

	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض</p> <p>خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)</p>																	
<p>شماره پیمان:</p> <p>۰۵۳ - ۰۷۳ - ۹۱۸۴</p>	<p>DATA SHEET (W/CURVE, DRAWING & CERTIFICATE) FOR COMPRESSOR MAIN MOTOR</p> <table border="1"> <tr> <td>نسخه</td> <td>سریال</td> <td>نوع مدرک</td> <td>رشته</td> <td>تسهیلات</td> <td>صادر کننده</td> <td>بسته کاری</td> <td>پروژه</td> </tr> <tr> <td>V01</td> <td>0001</td> <td>DS</td> <td>EL</td> <td>120</td> <td>HY</td> <td>GCS</td> <td>BK</td> </tr> </table>	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	V01	0001	DS	EL	120	HY	GCS	BK	<p>8 از 1 : شماره صفحه</p>
نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه											
V01	0001	DS	EL	120	HY	GCS	BK											

طرح نگهداشت و افزایش تولید ۲۷ مخزن

DATA SHEET (W/CURVE, DRAWING & CERTIFICATE) FOR COMPRESSOR MAIN MOTOR

نگهداشت و افزایش تولید میدان نفتی بینک

V01	Nov. 2023	IFR	HAVAYAR	M.Fakharian	S.Faramarzpour	
V00	Feb. 2023	IFR	HAVAYAR	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Status:

IFA: Issued for Approval
IFR: Issued for Review
IFI: Issued for Information
AFC: Approved for Construction

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض</p> <p>خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)</p>																	
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نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه											
V01	0001	DS	EL	120	HY	GCS	BK											

REVISION RECORD SHEET

PAGE	V00	V01	V02	V03	V04
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شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	DATA SHEET (W/CURVE, DRAWING & CERTIFICATE) FOR COMPRESSOR MAIN MOTOR							8 از 3 : شماره صفحه		
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال			نسخه
	BK	GCS	HY	120	EL	DS	0001			V01

Item	Category	Required Specification	Vendor Data
1	Driven Machine	Electrical Motor	Confirmed
2	Driven Machine Tag No.	-	M-2101- A/B/C
3	Manufacturer		WOLONG NANYANG
4	Manufacturer's Number / Type		YBXKK 800-14
5	Manufacturing Standard	IEC 60034 & IPS-M-EL-132(2)	Confirmed
6	Location	[X] Outdoor (Under Shelter) [] Indoor	Confirmed
7	Area Classification	Acc. to requisition data	Zone 2 IIB
8	Ambient Temperature	5 to +55°C	Confirmed
9	Relative Humidity	100 %	100 %
10	Dust	[X] Yes [] No	Confirmed
11	Corrosion	[X] Yes [] No	Paint is manufacture standard
12	Elevation	12.5m Above Sea Level	Confirmed
13	Quantity	Acc. To Load List (BK-GCS-PEDCO-120-EL-LI-0001)	One each compressor
14	Tag Number	Acc. To Load List (BK-GCS-PEDCO-120-EL-LI-0001)	M-2101- A/B/C
15	Motor Type	Asynchronous, Squirrel Cage	Confirmed
16	Mounting	[] Horizontal [] Vertical	Horizontal
17	Rotor Construction	<input checked="" type="checkbox"/> Brazed Copper Bars <input type="checkbox"/> Aluminum Die Cast	Brazed Copper Bars
18	Stator Case Material	Cast Iron	Steel
19	Frame Material	Steel Sheet or Cast Iron	Steel
20	Cooling Method	According to IPS-M-EL-131(2)	IC511
21	Ingress Protection Degree for Motor	IP 54	IP55
22	Ingress Protection Degree for Terminal Box	IP 55	Confirmed
23	Explosion Protection of Motor	N/A for Safe Area Zone 2, IIB, T3	Exdb,IIB,T4
24	Explosion Protection of Terminal Box	N/A for Safe Area Zone 2, IIB, T3	Exdb,IIB,T4
25	Ex. Certificate Authority/Certificate No.	By Vendor	SHEx/SHEx23.3195X
26	Driven Machine Shaft Power Requirement (P _{mp})	As Per Related Mechanical Data sheet (to be Specified by Vendor)	949KW (PSV setting)
27	API Design Margin (Km)	1.10	Confirmed
28	Motor output shaft power requirement @ site condition (=Pmp/Km)	As Per Related Mechanical Data sheet (to be Specified by Vendor)	1050KW@ site condition

