

PURCHASER'S DATA																																				
A. Site conditions																																				
1	Ambient temperature, minimum:	10 °C	3																																	
2	maximum:	39.8 °C	4																																	
3	design:	40.0 °C	5																																	
4	Relative humidity:	93 %	6																																	
B. Technical particulars																																				
1	Motor tag no.:	141-PM-16 AS																																		
2	Driven equipment name:	NAPTHA TANK CBD PUMP																																		
3	Voltage:	415 V ±6%	16																																	
4	Phase:	Three	17																																	
5	Frequency:	50 Hz ±3%	18																																	
6	Fault level:	50 kA	19																																	
7	Method of starting:	D.O.L.	20																																	
8	Winding connection:	Delta	21																																	
9	No. of terminals:	6	22																																	
10	Cable size:	1X3C X 16 mm ²	23																																	
11	Cable type:	AYFY	24																																	
12	Temperature rise:	80 °C																																		
13	Cooling:	TEFC																																		
14	Insulation class:	B/F With Temp. rise limited to Class B	25																																	
15																																				
<table border="1"> <tbody> <tr> <td>16</td> <td>Hazardous area classification:</td> <td>Zone-2</td> </tr> <tr> <td>17</td> <td>Gas group:</td> <td>IIA/IIIB, T3</td> </tr> <tr> <td>18</td> <td>Type of explosion protection:</td> <td>Ex (d)</td> </tr> <tr> <td>19</td> <td>Type of ingress protection:</td> <td>IP 55</td> </tr> <tr> <td>20</td> <td>Color shade:</td> <td>632 as per IS 5</td> </tr> <tr> <td>21</td> <td>Thermistors:</td> <td>☐ Required ☒ Not required</td> </tr> <tr> <td>22</td> <td>RTD:</td> <td>☐ Required ☒ Not required</td> </tr> <tr> <td>23</td> <td>BTD:</td> <td>☐ Required ☒ Not required</td> </tr> <tr> <td>24</td> <td>RTD/BTD monitoring device:</td> <td>☐ Required ☒ Not required</td> </tr> <tr> <td></td> <td>Make:</td> <td>Not applicable</td> </tr> <tr> <td>25</td> <td>Applicable specification:</td> <td>EIL spec. 6-51-0032 and Relevant IS</td> </tr> </tbody> </table>				16	Hazardous area classification:	Zone-2	17	Gas group:	IIA/IIIB, T3	18	Type of explosion protection:	Ex (d)	19	Type of ingress protection:	IP 55	20	Color shade:	632 as per IS 5	21	Thermistors:	☐ Required ☒ Not required	22	RTD:	☐ Required ☒ Not required	23	BTD:	☐ Required ☒ Not required	24	RTD/BTD monitoring device:	☐ Required ☒ Not required		Make:	Not applicable	25	Applicable specification:	EIL spec. 6-51-0032 and Relevant IS
16	Hazardous area classification:	Zone-2																																		
17	Gas group:	IIA/IIIB, T3																																		
18	Type of explosion protection:	Ex (d)																																		
19	Type of ingress protection:	IP 55																																		
20	Color shade:	632 as per IS 5																																		
21	Thermistors:	☐ Required ☒ Not required																																		
22	RTD:	☐ Required ☒ Not required																																		
23	BTD:	☐ Required ☒ Not required																																		
24	RTD/BTD monitoring device:	☐ Required ☒ Not required																																		
	Make:	Not applicable																																		
25	Applicable specification:	EIL spec. 6-51-0032 and Relevant IS																																		

DRIVEN EQUIPMENT MANUFACTURER'S DATA																								
1	Suggested motor rating:	7.5 kW	9																					
2	Manufacturer:	KBL	10																					
3	BkW at full load:	3.13 kW																						
4	kW at end of curve:	5.07 kW																						
5	Speed:	2900 RPM																						
6	Rotation viewed from coupling end:	CCW																						
7	Driven equipment:	Pump																						
8	Coupling type:	Disc Flexible																						
<table border="1"> <tbody> <tr> <td>9</td> <td>Torque required, starting:</td> <td>0.007 kNm</td> </tr> <tr> <td></td> <td>maximum:</td> <td>0.015 kNm</td> </tr> <tr> <td>10</td> <td>GD² of eqpt., including flywheel:</td> <td>kgm²</td> </tr> <tr> <td></td> <td>excluding flywheel:</td> <td>0.085 kgm²</td> </tr> <tr> <td>11</td> <td>Thrust, up:</td> <td>kg</td> </tr> <tr> <td></td> <td>down:</td> <td>kg</td> </tr> <tr> <td>12</td> <td>Starting condition:</td> <td>Open Discharge Valve</td> </tr> </tbody> </table>				9	Torque required, starting:	0.007 kNm		maximum:	0.015 kNm	10	GD ² of eqpt., including flywheel:	kgm ²		excluding flywheel:	0.085 kgm ²	11	Thrust, up:	kg		down:	kg	12	Starting condition:	Open Discharge Valve
9	Torque required, starting:	0.007 kNm																						
	maximum:	0.015 kNm																						
10	GD ² of eqpt., including flywheel:	kgm ²																						
	excluding flywheel:	0.085 kgm ²																						
11	Thrust, up:	kg																						
	down:	kg																						
12	Starting condition:	Open Discharge Valve																						

