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# Engine Room Simulator

## LM2500 Gas Turbine – GT22

  

### Alarm Lists

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## 1 DIRECTORY LIST

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Page:5000	GT1 Enclosure Ventilation
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## 2 VARIABLE LIST PAGES

### 2.1 Page:1000 AG01 \*\* Fuel Supply System

A:	L20001	%	L=10.0	H=98.0	GT1 Fuel Day Tank Level
B:	L20003	%	L=40.0	H=---	GT1 Fuel Exp.Tank Level
C:	P20001	bara	L=---	H=1.9	GT1 Fuel Supply Filter Diff Pressure
D:	P20005	bara	L=---	H=1.9	GT1 Suction Filter Diff Pressure
E:	P20007	bar	L=0.5	H=---	GT1 Fuel Supply Pressure
F:	L20002	%	L=10.0	H=98.0	GT2 Fuel Day Tank Level
G:	L20004	%	L=40.0	H=---	GT2 Fuel Exp.Tank Level
H:	P20002	bara	L=---	H=1.9	GT2 Fuel Supply Filter Diff Pressure
I:	P20006	bara	L=---	H=1.9	GT2 Suction Filter Diff Pressure
J:	P20008	bar	L=0.5	H=---	GT2 Fuel Supply Pressure

K:

L:

M:

N:

O:

P:

Q:

R:

S:

T:

### 2.2 Page:2000 AG02 \*\* GT1 Lube Oil System

A:	L20101	%	L=10.0	H=98.0	GT1 LO Storage Tank Level
B:	T20101	degC	L=---	H=100.0	GT1 LO Temp after cooler
C:	T20103	degC	L=---	H=120.0	GT1 LO Temp before cooler
D:	T20104	degC	L=---	H=100.0	GT1 LO Temp out of Storage Tank
E:	P20101	bara	L=---	H=1.4	GT1 LO Scavenge Filter1 Diff Pressure
F:	P20102	bara	L=---	H=1.4	GT1 LO Scavenge Filter2 Diff Pressure
G:	P20103	bara	L=---	H=1.4	GT1 LO Supply Filter1 Diff Pressure
H:	P20104	bara	L=---	H=1.4	GT1 LO Supply Filter2 Diff Pressure
I:	P20105	bar	L=1.3	H=---	GT1 LO Supply Pressure
J:	T20111	degC	L=---	H=120.0	GT1 LO Scavenge Temp A
K:	T20112	degC	L=---	H=120.0	GT1 LO Scavenge Temp B
L:	T20113	degC	L=---	H=120.0	GT1 LO Scavenge Temp C
M:	T20114	degC	L=---	H=120.0	GT1 LO Scavenge Temp D
N:	T20115	degC	L=---	H=120.0	GT1 LO Scavenge Temp E (gearbox)

O:

P:

Q:

R:

S:

T:



## 2.3 Page:3000 AG03\*\* GT1 Starting System

A: P20201 bar L=2.0 H=--- GT1 Start Air Pressure  
B: N20201 rpm L=--- H=9900.0 GT1 GG Speed  
C: N20202 rpm L=--- H=4000.0 GT1 PT Speed  
D: P20202 bar L=--- H=80.0 GT1 Fuel Manifold Pressure  
E: T20201 degC L=--- H=885.0 GT1 PT Inlet Gas Temperature (T 5.4)

F:  
G:  
H:  
I:  
J:  
K:  
L:  
M:  
N:  
O:  
P:  
Q:  
R:  
S:  
T:

## 2.4 Page:4000 AG04\*\* GT1 Fuel System

A: P20301 bar L=--- H=1.9 GT1 Fuel Filter Diff. Pressure  
B: T20301 degC L=--- H=55.0 GT1 Fuel Suction Temperature  
C: T20302 degC L=--- H=50.0 GT1 Air Inlet Temperature (T 2)

D:  
E:  
F:  
G:  
H:  
I:  
J:  
K:  
L:  
M:  
N:  
O:  
P:  
Q:  
R:  
S:  
T:



## 2.5 Page:5000 AG05\*\* GT1 Enclosure Ventilation

A: X20411	<0-1>	L=---	H=1.0	GT1 Fire Alarm
B: X20417	<0-1>	L=---	H=1.0	GT1 Fire Flame Detector (UV)
C: X20418	<0-1>	L=---	H=1.0	GT1 Fire Temperature Switch
D: X20412	<0-1>	L=---	H=1.0	GT1 Fire Alarm Switch (manual)

E:  
F:  
G:  
H:  
I:  
J:  
K:  
L:  
M:  
N:  
O:  
P:  
Q:  
R:  
S:  
T:

