



**ISSUED FOR TENDER**

0	Mar 09, 2018	Issued for Tender	JAB	ZHW	AIB	MHQ	MAS		
A	Feb 13, 2018	Issued for Review & Approval	JAB	ZHW	AIB	MHQ	AHB		
REV	DATE	DESCRIPTION	ORIG	CHKD	LE	QA	PM	LOCAL REPR.	PROJ. MAN.



ENAR Petrotech Services (Pvt.) Limited , 7-B ,  
Sector 7-A , Korangi Industrial Area , Karachi  
Pakistan

DOCUMENT TITLE:

**DATA SHEET FOR INSTRUMENT AIR  
COMPRESSOR MOTOR (K-3401CM)**

	<b>0193</b>	<b>ELA</b>	<b>6505</b>	<b>0</b>	
CONTRACT NO. 14-0193	CODE	TYPE	SEQ NO.	REV.	-



**ENAR PETROTECH SERVICES  
(PRIVATE) LIMITED**

Plot No. 7-B, Sector-7A Korangi Industrial Area  
Karachi-74900

**DATA SHEET FOR INSTRUMENT AIR  
COMPRESSOR MOTOR  
(K-3401CM)**

PROJECT NO. : 14-0193

REV. NO. : 0

PROJECT NAME : NASHPA COMPRESSION PROJECT PHASE-II

DATE : 9-Mar-18

CLIENT : OIL & GAS DEVELOPMENT CO. LTD. (OGDCL)

SHEET : 2 of 2

DOCUMENT NO. : 0193-ELA-6505-0

**LV A.C INDUCTION MOTORS**

GENERAL SPECIFICATION				VENDOR DATA			
1	Equipment Tag	K-3401CM	Qty 1	34	Manufacturer	VTA	
2	Equipment Service	Air Compressor Motor		35	Frame Size	VTA	
3	Motor Type	Squirrel Cage Induction Motor		36	Frame Material	VTA	
4	Rated Output	75 (VTC Note-12)	kW	37	Full Load Current	VTA	A
5	Rated Voltage	400	V	38	Locked Rotor Current	VTA	A
6	Allowable Volatage Variation	± 10%		39	Starting Current Ratio	VTA	A
7	Frequency (Hz)	50		40	Rated Torque	VTA	Nm
8	Allowable Frequency Variation	± 2%		41	Moment of Inertia	VTA	kgm <sup>2</sup>
9	Phase	3		42	Rated Power	75kW (VTC Note-12)	
10	Speed	To suit application		43	Starting Power Factor	VTA	
11	No. of Poles	To suit application		44	Mounting	VTA	
12	Duty Type	Continuous		45	Coupling Method	<input checked="" type="checkbox"/> Direct	<input type="checkbox"/> V-Belt <input type="checkbox"/> Gear Box
13	Service Factor	1		46	Rotation (Facing Drive End)	<input type="checkbox"/> Clockwise	<input type="checkbox"/> Anti-Clockwise
14	Enclosure	TEFC		47	Noise Level	85 dBA at 1 m	
15	Ingress Protection	IP 55 Motor	IP 65 Terminal Box	48	Hazardous Area Certification	N/A	
16	Insulation Class	F		49	Weight of Motor	VTA	kg
17	Temperature Rise	B		50	Vibration	IEC-60034 & applicable IEC standards	
18	Motor Starting Method	<input type="checkbox"/> DOL	<input checked="" type="checkbox"/> Y-D	<input type="checkbox"/> VFD	<input type="checkbox"/> SoftStart	51	Efficiency
19	Location	<input checked="" type="checkbox"/> Outdoor	<input type="checkbox"/> Indoor	52	100% Load	VTA	%
20	Area Classification	<input type="checkbox"/> Hazardous	<input checked="" type="checkbox"/> Safe	53	75% Load	VTA	%
21	Class			54	50% Load	VTA	%
22	Zone			55	No Load		
23	Group			56	Power Factor		
24	Temperature Class			57	100% Load		≥ 0.9
25	Altitude	2700 Ft		58	75% Load		≥ 0.9
26	Humidity	Maximum 70%	Minimum 10%	59	50% Load	VTA	
27	Ambient Temperature	Maximum 115 °F	Minimum 35 °F	60	No Load	VTA	
28	Space Heater	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	VTA Watt	230 Volt	61	Bearing	
29	Winding RTD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 Nos.	Per / ph	62	Tpye	VTA
30	Power Cable Size	See Note-11		63	Drive End	VTA	
31	No. of Power Cable Runs	01 (One)		64	Non-Drive End	VTA	
32	Cable Type	0.6/1kV,CU/XLPE/PVC/SWA/PVC		65	Lubricant	VTA	
33	Cable Gland	See Note-11		66	Motor Specification	0193-ELA-6504	

**NOTES:**

- Vendor shall provide the Motor Data Sheet with Thermal Curve, Performance Curves of Torque & Speed X Current on 80% & 100% of rated voltage of the offered model.
  - Please refer to Specification for Motors 0193-ELA-6504 for detail specifications.
  - Vendor shall provide a routine test certificate for each motor.
  - Equipments shall be designed as per area classification.
  - Vendor advice enclosure material which is suitable for atmosphere that is made corrosive by traces of chemicals noramilly present in a petroleum processing facility and in an environment that may include high humidity, storms, salt-laden air etc.
  - Vendor to submit the coupling method details with drawings for OGDCL approval prior to manufacturing.
  - Vendor to ensure that voltage surges or rate of rise of Voltage surges shall not jeopardize the motor winding and its insulation life.
  - Cable Gland shall be nickel plated brass & suitable for area classification.
  - Vendor shall fill the remaining unfilled data of this data sheet.
  - Power factor of all LV Motors shall be greater than or equal to 0.9 at 100% & 75% load.
  - To be confirmed by EPCC during detail Engineering.
  - New Air Compressor Motor (K-3401CM) shall be identical to existing motors (K-3401 A/BM) w.r.t rating and other parameters, so that parallel operation with existing motors (K-3401 A/BM) can be achieved. Minimum name plate rating will be 75 kW.
- VTA - Vendor to Advise/Provide VTC - Vendor to confirm