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	نسخه		سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه									
V01	0001	DS	EL	120	HY	GCS	BK											

Item	Category	Required Specification	Vendor Data
29	De-rating factor due to Ambient Temperature (Kt)	0.85 (MFR Shall Advise The Value)	1070KW@ site condition
30	De-rating factor due to Altitude (Ka)	1 (MFR Shall Advise The Value)	1070KW@ site condition
31	Motor Power (Defined for IEC condition i.e. 40°C)	As Per Related Mechanical Data sheet (to be Specified by Vendor)	1070KW@ site condition
32	Standard Rated Motor Output = $K_m \times P_{mp} / (K_a K_t)$	By Vendor	—
33	Frame Size	By Vendor	800
34	Rated Voltage	11KV $\pm 10\%$ or 3.3KV $\pm 10\%$	11KV $\pm 10\%$
35	Rated Frequency	50 Hz $\pm 5\%$	50 Hz $\pm 5\%$
36	Voltage During Motor Start	80% U_n	Confirmed
37	Synchronous Speed	By Vendor	428 rpm
38	Full Load Speed [RPM]	By Vendor	424 rpm Rated
39	Number of Poles	By Vendor	14
40	Starting Method	Direct on Line	Confirmed
41	Direction of Rotation (Viewed from coupling end)	Shall be Proposed by MFR Based on Driven Load Rotation of Direction	[X] CCW View Motor Shaft
42	Stator Winding Connection	Star	Confirmed
43	Location of Terminal Box (Viewed from DE)	[] Right [] Left	Terminal box for main power supply: Right CT terminal box: Left
44	Insulation Class	Class F	Confirmed
45	Class of Temperature Rise	Class B	Confirmed
46	Max. Permissible Starting Time [s]	By Vendor	25S
47	Accelerating Time DOL starting, at 100% U_n [s]	By Vendor	Will be filled
48	Accelerating Time DOL starting, at 80% U_n [s]	By Vendor	Will be filled
49	Starting Torque at 100% U_n [N.m]	By Vendor	14460
50	Starting Torque at 80% U_n [N.m]	By Vendor	9254
51	Maximum Torque [N.m]	By Vendor	2 \times Rated torque
52	Rated Torque [N.m]	By Vendor	24100
53	Rated Current [A]	By Vendor	81.7
54	No Load Current [A]	By Vendor	30.8
55	Locked Rotor Current [A]	$< 7I_n$	Confirmed
56	Torque-Speed Class	Shall be Selected Based on Driven Load Torque Requirement	[] A [] B [] C [] D
57	Permit to Start Times	3C2H	Confirmed

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پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه											
BK	GCS	HY	120	EL	DS	0001	V01											

Item	Category	Required Specification	Vendor Data
58	Reacceleration	Capable for connection to 100% main voltage with 30%, 180° out of phase residual voltage.	—
59	Heating time Constant [minute]	By Vendor	120
60	Cooling Time Constant [minute]	By Vendor	240
61	Duty Cycle	S1	Confirmed
62	Rotor Moment of Inertia [kgm ²]	By Vendor	890
63	Driven Machine Moment of Inertia [kgm ²]	By Vendor	Will be filled
64	Max. Allowable Load Moment of Inertia [kgm ²]	By Vendor	220
65	Power Factor at ½ Rated Load	By Vendor	0.58
66	Power Factor at ¾ Rated load	By Vendor	0.67
67	Power factor at Rated Load	By Vendor	0.73
68	Efficiency at ½ Rated Load	By Vendor	93.4%
69	Efficiency at ¾ Rated Load	By Vendor	93.9%
70	Efficiency at Rated Load	By Vendor	94.2%
71	Bearing (DE)		
	Type (Detail Description by Vendor)	<input type="checkbox"/> Antifriction (Ball Bearing) <input type="checkbox"/> Antifriction (Roller Bearing) <input checked="" type="checkbox"/> Sleeve (Spherical Self Aligned)	Confirmed
	Manufacturer	By Vendor	Will be filled
	Minimum Life Without Load	Minimum 100,000 Hours	Confirmed
	Minimum Life With Load	By Vendor	—
	Lubrication	Oil (oil specification shall be specified by manufacturer)	Confirmed
	Lubrication system (To be advised by manufacturer considering ambient temperature)	<input type="checkbox"/> Grease (anti friction bearings) <input checked="" type="checkbox"/> Air cooled oil reservoir with Lubricating ring <input type="checkbox"/> Forced Oil Lubrication with air cooled radiator	Forced Oil Lubrication with air cooled radiator
	Oil Capacity [Liter]	By Vendor	Will be filled
	Permissible Trust Force [N]	By Vendor	—
	Max. Normal Operating Temperature	By Vendor	85°C
72	Bearing (NDE)		
	Type (Detail Description by Vendor)	<input type="checkbox"/> Anti friction (Ball Bearing) <input type="checkbox"/> Antifriction (Roller Bearing) <input checked="" type="checkbox"/> Sleeve (Spherical self aligned)	Slide Bearing
	Manufacturer	By Vendor	Will be filled
	Minimum Life Without Load	Minimum 100,000 Hours	