## 2.6 Page:6000 AG06\*\* GT1 Load System

A: E20501	kW	L=---	H=20000.0	GT1 El. Generator Active Power
B: I20501	A	L=---	H=15000.0	GT1 El. Generator Current
C: X20501	<0-3>	L=---	H=1.0	GT1 El. Breaker Trip
D: E20511	kW	L=---	H=20000.0	GT1 Water Brake Power
E: Q20512	kNm	L=---	H=55.0	GT1 Water Brake Torque

F:  
G:  
H:  
I:  
J:  
K:  
L:  
M:  
N:  
O:  
P:  
Q:  
R:  
S:  
T:



## 2.7 Page:7000 AG07\*\* GT1 Miscellaneous

A: T30001 degC L=--- H=175.0 GT1 Enclosure Temperature

B:

C:

D:

E:

F:

G:

H:

I:

J:

K:

L:

M:

N:

O:

P:

Q:

R:

S:

T:

## 2.8 Page:12000 AG12\*\* GT2 Lube Oil System

A: L25101 % L=10.0 H=98.0 GT2 LO Storage Tank Level

B: T25101 degC L=--- H=100.0 GT2 LO Temp after cooler

C: T25103 degC L=--- H=120.0 GT2 LO Temp before cooler

D: T25104 degC L=--- H=100.0 GT2 LO Temp out of Storage Tank

E: P25101 bara L=--- H=1.4 GT2 LO Scavenge Filter1 Diff Pressure

F: P25102 bara L=--- H=1.4 GT2 LO Scavenge Filter2 Diff Pressure

G: P25103 bara L=--- H=1.4 GT2 LO Supply Filter1 Diff Pressure

H: P25104 bara L=--- H=1.4 GT2 LO Supply Filter2 Diff Pressure

I: P25105 bar L=1.3 H=--- GT2 LO Supply Pressure

J: T25111 degC L=--- H=120.0 GT2 LO Scavenge Temp A

K: T25112 degC L=--- H=120.0 GT2 LO Scavenge Temp B

L: T25113 degC L=--- H=120.0 GT2 LO Scavenge Temp C

M: T25114 degC L=--- H=120.0 GT2 LO Scavenge Temp D

N: T25115 degC L=--- H=120.0 GT2 LO Scavenge Temp E (gearbox)

O:

P:

Q:

R:

S:

T:





**2.9 Page:13000 AG13\*\* GT2 Starting System**

A: P25201 bar L=2.0 H=--- GT2 Start Air Pressure  
 B: N25201 rpm L=--- H=9900.0 GT2 GG Speed  
 C: N25202 rpm L=--- H=4000.0 GT2 PT Speed  
 D: P25202 bar L=--- H=80.0 GT2 Fuel Manifold Pressure  
 E: T25201 degC L=--- H=885.0 GT2 PT Inlet Gas Temperature (T 5.4)

F:  
 G:  
 H:  
 I:  
 J:  
 K:  
 L:  
 M:  
 N:  
 O:  
 P:  
 Q:  
 R:  
 S:  
 T:

**2.10 Page:14000 AG14\*\* GT2 Fuel System**

A: P25301 bar L=--- H=1.9 GT2 Fuel Filter Diff. Pressure  
 B: T25301 degC L=--- H=55.0 GT2 Fuel Suction Temperature  
 C: T25302 degC L=--- H=50.0 GT2 Air Inlet Temperature (T 2)

D:  
 E:  
 F:  
 G:  
 H:  
 I:  
 J:  
 K:  
 L:  
 M:  
 N:  
 O:  
 P:  
 Q:  
 R:  
 S:  
 T:



## 2.11 Page:15000 AG15\*\* GT2 Enclosure Ventilation

A: X25411 <0-1> L=--- H=1.0 GT2 Fire Alarm  
 B: X25417 <0-1> L=--- H=1.0 GT2 Fire Flame Detector (UV)  
 C: X25418 <0-1> L=--- H=1.0 GT2 Fire Temperature Switch  
 D: X25412 <0-1> L=--- H=1.0 GT2 Fire Alarm Switch (manual)

E:  
 F:  
 G:  
 H:  
 I:  
 J:  
 K:  
 L:  
 M:  
 N:  
 O:  
 P:  
 Q:  
 R:  
 S:  
 T:

## 2.12 Page:16000 AG16\*\* GT2 Load System

A: E25501 kW L=--- H=20000.0 GT2 El. Generator Active Power  
 B: I25501 A L=--- H=15000.0 GT2 El. Generator Current  
 C: X25501 <0-3> L=--- H=1.0 GT2 El. Breaker Trip  
 D: E25511 kW L=--- H=20000.0 GT2 Water Brake Power  
 E: Q25512 kNm L=--- H=55.0 GT2 Water Brake Torque