MOTOR MANUFACTURER'S DATA																																																									
1	Rating:	7.5 kW	16																																																						
2	Manufacturer:	CGL	17																																																						
3	No. of poles:	2	18																																																						
4	Frame designation:	E132M	19																																																						
5	Full load speed:	2900 RPM	20																																																						
6	Mounting:	V1	21																																																						
7	Full load torque (FLT):	2.52 mkg	22																																																						
8	Starting torque:	225 % of FLT	23																																																						
9	Break down or pull out torque:	275 %	24																																																						
10	Full load current (FLC):	14 A	25																																																						
11	Starting current at 100% voltage:	600 % of FLC	26																																																						
(Sub. to Tolerance as per IEC)																																																									
12	Rotation viewed from coupling end:	Bidirectional	27																																																						
13	Starting time at, 80% voltage:	<4 sec.	28																																																						
	100% voltage:	<2 sec.																																																							
14	Locked rotor withstand time (cold/hot) at, 80% voltage:	25/13 sec.																																																							
	100% voltage:	16/8 sec.																																																							
15	Space heater - voltage & power:	NA																																																							
<table border="1"> <tbody> <tr> <td>16</td> <td>Efficiency at, 75% load:</td> <td>% 84.1</td> </tr> <tr> <td></td> <td>100% load:</td> <td>% 87.1</td> </tr> <tr> <td>17</td> <td>Power factor at, 75% load:</td> <td>0.85</td> </tr> <tr> <td></td> <td>100% load:</td> <td>0.86</td> </tr> <tr> <td>18</td> <td>Moment of inertia, GD²:</td> <td>0.184 kgm²</td> </tr> <tr> <td>19</td> <td>NDE bearing type & no.:</td> <td>BALL 6308 2Z</td> </tr> <tr> <td>20</td> <td>DE bearing type & no.:</td> <td>BALL 6208 2Z</td> </tr> <tr> <td>21</td> <td>Type of lubrication:</td> <td>GREASED FOR LIFE</td> </tr> <tr> <td>22</td> <td>Weight of motor:</td> <td>110 kg</td> </tr> <tr> <td>23</td> <td>Thermistors, quantity:</td> <td>NA no.</td> </tr> <tr> <td></td> <td>make:</td> <td>type:</td> </tr> <tr> <td>24</td> <td>RTD, quantity:</td> <td>NA no.</td> </tr> <tr> <td></td> <td>make:</td> <td>type:</td> </tr> <tr> <td>25</td> <td>BTD, quantity:</td> <td>NA no.</td> </tr> <tr> <td></td> <td>make:</td> <td>type:</td> </tr> <tr> <td>26</td> <td>Shaft voltage:</td> <td>V</td> </tr> <tr> <td>27</td> <td>Critical speed, 1st/2nd stage:</td> <td>RPM</td> </tr> <tr> <td>28</td> <td>Canopy:</td> <td>☒ Required ☐ Not required</td> </tr> </tbody> </table>				16	Efficiency at, 75% load:	% 84.1		100% load:	% 87.1	17	Power factor at, 75% load:	0.85		100% load:	0.86	18	Moment of inertia, GD ² :	0.184 kgm ²	19	NDE bearing type & no.:	BALL 6308 2Z	20	DE bearing type & no.:	BALL 6208 2Z	21	Type of lubrication:	GREASED FOR LIFE	22	Weight of motor:	110 kg	23	Thermistors, quantity:	NA no.		make:	type:	24	RTD, quantity:	NA no.		make:	type:	25	BTD, quantity:	NA no.		make:	type:	26	Shaft voltage:	V	27	Critical speed, 1 st /2 nd stage:	RPM	28	Canopy:	☒ Required ☐ Not required
16	Efficiency at, 75% load:	% 84.1																																																							
	100% load:	% 87.1																																																							
17	Power factor at, 75% load:	0.85																																																							
	100% load:	0.86																																																							
18	Moment of inertia, GD ² :	0.184 kgm ²																																																							
19	NDE bearing type & no.:	BALL 6308 2Z																																																							
20	DE bearing type & no.:	BALL 6208 2Z																																																							
21	Type of lubrication:	GREASED FOR LIFE																																																							
22	Weight of motor:	110 kg																																																							
23	Thermistors, quantity:	NA no.																																																							
	make:	type:																																																							
24	RTD, quantity:	NA no.																																																							
	make:	type:																																																							
25	BTD, quantity:	NA no.																																																							
	make:	type:																																																							
26	Shaft voltage:	V																																																							
27	Critical speed, 1 st /2 nd stage:	RPM																																																							
28	Canopy:	☒ Required ☐ Not required																																																							

* Data to be Furnished by Vendor @ Code-1 subject to incorporation of Comments marked on datasheet & drawings.

NOTES :

- Starting time calculations shall be based on operating conditions specified on Material Requisition eg. open valve condition/ closed valve condition, at no load/full load, as applicable.
- Valid CIMFR Test certificate, PESO (CCOE) approval and BIS License for the offered Ex(d) Motor shall be shown to EIL Inspector at the time of inspection

समीक्षा कोड
12/12/2010
12/12/2010
Rev. No. Date
Date / दिनांक
VP No. 6907/4090
को पी सी

ISSUED WITH PR
Purpose



Prepared by JLC
Checked by RKS
Approved by BD