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	BK	GCS	HY	120	EL	DS	0001			V01

Item	Category	Required Specification	Vendor Data
	Minimum Life With Load	By Vendor	Will be filled
	Lubrication	Oil (Specification must be specified by manufacturer)	Forced Oil Lubrication with air cooled radiator
	Oil Capacity [Liter]	By Vendor	Will be filled
	Permissible Trust Force [N]	Shall meet coupled machine trust	Will be filled
	Max. Normal Operating Temperature	By Vendor	85°C
73	DE Bearing Temperature Sensor / Meter	<input type="checkbox"/> Not Required <input type="checkbox"/> PTC <input checked="" type="checkbox"/> RTD <input checked="" type="checkbox"/> Thermometer (Dial) <input type="checkbox"/> Temperature Switch	<input checked="" type="checkbox"/> RTD
74	NDE Bearing Temperature Sensor	<input type="checkbox"/> Not Required <input type="checkbox"/> PTC <input checked="" type="checkbox"/> RTD <input checked="" type="checkbox"/> Thermometer (Dial) <input type="checkbox"/> Temperature Switch	<input checked="" type="checkbox"/> RTD
75	Winding Temperature Sensor	<input type="checkbox"/> Not Required <input type="checkbox"/> PTC <input checked="" type="checkbox"/> RTD (9 RTD's 3 per phase)	<input checked="" type="checkbox"/> RTD (9 RTD's 3 per phase)
76	Space Heater	Required	Yes
	Space Heater Voltage [V]	230VAC, 50Hz, 1Ph	Confirmed
	Space Heater Power [W]	By Vendor	1000W
77	Terminal Boxes	<input checked="" type="checkbox"/> MV main Terminal Box <input checked="" type="checkbox"/> Space heater / RTD's / Switches Terminal Box	Confirmed
78	Main Power Cable Specification & Size & Orientation	According to BK-GCS-PEDCO-120-EL-CN-0003	M90
79	Method of Cable Entry	<input checked="" type="checkbox"/> Cable Gland <input type="checkbox"/> Sealing Gasket	Confirmed
80	Short Circuit Capability of Terminal Box	25 kA for 0.2 S	N.A
81	Power terminal box connection method	Motor & Supply wires with cable shoe to be fixes on suitable post insulators	Confirmed
82	Sound Level at 1 distance (m) From Motor	Max. 85 dB(A)	≤85
83	Finish Color	Manufacturer Standard	RAL5012
84	Test & Inspection Routine tests including: a) Insulation resistance test on windings, heaters, temperature detectors and bearing insulations b) Measurement of winding resistance (cold) c) Measurement of winding resistance (hot)	For P≤500kW Witness on test of all motors[X] Report of test of all motors[X] For P>500kW Witness on test of all motors[X] Report of test of all motors[X]	As per ITP

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پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه											
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Item	Category	Required Specification	Vendor Data
	d) Bearing temperature rise e) No load current f) Current unbalance at full load g) Locked rotor current (at full or reduced voltage) h) Locked rotor torque (at full or reduced voltage) i) Torque speed curve j) No load losses k) Direction of rotation l) Slip and nominal speed and full load m) Vibration severity n) Noise test o) bearings inspection Type test: p) Heat run test	<p>For P<=1000kW Report of test of one identical motor[X]</p> <p>For P>1000kW Witness on test of One project motor[X] Report of test of above mentioned test[X]</p>	
Note1: Motor with differential protector, LZZBJ9-10A1- transformation ratio 400:5 0.5/5P10 15VA, 3 pieces/set.			