F:  
 G:  
 H:  
 I:  
 J:  
 K:  
 L:  
 M:  
 N:  
 O:  
 P:  
 Q:  
 R:  
 S:  
 T:



## 2.13 Page:17000 AG17\*\* GT2 Miscellaneous

A: T40001 degC L=--- H=175.0 GT2 Enclosure Temperature  
 B:  
 C:  
 D:  
 E:  
 F:  
 G:  
 H:  
 I:  
 J:  
 K:  
 L:  
 M:  
 N:  
 O:  
 P:  
 Q:  
 R:  
 S:  
 T:

## 2.14 Page:18000 AG18\*\* GT1 Status

A: E30001 MW L=--- H=20.5 GT1 Power  
 B: Q30001 kNm L=--- H=55.0 GT1 Torque  
 C: X30010 mils L=--- H=6.0 GT1 GG Vibration (Self Induced)  
 D: X30011 mils L=--- H=6.0 GT1 GG Vibration (PT Induced)  
 E: X30012 mils L=--- H=7.0 GT1 PT Vibration (Self Induced)  
 F: X30013 mils L=--- H=7.0 GT1 PT Vibration (GG Induced)  
 G: P30001 bara L=--- H=1.2 GT1 Air Inlet Pressure (PT2)  
 H: P30002 bara L=--- H=4.3 GT1 PT Gas Inlet Pressure (PT 5,4)  
 I: P30003 bara L=--- H=20.0 GT1 Compr Discharge Press  
 J: X30020 <0-1> L=--- H=1.0 GT1 Fire - Emergency Stop  
 K: X30021 <0-1> L=--- H=1.0 GT1 Fuel Leak Indicator  
 L: E40001 MW L=--- H=20.5 GT2 Power  
 M: Q40001 kNm L=--- H=55.0 GT2 Torque  
 N: X40010 mils L=--- H=6.0 GT2 GG Vibration (Self Induced)  
 O: X40011 mils L=--- H=6.0 GT2 GG Vibration (PT Induced)  
 P: X40012 mils L=--- H=7.0 GT2 PT Vibration (Self Induced)  
 Q: X40013 mils L=--- H=7.0 GT2 PT Vibration (GG Induced)  
 R: P40001 bara L=--- H=1.2 GT2 Air Inlet Pressure (PT2)  
 S: P40002 bara L=--- H=4.3 GT2 PT Gas Inlet Pressure (PT 5,4)  
 T: P40003 bara L=--- H=20.0 GT2 Compr Discharge Press



## 2.15 Page:18001 AG18\*\* GT1 Status

A: X40020 <0-1> L=--- H=1.0 GT2 Fire - Emergency Stop  
 B: X40021 <0-1> L=--- H=1.0 GT2 Fuel Leak Indicator  
 C:  
 D:  
 E:  
 F:  
 G:  
 H:  
 I:  
 J:  
 K:  
 L:  
 M:  
 N:  
 O:  
 P:  
 Q:  
 R:  
 S:  
 T:

## 2.16 Page:21000 AG21\*\* GT1 Local Operating Panel no.1

A: X82014 <0-1> L=--- H=1.0 GT1 Emergency Stop  
 B: T82102 degC L=--- H=175.0 GT1 Encl. cooling Air Outlet Temp.  
 C: X82105 <0-1> L=--- H=1.0 GT1 Fail to Reach 1200 rpm  
 D: X82106 <0-1> L=--- H=1.0 GT1 Fail to Reach 4500 rpm  
 E: X82107 <0-1> L=--- H=1.0 GT1 Fail to Light Off  
 F: X82108 <0-1> L=--- H=1.0 GT1 GG Inlet Air Icing  
 G: X82109 <0-1> L=--- H=1.0 GT1 PT Inlet Temp High (shut down)  
 H: X82110 <0-1> L=--- H=1.0 GT1 PT O/S Switch (Shut down)  
 I: X82111 <0-1> L=--- H=1.0 GT1 Lube Oil Low Press.(Shut down)  
 J: X82112 <0-1> L=--- H=1.0 GT1 PT Inlet Temp High (T5,4)  
 K: X82113 <0-1> L=--- H=1.0 GT1 LO Supply Press Low  
 L: X82115 <0-1> L=--- H=1.0 GT1 Stop Failure  
 M: X82117 <0-1> L=--- H=1.0 GT1 LO Temp Sump A High  
 N: X82118 <0-1> L=--- H=1.0 GT1 LO Temp Sump B High  
 O: X82119 <0-1> L=--- H=1.0 GT1 LO Temp Sump C High  
 P: X82120 <0-1> L=--- H=1.0 GT1 LO Temp Sump D High  
 Q: X82121 <0-1> L=--- H=1.0 GT1 LO Temp Sump Gear High  
 R: X82122 <0-1> L=--- H=1.0 GT1 Starter Failure  
 S: X82123 <0-1> L=--- H=1.0 GT1 GG Vibra High  
 T: X82124 <0-1> L=--- H=1.0 GT1 PT Vibra High



