



Resalat Oil Field Development Project Phase 1 (EPC-EPD)



Contract No.

Data Sheet for Gas-Generator

Class

2

5365

Pr. Code

Unit

Disc.

Doc.

Seq.

Rev.

LRSL

R1X

EL

DS





008





01





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Data Sheet for Gas-Generator

Rev.	Date	Purpose of Issue	ORIG.	BY	PREP'D	CHECK'D	APP'D	COMPANY APP'D
					<i>S.S.</i>	<i>A.S.</i>	<i>M.A.</i>	-
01	9-May-21	Issued for Approval	IOEC	-	S.Saffari	A.Samadi	M.Aghaei	-
00	9-May-21	Issued for Comment	IOEC	-	S.Saffari	A.Samadi	M.Aghaei	-

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GENERAL DATA								
Vendor's Name:					Design Temp. Deg.C (Min / Max): 7°C/45°C			
Tag No.(s): LRS�-11-G-0301, LRS�-11-G-0302, LRS�-11-G-0303					Area Classification: Zone 2			
Reference Document.(s): LRS�-000-PR-DB-706 (Process Design Basis (Basic)), LRS�-R1X-EL-CC-009 (Gas-Generator sizing), LRS�-000-EL-SP-619 (Specification for Gas-Generator), LRS�-000-EL-DB-603 (Electrical Design Criteria), LRS�-R1X-EL-SD-007 (Overall Single Line Diagram), LRS�-R1X-EL-ST-002 (Electrical System Study), LRS�-R1X-EL-SM-001 (Schematic diagram for MV Switchgear), LRS�-R1X-EL-LI-003 (I/O list for PMS), LRS�-R1X-EL-LD-001 (ATS Logic Block Diagram)					Altitude: less than 1000 m Above Sea level			
					Seismic Condition: According to "LRS�-000-PR-DB-706"			
					Wind Velocity: According to "LRS�-000-PR-DB-706"			
					Climate: Dusty, Corrosive			
					Relative Humidity (Max): 100%			
TECHNICAL DATA								
1-GENERAL:		PROJECT REQUIREMENT				VENDOR DATA		
1-1 Driver		Gas Turbine						
		Gas Engine <input checked="" type="checkbox"/>						
		Diesel						
		Other						
1-2 Explosion Proof / Industrial Type								
1-3 Earthing		Isolated						
		High Impedance						
		Low Impedance <input checked="" type="checkbox"/>						
		High Inductance						
		Low Inductance						
		Direct Connection						
1-4 Location / Service		Off shore						
2-ELECTRICAL CHARACTERISTICS:		PROJECT REQUIREMENT				VENDOR DATA		
2-1 Insulation Class		Rotor		Class F				
		Stator		Class F				
		Exciter		Class F				
2-2 Vibrostability		Amplitude <10 Hz (s<0.4 mm)						
		Velocity < 10 ~ 100 Hz (V<18 mm/s)						
		Acceleration > 100 Hz (b. < 1.6 g)						
2-3 Network System		Ring						
		Radial <input checked="" type="checkbox"/>						
		Other						
2-4 Voltage (V)		6600						
2-5 Transient Time Voltage Response		< 300 ms						
2-6 Dynamic Voltage Variations		15%						
2-7 Steady State Voltage Variations		± 5%						
2-8 Max. Dip Voltage		< = 15%						
2-9 Frequency, Variations(Hz)		± 1						
2-10 Rated Current(A)		219A						
2-11 Over Load		Capability		50%				
		Duration		1 Minute				
2-12 Unbalance Load		Capability		10%				
		Duration		continuse				
2-13 Number of Poles								
2-14 Reactance		Transient (X'd shall be less than 12%)						
		Sub-transient						
		Synchronous						
2-15 Winding Connection		Star						
2-16 Radio Interference Suppression Grade		as per IEC 61000						
2-17 Continuous Power Rating (kVA)		2500 (@Site Condition)						

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2-18 Power Factor (%)									
1/4 Load									
2/4 Load									
3/4 Load									
4/4 Load		0.8							
2-19 Efficiency (%)									
1/4 Load									
2/4 Load									
3/4 Load									
4/4 Load									
2-20 Synchronous Speed (rpm)		1500							
2-21 Starting Method		Local/Remote							
2-22 Stopping Method		Local/Remote							
2-23 Regulation Method		Self Regulating							
2-24 Exciting Method		Self Exiting							
2-25 Withstand Fault Current (kA)/Duration (Sec)		25/1							
2-26 Short Circuit Current (kA)		Ratio							
		Stationary							
		Instantaneous							
2-27 Space Heater		Power and Voltage							
3-EXCITER SPECIFICATION		PROJECT REQUIREMENT						VENDOR DATA	
3-1 Rated Voltage (V)									
3-2 Power Supply Type		Self Exciter							
3-3 Winding Insulation Class		F							
4-PROTECTION FACILITIES:		PROJECT REQUIREMENT						VENDOR DATA	
4-1 Degree of Protection of Panel		IP42 (For indoor)							
4-2 Protection Facility (For Generator, Exciter, Bearing, Lubricating)		Required according to document "LRSL-R1X-EL-SM-001"							
		Required according to document "LRSL-R1X-EL-SM-001"							
4-3 Current Transformers		Quantity:							
		Specification:							
5-MEASURING & CONTROL FACILITIES:		PROJECT REQUIREMENT						VENDOR DATA	
5-1 Degree of Protection of Panel		IP42 (For indoor)							
5-2 Measuring Instrument		Required according to document "LRSL-R1X-EL-SM-001"							
		Required according to document "LRSL-R1X-EL-SM-001"							
5-3 Current Transformers		Quantity:							
		Specification:							
5-4 Load sharing		Required							
6- SYNCHRONIZING PANEL:		PROJECT REQUIREMENT						VENDOR DATA	
6-1 Degree of Protection of Panel		IP42 (For indoor)							
6-2 Synchronizing Facilities		Required according to document "LRSL-R1X-EL-SM-001"							
6-3 Local/Remote, Auto/Manual		Required according to document "LRSL-R1X-EL-LD-001"							
7- SIGNALING:		PROJECT REQUIREMENT						VENDOR DATA	
7-1 Interface by PMS		Required according to document "LRSL-R1X-EL-LI-003"							
8- NEUTRAL EARTHING RESISTOR									
8-1 NER		Required							
8-2 Tags		LRSL-11-GNGR-0301/0302/0303							
8-3 Quantity		3							
8-4 Contactor		Required							
8-5 Rated Current		By Vendor							

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8-6 Rated Time		10Sec							
9-MECHANICAL CHARACTERISTIC:		PROJECT REQUIREMENT				VENDOR DATA			
9-1 Construction Type									
9-2 Enclosure		Required							
9-3 IP of enclosure		IP55							
9-4 Cooling Method		Air							
9-5 Cooling Media		Air							
9-6 Fan Material (If Any)									
9-7 Direction of rotation from Non-Drive End									
9-8 Anti Condensation Heater		Required							
9-9 Dimension									
9-10 Weight									
REMARKS: Generator package shall be able to work in parallel									