











OWNER:  شرکت سست و سویی توستر ایرانیاان (سهایی نیاان)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	MC :  شرکت سست و سویی توستر ایرانیاان توسعه ایرکراک	COMPRESSOR MOTOR DATA SHEET FOR EMERGENCY INSTRUMENT AIR COMPRESSOR							
Project		Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-10B	BU	20	VD	303	EL	DSH	0099	Rev.:	Page
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COMPRESSOR MOTOR DATA SHEET FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

 شرکت سست و سویی توستر ایرانیاان	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
Document Review		
Issue Purpose:	AB	
Result Code: AP,AN,CM,RE,NC	AP	
Next Status : IFC,IFA,IFI,AFC,AB	-	
Responsible Department	MECHANIC	
Commented Date	Oct.29.2023	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		

06	23/10/2023	As Built	KP	LDM	PW	
05	31/01/2022	Approved for Construction	KP	LDM	PW	
04	06/01/2022	Approved for Construction	KP	LDM	PW	
03	09/11/2021	Approved for Construction	KP	LDM	PW	
02	14/10/2021	Approved for Construction	KP	LDM	PW	
01	20/09/2021	For approval	KP	LDM	PW	
00	24/06/2020	For approval	KP	LdM	PW	
Rev	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P

OWNER: 		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR: 	
MC: 		COMPRESSOR MOTOR DATA SHEET FOR EMERGENCY INSTRUMENT AIR COMPRESSOR						VENDOR: 	
								Contract No : 52-98/445	
Document Number:		Project	Area	Phase	Unit	Dis.	Doc.	Seq.	
		BU	20	VD	303	EL	DSH	0099	
Tag Nos :		20-C-7080-M			Manufacturer :		WEG		
QTY. :		1			Plant Location :		Busher		
Client :		Bushehr Petrochemical Company			Purchase Order No. :		-		
General Design Data		Applicable Document				Environmental Condition			
		Project Specification :		BU-20-D-000-EL-SPC-521		Location :		Outdoor	
		Paint Specification :		BU-20-D-000-PI-SPC-409		Ambient Air Temperature :		Min. 5°C Max. 52°C	
		Applicable Standard :		IEC 60034		Humidity :		80%	
						Altitude :		8.5m above Sea Level	
						Area Classification(IEC 60079-10) :		Zone 2, IIB, T3	
Basic Data		Particulars of Equipment		Unit	Purchaser's Requirements		Vendor's Data		
		Frame Size			VTA		160ML		
		Rated Voltage		V	400		400		
		Rated Frequency		Hz	50		50		
		Required Shaft Brake Power		KW	*		11,5		
		Rated Power		KW	*		15		
		No. of Phases			3 phases		3		
		Duty / Service Factor			S1 / 1		S1		
		No. of Poles / Synchronous Speed			*		4 / 1500		
		Stator Connection			Delta		Delta		
Insulation Class			Class F		F				
Design Temperature			48 °C		55				
Temperature Rise			Class B		B				
Ingress Protection Classification (IEC 60529)			IP55		IP56				
Cooling Type (IEC 60034-6)			TEFC, IC 411		TEFC				
Performance Characteristics		Full Load Current		A	VTA		29,2		
		Efficiency (FL / 3/4 FL / 1/2FL)		PU	VTA		93,9 / 92,7 / 91,9		
		Power Factor (FL / 3/4 FL / 1/2FL)		PU	VTA		0,79 / 0,72 / 0,79		
		Full Load Torque		Nm	VTA		96,9		
		Break Down Torque		%	VTA		360		
		Pull Up Torque		%	VTA		320		
		Full Load Speed		rpm	VTA		1479		
		Slip at Full Load / 75% Load		%	VTA		1,4		
		Over Speed Capability			VTA		No overspeed capability		
		No Load Losses		watt	VTA		Information not available		
Starting Characteristics		Starting Method			Direct on Line		DOL		
		Starting Performance (IEC60034-12)			VTA		8,6		
		Maximum Allowable Stall Time (Hot / Cold)		Sec.	VTA		19 / 34		
		Maximum No. of Successive Starts			VTA		3		
		Starting Current		PU	VTA		8,6		
		Starting Current		A	VTA		251,2		
		Locked Rotor Power Factor		PU	VTA		0,5		
		Locked Rotor Torque		%	VTA		320		
		Run-Up Time		Sec.	VTA		5		
		Allowable Run-Up Time from Cold State		Sec.	VTA		34		
Allowable Run-Up Time from Hot State		Sec.	VTA		19				
Hazardous Area Certification		Motor Explosion Protection Type / Gas Group / Temp. Class		--	Ex d IIB T3		Ex d IIB T4		
		Terminal Boxes Explosion Protection Type / Gas Group / Temp. Class		--	Ex d IIB T3		Ex d IIB T4		
		Ex "e" Motor t ₀ Time		Sec.	VTA		N/A		
		Recommended Thermal O/L Relay			VTA		10		
		Certifying Authority		--	VTA		as per IECex certificate		

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								Contract No : 52-98/445		
Document Number:		BU	20	VD	303	EL	DSH	0099	Rev.: 06	Page: 4 of 4
		Project	Area	Phase	Unit	Dis.	Doc.	Seq.		
Mechanical Detail	Particulars of Equipment		Unit	Purchaser's Requirements			Vendor's Data			
	Mounting (IEC 60034-7)			*			B3T			
	Stator Frame Material			Ferromagnetic Material			Ferromagnetic Material			
	Enclosure Material			Sheet Steel/ Cast Iron			cast iron			
	Rotor Cage Material			Copper/ Die Cast Aluminium			Die cast aluminium			
	Cooling Fan Material			Aluminium, Cast Iron, Steel, Brass, Bronze			aluminium			
	Rotation Facing Drive End (CW/CCW)			*			Both			
	Finish Color			Gentian Blue RAL-5010			Ral 5010			
	Motor Weight		Kg	VTA			211			
	Rotor (Uncoupled) Inertia		Kg.m2	VTA			0,1813			
	Driven Load Inertia (Related to Motor Speed)		Kg.m2	*			TBC			
	Coupling Type			Direct/ Gear Box/ Pulley			Pulley			
	Maximum Sound Pressure Level at one Meter (Full Load)		dB(A)	Comply with IEC 60034-9 & Note 5			61			
	Sound Power level		dB	VTA			N/A			
	Noise Silencer		Yes/No	VTA			No			
	Integral Breather / Drain (IEC60034-5)		Yes/No	VTA			No			
	Drive End Bearing Type/ Make & Size			VTA			NU309-C3			
	No. of Drive End Bearings			VTA			1			
	None Drive End Bearing Type / Make & Size			VTA			6308-C3			
	No. of None Drive End Bearings			VTA			1			
	Method of Bearing Lubrication			VTA			grease nipple			
	Bearing Ingress Protection (IEC 60529)			IP55			IP55			
	Minimum Bearing Lifetime, Motor Only		hr	40000			40000			
	Maximum Relubrication Interval		hr	4000/2000 for horizontal/vertical motors			20000			
	Shaft			Extended / Solid / Hollow			solid			
	Max. Shaft Voltage		mV rms	VTA			N/A			
	Insulated Bearings		Yes/No	(Note 4)			No			
	Bearing Insulation Rating		KV	VTA			N/A			
Rotor Axial Float		+ / - mm	VTA (If applicable)			N/A				
Vibration at No Load, Self Mounted, Peak to Peak		mm/S	VTA (Comply with IEC 60034-14)			as per IEC 60034-14				
Critical Speed		rpm	(Note 6)			N/A				
Lifting Lug		Yes/No	Yes			Yes				
Accessories	Anti Condensation Heater		Yes/No	No			No			
	Anti Condensation Heater Power		W	-			N/A			
	Anti Condensation Heater Voltage		VAC	-			N/A			
	Winding Temperature Detector		Yes/No	No			No			
	Bearing Temperature Detector		Yes/No	No			No			
	Frame Earth / Terminal Box Earth		Yes/No	Yes (External Stud / Internal Terminal)			Yes (External Stud / Internal Terminal)			
	Accelerometer Shock Pulse Measurement Device		Yes/No	VTA			No			
	Anti Rotational Device		Yes/No	VTA			No			
	Vibration Switch		Yes/No	VTA			No			
	Sun Canopy		Yes/No	VTA			No			
Terminal Box & Cable Connection	Differential Protection CT's in Neutral Terminal Box		Yes/No	NO			No			
	Ingress Protection of Terminal Box		--	IP55			IP56			
	Power Terminal Box Type		--	Phase Insulated			Phase (air) Insulated			
	Power Terminal Box Location (IEC 60034-7)		--	Top or Right (looking from drive end)			Top			
	Power Cable Type		--	Cu/XLPE/SWA/PVC			Cu/XLPE/SWA/PVC			
	Power Cable No. & Size		--	**			4 x 6 Sqmm			
	Power Cable Gland & Entries		--	**			1 x M25			
	Power Cable Entry Direction		--	**			side entry			
	Heater Cable Type		--	-			N/A			
	Heater Cable No. & Size		--	-			N/A			
	Heater Cable Gland & Entry		--	-			N/A			
	Instrument Cable Type		--	**			N/A			
Instrument Cable No. & Size		--	**			N/A				
Instrument Cable Gland & Entry		--	**			N/A				

Note 1: Vendor to Advise

Note 2: (*) in "Purchaser Requirement" column should be filled out by driven equipment vendor.

Note 3: (**) Will be informed to motor vendor after receiving preliminary motor data.

Note 4: The shaft voltage shall not exceed 300mV RMS, unless bearings shall be fully insulated from the motor carcase and/or bedplate to prevent a flow of shaft current.

Note 5: The sound pressure level of the loaded machine shall not exceed 77 dB(A) in the work area, measured in accordance with ISO 1680.

Note 6: The machine shall have a rigid, under critical rotor-bearing system with first critical speed not lower than 125 % of the synchronous speed.