## 2.17 Page:21001 AG21\*\* GT1 Local Operating Panel no.1

A: X82125	<0-1>	L=---	H=1.0	GT1 PLA Actuator Failure
B: X82126	<0-1>	L=---	H=1.0	GT1 Fuel Valves No Current
C: X82127	<0-1>	L=---	H=1.0	GT1 Overtorque Indication
D: X82128	<0-1>	L=---	H=1.0	GT1 PT Speed Limit
E: X82129	<0-1>	L=---	H=1.0	GT1 GT Cooling Air Temp High
F: X82130	<0-1>	L=---	H=1.0	GT1 Enclosure Heater Overtemp
G: X82131	<0-1>	L=---	H=1.0	GT1 Fire Exting. Release Inhibit
H: X82133	<0-1>	L=---	H=1.0	GT1 Flame Detector Failure
I: X82134	<0-1>	L=---	H=1.0	GT1 Enclosure Fire Indication
J:				
K:				
L:				
M:				
N:				
O:				
P:				
Q:				
R:				
S:				
T:				

## 2.18 Page:22000 AG22\*\* GT2 Local Operating Panel no.1

A: X92014	<0-1>	L=---	H=1.0	GT2 Emergency Stop
B: T92102	degC	L=---	H=175.0	GT2 Encl. cooling Air Outlet Temp.
C: X92105	<0-1>	L=---	H=1.0	GT2 Fail to Reach 1200 rpm
D: X92106	<0-1>	L=---	H=1.0	GT2 Fail to Reach 4500 rpm
E: X92107	<0-1>	L=---	H=1.0	GT2 Fail to Light Off
F: X92108	<0-1>	L=---	H=1.0	GT2 GG Inlet Air Icing
G: X92109	<0-1>	L=---	H=1.0	GT2 PT Inlet Temp High (shut down)
H: X92110	<0-1>	L=---	H=1.0	GT2 PT O/S Switch (Shut down)
I: X92111	<0-1>	L=---	H=1.0	GT2 Lube Oil Low Press.(Shut down)
J: X92112	<0-1>	L=---	H=1.0	GT2 PT Inlet Temp High (T5,4)
K: X92113	<0-1>	L=---	H=1.0	GT2 LO Supply Press Low
L: X92115	<0-1>	L=---	H=1.0	GT2 Stop Failure
M: X92117	<0-1>	L=---	H=1.0	GT2 LO Temp Sump A High
N: X92118	<0-1>	L=---	H=1.0	GT2 LO Temp Sump B High
O: X92119	<0-1>	L=---	H=1.0	GT2 LO Temp Sump C High
P: X92120	<0-1>	L=---	H=1.0	GT2 LO Temp Sump D High
Q: X92121	<0-1>	L=---	H=1.0	GT2 LO Temp Sump Gear High
R: X92122	<0-1>	L=---	H=1.0	GT2 Starter Failure
S: X92123	<0-1>	L=---	H=1.0	GT2 GG Vibra High
T: X92124	<0-1>	L=---	H=1.0	GT2 PT Vibra High



## 2.19 Page:22001 AG22\*\* GT2 Local Operating Panel no.1

A: X92125	<0-1>	L=---	H=1.0	GT2 PLA Actuator Failure
B: X92126	<0-1>	L=---	H=1.0	G2 Fuel Valves No Current
C: X92127	<0-1>	L=---	H=1.0	GT2 Overtorque Indication
D: X92128	<0-1>	L=---	H=1.0	GT2 PT Speed Limit
E: X92129	<0-1>	L=---	H=1.0	GT2 GT Cooling Air Temp High
F: X92130	<0-1>	L=---	H=1.0	GT2 Enclosure Heater Overtemp
G: X92131	<0-1>	L=---	H=1.0	GT2 Fire Exting. Release Inhibit
H: X92133	<0-1>	L=---	H=1.0	GT2 Flame Detector Failure
I: X92134	<0-1>	L=---	H=1.0	GT2 Enclosure Fire Indication

J:

K:

L:

M:

N:

O:

P:

Q:

R:

S:

T: