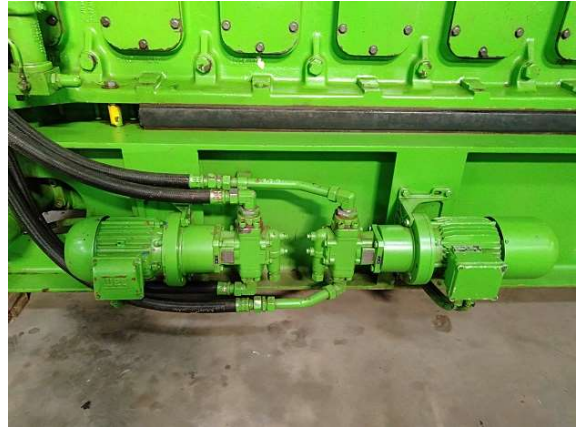
Throttle Valve



Oil inlet & discharge lines and oil level



Priming pumps



Heat exchanger



Cooling system interface



Jacket water pump



Pre-heat cooling water



Motor starter



Ignition control



Mechanical oil circulation pump



Bluebay/lube oil ventilation system



Interface panel outside view



Interface panel inside view



Spark Plug



Combustion cylinder endoscope:



Cylinder #3



Cylinder #4



Cylinder #5



Cylinder #6



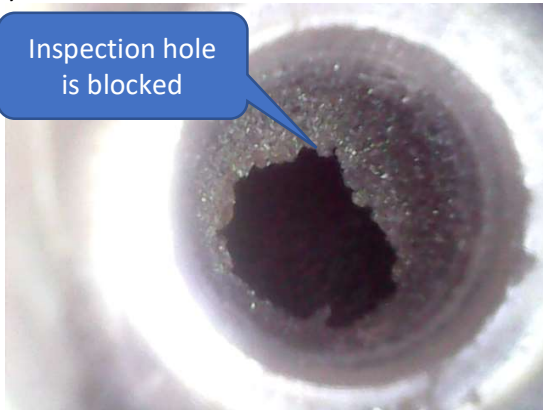
Cylinder #7



Cylinder #8



Cylinder #9



Cylinder #10



Cylinder #11



Cylinder #12



Cylinder #13



Cylinder #14



Cylinder #15



Cylinder #16



Cylinder #17



Cylinder #18



Cylinder #19



Cylinder #20



2. Turbo Charger

Bank A: Easy turn by hand (gab: 0,45mm)



Bank B: Easy tur by hand (gab: 0.45mm)



3. Crank Shaft Axial, *all connecting rods movements is moving good (2/12 to 10/20)*

Zero position



Movements/displacement : 0.46 mm



4. Crank Shaft Bearing Cylinder #12

Bearing #12



Shaft #12



Liner #2



Cylinder #16

Bearing #16



Shaft #16



Liner #6



Cylinder #10

Bearing #20



Shaft #20



Liner #10



5. Coneccting Rods Pictures

Hand hole #12



Hand hole #13



Hand hole #14



Hand hole #15



Hand hole #16



Hand hole #17



Hand hole #18



Hand hole #19



Hand hole #20



Engine oil tank



6. Generator

Front view



Rear view



Grease top up line (TOP)



Grease top up & disposal line (BOTTOM)



Main winding (TOP)



Main winding (BOTTOM)



Main winding (LEFT)



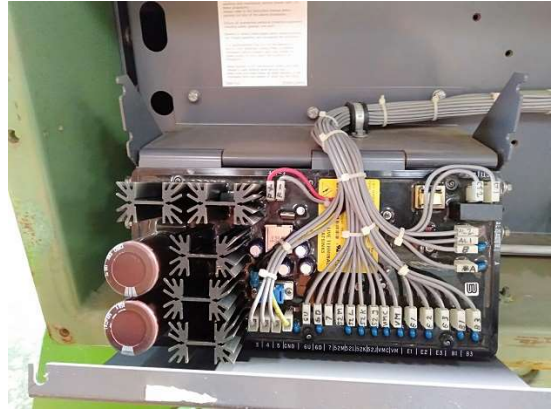
Main winding (RIGHT)



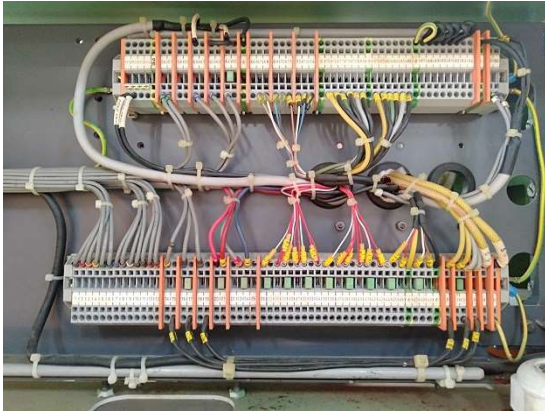
Exciter/AVR panels



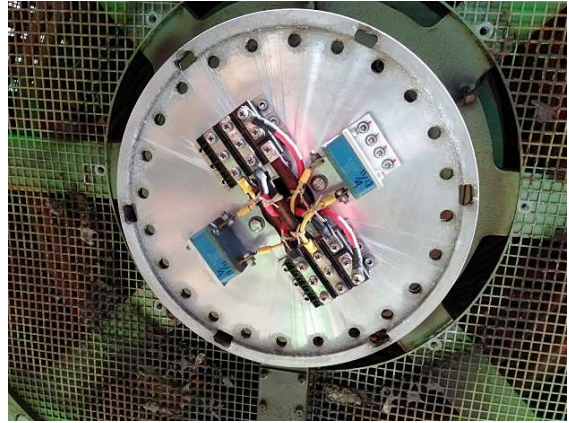
AVR



Exciter/AVR interfacing terminals



Exciter diodes



Main terminal box



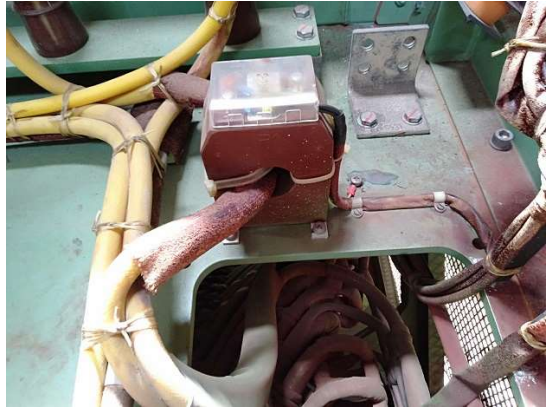
Close up 1



Close up 2



Close up 3



Close up 4



Phase U insulation resistance: >1 giga ohm



Phase V insulation resistance: >1 giga ohm



Phase W insulation resistance: 883 mega ohm



Terminal box corner 1



Terminal box corner 2



Terminal box corner 3



Terminal box corner 4



7. Exhaust gas Y-pipe



8. Gas Line (Gas train, prechamber and accessories)



9. Cooling water

HT circuit circulation pump



LT circuit circulation pump



HT & LT three way valves



Pressurized tank



10. Module Control Panel

Front view



Inside panel



Flash card



12. Accessories

Engine lifting lug A-side



Engine lifting lug B-side



Generator rotor lock bar



Engine turning bar



13. Technical Documents

Technical description	Wiring diagram
Maintenance book	Spareparts list
Alarm list	Logsheet (at least last 3 months)

14. Hystorical of the units

1. 1 st engine commissioning date	
2. The last date operated	
3. Stop mode	
4. Running hours	
5. Stop reason	
6. Periodical maintenace	
7. Unscheduled repair	
8. Part replacement	
9. Engine oil	
10. Others:	